Executive Department
Jon P. Jennings, City Manager

January 31, 2018

Ms. Solanch Pastrana-Del Valle
Office of Environmental Stewardship
U.S. Environmental Protection Agency – Region 1
5 Post Office Square – Suite 100
Mail Code OES04-4
Boston, MA 02109-3912

Re: CMOM Program Implementation Annual Report
City of Portland Reporting Period: 1/1/2017 – 12/31/2017
Administrative Order Docket No CWA-R1-AO-12-009

Dear Ms. Pastrana-Del Valle:

Please find the City of Portland's CMOM Program Implementation Annual Report enclosed. The report reflects the period between January 1, 2017, to December 31, 2017; according to the requirements of the Administrative Order Implementation Schedule. The attached reports were organized in collaboration with members of my staff and prepared by Benjamin Pearson, P.E., Compliance Coordinator. I am pleased to report that we have completed significant efforts to resolve deficiencies identified in the CMOM Corrective Action Plan; we are in the process of executing additional contracts for other corrective action plan work as described in the attached reports.

The report complies with the CMOM Corrective Action Plan and provides information required for the annual report and checklist. Topics include; corrective action plan related work, reports on sanitary sewer overflows (SSO's), activities to measure efforts to comply with the EPA Order, collections system mapping, sewer budgets, measures to reduce Inflow and Infiltration, easement maintenance program, status of work related to the Administrative Order schedule, and projected measures going forward. Associated documentation including invoices, pay requisitions, contracts, SSO reports, and budget documents are included in the appendices.

The City of Portland is committed to promote, implement and maintain our infrastructure to meet Clean Water Act regulations and requirements. The City has taken on other initiatives to support this effort to include continued funding for Sewer CMOM corrective actions, organizational and staff development work, and assessments of the City's stormwater infrastructure, including implementing a stormwater utility fee.

Should you have any questions or need further information, do not hesitate to contact Nancy Gallinaro, Water Resources Manager, at 207-874-8801.

Sincerely,

Jon. P. Jennings
City Manager

CC: Anita LaChance, City of Portland, Deputy City Manager
Christopher Branch, City of Portland, Director of Public Works
Nancy Gallinaro, City of Portland, Water Resources Manager
Danielle West Chuhta, City of Portland, Corporation Counsel
Benjamin Pearson, City of Portland, Compliance Coordinator
Stuart Rose, MaineDEP WQM-Southern Region
Michael Wagner, Senior Enforcement Counsel, USEPA

Via Electronic Mail

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Re: CMOM Program Implementation 2017 Annual Report, City of Portland Maine
Reporting Period: 01/01/2017 – 12/31/2017
Administrative Order Docket No CWA-R1-AO-12-009

Dear Ms. Pastrana-Del Valle,

As required in the Administrative Order Docket No CWA-R1-AO-12-009, hereinafter referred to as the "Order", the City of Portland (City) is hereby submitting this CMOM Program Implementation Annual Report. This is the City's fifth Annual Report, which includes CMOM Program Implementation activities completed during the reporting period beginning January 1, 2017, and extending through December 31, 2017.

Administrative Order Compliance

The City of Portland prepared a CMOM Assessment and Corrective Action Plan to address the requirements of the Order and to provide a detailed long-term Corrective Action Plan for wastewater system management. The CMOM Assessment and Corrective Action Plan was completed on November 12, 2013, and submitted to EPA. Subsequently, the City prepared and submitted the CMOM Corrective Action Plan Implementation Schedule, dated November 22, 2014, which was approved by the EPA.

With the intent to summarize the compliance activity information requested in Section IV of the Order for the period ending December 31, 2017, we have organized this Annual Report to be consistent with the sections of the Order, as outlined below:

Table 1: Compliance Activities

Administrative Order Ref.	Description	Status	Page Number
IV.2.	Corrective Action Plan Related Contracted Work	Addressed	2
IV.2.a.	Summary Listing of all SSOs	Addressed	4
IV.2.b.	Activities to Measure Effects to Comply with AO § V.	Addressed	6
IV.2.c.	Collection System Mapping	Addressed	7
IV.2.d.	Copies of Collection System O&M Budgets	Addressed	8
IV.2.e.	Measures Taken to Reduce Extraneous Flows	Addressed	8
IV.2.f.	Description of Easement Maintenance Programs	Addressed	9
IV.2.g.	Current Status of AO Schedule Work	Addressed	10
IV.2.h.	Projection of Current Year Work to Comply with AO § V.	Addressed	14

Order Section IV.2. – Corrective Action Plan Related Contracted Work

Throughout 2017, multiple efforts were undertaken related to the Corrective Action Plan. While some were previously planned priorities, many sewer replacement projects and point repairs were completed after being discovered while conducting sewer assessment investigations with CCTV work. The following section describes this work:

As part of the CMOM Corrective Action Plan Implementation Schedule, the contract with the Ted Berry Company Inc. included in the annual report submitted for 2015 was extended in order to ensure that the City met its obligation of inspecting six percent of the collection system. In 2017, the total amount of sewer inspections completed were 154,817 linear feet or 12.6 percent of the collection system. City staff inspected 116,633 linear feet. Ted Berry Company inspected 38,184 linear feet and 55 manholes at a cost of $107,394. All pipe inspections and manhole inspections are NAASCO rated with PACP and MACP and are managed through ITpipes software. The original contract and final invoices for this work can be found in Appendix A.

In 2017, Woodard and Curran were under contract to provide SCADA Troubleshoot, Repair, and Maintain Services and an upgrade to the SCADA system. Under a separate Payment Order, a new pump and a new grinder were ordered and delivered to the Franklin Street Pump Station. Contracts and invoices for this work are included in Appendix A

In 2017, GIS Inc. was awarded a contract and completed their proposal to re-implement Cityworks through the review and improvement of existing workflows and templates. The City is currently implementing the final results from the report and incorporating recommended actions. The contract for this work can be found in Appendix A.

Multiple sewer separation projects were completed or began construction during this period and included sanitary sewer replacement. A limited contract document and associated final payment requisition documents for each project are included in Appendix A unless noted. Complete project documents are several hundred pages and can be sent upon request and include the original document, the proposal, and all bond and insurance information. The projects which had sanitary sewer replacement work are briefly described here:

State Street – This project's primary goal was to separate approximately 100 acres of drainage from the combined sewer system within State Street between Cumberland Avenue to Forest Avenue. In completing this project, a total of 1,702 linear feet of sanitary sewer was replaced. The total project cost of $6,845,081, which includes all water resources utilities and associated transportation work, was awarded to Sargent Corporation in June of 2017 with all water resources utility work completed by December 31, 2017

Moody-Wilson - This project's primary goal was to separate 7.5 acres of drainage from the combined sewer system within Wilson, Moody and Beckett Streets. The sanitary sewers were replaced during this project. A total of 769 linear feet of sanitary sewer was replaced. The total project cost of $789,363, which includes all water resources utilities and associated roadway reconstruction, was awarded to Gorham Sand and Gravel in October of 2016 with a substantial completion date of June 20, 2017.

Woodford Street - This project's primary goal was to separate 49 acres of drainage from the combined sewer system within the combined sewer system stretching from Woodford Street at the Back Cove to Forest Avenue and included several previously separated sewers that previously had been reconnected into the combined system. A total of 1,090 linear feet of sewer was replaced. Additionally, 633 linear feet of sewer lateral was replaced. The total project cost of $1,176,535, which includes all water resources utilities and associated roadway and sidewalk reconstruction, was awarded to D & C Construction Company in February of 2017 with a substantial completion date of August 31, 2017.

Powsland – Mitton – This project's primary goal is to replace sanitary sewer within Powsland and Mitton Streets. As of this date, 1,100 linear feet of sewer has been replaced in Powsland Street. Construction has

been suspended during the most recent cold snap and will restart with sewer replacement in Mitton Street again in early 2018. When completed, a total of 1,620 linear feet of sanitary sewer pipe and 1,460 linear feet of lateral piping will be replaced. The total project cost of $1,176,535, which includes all water resources utilities and associated roadway and sidewalk reconstruction, was awarded to R.E. Coleman in September of 2017. The contractor has not submitted any invoices within the reporting date.

Three sewer mains were replaced by Shaw Brothers Construction in areas that were in failure mode and/or had a history of sewer backups over the reporting period. These projects were considered emergency work and the general services contract was applied. The general services contract for Shaw Brothers Construction and associated invoice documents for each project are included in Appendix A.

The replacements and repairs were:

Chenery Street – 220' of 10" sewer pipe was replaced to address a failing sewer within Chenery Street. The total cost of this project was $47,739.93

Congress Street – 200' of 12" sewer pipe was replaced to address a failing sewer on Congress Street between Locust Street and Hampshire Street. Due to the location, this work was required to be done at night which paid double time. The total cost of this project was $75,316.08.

Chestnut Street – 278' of 18" sewer pipe was replaced to address a sewer where previously completed repairs had failed and collapse was likely. The total cost of this project was $147,805.81.

Sewer Rehabilitation work was completed for sewer infrastructure in two areas on the peninsula with cured-in-place-pipe utilizing ultra-violet light. This was a pilot project to avoid steam or hot water as a curing method particularly well suited for large diameter pipe. A total of 1,260 linear feet of varying size of sanitary sewer pipe was rehabilitated using this method. Precision Industrial Maintenance was awarded $804,173 in March of 2017 to complete this work. The sewers rehabilitated were:

Fore Street and India Street –136 linear feet of 36" x 24" horseshoe brick sewer, 229 linear feet of 42" through 45" brick sewer, and 807 linear feet of 48" brick sewer

High Street - 88 linear feet of 20" x 30" horseshoe brick sewer

The total funding encumbered for this project was not fully spent and additional rehabilitation is being discussed. The contract for Precision Industrial Maintenance and associated invoice documents for the project are included in Appendix A.

The City is currently under contract with Flow Assessment Services to provide flow monitoring services for sanitary sewer flows. The data gathered within this contract has been utilized as part of the Inflow and Infiltration Program. Flow Assessment Services is also the subcontractor to Arcadis for the Inflow and Infiltration Program.

Copies of the readily available contracts, invoices, or pay requisitions related to this work are attached as Appendix A. Additional documents can be provided upon request.

Order Section IV.2.A – Sanitary Sewer Overflows

What follows is a listing of all documented sanitary sewer overflow (SSO) as described in the Order, which have occurred and reported since January 1st, 2017 through December 31st, 2017. A SSO is defined for purposes of the Order as overflow, spill, or other release from the Collection System, including building/private property backups and dry-weather CSO outfall discharges.

During this period, there were three documented SSO events, all of which were dry-weather events. All corrective actions were completed after the overflow was observed. Table 2 provides the listing of these events in chronological order, with the additional information as required in Section IV. Request for Information.

Table 2: SSO Detail *

Date / Time	Location	Notification Source	Cause	Volume Released and Method to Estimate	Potential MS4 Impact	Potential Surface Water Impact	Volume Released to MS4 or Surface Water and Method to Estimate	Corrective Measures	DEP Reporting Date	Last Event – Same Location
1/29/2017 through 1/31/2017 02:30 to 08:30	Combined Sewer Overflow 18	Portland Water District	Intense rain event caused a combined sewer overflow which continued after the rain stopped. Multiple alarm systems and fail-safes failed due to both human and machine error.	2,490,000 gallons based on CSO overflow monitoring data	Entered directly into Back Cove	Back Cove - Casco Bay	2,490,000 gallons based on CSO overflow monitoring data	Multiple measures were put into place including equipment replacement, SCADA reprogramming, rewriting of administrative protocol, and additional investigation. For more information, please review the letter to the Maine Department of Environmental Protection dated March 24, 2017, attached to the SSO report.	Verbal 1/31/2017 Written 2/3/2017	None known
2/22/2017 Reported at 21:15, unknown start time	80 Four Winds Road	Property Owner	Blockage caused by root ball.	No estimate	None	Capisic Brook	None	Sewage backed up into basement due to root ball. Sewer main was rodded to remove blockage and the line was thoroughly cleaned. Segment will be added to root trouble list.	Verbal 2/23/2016 Written 3/2/2017	None known
5/26/2017 Reported in the afternoon and relieved at 18:00 same day	753-757 Brighton Avenue	Property Owner	Pipe blocked by material buildup at root intrusion.	No estimate	None	Capisic Brook	None	8" sewer was immediately rodded to relieve the surcharge. System was then televised to verify the cause of the blockage. Segment will be added to root trouble list.	Verbal 5/30/2017 Written 6/1/2017	None known

*Copy of the MaineDEP Non-Compliance Discharge Incident Reports, as prepared by the City are attached in **Appendix B.** A map of SSOs locations is available upon request.

Order Section IV.2.B – Activities to measure effects to comply

The City has worked diligently during 2017 to comply with the Order through the Asset Management Program and in cooperation with other City Departments.

The City continues to improve its use of Cityworks, a computerized maintenance management software. During this reporting period, the Asset Management Team and the Maintenance and Operations team worked together to implement a paperless workflow using Cityworks and iPads. Catch basin cleaning and inspections were completed using Cityworks digitally. The new workflow allows for quicker distribution of work and allow for better tracking of inspections. The workflow also allows for quicker review of the inspections and work order creation when issues within the collection system were identified. Moving forward, the Maintenance and Operation team will receive work assignments digitally in Cityworks rather than a paper process. Additionally, equipment, labor, and materials have been incorporated into work orders to determine the life cycle costs of assets.

Asset Management staff is now able to update the risk analysis model to recalculate the consequence of failure, the likelihood of failure, and risk for all of the sanitary sewer pipes within GIS. Previously, this update was completed solely by Woodard and Curran or with their assistance. This effort is more robust than the previous analysis as our GIS data has been greatly improved with the work done described in Order Section IV.2.C – Collection System Mapping. Pump station work orders have been incorporated by component and task using Cityworks work order templates and a related table through GIS. With better data on recurring maintenance and equipment replacement, risk analysis for pump stations will be updated and improved. While capital improvement projects are planned for priority areas, repair and replacement work is completed as issues are found through inspections via CCTV work as evidenced in the multiple point repairs and sewer pipe replacement done in 2017.

Per the Administrative Order multiple staff members from Water Resources Engineering (2), Asset Management (2), and Operations and Maintenance (2) were trained and certified through the National Association of Sanitary Sewer Company Pipe Assessment Certification Program.

While incorporated into the Rules and Regulations for Use of the Sewer System in the summer of 2015, the Fats, Oils, and Grease (FOG) program began full implementation July 2016. In 2017, 553 Fats, Oils, and Grease inspections were completed by the Health Department, double of the number completed in 2016. Since the program was fully implemented, over 800 inspections have been completed. Much of the follow-up work, if required, is conducted by Water Resources staff and generally involves providing maintenance information or technical support for equipment upgrades. When a health inspection that indicates a non-compliant establishment is submitted to Water Resources, follow up is done to inform and correct the non-compliance. From an administrative perspective, the FOG program continues to be integrated into the building permit and business licensing processes for any new food service establishments or existing establishments that are changing hands. By being incorporated into the permit and license process, FOG program requirements are enforced and equipment installed prior to final approval for construction or business license approval. In the fall of 2017, to increase compliance at Food Service Establishments that have not been inspected recently or required a building permit, a tiered enforcement approach has been implemented. Tier I is currently underway on 30 establishments that did not have any equipment on record. Of these 30, 20 either have equipment in place or will be installing equipment to comply. Of the other 10, 6 were evaluated and were determined to be exempt due to the nature of their establishments, 3 are seasonal and will be installing equipment prior to opening, and 1 is moving to a new location where grease control equipment will be installed. Tier II is currently underway and focuses on establishments that have equipment

but a lack of records or information required as part of the program. These establishments are required to have a Fats, Oils, and Grease evaluation done during the business license renewal process. Tier II only covers establishments that don't serve alcohol as they have an annual renewal date. Tier III will begin in 2018 to cover establishments that have a license to serve alcohol and are on a rolling business license renewal calendar.

The City has continued to use Smart Cover to alert Operations staff when the flow at the manholes begins to rise to a pre-determined height, indicative of a sewer back-up downstream. Ten additional Smart Covers were purchased in late 2017 and will be deployed in 2018. Besides the purchase of the covers, there is an annual fee for the reporting of flow information to the cloud.

Order Section IV.2.C – Collection system mapping

In order to improve the collection system mapping, the Asset Management team is constantly updating the GIS system. Whether it is due to the installation of new infrastructure, the abandonment of old infrastructure or field verification of unknowns, the collection system data is regularly revised. To help understand and improve how this process of updating and revising is completed, the following was completed in 2017:

As part of the Inflow and Infiltration Program, a gap analysis of the GIS system has been completed and has been provided to the City in a draft form. The report highlights areas within the GIS system that are deficient or lack information. The report indicates that some attributes are populated with a percentage of nulls, which indicates a lack of data. Initial trace analysis indicated that 95% of the system is fully connected but at this time, the remaining 5% has been corrected to ensure that the GIS is fully connected. Other issues include a lack of invert elevation data for manholes, an effort that will require additional resources to correct. The City is currently determining how to collect this data and may acquire a survey-grade GPS unit for data collection. The data will be necessary to have a proper hydraulic model that can provide accurate information as well. As part of the gap analysis and planning process for flow monitoring, a number of questions were posed to the City for clarification. While some of the questions were related to private pumping stations the most critical questions were regarding multiple high point manholes that required verification. As the Operations and Maintenance crews investigate and resolve the questions, the GIS system will be updated.

The reimplementation of Cityworks effort completed by GIS Inc. included a needs assessment to determine the status of CMMS work orders and Best Management Practices and the development of benchmarking metrics for the Water Resources Division which resulted in new Standard Operating Procedures. Additionally, programming to improve reporting from Cityworks utilizing Crystal Reports was created. Any Cityworks user can now view data reports related to collection system maintenance and inspection, which helps ensure that the City is on track to meet the requirements of the Administrative Order. This effort highlighted the need to ensure that maintenance work completed in the field is properly reported and that any issues with the existing GIS system are noted to allow for the Asset Management team to make the corrections.

The City continues to collect sewer assessment data with field inspections and closed circuit television inspections of collection system infrastructure. Since 2010, the City has inspected 45% of the collection system through CCTV. When the inspection data is received, the related GIS is reviewed, verified, and corrected if needed. As the data is updated, the risk analysis model can be run and kept up to date. This allows the City to make better-informed decisions regarding infrastructure repair or replacement.

The asset management team was given the Asset Management Excellence Award from the Maine Water Environment Association for their work and willingness to help other communities with their asset management programs.

Map updates are ongoing and we would be pleased to provide a GIS copy of the most current system map upon request.

Order Section IV.2.D – Collection System Budgets

Attached in Appendix C is a copy of the FY18 Sewer Enterprise Fund Operations & Maintenance Budget and Capital Budget from the City's operating "Sewer Fund" budgets, for the period beginning July 1, 2017, through June 30, 2018. The City's Sewer Enterprise Fund generates revenue from all users of the system who pay monthly or quarterly fees, based on water volume. Capital projects including repair and replacement of sanitary sewer infrastructure are funded through this Sewer Enterprise Fund as well, with financing using the State Revolving Loan Fund and City bonds. Combined Sewer Overflow abatement is funded through the Sewer Enterprise Funds. Collection System operations and maintenance budget is specifically described in the Enterprise Fund Budget as Sewer Districting (31-12); further breakdown of that budget is attached in Appendix C as Sewer Utility Districting General Fund/Operating Budget, along with FY18 Sewer Districting Expenditures Explanatories. Please note that the attached reports provide "life-to-date" data.

Additionally, attached in Appendix C is the City of Portland FY18 Capital Improvement Plan Project to Date report, limited to those pages including sewer-related projects.

Order Section IV.2.E – Infiltration and Inflow Reduction Measures

Arcadis was chosen and awarded a contract to complete the multiple year and phase Inflow and Infiltration Program beginning in May of 2017. Of the $1,800,000 budgeted for the program, $1,100,000 has been allocated. The final funding addition will be completed after the Fiscal Year 2019 Capital Improvement Plan budget is approved. The final contract, which includes the scope of work for the program, is included in Appendix A.

The three phases of the program are:

1. Investigation and quantification of Inflow and Infiltration flows
2. Identification of major Inflow and Infiltration sources
3. Schedule of target opportunities for cost-effective mitigation

The Inflow and Infiltration program is currently in Phase 1. In this phase, the consultant is reviewing existing GIS and modeling data in order to complete a gap analyses for both the GIS system related to sewer infrastructure and for the City's existing modeling capabilities. Both reports are currently in draft form and are being reviewed by City staff. In completing these efforts, recommendations will be made to the City to improve the existing GIS system and to create a dynamic model for future planning purposes.

The next task in Phase 1 is to identify excessive flows defined as greater than 4,000 gallons per day per inch-diameter/mile utilizing a flow monitoring program with the subcontractor Flow Assessment Services. The flow monitoring program will occur over two seasons, spring 2018 and fall 2018. If additional flow monitoring is required, Arcadis will work with Flow Assessment to collect more data. The data that has been collected previously by Flow Assessment Services under separate contracts are being utilized as well. Once adequate flow data is collected, a summary flow monitoring report will be prepared and provided to the City.

Phase 2 of the program will identify major sources of inflow and infiltration in the collection system. All flow monitoring data collected and from previous monitoring efforts will be reviewed to determine if there are any gaps in the data. Recommendations for future flow monitoring will be provided. An investigation strategy will be prepared and include manhole inspections, smoke testing, additional camera inspections and any other investigative methods. Camera inspections will be completed by the Ted Berry Company, the subcontractor on this project, or by City staff. From this investigation, Arcadis will identify, locate, and quantify significant sources of inflow and infiltration throughout the collection system.

Phase 3 of the program will result in a Wastewater Collection System Analysis and Action Plan. This plan will determine strategies to reduce inflow and infiltration, a cost estimate for those strategies, prioritized rehabilitation, repair, and replacement work, and a 10-year capital plan with short-term and long-term objectives. Finally, a comprehensive Inflow and Infiltration Study Report that incorporates the findings of all reports prepared in phase 1, 2, and 3.

Arcadis has broken down the program into six tasks, some of which will be part of each phase. The proposal, final scope of work, and cost estimates are included in the contract, which can be found in Appendix A. All invoices to date are also included in Appendix A. Additional insurance documents are available upon request.

Sewer replacement projects which limited infiltration and inflow can be found in section IV. 2 Correction Action Plan Related Contracted Work.

Order Section IV.2.F – Easement maintenance program

The City's Easement Maintenance Program is designed to protect public health and the environment by focusing on locating lost or buried manholes; the City periodically clears easements of trees and re-growth to prevent tree root penetration into sewer lines. The goal of the program is for line segments to be cleared on a regular interval, dependent upon site conditions. As easements are maintained, the sewer system within them are inspected to determine if rehabilitation is necessary. The City utilizes Public Works Survey staff to flag the easements prior to initiating clearing activities. The maintenance program includes mowing, selective vegetation removal, and tree cutting, and as required, use of EPA-approved spot herbicide applications. Additional equipment has been budgeted and purchased to maintain easements throughout the City.

In 2017, the City maintained four sewer easements throughout the City for a total of 10,330 linear feet. The easements maintained are:

Pennel Avenue Right of Way – 2,750 linear feet

Maine Avenue to Ray Street Right of Way – 2,030 linear feet

Riverside to Industrial Right of Way – 4,700 linear feet

Portland Area Technical High School Right of Way – 850 linear feet

Public Works survey staff continue to assist in easement maintenance by providing research of property deeds and ownership along with flagging of the right of ways.

Order Section IV.2.H – Current Status of AO Schedule Work

As part of the Administrative Order, a Capacity Management Operation and Maintenance Corrective Action Plan Implementation Schedule (CMOM CAP) was approved by the Environmental Protection Agency on November 22, 2014. The CMOM CAP includes program, staffing, and projects with associated deadlines and are italicized below. The current status is reported below each item.

Operations and Maintenance Recommendations

1. *Beginning July 1, 2014, perform annual CCTV assessment of at least 6% of the collection system and manholes;*
    a. *PACP and MACP data from the assessment shall be integrated into the City's CMMS within 30 days of collection.*

This has been completed annually each year on time through the combination of City sewer inspections and sewer assessment contracts with Ted Berry Company. In 2017, less than 6% of sewer manholes were completed as the City refines and prepares an updated MACP template for level 2 inspections to be completed from here on out. It is anticipated that more than 6% of the collection system and manholes will be assessed during the Inflow and Infiltration program.

2. *By July 1, 2016, City's collection system CCTV and other inspection data collected since July 1, 2010, shall be assigned PACP and MACP scores and uploaded to the CMMS database.*

Data collected previously that did not have this rating was converted through a contract with Ted Berry and reported in the 2016 annual CMOM report and all data has been assigned PACP and MACP prior to the deadline.

3. *By July 1, 2016, the City shall assign unique individual asset identifiers for collection system structures (manholes, diversion structures, outfalls, hydro brakes, etc.) in the CMMS program to track maintenance activities and operational performance.*

This was completed on time through a contract with ESRI and reported in the 2016 annual CMOM report.

4. *Between January 1, 2015, and January 1, 2019, the City shall complete Phase I of an I/I program as described in Section 6.3.2 of the City's CMOM Correction Action Plan. A Phase I report that includes flow metering results and identified all sub-catchment areas that have I/I flows in excess of 4,000 GPD per inch diameter/mile of sewer shall be submitted to EPA no later than January 1, 2019.*

Arcadis has been contracted to complete the Inflow and Infiltration Program. Currently, Arcadis is conducting Phase 1 of the program and is reviewing existing flow metering data in order to select locations for their sub-consultant to conduct two seasons worth of metering.

5. *By July 1, 2019 the City shall submit Phase II of the I/I program as described in Section 6.3.3 of the City's CMOM Correction Action Plan that identifies all major source of I/I based on a methodology of assessment whose inputs are, at a minimum, the I/I program's Phase I results.*

During that time frame the following items will be developed and worked on by the City:

- *The City and the OWD currently own 41 CSO flow monitors, In addition, the City also owns 24 additional flow monitors utilized to monitor and model sub-catchment areas for the development of its CSO projects. Metering and modeling data will be collected from past and future projects and consolidated into SWMM 5.0. A Gap Analysis will then be performed to determine what parts of the system remain to be modeled and move forward with that task. InfoSWMM will help us to determine deficiencies within the collection system allowing us to focus on critical infrastructure first. To complement this effort, gaps in our GIS data will be identified and corrected for the highest level of accuracy in the model.*

In addition to reviewing existing flow monitoring data and planning on the future collection of data, Arcadis is reviewing the existing GIS and hydraulic models in order to identify data gaps as part of Phase 1 of the Inflow and Infiltration Program. A draft report is being reviewed and will be finalized in 2018. Additional funding to improve the model based on the recommendations from the gap analysis will be requested in future fiscal year budgets. Phase 2 of the Inflow and Infiltration program is on track to meet the July 1, 2019 deadline.

- *In addition to investing in modeling technology, the Department of Public Services will be seeking funds in FY16 to add a new truck and software for in-house CCTV as well as certifying additional staff on NASSCO PACP, MACP, and LACP to give us the best possible, consistent, objective data when prioritizing rehabilitation and replacement needs.*

This was completed through the purchase of the new CCTV truck as previously reported.

- *A full and complete inventory of our assets and their condition and a plan to address I&I can be established and prioritized the results of an integrated plan.*

While this will be part of the I/I program, the City is currently in the process of reviewing and shortlisting consultants to provide engineering services in order to prepare an integrated plan. It is expected that a consultant will be selected in 2018.

- *Determine the best possible benchmark for measuring success in our efforts. We anticipate this measurement will be a reduction in base flows from Pump Stations to the East End Wastewater Treatment Plant.*

This will be part of the Inflow and Infiltration Program.

- *By July 1, 2016, the City shall finalize the CMMS program implementation for both the collection system and pump station assets in order to track all service requests, work orders, including predictive maintenance practices.*

This has been completed for collection system assets and pump station assets. A new asset management technician has been hired to improve the use of CMMS for pump station assets. Additionally, GIS Inc. has been contracted to help improve the use of Cityworks through the review and improvement of existing workflows and templates. Detailed information regarding this can be found in Order Section IV.2. – Corrective Action Plan Related Contracted Work

Additionally, the Asset Management team has offered several training opportunities to Operations and Maintenance staff in the use of iPads to complete work orders and inspections so that all of the information is digital and entered into the CMMS. Detailed information regarding this can be found in Order Section IV.2.B – Activities to measure effects to comply

6. *By December 1, 2019, the City shall submit a schedule for the completion of Phase III as described in the City's CMOM CAP Section 6.3.4 and 6.3.5 that will be incorporated into the Administrative Order Docket number 12-009 unless EPA issues an order with an alternative schedule. Said alternative schedule shall be reviewed and jointly agreed to by the City of Portland Region 1 EPA office.*

This will be part of the Inflow and Infiltration Program.

Collection System and Pump Station Renewal Recommendations

1. *By January 1, 2020, the City shall submit to EPA and MEDEP for approval a plan for long-term collection system renewal based on CCTV assessments, SSES studies and asset management performed up to that date.*

This will be part of the Inflow and Infiltration Program and/or Integrated Planning efforts.

2. *By July 1, 2020, the City shall plan and execute short-term collection system renewal projects for all 'high priority renewal' projects identified in the CMOM Plan.*

The City has reviewed the projects identified in the CMOM plan and will continue to plan and execute the projects which are still considered to be priorities. Since the CMOM report was prepared with a small amount of data compared to what the City currently has collected with sewer assessments, not all of the projects identified in the report will be completed as other projects have begun higher priority. It is expected that the Presumpscot North Interceptor, identified in the CMOM report, will be rehabilitated or replaced in 2018.

3. *By July 1, 2020, the City shall plan to execute short-term pump station renewal projects identified in the CMOM Plan based on the following schedule:*
    a. *By July 1, 2016, upgrade the standby power connection at the Castine Pump Station*

This has been completed.

b. *By December 31, 2017, the City shall eliminate the Franklin Street Pump Station, or implement as follows:*
   i. *Upgrade the cooling water system, and Pump 3 by July 1, 2016*
   ii. *Upgrade the MCC by July 1, 2017*

Currently, a design-build contract with Woodard & Curran is being negotiated. Under the contract, Woodard & Curran will provide up to 60% designs and determine a guaranteed maximum price to complete the work. After approving the work and costs, Woodard & Curran will work with electrical and mechanical subcontractors to complete the projects.

c. *At the Riverside Pump Station:*
   i. *Upgrade the MCC system by July 1, 2016*
   ii. *Upgrade Pumps 1 and 2 by July 1, 2017*

This has been completed.

d. *By July 1, 2018, eliminate the Curtis Pump Station and implement the recommended upgrades at the Hope Street Pump Station, or plan and implement of the other two alternatives described in the CMOM Plan by July 1, 2017.*

Currently, a design-build contract with Woodard & Curran is being negotiated. Under the contract, Woodard & Curran will provide up to 60% designs and create a guaranteed maximum price to complete the work. After approving the work and costs, Woodard & Curran will work with electrical and mechanical subcontractors to complete the projects.

e. *Upgrade the PLC and instruments at the Ashmont pump station by July 1, 2019.*

A new engineering staff member has been hired and will be reviewing this work in 2018 to determine if it can be designed and/or completed in-house. It is anticipated to be completed in time.

f. *Replace the Riverton Pump Station with a submersible pump station by July 1, 2019.*

A new engineering staff member has been hired and will be reviewing this work in 2018 to determine if it can be designed in-house. It is anticipated to be completed in time.
.

g. *By January 31, 2020, the City shall submit plans for long-term pump station renewal projects to be completed during the next five year period from July 1, 2020, through July 1, 2025.*

This may be part of the Integrated Planning efforts.

<u>Wastewater Program and Ordinance Recommendation</u>

1. *By January 31, 2015, the City shall 1) develop a Fats, Oils, and Grease (FOG) program that reduces grease accumulations so as to not impact Collection System capacity and contributing to Sanitary Sewer Overflows (SSO's) and 2) submit a written description of that program to EPA and MEDEP. The City shall implement the FOG program by July 1, 2016.*

This was completed on time. More detailed information can be found in Section IV.2.B – Activities to measure effects to comply.

2. *Beginning July 1, 2016, and annually thereafter, update the City's asset risk analysis and renewal planning priorities, to be submitted to EPA and MEDEP as part of the CMOM Program Implementation Annual Report.*

The risk analysis and renewal planning priorities are available and are provided in Appendix D, though the analysis and rehabilitation list is updated as additional information is gathered through inspections and CCTV work.

Staffing and Organizational Recommendations

1. *By July 30, 2015, complete the implementation of the organizational framework recommendations within the CMOM Plan including the establishment of a new division of Water Resources Management, the hiring of a full-time manager for this division, and the hiring of a full-time asset manager.*

This was completed on time

Order Section IV.2.H – Projected measures

In addition to the ongoing work described in this Annual Report and as outlined in the approved CMOM Corrective Action Plan Implementation Schedule, the following activities plan to be completed by December 31st, 2018:

Sewer rehabilitation projects through the use of cured-in-place-pipe products and sewer replacement will be completed. Sewer rehabilitation projects will likely include a combination of traditional CIPP and sewer replacement. $1,100,000 is budgeted for each fiscal year and multiple years of funding have built up for expenditure. With additional sewer investigation as part of the Inflow and Infiltration Program, it is anticipated that many pipes and manholes will require rehabilitation. Pipe rehabilitation will be based on priority areas, condition assessments, and in segments identified in the SSO reports found in Appendix B. The reporting period for 2018 will likely have projects utilizing multiple years of capital improvement plan funding.

In addition to the sewer lining projects, multiple sewer rehabilitation and/or replacement projects are anticipated to begin construction during 2018 and include the following:

Roughly 620 linear feet of 8 inch vitrified clay pipe sanitary sewer with 8" PVC will be replaced in Mitton Street.

Roughly 950 linear feet of 10 inch PVC sanitary sewer pipe will be replaced within Bell Street.

Multiple sewer separation projects are anticipated to begin construction during 2018. As part of the sewer separation, sanitary sewer will be replaced. The planned projects include the following:

Bedford Street - Roughly 2,270 linear feet of sanitary sewer pipe will be replaced in a sewer separation project located in Bedford Street, Forest Avenue, and Belmeade Streets.

Madison-Washington-Walnut - Roughly 1,800 linear feet of sanitary sewer pipe will be replaced in a sewer separation project located in Madison Street, Walnut Street, and Washington Avenue. A section of sewer pipe in Washington Avenue between Madison Street and Cumberland Avenue was added to the sewer separation project after a CCTV inspection found sections of the pipe in poor condition.

Preble Street – Roughly 2,700 linear feet of sanitary sewer pipe will be replaced in a sewer separation project located in Preble Street, Kennebec Street, and Somerset Street. The total length of sewer replaced may change as the design progresses.

The Franklin Street and Curtis Road Pump Station projects identified in the CMOM report will begin design and construction in 2018 as described in *Order Section IV.2.H – Current Status of AO Schedule Work*. Currently, a design-build contract with Woodard & Curran is being negotiated. Under the contract, Woodard & Curran will provide up to 60% designs for both projects and create a guaranteed maximum price to complete the work. After approving the work and costs, Woodard & Curran will work with electrical and mechanical subcontractors to complete the projects. The work includes:

Curtis Road Pump Station Comprehensive Upgrade – All aspects of the pump station except the wet well will be replaced and upgraded based on a recommendation from a Business Case Study done by Woodard and Curran which considered eliminating the station in favor of nearby pump station.

Franklin Street Pump Station – Upgrades to this pump station include the cooling water system, MCC, and Pump 3. This station was originally planned on being eliminated as part of the design of a 3.5 million gallon storage conduit, known as Back Cove South, but the original location was modified and the station will not be eliminated.

Design of the Riverton Pump Station replacement will begin in 2018 to replace the flooded suction station currently in place with a submerged pump style station. The design will likely be completed in-house utilizing a recently hired Project Engineer.

Design of the upgrades of the PLC and instruments at the Ashmont pump station will begin in 2018.

The FOG program will continue to be enforced with additional efforts being made to incorporate FOG requirements into business license renewal. It is anticipated that over 500 restaurant inspections will be completed by the Health Department in 2018. A tiered enforcement of compliance, as described in Order Section IV.2.B – Activities to measure effects to Comply with AO will continue to be enacted as part of the business license renewal process, which is the main trigger, along with building permits, in ensuring grease control equipment is installed.

Recently purchased Smart Covers will be deployed in areas throughout the City to help identify that may have had issues in the past due to root or debris blockages. These Smart Covers will notify City staff of rising sewerage levels that can lead to sewer backups.

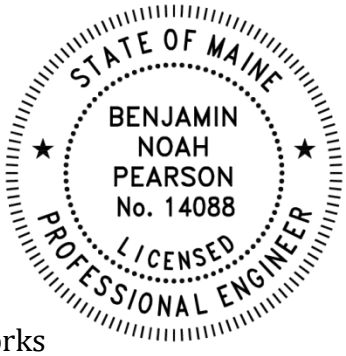
SUMMARY

We appreciate the opportunity to have submitted this CMOM Program Implementation Annual Report for the period ending December 31, 2017.

Should you have any questions, comments or need any additional information, please do not hesitate to contact Nancy Gallinaro, Water Resources Manager, at 207-874-8817.

Sincerely,

CITY OF PORTLAND



Benjamin Pearson, P.E.
Compliance Coordinator
Department of Public Works
Water Resources Division

Attachment(s)

Appendix A – Contracts and Invoices
Appendix B – Sanitary Sewer Overflow Reports
Appendix C – Municipal Budgets
Appendix D – Risk Analysis Map and Rehabilitation Priorities

BNP

cc: Jon Jennings, City of Portland, City Manager
Anita LaChance, City of Portland, Deputy City Manager
Christopher Branch, City of Portland, Director of Public Works
Nancy Gallinaro, City of Portland, Water Resources Manager
Danielle West Chuhta, City of Portland, Corporation Counsel
Brad Roland, City of Portland, Senior Project Engineer
Stuart Rose, MaineDEP WQM-Southern Region
Michael Wagner, Senior Enforcement Counsel, USEPA

Appendix A – Contracts and Invoices

Appendix A – Contracts and Invoices

SECOND AMENDMENT TO
AGREEMENT BETWEEN
CITY OF PORTLAND
AND
TED BERRY COMPANY, INC.

THIS SECOND AMENDMENT is made as of this 20th day of November, 2017, to the **AGREEMENT** dated October 27, 2015 by and between the **CITY OF PORTLAND**, a body politic and corporate, located in Cumberland County and State of Maine, (hereinafter the "**CITY**"), and **TED BERRY COMPANY, INC.**, a Maine corporation with a mailing address of 521 Federal Road, Livermore, Maine 04253 (hereinafter the "**CONTRACTOR**").

W I T N E S S E T H:

WHEREAS, the **CITY** and the **CONTRACTOR** entered into an agreement dated October 27, 2015 for internal examination and cleaning of the City sewer system, which was amended by a First Amendment to Agreement dated June 1, 2016 (collectively, the "Agreement"); and

WHEREAS, the parties desire to extend the term of said agreement in order to allow time for the CONTRACTOR to provide the additional services described herein;

NOW, THEREFORE, the parties agree to amend the original agreement dated as of October 27, 2015 (hereinafter the "Agreement") as follows:

1. ADDITIONAL SERVICES; COMPENSATION. In addition to the services described in the Agreement, CONTRACTOR shall provide the services described in the FY16 Condition Assessment of Sewer System (attached hereto as Exhibit A and incorporated herein by reference). In exchange for performance of the services described in Exhibit A, the City shall pay CONTRACTOR an amount not to exceed $271,037.00 at the rates set forth therein.

2. TIME FOR PERFORMANCE. The termination date of the Agreement, which is currently June 30, 2017, is hereby extended until June 30, 2018.

3. SURVIVING TERMS. Any and all terms of the Agreement not herein amended shall remain in full force and effect for the duration of the Agreement as amended hereby and are hereby ratified. In the event of any conflict between the terms of this Amendment and the terms of the Agreement and any exhibits thereto, the terms of this Amendment shall govern and control so long as this Amendment is in effect.

IN WITNESS WHEREOF, the said **CITY OF PORTLAND** has caused this Agreement to be signed and sealed by Jon P. Jennings, its City Manager, thereunto duly authorized, and **TED BERRY COMPANY, INC.** has caused this Agreement to be signed and sealed by Matthew Timberlake, its President, thereunto duly authorized, the day and year first above written.

WITNESS:

CITY OF PORTLAND

By: _____
Jon P. Jennings
Its City Manager

WITNESS:

TED BERRY COMPANY, INC.

By: _____

Print Name: Matthew Timberlake

Its President

Approved as to form:

_____
Corporation Counsel's Office

Approved as to funds:

_____
Finance Director

EXHIBIT A

FY16 CONDITION ASSESSMENT OF SEWER SYSTEM City of Portland 6% Contract Extension through June 30th, 2018						
8" Pipe Size	Item #	Item	QTY	Unit Price ($)	Pay type	Total Price ($)
	1	Light Cleaning <25%	3,597	$ 0.75	Per Foot	$ 2,697.75
	2	Heavy Cleaning >25%	-	$ 3.00	Per Foot	$ -
NASSCO PACP	3	CCTV Inspection	3,597	$ 1.00	Per Foot	$ 3,597.00
9" & 10" Pipe Size						
	4	Light Cleaning <25%	8,893	$ 0.75	Per Foot	$ 6,669.75
	5	Heavy Cleaning >25%	-	$ 5.00	Per Foot	$ -
NASSCO PACP	6	CCTV Inspection	8,893	$ 1.00	Per Foot	$ 8,893.00
12" Pipe Size						
	7	Light Cleaning <25%	12,932	$ 0.75	Per Foot	$ 9,699.00
	8	Heavy Cleaning >25%	-	$ 1.00	Per Foot	$ -
NASSCO PACP	9	CCTV Inspection	12,932	$ 1.00	Per Foot	$ 12,932.00
14" & 15" & 16" Pipe Size						
	10	Light Cleaning <15%	10,115	$ 0.75	Per Foot	$ 7,586.25
	11	Heavy Cleaning >15%	-	$ 5.00	Per Foot	$ -
NASSCO PACP	12	CCTV Inspection	10,115	$ 1.00	Per Foot	$ 10,115.00
18" Pipe Size						
	13	Light Cleaning <15%	23,953	$ 0.75	Per Foot	$ 17,964.75
	14	Heavy Cleaning >15%	-	$ 2.00	Per Foot	$ -
NASSCO PACP	15	CCTV Inspection	23,953	$ 1.00	Per Foot	$ 23,953.00
20" Pipe Size						
	16	Light Cleaning <15%	1,176	$ 1.00	Per Foot	$ 1,176.00
	17	Heavy Cleaning >15%	-	$ 2.00	Per Foot	$ -
NASSCO PACP	18	CCTV Inspection	1,176	$ 1.00	Per Foot	$ 1,176.00
24" Pipe Size						
	19	Light Cleaning <15%	9,984	$ 1.00	Per Foot	$ 9,984.00
	20	Heavy Cleaning >15%	-	$ 2.00	Per Foot	$ -
NASSCO PACP	21	CCTV Inspection	9,984	$ 1.00	Per Foot	$ 9,984.00
30" Pipe Size	Item #	Item	QTY	Price ($)	Pay type	Total
	22	Light Cleaning <10%	4,053	$ 3.25	Per Foot	$ 13,172.25
	23	Heavy Cleaning >10%	-	$ 6.50	Per Foot	$ -
NASSCO PACP	24	CCTV Inspection	4,053	$ 1.25	Per Foot	$ 5,066.25
36" Pipe Size	Item #	Item	QTY	Price ($)	Pay type	Total
	25	Light Cleaning <10%	5,683	$ 1.00	Per Foot	$ 5,683.00
	26	Heavy Cleaning >10%	-	$ 5.00	Per Foot	$ -
NASSCO PACP	27	CCTV Inspection	5,683	$ 1.00	Per Foot	$ 5,683.00
40" - 42" Pipe Size						
	28	Light Cleaning <10%	221	$ 1.00	Per Foot	$ 221.00
	29	Heavy Cleaning >10%	-	$ 5.00	Per Foot	$ -
NASSCO PACP	30	CCTV Inspection	221	$ 1.00	Per Foot	$ 221.00
44" - 48" Pipe Size	Item #	Item	QTY	Price ($)	Pay type	Total
	31	Light Cleaning <10%	1,912	$ 1.00	Per Foot	$ 1,912.00
	32	Heavy Cleaning >10%	-	$ 5.00	Per Foot	$ -
NASSCO PACP	33	CCTV Inspection	1,912	$ 1.00	Per Foot	$ 1,912.00
Done in conjunction with CCTV Inspection	34	Sonar Profiling	1,912	$ 4.50	Per Foot	$ 8,604.00
	35	2D Laser Profiling	1,912	$ 6.00	Per Foot	$ 11,472.00
	36	3D Laser Profiling	-	$ 9.00	Per Foot	$ -
60" Pipe Size	Item #	Item	QTY	Price ($)	Pay type	Total
	37	Light Cleaning <10%	576	$ 1.00	Per Foot	$ 576.00
	38	Heavy Cleaning >10%	-	Per Section	Per Foot	-
NASSCO PACP	39	CCTV Inspection	576	$ 1.50	Per Foot	$ 864.00
Done in conjunction with CCTV Inspection	40	Sonar Profiling	576	$ 4.50	Per Foot	$ 2,592.00
	41	2D Laser Profiling	576	$ 6.00	Per Foot	$ 3,456.00
	42	3D Laser Profiling	-	$ 9.00	Per Foot	$ -
72" Pipe Size	Item #	Item	QTY	Price ($)	Pay type	Total
	43	Light Cleaning <10%	1,828	$ 1.00	Per Foot	$ 1,828.00
	44	Heavy Cleaning >10%	-	Per Section	Per Foot	-

NASSCO PACP	45	CCTV Inspection	1,828	$ 1.50	Per Foot	$ 2,742.00
Done in conjunction with CCTV inspection	46	Sonar Profiling	1,828	$ 4.50	Per Foot	$ 8,226.00
	47	2D Laser Profiling	1,828	$ 6.00	Per Foot	$ 10,968.00
	48	3D Laser Profiling	-	$ 9.00	Per Foot	$ -
96" Pipe Size	**Item #**	**Item**	**QTY**	**Price ($)**	**Pay type**	**Total**
	49	Light Cleaning <10%	1,145	$ 1.00	Per Foot	$ 1,145.00
	50	Heavy Cleaning >10%	-	Per Section	Per Foot	
NASSCO PACP	51	CCTV Inspection	1,145	$ 1.50	Per Foot	$ 1,717.50
Done in conjunction with CCTV inspection	52	Sonar Profiling	1,145	$ 4.50	Per Foot	$ 5,152.50
	53	2D Laser Profiling	1,145	$ 6.00	Per Foot	$ 6,870.00
	54	3D Laser Profiling	-	$ 9.00	Per Foot	$ -
6" to 12" Pipe Size	**Item #**	**Item**	**QTY**	**Unit Price ($)**	**Pay type**	**Total Price ($)**
	55	Root Cut Medium RM & RB < 3 Joints	-	$ 50.00	Per Foot	$ -
	56	Root Cut Heavy RB 3 or > 3 Joints	-	$ 150.00	Per Foot	$ -
	57	Lateral Cuts Excluding DIP, SP, CAS	-	$ 100.00	Per Each	$ -
14" to 24" Pipe Size	**Item #**	**Item**	**QTY**	**Price ($)**	**Pay type**	**Total**
	58	Root Cut Medium RM & RB < 3 Joints	-	$ 50.00	Per Foot	$ -
	59	Root Cut Heavy RB 3 or > 3 Joints	-	$ 150.00	Per Foot	$ -
	60	Lateral Cuts Excluding DIP, SP, CAS	-	$ 150.00	Per Each	$ -
27" to 36" Pipe Size	**Item #**	**Item**	**QTY**	**Price ($)**	**Pay type**	**Total**
	61	Root Cut Medium RM & RB < 3 Joints	-	$ 50.00	Per Foot	$ -
	62	Root Cut Heavy RB 3 or > 3 Joints	-	$ 150.00	Per Foot	$ -
	63	Lateral Cuts Excluding DIP, SP, CAS	-	$ 250.00	Per Each	$ -
		Total Pipe Footage =	**83,664**	**LINEAR FEET**		
Misc.	**Item #**	**Item**	**QTY**	**Price ($)**	**Pay type**	**Total**
NASSCO MACP	64	Manhole inspection and report Level 1	-	$ 12.50	Per Each	$ -
NASSCO MACP	65	Manhole inspection and report Level 2	450	$ 50.00	Per Each	$ 22,500.00
	66	Traffic control (excluding uniformed officers)	-	$ 18.00	Per Hour	$ -
	67	Deliverables	-	$ 75.00	LS	$ -
	68	GIS analyst	-	$ 65.00	Per Hour	$ -
	69	Sewer Line Acoustic Assessment	-	$ 2.50	Per Foot	$ -
John Emerson as needed	70	Hourly investigative work as needed	80	$ 195.00	Per Hour	$ 15,600.00
Back Cove Storage Conduit	**Item #**	**Item**	**QTY**	**Price ($)**	**Pay type**	**Total**
Payson Park	71	CCTV Inspection 8' x 10' box culvert x 340' (3)	1,020	$ 2.55	Per Foot	$ 2,601.00
Baxter Boulevard	72	CCTV inspection 8' x 10' box culvert x 1,500' (1)	1,500	$ 2.55	Per Foot	$ 3,825.00
As needed after CCTV	73	Cleaning inspection 8' x 10' box culvert x 340' (3)	-	$ 275.00	Per Hour	$ -
As needed after CCTV	74	Cleaning inspection 8' x 10' box culvert x 1,500' (1)	-	$ 275.00	Per Hour	$ -
						$ 271,037.00

PURCHASE ORDER

CITY OF PORTLAND, MAINE
City Hall, 389 Congress Street
Portland, Maine 04101
(207) 874-8654

P.O. # 044636
Date: 12/06/17

TED BERRY CO INC
521 FEDERAL ROAD
LIVERMORE, ME 04253

City of Portland
PUBLIC WORKS ADMIN.
55 PORTLAND STREET
PORTLAND, ME 04101

VENDOR #
2665

DELIVER BY	SHIP VIA	TERMS
06/30/18		NET

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
MATTHEW TIMBERLAKE	KAREN MARSTON	

FREIGHT	CONTRACT NO.	ACCOUNT NO.	PROJECT	REQ. NO.	REQ. DATE
		SEE BELOW			

LINE #	QUANTITY	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	250000.00	EA	SEWER INSPECTIONS	1.0000	250000.00
2	21037.00	EA	CONDUIT MAINTENANCE	1.0000	21037.00
				SUB-TOTAL	271037.00
				TOTAL	271037.00

REMARKS:
Per contract amendment dated 11-20-17.

TERMS & CONDITIONS, AS DEPICTED ON THE REVERSE SIDE OF THIS ORDER, ARE A FORMAL PART OF THIS ORDER

FOR THE CITY OF PORTLAND, MAINE

AUTHORIZED SIGNATURE

TED BERRY COMPANY Inc.

521 Federal Rd., Livermore, ME 04253
Tel: 207-897-3348 Fax: 207-897-3627

Invoice

DATE	INVOICE #
3/20/2017	14683

BILL TO	PROJECT INFORMATION
City of Portland 389 Congress St Portland, ME 04101	2017 Condition assessment of sewer system 3% (extension to bid #2116) March 7, 8 & 13, 2017 Portland, ME Jon P. Jennings

P.O. NUMBER	TERMS	REP	SHIP	DUE DATE	State	PROJECT
Signed Agreement	Net 30	DB	3/20/2017	4/19/2017	ME	M-17-00170

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
2,190.3	MVIA	CCTV Inspection 8" - Item 5 March 7 & 13, 2017	1.00	2,190.30
1,760	MHIB	Light Cleaning 8" - Item 3 March 8, 2017	0.75	1,320.00
133.8	MVIA	CCTV Inspection 15" - Item 4 March 7, 2017	1.00	133.80
650.5	MVIA	CCTV Inspection 18" - Item 17 March 7 & 8, 2017	1.00	650.50
501.2	MVIA	CCTV Inspection 21" - Item 20 March 7, 2017	1.00	501.20
173.1	MVIA	CCTV Inspection 24" - Item 23 March 7, 2017	1.00	173.10

For Your Convenience, We Accept
Visa & Mastercard

Past due invoices are subject to 1.5% per month finance charge. Finance charges will begin 30 days from the date of invoice if not paid in full or if other arrangements have not been made in writing. Further collection processes may be taken uo to and including liens. Any disputes to the accuracy of this bill must be received by the due date of the bill or the amount will be deemed to be as agreed upon and billed.

Total $4,968.90

Ph (207) 897-3348 FX (207) 897-3627

4 2175

TED BERRY COMPANY Inc.

521 Federal Rd., Livermore, ME 04253
Tel: 207-897-3348 Fax: 207-897-3627

Invoice

DATE	INVOICE #
3/27/2017	14691

BILL TO	PROJECT INFORMATION
City of Portland 389 Congress St Portland, ME 04101	2017 Condition assessment of sewer system 3% (extension to bid #2116) March 20 - 24, 2017 Portland, ME Jon P. Jennings

P.O. NUMBER	TERMS	REP	SHIP	DUE DATE	State	PROJECT
Signed Agreement	Net 30	DB	3/27/2017	4/26/2017	ME	M-17-00170

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
18,393	MHIB	Light Cleaning 8" - Item 3 March 20 - 24, 2017	0.75	13,794.75
721	MHIB	Heavy Cleaning 8" - Item 4 March 20 & 22, 2017	3.00	2,163.00
15,256.4	MVIA	CCTV Inspection 8" - Item 5 March 20 - 24, 2017	1.00	15,256.40
1,850	MHIB	Light Cleaning 12" - Item 9 March 20, 21 & 23, 2017	0.75	1,387.50
281	MHIB	Heavy Cleaning 12" - Item 10 March 20, 2017	1.00	281.00
2,506.4	MVIA	CCTV Inspection 12" - Item 11 March 20 - 24, 2017	1.00	2,506.40
490	MHIB	Light Cleaning 15" - Item 12 March 21, 2017	0.75	367.50
485.6	MVIA	CCTV Inspection 15" - Item 14 March 20 - 21, 2017	1.00	485.60
920	MHIB	Light Cleaning 18" - Item 15 March 21, 2017	0.75	690.00
492.1	MVIA	CCTV Inspection 18" - Item 17 March 21 - 22, 2017	1.00	492.10
259.1	MVIA	CCTV Inspection 21" - Item 20 March 22, 2017	1.00	259.10
153.4	MVIA	CCTV Inspection 24" - Item 23 March 22, 2017	1.00	153.40

For Your Convenience, We Accept
Visa & Mastercard

VISA MasterCard

Past due invoices are subject to 1.5% per month finance charge. Finance charges will begin 30 days from the date of invoice if not paid in full or if other arrangements have not been made in writing. Further collection processes may be taken uo to and including liens. Any disputes to the accuracy of this bill must be received by the due date of the bill or the amount will be deemed to be as agreed upon and billed.

Total $37,836.75

Ph (207) 897-3348 FX (207) 897-3627

TED BERRY COMPANY Inc.

521 Federal Rd., Livermore, ME 04253
Tel: 207-897-3348 Fax: 207-897-3627

Invoice

DATE	INVOICE #
4/14/2017	14764

BILL TO	PROJECT INFORMATION
City of Portland 389 Congress St Portland, ME 04101	2017 Condition assessment of sewer system 3% (extension to bid #2116) Portland, ME March 27 - 31, 2017 Jon P. Jennings

P.O. NUMBER	TERMS	REP	SHIP	DUE DATE	State	PROJECT
Signed Agreement	Net 30	DB	4/14/2017	5/14/2017	ME	M-17-00170

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
200	MHIB	Light Cleaning 6" - Item 1 March 29, 2017	0.75	150.00
9,309	MHIB	Light Cleaning 8" - Item 3 March 27 - 31, 2017	0.75	6,981.75
1,762	MVIA	Heavy Cleaning 8" - Item 4 March 27 - 28, 2017	3.00	5,286.00
8,380.3	MVIA	CCTV Inspection 8" - Item 5 March 27 - 29 & 31, 2017	1.00	8,380.30
4,815	MHIB	Light Cleaning 10" - Item 6 March 27 - 29 & 31, 2017	0.75	3,611.25
2,751	MVIA	CCTV Inspection 10" - Item 8 March 28 - 30, 2017	1.00	2,751.00
620	MHIB	Light Cleaning 36" - Item 30 March 31, 2017	1.00	620.00
450	MHIB	Heavy Cleaning 36" - Item 31 March 30, 2017	5.00	2,250.00
730	MHIB	Light Cleaning 42" - Item 33 March 29, 2017	1.00	730.00
37	MMIS	Manhole Inspection Reports - Item 48 March 31, 2017	12.50	462.50
31	MMIS	Traffic Control - Item 49 March 29 - 31, 2017	18.00	558.00

For Your Convenience, We Accept
Visa & Mastercard

Past due invoices are subject to 1.5% per month finance charge. Finance charges will begin 30 days from the date of invoice if not paid in full or if other arrangements have not been made in writing. Further collection processes may be taken uo to and including liens. Any disputes to the accuracy of this bill must be received by the due date of the bill or the amount will be deemed to be as agreed upon and billed.

Total $31,780.80

Ph (207) 897-3348 FX (207) 897-3627

TED BERRY COMPANY Inc.

521 Federal Rd., Livermore, ME 04253
Tel: 207-897-3348 Fax: 207-897-3627

Invoice

DATE	INVOICE #
5/19/2017	14836

BILL TO	PROJECT INFORMATION
City of Portland 389 Congress St Portland, ME 04101	2017 Condition assessment of sewer system 3% (extension to bid #2116) Portland, ME April 3 - 30, 2017 Benjamin Pearson

P.O. NUMBER	TERMS	REP	SHIP	DUE DATE	State	PROJECT
Signed Agreement	Net 30	DB	5/24/2017	6/18/2017	ME	M-17-00170

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
7,066.8	MHIB	CCTV Inspection 8" - Item 5 April 3, 10, 13, 25, 26 & 27, 2017	1.00	7,066.80
1,143.8	MHIB	CCTV Inspection 10" - Item 8 April 3, 26 & 27, 2017	1.00	1,143.80
239.1	MVIA	CCTV Inspection 12" - Item 11 April 25, 2017	1.00	239.10
753.3	MVIA	CCTV Inspection 15" - Item 14 April 25 & 27, 2017	1.00	753.30
335.4	MHIB	CCTV Inspection 30" - Item 29 April 25, 2017	1.25	419.25
995	MVIA	Light Cleaning 8" - Item 3 April 25 & 26, 2017	0.75	746.25
430	MHIB	Light Cleaning 10" - Item 6 April 25 & 27, 2017	0.75	322.50
420	MHIB	Light Cleaning 12" - Item 9 April 26, 2017	0.75	315.00
1,275	MHIB	Light Cleaning 15" - Item 12 April 4 & 26, 2017	0.75	956.25
225	MHIB	Light Cleaning 18" - Item 15 April 26, 2017	0.75	168.75
390	MHIB	Light Cleaning 24" - Item 21 April 26 & 27, 2017	1.00	390.00

For Your Convenience, We Accept
Visa & Mastercard

Past due invoices are subject to 1.5% per month finance charge. Finance charges will begin 30 days from the date of invoice if not paid in full or if other arrangements have not been made in writing. Further collection processes may be taken uo to and including liens. Any disputes to the accuracy of this bill must be received by the due date of the bill or the amount will be deemed to be as agreed upon and billed.

Total

Ph (207) 897-3348 FX (207) 897-3627

TED BERRY COMPANY Inc.

521 Federal Rd., Livermore, ME 04253
Tel: 207-897-3348 Fax: 207-897-3627

Invoice

DATE	INVOICE #
5/19/2017	14836

BILL TO	PROJECT INFORMATION
City of Portland 389 Congress St Portland, ME 04101	2017 Condition assessment of sewer system 3% (extension to bid #2116) Portland, ME April 3 - 30, 2017 Benjamin Pearson

P.O. NUMBER	TERMS	REP	SHIP	DUE DATE	State	PROJECT
Signed Agreement	Net 30	DB	5/24/2017	6/18/2017	ME	M-17-00170

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
1,165	MHIB	Light Cleaning 30" - Item 27 April 25 & 27, 2017	3.25	3,786.25
3,090	MHIB	Light Cleaning 42" - Item 33 April 4, 26 & 27, 2017	1.00	3,090.00
14	MMIS	Traffic Control - Item 49 April 27, 2017	18.00	252.00

For Your Convenience, We Accept
Visa & Mastercard

Past due invoices are subject to 1.5% per month finance charge. Finance charges will begin 30 days from the date of invoice if not paid in full or if other arrangements have not been made in writing. Further collection processes may be taken uo to and including liens. Any disputes to the accuracy of this bill must be received by the due date of the bill or the amount will be deemed to be as agreed upon and billed.

Total $19,649.25

Ph (207) 897-3348 FX (207) 897-3627

TED BERRY COMPANY Inc.

521 Federal Rd., Livermore, ME 04253
Tel: 207-897-3348 Fax: 207-897-3627

Invoice

DATE	INVOICE #
6/14/2017	14971

BILL TO	PROJECT INFORMATION
City of Portland 389 Congress St Portland, ME 04101	2017 Condition assessment of sewer system 3% (extension to bid #2116) Portland, ME May 4, 5, June 5 - 10, 2017 Benjamin Pearson

P.O. NUMBER	TERMS	REP	SHIP	DUE DATE	State	PROJECT
Signed Agreement	Net 30	DB	6/15/2017	7/14/2017	ME	M-17-00170

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
486.9	MVIA	CCTV Inspection 8" - Item 5 May 4, 5 & June 5, 2017	1.00	486.90
476.3	MVIA	CCTV Inspection 12" - Item 11 June 5, 2017	1.00	476.30
26.5	MVIA	CCTV Inspection 15" - Item 14 May 5, 2017	1.00	26.50
241.3	MVIA	CCTV Inspection 18" - Item 17 May 5 & June 7, 2017	1.00	241.30
247.1	MVIA	CCTV Inspection 21" - Item 20 June 7, 2017	1.00	247.10
1,184.5	MVIA	CCTV Inspection 24" - Item 23 June 7, 2017	1.00	1,184.50
1,212.1	MVIA	CCTV Inspection 30" - Item 29 June 9 & 10, 2017	1.25	1,515.13
649.3	MVIA	CCTV Inspection 36" - Item 32 June 9, 2017	1.00	649.30
1,856.3	MVIA	CCTV Inspection 42" - Item 35 May 5 & June 9, 2017	1.00	1,856.30
1,212.1	MHIB	Light Cleaning 30" - Item 27 June 9 & 10, 2017	3.25	3,939.33
649.3	MHIB	Light Cleaning 36" - Item 30 June 9, 2017	1.00	649.30

For Your Convenience, We Accept
Visa & Mastercard

VISA MasterCard

Past due invoices are subject to 1.5% per month finance charge. Finance charges will begin 30 days from the date of invoice if not paid in full or if other arrangements have not been made in writing. Further collection processes may be taken uo to and including liens. Any disputes to the accuracy of this bill must be received by the due date of the bill or the amount will be deemed to be as agreed upon and billed.

Total

Ph (207) 897-3348 FX (207) 897-3627

TED BERRY COMPANY Inc.

521 Federal Rd., Livermore, ME 04253
Tel: 207-897-3348 Fax: 207-897-3627

Invoice

DATE	INVOICE #
6/14/2017	14971

BILL TO	PROJECT INFORMATION
City of Portland 389 Congress St Portland, ME 04101	2017 Condition assessment of sewer system 3% (extension to bid #2116) Portland, ME May 4, 5, June 5 - 10, 2017 Benjamin Pearson

P.O. NUMBER	TERMS	REP	SHIP	DUE DATE	State	PROJECT
Signed Agreement	Net 30	DB	6/15/2017	7/14/2017	ME	M-17-00170

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
894.6	MHIB	Light Cleaning 42" - Item 33 June 9, 2017	1.00	894.60
16	MMIS	Manhole Reports - Item 48 May 4, 2017	12.50	200.00
44	MMIS	Traffic Control - Item 49 May 5, June 6 & 7, 2017	18.00	792.00

For Your Convenience, We Accept
Visa & Mastercard

Past due invoices are subject to 1.5% per month finance charge. Finance charges will begin 30 days from the date of invoice if not paid in full or if other arrangements have not been made in writing. Further collection processes may be taken uo to and including liens. Any disputes to the accuracy of this bill must be received by the due date of the bill or the amount will be deemed to be as agreed upon and billed.

Total $13,158.56

Ph (207) 897-3348 FX (207) 897-3627

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

March 3, 2017

John Emerson
Wastewater Facilities Coordinator
Department of Public Services
City of Portland
109 District Road
Portland, ME 04102

Re: Proposal for SCADA TRM (Troubleshoot, Repair, Maintain) Services

Dear John:

Woodard & Curran recently completed a SCADA Review in accordance with our proposal executed by the City on February 7, 2017. As a result of that SCADA Review, we identified maintenance, repair and troubleshooting issues that Woodard & Curran believes will improve the instrumentation and controls systems and therefore the operational efficiencies of the facilities. The list, hereinafter referred to as the TRM List (Troubleshooting, Repair & Maintain) has been developed by W&C alongside operations personnel and will serves to define the Scope of Services presented herein.

SCOPE OF SERVICES

Woodard & Curran will provide engineering services to troubleshoot, repair and maintain the City of Portland's SCADA system as determined by the SCADA Review. The recommended TRM tasks are broken out below by location.

RADIO MASTER CONTROL PANEL (To be relocated under separate project)

- UPS and Smart Relay Card replacement for UPS Failure / Low Battery indications.
- PLC/OIT Date/Time Synchronization.

GOWEN HILL REPEATER

- Review with Electrical Contractor water tight sealing from control panel conduit, particularly radio coax, and inspection (Electrical Contactor provided by City)
- Review with Electrical Contractor power distribution of control panel and addition of Generator Power circuit for portable back-up power during extended power outage. (Electrical Contactor provided by City)
- PLC/OIT Date/Time Synchronization.

PARTRIDGE

- Electrical Contractor to review conduit seals and debris removal from panel. (Electrical Contactor provided by City)
- Motor amperage monitoring with 1762-IF4 analog input card.
- PLC/OIT Date/Time Synchronization.

FRANKLIN ST

- Modify three pump control mode capabilities (lead/lag/lag-lag) for ease of operations.
- Program and test flow matching of VFDs onsite
- Pump 1 Onsite commissioning and testing once replaced by City
- Onsite investigation of Sluice Gate control and associated level control
- Muffin Monster jammed alarm integration from Siemens S7-200 PLC panel. (Electrical Contactor provided by City)
- Intrusion switch replacement and testing (Wiring and Installation by Electrical Contractor).
- PLC/OIT Date/Time Synchronization.

LINDEN/ASHMONT

- Review with Electrical contractor water tight sealing from control panel conduit, particularly radio coax, and inspection
- Pump motor amperage monitoring with 1762-IF4 analog input expansion card (Installation and wiring of CT Monitoring Switch by Electrical Contactor provided by City)
- Intrusion switch installation and testing (Wiring and Installation by Electrical Contractor).
- PLC/OIT Date/Time Synchronization.

PENNEL

- PLC/OIT Date/Time Synchronization.
- Pump motor amperage monitoring with 1762-IF4 analog input expansion card (Installation and wiring of CT Monitoring Switch by Electrical Contractor)

CURTIS

- PLC/OIT Date/Time Synchronization.

HOPE

- Generator running alarm PLC programming modifications.
- PLC/OIT Date/Time Synchronization.
- Pump motor amperage monitoring with 1762-IF4 analog input expansion card (Installation and wiring of CT Monitoring Switch by Electrical Contactor provided by City)

RIVERSIDE

- Integration of flow and/or O2 sensor (future).
- OIT/HMI alarm review and testing.
- Muffin Monster jammed alarm integration from Siemens S7-200 PLC panel. (Wiring of alarm/status by Electrical Contactor provided by City)
- Intrusion switch replacement and testing (Wiring and Installation by Electrical Contractor).
- PLC/OIT Date/Time Synchronization.

RIVERTON

- Intrusion switch replacement and testing (Wiring and Installation by Electrical Contactor provided by City)
- PLC/OIT Date/Time Synchronization.
- Pump motor amperage monitoring with 1762-IF4 analog input expansion card (Installation and wiring of CT Monitoring Switch by Electrical Contractor)

CASTINE

- Change Pump VFD Speed Feedback to Pump Amperage.
- PLC/OIT Date/Time Synchronization.

EAST END

- PLC/OIT Date/Time Synchronization.
- Pump motor amperage monitoring with 1762-IF4 analog input expansion card (Installation and wiring of CT Monitoring Switch by Electrical Contactor provided by City)

RESPONSIBILITY OF OTHERS

- Electrical contractor to provide all necessary wiring and installation for applicable tasks as noted.

DELIVERABLES BY WOODARD & CURRAN

- 12 Current Transformers for monitoring pump amperage
- 6 Analog Input Modules for PLC Expansion for amperage
- 6 Intrusion Switch Replacements
- UPS Relay hardware
- Provide up to 8 hours of training on any resulting changes from the preceding task list.
- Modifications of panel drawings as required.
- SCADA file system backups as required.
- O&M modifications as required.

CLARIFICATIONS

The City shall be responsible for providing access to all control equipment and documentation; provide site specific safety hazards and training; attending meetings and providing feedback; and providing a list of known issues, desired improvements, and modifications to the controls prior to the site visit.

SCHEDULE

Woodard & Curran is prepared to initiate our work immediately upon Notice to Proceed and assuming Notice to Proceed prior to DATE, anticipates completing this work prior to June 1, 2017.

FEE PROPOSAL

Woodard & Curran proposes to complete the work described herein on a Lump Sum basis in the amount of $23,375, to be billed monthly based upon percentage of work complete, including reimbursable expenses.

TERMS AND CONDITIONS

Terms and Conditions of this work will be per the executed *Agreement between the City of Portland and Woodard & Curran, dated March 18, 2014*. If this proposal is acceptable to you, please indicate your agreement by signing this letter and returning a copy for our records. We can begin our work upon an email authorization, with the understanding that an executed copy of this agreement will be forthcoming. Any Purchase Order issued by the City in connection herewith shall be for accounting purposes only and shall incorporate the terms and conditions of this proposal by reference. The terms and conditions of this proposal shall prevail over any terms and conditions of a purchase order issued in connection herewith

We welcome any questions you may have on this. Please do not hesitate to call us at (207) 774-2112.

Sincerely,

WOODARD & CURRAN INC.

Barry Sheff, P.E.
Senior Vice President

JT Trinward
Technical Manager

Accepted this _____ Day of _____, 2017

By: _____

Title:_____

F I E L D P U R C H A S E O R D E R
City of Portland

FIELD PO NUMBER: J28742 ORDERED DATE: 5/05/17
VENDOR: 0002694 - WOODARD & CURRAN INC
REMARKS: SCADA SERVICES UNDER CONTRACT
ORDERED BY: EMERSON ENTERED: 5/05/17 14:07 BY: CBAIER

BILL TO: City of Portland
389 CONGRESS STREET
PORTLAND ME 04101

AMOUNT	ITEM DESCRIPTION	ACCOUNT#	PROJ#
$ 1240.40	INV 138561	57031125003500	

$ 1240.40 TOTAL ORDER

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

MAY 03 2017

5703112 500 3500

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

May 1, 2017
Project No: 0221832.04
Invoice No: 138561

Project 0221832.04 CITY OF PORTLAND SCADASERV MAINTENANCE

Professional Services for the period ending April 14, 2017

Phase 001 SERVICE 02.22, 03.10, 03.22

Fee Total	640.00			
Percent Complete	100.00	Total Earned	640.00	
		Previous Fee Billing	640.00	
		Current Fee Billing	0.00	
		Fee Total		**0.00**
			Total this Phase	**0.00**

Phase 002 SERVICE 03.31, 04.10, 04.11

Professional Personnel

	Hours	Rate	Amount	
Technical Specialist 3	8.00	128.00	1,024.00	
Clerical	3.25	60.00	195.00	
Totals	11.25		1,219.00	
Labor Total				**1,219.00**

Reimbursable

Vehicle Expenses

3/31/2017	Mesick, Kevin	"Personal Car Mileage:SCADA Service:94E1	5.35	
4/5/2017	Mesick, Kevin	"Personal Car Mileage:SCADA Service:4573	5.35	
4/10/2017	Mesick, Kevin	"Personal Car Mileage:SCADA Service:4573	5.35	
4/11/2017	Mesick, Kevin	"Personal Car Mileage:SCADA Service:4573	5.35	
	Reimbursable Total		**21.40**	**21.40**

Please include our invoice number in your remittance. Thank you.

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

Project	0221832.04	CITY OF PORTLAND SCADASERV MAINTENANCE	Invoice	138561
		Total this Phase		**$1,240.40**
		Total this Invoice		**$1,240.40**

Approved by: _____

Peter Andromalos
Project Manager 1
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

SERVICE CALL SETUP SHEET

Client: City of Portland
Client PO #

Contact: John Emerson

Project Name: City of Portland SCADAServ Main
Project Number: 221832.04

Phase 002

NOTES: Open new phase 002 Service 03.31,04.10,04.11

LABOR

NAME	DATE	HOURS	RATE	TOTAL	NOTES
Kevin		8.00	128	1024.00	Rate Table 169
Christine		.50	60	30.00	
Nosh		2.75	60	165.00	

MILEAGE @.60

NAME	DATE	MILES	COST	TOTAL
Kevin		41		24.60

EXPENSE 15% Markup

PART ID	QTY	COST	SELL	TOTAL	Manuf	Description

LABOR	1,219.00
MILEAGE	24.60
EXPENSES	
TOTALS	1,243.60

F I E L D P U R C H A S E O R D E R
City of Portland

FIELD PO NUMBER: J29653 ORDERED DATE: 5/30/17
VENDOR: 0002694 - WOODARD & CURRAN INC
REMARKS: SCADA MONITORING SERVICE THRU MAY 12, 2017
ORDERED BY: EMERSON ENTERED: 5/30/17 11:56 BY: CBAIER

BILL TO: City of Portland
389 CONGRESS STREET
PORTLAND ME 04101

AMOUNT	ITEM DESCRIPTION	ACCOUNT#	PROJ#
$ 3670.28	INV 139280	57031125003500	

$ 3670.28 TOTAL ORDER

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

MAY 26 2017

5703112500 3500

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works 55
Portland Street
Portland, ME 04101

May 24, 2017
Project No: 0221832.04
Invoice No: 139280

Project 0221832.04 CITY OF PORTLAND SCADASERV MAINTENANCE

Professional Services for the period ending May 12, 2017

Phase 003 SERVICE 4.18,4.19,4.21, 5.01,5.02,5.03,5.04

Professional Personnel

	Hours	Rate	Amount	
Technical Specialist	12.50	130.00	1,625.00	
Tech Manager I	6.00	160.00	960.00	
Clerical	3.00	60.00	180.00	
Totals	21.50		2,765.00	
Labor Total				**2,765.00**

Reimbursable

Vehicle Expenses				
5/1/2017	Mesick, Kevin	"Personal Car Mileage: SCADA:CBE8F882401 6	10.70	
Postage/Shipping				
4/19/2017	HORIZON SOLUTIONS LLC	Shipping-1766-L32AWA	9.78	
Field Equipment				
4/19/2017	HORIZON SOLUTIONS LLC	1766-L32AWA	884.80	
	Reimbursable Total		**905.28**	**905.28**

Total this Phase **$3,670.28**

Total this Invoice **$3,670.28**

Approved by: _____

Peter Andromalos
Project Manager 1
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

SERVICE CALL SETUP SHEET

Client: City of Portland
Client PO #

Contact: John Emerson

Project Name: City of Portland SCADASen
Project Number: 022183204

Phase

NOTES: New Phase 003 - Service 4,19 - 4,20 - 4,21 - 5,1 - 5,2 - 5,3 4,27, 4,28

LABOR

NAME	DATE	HOURS	RATE	TOTAL	NOTES
Kevin M	5/1-5/2	8.50	$130	$1,105	Rate Table 169
Peter A	4/19-4/21	6.00	$160	$ 960	
Aaron K	5/3-5/4	4.00	$130	$ 520	
Lisa R	4/18-5/2	3.00	$60.	$ 180	
				$2,765.00	

MILEAGE @.60

NAME	DATE	MILES	COST	TOTAL
Kevin M	5/1		10.70	
				10.70

EXPENSE 15% Markup

PART ID	QTY	COST	SELL	TOTAL	Manuf	Description
Horizon		894.58				
				894.58		

LABOR	$2,765
MILEAGE	10.70
EXPENSES	$ 894.58
TOTALS	$3,670.28

F I E L D P U R C H A S E O R D E R
City of Portland

FIELD PO NUMBER: J31082 ORDERED DATE: 8/24/17
VENDOR: 0002694 - WOODARD & CURRAN INC
REMARKS: SCADA SERVICE THROUGH 8/11/2017
ORDERED BY: EMERSON ENTERED: 8/24/17 12:50 BY: CBAIER

BILL TO: City of Portland
389 CONGRESS STREET
PORTLAND ME 04101

AMOUNT	ITEM DESCRIPTION	ACCOUNT#	PROJ#
$ 3851.35	INV 141985	57031125003500	

$ 3851.35 TOTAL ORDER

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

August 18, 2017
Project No: 0221832.05
Invoice No: 141985

570 3112 500 3500

Project 0221832.05 PORTLAND, ME, CITY OF - SCADA UPGRADES PO# 43808

Professional Services for the period ending August 11, 2017

Phase 001 ENGINEERING

Fee Total	77,027.00			
Percent Complete	55.00	Total Earned	42,364.85	
		Previous Fee Billing	38,513.50	
		Current Fee Billing	3,851.35	
		Fee Total		**3,851.35**
			Total this Phase	**$3,851.35**

Phase 002 CONSTRUCTION

Fee Total	21,558.00			
Percent Complete	50.00	Total Earned	10,779.00	
		Previous Fee Billing	10,779.00	
		Current Fee Billing	0.00	
		Fee Total		**0.00**
			Total this Phase	**0.00**
			Total this Invoice	**$3,851.35**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

WOODARD &CURRAN

Via Regular US Mail

August 18, 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADA Upgrades

Dear John:

Enclosed please find our invoice #141985 in the amount of $3,851.35 for professional services rendered for the above-mentioned project through the period ending August 11, 2017.

- Server Upgrade
- Software Modifications
- Troubleshoot Alarming Software
- Project Administration

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

F I E L D P U R C H A S E O R D E R
City of Portland

FIELD PO NUMBER: J31200 ORDERED DATE: 9/05/17
VENDOR: 0002694 - WOODARD & CURRAN INC
REMARKS: SCADA SERVICES
ORDERED BY: EMERSON ENTERED: 9/05/17 12:36 BY: CBAIER

BILL TO: City of Portland
389 CONGRESS STREET
PORTLAND ME 04101

AMOUNT	ITEM DESCRIPTION	ACCOUNT#	PROJ#
$ 1305.50	INV 142079	57031125003500	

$ 1305.50 TOTAL ORDER

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

WOODARD &CURRAN

Via Regular US Mail

August 28, 2017

AUG 30 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADAServ Maintenance

Dear John:

Enclosed please find our invoice #142079 in the amount of $1,305.50 for professional services rendered for the above-mentioned project through the period ending August 11, 2017.

- Onsite Project Meeting
- OIT Firmware Updates
- Project Administration

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

August 22, 2017
Project No: 0221832.04
Invoice No: 142079

Project 0221832.04 CITY OF PORTLAND SCADASERV MAINTENANCE

Professional Services for the period ending August 11, 2017

Phase 005 SERVICES 6.16 7.5 8.1 8.8 8.9 7.20 7.19 7.24

Professional Personnel

	Hours	Rate	Amount	
Technical Specialist 2	3.50	113.00	395.50	
Tech Manager I	4.75	160.00	760.00	
Clerical	2.50	60.00	150.00	
Totals	10.75		1,305.50	
Labor Total				**1,305.50**
		Total this Phase		**$1,305.50**
		Total this Invoice		**$1,305.50**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

CALL/TRIP REPORT

Woodard Curran Inc.
980 Washington Street, Suite 325N, Dedham, MA 02026
Tel: (781)251-0200 Fax: (781)251-0847

Date	Employee Code	Employee Name
7/20/2017	2903	Kevin Mesick

Project/Phase Number	Client/Job Name	Contact Name:	John Emerson	Client P.O.#
221832.04/100	City of Portland DPW	Contact Tel.#:		

Purpose of service: SCADA Service

Notes:

Trip Start:	8:15 AM	Offsite:	11:45 AM	Travel Time:	0 h 00
Onsite:	8:15 AM	Trip End:	11:45 AM	Onsite Time:	3 h 30
				Total Time:	3 h 30
Start Mileage:	0	End Mileage:	0	Total Mileage:	0

Work Performed: CoP SCADA - OIT firmware updates and revisions for support.

Material Used:

NOTE:

TERMS & CONDITIONS

1. Woodard & Curran Inc. ("Consultant") will perform all work in accordance with the Scope of Services as described on this Call/Trip report form.
2. Consultant will perform all work in a professional manner that is consistent with other professionals performing similar work in the geographic area at the time services are rendered. Consultant shall comply with all laws and regulations applicable to Con
3. Client shall pay Consultant in accordance with the payment methods, rates, and charges set forth in the Scope of Services or otherwise agreed upon.
4. Consultant is protected by Worker's Compensation Insurance, Employer's Professional Liability Insurance, and by General Liability Insurance each (with the exception of Workers' Compensation) with a minimum limit of $1,000,000 per occurrence and in the agg
5. Consultant agrees to indemnify and hold Client harmless from and against all claims, damages, causes of actions, and fines to the extent such claims, damages, causes of action and fines are based on or arise out of Consultant's negligent acts or negligent
6. The total liability, in the aggregate, of Consultant shall not exceed the total compensation received by Consultant under this Agreement, or the total amount of $50,000, whichever is greater. Neither party shall be responsible or held liable to the other
7. This Agreement shall be governed and construed in accordance with the laws of the state where the project is located.

Client Signature — Date

Kevin Mesick — 7/20/2017

(If client not available) W&C Employee Signature — Date

F I E L D P U R C H A S E O R D E R
City of Portland

FIELD PO NUMBER: J31685 ORDERED DATE: 6/30/17
VENDOR: 0002694 - WOODARD & CURRAN INC
REMARKS: SCADA SERVICE / MAINTENANCE
ORDERED BY: EMERSON ENTERED: 7/14/17 9:16 BY: CBAIER

BILL TO: City of Portland
389 CONGRESS STREET
PORTLAND ME 04101

AMOUNT	ITEM DESCRIPTION	ACCOUNT#	PROJ#
$ 562.00	INV 140539	57031125003500	

$ 562.00 TOTAL ORDER

FY17

WOODARD & CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

5703112500 3500

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

June 29, 2017
Project No: 0221832.04
Invoice No: 140539

Project 0221832.04 CITY OF PORTLAND SCADASERV MAINTENANCE

Professional Services for the period ending June 9, 2017

Phase 004 SERVICES 5.16 5.17 5.25 6.8

Professional Personnel

	Hours	Rate	Amount	
Technical Specialist 2	4.00	113.00	452.00	
Tech Manager I	.50	160.00	80.00	
Clerical	.50	60.00	30.00	
Totals	5.00		562.00	
Labor Total				**562.00**
		Total this Phase		**$562.00**
		Total this Invoice		**$562.00**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

AWE 7-12-17

Please include our invoice number in your remittance. Thank you.

SERVICE CALL SETUP SHEET

Client: City of Portland
Client PO #

Contact:

Project Name: City of Portland SCADA Serv
Project Number: 221832.04

Phase 004

NOTES: 5.14 / 5.17 / 5.25 / 6.8

LABOR

NAME	DATE	HOURS	RATE	TOTAL	NOTES
Peter A	6/8	.50	$160		RATE TABLE 169
Lisa R	5/14/5/17	.50	86.0		
Charles D	5/25	4.00	113.00		

MILEAGE @.60

NAME	DATE	MILES	COST	TOTAL

EXPENSE 15% Markup

PART ID	QTY	COST	SELL	TOTAL	Manuf	Description

LABOR $562.00
MILEAGE
EXPENSES

TOTALS $562.00

F I E L D P U R C H A S E O R D E R
City of Portland

FIELD PO NUMBER: J35902 ORDERED DATE: 10/31/17
VENDOR: 0002694 - WOODARD & CURRAN INC
REMARKS: SCADA SERVICE/MAINTENANCE
ORDERED BY: EMERSON ENTERED:10/31/17 15:06 BY: CBAIER

BILL TO: City of Portland
389 CONGRESS STREET
PORTLAND ME 04101

AMOUNT	ITEM DESCRIPTION	ACCOUNT#	PROJ#
$ 590.87	INV 143902	57031125003500	

$ 590.87 TOTAL ORDER

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

WOODARD &CURRAN

Via Regular US Mail

October 24, 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADAServ Maintenance

Dear John:

Enclosed please find our invoice #143902 in the amount of $590.87 for professional services rendered for the above-mentioned project through the period ending October 13, 2017.

- Master PLC Logic Updates
- Project Administration

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

Jur 10/31/17

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

October 24, 2017
Project No: 0221832.04
Invoice No: 143902

Project 0221832.04 CITY OF PORTLAND SCADASERV MAINTENANCE

Professional Services for the period ending October 13, 2017

Phase 006 SERVICES 10.14

Professional Personnel

	Hours	Rate	Amount	
Technical Specialist 2	1.50	113.00	169.50	
Tech Manager I	1.00	160.00	160.00	
Clerical	1.00	60.00	60.00	
Totals	3.50		389.50	
Labor Total				**389.50**

Reimbursable

Vehicle Expenses	5.35	
Postage/Shipping	7.70	
Field Equipment	178.50	
Pass Thru Sales Tax	9.82	
Reimbursable Total	**201.37**	**201.37**

Total this Phase **$590.87**

Total this Invoice **$590.87**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

CALL/TRIP REPORT

Woodard Curran Inc.
980 Washington Street, Suite 325N, Dedham, MA 02026
Tel: (781)251-0200 Fax: (781)251-0847

Date	Employee Code	Employee Name		
10/4/2017	2903	Kevin Mesick		
Project/Phase Number	**Client/Job Name**	**Contact Name:**	**John Emerson**	**Client P.O.#**
221832.04/100	City of Portland DPW	**Contact Tel.#:**		

Purpose of service: SCADA Service

Notes:

Trip Start:	10:15 AM	**Offsite:**	11:45 AM	**Travel Time:**	0 h 00
Onsite:	10:15 AM	**Trip End:**	11:45 AM	**Onsite Time:**	1 h 30
				Total Time:	1 h 30
Start Mileage:	0	**End Mileage:**	0	**Total Mileage:**	0

Work Performed: Master PLC logic updates to enable all intrusion alarms after 5 pm.

Material Used:

NOTE:

TERMS & CONDITIONS

1. Woodard & Curran Inc. ("Consultant") will perform all work in accordance with the Scope of Services as described on this Call/Trip report form.
2. Consultant will perform all work in a professional manner that is consistent with other professionals performing similar work in the geographic area at the time services are rendered. Consultant shall comply with all laws and regulations applicable to Con
3. Client shall pay Consultant in accordance with the payment methods, rates, and charges set forth in the Scope of Services or otherwise agreed upon.
4. Consultant is protected by Worker's Compensation Insurance, Employer's Professional Liability Insurance, and by General Liability Insurance each (with the exception of Workers' Compensation) with a minimum limit of $1,000,000 per occurrence and in the agg
5. Consultant agrees to indemnify and hold Client harmless from and against all claims, damages, causes of actions, and fines to the extent such claims, damages, causes of action and fines are based on or arise out of Consultant's negligent acts or negligent
6. The total liability, in the aggregate, of Consultant shall not exceed the total compensation received by Consultant under this Agreement, or the total amount of $50,000, whichever is greater. Neither party shall be responsible or held liable to the other
7. This Agreement shall be governed and construed in accordance with the laws of the state where the project is located.

Client Signature — Date

Kevin Mesick — 10/4/2017

(If client not available) W&C Employee Signature — Date

F I E L D P U R C H A S E O R D E R
City of Portland

FIELD PO NUMBER: J38087 ORDERED DATE: 12/28/17
VENDOR: 0002694 - WOODARD & CURRAN INC
REMARKS: SCADA MONITORING SERVICES/MAINTENANCE
ORDERED BY: EMERSON ENTERED:12/28/17 13:38 BY: CBAIER

BILL TO: City of Portland
389 CONGRESS STREET
PORTLAND ME 04101

AMOUNT	ITEM DESCRIPTION	ACCOUNT#	PROJ#
$ 441.35	INV 145833	57031125003500	

$ 441.35 TOTAL ORDER

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

WOODARD &CURRAN

Via Regular US Mail

December 19, 2017

DEC 22 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADAServ Maintenance

Dear John:

Enclosed please find our invoice #145833 in the amount of $441.35 for professional services rendered for the above-mentioned project through the period ending December 8, 2017.

- CoP SCADA Back Cove OIT, Heater Issues.
- WIN911 Alarming Issues
- Project Administration

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

WOODARD & CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

December 19, 2017
Project No: 0221832.04
Invoice No: 145833

Project 0221832.04 CITY OF PORTLAND SCADASERV MAINTENANCE

Professional Services for the period ending December 8, 2017

Phase 007 SERVICES 11.14

Professional Personnel

	Hours	Rate	Amount	
Technical Specialist 2	2.00	113.00	226.00	
Tech Manager I	.75	160.00	120.00	
Clerical	1.50	60.00	90.00	
Totals	4.25		436.00	
Labor Total				**436.00**

Reimbursable

Vehicle Expenses	5.35	
Reimbursable Total	**5.35**	**5.35**

Total this Phase **$441.35**

Total this Invoice **$441.35**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

CALL/TRIP REPORT

Woodard Curran Inc.
980 Washington Street, Suite 325N, Dedham, MA 02026
Tel: (781)251-0200 Fax: (781)251-0847

Date	Employee Code	Employee Name		
11/14/2017	2903	Kevin Mesick		
Project/Phase Number	**Client/Job Name**	**Contact Name:**	**John Emerson**	**Client P.O.#**
221832.04/100	City of Portland DPW	**Contact Tel.#:**		

Purpose of service: SCADA Service

Notes:

Trip Start:	7:15 AM	**Offsite:**	9:00 AM	**Travel Time:**	0 h 30
Onsite:	7:30 AM	**Trip End:**	9:15 AM	**Onsite Time:**	1 h 30
				Total Time:	2 h 00
Start Mileage:	0	**End Mileage:**	10	**Total Mileage:**	10

Work Performed: CoP SCADA - Back Cove OIT, Heater issues. Updated login info and changes to trends. WIN911 alarming issue.

Material Used:

NOTE:

TERMS & CONDITIONS

1. Woodard & Curran Inc. ("Consultant") will perform all work in accordance with the Scope of Services as described on this Call/Trip report form.
2. Consultant will perform all work in a professional manner that is consistent with other professionals performing similar work in the geographic area at the time services are rendered. Consultant shall comply with all laws and regulations applicable to Con
3. Client shall pay Consultant in accordance with the payment methods, rates, and charges set forth in the Scope of Services or otherwise agreed upon.
4. Consultant is protected by Worker's Compensation Insurance, Employer's Professional Liability Insurance, and by General Liability Insurance each (with the exception of Workers' Compensation) with a minimum limit of $1,000,000 per occurrence and in the agg
5. Consultant agrees to indemnify and hold Client harmless from and against all claims, damages, causes of actions, and fines to the extent such claims, damages, causes of action and fines are based on or arise out of Consultant's negligent acts or negligent
6. The total liability, in the aggregate, of Consultant shall not exceed the total compensation received by Consultant under this Agreement, or the total amount of $50,000, whichever is greater. Neither party shall be responsible or held liable to the other
7. This Agreement shall be governed and construed in accordance with the laws of the state where the project is located.

Client Signature — Date

Kevin Mesick — 11/14/2017

(If client not available) W&C Employee Signature — Date

R E C E I V I N G R E P O R T

RECEIPT NO.: 331028

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 044217

DATE: 10/31/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY	SHIP VIA	F.O.B.
7/19/17		

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		999	7/19/17

LINE	QTY RCVD / BIN LOCATION	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	14629.95	EA	999 99 UNSPECIFIED UNSPECIFIED SCADA TRM SERVICES (BALANCE)	1.0000	14629.95
	Acct/Proj:	57031125003500			

TOTAL EXTENDED COST: 14629.95

RECEIVED BY: EMERSON RECEIVED DATE: 10/31/17

WOODARD & CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

October 23, 2017
Project No: 0221832.06
Invoice No: 143844

Project 0221832.06 PORTLAND, ME, CITY OF - SCADA TRM SERVICES

Professional Services for the period ending October 13, 2017

Phase 001 ENGINEERING 2017
PO #43893

Fee Total	3,386.00			
Percent Complete	100.00	Total Earned	3,386.00	
		Previous Fee Billing	3,386.00	
		Current Fee Billing	0.00	
		Fee Total		**0.00**
			Total this Phase	**0.00**

Phase 002 EXPENSES 2017
PO #43893

Fee Total	2,949.00			
Percent Complete	100.00	Total Earned	2,949.00	
		Previous Fee Billing	2,949.30	
		Current Fee Billing	-.30	
		Fee Total		**-.30**
			Total this Phase	**-$.30**

Phase 003 ENGINEERING FY 2018
PO #44217

Fee Total	26,047.70			
Percent Complete	50.00	Total Earned	13,023.85	
		Previous Fee Billing	0.00	
		Current Fee Billing	13,023.85	
		Fee Total		**13,023.85**

Please include our invoice number in your remittance. Thank you.

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

Project	0221832.06	PORTLAND, ME, CITY OF - SCADA TRM SERVIC	Invoice	143844
			Total this Phase	**$13,023.85**

Phase 004 EXPENSES FY 2018
PO #44217

Fee Total	8,032.00			
Percent Complete	20.00	Total Earned	1,606.40	
		Previous Fee Billing	0.00	
		Current Fee Billing	1,606.40	
		Fee Total		**1,606.40**
			Total this Phase	**$1,606.40**
			Total this Invoice	**$14,629.95**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

March 3, 2017

John Emerson
Wastewater Facilities Coordinator
Department of Public Services
City of Portland
109 District Road
Portland, ME 04102

Re: Proposal for SCADA Upgrade

Dear John:

Woodard & Curran recently completed a SCADA Review in accordance with our proposal executed by the City on February 7, 2017. Based on our findings and recommendations from that SCADA Review, the following is a proposal for the migration and upgrade to the SCADA Radio master and Server computers to the new DPW building location. Woodard & Curran will provide engineering services, hardware, and installation to fully transition the existing radio master to the new location. New SCADA Server class computers will be procured and installed by Woodard & Curran to provide operations a seamless transition to operations at the new facility. The work to be completed is described as our Scope of Services, as follows:

SCOPE OF SERVICES

Woodard & Curran will provide engineering services to relocate the SCADA radio master PLC panel from 55 Portland St to 109 District Rd facilities. The relocation includes a radio path study and communication optimizations as provided by TCS Communications, as a subconsultant to Woodard & Curran. The physical relocation, installation, and commissioning of control panel hardware, associated radio equipment to the new location will be included by Woodard & Curran. All conduit, power, and communication wiring required for this migration will be provided in this contract.

The upgraded SCADA system will receive a new Network Rack including two (2) Server Class machines, UPS Back-Up power, Ethernet/Fiber Switching, and Fiber Patch hardware. This computer upgrade includes updates to all SCADA Software; Allen-Bradley FactoryTalk View SE HMI, Allen-Bradley RSLogix500, XLReporter reporting and WIN911 alarming software. This includes migration of legacy RSView32 HMI screens into FactoryTalk. Further detail on this scope of services follows.

RELOCATION OF SCADA RADIO MASTER CONTROL PANEL

- Radio path study by TCS Communications (Dean Marengi).
- Electrical 120Vac power wiring & conduit runs from power panel (TBD) to location of control panel installation.
- Installation of antenna hardware, conduit and cabling, provided under this contract by Campbell Electric as a subcontractor to Woodard & Curran
- Installation of Fiber/copper Ethernet converters and multi-mode fiber optic cable run from garage to 109 District Rd DPW network closet (network rack).
- Installation of Phone cable from control panel in garage to DPW network rack for RACO Auto-Dialer back-up alarm dialing
- Installation of copper Ethernet patch cabling to DPW network switch

- Installation of radio master control panel at new 109 District Rd facilities garage.
- Installation of existing Network rack and associated SCADA server computer systems at DPW building in network closet.
- Communications optimization with TCS Communications and W&C.
- System relocation testing: Functionality including alarming and reports, iPad remote access.

SCADA COMPUTER UPGRADE

- Purchase and configure SCADA (2) Servers & server rack hardware.
- Purchase and configure SCADA software upgrades.
- Purchase and installation of Network Rack
- Purchase and installation of Network Rack UPS
- Power wiring of Network Rack UPS
- SCADA Server computer HMI development.
- SCADA Upgrade Development Meetings with DPW staff.
- SCADA Server FAT at W&C office.
- Installation of servers in DPW building network closet server rack.
- SCADA Server SAT at 109 District Rd DPW building.
- Demolition of old SCADA computer systems.

DELIVERABLES BY WOODARD & CURRAN

- Fully integrated and System Acceptance testing of new SCADA servers and relocated Radio Master control panel
- Full Alarm testing and configuration to City DPW Operations
- Configuration and testing of Automated Reporting to DPW Management
- Configuration and testing of SCADA remote access for City DPW Operations and Management
- SCADA Security configuration to update Security for remote access and SCADA interfacing
- Provide up to 8 hours of training broken in to segments of 2 hours on upgraded systems.
- Modifications of panel drawings as required.
- SCADA file system backups as required.
- O&M modifications as required, including new hardware/software documentation.

CLARIFICATIONS

The City shall be responsible for providing access to all control equipment, facilities and documentation; providing site specific safety hazards and training; attending meetings and providing feedback; and providing a list of known issues, desired improvements, and modifications to the controls prior to the site visit. The City shall also provide Analog Phone connection (POT Line) for RACO Auto-Dialer in DPW Network cabinet; and provide networking coordination for new SCADA Server computers for DPW Staff access, this includes network addressing and Port limiting of traffic to servers.

SCHEDULE

Woodard & Curran is prepared to initiate our work immediately upon Notice to Proceed and assuming Notice to Proceed prior to DATE, anticipates completing this work prior to June 1, 2017.

FEE PROPOSAL

Woodard & Curran proposes to complete the work described herein on a Lump Sum basis in the amount of $98,585, to be billed monthly based upon percentage of work complete, including reimbursable expenses.

TERMS AND CONDITIONS

Terms and Conditions of this work will be per the executed *Agreement between the City of Portland and Woodard & Curran, dated March 18, 2014*. If this proposal is acceptable to you, please indicate your agreement by signing this letter and returning a copy for our records. We can begin our work upon an email authorization, with the understanding that an executed copy of this agreement will be forthcoming. Any Purchase Order issued by the City in connection herewith shall be for accounting purposes only and shall incorporate the terms and conditions of this proposal by reference. The terms and conditions of this proposal shall prevail over any terms and conditions of a purchase order issued in connection herewith

We welcome any questions you may have on this. Please do not hesitate to call us at (207) 774-2112.

Sincerely,

WOODARD & CURRAN INC.

Barry Sheff, P.E.
Senior Vice President

JT Trinward
Technical Manager

Accepted this _____ Day of _____, 2017

By: _____

Title:_____

R E C E I V I N G R E P O R T

RECEIPT NO.: 325657

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 043808

DATE: 5/31/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY SHIP VIA F.O.B.
6/01/17

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		0000040723	3/24/17

LINE	QTY RCVD	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	26184.40	EA	888 88 UNSPECIFIED UNSPECIFIED SCADA UPGRADE	1.0000	26184.40

BIN LOCATION

Acct/Proj: 37031005003500 / C16504

TOTAL EXTENDED COST: 26184.40

RECEIVED BY: EMERSON RECEIVED DATE: 5/31/17

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

WOODARD &CURRAN

Via Regular US Mail

May 24, 2017

MAY 26 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADA Upgrades

Dear John:

Enclosed please find our invoice #139228 in the amount of $26,184.40 for professional services rendered for the above-mentioned project through the period ending May 12, 2017.

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

WOODARD & CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

May 23, 2017
Project No: 0221832.05
Invoice No: 139228

Project 0221832.05 PORTLAND, ME, CITY OF - SCADA UPGRADES
PO# 43808

Professional Services for the period ending May 12, 2017

Phase 001 ENGINEERING

Fee Total	77,027.00			
Percent Complete	20.00	Total Earned	15,405.40	
		Previous Fee Billing	0.00	
		Current Fee Billing	15,405.40	
		Fee Total		**15,405.40**
			Total this Phase	**$15,405.40**

Phase 002 CONSTRUCTION

Fee Total	21,558.00			
Percent Complete	50.00	Total Earned	10,779.00	
		Previous Fee Billing	0.00	
		Current Fee Billing	10,779.00	
		Fee Total		**10,779.00**

Please include our invoice number in your remittance. Thank you.

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

Project	0221832.05	PORTLAND, ME, CITY OF - SCADA UPGRADES	Invoice	139228
		Total this Phase		**$10,779.00**
		Total this Invoice		**$26,184.40**

Approved by: _____

Peter Andromalos
Project Manager 1
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

RECEIVING REPORT

RECEIPT NO.: 326733

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 043808

DATE: 6/28/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY	SHIP VIA	F.O.B.
6/01/17		

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		0000040723	3/24/17

LINE	QTY RCVD / BIN LOCATION	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	15405.40	EA	888 88 UNSPECIFIED UNSPECIFIED SCADA UPGRADE Acct/Proj: 37031005003500 / C16504	1.0000	15405.40

TOTAL EXTENDED COST: 15405.40

RECEIVED BY: PEARSON RECEIVED DATE: 6/28/17

WOODARD & CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works 55
Portland Street
Portland, ME 04101

June 22, 2017
Project No: 0221832.05
Invoice No: 140302

Project 0221832.05 PORTLAND, ME, CITY OF - SCADA UPGRADES PO# 43808

Professional Services for the period ending June 9, 2017

Phase 001 ENGINEERING

Fee Total	77,027.00			
Percent Complete	40.00	Total Earned	30,810.80	
		Previous Fee Billing	15,405.40	
		Current Fee Billing	15,405.40	
		Fee Total		**15,405.40**
			Total this Phase	**$15,405.40**

Phase 002 CONSTRUCTION

Fee Total	21,558.00			
Percent Complete	50.00	Total Earned	10,779.00	
		Previous Fee Billing	10,779.00	
		Current Fee Billing	0.00	
		Fee Total		**0.00**
			Total this Phase	**0.00**
			Total this Invoice	**$15,405.40**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Approved: Bryan Pearson
Date: 6/28/2017
Account:
Proj: C16504 PO: 043808

Please include our invoice number in your remittance. Thank you.

R E C E I V I N G R E P O R T

RECEIPT NO.: 327851

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 043808

DATE: 7/31/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY SHIP VIA F.O.B.
6/01/17

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		0000040723	3/24/17

LINE	QTY RCVD	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
BIN LOCATION					
1	7702.70	EA	888 88 UNSPECIFIED UNSPECIFIED SCADA UPGRADE	1.0000	7702.70
Acct/Proj:	37031005003500 / C16504				

TOTAL EXTENDED COST: 7702.70

RECEIVED BY: PEARSON RECEIVED DATE: 7/31/17

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

43808

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

July 21, 2017
Project No: 0221832.05
Invoice No: 141088

Project 0221832.05 PORTLAND, ME, CITY OF - SCADA UPGRADES PO# 43808

Professional Services for the period ending July 14, 2017

Phase 001 ENGINEERING

Fee Total	77,027.00			
Percent Complete	50.00	Total Earned	38,513.50	
		Previous Fee Billing	30,810.80	
		Current Fee Billing	7,702.70	
		Fee Total		**7,702.70**
			Total this Phase	**$7,702.70**

Phase 002 CONSTRUCTION

Fee Total	21,558.00			
Percent Complete	50.00	Total Earned	10,779.00	
		Previous Fee Billing	10,779.00	
		Current Fee Billing	0.00	
		Fee Total		**0.00**
			Total this Phase	**0.00**
			Total this Invoice	**$7,702.70**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

JUL 26 2017

WOODARD &CURRAN

Via Regular US Mail

July 24, 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADA Upgrades

Dear John:

Enclosed please find our invoice #141088 in the amount of $7,702.70 for professional services rendered for the above-mentioned project through the period ending July 14, 2017.

- Alarm and reporting configuration, testing and troubleshooting.
- Project Management and Administration.
- Meeting to discuss placement of repeater at Munjoy Hill Fire Station PLC rack.
- Factory talk and software.

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

R E C E I V I N G R E P O R T

RECEIPT NO.: 330305

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 043808

DATE: 10/17/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY SHIP VIA F.O.B.
6/01/17

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		0000040723	3/24/17

LINE	QTY RCVD / BIN LOCATION	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	2544.60	EA	888 88 UNSPECIFIED UNSPECIFIED SCADA UPGRADE Acct/Proj: 37031005003500 / C16504	1.0000	2544.60

TOTAL EXTENDED COST: 2544.60

RECEIVED BY: EMERSON RECEIVED DATE: 10/17/17

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

WOODARD &CURRAN

Via Regular US Mail

SEP 25 2017

September 20, 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADA Upgrades

Dear John:

Enclosed please find our invoice #142963 in the amount of $2,544.60 for professional services rendered for the above-mentioned project through the period ending September 08, 2017.

- Factory Talk Startup
- Resolve WIN911 Issues
- Lead/Lag Pump Indication on Screen Issues
- Project Administration

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works 55
Portland Street
Portland, ME 04101

September 20, 2017
Project No: 0221832.05
Invoice No: 142963

Project 0221832.05 PORTLAND, ME, CITY OF - SCADA UPGRADES PO# 43808

Professional Services for the period ending September 8, 2017

Phase 001 ENGINEERING

Fee Total	77,027.00			
Percent Complete	55.00	Total Earned	42,364.85	
		Previous Fee Billing	42,364.85	
		Current Fee Billing	0.00	
		Fee Total		**0.00**
			Total this Phase	**0.00**

Phase 002 CONSTRUCTION

Fee Total	44,412.00			
Percent Complete	30.00	Total Earned	13,323.60	
		Previous Fee Billing	10,779.00	
		Current Fee Billing	2,544.60	
		Fee Total		**2,544.60**
			Total this Phase	**$2,544.60**
			Total this Invoice	**$2,544.60**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

R E C E I V I N G R E P O R T

RECEIPT NO.: 331027

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 043808

DATE: 10/31/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY SHIP VIA F.O.B.
6/01/17

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		0000040723	3/24/17

LINE	QTY RCVD	BIN LOCATION	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	4441.20		EA	888 88 UNSPECIFIED UNSPECIFIED SCADA UPGRADE Acct/Proj: 37031005003500 / C16504	1.0000	4441.20

TOTAL EXTENDED COST: 4441.20

RECEIVED BY: EMERSON RECEIVED DATE: 10/31/17

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

WOODARD &CURRAN

Via Regular US Mail

October 23, 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADA Upgrades

Dear John:

Enclosed please find our invoice #143842 in the amount of $4,441.20 for professional services rendered for the above-mentioned project through the period ending October 13, 2017.

- PLC Program Updates
- Resolved Punch List Issues
- Setup and Test Cellular Modem
- Coordination of Project Updates and Munjoy Hill Installation
- Project Administration

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

gwr 10/31/17

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

October 23, 2017
Project No: 0221832.05
Invoice No: 143842

Project 0221832.05 PORTLAND, ME, CITY OF - SCADA UPGRADES
PO# 43808

Professional Services for the period ending October 13, 2017

Phase 001 ENGINEERING

Fee Total	77,027.00			
Percent Complete	55.00	Total Earned	42,364.85	
		Previous Fee Billing	42,364.85	
		Current Fee Billing	0.00	
		Fee Total		**0.00**
			Total this Phase	**0.00**

Phase 002 CONSTRUCTION

Fee Total	44,412.00			
Percent Complete	40.00	Total Earned	17,764.80	
		Previous Fee Billing	13,323.60	
		Current Fee Billing	4,441.20	
		Fee Total		**4,441.20**

Please include our invoice number in your remittance. Thank you.

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

Project	0221832.05	PORTLAND, ME, CITY OF - SCADA UPGRADES	Invoice	143842

Total this Phase	**$4,441.20**
Total this Invoice	**$4,441.20**

Outstanding Invoices

Number	Date	Balance
142963	9/20/2017	2,544.60
Total		**2,544.60**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

R E C E I V I N G R E P O R T

RECEIPT NO.: 331864

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 043808

DATE: 11/28/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY	SHIP VIA	F.O.B.
6/01/17		

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		0000040723	3/24/17

LINE	QTY RCVD / BIN LOCATION	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	12143.90	EA	888 88 UNSPECIFIED UNSPECIFIED SCADA UPGRADE Acct/Proj: 37031005003500 / C16504	1.0000	12143.90

TOTAL EXTENDED COST: 12143.90

RECEIVED BY: EMERSON RECEIVED DATE: 11/28/17

WOODARD & CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

November 16, 2017
Project No: 0221832.05
Invoice No: 144773

Project 0221832.05 PORTLAND, ME, CITY OF - SCADA UPGRADES PO# 43808

Professional Services for the period ending November 10, 2017

Phase 001 ENGINEERING

Fee Total	77,027.00			
Percent Complete	65.00	Total Earned	50,067.55	
		Previous Fee Billing	42,364.85	
		Current Fee Billing	7,702.70	
		Fee Total		**7,702.70**
			Total this Phase	**$7,702.70**

Phase 002 CONSTRUCTION

Fee Total	44,412.00			
Percent Complete	50.00	Total Earned	22,206.00	
		Previous Fee Billing	17,764.80	
		Current Fee Billing	4,441.20	
		Fee Total		**4,441.20**
			Total this Phase	**$4,441.20**
			Total this Invoice	**$12,143.90**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

WOODARD &CURRAN

Via Regular US Mail

NOV 22 2017

November 17, 2017

John Emerson
Department of Public Works
55 Portland Street
Portland, ME 04101

Re: City of Portland SCADA Upgrades

Dear John:

Enclosed please find our invoice #144773 in the amount of $12,143.90 for professional services rendered for the above-mentioned project through the period ending November 10, 2017.

- CoP Upgrades – Munjoy Hill
- Munjoy Hill Panel Installation
- TCS Communications and Materials
- SMS Alarming
- HMI Updates
- XLR Backup
- Project Administration

If you have any questions or if I can be of further assistance, please feel free to contact me at (207) 558.3687 or email pandromalos@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Peter Andromalos
Project Manager
Woodard & Curran

R E C E I V I N G R E P O R T

RECEIPT NO.: 327387

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 043893

DATE: 7/14/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY SHIP VIA F.O.B.
6/01/17

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		0000040724	3/24/17

LINE	QTY RCVD / BIN LOCATION	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	3211.32	EA	888 88 UNSPECIFIED UNSPECIFIED SCADA TRM SERVICES Acct/Proj: 57031125003500	1.0000	3211.32

TOTAL EXTENDED COST: 3211.32

RECEIVED BY: EMERSON RECEIVED DATE: 7/14/17

WOODARD & CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works
55 Portland Street
Portland, ME 04101

June 26, 2017
Project No: 0221832.06
Invoice No: 140409

Project 0221832.06 PORTLAND, ME, CITY OF - SCADA TRM SERVICES PO #43893

Professional Services for the period ending June 9, 2017

Phase 001 ENGINEERING

Fee Total	13,544.00			
Percent Complete	25.00	Total Earned	3,386.00	
		Previous Fee Billing	1,354.40	
		Current Fee Billing	2,031.60	
		Fee Total		**2,031.60**
			Total this Phase	**$2,031.60**

Phase 002 EXPENSES

Fee Total	9,831.00			
Percent Complete	30.00	Total Earned	2,949.30	
		Previous Fee Billing	1,769.58	
		Current Fee Billing	1,179.72	
		Fee Total		**1,179.72**
			Total this Phase	**$1,179.72**
			Total this Invoice	**$3,211.32**

Outstanding Invoices

Number	Date	Balance
139224	5/23/2017	3,123.98
Total		**3,123.98**

Approved by: _____

Peter Andromalos, PMP
Project Manager
Woodard & Curran

7-12-17

Please include our invoice number in your remittance. Thank you.

R E C E I V I N G R E P O R T

RECEIPT NO.: 327388

SHIP TO:
PUBLIC WORKS ADMIN.

P.O. NO.: 043893

DATE: 7/14/17

VENDOR: WOODARD & CURRAN INC
41 HUTCHINS DRIVE
PORTLAND ME 04102

VENDOR NO.
2694

DELIVER BY	SHIP VIA	F.O.B.
6/01/17		

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
BARRY SHEFF	KAREN MARSTON	PMH (BP)

FREIGHT	CONTRACT NO.	REQ. NO.	REQ. DATE
		0000040724	3/24/17

LINE	QTY RCVD / BIN LOCATION	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	3123.98	EA	888 88 UNSPECIFIED UNSPECIFIED SCADA TRM SERVICES Acct/Proj: 57031125003500	1.0000	3123.98

TOTAL EXTENDED COST: 3123.98

RECEIVED BY: EMERSON RECEIVED DATE: 7/14/17

WOODARD &CURRAN

COMMITMENT & INTEGRITY
DRIVE RESULTS

Remit to:
PO Box 55008
Boston, MA 02205-5008

T 800.426.4262
T 207.774.2112
F 207.774.6635

INVOICE

TD BANK
Electronic Transfer:
⑆211274450⑆ 2427662596⑈

John Emerson
Wastewater Facilities Coordinator
Portland, ME, City of
Department of Public Works 55
Portland Street
Portland, ME 04101

May 23, 2017
Project No: 0221832.06
Invoice No: 139224

Project 0221832.06 PORTLAND, ME, CITY OF - SCADA TRM SERVICES PO #43893

Professional Services for the period ending May 12, 2017

Phase 001 ENGINEERING

Fee Total	13,544.00			
Percent Complete	10.00	Total Earned	1,354.40	
		Previous Fee Billing	0.00	
		Current Fee Billing	1,354.40	
		Fee Total		**1,354.40**
			Total this Phase	**$1,354.40**

Phase 002 EXPENSES

Fee Total	9,831.00			
Percent Complete	18.00	Total Earned	1,769.58	
		Previous Fee Billing	0.00	
		Current Fee Billing	1,769.58	
		Fee Total		**1,769.58**
			Total this Phase	**$1,769.58**
			Total this Invoice	**$3,123.98**

Approved by: _____

Peter Andromalos
Project Manager 1
Woodard & Curran

Please include our invoice number in your remittance. Thank you.

JWC Environmental®
2850 S. Red Hill Ave., STE 125
Santa Ana, CA 92705
(949) 833-3888

AUG 03 2017

Invoice No: 87536
Date: 7/27/2017
Order No: S027349
Page No: 1
F.O.B: Origin

Sold To	Ship To
Portland, City of City Hall 389 Congress Street Portland, ME 04101 US	Portland, City of Public Works Admin. 55 Portland St Portland, ME 04101-2921 US

TIN: 45-2771126

DUNNS# 61-059-2388

CUSTOMER ID	CUSTOMER PO	PAYMENT TERMS	FREIGHT TERMS
5032925	044113	Net 30 Days	Freight: Prepaid

SALES REP ID	SHIPPING METHOD	SHIP DATE	INVOICE DUE DATE
226	Old Dominion Freight Line	7/27/2017	8/26/2017

QUANTITY								
LI#	ORD	SHP	BCK	PART	DESCRIPTION	X		
1	1	1	0	EVAL_CA	CMD4010-XDS2.0-Upgrade Return Expected Return Grinder SN: G010141-2-1			
2	1	1	0	CMD4010-XDS2.0	CMD4010-XDS2.0-Upgrade 17T Serrated Cam Cutters with Knurled Spacers 1:1 Stack Hardened Alloy STL BUNA-N Elastomers Cork & Rubber Gaskets Vertical Shaft Support with Grease Line Optimized Cut Control Gearing 1/2in Perforated Drum Drum Brush Motor Type: Hydraulic Spool Less Motor Less Reducer Grinder SN: S027349-2-1 ********** Paint: Epoxy Green **********			
3	2	2	0	MANUALS	O&M MANUALS Operation and Maintenance Manuals Ship with Equipment			
4	1	1	0	UC-SA	Upgrade Return Santa Ana ********** UPGRADE RETURN Please return your old unit within 30 days to activate the warranty on your cutter cartridge. ********** Return equipment to: JWC Environmental 2600 South Garnsey Street Santa Ana, CA 92707 **********			
5	1	1	0	Shipping	Shipping & Handling			

JWC Environmental®

2850 S. Red Hill Ave., STE 125
Santa Ana, CA 92705
(949) 833-3888

Invoice No: **87536**
Date: **7/27/2017**
Order No: **S027349**
Page No: **2**
F.O.B: **Origin**

Sold To	Ship To
Portland, City of City Hall 389 Congress Street Portland, ME 04101 US	Portland, City of Public Works Admin. 55 Portland St Portland, ME 04101-2921 US

TIN: 45-2771126

DUNNS# 61-059-2388

CUSTOMER ID	CUSTOMER PO	PAYMENT TERMS	FREIGHT TERMS
5032925	044113	Net 30 Days	Freight: Prepaid

SALES REP ID	SHIPPING METHOD	SHIP DATE	INVOICE DUE DATE
226	Old Dominion Freight Line	7/27/2017	8/26/2017

QUANTITY								
LI#	ORD	SHP	BCK	PART	DESCRIPTION	X		

SUB TOTAL:	$24,399.00
SALES TAX:	$0.00
TOTAL AMOUNT DUE:	$24,399.00

PLEASE REFERENCE THIS INVOICE NUMBER ON YOUR CHECK AND REMIT TO: **JWC Environmental, LLC**
P.O. Box 848853
Los Angeles, CA 90084-8853

IF PAYING BY ACH OR WIRE:

ACH/WIRE INSTRUCTIONS
BANK NAME: WELLS FARGO
ADDRESS: IRVINE, CA.
ABA#: 121000248
ACCOUNT #: 4123519118
ACCOUNT NAME: **JWC Environmental, LLC**

PURCHASE REQUISITION NBR: 0000040709

STATUS: DEPARTMENTAL APPROVAL

REQUISITION BY: CBAIER (EMERSON)

REASON: EMERGENCY REPLACEMENT OF PUMP #3 - FRANKLIN ST

DATE: 3/16/17

SHIP TO LOCATION: PUBLIC WORKS ADMIN.

SUGGESTED VENDOR: 7549 TIMKEN MOTOR & CRANE SERVICES

DELIVER BY DATE: 3/16/17

1	FAIRBANKS MORSE 37.9 HP REPLACEMENT PUMP COMMODITY: UNSPECIFIED SUBCOMMOD: UNSPECIFIED	77875.00	EA	1.0000	77875.00

REQUISITION TOTAL: 77875.00

A C C O U N T I N F O R M A T I O N

LINE #	ACCOUNT		PROJECT	%	AMOUNT
1	37031005004020	Maintenance and Repairs Other Equipment	C16504 CMOM Pump Stattion Rehab	100.00	77875.00
					77875.00

REQUISITION IS IN THE CURRENT FISCAL YEAR.

REQUISITION COMMENTS:

Sole source letter attached. Quote includes
freight charges.

REQUEST

Portland Public Works

To: Matt Fitzgerald, Purchasing Manager

From: Benjamin Pearson, P.E., Compliance Coordinator

Date: March 16, 2017

Re: Sole Source for Pump #3 at Franklin Street Pump Station

Attached is a quote for a Fairbanks Morse 37.9 HP pump for the Franklin Street Pump Station at a cost of $77,875 from Stultz Electric, part of Timken Motor & Crane Services, LLC. This pump is being purchased to replace an original pump from 1973 that is failing.

The replacement of this pump is critical to the function of the Franklin Street Pump Station. Funding is annually set aside for Pump Station Renewal projects such as these. This funding allocation is required to meet the City's Administrative Order from the Environmental Protection Agency.

This sole source request is being made because Timken Motor & Crane Services, LLC, is the local Fairbanks Morse dealer and the only vendor who can provide this brand of pump. The Water Resources Division is working towards standardizing equipment at pump stations. To that end, this pump station already has two Fairbank Morse pumps.

For these reasons, please allow this purchase to be completed without requiring an additional two bids from other vendors for a similar pump.

Thank you and please let me know if you should have any questions.

Benjamin Pearson
bnp@portlandmaine.gov
874-8843

QUOTATION
Quote Number: 36138
Quote Date: 3/13/2017
Please reference this quote number on all correspondence

Timken Motor & Crane Services LLC
Stultz Electric
1 McAlister Farm Road
Portland, ME 04103

Thank you for your inquiry. We are pleased to offer this quote for your consideration.

To: City Of Portland
389 Congress Street
Portland, ME 04101
USA

Ship To: City Of Portland
389 Congress Street
Portland, ME 04101
USA

Quote Description: Fairbanks Morse 37.9HP(40) 720 RPM replacement pump

Quote Reference:

PO Reference:

Attn: John Emerson

Phone: 207-318-0239

Fax:

Email: JWE@Portlandmaine.gov

Sales Rep: Stevens, Glenn
60 Darin Drive
Augusta, Maine 04330

Phone: +1 207 623 7500
Fax:
Email: glennstevens@maineindustrial.com

Inside: Woods, Luci
1 McAllister Farm Road
Portland, ME 04103
Phone: +1 207 699 2501
Fax:
Email: luci@stultzelectric.com

Credit card orders may be subject to a 3% convenience fee.

Visit us at www.stultzelectric.com

In House Capabilities
- Motor and Generator Repairs In-House
- Full Voltage Testing to 13,800V AC, 1200V DC
- UL Authorized Facility
- Large Machining
- Environmentally Controlled Rewind Department
- Full Load Testing Capabilities
- Gearbox Repair
- Custom Controls & Integration

Switchgear Services
- Full Switchgear Testing Services
- Oil Analysis
- Transformer Turn ratio Testing
- Power Factor Testing
- Circuit Breaker Retrofits

Hydroelectric Services
- On-site Inspection and Servicing
- Complete Mechanical Rebuilds and Electrical Rewinds
- Redesign and Uprate
- Core Lamination Replacement/Repair
- Recondition and Rewedge
- Cryogenic Cleaning

Field Service
- Motor Installation and Removals
- AC and DC Drive Repairs, Installations, and Retrofits
- Laser Alignment Services
- Vibration Trending and Analysis
- Infrared Thermography
- On and Off-Line Motor Testing
- Engineered Solutions and Energy Efficient Upgrades

Applicable Terms & Conditions *(see attached - subject to credit approval)*

Terms of Payment: Net 30

Freight Payment: Prepay and Add

Shipping Via: Best Way

Quote Validity: 30 Days

ISO 9001
Quality Certified

TIMKEN

STULTZ ELECTRIC

QUOTATION
Quote Number: 36138
Quote Date: 3/13/2017

Please reference this quote number on all correspondence

Item	*Part\Description*	*Qty*	*Net Price Each*	*Extended Price*	*Shipment / Lead Time*
1	**Part:** 10" D5435WD **Description:** Fairbanks Morse Pump unit Dry Pit submersible Drop in Replacement for Ser#1234419	1	77,875.00	77,875.00	16-20 weeks ARO

Comments:

Design conditions: 3600 GPM @32FT TDH
CW Rotation, DIscharge Position # 7
Standard double mechanical seal ,
Standard 10x10 suction elbow driven by External water jacketed 40 HP 720 RPM 3/60/460 volt 360 Frame Submersible motor/Standard 25 ft cable length. Mounte4d on Vertical base.

Options:
Freight has been included in the quoted price. Deduct $1763 if you wish the freight charges to be charged separately.(weight 3525 lbs)

Deduct $756.00 each for 10X10 suction elbo if not required

Deduct $966.00 for Vertical base if not required.

Quote Total US Dollars (Excludes Options): **$77,875.00**

Ex Works

- For parts orders: On your purchase order please include complete nameplate information.
- To avoid delays, please provide tax exempt certification with your purchase order.

TIMKEN MOTOR & CRANE SERVICES LLC
STANDARD TERMS AND CONDITIONS OF SALE,
SERVICE, REPAIR, PARTS, MODIFICATION, MAINTENANCE, INSPECTION AND TEST

1. ACCEPTANCE
All orders are subject to acceptance by Timken Motor & Crane Services LLC ("Seller"). Any acceptance by Seller of Buyer's order is expressly made conditional on Buyer's assent to any additional or different terms and Conditions contained herein, and all sales and charges of the products listed herein shall be, in the case of conflict between the terms and conditions of Buyer and Seller, interpreted and governed exclusively by the terms and conditions contained herein. Seller shall not be bound by any terms and conditions proposed by Buyer, whether in its purchase order or otherwise, which are additional to or different from the terms and conditions set forth herein, unless and only if accepted in writing by a principal officer of the Seller or his designated representative.

2. TAXES
The Seller's prices do not include any applicable sales, use, excise, value added or similar taxes; and the amount of any such tax which the Seller may be required to pay or collect will be added to each invoice unless the Buyer has furnished the Seller with a valid tax exemption certificate acceptable to the taxing authorities.
Where a Buyer fails to furnish the required documentation, the previously unpaid sales, use, excise, or similar tax will be billed to the Buyer.
If, upon subsequent sales, use, excise, or similar tax audit, an exemption certificate provided to the Seller by Buyer is, through no fault of the Seller, determined to be invalid, the Seller will attempt to acquire a valid exemption certificate, notarized affidavit of exempt use, or other necessary documentation from Buyer. If Buyer fails to timely furnish a valid exemption certificate, notarized affidavit or other necessary documentation, the previously unpaid sales, use or similar excise tax will be billed to Buyer.

3. TERMS
Progress payments are required for on any order exceeding $250,000. Payment shall be due thirty (30) days from date of invoice, which shall be the date of shipment or agreed progress payments as applicable. Amounts past due are subject to a service charge of 1 and ½ percent per month (or fraction thereof) or if less, the maximum contract rate permitted by law. If the Seller deems that by reason of the financial condition of the Buyer or otherwise, the continuance of any services or shipment on the terms specified herein is not justified, the Seller may require full or partial payment in advance. The Seller at its option may retain possession of equipment repaired, modified, inspected, tested, maintained or serviced under this agreement until its billings (final or progress) are paid. If such charges are not paid within 90 days following completion of the work and the invoicing to the Buyer, the Seller may upon not less than 7 days written notice by certified mail to the Buyer at the Buyer's last known address sell the equipment at public or private sale and apply the net proceeds to the Seller charge.
Upon Seller's approval in each case, portions of an invoice in dispute may be deducted and the balance remitted with a detailed explanation of the deduction. Such disputed amounts that are later paid are subject to the above interest charges from the original date due.

4. PRICE POLICY
In the event of a standard Seller price increase or decrease, the price of goods in order will be adjusted to reflect such increase or decrease. As it relates to price decreases, this does not apply to shipment held by request of Buyer. Goods already shipped are not subject to price increase or decrease. Orders placed on a bid or contract basis are not subject to this article and the mutually agreed upon terms within the bid or contract will apply. Seller's prices include the costs of standard domestic packing only. Any deviation from this standard packing (domestic or export), including U.S. government sealed packing, will result in extra charges. To determine such charges, consult Seller's sales offices. The minimum order amount is $20.

5. DELIVERY
Shipping dates given by the Seller are approximate and are based on prompt receipt of information, equipment, or access to the equipment at the customer's premise if work is performed on said premise.
The Seller will use its reasonable efforts to meet the scheduled dates, however, it cannot be held responsible for its failure to do so for causes beyond its reasonable control and in no event shall it be liable for any loss or damage resulting from its failure to deliver the services within the time specified herein.

6. SHIPPING/HANDLING CHARGES
Shipments are F.O.B. shipping point (or Ex Works) and Buyer assumes all risk of loss or damage to goods in transit, but except to the extent of Seller's proven negligence. Buyer's exclusive remedy for shortage, loss or damage in transit shall be a claim against the carrier. Shipping/handling will be prepaid and billed as a separate item on the equipment invoice on the basis of Seller's current shipping/handling policies. Seller assumes no responsibility for tariff classifications on carriers.

7. CHANGES
Buyer may, with the express written consent of the Seller, make changes in the specifications for equipment covered by the contract in such event the contract price and delivery dates shall be equitably adjusted. The Seller shall be entitled to payment for reasonable profit plus costs and expenses incurred by it for work and materials rendered unnecessary as a result of such changes and for work and materials required to effect said changes.

8. CANCELLATION
Undelivered parts of any order may be canceled by the Buyer only with the written approval of the Seller. If the Buyer makes an assignment for the benefit of creditors, if a voluntary or involuntary petition or action in bankruptcy or for reorganization or under any other insolvency law shall be filed by or against the buyer, if the Buyer shall admit its inability to pay its debts, if a trustee, receiver or liquidator is appointed for any part of the assets of the Buyer, or if the Buyer fails to make payments to the Seller in accordance with the terms hereof, the Seller may at its option cancel all undelivered parts or any order by written notice to the Buyer.
In the event of any cancellation of this order by either party, the Buyer shall pay the Seller the reasonable cost and expense, including engineering expense and all commitments to its suppliers and subcontractors, incurred by the Seller prior to receipt of notice of such cancellation, plus the Seller's usual rate of profit for similar work.

9. RETURN POLICY
Upon prior written approval in each case, the Seller may accept merchandise returns on items normally stocked by Seller under the following conditions. The Buyer contacts the Seller to obtain an RMA (Return Merchandise Authorization) number prior to returning the product. All returns must be made within 30 days of the date of invoice and be accompanied by the original invoice number and a brief explanation of the reason for the return. Return freight charges must be prepaid. All returned merchandise must be in original unopened packaging and in reasonable condition. Parts returned due to customer error will be charged a 25% restocking charge. Special order items are not returnable. Defective merchandise maybe returned within 90 day of the original invoice date.

10. ELECTRONIC DATA INTERCHANGE/FACSIMILE (FAX)
Orders placed hereunder by Buyer may be transmitted electronically or via FAX and in such event, such orders shall be subject to the terms and conditions contained in Seller's Electronic Data Interchange Agreement, in addition to the terms and conditions contained herein.

11. REGULATORY LAWS AND STANDARDS
The Seller makes no promise or representation that its product, services or work will conform to any federal, state or local laws, ordinances, regulations, codes or standards, except as particularly specified and agreed upon for compliance in writing as part of the quotation or contract between Buyer and Seller. The Seller prices do not include the cost of any related inspections or permits or inspection fees.

12. EXPORT CONTROL
Products and associated materials supplied or licensed under this agreement may be subject to various export laws and regulations. It is the responsibility of the exporter to comply with all such laws and regulations.

13. PRODUCT AND SERVICE STANDARD
The standards of OSHA, CMAA Crane Manufacturer's Association of America, NEC National Electrical Code, ASME American Society of Mechanical Engineers, AWS American Welding Society, AISC American Institute of Steel Construction will be used where agreed upon in each case and applicable in the manufacture of the crane and crane units. Products of Seller's design and original manufacture will comply with applicable federal government occupational safety, noise, environmental, health and sanitation standards. As related to Buyer's use of the products, Buyer is solely responsible for compliance of the products in their operation with any state or local laws, codes, rules or regulations, and for all necessary precautions and protections to insure the safety of persons, including when Sellers's products are used as a component of a larger installation.

14. WARRANTY

A. WARRANTY PERIOD
All sales, repair, inspection, test, rental service, modification or maintenance sold or serviced by the Seller is warranted to be free from defects of material and workmanship and to conform to any applicable drawings, specifications, or written documents approved by the Seller for a period of time as detailed below, or if different, such other period as included in Seller's quote:
1. Reconditioned components: no warranty unless otherwise agreed to by the parties.
2. Recondition and standard motor rewind: one (1) year in service or 18 months from date of shipment, whichever occurs first.
3. New Product Sales: one (1) year in service or 18 months from date of shipment, whichever occurs first.

The above warranties shall be based on such equipment operating with competent supervision under normal load, usage and conditions. For the warranty to apply, the Seller must be retained to perform any recommended servicing and to return to the site as recommended by the OEM after one year of operation to inspect and check, re-tension the core through bolts, etc. Seller's warranty excludes any seismic changes or those that arise from incorrect operation or improper maintenance, or external influences, such as overspeed of the turbine.

B. WARRANTY - REPAIR, MODIFICATION, REBUILD
If within the period specified above, the Seller receives from the Buyer written notice of any alleged defect or non-conformity and if the services provided are found by Seller not to be in conformity with this warranty (the Buyer having provided the Seller reasonable opportunity to perform any appropriate test thereon) the Seller will, at its option, correct such nonconformity or supply a replacement thereof. This warranty shall only apply to parts repaired or replaced by the Seller. No separate warranty shall apply to repaired apparatus as a whole or to parts not repaired or replaced by the Seller. The Seller shall have the right to require the Buyer to deliver any apparatus covered by this warranty to a designated service center and the Buyer shall pay both in-bound and out-bound transportation charges, with Seller accepting only the direct and actual cost of apparatus repair or replacement as provided above.

C. EQUIPMENT, COMPONENT AND PARTS WARRANTY
If any of the equipment or component parts provided by the Seller shall prove defective in material and/or workmanship within the warranty period, Buyer shall immediately thereupon notify the Seller in writing of such defect. Where the defect is found by Seller to be covered hereunder, the Seller shall, at its option, modify, repair, supply a replacement part or refund the purchase price of said item. The Seller shall have the option to have the part returned to it, F.O.B. its factory, or to make such adjustment at the point of installation. The Seller shall invoice for all travel and labor involved. The Seller shall accept no responsibility if such item has been improperly operated or maintained or if Buyer has permitted any unauthorized modifications, adjustments and/or repairs to the part. Parts not manufactured by the Seller shall be covered by the warranty of the manufacturer or supplier thereof.

D. WARRANTY - INSPECTION, TEST, MAINTENANCE, CALIBRATION, CONSULTATION
The Seller warrants that these services will be provided in accordance with accepted industry practice. If any service fails to meet the foregoing warranty, the Seller shall duplicate the service to the same extent and on the same conditions as the original service rendered.

E. REMANUFACTURED EQUIPMENT/COMPONENTS
All equipment components remanufactured by Seller will be warranted for a period of one (1) year from date of shipment. Repair of electronic boards will be warranted for a period of six (6) months from date of shipment.

F. NUCLEAR APPLICATIONS
NOTWITHSTANDING ANYTHING IN THESE TERMS TO THE CONTRARY, BUYER SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS SELLER FROM ANY LIABILITY, COST OR EXPENSE ARISING OUT OF OR RELATING TO NUCLEAR MATERIAL AND CUSTOMER SHALL INCLUDE SELLER AS AN ADDITIONAL INSURED ON ANY POLICIES OF INSURANCE THAT COVER NUCLEAR DAMAGE OR LIABILITY AND SHALL WAIVE AND CAUSE ITS CARRIERS TO WAIVER SUBROGATION AGAINST SELLER UNDER SUCH POLICIES.

G. EXCLUSIVE WARRANTY
THESE WARRANTIES ARE IN LIEU OF AND EXCLUDE ALL OTHER EXPRESS, IMPLIED OR STATUTORY WARRANTIES, INCLUDING WITHOUT LIMITATIONS, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL THE SELLER BE LIABLE FOR SPECIAL OR CONSEQUENTIAL DLAMAGES, OR FOR ANY OTHER LOSS, DAMAGE OR EXPENSE OF ANY KIND, INCLUDING LOSS OF PROFITS ARISING IN CONNECTION WITH THIS AGREEMENT OR WITH THE USE OR INABILITY TO USE THE SERVICES FURNISHED UNDER THIS AGREEMENT. THE SELLER DOES NOT WARRANT THE DESIGN OF ANY EQUIPMENT, MATERIAL, COMPONENTS OR SERVICES OF OTHERS.

15. INSURANCE
Seller shall provide such insurance as is reasonable and customary for the work being provided and that is generally consistent with the coverage that Seller has provided to other customers for which it has performed similar work. Seller maintains the option to self-insure. As an alternative to additional insured designation if any, Seller's insurance may contain blanket contractual liability coverage.

16. SUBCONTRACTING
In providing the work, equipment and component parts hereunder, Seller reserves the right to subcontract the same to third parties.

17. PATENT INFRINGEMENT
The Seller shall defend any suit or proceeding brought against the Buyer so far as the same is based on a claim that any apparatus of the Seller's design furnished hereunder or any part thereof, constitutes an infringement of any United States patents, if notified promptly in writing and given authority, information and assistance (at the Seller's expense) for the defense of the same and if such alleged infringement is not the result of a design or other special requirement specified by the Buyer as the result of the application or the use to which such apparatus is put by the Buyer or others. The Seller will pay all covered damages and costs awarded in such suit or proceeding against the Buyer. In case such apparatus or part is in such suit held to infringe any such patent and the use thereof is enjoined, the Seller shall at its expense either, at its option, (a) obtain for the Buyer the right to continue using such apparatus or part, or, (b) replace the same with non-infringing apparatus, or (c) modify the same so that it becomes non-infringing or, (d) remove said apparatus and refund the purchase price and the transportation and installation costs thereof. The foregoing states the entire liability of the Seller to the Buyer for patent infringement.

18. TITLE
All scrap resulting from the work shall be the property of the Seller. The title and right of possession of equipment upgraded and modified under this contract shall remain with the Buyer, subject to any applicable lien rights of the Seller and to its right of sale in the event of non-payment as provided herein.

19. FORCE MAJUERE
Seller shall not be liable for any loss, damage, expense, cost, product failure, cover, non-performance, delay or breach caused or occasioned by acts of God or any governmental authority, labor disputes (including lockouts), unusual weather conditions, fire, flood, accident, unavailability of materials or components, or late delivery thereof, boycott, embargo, insurrection, riot, civil disturbance, war, exposure to conditions or processes not specified by Seller, or any other cause which is unavoidable or beyond Seller's reasonable control.

20. DISCLAIMER OF DAMAGES
IN NO EVENT SHALL SELLER BE LIABLE FOR ANY TYPE OF SPECIAL, CONSEQUENTIAL, INCIDENTAL OR PENAL DAMAGES, WHETHER SUCH DAMAGES ARISE OUT OF OR ARE A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE. Such damages which are disclaimed shall include but not be limited to loss of profits or revenues, loss of use of the equipment or associated equipment, cost of substitute equipment, facilities, down time costs, increased construction costs or claims of Buyer's customers or contractors for such damages. Buyer agrees that in the event of a transfer, assignment, or lease of the equipment sold hereunder that Buyer shall secure for the Seller the protection afforded to it in this paragraph.

21. LIMITATION OF LIABILITY
The Seller shall not be liable for any loss, claim, expense or damage caused by, contributed to by or arising out of the acts or omissions of Buyer or third parties, whether negligent or otherwise. Seller's liability to Buyer on any claim or cause of action of any kind in contract, tort or otherwise, for any losses, costs, damages, expense, statutory violation, fine or penalty, loss of use, non-performance, exercise of cover or any breach or fault by Seller whatsoever, shall be limited to the purchase price paid by Buyer for the portion of the products or services allocable to the part, component or work out of which the claim arose. Any suit arising hereunder must be commenced within one (1) year from the date the cause of action accrues.

22. DISPUTES
At the sole and exclusive election of Seller, any claim or controversy arising out of or relating to the transaction (s) between Seller and Buyer shall be settled by arbitration administered by the American Arbitration Association ("AAA") and judgment on the award rendered by the arbitrator (s) may be entered by any court or competent jurisdiction. The Arbitrator (s) shall be entitled to award the charges of the arbitrator (s) and the AAA to the prevailing party. Exclusive venue for any arbitration and for any court proceedings shall be as designated by Seller at the time of the action, and Buyer waives any defenses or objections to such venue and consents to such jurisdiction.

23. GOVERNING LAW, LIMITATION PERIOD AND FEES
These Terms and the transaction between Buyer and Seller shall be governed, interpreted and enforced in accordance with the laws of Delaware, without regard to its conflict of laws rules. No claim for breach of contract or warranty shall be asserted by Buyer in any court or arbitration proceeding after one year from the date the cause of action accrues. Seller shall be entitled to recover its reasonable attorneys' fees incurred in connection with collection of all or a portion and/or reasonable additional charges from Buyer.

24. NO RESPONSIBILITY FOR GRATUITOUS INFORMATION OR ASSISTANCE
If Seller provides Buyer with assistance or advice which concerns any parts/products/service supplied hereunder or any system or equipment in which any such part/product/service may be installed and which is not required pursuant hereto, the furnishing of such assistance or advice shall not subject Seller to any liability, whether based in contract, warranty, tort (including negligence) or otherwise.

25. INTERPRETATION
Should any term or provision contained in the contract contravene or be invalid under applicable law, the contract shall not fail by reason thereof but shall be construed in the same manner as if such term or provision had not appeared therein.. This contract is not assignable by any party hereto; provided, however, that Seller may assign this contract to any purchaser of all or substantially all of Seller's business, whether by stock or asset sale, merger or any other similar transaction.

26. NO OTHER REPRESENTATIONS
There are no understandings, agreements, representations or warranties, either written or oral, relative to the goods that are not fully expressed in these Terms, which supersede or cancel any previous understanding or agreement between the parties with respect to the subject matter of the order. Any subsequent representation made by any person, including distributors, dealers, employees and representatives of Seller, which is inconsistent with or adds to these Terms shall not be binding on Seller unless approved in writing by an officer of Seller.

P-Form Jan 2016 Rev -

AGREEMENT BETWEEN THE
CITY OF PORTLAND
AND
SARGENT CORPORATION

THIS AGREEMENT is entered into this 26th day of June, 2017, by and between the **CITY OF PORTLAND,** a body politic and corporate, (hereinafter the "**CITY**"), and **SARGENT CORPORATION,** with an address of 378 Bennoch Road, P.O. Box 435, Stillwater, Maine 04489 (hereinafter the "**CONTRACTOR**").

W I T N E S S E T H:

WHEREAS, the CITY is in need of sewer and stormwater system separation on State Street and Marginal Way and did advertise a Request for Bids #7417 dated April 24, 2017entitled "State Street Infrastructure Improvements Contract 1 of 3 – SRF/Non SRF Improvements" as amended by Addenda No. 1 dated May 9, 2017 and No. 2 dated May 15, 2017 (a copy of the Request for Bids and its addenda, appendices, and attachments are attached hereto collectively as Exhibit A and made a part hereof); and

WHEREAS, the CONTRACTOR has the requisite knowledge and technical ability to perform the required services and has submitted a proposal for the provision of such services dated May 18, 2017, (hereinafter, the "Proposal") a copy of which is attached as Exhibit B and made a part hereof; and

WHEREAS, after due consideration of all the Bids, the CITY did award the bid to the CONTRACTOR;

NOW, THEREFORE, in consideration of the mutual promises made by each party to the other, the parties covenant and agree as follows:

1. The CONTRACTOR will furnish the materials, supplies, equipment and labor (hereinafter the "Work") in accordance with the Request for Bids, the Contract Drawings for State Street Infrastructure Improvements (copies of which are on file with the CITY and have been provided to CONTRACTOR) (said Request for Bids and its attachments,

appendices, and addenda, and the Contract Drawings are referred to collectively herein as the "Request for Bids") and also in accordance with the CONTRACTOR's Proposal, all of which are made a part of this Contract.

The restatement in this document of any term of the Request for Bids or Proposal shall not be deemed to waive any term not so restated. If any disagreement is found between Request for Bids or the Proposal and this document, then this document shall govern; and the Request for Bids shall govern over the Proposal, to the extent they disagree; provided, however, that this document and its attachments shall be construed to be supplemental to one another to the extent possible.

2. The CONTRACTOR covenants and agrees that all Work performed and furnished hereunder shall be free from all defects, and that all Work shall be performed in a good workmanlike manner. Unless a longer warranty period is specified in the Exhibits hereto, all Work provided shall be warranted by the CONTRACTOR for one (1) full year from the date of completion of all Work hereunder and acceptance thereof by the CITY. Notwithstanding the foregoing, any longer period specified in the attachments shall stay in effect.

3. Prior to the execution of this Agreement, the CONTRACTOR will procure and maintain occurrence-based Automobile Liability Insurance coverage in amounts of not less than One Million Dollars ($1,000,000.00) per occurrence for bodily injury, death and property damage, naming the CITY as an additional insured thereon, Pollution Liability Insurance coverage and Commercial General Liability Insurance coverage in amounts of not less than Five Million Dollars ($5,000,000.00) per occurrence for bodily injury, death and property damage, naming the CITY as an additional insured thereon, and also Workers' Compensation Insurance coverage to the extent required by law. With respect to the Automobile, Pollution, and Commercial General Liability Insurance, the CONTRACTOR shall name the CITY as an additional insured for coverage only in those areas where government immunity has been expressly waived by 14 M.R.S. A. § 8104-A, as limited by § 8104-B, and § 8111. This provision shall not be deemed a waiver of any defenses, immunities or limitations of liability or damages available to the CITY under the Maine Tort Claims Act, other Maine statutory law, judicial precedent, common law, or any other defenses, immunities or limitations of liability available to the CITY. Prior to execution of this Agreement, the CONTRACTOR shall furnish the CITY and thereafter maintain certificates evidencing all such coverages, which certificates shall guarantee thirty (30) days' notice to the CITY of termination of insurance from the insurance provider or agent. CONTRACTOR shall also provide a copy of any endorsement naming the CITY as additional insured. A certificate that merely has a box checked under "Addl Insr," or the like, or that merely states the City of Portland is named as an Additional Insured, will not be acceptable. The Workers' Compensation insurance shall include an endorsement waiving all rights of subrogation against the City of Portland, its officers or employees. Upon CITY'S request, CONTRACTOR shall provide CITY with a complete copy of any of the above-referenced policies. CONTRACTOR shall be responsible for any and all deductibles and/or self-insured retentions.

4. The CONTRACTOR shall furnish to the CITY, upon execution of the Contract, a Contract Performance Bond and a Contract Labor and Materials Payment Bond each for the full amount of the Contract and issued by a surety company or surety companies authorized to do business in the State of Maine and approved by the CITY. The Bonds shall remain in effect for one year after final acceptance of the Work, and protect the CITY for at least one year of warranty of the Work hereunder, and also shall insure settlement of claims for the payment of all bills for labor, materials and equipment.

5. To the fullest extent permitted by law, the CONTRACTOR shall defend, indemnify and hold harmless the CITY, its officers and employees, from and against all claims, damages, losses, and expenses, just or unjust, including, but not limited to, the costs of defense and attorney's fees arising out of or resulting from the performance of this Agreement, provided that any such claims, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use therefrom, and (2) is caused in whole or in part by any act or omission of the CONTRACTOR, anyone directly or indirectly employed by it, or anyone for whose act it may be liable. Such obligation of indemnification shall not be construed to negate or abridge any other obligation of indemnification running to the CITY which otherwise exists. The extent of the indemnification provision shall not be limited by the provision for insurance in this Agreement. CONTRACTOR's obligations under this paragraph shall survive termination of this Agreement.

6. Prior to any payment, the CITY reserves the right to require Waivers of Lien for materials and labor from the CONTRACTOR and its subcontractors and suppliers guaranteeing One Hundred Percent (100%) performance, free and clear from all liens and encumbrances. Any mechanic's lien or any other lien which may be filed against the premises which are the subject of this Agreement by reason of the Work described herein shall be defended (by counsel reasonably acceptable to the CITY) and promptly discharged by the CONTRACTOR at its own expense. The CITY may require the CONTRACTOR to provide a bond satisfactory to the CITY to indemnify it against any lien and as a substitution in place of a lien. If the CONTRACTOR should fail either to defend the CITY against the lien or to discharge it, then the CITY may do so at the CONTRACTOR's expense. In the event of such an undertaking by the CITY, the CONTRACTOR will promptly reimburse the CITY for all its costs and expenses in so doing, including, but not limited to, reimbursement of the CITY's reasonable counsel fees, as well as costs which may be incurred by it in substituting a bond in place of a lien. CONTRACTOR's obligations under this paragraph shall survive termination of this Agreement.

7. The CONTRACTOR shall perform the work to the satisfaction of the responsible CITY official who will have the right of inspection at all times, and whose approval and acceptance of the work will be a condition precedent to payments by the CITY under this Contract. CITY inspectors will have the authority to stop work in progress if such work is being done contrary to the Request for Bids or the City's engineering practice. CONTRACTOR acknowledges and agrees that such inspection is for purposes of approving payment alone and such inspection shall not be deemed to impose any duty or liability upon the CITY to supervise any aspect of or approve the quality of the Work.

8. Time is of the essence in the performance of this Agreement. Upon receipt of executed contracts and insurance as required, the CITY will promptly send an executed CITY contract to the CONTRACTOR, which will commence work upon receipt. As set forth in the Request for Bids, the construction of a storm drain outfall at Back Cove must be completed by July 14, 2017. All utility pipe work must be complete in place with binder course pavement installed by December 1, 2017. The final surface paving work shall be completed by July 1, 2018.

9. In the event of any dispute as to the amount, nature or scope of the work required under this Contract, the design and judgment of the Director of the Department of Public Works or his or her designee (hereinafter, the "Director") will be final and binding.

10. For performance of all the terms and conditions of this Agreement, the CITY will pay the CONTRACTOR Six Million Eight Hundred Forty-Five Thousand Eighty-One Dollars and No Cents ($6,845,081.00) based on the rates set forth in the Proposal. This Agreement only includes Contract 1 of 3, and not Contract 2 of 3 (CDBG Improvements) or Contract 3 of 3 (Portland Water District Improvements), described in the Request for Bids and the Proposal.

11. Payment shall be in accordance with Section 108 – Prior to substantial completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as the **CITY** may determine or may withhold, including but not limited to liquidated damages in accordance with general conditions:
    a. 95 percent of work completed (with balance being retainage); and
    b. 95 percent of cost of materials and equipment not incorporated in the work (with balance being retainage)

    Upon substantial completion, the **CITY** shall pay an amount sufficient to increase total payments to the **CONTRACTOR** to 98 percent of the work completed, less such amounts as the **CITY** shall determine in accordance with general conditions. The final two percent of the value of the Work shall be retained for a period of one year from the date of substantial completion.

12. The CONTRACTOR shall keep accurate records of all services performed under this Agreement and shall submit such information to the CITY on a monthly basis. Payment for such Work shall be made to the CONTRACTOR not more than thirty (30) days after receipt of an invoice and acceptance of the Work by the Director.

13. The CITY may terminate this Agreement for cause by written notice to the CONTRACTOR. In the event of such termination, the CONTRACTOR shall not be entitled to any further payment under this Agreement from the date of receipt of said notice.

14. The CITY shall have the right to terminate this Agreement at any time for its convenience on thirty (30) days' prior written notice to the CONTRACTOR. If the Agreement is terminated by the CITY for convenience, the CITY shall pay the

CONTRACTOR for all Work performed and all materials purchased pursuant to this Agreement prior to receipt of such notice.

15. Out of concern for the public, CITY employees and the CONTRACTOR's employees, all work performed by the CONTRACTOR shall be in conformance with pertinent OSHA, local, state and federal government regulations.

16. No waiver of any breach of any one or more of the conditions of this Agreement by the CITY shall be deemed to imply or constitute a waiver of any succeeding or other breach hereunder.

17. This Agreement and its attachments represents the entire and complete agreement and understanding between the parties and supersedes any prior agreement or understanding, written or oral, between the parties with respect to the subject matter of this Agreement. This Agreement cannot be amended except by written instrument executed by the CITY and CONTRACTOR.

18. This Agreement shall be construed in all respects in accordance with, and governed by, the laws of the State of Maine. All parties hereto hereby consent to the exclusive jurisdiction of the Superior Court for the County of Cumberland in the State of Maine, for all actions, proceedings and litigation arising from or relating directly or indirectly to this Agreement or any of the obligations hereunder, and any dispute not otherwise resolved as provided herein shall be litigated solely in said Court.

19. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement. A signature in a pdf or electronic document shall be considered the equivalent of an original signature.

20. CONTRACTOR warrants and represents that it has the full right and authority to enter into this Agreement, that there is no impediment that would inhibit its ability to perform their respective obligations under this Agreement, and that the person signing this Agreement on behalf of CONTRACTOR has the authority to do so.

IN WITNESS WHEREOF, the said **CITY OF PORTLAND** has caused this Agreement to be signed and sealed by Jon P. Jennings, its City Manager, thereunto duly authorized, **SARGENT CORPORATION** has caused this Agreement to be signed and sealed by TIMOTHY FOLGSTER, its VICE PRESIDENT OF OPERATIONS, thereunto duly authorized, the day and date first above written.

WITNESS:

_____

CITY OF PORTLAND

By: _____
Jon P. Jennings
Its City Manager

WITNESS: Ian McCarthy

_____

SARGENT CORPORATION

By: _____

Print or type name: Timothy M. Foulster

Its: Vice President - Operations

Approved as to form:

_____
City Corporation Counsel's Office

Approved as to funds:

_____
City Finance Director

EXHIBIT B

Bid #7417

BID

Bid No.7417
CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS

STATE STREET INFRASTRUCTURE IMPROVEMENTS
Contract 1 of 3 - SRF IMPROVEMENTS

Proposal of Sargent Corporation
Name

Address 378 Bennoch Road, PO Box 435, Stillwater, Maine 04489

The name and address shown on the above lines shall be the official name and address of the person, partnership or corporation submitting this bid and shall agree with the "Signature of Bidder" in the case of an individual, the "Name of Firm or Partnership" in the case of a firm or partnership, or the "Name of Bidder" in the case of a corporation.

TO: Matthew Fitzgerald, Purchasing Manager
City Hall, Room 103
389 Congress Street
Portland, ME 04101

Dear Mr. Fitzgerald:

The undersigned, having carefully examined the site of the work, the Plans, the Standard Specifications, including all current amendments or revisions thereof, the Supplemental Specifications, Special Provisions, Contract Agreement and Contract Bonds contained herein for the STATE STREET INFRASTRUCTURE IMPROVEMENTS, do(es) hereby propose and offer to enter into a contract to supply all the materials, tools, equipment a\nd labor required to perform and construct the whole of the work in strict accordance with the terms and conditions of this contract at the unit prices stated in the following "Schedule of Items" submitted by the undersigned.

This Bid may be accepted by the City of Portland at any time within sixty (60) calendar days after opening of the bids.

(Fill out prices in ink, in writing and in figures; in case of a discrepancy between prices in writing and prices in figures, the writing shall govern. In case of discrepancy between total of items and total of bid amount stated, total of items shall govern. Use the pages in this document when submitting proposal and submit contract document intact.)

Any pay items with quantities marked with an asterisk (*) on the bid sheets are not anticipated at time of bid and therefore are indeterminate. These items are part of the Contract Proposal and will also be used should any extra work be necessary. Actual quantities will be measured in the field or calculated from the contract drawings. The unit bid prices will be used to calculate payment amounts regardless of final quantities.

BID

Bid No.7417
CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS

STATE STREET INFRASTRUCTURE IMPROVEMENTS
Contract 2 of 3 - CDBG IMPROVEMENTS

Proposal of Sargent Corporation
Name

Address 378 Bennoch Road, PO Box 435, Stillwater, Maine 04489

The name and address shown on the above lines shall be the official name and address of the person, partnership or corporation submitting this bid and shall agree with the "Signature of Bidder" in the case of an individual, the "Name of Firm or Partnership" in the case of a firm or partnership, or the "Name of Bidder" in the case of a corporation.

TO: Matthew Fitzgerald, Purchasing Manager
City Hall, Room 103
389 Congress Street
Portland, ME 04101

Dear Mr. Fitzgerald:

The undersigned, having carefully examined the site of the work, the Plans, the Standard Specifications, including all current amendments or revisions thereof, the Supplemental Specifications, Special Provisions, Contract Agreement and Contract Bonds contained herein for the STATE STREET INFRASTRUCTURE IMPROVEMENTS, do(es) hereby propose and offer to enter into a contract to supply all the materials, tools, equipment a\nd labor required to perform and construct the whole of the work in strict accordance with the terms and conditions of this contract at the unit prices stated in the following "Schedule of Items" submitted by the undersigned.

This Bid may be accepted by the City of Portland at any time within sixty (60) calendar days after opening of the bids.

(Fill out prices in ink, in writing and in figures; in case of a discrepancy between prices in writing and prices in figures, the writing shall govern. In case of discrepancy between total of items and total of bid amount stated, total of items shall govern. Use the pages in this document when submitting proposal and submit contract document intact.)

Any pay items with quantities marked with an asterisk (*) on the bid sheets are not anticipated at time of bid and therefore are indeterminate. These items are part of the Contract Proposal and will also be used should any extra work be necessary. Actual quantities will be measured in the field or calculated from the contract drawings. The unit bid prices will be used to calculate payment amounts regardless of final quantities.

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
201.110*	SY 750	CLEARING @ Four Dollars and No Cents Per Square Yard	4	00	3,000	00
201.230*	EA 13	REMOVE SINGLE TREE @ Six Hundred Dollars and No Cents Per Each	600	00	7,800	00
201.231	EA 1	REMOVE SINGLE TREE – NON SRF @ Six Hundred Dollars and No Cents Per Each	600	00	600	00
202.15	EA 5	REMOVE MANHOLE OR CATCH BASIN @ Five Hundred Dollars and No Cents Per Each	500	00	2,500	00
202.16	LF 146	REMOVE EXISTING PIPE @ Twenty Dollars and No Cents Per Linear Foot	20	00	2,920	00
202.20	SY 8340	REMOVE BITUMINOUS CONCRETE PAVEMENT @ Two Dollars and No Cents Per Square Yard	2	00	16,680	00
202.211	SY 3400	REMOVE BITUMINOUS CONCRETE PAVEMENT – NON SRF @ Two Dollars and No Cents Per Square Yard	2	00	6,800	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
202.202	SY 3600	MILL EXISTING SURFACE PAVEMENT @ Five Dollars Per Square Yard	5	00	18,000	—
202.41	LS 1	REMOVE GRANITE/CONCRETE BLOCKS – NON SRF @ Seven Thousand Five Hundred Dollars and No Cents Per Lump Sum	7,500	00	7,500	00
203.20*	CY 2200	COMMON EXCAVATION @ Eighteen Dollars and No Cents Per Cubic Yard	18	00	39,600	00
203.21*	CY 7500	COMMON EXCAVATION – NON SRF @ Eighteen Dollars and No Cents Per Cubic Yard	18	00	135,000	00
203.25*	CY 6470	GRANULAR BORROW @ Twenty Four Dollars and No Cents Per Cubic Yard	24	00	155,280	00
203.28*	VF 84	TEST PIT EXCAVATION @ Eighty Dollars and No Cents Per Vertical Foot	80	00	6,720	00
203.31*	CY 1480	CRUSHED STONE (OVERDEPTH) 703.31 – TYPE A @ Thirty Six Dollars and No Cents TMF Per Cubic Yard	36	00	53,280	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
203.35	CY 170	CRUSHED STONE @ Thirty Six Dollars and No Cents Per Cubic Yard	36	00	6,120	00
203.381	CY 190	FILTER SAND @ Thirty Two Dollars and No Cents Per Cubic Yard	32	00	6,080	00
206.061*	CY 1480	EARTH EXCAVATION, BELOW GRADE (OVERDEPTH) @ Eighteen Dollars and No Cents Per Cubic Yard	18	00	26,640	00
206.07*	CY 1480	STRUCTURAL ROCK EXCAVATION @ One Dollar and No Cents Per Cubic Yard	1	00	1,480	00
304.09	CY 1350	AGGREGATE BASE COURSE – TYPE B @ Thirty Dollars and No Cents Per Cubic Yard	30	00	40,500	00
304.091	CY 490	AGGREGATE BASE COURSE – TYPE B – NON SRF @ Thirty Dollars and No Cents Per Cubic Yard	30	00	14,700	00
304.10	CY 2580	AGGREGATE SUBBASE COURSE - TYPE D @ TWENTY SIX Dollars Per Cubic Yard	26	00	67,080	—

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
304.101	CY 6270	AGGREGATE SUBBASE COURSE - TYPE D – NON SRF @ Twenty Six Dollars and No Cents Per Cubic Yard	26	00	163,020	00
403.207	T 1370	HOT MIX ASPHALT 19.0MM NOMINAL MAXIMUM SIZE @ One Hundred Dollars and No Cents Per Ton	100	00	137,000	00
403.2071	T 730	HOT MIX ASPHALT 19.0MM NOMINAL MAXIMUM SIZE – NON SRF @ One Hundred Dollars and No Cents Per Ton	100	00	73,000	00
403.2075	SY 110	HOT MIX ASPHALT 19.0 MM NOMINAL MAXIMUM SIZE – (HANDPLACED) @ Forty Dollars and No Cents Per Square Yard	40	00	4,400	00
403.208	T 1100	HOT MIX ASPHALT 12.5 MM NOMINAL MAXIMUM SIZE @ One Hundred Dollars and No Cents Per Ton	100	00	110,000	00
403.2081	T 380	HOT MIX ASPHALT 12.5 MM NOMINAL MAXIMUM SIZE – NON SRF @ One Hundred Dollars and No Cents Per Ton	100	00	38,000	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
403.2085	SY 55	HOT MIX ASPHALT 12.5 MM NOMINAL MAXIMUM SIZE – (HANDPLACED) @ Forty Dollars and No Cents Per Square Yard	40	00	2,200	00
403.209	SY 68	HOT MIX ASPHALT 9.5 MM NOMINAL MAXIMUM SIZE (HAND PLACED) @ Forty Dollars and No Cents Per Square Yard	40	00	2,720	00
403.2101	T 97	HOT MIX ASPHALT 9.5 MM NOMINAL MAXIMUM SIZE – NON SRF @ One Hundred Twenty-Five Dollars and No Cents Per Ton	125	00	12,125	00
403.213	T 30	HOT MIX ASPHALT 12.5 MM NOMINAL MAXIMUM SIZE (BASE) @ One Hundred Twenty-Five Dollars and No Cents Per Ton	125	00	3,750	00
411.131	SY 140	STONE DUST PATH @ Ten Dollars and No Cents Per Square Yard	10	00	1,400	00
502.65	CY 620	Flowable Fill (Grout) @ One Hundred Twenty Five Dollars and No Cents Per Cubic Yard	125	00	77,500	00
603.1331	LF 344	12 INCH POLYETHYLENE SANITARY SEWER PIPE @ Eighty Eight Dollars and No Cents Per Linear Foot	88	00	30,272	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
603.1351	LF	18 INCH POLYETHYLENE SANITARY SEWER PIPE				
	490	@ One Hundred Sixteen Dollars and No Cents Per Linear Foot	116	00	56,840	00
603.136	LF	24 INCH SANITARY SEWER PIPE				
	11	@ One Hundred Seventy Two Dollars and No Cents Per Linear Foot	172	00	1,892	00
603.138	LF	36 INCH SANITARY SEWER PIPE TMF				
	81	@ One Hundred Eighty ~~One~~ Eight Dollars and No Cents Per Linear Foot	188	00	15,228	00
603.140	LF	48 INCH SANITARY SEWER PIPE				
	805	@ Three Hundred Dollars and No Cents Per Linear Foot	300	00	241,500	00
603.153	LF	10 INCH STORM DRAIN PIPE				
	523	@ Seventy Dollars and No Cents Per Linear Foot	70	00	36,610	00
603.1531	LF	10 INCH STORM DRAIN PIPE POND OUTLET				
	40	@ One Hundred Twenty Dollars and No Cents Per Linear Foot	120	00	4,800	00
603.159	LF	12 INCH STORM DRAIN PIPE				
	406	@ Seventy Six Dollars and No Cents Per Linear Foot	76	00	30,856	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

			UNIT PRICE		TOTAL PRICE	
Item No.	Quantity	Item with Unit Bid Price Written in Words	Dollars	Cents	Dollars	Cents
603.179	LF 135	18 INCH STORM DRAIN PIPE @ Ninety Eight Dollars and No Cents Per Linear Foot	98	00	13,230	00
603.1791	LF 526	18 INCH POLYETHYLENE STORM DRAIN PIPE @ One Hundred Six Dollars and No Cents Per Linear Foot	106	00	55,756	00
603.199	LF 587	24 INCH STORM DRAIN PIPE @ One Hundred Ten Dollars and No Cents Per Linear Foot	110	00	64,570	00
603.1991	LF 59	24 INCH POLYETHYLENE STORM DRAIN PIPE @ One Hundred Sixty Four Dollars and No Cents Per Linear Foot	164	00	9,676	00
603.2091	LF 260	30 INCH POLYETHYLENE STORM DRAIN PIPE @ One Hundred Eighty Four Dollars and No Cents Per Linear Foot	184	00	47,840	00
603.219	LF 328	36 INCH STORM DRAIN PIPE @ One Hundred Eighty Dollars and No Cents Per Linear Foot	180	00	59,040	00
603.210	LF 35	42 INCH WEHOLITE STORM DRAIN PIPE @ Three Hundred Dollars and No Cents Per Linear Foot	300	00	10,500	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
603.220	LF 660	42 INCH STORM DRAIN PIPE @ Two Hundred Dollars and No Cents Per Linear Foot	200	00	132,000	00
603.227	LF 1855	84 INCH WEHOLITE STORM DRAIN PIPE @ One Thousand One Hundred Fifty Dollars and No Cents Per Linear Foot	1,150	00	2,133,250	00
603.228	LF 160	84 INCH OVALIZED WEHOLITE STORM DRAIN PIPE @ One Thousand, Two Hundred Dollars and No Cents Per Linear Foot	1,200	00	192,000	00
603.2281	LF 25	84 INCH OVALIZED WEHOLITE SANITARY SEWER PIPE @ Five Thousand, Two Hundred Dollars and No Cents Per Linear Foot	5,200	00	130,000	00
603.99	EA 11	TRENCH DAM AND UNDERDRAIN @ Two Thousand Dollars and No Cents Per Each	2,000	00	22,000	00
604.13	EA 32	4 FOOT DIAMETER CATCH BASIN @ Four Thousand Dollars and No Cents Per Each	4,000	00	128,000	00
604.150	EA 16	4 FOOT DIAMETER MANHOLE @ Four Thousand Five Hundred Dollars and No Cents Per Each	4,500	00	72,000	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
604.1501	EA 3	4 FOOT DIAMETER LOCKING MANHOLE @ Four Thousand Seven Hundred Dollars and No Cents Per Each	4,700	00	14,100	00
604.154	EA 15	6 FOOT DIAMETER MANHOLE @ Seven Thousand Two Hundred Dollars and No Cents Per Each	7,200	00	108,000	00
604.1541	EA 2	6 FOOT DIAMETER LOCKING MANHOLE @ Seven Thousand Four Hundred Dollars and No Cents Per Each	7,400	00	14,800	00
604.156	EA 2	8 FOOT DIAMETER MANHOLE @ Fifteen Thousand Dollars and No Cents Per Each	15,000	00	30,000	00
604.159	EA 2	6 FOOT DIAMETER DOGHOUSE MANHOLE @ Ten Thousand Dollars and No Cents Per Each	10,000	00	20,000	00
604.163	EA 5	ABANDON MANHOLE @ Five Hundred Dollars and No Cents Per Each	500	00	2,500	00
604.18	EA 1	ADJUSTING MANHOLE OR CATCH BASIN TO GRADE @ Five Hundred Dollars and No Cents Per Each	500	00	500	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
604.19	EA 2	CORE INLET/OUTLET PIPE HOLE IN CATCH BASIN OR MANHOLE @ One Thousand Dollars and No Cents Per Each	1,000	00	2,000	00
604.30	EA 3	MANHOLE RISER @ Eighteen Thousand Dollars and No Cents Per Each	18,000	00	54,000	00
604.31	EA 6	CATCH BASIN RISER @ Eighteen Thousand Dollars and No Cents Per Each	18,000	00	108,000	00
604.311	EA 1	CATCH BASIN OFFSET RISER @ Twenty Thousand Dollars and No Cents Per Each	20,000	00	20,000	00
604.32	EA 3	LOCKING MANHOLE RISER @ Eighteen Thousand Dollars and No Cents Per Each	18,000	00	54,000	00
605.07	LF 305	4 INCH UNDERDRAIN – TYPE B @ Thirty Two Dollars and No Cents Per Linear Foot	32	00	9,760	00
607.176	LS 1	INSTALL TEMPORARY CHAIN LINK SAFETY FENCE @ Twenty Five Thousand Dollars and No Cents Per Lump Sum	25,000	00	25,000	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

			UNIT PRICE		TOTAL PRICE	
Item No.	**Quantity**	**Item with Unit Bid Price Written in Words**	**Dollars**	**Cents**	**Dollars**	**Cents**
607.25	LF 275	REMOVE AND RESET CHAIN LINK FENCE @ Twenty Five Dollars and No Cents Per Linear Foot	25	00	6,875	00
608.08	SY 96	REINFORCED CONCRETE SIDEWALK @ One Hundred Dollars and No Cents Per Square Yard	100	00	9,600	00
608.15	SY 79	BRICK SIDEWALK W/ BITUMINOUS BASE @ One Hundred Twenty Five Dollars and No Cents Per Square Yard	125	00	9,875	00
608.16	SY 28	BRICK DRIVEWAY W/ BITUMINOUS BASE @ One Hundred Twenty Five Dollars and No Cents Per Square Yard	125	00	3,500	00
608.27	SF 38	CURB RAMP DETECTABLE WARNING FIELD @ Thirty Dollars and No Cents Per Square Foot	30	00	1,140	00
609.11	LF 170	TYPE 1 VERTICAL CURB @ Forty Eight Dollars and No Cents Per Linear Foot	48	00	8,160	00
609.111	LF 315	TYPE 1 VERTICAL CURB – NON SRF @ Forty Eight Dollars and No Cents Per Linear Foot	48	00	15,120	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
609.121	LF 84	TYPE 1 VERTICAL CURB (CIRCULAR) – NON SRF @ Fifty Eight Dollars and No Cents Per Linear Foot	58	00	4,872	00
609.234	EA 2	TERMINAL CURB TYPE 1, 4 FOOT LENGTH @ Two Hundred Twenty Five Dollars and No Cents Per Each	225	00	450	00
609.2341	EA 1	TERMINAL CURB TYPE 1, 4 FOOT LENGTH, CIRCULAR – NON SRF @ Two Hundred Fifty Dollars and No Cents Per Each	250	00	250	00
609.2342	EA 1	TERMINAL CURB TYPE 1, 4 FOOT LENGTH – NON SRF @ Two Hundred Twenty Five Dollars and No Cents Per Each	225	00	225	00
609.237	EA 2	TERMINAL CURB TYPE 1, 7 FOOT LENGTH @ Three Hundred Fifty Dollars and No Cents Per Each	350	00	700	00
609.34	LF 210	TYPE 5 VERTICAL CURB @ Thirty Two Dollars and No Cents Per Linear Foot	32	00	6,720	00
609.341	LF 96	TYPE 5 VERTICAL CURB – NON SRF @ Thirty Two Dollars and No Cents Per Linear Foot	32	00	3,072	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
609.35	LF 64	TYPE 5 VERTICAL CURB CIRCULAR – NON SRF @ Forty Two Dollars and No Cents Per Linear Foot	42	00	2,688	00
609.38	LF 510	REMOVE AND RESET CURB TYPE 1 @ Twenty Two Dollars and No Cents Per Linear Foot	22	00	11,220	00
609.441	LF 50	CURBING REMOVED AND STACKED – NON SRF @ Ten Dollars and No Cents Per Linear Foot	10	00	500	00
610.16	CY 67	HEAVY RIPRAP @ Eighty Two Dollars and No Cents Per Cubic Yard	82	00	5,494	00
614.141	EA 14	MASONRY PLUG 8 INCH – 18 INCH @ Three Hundred Fifty Dollars and No Cents Per Each	350	00	4,900	00
614.142	EA 1	MASONRY PLUG 24 INCH – 36 INCH @ Four Hundred Fifty Dollars and No Cents Per Each	450	00	450	00
614.143	EA 20	MASONRY PLUG 42 INCH – 48 INCH @ Nine Hundred Fifty Dollars and No Cents Per Each	950	00	19,000	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
615.071	SY 7380	LOAM, SEED, AND MULCH @ Seven Dollars and No Cents Per Square Yard	7	00	51,660	00
615.072	SY 1300	LOAM, SEED, AND MULCH – NON SRF @ Seven Dollars and No Cents Per Square Yard	7	00	9,100	00
626.221	LF 175	UNDERGROUND CONDUIT RELOCATION – NON SRF @ ~~Thirty Six~~ Fifty Dollars and No Cents Per Linear Foot	~~36~~ 50	00	~~6,300~~ 8,750.00	00
627.181	LF 280	12" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE – NON SRF @ Two Dollars and Fifty Cents Per Linear Foot	2	50	700	00
627.30	SF 3300	GROOVING FOR PAVEMENT MARKING @ Three Dollars and Fifty Cents Per Square Foot	3	50	11,550	00
627.733	LF 1680	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE @ Seventy Five Cents Per Linear Foot	00	75	1,260	00

THF

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
627.734	LF 1550	4" WHITE OR YELLOW PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE (RECESSED) @ One Dollar and Twenty Five Cents Per Linear Foot	1	25	1,937	50
627.744	LF 700	6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE @ One Dollar and No Cents Per Linear Foot	1	00	700	00
627.7441	LF 680	6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE – NON SRF @ One Dollar and No Cents Per Linear Foot	1	00	680	00
627.745	LF 540	6" WHITE OR YELLOW PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE (RECESSED) @ One Dollar and Fifty Cents Per Linear Foot	1	50	810	00
627.75	SF 1060	WHITE OR YELLOW PAVEMENT & CURB MARKINGS @ Three Dollars and Fifty Cents Per Square Foot	3	50	3,710	00
627.7501	SF 310	WHITE OR YELLOW PAVEMENT & CURB MARKINGS – NON SRF @ Three Dollars and Fifty Cents Per Square Foot	3	50	1,085	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
627.751	SF .700	WHITE OR YELLOW PREFORMED THERMOPLASTIC PAVEMENT MARKINGS (RECESSED) @ Four Dollars and Fifty Cents Per Square Foot	4	50	3,150	00
627.755	LF 1210	8" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE @ One Dollar and Twenty Five Cents Per Linear Foot	1	25	1,512	50
627.7551	LF 2320	8" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE – NON SRF @ One Dollar and Twenty Five Cents Per Linear Foot	1	25	2,900	00
627.76	LS 1	TEMPORARY PAVEMENT OR MARKING LINE, WHITE OR YELLOW @ Ten Thousand Dollars and No Cents Per Lump Sum	10,000	00	10,000	00
627.943	SF 1850	PREFORMED THERMOPLASTIC COLORED BIKE LANE (RECESSED) @ Six Dollars and No Cents Per Square Foot	6	00	11,100	00
629.05*	HR 40	HAND LABOR, STRAIGHT TIME @ Forty Two Dollars and No Cents Per Hour	42	00	1,680	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

			UNIT PRICE		TOTAL PRICE	
Item No.	**Quantity**	**Item with Unit Bid Price Written in Words**	**Dollars**	**Cents**	**Dollars**	**Cents**
629.06*	HR 40	MASON, STRAIGHT TIME @ Sixty Four Dollars and No Cents Per Hour	64	00	2,560	00
631.12*	HR 40	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR) @ One Hundred Fifty Eight Dollars and No Cents Per Hour	158	00	6,320	00
631.13*	HR 40	BULLDOZER (INCLUDING OPERATOR) @ One Hundred Fifty Eight Dollars and No Cents Per Hour	158	00	6,320	00
631.15*	HR 40	ROLLER EARTH BASE CRS (INC OP) @ Eighty Four Dollars and No Cents Per Hour	84	00	3,360	00
631.172*	HR 40	TRUCK-LARGE (INCLUDING OPERATOR) @ Ninety Four Dollars and No Cents Per Hour	94	00	3,760	00
631.22*	HR 40	FRONT END LOADER (INCLUDING OPERATOR) @ One Hundred Thirty Four Dollars and No Cents Per Hour	134	00	5,360	00
631.36*	HR 40	FOREMAN, STRAIGHT TIME @ Sixty Eight Dollars and No Cents Per Hour	68	00	2,720	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

			UNIT PRICE		TOTAL PRICE	
Item No.	**Quantity**	**Item with Unit Bid Price Written in Words**	**Dollars**	**Cents**	**Dollars**	**Cents**
632.041*	EA 23	4 INCH AND 6 INCH INSERTA TEE SANITARY/STORM DRAIN PIPE SECTIONS @ Five Hundred Dollars and No Cents Per Each	500	00	11,500	00
632.043	EA 3	10 INCH INSERTA TEE SANITARY/STORM DRAIN PIPE SECTIONS @ Seven Hundred Dollars and No Cents Per Each	700	00	2,100	00
632.044	EA 1	12 INCH INSERTA TEE SANITARY/STORM DRAIN PIPE SECTIONS @ One Thousand Dollars and No Cents Per Each	1,000	00	1,000	00
632.045	EA 2	15 INCH INSERTA TEE SANITARY/STORM DRAIN PIPE SECTIONS @ One Thousand Two Hundred Dollars and No Cents Per Each	1,200	00	2,400	00
632.046	EA 1	18 INCH INSERTA TEE SANITARY/STORM DRAIN PIPE SECTIONS @ One Thousand Four Hundred and No Cents Per Each	1,400	00	1,400	00
633.04*	LF 960	FOUR INCH AND SIX INCH SANITARY/STORM DRAIN HOUSE LATERALS @ Sixty Eight Dollars and No Cents Per Linear Foot	68	00	65,280	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
643.62	EA 2	RECTANGULAR RAPID FLASHING BEACON – NON SRF @ Ten Thousand Dollars and No Cents Per Each	10,000	00	20,000	00
643.621	EA 2	REMOVE AND RESET RECTANGULAR RAPID FLASHING BEACON @ Four Thousand Dollars and No Cents Per Each	4,000	00	8,000	00
643.71	EA 18	SIGNAL MODIFICATIONS FOR PEDESTRIAN CROSSING – NON SRF @ Five Thousand Dollars and No Cents Per Each	5,000	00	90,000	00
645.251	SF 21	ROADSIDE GUIDE SIGNS TYPE I @ Fifty Dollars and No Cents Per Square Foot	50	00	1,050	00
648.561	LF 100	REMOVE EXISTING RAILROAD TRACKS @ Fifty Dollars and No Cents Per Linear Foot	50	00	5,000	00
652.36*	LS 1	MAINTENANCE OF TRAFFIC CONTROL @ Seven Hundred Fifty-one Thousand Dollars and No Cents Per Lump Sum	751,000	00	751,000	00
654.08	EA 80	DENSITY TEST @ One Hundred Dollars and No Cents Per Each	100	00	8,000	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
656.75*	LS 1	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL @ Fifty Thousand Dollars and No Cents Per Lump Sum	50,000	00	50,000	00
679.66	SF 150	RETAINING WALL RECONSTRUCTION @ Fifty Dollars and No Cents Per Square Foot	50	00	7,500	00
703.221	CY 130	UNDERDRAIN TRANSITION COURSE @ Forty Eight Dollars and No Cents Per Cubic Yard	48	00	6,240	00
824.3011	EA 1	HYDRANT ASSEMBLY @ Twelve Thousand Dollars and No Cents Per Each	12,000	00	12,000	00
824.31	EA 1	REMOVE AND SALVAGE HYDRANT @ One Thousand Dollars and No Cents Per Each	1,000	00	1,000	00
824.341	LF 32	6 INCH WATER MAIN OFFSET @ Two Hundred Dollars and No Cents Per Linear Foot	200	00	6,400	00
824.342	LF 22	8 INCH WATER MAIN OFFSET @ Three Hudnred Dollars and No Cents Per Linear Foot	300	00	6,600	00

STATE STREET INFRASTRUCTURE IMPROVEMENTS

CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
824.343	LF 27	20 INCH WATER MAIN OFFSET @ ~~Eight~~ Nine Hundred Dollars and No Cents Per Linear Foot	900.00 ~~80000~~		24,300.00 ~~21,60000~~	
900.01	SF 3400	PERMEABLE PAVEMENT @ Eighteen Dollars and No Cents Per Square Foot	1800		61,20000	
900.02	LS 1	NUTRIENT SEPARATING BAFFLE @ Seventy Five Thousand Dollars and No Cents Per Lump Sum	75,00000		75,00000	
901.01	LS 1	4-INCH INLINE CHECK VALVE @ One Thousand Two Hundred Dollars and No Cents Per Lump Sum	1,20000		1,20000	
901.02	LS 1	10-INCH INLINE CHECK VALVE @ Three Thousand Dollars and No Cents Per Lump Sum	3,00000		3,00000	
901.03	LS 1	84-INCH INLINE CHECK VALVE @ One Hundred Twenty Five Thousand Dollars and No Cents Per Lump Sum	125,00000		125,00000	
902.01	CD 5	DOWN TIME DUE TO ARCHAEOLOGICAL DELAY @ Seven Thousand Five Hundred Dollars and No Cents Per Calendar Day	7,50000		37,50000	

TMF

STATE STREET INFRASTRUCTURE IMPROVEMENTS CONTRACT 1 OF 3 – SRF IMPROVEMENTS BASE BID FORM						
			UNIT PRICE		TOTAL PRICE	
Item No.	Quantity	Item with Unit Bid Price Written in Words	Dollars	Cents	Dollars	Cents
TOTAL AMOUNT OF BID WRITTEN AND IN NUMBERS BASED ON ESTIMATE OF QUANTITIES Six Million - Eight Hundred Forty-Five Thousand Eighty-one Dollars and No Cents ***(Written)***			$ 6,845,081			

Any pay items with quantities marked with an asterisk (*) on the bid sheets are not anticipated at time of bid and therefore are indeterminate. These items are part of the Contract Proposal and will also be used should any extra work be necessary. Actual quantities will be measured in the field or calculated from the contract drawings. The unit bid prices will be used to calculate payment amounts regardless of final quantities.

The undersigned also agrees as follows:

FIRST: To do any extra work, not covered by the above schedule of items, which may be ordered, and to accept as full compensation therefore such prices as may be agreed upon in writing by the Engineer and the Contractor; or in case no agreement is made, to accept as full compensation the amount determined upon a "force account" basis as provided in the State of Maine Department of Transportation Standard Specifications, Revision of November 2014, including all current additions or modifications thereof .

SECOND: To begin work on the date specified in the Engineer's "Notice to Commence Work" and to prosecute said work in such a manner as to complete all underground utility work, sidewalk and curb installation, and paving by **June 30, 2019.** or within the time limits given in the Special Provisions.

THIRD: That this offer is to continue open to acceptance until the formal contract is executed by the successful bidder of this work, and the City may at any time without notice accept this proposal whether any other proposal has previously been accepted or not. Provided, however, that the City will accept, in writing, one of the proposals made, or reject all proposals made, within sixty (60) calendar days after the date of opening of the proposals.

The undersigned as Bidder, declares that the only persons or parties interested in this Proposal are those named herein; that the bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on this contract; and that this Proposal is made without collusion with any other person, firm or corporation.

"The undersigned declares that any person(s) employed by the City of Portland, Maine, who has direct or indirect personal or financial interest in this proposal or in any portion of the profits which may be derived therefrom, has been identified and the interest disclosed by separate attachment. (Please include in your disclosure any interest which you know of. An example of a direct interest would be a City employee who would be paid to perform services under this proposal. An example of an indirect interest would be a City employee who is related to any officers, employees, principal or shareholders of your firm or you.) If in doubt as to status or interest, please disclose to the extent known."

Respectfully submitted this 18th day of May, 2017

Acknowledgement of Receipt of Addenda:

Addendum No.	Addendum Date
1	May 9, 2017
2	May 15, 2017

IF AN INDIVIDUAL, SIGN HERE

Signature of Bidder_____

Address_____

_____

Phone # _____

Email Address_____

Social Security Number_____

(Signatures for a Firm, Partnership or Corporation on next page.)

IF A FIRM OR PARTNERSHIP, SIGN HERE

Signature of Bidder_____

Name of Firm or Partnership_____

Business Address_____

Telephone Number_____ Fax Number_____

Email Address_____SS No. or Tax I.D. Number_____

Names and Addresses of Members of Firm or Partnership:

_____

_____

_____

IF A CORPORATION, SIGN HERE

Name of Bidder Sargent Corporation

Authorized Signature_____ Vice President-Operations
(Name) Timothy M. Folster (Title)

Business Address 378 Bennoch Road, PO Box 435, Stillwater, Maine04489

Telephone Number 207-827-4435 Fax Number 207-827-3148

Email Addresstfolster@sargent-corp.com SS No. or Tax I.D. Number 01-0470209

Incorporated under the Laws of the State of Maine

Names and Addresses of Officers of the Corporation:

President Herbert R. Sargent - Hampden, Maine

Secretary Brent K. Hartley - Hermon, Maine

Treasurer Brent K. Hartley - Hermon, Maine ss

Before me, personally appeared Timothy M. Folster and acknowledged that the signature to the preceding bid is his/her signature in his/her official capacity.

Date: May 18, 2017

Notary Public - Signature and Seal

KIM A. RYAN
Notary Public * State of Maine
My Commission Expires
November 15, 2021

Bid #7417

ALL CORPORATIONS MUST SIGN THIS FORM
AND SUBMIT WITH THE BID PROPOSAL

(Insert copy of that part of the records of the corporation wherein authority is given to the officer of that corporation to sign this bid on behalf of the corporation.)

See attached Certificate of Corporate Vote

(date)

The above is a true copy of the records of the Sargent

Corporation, which records are in my legal custody.

Brent K. Hartley Officer having custody of the records

Maine, Penobscot County ss

Before me appeared, Brent K. Hartley, Secretary

of the Sargent Corporation, and made

oath that the above statement is true.

Notary Public - Signature and Seal

KIM A. RYAN
Notary Public * State of Maine
My Commission Expires
November 15, 2021

SARGENT
CORPORATION
Excellence for Generations

SARGENT CORPORATION
Certificate of Corporate Vote

I, Brent K. Hartley, of Hermon, Penobscot County, Maine, certify as follows:

1. That I am the duly elected and qualified secretary of SARGENT CORPORATION, a Maine corporation with a principal place of business at Stillwater, Penobscot County, Maine;

2. That by unanimous action of the Board of Directors of SARGENT CORPORATION (the "Corporation"), dated March 10, 2016, the following resolutions were adopted:

RESOLVED: That, as of March 10, 2016, any one of the officers of the Corporation named below, acting singly, be and hereby is authorized to execute and deliver, on behalf of the Corporation, any and all quotes, bids, and contracts arising in the business operations of the Corporation.

President	Herbert R. Sargent
Vice President-Finance, CFO	Brent K. Hartley
Vice President-Operations	Timothy M. Folster
Treasurer	Brent K. Hartley
Secretary	Brent K. Hartley
Assistant Secretary	Carey L. Sheehan

3. That the foregoing resolutions are in full force and effect.

Dated: March 10, 2016

Brent K. Hartley, Secretary

Main Office
378 Bennoch Road
P.O. Box 435
Stillwater, Maine 04489
Phone: 207/827-4435
Fax: 207/827-6150

Bangor Regional Office
489 Odlin Road
Suite 101
Bangor, Maine 04401
Phone: 207/990-1735
Fax: 207/990-2432

Mid-Atlantic Regional Office
11139 Air Park Road
Suite 1
Ashland, VA 23005
Phone: 804/368-7118
Fax: 804/368-7387

Sargent Corporation is an Equal Opportunity, Affirmative Action Employer
Women and Minorities are encouraged to apply

Bid #7417

NOTICE

(This Must Be Filled Out)

The full names and residences of all persons interested in this bid as principals are as follows: (In case of Corporation, include and identify President, Treasurer, Manager)

Herbert R. Sargent, President - Hampden, Maine

Timothy M. Folster, Vice President-Operations - Old Town, Maine

Brent K. Hartley, Vice President-Finance/CFO, Secretary & Treasurer

Bid #7417

ALL CONTRACTORS SHALL FILL IN THE FOLLOWING INFORMATION BEFORE SUBMITTING BID

	Name and Address of Materials Supplier	Materials to be Supplied
1	UPONOR - CANADA	WEHOLITE PIPE & FITTINGS
2	EJ PRESCOTT - GARDINER, ME	OTHER PIPE
3	HD SUPPLY -	OTHER PIPE
4		
5		
6		
7		

	Name and Address of Contractor	Service or Trades to be Supplied	Anticipated $ Amount
1	GRANITE STATE CURB SETTERS	CURB	95,000 -
2			
3			
4			
5			
6			

This is a Sample Contract or Agreement ONLY; the final terms and conditions in the actual Agreement will be determined by the City's Corporation Counsel Office, and may contain additional provisions.

SAMPLE AGREEMENT

SARGENT CORPORATION

Excellence for Generations.

APPLICATION AND CERTIFICATION FOR PAYMENT

TO: Attn: Justin Pellerin
City of Portland Public Works Department
55 Portland Street
Portland, ME 04101-2921

FROM: Attn: Ian McCarthy
SARGENT CORPORATION
378 BENNOCH ROAD
STILLWATER, MAINE 04489

PROJECT: State Street Infrastructure Improvements

6

PROJECT # 37702
REQUEST # 6
P.O. # 044108

PERIOD FROM: December 1 2017
PERIOD TO: December 30 2017

SUBMIT DATE: January 17, 2018

CONTRACT DATE: July 6, 2017

Distribution
[ ] Justin Pellerin
[ ] Sean Milligan
[ ] Kevin Burns
[ ] Bryan Peet

CONTRACTOR'S APPLICATION FOR PAYMENT

CHANGE ORDER SUMMARY		
Change Orders approved in previous months by Owner TOTAL	ADDITIONS	DEDUCTIONS
Approved this Month		
Number		
Amendment 1 - Ocean Ave Landfill	$ 180,081.50	
Amendment 2 - Traffic Signal Modifications	$ 557,080.00	
Amendment 3 - Twin 60" ADS Sanitie Pipe	$ 278,430.98	
Amendment 4 - SRF Test Pits	$ 34,000.00	
Amendment 5 - Landfill Gas	$ 68,888.70	
TOTALS	$1,118,481.18	$0.00
NET CHANGE BY CHANGE ORDERS	$1,118,481.18	

CONTRACT STATUS

1 ORIGINAL CONTRACT SUM		$6,845,081.00
2 Net change by Change Orders		$1,118,481.18
3 CONTRACT SUM TO DATE (Line 1+2)		$7,963,562.18
4 TOTAL COMPLETED AND STORED		$6,224,704.84
A. TOTAL COMPLETED TO DATE		$6,224,704.84
B. TOTAL STORED TO DATE		$0.00
5 RETAINAGE: 5.0%		
A. RETAINAGE ON WORK COMPLETED	$311,235.24	
B. RETAINAGE ON STORED MATERIALS	$0.00	
TOTAL RETAINAGE (Line 5A + 5B)		$311,235.24
6 TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5 total)		$5,913,469.60
7 LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)		$4,918,324.57
8 CURRENT PAYMENT DUE		**$995,145.03**
9 BALANCE TO FINISH, PLUS RETAINAGE (Line 3 less Line 6)		$2,050,092.58

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief, the work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Sargent Corporation Approved By: Ian McCarthy _____ Date: 1/17/18

OWNER: City of Portland Approved By: _____ Date: _____

OWNER NAME: Attn: Justin Pellerin
PROJECT NAME **State Street Infrastructure Improvements**

PERIOD FROM: December 1 2017
PERIOD TO: December 30 2017

SARGENT CORPORATION
Excellence for Generations.

REQUISITION NUMBER **6**

Print Date: 1/17/2018

ITEM NO.	DESCRIPTION	SCHEDULED QTY	UN	UNIT PRICE	SCHEDULED VALUE	QTY COMPLETED PREV.REQS 5	DOLLAR VALUE PREV.REQS 5	QTY COMPL. THIS REQ	COMPLETED WORK THIS REQ	STORED MATERIAL THIS REQ	TOTAL QTY COMPL. TO DATE	TOTAL DOLLAR VALUE COMPL TO DATE	TOTAL % COMPL	DOLLAR VALUE OF RETAINAGE	DOLLAR VALUE REMAINING TO COMPLETE
201.110*	CLEARING	750	SY	$4.00	$3,000.00	277.00	$1,108.00	0	$0.00		277.00	$1,108.00	36.93%	$55.40	$1,892.00
201.230*	REMOVE SINGLE TREE	13	EA	$600.00	$7,800.00	6.00	$3,600.00	1	$600.00		7.00	$4,200.00	53.85%	$210.00	$3,600.00
201.231	REMOVE SINGLE TREE NON SRF	1	EA	$600.00	$600.00	1.00	$600.00	0	$0.00		1.00	$600.00	100.00%	$30.00	$0.00
202.15	REMOVE MANHOLE OR CATCH BASIN	5	EA	$500.00	$2,500.00	4.00	$2,000.00	0	$0.00		4.00	$2,000.00	80.00%	$100.00	$500.00
202.16	REMOVE EXISTING PIPE	146	LF	$20.00	$2,920.00	19.00	$380.00	0	$0.00		19.00	$380.00	13.01%	$19.00	$2,540.00
202.2	REMOVE BITUMINOUS CONCRETE PAVEMENT	8,340	SY	$2.00	$16,680.00	5,624.00	$11,248.00	2596	$5,192.00		8,220.00	$16,440.00	98.56%	$822.00	$240.00
202.211	REMOVE BITUMINOUS CONCRETE PAVEMENT - NON S	3,400	SY	$2.00	$6,800.00	3,843.00	$7,686.00	0	$0.00		3,843.00	$7,686.00	113.03%	$384.30	-$886.00
202.202	MILL EXISTING SURFACE PAVEMENT	3,600	SY	$5.00	$18,000.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$18,000.00
202.41	REMOVE GRANITE/CONCRETE BLOCKS - NON SRF	1	LS	$7,500.00	$7,500.00	0.00	$0.00	1	$7,500.00		1.00	$7,500.00	100.00%	$375.00	$0.00
203.20*	COMMON EXCAVATION	2,200	CY	$18.00	$39,600.00	212.10	$3,817.80	151	$2,718.00		363.10	$6,535.80	16.50%	$326.79	$33,064.20
203.21*	COMMON EXCAVATION NON SRF	7,500	CY	$18.00	$135,000.00	3,786.82	$68,162.76	773	$13,914.00		4,559.82	$82,076.76	60.80%	$4,103.84	$52,923.24
203.25*	GRANULAR BORROW	6,470	CY	$24.00	$155,280.00	1,445.00	$34,680.00	0	$0.00		1,445.00	$34,680.00	22.33%	$1,734.00	$120,600.00
203.28*	TEST PIT EXCAVATION	84	VF	$80.00	$6,720.00	63.50	$5,080.00	0	$0.00		63.50	$5,080.00	75.60%	$254.00	$1,640.00
203.31*	CRUSHED STONE (OVERDEPTH) 703.31 TYPE A	1,480	CY	$36.00	$53,280.00	1,380.67	$49,704.12	0	$0.00		1,380.67	$49,704.12	93.29%	$2,485.21	$3,575.88
203.35	CRUSHED STONE	170	CY	$36.00	$6,120.00	170.00	$6,120.00	0	$0.00		170.00	$6,120.00	100.00%	$306.00	$0.00
203.381	FILTER SAND	190	CY	$32.00	$6,080.00	190.00	$6,080.00	0	$0.00		190.00	$6,080.00	100.00%	$304.00	$0.00
206.061*	EARTH EXCAVATION, BELOW GRADE (OVERDEPTH)	1,480	CY	$18.00	$26,640.00	1,380.67	$24,852.06	0	$0.00		1,380.67	$24,852.06	93.29%	$1,242.60	$1,787.94
206.07*	STRUCTURAL ROCK EXCAVATION	1,480	CY	$1.00	$1,480.00	271.00	$271.00	79.4	$79.40		350.40	$350.40	23.68%	$17.52	$1,129.60
304.09	AGGREGATE BASE COURSE TYPE B	1,350	CY	$30.00	$40,500.00	484.07	$14,522.10	392.67	$11,780.10		876.74	$26,302.20	64.94%	$1,315.11	$14,197.80
304.091	AGGREGATE BASE COURSE - TYPE B - NON SRF	490	CY	$30.00	$14,700.00	392.80	$11,784.00	87.3	$2,619.00		480.10	[illegible]	[illegible]	[illegible].15	$297.00
304.1	AGGREGATE SUBBASE COURSE - TYPE D	2,580	CY	$26.00	$67,080.00	1,760.32	$45,768.32	350	$9,100.00		2,110.32	[illegible]	[illegible]	[illegible].42	$12,211.68
304.101	AGGREGATE SUBBASE COURSE - TYPE D - NON SRF	6,270	CY	$26.00	$163,020.00	3,019.49	$78,506.74	773	$20,098.00		3,792.49	[illegible]	[illegible]	[illegible].24	$64,415.26
403.207	HOT MIX ASPHALT 19.0MM NOMINAL - MACHINE	1,370	T	$100.00	$137,000.00	554.56	$55,456.00	763	$76,300.00		1,317.56	[illegible]	[illegible]	[illegible].80	$5,244.00
403.2071	HOT MIX ASPHALT 19.0MM NOMINAL - NON SRF	730	T	$100.00	$73,000.00	582.42	$58,242.00	0	$0.00		582.42	[illegible]	[illegible]	[illegible].10	$14,758.00
403.2075	HOT MIX ASPHALT 19.0 MM NOMINAL - HAND	110	SY	$40.00	$4,400.00	0.00	$0.00	270.91	$10,836.40		270.91	[illegible]	[illegible]	[illegible].82	-$6,436.40
403.208	HOT MIX ASPHALT 12.5 MM NOMINAL - MACHINE	1,100	T	$100.00	$110,000.00	8.14	$814.00	0	$0.00		8.14	[illegible]	[illegible]	[illegible].70	$109,186.00
403.2081	HOT MIX ASPHALT 12.5 MM NOMINAL - NON SRF	380	T	$100.00	$38,000.00	0.00	$0.00	0	$0.00		0.00	[illegible]	[illegible]	[illegible].00	$38,000.00
403.2085	HOT MIX ASPHALT 12.5 MM NOMINAL - HAND	55	SY	$40.00	$2,200.00	0.00	$0.00	0	$0.00		0.00	[illegible]	[illegible]	[illegible].00	$2,200.00
403.209	HOT MIX ASPHALT 9.5 MM NOMINAL - HAND	68	SY	$40.00	$2,720.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$2,720.00
403.2101	HOT MIX ASPHALT 9.5 MM NOMINAL - NON SRF	97	T	$125.00	$12,125.00	0.00	$0.00	35	$4,375.00		35.00	$4,375.00	36.08%	$218.75	$7,750.00
403.213	HOT MIX ASPHALT 12.5 MM NOMINAL (BASE)	30	T	$125.00	$3,750.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$3,750.00
411.131	STONE DUST PATH	140	SY	$10.00	$1,400.00	108.33	$1,083.30	0	$0.00		108.33	$1,083.30	77.38%	$54.17	$316.70
502.65	FLOWABLE FILL 100 PSI	620	CY	$125.00	$77,500.00	347.00	$43,375.00	25	$3,125.00		372.00	$46,500.00	60.00%	$2,325.00	$31,000.00
603.1331	12" HDPE SANITARY SEWER (STATE ST MAIN)	344	LF	$88.00	$30,272.00	294.00	$25,872.00	0	$0.00		294.00	$25,872.00	85.47%	$1,293.60	$4,400.00
603.1351	18" HDPE SANITARY SEWER (STATE ST MAIN)	490	LF	$116.00	$56,840.00	496.10	$57,547.60	0	$0.00		496.10	$57,547.60	101.24%	$2,877.38	-$707.60
603.136	24" HDPE SANITARY SEWER (STATE ST MAIN)	11	LF	$172.00	$1,892.00	11.00	$1,892.00	0	$0.00		11.00	$1,892.00	100.00%	$94.60	$0.00
603.138	36" HDPE SANITARY SEWER (STATE ST MAIN)	81	LF	$188.00	$15,228.00	74.50	$14,006.00	0	$0.00		74.50	$14,006.00	91.98%	$700.30	$1,222.00
603.14	48" HDPE SANITARY SEWER (STATE ST MAIN)	805	LF	$300.00	$241,500.00	827.20	$248,160.00	0	$0.00		827.20	$248,160.00	102.76%	$12,408.00	-$6,660.00
603.153	10" STORM DRAIN PIPE (LATERALS)	523	LF	$70.00	$36,610.00	789.00	$55,293.00	57.5	$4,025.00		847.40	$59,318.00	162.03%	$2,965.90	-$22,708.00
603.1531	10" STORM DRAIN PIPE (POND OUTLET)	40	LF	$120.00	$4,800.00	40.00	$4,800.00	0	$0.00		40.00	$4,800.00	100.00%	$240.00	$0.00
603.159	12" STORM DRAIN PIPE (LATERALS)	406	LF	$76.00	$30,856.00	361.70	$27,489.20	61	$4,636.00		422.70	$32,125.20	104.11%	$1,606.26	-$1,269.20
603.179	18" STORM DRAIN PIPE (LATERALS)	135	LF	$98.00	$13,230.00	26.50	$2,597.00	0	$0.00		26.50	$2,597.00	19.63%	$129.85	$10,633.00
603.1791	18" HDPE STORM DRAIN (STATE ST MAIN)	526	LF	$106.00	$55,756.00	481.90	$51,081.40	0	$0.00		481.90	$51,081.40	91.62%	$2,554.07	$4,674.60
603.199	24" STORM DRAIN PIPE (LATERALS)	587	LF	$110.00	$64,570.00	529.54	$58,249.40	0	$0.00		529.54	$58,249.40	90.21%	$2,912.47	$6,320.60
603.1991	24" HDPE STORM DRAIN (STATE ST MAIN)	59	LF	$164.00	$9,676.00	61.50	$10,086.00	0	$0.00		61.50	$10,086.00	104.24%	$504.30	-$410.00
603.2091	30" HDPE STORM DRAIN (STATE ST MAIN)	260	LF	$184.00	$47,840.00	263.60	$48,502.40	0	$0.00		263.60	$48,502.40	101.38%	$2,425.12	-$662.40

TOTAL SEWER MAIN REPLACEMNET: 1,702.80 LF
TOTAL COST: $347477.60

OWNER NAME: Attn: Justin Pellerin
PROJECT NAME: **State Street Infrastructure Improvements**

PERIOD FROM: December 1 2017
PERIOD TO: December 30 2017

SARGENT CORPORATION
Excellence for Generations.

REQUISITION NUMBER **6**

Print Date: 1/17/2018

ITEM NO.	DESCRIPTION	SCHEDULED QTY	UN	UNIT PRICE	SCHEDULED VALUE	QTY COMPLETED PREV.REQS 5	DOLLAR VALUE PREV.REQS 5	QTY COMPL. THIS REQ	COMPLETED WORK THIS REQ	STORED MATERIAL THIS REQ	TOTAL QTY COMPL. TO DATE	TOTAL DOLLAR VALUE COMPL TO DATE	TOTAL % COMPL	DOLLAR VALUE OF RETAINAGE	DOLLAR VALUE REMAINING TO COMPLETE
603.219	36" HDPE STORM DRAIN (STATE ST MAIN)	328	LF	$180.00	$59,040.00	324.50	$58,410.00	0	$0.00		324.50	$58,410.00	98.93%	$2,920.50	$630.00
603.21	42" WEHOLITE STORM DRAIN (TIE-INS)	35	LF	$300.00	$10,500.00	64.90	$19,470.00	0	$0.00		64.90	$19,470.00	185.43%	$973.50	-$8,970.00
603.22	42" HDPE STORM DRAIN (STATE ST MAIN)	660	LF	$200.00	$132,000.00	520.40	$104,080.00	105	$21,000.00		625.40	$125,080.00	94.76%	$6,254.00	$6,920.00
603.227	84" WEHOLITE STORM DRAIN (OUTFALL MAIN)	1,855	LF	$1,150.00	$2,133,250.00	1,855.04	$2,133,296.00	0	$0.00		1,855.04	$2,133,296.00	100.00%	$106,664.80	-$46.00
603.228	84" OVALIZED WEHOLITE STORM DRAIN MAIN	160	LF	$1,200.00	$192,000.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$192,000.00
603.2281	84" OVALIZED WEHOLITE SANITARY SEWER MAIN	25	LF	$5,200.00	$130,000.00	32.50	$169,000.00	0	$0.00		32.50	$169,000.00	130.00%	$8,450.00	-$39,000.00
603.99	TRENCH DAM AND UNDERDRAIN	11	EA	$2,000.00	$22,000.00	11.00	$22,000.00	0	$0.00		11.00	$22,000.00	100.00%	$1,100.00	$0.00
604.13	4' DIAMETER CATCH BASIN	32	EA	$4,000.00	$128,000.00	31.00	$124,000.00	4	$16,000.00		35.00	$140,000.00	109.38%	$7,000.00	-$12,000.00
604.15	4' DIAMETER MANHOLE	16	EA	$4,500.00	$72,000.00	16.00	$72,000.00	0	$0.00		16.00	$72,000.00	100.00%	$3,600.00	$0.00
604.1501	4' DIAMETER LOCKING MANHOLE	3	EA	$4,700.00	$14,100.00	3.00	$14,100.00	0	$0.00		3.00	$14,100.00	100.00%	$705.00	$0.00
604.154	6' DIAMETER MANHOLE	15	EA	$7,200.00	$108,000.00	15.00	$108,000.00	0	$0.00		15.00	$108,000.00	100.00%	$5,400.00	$0.00
604.1541	6' DIAMETER LOCKING MANHOLE	2	EA	$7,400.00	$14,800.00	2.00	$14,800.00	1	$7,400.00		3.00	$22,200.00	150.00%	$1,110.00	-$7,400.00
604.156	8' DIAMETER MANHOLE	2	EA	$15,000.00	$30,000.00	2.00	$30,000.00	0	$0.00		2.00	$30,000.00	100.00%	$1,500.00	$0.00
604.159	6' DIAMETER DOGHOUSE MANHOLE	2	EA	$10,000.00	$20,000.00	1.00	$10,000.00	0	$0.00		1.00	$10,000.00	50.00%	$500.00	$10,000.00
604.163	ABANDON MANHOLE	5	EA	$500.00	$2,500.00	3.00	$1,500.00	2	$1,000.00		5.00	$2,500.00	100.00%	$125.00	$0.00
604.18	ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	1	EA	$500.00	$500.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$500.00
604.19	CORE INLET/OUTLET PIPE HOLE IN CB OR MH	2	EA	$1,000.00	$2,000.00	6.00	$6,000.00	0	$0.00		6.00	$6,000.00	300.00%	$300.00	-$4,000.00
604.3	MANHOLE RISER	3	EA	$18,000.00	$54,000.00	3.00	$54,000.00	0	$0.00		3.00	$54,000.00	100.00%	$2,700.00	$0.00
604.31	CATCH BASIN RISER	6	EA	$18,000.00	$108,000.00	5.00	$90,000.00	0	$0.00		5.00	$90,000.00	83.33%	$4,500.00	$18,000.00
604.311	CATCH BASIN OFFSET RISER	1	EA	$20,000.00	$20,000.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$20,000.00
604.32	LOCKING MANHOLE RISER	3	EA	$18,000.00	$54,000.00	3.00	$54,000.00	0	$0.00		3.00	$54,000.00	100.00%	$2,700.00	$0.00
605.07	4" UNDERDRAIN - TYPE B	305	LF	$32.00	$9,760.00	585.00	$18,720.00	0	$0.00		585.00	$18,720.00	191.80%	$936.00	-$8,960.00
607.176	INSTALL TEMPORARY CHAIN LINK SAFETY FENCE	1	LS	$25,000.00	$25,000.00	1.00	$25,000.00	0	$0.00		1.00	$25,000.00	100.00%	$1,250.00	$0.00
607.25	REMOVE AND RESET CHAIN LINK FENCE	275	LF	$25.00	$6,875.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$6,875.00
608.08	REINFORCED CONCRETE SIDEWALK	96	SY	$100.00	$9,600.00	0.00	$0.00	226.44	$22,644.00		226.44	$22,644.00	235.88%	$1,132.20	-$13,044.00
608.15	BRICK SIDEWALK W/ BITUMINOUS BASE	79	SY	$125.00	$9,875.00	45.00	$5,625.00	101.7	$12,712.50		146.70	$18,337.50	185.70%	$916.88	-$8,462.50
608.16	BRICK DRIVEWAY W/ BITUMINOUS BASE	28	SY	$125.00	$3,500.00	0.00	$0.00	25	$3,125.00		25.00	$3,125.00	89.29%	$156.25	$375.00
608.27	CURB RAMP DETECTABLE WARNING FIELD	38	SF	$30.00	$1,140.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$1,140.00
609.11	TYPE 1 VERTICAL CURB	170	LF	$48.00	$8,160.00	88.00	$4,224.00	26	$1,248.00		114.00	$5,472.00	67.06%	$273.60	$2,688.00
609.111	TYPE 1 VERTICAL CURB - NON SRF	315	LF	$48.00	$15,120.00	272.00	$13,056.00	99	$4,752.00		371.00	$17,808.00	117.78%	$890.40	-$2,688.00
609.121	TYPE 1 VERTICAL CURB (CIRCULAR) - NON SRF	84	LF	$58.00	$4,872.00	55.50	$3,219.00	9	$522.00		64.50	$3,741.00	76.79%	$187.05	$1,131.00
609.234	TERMINAL CURB TYPE 1, 4' LENGTH	2	EA	$225.00	$450.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$450.00
609.2341	TERMINAL CURB TYPE 1, 4' LENGTH, CIRCULAR - NON	1	EA	$250.00	$250.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$250.00
609.2342	TERMINAL CURB TYPE 1, 4' LENGTH - NON SRF	1	EA	$225.00	$225.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$225.00
609.237	TERMINAL CURB TYPE 1, 7' LENGTH	2	EA	$350.00	$700.00	2.00	$700.00	0	$0.00		2.00	$700.00	100.00%	$35.00	$0.00
609.34	TYPE 5 VERTICAL CURB	210	LF	$32.00	$6,720.00	50.00	$1,600.00	123	$3,936.00		173.00	$5,536.00	82.38%	$276.80	$1,184.00
609.341	TYPE 5 VERTICAL CURB - NON SRF	96	LF	$32.00	$3,072.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$3,072.00
609.35	TYPE 5 VERTICAL CURB CIRCULAR - NON SRF	64	LF	$42.00	$2,688.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$2,688.00
609.38	REMOVE AND RESET CURB TYPE 1	510	LF	$22.00	$11,220.00	0.00	$0.00	1362	$29,964.00		1,362.00	$29,964.00	267.06%	$1,498.20	-$18,744.00
609.441	CURBING REMOVED AND STACKED - NON SRF	50	LF	$10.00	$500.00	0.00	$0.00	50	$500.00		50.00	$500.00	100.00%	$25.00	$0.00
610.16	HEAVY RIPRAP	67	CY	$82.00	$5,494.00	164.33	$13,475.06	0	$0.00		164.33	$13,475.06	245.27%	$673.75	-$7,981.06
614.141	MASONRY PLUG 8" TO 18"	14	EA	$350.00	$4,900.00	16.00	$5,600.00	0	$0.00		16.00	$5,600.00	114.29%	$280.00	-$700.00
614.142	MASONRY PLUG 24" TO 36"	1	EA	$450.00	$450.00	3.00	$1,350.00	0	$0.00		3.00	$1,350.00	300.00%	$67.50	-$900.00
614.143	MASONRY PLUG 42" TO 48"	20	EA	$950.00	$19,000.00	5.00	$4,750.00	0	$0.00		5.00	$4,750.00	25.00%	$237.50	$14,250.00
615.071	LOAM, SEED, AND MULCH	7,380	SY	$7.00	$51,660.00	2,520.00	$17,640.00	0	$0.00		2,520.00	$17,640.00	34.15%	$882.00	$34,020.00
615.072	LOAM, SEED, AND MULCH - NON SRF	1,300	SY	$7.00	$9,100.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$9,100.00

OWNER NAME: Attn: Justin Pellerin
PROJECT NAME **State Street Infrastructure Improvements**

PERIOD FROM: December 1 2017
PERIOD TO: December 30 2017

SARGENT
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REQUISITION NUMBER **6**

Print Date: 1/17/2018

ITEM NO.	DESCRIPTION	SCHEDULED QTY	UN	UNIT PRICE	SCHEDULED VALUE	QTY COMPLETED PREV.REQS 5	DOLLAR VALUE PREV.REQS 5	QTY COMPL. THIS REQ	COMPLETED WORK THIS REQ	STORED MATERIAL THIS REQ	TOTAL QTY COMPL. TO DATE	TOTAL DOLLAR VALUE COMPL TO DATE	TOTAL % COMPL	DOLLAR VALUE OF RETAINAGE	DOLLAR VALUE REMAINING TO COMPLETE
626.221	UNDERGROUND CONDUIT RELOCATION - NON SRF	175	LF	$50.00	$8,750.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$8,750.00
627.181	12" WHITE OR YELLOW PAINTED MARKING LINE - NON	280	LF	$2.50	$700.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$700.00
627.3	GROOVING FOR PAVEMENT MARKING	3,300	SF	$3.50	$11,550.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$11,550.00
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING	1,680	LF	$0.75	$1,260.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$1,260.00
627.734	4" WHITE OR YELLOW PREFORMED (RECESSED)	1,550	LF	$1.25	$1,937.50	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$1,937.50
627.744	6" WHITE OR YELLOW PAINTED MARKING LINE	700	LF	$1.00	$700.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$700.00
627.7441	6" WHITE OR YELLOW PAINTED MARKING LINE - NON	680	LF	$1.00	$680.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$680.00
627.745	6" WHITE OR YELLOW PREFORMED (RECESSED)	540	LF	$1.50	$810.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$810.00
627.75	WHITE OR YELLOW PAVEMENT & CURB MARKINGS	1,060	SF	$3.50	$3,710.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$3,710.00
627.7501	WHITE OR YELLOW & CURB MARKINGS - NON SRF	310	SF	$3.50	$1,085.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$1,085.00
627.751	WHITE OR YELLOW PREFORMED (RECESSED)	700	SF	$4.50	$3,150.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$3,150.00
627.755	8" WHITE OR YELLOW PAINTED MARKING LINE	1,210	LF	$1.25	$1,512.50	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$1,512.50
627.7551	8" WHITE OR YELLOW PAINTED MARKING LINE - NON	2,320	LF	$1.25	$2,900.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$2,900.00
627.76	TEMPORARY OR MARKING LINE, WHITE OR YELLOW	1	LS	$10,000.00	$10,000.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$10,000.00
627.943	PREFORMED THERMO COLORED BIKE LANE (RECESS	1,850	SF	$6.00	$11,100.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$11,100.00
629.05*	HAND LABOR, STRAIGHT TIME	40	HR	$42.00	$1,680.00	0.00	$0.00	12	$504.00		12.00	$504.00	30.00%	$25.20	$1,176.00
629.06*	MASON, STRAIGHT TIME	40	HR	$64.00	$2,560.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$2,560.00
631.12*	ALL PURPOSE EXCAVATOR (INCLUDING OP)	40	HR	$158.00	$6,320.00	0.00	$0.00	6	$948.00		6.00	$948.00	15.00%	$47.40	$5,372.00
631.13*	BULLDOZER (INCLUDING OP)	40	HR	$158.00	$6,320.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$6,320.00
631.15*	ROLLER EARTH BASE CRS (INC OP)	40	HR	$84.00	$3,360.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$3,360.00
631.172*	TRUCK-LARGE (INCLUDING OP)	40	HR	$94.00	$3,760.00	0.00	$0.00	2	$188.00		2.00	$188.00	5.00%	$9.40	$3,572.00
631.22*	FRONT END LOADER (INCLUDING OP)	40	HR	$134.00	$5,360.00	0.00	$0.00	2	$268.00		2.00	$268.00	5.00%	$13.40	$5,092.00
631.36*	FOREMAN, STRAIGHT TIME	40	HR	$68.00	$2,720.00	0.00	$0.00	6	$408.00		6.00	$408.00	15.00%	$20.40	$2,312.00
632.041*	4" & 6" INSERTA TEE PIPE SECTIONS	23	EA	$500.00	$11,500.00	16.00	$8,000.00	0	$0.00		16.00	$8,000.00	69.57%	$400.00	$3,500.00
632.043	10" INSERTA TEE PIPE SECTIONS	3	EA	$700.00	$2,100.00	8.00	$5,600.00	0	$0.00		8.00	$5,600.00	266.67%	$280.00	-$3,500.00
632.044	12" INSERTA TEE PIPE SECTIONS	1	EA	$1,000.00	$1,000.00	1.00	$1,000.00	0	$0.00		1.00	$1,000.00	100.00%	$50.00	$0.00
632.045	15" INSERTA TEE PIPE SECTIONS	2	EA	$1,200.00	$2,400.00	1.00	$1,200.00	0	$0.00		1.00	$1,200.00	50.00%	$60.00	$1,200.00
632.046	18" INSERTA TEE PIPE SECTIONS	1	EA	$1,400.00	$1,400.00	2.00	$2,800.00	0	$0.00		2.00	$2,800.00	200.00%	$140.00	-$1,400.00
633.04*	4" & 6" SANITARY/STORM DRAIN HOUSE LATERALS	960	LF	$68.00	$65,280.00	560.85	$38,137.80	87.65	$5,960.20		648.50	$44,098.00	67.55%	$2,204.90	$21,182.00
643.62	RECTANGULAR RAPID FLASHING BEACON - NON SRF	2	EA	$10,000.00	$20,000.00	2.00	$20,000.00	0	$0.00		2.00	$20,000.00	100.00%	$1,000.00	$0.00
643.621	REMOVE & RESET RECTANGULAR RAPID FLASHING B	2	EA	$4,000.00	$8,000.00	2.00	$8,000.00	0	$0.00		2.00	$8,000.00	100.00%	$400.00	$0.00
643.71	SIGNAL MODS FOR PEDESTRIAN CROSSING - NON SRI	18	EA	$5,000.00	$90,000.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$90,000.00
645.251	ROADSIDE GUIDE SIGNS TYPE I	21	SF	$50.00	$1,050.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$1,050.00
648.561	REMOVE EXISTING RAILROAD TRACKS	100	LF	$50.00	$5,000.00	234.00	$11,700.00	108	$5,400.00		342.00	$17,100.00	342.00%	$855.00	-$12,100.00
652.36*	MAINTENANCE OF TRAFFIC CONTROL	1	LS	$751,000.00	$751,000.00	0.60	$450,600.00	0.2	$150,200.00		0.80	$600,800.00	80.00%	$30,040.00	$150,200.00
654.08	DENSITY TEST	80	EA	$100.00	$8,000.00	8.00	$800.00	11	$1,100.00		19.00	$1,900.00	23.75%	$95.00	$6,100.00
656.75*	TEMPORARY SOIL EROSION AND WATER POLLUTION	1	LS	$50,000.00	$50,000.00	0.53	$26,500.00	0.22	$11,000.00		0.75	$37,500.00	75.00%	$1,875.00	$12,500.00
679.66	RETAINING WALL RECONSTRUCTION	150	SF	$50.00	$7,500.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$7,500.00
703.221	UNDERDRAIN TRANSITION COURSE	130	CY	$48.00	$6,240.00	130.00	$6,240.00	0	$0.00		130.00	$6,240.00	100.00%	$312.00	$0.00
824.3011	HYDRANT ASSEMBLY	1	EA	$12,000.00	$12,000.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$12,000.00
824.31	REMOVE AND SALVAGE HYDRANT	1	EA	$1,000.00	$1,000.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$1,000.00
824.341	6" WATER MAIN OFFSET	32	LF	$200.00	$6,400.00	37.50	$7,500.00	0	$0.00		37.50	$7,500.00	117.19%	$375.00	-$1,100.00
824.342	8" WATER MAIN OFFSET	22	LF	$300.00	$6,600.00	41.50	$12,450.00	0	$0.00		41.50	$12,450.00	188.64%	$622.50	-$5,850.00
824.343	20" WATER MAIN OFFSET	27	LF	$900.00	$24,300.00	32.00	$28,800.00	0	$0.00		32.00	$28,800.00	118.52%	$1,440.00	-$4,500.00
900.01	PERMEABLE PAVEMENT	3,400	SF	$18.00	$61,200.00	0.00	$0.00	3402	$61,236.00		3,402.00	$61,236.00	100.06%	$3,061.80	-$36.00
900.02	NUTRIENT SEPARATING BAFFLE	1	LS	$75,000.00	$75,000.00	1.00	$75,000.00	0	$0.00		1.00	$75,000.00	100.00%	$3,750.00	$0.00

OWNER NAME: Attn: Justin Pellerin
PROJECT NAME **State Street Infrastructure Improvements**

PERIOD FROM: December 1 2017
PERIOD TO: December 30 2017

SARGENT CORPORATION
Excellence for Generations.
REQUISITION NUMBER **6**

Print Date: 1/17/2018

ITEM NO.	DESCRIPTION	SCHEDULED QTY	UN	UNIT PRICE	SCHEDULED VALUE	QTY COMPLETED PREV.REQS 5	DOLLAR VALUE PREV.REQS 5	QTY COMPL. THIS REQ	COMPLETED WORK THIS REQ	STORED MATERIAL THIS REQ	TOTAL QTY COMPL. TO DATE	TOTAL DOLLAR VALUE COMPL TO DATE	TOTAL % COMPL	DOLLAR VALUE OF RETAINAGE	DOLLAR VALUE REMAINING TO COMPLETE
901.01	**4" INLINE CHECK VALVE**	1	LS	$1,200.00	$1,200.00	1.00	$1,200.00	0	$0.00		1.00	$1,200.00	100.00%	$60.00	$0.00
901.02	**10" INLINE CHECK VALVE**	1	LS	$3,000.00	$3,000.00	1.00	$3,000.00	0	$0.00		1.00	$3,000.00	100.00%	$150.00	$0.00
901.03	**84" INLINE CHECK VALVE**	1	LS	$125,000.00	$125,000.00	0.00	$0.00	1	$125,000.00		1.00	$125,000.00	100.00%	$6,250.00	$0.00
902.01	**ARCHAEOLOGICAL CREW DELAYS**	5	CD	$7,500.00	$37,500.00	0.00	$0.00	0	$0.00		0.00	$0.00	0.00%	$0.00	$37,500.00
	TOTALS				$6,845,081.00		$5,048,660.06		$663,913.60			$5,712,573.66		$285,628.68	$1,132,507.34
	CHANGE ORDERS														
1	Ocean Ave. Landfill Improvements	1	LS	$180,081.50	$180,081.50	0.73	$130,811.50	0.00%	$0.00		0.73	$130,811.50	72.64%	$6,540.58	$49,270.00
2	Traffic Signal Modifications	1	LS	$557,080.00	$557,080.00	0.00	$0.00	0.00%	$0.00		0.00	$0.00	0.00%	$0.00	$557,080.00
3	Amendment 3 - Twin 60" ADS Sanitie Pipe	1	LS	$278,430.98	$278,430.98	0.00	$0.00	1	$278,430.98		1.00	$278,430.98	100.00%	$13,921.55	$0.00
4	Amendment 4 - SRF Test Pits	1	LS	$34,000.00	$34,000.00	0.00	$0.00	1	$34,000.00		1.00	$34,000.00	100.00%	$1,700.00	$0.00
5	Amendment 5 - Landfill Gas	1	LS	$68,888.70	$68,888.70	0.00	$0.00	1	$68,888.70		1.00	$68,888.70	100.00%	$3,444.44	$0.00
	TOTALS CHANGE ORDERS				$1,118,481.18		$130,811.50		$381,319.68			$512,131.18		$25,606.56	$606,350.00

CONTRACT STATUS

ORIGINAL CONTRACT AMOUNT	$6,845,081.00
CHANGE ORDERS SUM TO DATE	$1,118,481.18
CURRENT TOTAL CONTRACT PRICE	$7,963,562.18

CONTRACT PAYMENT

TOTAL DOLLAR VALUE COMPLETED TO DATE	$6,224,704.84
MATERIALS STORED ONSITE	$0.000
LESS RETAINAGE	$311,235.24
TOTAL AMOUNT DUE TO DATE	$5,913,469.60
LESS AMOUNT OF PREVIOUS REQUISITIONS	$4,918,324.57
TOTAL AMOUNT DUE THIS REQUISITION	**$995,145.03**

AGREEMENT BETWEEN THE
CITY OF PORTLAND
AND
GORHAM SAND & GRAVEL, INC.

THIS AGREEMENT is entered into as of this 5th day of October, 2016, by and between the **CITY OF PORTLAND,** a body politic and corporate, (hereinafter the "**CITY**"), and **GORHAM SAND & GRAVEL INC.** with an address of 939 Parker Farm Road, Buxton, Maine 04093 (hereinafter the "**CONTRACTOR**").

W I T N E S S E T H:

WHEREAS, the **CITY** is in need of sewer and stormwater separation work near the Eastern Promenade and did advertise a Request for Bids #8416 entitled "Moody-Wilson Sewer Separation and Beckett Street Sewer Replacement" dated July 5, 2016, as amended by Addendum #1 dated July 25, 2016 and Addendum #2 dated July 28, 2016 (hereinafter, collectively, the "Request for Bids"), a copy of which is attached as Exhibit A and made a part hereof; and

WHEREAS, the **CONTRACTOR** has the requisite knowledge and technical ability to perform the required services and has submitted a proposal for the provision of such services dated August 2, 2016 (hereinafter, the "Proposal"), a copy of which is attached as Exhibit B and made a part hereof; and

WHEREAS, after due consideration of all the Bids, the **CITY** did award the bid to the **CONTRACTOR;**

NOW, THEREFORE, in consideration of the mutual promises made by each party to the other, the parties covenant and agree as follows:

1. The **CONTRACTOR** will furnish the materials, supplies, equipment and labor (hereinafter the "Work") in accordance with the specifications contained in the Request for Bids issued to the Contractors under date of July 5, 2016 by the Purchasing Manager of the City of Portland, and also in accordance with the **CONTRACTOR's** Proposal.

   The restatement in this document of any term of the Request for Bids or Proposal shall not be deemed to waive any term not so restated. If any disagreement is found between Request for Bids or the Proposal and this document, then this document shall govern; and the Request for Bids shall govern over the Proposal, to the extent they disagree; provided, however, that this document and its attachments shall be construed to be supplemental to one another to the extent possible.

2. The **CONTRACTOR** covenants and agrees that all Work performed and furnished hereunder shall be free from all defects, and that all Work shall be performed in a good workmanlike manner. Unless a longer warranty period is specified in the Exhibits hereto, all Work provided shall be warranted by the **CONTRACTOR** for one (1) full year from the date of completion of all Work hereunder and acceptance thereof by the **CITY**. Notwithstanding the foregoing, any longer period specified in the attachments shall stay in effect.

3. Prior to the execution of this Agreement, the **CONTRACTOR** will procure and maintain Automobile Insurance and General Public Liability Insurance coverage in amounts of not less than Four Hundred Thousand Dollars ($400,000.00) per occurrence for bodily injury, death and property damage, naming the **CITY** as an additional insured thereon, and also Workers' Compensation Insurance coverage to the extent required by law. With respect to the Liability Insurance, the **CONTRACTOR** will provide the **CITY** a certificate of insurance evidencing such coverage, in this way: certificate must say either: A) "the policy has been endorsed to name the City of Portland as an Additional Insured" and a copy of the endorsement must come to the City of Portland with the certificate, or B) "the policy already includes an endorsement, such as the General Liability Extension Endorsement, by which the City of Portland is automatically made an additional insured." A Certificate which merely has a box checked under "Addl Insr," or the like, or which merely states the City of Portland is named as an Additional Insured, will not be acceptable. The Workers' Compensation insurance shall include an endorsement waiving all rights of subrogation against the City of Portland, its officers or employees. The **CONTRACTOR** shall furnish the **CITY** and thereafter maintain certificates evidencing all such coverages, which certificates shall guarantee thirty (30) days' notice to the **CITY** of termination of insurance from insurance provider or agent. Nothing in this Agreement constitutes a waiver of any defense, immunity or limitation of liability that may be available to the **CITY**, or its officers, agents or employees under the Maine Tort Claims Act (Title 14 M.R.S.A. 8101 et. seq.), and nothing in this Agreement shall constitute a waiver of other privileges or immunities that may be available to the **CITY**.

4. The **CONTRACTOR** shall furnish to the **CITY**, upon execution of the Contract, a Contract Performance Bond and a Contract Labor and Materials Payment Bond each for the full amount of the Contract and issued by a surety company or surety companies

authorized to do business in the State of Maine and approved by the **CITY**. The Bonds shall remain in effect for one year after final acceptance of the Work, and protect the **CITY** for at least one year of warranty of the Work hereunder, and also shall insure settlement of claims for the payment of all bills for labor, materials and equipment.

5. To the fullest extent permitted by law, the **CONTRACTOR** shall defend, indemnify and hold harmless the **CITY**, its officers and employees, from and against all claims, damages, losses, and expenses, just or unjust, including, but not limited to, the costs of defense and attorney's fees arising out of or resulting from the performance of this Agreement, provided that any such claims, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use therefrom, and (2) is caused in whole or in part by any negligent act or omission of the **CONTRACTOR**, anyone directly or indirectly employed by it, or anyone for whose act it may be liable. Such obligation of indemnification shall not be construed to negate or abridge any other obligation of indemnification running to the **CITY** which otherwise exists. The extent of the indemnification provision shall not be limited by the provision for insurance in this Agreement. **CONTRACTOR**'s obligations under this paragraph shall survive termination of this Agreement.

6. Prior to any payment, the **CITY** reserves the right to require Waivers of Lien for materials and labor from the **CONTRACTOR** and its subcontractors and suppliers guaranteeing One Hundred Percent (100%) performance, free and clear from all liens and encumbrances. Any mechanic's lien or any other lien which may be filed against the premises which are the subject of this Agreement by reason of the Work described herein shall be defended (by counsel reasonably acceptable to the **CITY**) and promptly discharged by the **CONTRACTOR** at its own expense. The **CITY** may require the **CONTRACTOR** to provide a bond satisfactory to the **CITY** to indemnify it against any lien and as a substitution in place of a lien. If the **CONTRACTOR** should fail either to defend the **CITY** against the lien or to discharge it, then the **CITY** may do so at the **CONTRACTOR's** expense. In the event of such an undertaking by the **CITY**, the **CONTRACTOR** will promptly reimburse the **CITY** for all its costs and expenses in so doing, including, but not limited to, reimbursement of the **CITY's** reasonable counsel fees, as well as costs which may be incurred by it in substituting a bond in place of a lien. **CONTRACTOR**'s obligations under this paragraph shall survive termination of this Agreement.

7. The **CONTRACTOR** shall perform the work to the satisfaction of the responsible **CITY** official who will have the right of inspection at all times, and whose approval and acceptance of the work will be a condition precedent to payments by the **CITY** under this Contract. **CITY** inspectors will have the authority to stop work in progress if such work is being done contrary to the plans, specifications or engineering practice. **CONTRACTOR** acknowledges and agrees that such inspection is for purposes of approving payment alone and such inspection shall not be deemed to impose any duty or liability upon the **CITY** to supervise any aspect of or approve the quality of the Work.

8. Time is of the essence in the performance of this Agreement. Upon receipt of executed contracts and insurance as required, the **CITY** will promptly send an executed **CITY** contract to the **CONTRACTOR**, which will commence work upon receipt. The work shall reach substantial completion, including all underground utility work, surface restoration, site stabilization and base paving complete in place, by June 16, 2017, and final completion by October 1, 2017, provided that any sections of pipe work completed by November 18, 2016 must receive base paving prior to that date.

9. In the event of any dispute as to the amount, nature or scope of the work required under this Contract, the design and judgment of the Director of the Department of the Department of Public Works or his or her designee (hereinafter, the "Director") will be final and binding.

10. For performance of all the terms and conditions of this Agreement, the **CITY** will pay the **CONTRACTOR** Nine Hundred Eighty-Nine Thousand Four Hundred Eighty-Five Dollars and 11 Cents ($989,485.11) based on the rates set forth in the Proposal.

11. Payment shall be in accordance with Section 108 – Prior to substantial completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as the **CITY** may determine or may withhold, including but not limited to liquidated damages in accordance with general conditions:

    a. 95 percent of work completed (with balance being retainage); and
    b. 95 percent of cost of materials and equipment not incorporated in the work (with balance being retainage)

    Upon substantial completion, the **CITY** shall pay an amount sufficient to increase total payments to the **CONTRACTOR** to 98 percent of the work completed, less such amounts as the **CITY** shall determine in accordance with general conditions. The final two percent of the value of the Work shall be retained for a period of one year from the date of substantial completion.

12. WINTER OPERATIONS. The **CONTRACTOR** agrees that the winter operations aspect of the project shall be coordinated with the **CITY**'s winter efforts and the additional costs associated with the activities shall be borne by the **CONTRACTOR** and not by the **CITY**. Winter Maintenance shall be considered incidental to the cost of the work and no extra payment will be made.

    CONTRACTOR shall provide a minimum of one loader and necessary personnel for the project site which shall be used for the removal of ice and/or snow during the winter period. **CONTRACTOR** shall plow and remove snow and ice within the area of the project's winter work including but not limited to maintaining access to driveways and side streets, crosswalks and sidewalks. All areas shall have snow and ice removed within 6 hours of start of any storm event. **CONTRACTOR** shall clear the access to driveways and road crossings of snow within the area impacted by the project's winter work. **CONTRACTOR** shall remove stockpiled snow from the project area when it is

necessary for work progress (when the stockpiled snow impacts traffic or when the stockpiled snow impacts sidewalks and school routes).

CONTRACTOR shall provide on-site response to sand/salt treatment, snow plowing, and snow removal operations within one hour of receiving a request from the **CITY**. **CONTRACTOR** shall provide for maintenance of the trench and driveway aprons impacted by the project's winter work. Replacement materials of sufficient strength and integrity shall be used for roadway and aprons to hold up to winter conditions. The **CONTRACTOR** shall be responsible for this work, which shall be considered incidental to the project.

CONTRACTOR shall not re-stripe the street associated with winter work but shall ensure the delineation of the work zone as the project progresses. Re-establishment of the work zone following a storm will be required when snow removal operations have been completed. No payment will be made for the replacement of traffic control devices.

The **CONTRACTOR** will not be reimbursed for sand/salt treatment, snow plowing, or snow and ice removal operations associated with this project.

In the event that a shut-down period is required, **CONTRACTOR** shall contact the **CITY** and a time frame shall be established under mutual agreement only. Any shut-down shall not relieve the contractor of the required completion dates. The contractor shall not be entitled to any claims or extra costs.

CONTRACTOR acknowledges that frozen materials shall not be used in any aspects of the project and that no payment shall be made for the methods necessary to keep materials free from freezing.

The **CONTRACTOR** will be 100% responsible for winter maintenance of the road if construction activities are occurring on the road during winter months. The **CONTRACTOR** will be required to base pave any portion of road where the pipe work has been completed prior to the closing of the paving plants. In the case of the **CONTRACTOR** performing winter pipe work on a section of road, the **CONTRACTOR** will be required to plow and maintain the road at all times which will also include any shut down periods. The **CONTRACTOR** may leave the roadway gravel during an agreed upon shut down, however the **CONTRACTOR** shall be responsible to plow and maintain the road during the shutdown period.

Notwithstanding anything to the contrary herein, **CONTRACTOR** acknowledges and agrees that the **CITY** will only plow and maintain the road in the project site if base pavement has been placed.

13. The **CONTRACTOR** shall keep accurate records of all services performed under this Agreement and shall submit such information to the **CITY** on a monthly basis. Payment for such Work shall be made to the **CONTRACTOR** not more than thirty (30) days after receipt of an invoice and acceptance of the Work by the Director.

14. The **CITY** may terminate this Agreement for cause by written Notice to the **CONTRACTOR**. In the event of such termination, the **CONTRACTOR** shall not be entitled to any further payment under this Agreement from the date of receipt of said Notice.

15. The **CITY** shall have the right to terminate this Agreement at any time for its convenience on thirty (30) days' prior written Notice to the **CONTRACTOR**. If the Agreement is terminated by the **CITY** for convenience, the **CITY** shall pay the **CONTRACTOR** for all Work performed and all materials purchased pursuant to this Agreement prior to receipt of such Notice.

16. Out of concern for the public, **CITY** employees and the **CONTRACTOR's** employees, all work performed by the **CONTRACTOR** shall be in conformance with pertinent OSHA, local, state and federal government regulations.

17. No waiver of any breach of any one or more of the conditions of this Agreement by the **CITY** be deemed to imply or constitute a waiver of any succeeding or other breach hereunder.

18. This Agreement and its attachments represents the entire and complete agreement and understanding between the parties and supersedes any prior agreement or understanding, written or oral, between the parties with respect to the subject matter of this Agreement. This Agreement cannot be amended except by written instrument executed by the **CITY** and **CONTRACTOR.**

19. This Agreement shall be construed in all respects in accordance with, and governed by, the laws of the State of Maine. All parties hereto hereby consent to the exclusive jurisdiction of the Superior Court for the County of Cumberland in the State of Maine, for all actions, proceedings and litigation arising from or relating directly or indirectly to this Agreement or any of the obligations hereunder, and any dispute not otherwise resolved as provided herein shall be litigated solely in said Court.

20. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement. A signature in a pdf or electronic document shall be considered the equivalent of an original signature.

21. **CONTRACTOR** warrants and represents that it has the full right and authority to enter into this Agreement, that there is no impediment that would inhibit its ability to perform their respective obligations under this Agreement, and that the person signing this Agreement on behalf of **CONTRACTOR** has the authority to do so.

IN WITNESS WHEREOF, the said **CITY OF PORTLAND** has caused this Agreement to be signed and sealed by Jon P. Jennings, its City Manager, thereunto duly authorized, **GORHAM SAND & GRAVEL INC.** has caused this Agreement to be signed and sealed by THOMAS P SHAW, its PRESIDENT, thereunto duly authorized, the day and date first above written.

WITNESS:

Sonia Bean

CITY OF PORTLAND

By: _____
Jon P. Jennings
Its City Manager

WITNESS:

GORHAM SAND & GRAVEL INC.

By: _____

Print or type name: THOMAS P. SHAW

Its: President

Approved as to form:

Corporation Counsel's Office

Approved as to funds:

Finance Director

EXHIBIT B

Bid #8416

PROPOSAL

Bid No. 8416
CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS

PROJECT: MOODY-WILSON SEWER SEPARATION AND BECKETT STREET SEWER REPLACEMENT

The UNDERSIGNED hereby declares that he/she or they are the only person(s), firm or corporation interested in this application as principal, that it is made without any connection with any other person(s), firm or corporation submitting an application for the same.

The UNDERSIGNED hereby declares that they have read and understand all conditions as outlined in the invitation, and that the application is made in accordance with same.

The UNDERSIGNED hereby declares that any person(s) employed by the City of Portland, Maine, who has direct or indirect personal or financial interest in this application or in any portion of the profits which may be derived therefrom has been identified and the interest disclosed by separate attachment. (Please include in your disclosure any interest which you know of. An example of a direct interest would be a City employee who would be paid to perform services under this application. An example of an indirect interest would be a City employee who is related to any officers, employees, principal or shareholders of your firm or to you. If in doubt as to status or interest, please disclose to the extent known).

The proposer acknowledges the receipt of Addenda numbered 1+2 (if applicable)

COMPANY NAME: Gorham Sand & Gravel, Inc.
(Individual, Partnership, Corporation, Joint Venture)

AUTHORIZED SIGNATURE: [signature] DATE: 6/2/16
(Officer, Authorized Individual or Owner)

PRINT NAME & TITLE: James W. Shaw

ADDRESS: 939 Porter Farm Rd Buxton, ME

04093
Zip Code

TELEPHONE: 207-839-2442 FAX: 207-839-5445

24 HOUR #: 207-838-9102

E-MAIL ADDRESS: MIKEM@SSGRAVEL.COM

FEDERAL TAX I.D. NUMBER: 01-0422076

NOTE: All applications must bear the handwritten signature of a duly authorized member or employee of the organization making the application. This sheet must be signed and returned with proposal page.

SEWER SEPARATION BID FORM						
MOODY-WILSON SEWER SEPARATION AND BECKETT STREET SEWER REPLACEMENT						
PORTLAND, MAINE						
			UNIT PRICE		TOTAL PRICE	
Item No	Quantity	Item with Unit Bid Price Written in Words	Dollars	Cents	Dollars	Cents
201.231	EA	Remove Single Tree including Stump @ ONE THOUSAND TWO HUNDRED	1,200	–	7,200	–
	6	Per Each				
203.28	VF	Test Pit Excavation @ ONE HUNDRED	100	–	1,500	–
	15	Per Vertical Foot				
203.31	CY	Crushed Stone 703.31- Type 'A' (Overdepth) @ THIRTY SIX	34	–	3,400	–
	100	Per Cubic Yard				
203.061	CY	Earth Excavation, Below Grade (Overdepth) @ FIFTEEN	15	–	1,500	–
	100	Per Cubic Yard				
304.09	CY	Aggregate Base Course Crushed, Type "B"- FIFTY THREE AND 60/100	53	60	321	60
	6	Per Cubic Yard				
403.207	TON	Hot Bituminous Pavement, Grading,19.0 mm 2" @ ONE HUNDRED THIRTY FIVE	135	–	1,620	–
	12	Per Ton				
403.208	TON	Hot Bituminous Pavement, Grading, 9.5 mm 1.5" @ ONE HUNDRED THIRTY FIVE	135	–	1,215	–
	9	Per Ton				
603.130	LF	Install 4 and 6" Sewer Lateral Lines @ EIGHTY EIGHT AND 10/100	88	10	22,025	
	250	Per Linear Foot				
603.131	LF	Install 8" Diameter PVC Sewer Pipe NINETY FOUR AND 78/100	94	78	31,277	40
	330					

603.132	LF	Install 10" Sewer Pipe @ One hundred three and 65/100	103.65	25,184.95
	243	Per Linear Foot		
603.133	LF	Install 12" Sewer Pipe @ Eighty six and 22/100	86.22	18,106.20
	210	Per Linear Foot		
603.159	LF	Install 12" Storm Drain Pipe @ Eighty one and 98/100	81.98	24,921.92
	304	Per Linear Foot		
603.169	LF	Install 15" Storm Drain Pipe @ Ninety eight and 10/100	98.10	85,052.70
	867	Per Linear Foot		
603.179	LF	Install 18" Storm Drain Pipe @ One hundred thirty eight and 64/100	138.64	62,526.64
	451	Per Linear Foot		
603.199	LF	Install 24" Storm Drain Pipe @ One hundred forty four and 58/100	144.58	60,000.70
	415	Per Linear Foot		
604.13	EA	Install 4' Diameter Catch Basin @ Three thousand seven hundred forty two	3742.-	52,388.-
	14	Per Each		
604.15	EA	Install 4' Diameter Manhole @ Four thousand eight hundred six	4,804.-	81,702.-
	17	Per Each (MJM)		
604.151	EA	Install 5' Diameter Manhole @ Six thousand twenty four	6,824.-	6,824.-
	1	Per Each		
604.152	EA	Install 6' Outlet Control Structure @ Nine thousand seven hundred seventy five	9,775.-	9,775.-
	1	Per Each		
604.171	EA	Alter Existing Manhole or Catch Basin @ One thousand one hundred	1,100.-	9,900.-
	9			

		Per Each		
604.18	EA	Adjusting Manhole or Catch Basin to Grade @ Three hundred	300 -	3,300 -
	11	Per Each		
614.14	EA	Masonry Plug @ Three hundred	300 -	4,500 -
	15	Per Each		
615.071	1	Loam and Seed @ Fourteen thousand seven hundred	14,700 -	14,700 -
	LS	Per Lump Sum		
632.05	EA	6" Wye Pipe Connection @ Three hundred ten	310 -	2,790 -
	9	Per Each		
632.061*	EA	12" Inserta Tee Connection @ Five hundred eighty	580 -	580 -
	1	Per Each		
637.071	LS	Dust Control @ Three thousand	3,000 -	3,000 -
	1	Per Lump Sump		
652.38	LS	Installation and Maintenance of Traffic Control Devices @ Twenty nine thousand seventy three	29,073 -	29,073 -
	1	Per Lump Sum		
654.08	EA	Density Tests @ Fifty	50 -	3,000 -
	60	Per Each		
656.75	LS	Maintenance of Erosion and Sedimentation Control Devices @ Three thousand	3,000 -	3,000 -
	1	Per Lump Sum		

890.01	EA	New 1" Water Service @ One thousand five hundred fifty	1,550-	1,550-
	1	Per Each		
900.01	CF	R-Tank Sub-Surface Storage System @ Thirteen and 82/100	13 82	184,607.56
	13,358	Per Cubic Foot		
901.01	EA	Install Vort-Sentry HS-60 Manhole @ Fifteen Thousand Seventy	15,070-	15,070-
	1	Per Each		
901.02	EA	Install Vort-Sentry HS-48 Manhole @ Seventeen Thousand five hundred	17,550-	17,550-
	1	fifty Per Each		
		Total Bid – Sewer Separation	789,363.67	

ROAD RECONSTRUCTION BID FORM MOODY-WILSON SEWER SEPARATION PROJECT PORTLAND, MAINE						
			UNIT PRICE		TOTAL PRICE	
Item No	Quantity	Item with Unit Bid Price Written in Words	Dollars	Cents	Dollars	Cents
202.20	SY 5635	Removal of Existing Bituminous Pavement @ ONE DOLLAR Per Square Yard	1	—	5,635	—
202.202	SY 1482	Removal of Existing Pavement Surface (Milling) @ SIX AND 50/100 Per Square Yard	6	50	9,633	—
203.20	CY 393	Common Excavation @ TWENTY TWO AND 85/100 Per Cubic Yard	22	85	8,980	05
202.203	LS 1	Structural Concrete and Cobble Stone Removal @ FOUR THOUSAND FIVE HUNDRED Per Lump Sum	4,500	—	4,500	—
202.204	LS 1	Removal of Wooden Rail Track ~~FOUR THOUSAND~~ @ FOUR THOUSAND Per Lump Sum	4,000	—	4,000	—
304.09	CY 470	Aggregate Base Course Crushed, Type "B" – 3 inch @ THIRTY Per Cubic Yard	30	—	14,100	—
304.10	CY 39	Aggregate Sub Base Course Crushed, Type "D" @ FIFTY THREE Per Cubic Yard	53	—	2,067	—
403.207	TON 620	Hot Bituminous Pavement, Grading "19mm" 2 Inch @ SEVENTY THREE Per Ton	73	—	45,260	—
403.208	TON 587	Hot Bituminous Pavement, Grading "9.5" 1.5 Inch @ SEVENTY FIVE	75	—	44,025	—

		Per Ton		
608.1	SY 71	Brick Sidewalk (Remove and Replace) @ ONE HUNDRED SEVENTEEN Per Square Yard	117 -	8,307 -
608.11	EA 15	Adjust Driveways to Grade @ ONE Thousand ONE hundred SIXTY Per Each	1,160 -	17,400 -
609.38	LF 100	Remove and Reset Existing Granite Curb @ TWENTY EIGHT And 50/100 Per Linear Foot	28 50	2,850 -
627.75	SF 2820	White and Yellow Pavement Markings @ ONE And 15/100 Per Square Foot	1 15	3,243 -
629.05*	HR 20	Hand Labor, Straight Time @ FORTY FIVE Per Hour	45 -	900 -
629.06*	HR 20	Mason @ FORTY FIVE Per Hour	45 -	900 -
631.12*	HR 20	All Purpose Excavator, Including Operator @ ONE hundred SIXTY Per Hour	160 -	3,200 -
631.13*	HR 20	Bulldozer, Including Operator @ ONE hundred TWENTY FIVE Per Hour	125 -	2,500 -
631.171*	HR 20	Truck, Small, Including Operator @ FORTY FIVE Per Hour	45	900 -

631.22*	HR	Front End Loader, including Operator @ ONE HUNDRED TWENTY FIVE	125 —	2,500-
	20	Per Hour		
631.36*	HR	Foreman @ SIXTY FIVE	65 —	1,300-
	20	Per Hour		
		Total Bid – Road Construction	152,200.00	

BECKET STREET SEWER REPLACEMENT						
MOODY-WILSON SEWER SEPARATION; BECKETT STREET SEWER REPLACEMENT						
PORTLAND, MAINE						
			UNIT PRICE		TOTAL PRICE	
Item No	Quantity	Item with Unit Bid Price Written in Words	Dollars	Cents	Dollars	Cents
304.09	CY	Aggregate Base Course Crushed, Type "B" –3 inch	73	-	146	-
	2	@ Seventy Three				
		Per Cubic Yard				
403.207	Ton	Hot Bituminous Pavement, Grading 19mm -2 Inch Thick	165	-	495	-
		@ One hundred sixty five				
	3					
		Per Ton				
603.130	LF	Install 4 and 6" Sewer Lateral Lines	74	10	6,851	30
	93	@ Seventy Four And 10/100				
		Per Linear foot				
603.131	LF	Install 8" Sewer Pipe	95	57	3,536	09
		@ Ninety Five And 57/100				
	37					
		Per Linear Foot				
604.15	EA	Install 4' Diameter Manhole	3,475	-	3,475	-
		@ Three Thousand Four hundred				
	1	seventy five				
		Per Each				
604.171	EA	Alter Existing Manhole or Catch Basin	350	-	350	-
	1	@ Three hundred fifty				
		Per Each				
608.10	SY	Brick Sidewalk (remove and replace)	107	-	1,498	-
	14	@ One hundred seven				
		Per Square Yard				
609.38	LF	Remove and Reset Existing Granite Curb	40	-	600	-
		@ Forty				
	15					
		Per Linear Foot				

632.05	EA	6" Wye Pipe Connection	310 —	930 —
	3	@ THREE HUNDRED TEN Per Each		
Total Bid – Becket Street Sewer Separation			17,921 39	

The pay items with quantities marked with an asterisk (*) on the bid sheets are not anticipated at time of bid and therefore are indeterminate. These items are part of the Contract Proposal and will also be used should any extra work be necessary. Actual quantities will be measured in the field or calculated from the contract drawings. The unit bid prices will be used to calculate payment amounts regardless of final quantities.

Moody-Wilson Sewer Separation Bid = $ 789,363 47

Roadway Reconstruction Bid = $ 182,200 05

Becket Street Sewer Replacement Bid = $ 17,921 39

Total of Three Bid's = $ 989,485 11

(Basis of Award)

The undersigned also agrees as follows:

FIRST: To do any extra work, not covered by the above schedule of items, which may be ordered, and to accept as full compensation therefore such prices as may be agreed upon in writing by the Engineer and the Contractor; or in case no agreement is made, to accept as full compensation the amount determined upon a "force account" basis as provided in the M.D.O.T. Standard Specifications, Revision of December 2002.

"SECOND: To begin work on the date specified in the Engineer's "Notice to Commence Work" and to prosecute said work in such a manner as to complete it within the time limits given in the Special Provisions. Further, that monies will be deducted as liquidated damages at the rate specified in Subsection 107.7.2 "Schedule of Liquidated Damages" for each day that the work shall remain uncompleted after the time herein specified for completion of the work."

THIRD: That this offer is to continue open to acceptance until the formal contract is executed by the successful bidder of this work, and the City may at any time without notice accept this proposal whether any other proposal has previously been accepted or not. Provided, however, that the City will accept, in writing, one of the proposals made, or reject all proposals made, within sixty (60) calendar days after the date of opening of the proposals.

The undersigned as Bidder, declares that the only persons or parties interested in this Proposal are those named herein; that the bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on this contract; and that this Proposal is made without collusion with any other person, firm or corporation.

"The undersigned declares that any person(s) employed by the City of Portland, Maine, who has direct or indirect personal or financial interest in this proposal or in any portion of the profits which may be derived therefrom, has been identified and the interest disclosed by separate attachment. (Please include in your disclosure any interest which you know of. An example of a direct interest would be a City employee who would be paid to perform services under this proposal. An example of an indirect interest would be a City employee who is related to any officers, employees, principal or shareholders of your firm or you.) If in doubt as to status or interest, please disclose to the extent known."

Respectfully submitted this 2nd day of August, 2016

Acknowledgement of Receipt of Addenda:

1 + 2

IF AN INDIVIDUAL, SIGN HERE

Signature of Bidder_____

Address_____

_____

Email Address _____

Telephone Number _____

Soc. Sec. Number _____

(Signatures for a Firm, Partnership or Corporation on next page.)

PROPOSAL (continued)

IF A FIRM OR PARTNERSHIP, SIGN HERE

Signature of Bidder_____

Name of Firm or Partnership_____

Business Address_____

Email Address_____

Telephone Number_____ Fax Number_____
Soc. Sec. No. or Tax I.D. Number_____
Names and Addresses of Members of Firm or Partnership:

_____

_____

IF A CORPORATION, SIGN HERE

Name of Bidder Gorham Sand & Gravel
Authorized Signature [signature] Vice President
(Name) (Title)

Business Address 939 Portland Road Gorham, ME 04038

Email Address MIKEM@SSGRAVEL.COM

Telephone Number 207-839-2442 Fax Number 207-839-5445
Soc. Sec. No. or Tax I.D. Number 01-0422076
Incorporated under the Laws of the State of MAINE

Names and Addresses of Officers of the Corporation:

President Thomas R. Shaw
Secretary James W. Shaw

Treasurer Mark B. Curtis ss

Before me, personally appeared James W. Shaw and acknowledged that the signature to the preceding bid is his/her signature in his/her official capacity.

Date: 8/2/16

[signature]
Notary Public - Signature and Seal

Mark Curtis
NOTARY PUBLIC
State of Maine
My Commission Expires 1/06/2021

GORHAM SAND & GRAVEL, INC.

CERTIFICATE OF BIDDING AUTHORITY

Shareholders Resolution Granting 2016 Bidding Authority adopted on January 1, 2016 by unanimous consent of the shareholders of Gorham Sand & Gravel, Inc.

RESOLVED, that the Corporation hereby authorizes its President and/or its Vice President, or both or either of them, independently or in cooperation with one another, to prepare, sign and submit any and all construction project bids for public or private construction projects for the calendar year 2016 on behalf of the corporation. FURTHER RESOLVED, that the Corporation's President and/or its Vice President, or both or either of them, independently or in cooperation with one another, are fully authorized to determine which projects to bid upon, and to prepare, sign and submit specific bids for any and all construction bids for public or private construction projects for the calendar year 2016 on behalf of the corporation. FURTHER RESOLVED, that any and all actions taken by the aforesaid officer or officers in respect of the subject matter of the bid or bids prior to or after the date below have been or will be approved ratified and confirmed by the corporation and its shareholders, and such actions and any bids submitted by said officer or officers shall be binding upon the said corporation. FURTHER RESOLVED, that the recipient of any bid is authorized to rely upon this resolution until receipt by it of written notice of any change. FURTHER RESOLVED, that the articles of incorporation, charter and by-laws of said corporation do not require any consent of the shareholders for the filing or submission of any such construction bid, or for the signing of any construction contract by the President or Vice President, for such bid or contract to be binding upon the Corporation.

The above is a true copy of the records of Gorham Sand & Gravel, Inc., a Maine corporation, which records are in my legal custody.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said corporation this 8/2, 2016.

Gorham Sand & Gravel, Inc.

By Mark B. Curtis
Its Corporate Secretary

State of Maine
County of Cumberland, ss.

Dated: 8/2/16, 2016

Then personally appeared the above named **Mark B. Curtis**, Secretary of said corporation, and made oath that he is the custodian of the corporate records and that the foregoing is a true copy of the portion of the records to which it relates, and that the above is true to his personal knowledge and belief.

My commission expires: _____

Notary Public/Attorney-at-Law

John W. Sawyer, Maine Attorney at Law
Printed Name

John W. Sawyer - Attorney at Law
Maine Bar No. 2806

With all powers of a notary public
per Title 4 MRSA Section 1056
NO SEAL REQUIRED

ALL CORPORATIONS MUST SIGN THIS FORM
AND SUBMIT WITH THE BID PROPOSAL

(Insert copy of that part of the records of the corporation wherein authority is given to the officer of that corporation to sign this bid on behalf of the corporation.)

_____

_____

_____

_____

_____
(date)

The above is a true copy of the records of the_____
Corporation, which records are in my legal custody.

_____
Officer having custody of the records

_____ss

Before me appeared, _____, _____

_____ of the _____ Corporation, and made

oath that the above statement is true.

_____
Notary Public - Signature and Seal

NOTICE

(This Must Be Filled Out)

The full names and residences of all persons interested in this bid as principals are as follows: (In case of Corporation, include and identify President, Treasurer, Manager)

THOMAS R. SHAW – PRESIDENT	GORHAM, ME
JAMES W. SHAW – VICE PRESIDENT	GORHAM, ME
MARK B. CURTIS – TREASURER	GORHAM, ME

ALL CONTRACTORS SHALL FILL IN THE FOLLOWING INFORMATION BEFORE SUBMITTING BID

	Name and Address of Materials Supplier	Materials to be Supplied
1	ESP – Gardiner, ME	Pipe
	OR	
2	Ferguson Water Works, South Portland, ME	Pipe
3	Precast of Maine – Topsham, ME	Precast structures
4	ACF Environmental – Gorham, ME	Water storage + treatment units
5		
6		
7		

	Name and Address of Contractor	Service or Trades to be Supplied	Anticipated $ Amount
1	Dayton Sand + Gravel, Dayton, ME	Paving	97,000±
2	Zebra Striping, Scarborough, ME	Pavement Markings	3,000±
3			
4			
5			
6			
7			

Moody-Wilson Sewer Separation Project

Gorham Sand and Gravel

939 Parker Farm Rd
Buxton, ME 04092
Purchase Order No.: 043446

City of Portland- Department of Public Works
Water Resources Engineering

Payment 6

Account No.	**Project Code**	**Amount**
370-3100.500.70-10	**C09502**	**$789,363.67**
300-3100-492.70-10	**C16102**	**$182,200.05**
370-3100-500.70-10	**C15501**	**$17,921.39**

Payment Period
Through: **20-Jun-17**
Submitted: **26-Jun-17**
Processed: **July 17,2017**

TOTAL SEWER REPLACEMENT = 769.45 LF
TOTAL COST: $73,268.39

Sewer Separation Base Bid

						Payment 6		**Previous Amount**				
Item No	**Description**	**Unit**	**EST QTY**	**UNIT PRICE**	**EST AMT**	**QTY REQ**	**AMOUNT REQUESTED**	**PREV QTY**	**AMOUNT REQUESTED**	**QTY TO DATE**	**AMOUNT TO DATE**	**% COMPLETE**
201.231	Remove Single Tree including Stump	EA	6	$1,200.00	$7,200.00	0	$0.00	7	$8,400.00	7.00	$8,400.00	117%
203.28	Test Pit Excavation	VF	15	$100.00	$1,500.00	0.0	$0.00	13.8	$1,380.00	13.80	$1,380.00	92%
203.31	Crushed Stone 703.31 - Type 'A' (Overdepth)	CY	100	$36.00	$3,600.00	0.00	$0.00	29.38	$1,057.68	29.38	$1,057.68	29%
203.061	Earth Excavation, Below Grade (Overdepth)	CY	100	$15.00	$1,500.00	0.00	$0.00	19.88	$298.20	19.88	$298.20	20%
304.09	Aggregate Base Course Crushed, Type 'B'	CY	6	$53.60	$321.60	0.00	$0.00	38	$2,010.54	37.51	$2,010.54	625%
403.207	Hot Bituminous Pavement, Grading, 19.0 mm 2"	TON	12	$135.00	$1,620.00	0.00	$0.00	19	$2,558.25	18.95	$2,558.25	158%
403.208	Hot Bituminous Pavement, Grading, 9.5 mm 1.5"	TON	9	$135.00	$1,215.00	0	$0.00	0	$0.00	0.00	$0.00	0%
603.130	Install 4" and 6" Sewer Lateral Lines	LF	250	$88.10	$22,025.00	0.0	$0.00	220.60	$19,434.86	220.60	$19,434.86	88%
603.131	Install 8" Diameter PVC Sewer Pipe	LF	330	$94.78	$31,277.40	0.00	$0.00	319.45	$30,277.47	319.45	$30,277.47	97%
603.132	Install 10" Sewer Pipe	LF	243	$103.65	$25,186.95	0.00	$0.00	240.50	$24,927.83	240.50	$24,927.83	99%
603.133	Install 12" Sewer Pipe	LF	210	$86.22	$18,106.20	0.00	$0.00	209.50	$18,063.09	209.50	$18,063.09	100%
603.159	Install 12" Storm Drain Pipe	LF	304	$81.98	$24,921.92	0.00	$0.00	385.75	$31,623.79	385.75	$31,623.79	127%
603.169	Install 15" Storm Drain Pipe	LF	867	$98.10	$85,052.70	0.00	$0.00	851.50	$83,532.15	851.50	$83,532.15	98%
603.179	Install 18" Storm Drain Pipe	LF	451	$138.64	$62,526.64	0.00	$0.00	552.25	$76,563.94	552.25	$76,563.94	122%
603.199	Install 24" Storm Drain Pipe	LF	415	$144.58	$60,000.70	0	$0.00	431.75	$62,422.42	431.75	$62,422.42	104%
604.13	Install 4'Diameter Catch Basin	EA	14	$3,742.00	$52,388.00	0	$0.00	15.00	$56,130.00	15.00	$56,130.00	107%
604.15	Install 4' Diameter Manhole	EA	17	$4,806.00	$81,702.00	0	$0.00	19.00	$91,314.00	19.00	$91,314.00	112%
604.151	Install 5' Diameter Manhole	EA	1	$6,824.00	$6,824.00	0	$0.00	1	$6,824.00	1.00	$6,824.00	100%
604.152	Install 6' Outlet Control Structure	EA	1	$9,775.00	$9,775.00	0	$0.00	1	$9,775.00	1.00	$9,775.00	100%
604.171	Alter Existing Manhole or Catch Basin	EA	9	$1,100.00	$9,900.00	0	$0.00	16	$17,600.00	16.00	$17,600.00	178%
604.18	Adjusting Manhole or Catch Basin to Grade	EA	11	$300.00	$3,300.00	16	$4,800.00	0	$0.00	16.00	$4,800.00	145%
614.14	Masonry Plug	EA	15	$300.00	$4,500.00	0	$0.00	28	$8,400.00	28.00	$8,400.00	187%
615.071	Loam and Seed	LS	1	$14,700.00	$14,700.00	0.050	$735.00	0.95	$13,965.00	1.00	$14,700.00	100%
632.05	6" Wye Pipe Connection	EA	9	$310.00	$2,790.00	0	$0.00	12	$3,720.00	12.00	$3,720.00	133%
632.061	12" Inserta Tee Connection	EA	1	$580.00	$580.00	0	$0.00	3	$1,740.00	3.00	$1,740.00	300%
637.071	Dust Control	LS	1	$3,000.00	$3,000.00	0.05	$150.00	0.95	$2,850.00	1.00	$3,000.00	100%
652.38	Installation and Maintenance of Traffic Control	LS	1	$29,073.00	$29,073.00	0.05	$1,453.65	0.95	$27,619.35	1.00	$29,073.00	100%
654.08	Density Tests	EA	60	$50.00	$3,000.00	0	$0.00	29	$1,450.00	29.00	$1,450.00	48%
656.75	Maintenance of Erosion and Sedimentation Control	LS	1	$3,000.00	$3,000.00	0.0	$0.00	1.0	$3,000.00	1.00	$3,000.00	100%
890.01	New 1" Water Service	EA	1	$1,550.00	$1,550.00	0	$0.00	0	$0.00	0.00	$0.00	0%
900.01	R-Tank Sub-Surface Storage System	CF	13,358	$13.82	$184,607.56	0.00	$0.00	10,809.70	$149,390.05	10809.70	$149,390.05	81%
901.01	Install Vort-Sentry HS-60 Manhole	EA	1	$15,070.00	$15,070.00	0	$0.00	1	$15,070.00	1.00	$15,070.00	100%
901.02	Install Vort-Sentry HS-48 Manhole	EA	1	$17,550.00	$17,550.00	0	$0.00	1	$17,550.00	1.00	$17,550.00	100%
Base Bid Sewer Separation Total					**$789,363.67**		**$7,138.65**		**$788,947.62**		**$796,086.27**	**101%**

Roadway Reconstruction Base Bid

Item No	Description	Unit	EST QTY	UNIT PRICE	EST AMT	Payment 6 QTY REQ	Payment 6 AMOUNT REQUESTED	Previous Amount PREV QTY	Previous Amount AMOUNT REQUESTED	QTY TO DATE	AMOUNT TO DATE	% COMPLETE
202.20	Removal of Existing Bituminous Pavement	SY	5,635	$1.00	$5,635.00	0.0	$0.00	5918.70	$5,918.70	5918.70	$5,918.70	105%
202.202	Removal of Existing Pavement Surface (Milling)	SY	1,482	$6.50	$9,633.00	0	$0.00	0.00	$0.00	0.00	$0.00	0%
203.20	Common Excavation	CY	393	$22.85	$8,980.05	0	$0.00	796.00	$18,188.60	796.00	$18,188.60	203%
202.203	Structural Concrete and Cobble Stone Removal	LS	1	$4,500.00	$4,500.00	0	$0.00	1.00	$4,500.00	1.00	$4,500.00	100%
202.204	Removal of Wooden Rail Track	LS	1	$4,000.00	$4,000.00	0	$0.00	1.00	$4,000.00	1.00	$4,000.00	100%
304.09	Aggregate Base Course Crushed, Type "B" - 3 inch	CY	470	$30.00	$14,100.00	0.00	$0.00	831.81	$24,954.30	831.81	$24,954.30	177%
304.10	Aggregate Subbase Course Crushed, Type "D"	CY	39	$53.00	$2,067.00	0.00	$0.00	110.53	$5,858.09	110.53	$5,858.09	283%
403.207	Hot Bituminous Pavement, Grading "19mm"	TON	620	$73.00	$45,260.00	0.00	$0.00	737.09	$53,807.57	737.09	$53,807.57	119%
403.208	Hot Bituminous Pavement, Grading "9.5mm"	TON	587	$75.00	$44,025.00	0	$0.00	0.00	$0.00	0.00	$0.00	0%
608.1	Brick Sidewalk (Remove and Replace)	SY	71	$117.00	$8,307.00	63.03	$7,374.51	36.06	$4,219.02	99.09	$11,593.53	140%
608.11	Adjust Driveways to Grade	EA	15	$1,160.00	$17,400.00	21	$24,360.00	0.00	$0.00	21.00	$24,360.00	140%
609.38	Remove and Reset Existing Granite Curb	LF	100	$28.50	$2,850.00	0.00	$0.00	239.50	$6,825.75	239.50	$6,825.75	240%
627.75	White and Yellow Pavement Markings	SF	2,820	$1.15	$3,243.00	0	$0.00	0.00	$0.00	0.00	$0.00	0%
629.05	Hand Labor, Straight Time	HR	20	$45.00	$900.00	2.0	$90.00	2.50	$112.50	4.50	$202.50	23%
629.060	Mason	HR	20	$45.00	$900.00	0	$0.00	0.00	$0.00	0.00	$0.00	0%
631.12	All Purpose Excavator (incl. Operator)	HR	20	$160.00	$3,200.00	1	$160.00	0.00	$0.00	1.00	$160.00	5%
631.13	Bulldozer (incl. Operator)	HR	20	$125.00	$2,500.00	0.0	$0.00	0.00	$0.00	0.00	$0.00	0%
631.171	Truck, Small (incl. Operator)	HR	20	$45.00	$900.00	0	$0.00	7.20	$324.00	7.20	$324.00	36%
631.22	Front End Loader (incl. Operator)	HR	20	$125.00	$2,500.00	0	$0.00	0.00	$0.00	0.00	$0.00	0%
631.36	Foreman	HR	20	$65.00	$1,300.00	0	$0.00	0.00	$0.00	0.00	$0.00	0%
Base Bid Roadway Reconstruction Total					**$182,200.05**		**$31,984.51**		**$128,708.53**		**$160,693.04**	**88%**

Beckett Street Sewer Replacement Base Bid

Item No	Description	Unit	EST QTY	UNIT PRICE	EST AMT	Payment 6 QTY REQ	Payment 6 AMOUNT REQUESTED	Previous Amount PREV QTY	Previous Amount AMOUNT REQUESTED	QTY TO DATE	AMOUNT TO DATE	% COMPLETE
304.09	Aggregate Base Course Crushed, Type "B" - 3 inch	CY	2	$73.00	$146.00	0	$0.00	0	$0.00	0.00	$0.00	0%
403.207	Hot Bituminous Pavement, Grading 19 mm - 2 inch	TON	3	$165.00	$495.00	0.00	$0.00	0	$0.00	0.00	$0.00	0%
603.130	Install 4 and 6" Sewer Lateral Lines	LF	93	$74.10	$6,891.30	0	$0.00	116.5	$8,632.65	116.50	$8,632.65	125%
603.131	Install 8" Sewer Pipe	LF	37	$95.57	$3,536.09	0	$0.00	35.5	$3,392.74	35.50	$3,392.74	96%
604.15	Install 4' Diameter Manhole	EA	1	$3,475.00	$3,475.00	0	$0.00	1	$3,475.00	1.00	$3,475.00	100%
604.171	Alter Existing Manhole or Catch Basin	EA	1	$350.00	$350.00	0	$0.00	1	$350.00	1.00	$350.00	100%
608.10	Brick Sidewalk (remove and replace)	SY	14	$107.00	$1,498.00	26.99	$2,887.93	0	$0.00	26.99	$2,887.93	193%
609.38	Remove and Reset Existing Granite Curb	LF	15	$40.00	$600.00	0	$0.00	24	$960.00	24.00	$960.00	160%
632.05	6" Wye Pipe Connection	EA	3	$310.00	$930.00	0	$0.00	3	$930.00	3.00	$930.00	100%
Base Bid Beckett Street Sewer Reconstruction Total					**$17,921.39**	**-**	**$2,887.93**		**$17,740.39**		**$20,628.32**	**115%**

Contract Amendment 1
City Funded - C17102
Notes: Additional Paving on Moody, Wilson and O'Brion Street

Item No	Description	Unit	EST QTY	UNIT PRICE	EST AMT	Payment 6 QTY REQ	Payment 6 AMOUNT REQUESTED	Previous Amount PREV QTY	Previous Amount AMOUNT REQUESTED	QTY TO DATE	AMOUNT TO DATE	% COMPLETE
Additional Moody Street Paving												
202.20	Removal of Bit. Pavement	SY	616	$1.00	$616.00	0.00	$0.00	569.10	$569	569.10	$569.10	92%
203.20	Common Excavation	CY	52	$22.85	$1,188.20	74.60	$1,704.61	50.00	$1,143	124.60	$2,847.11	240%
304.09	Aggregate Base Course Crushed, Type "B" - 3 in	CY	52	$30.00	$1,560.00	0.00	$0.00	96.00	$2,880	96.00	$2,880.00	185%
403.207	Hot Bituminous Pavement, Grading "19mm"	TON	68	$73.00	$4,964.00	0.00	$0.00	68.00	$4,964	68.00	$4,964.00	100%
403.208	Hot Bituminous Pavement, Grading "9.5mm"	TON	51	$75.00	$3,825.00	0.00	$0.00	0.00	$0	0.00	$0.00	0%
Additional Wilson Street Paving												
202.20	Removal of Bit. Pavement	SY	570	$1.00	$570.00	0.00	$0.00	571.50	$572	571.50	$571.50	100%
203.20	Common Excavation	CY	48	$22.85	$1,096.80	74.60	$1,704.61	48.00	$1,097	122.60	$2,801.41	255%
304.09	Aggregate Base Course Crushed Type B	CY	48	$30.00	$1,440.00	0.00	$0.00	100.00	$3,000	100.00	$3,000.00	208%
403.207	Hot Bituminous Pavement, Grading "19mm"	TON	63	$73.00	$4,599.00	0.00	$0.00	63.00	$4,599	63.00	$4,599.00	100%
403.208	Hot Bituminous Pavement, Grading "9.5mm"	TON	48	$75.00	$3,600.00	0.00	$0.00	0.00	$0	0.00	$0.00	0%
Additional O'Brion Street Paving												
202.20	Removal of Bit. Pavement	SY	1500	$1.00	$1,500.00	1,074.33	$1,074.33	0.00	$0	1,074.33	$1,074.33	72%
203.20	Common Excavation	CY	125	$22.85	$2,856.25	192.00	$4,387.20	0.00	$0	192.00	$4,387.20	154%
304.09	Aggregate Base Course Crushed Type B	CY	125	$30.00	$3,750.00	208.00	$6,240.00	0.00	$0	208.00	$6,240.00	166%
403.207	Hot Bituminous Pavement, Grading "19mm"	TON	165	$73.00	$12,045.00	153.00	$11,169.00	0.00	$0	153.00	$11,169.00	93%
403.208	Hot Bituminous Pavement, Grading "9.5mm"	TON	124	$75.00	$9,300.00	0.00	$0.00	0.00	$0	0.00	$0.00	0%
-	Removal of Containt. Soils	LS	1	-	-	1.00	$6,983.38	0.00	$0	1.00	$6,983.38	-
-	10% Contingency	$	1	$5,291.03	$5,291.03		$0.00	0.00	$0	0.00	$0.00	0%
Contract Amendment # 1 Total					**$58,201.28**	-	**$33,263.13**		**$18,822.90**		**$52,086.03**	**89%**

Project Totals	$1,047,686.39	$75,274.22	$954,219.44	$1,029,493.66	98%

Base Bid Moody-Wilson Sewer Separation	$789,363.67
Base Bid Roadway Reconstruction	$182,200.05
Base Bid Beckett Street Sewer Replacement	$17,921.39
Contract Amendment # 1	$58,201.28
Project Total	$1,047,686.39

		TOTAL THIS ESTIMATE	$75,274.22
		RETAINAGE (5%) - LINE ITEM 1 - C09502	$3,763.71
		***** PAY THIS ESTIMATE ****	$71,510.51

Purchase Order 043446

PAY THIS ESTIMATE	C09502	LINE ITEM 1	$3,374.94
PAY THIS ESTIMATE	C16102	LINE ITEM 2	$31,984.51
PAY THIS ESTIMATE	C15501	LINE ITEM 3	$2,887.93
PAY THIS ESTIMATE	C17102	LINE ITEM 4	$33,263.13
		TOTAL PAYMENT	$71,510.51

PAID	
PAY REQUISITION 1	$161,871.85
PAY REQUISITION 2	$149,485.26
PAY REQUISITION 3	$239,649.69
PAY REQUISITION 4	$159,542.84
PAY REQUISITION 5	$195,958.76
PAY REQUISITION 6	$71,510.51
TOTAL PAID TO DATE	$978,018.92
RETAINAGE	
PAY REQUISITION 1	$8,519.57
PAY REQUISITION 2	$7,867.65
PAY REQUISITION 3	$12,613.14
PAY REQUISITION 4	$8,396.99
PAY REQUISITION 5	$10,313.62
PAY REQUISITION 6	$3,763.71
TOTAL RETAINAGE TO DATE	$51,474.68
TOTAL PROJECT AMOUNT	$1,047,686.39
(-) TOTAL COST TO DATE	$1,029,493.60
BALANCE OF CONTRACT	$18,192.79

11-Jul-17
Date

Brad A. Roland, P.E.
Senior Project Engineer
City of Portland Public Works

Project Engineer - Justin R. Pellerin, P.E.
City of Portland Public Works

Not Present
Checked By - Michelle Meserve

City of Portland Public Works

Terri Strouse
Gorham Sand and Gravel

AGREEMENT BETWEEN THE
CITY OF PORTLAND
AND
D. & C. CONSTRUCTION CO., INC.

THIS AGREEMENT is entered into this 27th day of February, 2017, by and between the **CITY OF PORTLAND,** a body politic and corporate, (hereinafter the "**CITY**"), and **D. & C. CONSTRUCTION CO., INC.,** a Massachusetts corporation with a Maine address of P.O. Box 123, Waterboro, Maine 04087 (hereinafter the "**CONTRACTOR**").

W I T N E S S E T H:

WHEREAS, the **CITY** is in need of the installation of sewer and stormwater systems on Woodford Street, Vannah Avenue, Clifton Street, and Forest Avenue and did advertise a Request for Bids #4517 entitled "Woodford Street Sewer Separation" as amended by Addendum 1 dated January 17, 2017, Addendum #2 dated January 25, 2017 and Addendum #3 dated January 27, 2017 (hereinafter, collectively, the "Request for Bids"), a copy of which is attached as Exhibit A and made a part hereof; and

WHEREAS, the **CONTRACTOR** has the requisite knowledge and technical ability to perform the required services and has submitted a proposal for the provision of such services dated January 31, 2017, (hereinafter, the "Proposal") a copy of which is attached as Exhibit B and made a part hereof; and

WHEREAS, after due consideration of all the Bids, the **CITY** did award the bid to the **CONTRACTOR;**

NOW, THEREFORE, in consideration of the mutual promises made by each party to the other, the parties covenant and agree as follows:

1. The **CONTRACTOR** will furnish the materials, supplies, equipment and labor and will perform all work required to construct separated storm and sewer infrastructure (hereinafter the "Work"), in accordance with the specifications contained in the Request

for Bids, and also in accordance with **CONTRACTOR**'s Proposal, including but not limited to:

Standard General Conditions of the Construction Contract (EJCDC)
CWSRF Supplementary Conditions
Appendix A: Boring Logs
Appendix B: Regulatory Agency Permits
MDEP NRPA Permit by Rule Application
Maine Department of Marine Resources Timing of Activity Approval
ACOE Category 2 Permit
Attached Plans:
Contract Drawings Pages 1 through 31

The restatement in this document of any term of the Request for Bids or Proposal shall not be deemed to waive any term not so restated. If any disagreement is found between Request for Bids or the Proposal and this document, then this document shall govern; and the Request for Bids shall govern over the Proposal, to the extent they disagree; provided, however, that this document and its attachments shall be construed to be supplemental to one another to the extent possible.

2. The **CONTRACTOR** covenants and agrees that all Work performed and furnished hereunder shall be free from all defects, and that all Work shall be performed in a good workmanlike manner. Unless a longer warranty period is specified in the Exhibits hereto, all Work provided shall be warranted by the **CONTRACTOR** for one (1) full year from the date of completion of all Work hereunder and acceptance thereof by the **CITY**. Notwithstanding the foregoing, any longer period specified in the attachments shall stay in effect.

3. Prior to the execution of this Agreement, the **CONTRACTOR** will procure and maintain Automobile Insurance and General Public Liability Insurance coverage, including contractual liability coverage, in amounts of not less than One Million Dollars ($1,000,000.00) per occurrence for bodily injury, death and property damage, naming the **CITY** as an additional insured thereon, and also Workers' Compensation Insurance coverage to the extent required by law. With respect to the General Liability and Automobile Liability Insurance, the **CONSULTANT** shall name the **CITY** as an additional insured for coverage only in those areas where government immunity has been expressly waived by 14 M.R.S. A. § 8104-A, as limited by § 8104-B, and § 8111. This provision shall not be deemed a waiver of any defenses, immunities or limitations of liability or damages available under the Maine Tort Claims Act, other Maine statutory law, judicial precedent or common law. With respect to the Liability Insurance, the **CONTRACTOR** will provide the **CITY** a certificate of insurance evidencing such coverage, in this way: certificate must say either: A) "the policy has been endorsed to name the City of Portland as an Additional Insured" and a copy of the endorsement must come to the City of Portland with the certificate, or B) "the policy already includes an endorsement, such as the General Liability Extension Endorsement, by which the City of Portland is automatically made an additional insured." A Certificate which merely has a

box checked under "Addl Insr," or the like, or which merely states the City of Portland is named as an Additional Insured, will not be acceptable. The Workers' Compensation insurance shall include an endorsement waiving all rights of subrogation against the City of Portland, its officers or employees. The **CONTRACTOR** shall furnish the **CITY** and thereafter maintain certificates evidencing all such coverages, which certificates shall guarantee thirty (30) days' notice to the **CITY** of termination of insurance from insurance provider or agent.

4. The **CONTRACTOR** shall furnish to the **CITY**, upon execution of the Contract, a Contract Performance Bond and a Contract Labor and Materials Payment Bond each for the full amount of the Contract and issued by a surety company or surety companies authorized to do business in the State of Maine and approved by the **CITY**. The Bonds shall remain in effect for one year after final acceptance of the Work, and protect the **CITY** for at least one year of warranty of the Work hereunder, and also shall insure settlement of claims for the payment of all bills for labor, materials and equipment.

5. To the fullest extent permitted by law, the **CONTRACTOR** shall defend, indemnify and hold harmless the **CITY**, its officers and employees, from and against all claims, damages, losses, and expenses, just or unjust, including, but not limited to, the costs of defense and attorney's fees arising out of or resulting from the performance of this Agreement, provided that any such claims, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use therefrom, and (2) is caused in whole or in part by any act or omission of the **CONTRACTOR**, anyone directly or indirectly employed by it, or anyone for whose act it may be liable. Such obligation of indemnification shall not be construed to negate or abridge any other obligation of indemnification running to the **CITY** which otherwise exists. The extent of the indemnification provision shall not be limited by the provision for insurance in this Agreement. **CONTRACTOR**'s obligations under this paragraph shall survive termination of this Agreement.

6. Prior to any payment, the **CITY** reserves the right to require Waivers of Lien for materials and labor from the **CONTRACTOR** and its subcontractors and suppliers guaranteeing One Hundred Percent (100%) performance, free and clear from all liens and encumbrances. Any mechanic's lien or any other lien which may be filed against the premises which are the subject of this Agreement by reason of the Work described herein shall be defended (by counsel reasonably acceptable to the **CITY**) and promptly discharged by the **CONTRACTOR** at its own expense. The **CITY** may require the **CONTRACTOR** to provide a bond satisfactory to the **CITY** to indemnify it against any lien and as a substitution in place of a lien. If the **CONTRACTOR** should fail either to defend the **CITY** against the lien or to discharge it, then the **CITY** may do so at the **CONTRACTOR's** expense. In the event of such an undertaking by the **CITY**, the **CONTRACTOR** will promptly reimburse the **CITY** for all its costs and expenses in so doing, including, but not limited to, reimbursement of the **CITY's** reasonable counsel fees, as well as costs which may be incurred by it in substituting a bond in place of a lien. **CONTRACTOR**'s obligations under this paragraph shall survive termination of this Agreement.

7. The **CONTRACTOR** shall perform the work to the satisfaction of the responsible **CITY** official who will have the right of inspection at all times, and whose approval and acceptance of the work will be a condition precedent to payments by the **CITY** under this Contract. **CITY** inspectors will have the authority to stop work in progress if such work is being done contrary to the plans, specifications or engineering practice. **CONTRACTOR** acknowledges and agrees that such inspection is for purposes of approving payment alone and such inspection shall not be deemed to impose any duty or liability upon the **CITY** to supervise any aspect of or approve the quality of the Work.

8. Time is of the essence in the performance of this Agreement. Upon receipt of executed contracts and insurance as required, the **CITY** will promptly send an executed **CITY** contract to the **CONTRACTOR**, which will commence work upon receipt. **CONTRACTOR** shall complete the entire Work by June 30, 2018 as set forth in the schedule below.

9. In the event of any dispute as to the amount, nature or scope of the work required under this Contract, the design and judgment of the Director of the Department of Public Works or his or her designee (hereinafter, the "Director") will be final and binding. The City will have the authority to stop work in progress if such work is being done contrary to the plans, specifications, or engineering practice. In the event that any dispute arises as to the amount, nature or scope of the Work required under this Contract, the decision and judgment of the Director will be final and binding.

10. For performance of all the terms and conditions of this Agreement, the **CITY** will pay the **CONTRACTOR** One Million One Hundred Seventy-Six Thousand Five Hundred Thirty-Five Dollars and Seventy Cents ($1,176,535.70).

11. Payment shall be in accordance with Section 108 – Prior to substantial completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as the **CITY** may determine or may withhold, including but not limited to liquidated damages in accordance with general conditions:

a. 95 percent of work completed (with balance being retainage); and
b. 95 percent of cost of materials and equipment not incorporated in the work (with balance being retainage)

Upon substantial completion, the **CITY** shall pay an amount sufficient to increase total payments to the **CONTRACTOR** to 98 percent of the work completed, less such amounts as the **CITY** shall determine in accordance with general conditions. The final two percent of the value of the Work shall be retained for a period of one year from the date of substantial completion.

12. The **CONTRACTOR** shall keep accurate records of all services performed under this Agreement and shall submit such information to the **CITY** on a monthly basis. Payment for such Work shall be made to the **CONTRACTOR** not more than thirty (30) days after receipt of an invoice and acceptance of the Work by the Director.

13. The **CITY** may terminate this Agreement for cause by written notice to the **CONTRACTOR**. In the event of such termination, the **CONTRACTOR** shall not be entitled to any further payment under this Agreement from the date of receipt of said notice.

14. The **CITY** shall have the right to terminate this Agreement at any time for its convenience on thirty (30) days' prior written notice to the **CONTRACTOR**. If the Agreement is terminated by the **CITY** for convenience, the **CITY** shall pay the **CONTRACTOR** for all Work performed and all materials purchased pursuant to this Agreement prior to receipt of such notice.

15. Out of concern for the public, **CITY** employees and the **CONTRACTOR's** employees, all work performed by the **CONTRACTOR** shall be in conformance with pertinent OSHA, local, state and federal government regulations.

16. Winter construction will be required along Woodford Street for sewer and storm drain work that does not impact water services. The start of work for this project is anticipated to be on or before March 15, 2017. The Contractor is required to complete the storm drain mainline and sewer main installation in Woodford Street by June 1, 2017 in anticipation of an MDOT Project in Forest Avenue. All work that requires paving shall be completed through base paving by August 31, 2017. Surface paving must be completed by June 30, 2018 and the entire project ready for owner acceptance.

The construction of a storm drain outfall at Baxter Boulevard includes work below the normal high water line. This work shall be completed in accordance with NRPA Permit by Rule and US Army Corps of Engineer permit requirements including the Maine Division of Marine Resources Timing of Activity approval. Activity below the normal high water line shall be complete by March 31, 2017.

The **CONTRACTOR** agrees that the winter operations aspect of the project shall be coordinated with the City's winter efforts and the additional costs associated with the activities not be borne by the City. Winter Maintenance shall be considered incidental to the cost of the work and no extra payment will be made. **CONTRACTOR** shall provide a minimum of one loader and necessary personnel for the project site which shall be used for the removal of ice and/or snow during the winter period. **CONTRACTOR** shall plow and remove snow and ice within the area of the project's winter work including but not limited to maintaining access to driveways and side streets, crosswalks and sidewalks. All areas shall have snow and ice removed within 6 hours of start of any storm event. **CONTRACTOR** shall clear the access to driveways and road crossings of snow within the area impacted by the project's winter work. CONTRACTOR shall remove stockpiled snow from the project area when it is necessary for work progress (when the stockpiled snow impacts traffic or when the stockpiled snow impacts sidewalks and school routes).

CONTRACTOR shall provide on-site response to sand/salt treatment, snow plowing, and snow removal operations within one hour of receiving a request from the City.

CONTRACTOR shall provide for maintenance of the trench and driveway aprons impacted by the project's winter work. Replacement materials of sufficient strength and integrity shall be used for roadway and aprons to hold up to winter conditions. The Contractor shall be reasonable for this work which shall be considered incidental to the project.

CONTRACTOR shall not re-stripe the street associated with winter work but shall ensure the delineation of the work zone as the project progresses. Reestablishment of the work zone following a storm will be required when snow removal operations have been completed. No payment will be made for the replacement of traffic control devices.

CONTRACTOR will not be reimbursed for sand/salt treatment, snow plowing, or snow and ice removal operations associated with this project.

In the event that a shut-down period is required, **CONTRACTOR** shall contact the City and a time frame shall be established under mutual agreement only. Any shut-down shall not relieve the contractor of the required completion dates. The contractor shall not be entitled to any claims or extra costs.

CONTRACTOR acknowledges that frozen materials shall not be used in any aspects of the project and the no payment shall be made for the methods necessary to keep materials free from freezing.

17. No waiver of any breach of any one or more of the conditions of this Agreement by the **CITY** shall be deemed to imply or constitute a waiver of any succeeding or other breach hereunder.

18. This Agreement and its attachments represents the entire and complete agreement and understanding between the parties and supersedes any prior agreement or understanding, written or oral, between the parties with respect to the subject matter of this Agreement. This Agreement cannot be amended except by written instrument executed by the **CITY** and **CONTRACTOR.**

19. This Agreement shall be construed in all respects in accordance with, and governed by, the laws of the State of Maine. All parties hereto hereby consent to the exclusive jurisdiction of the Superior Court for the County of Cumberland in the State of Maine, for all actions, proceedings and litigation arising from or relating directly or indirectly to this Agreement or any of the obligations hereunder, and any dispute not otherwise resolved as provided herein shall be litigated solely in said Court.

20. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement. A signature in a pdf or electronic document shall be considered the equivalent of an original signature.

21. **CONTRACTOR** warrants and represents that it has the full right and authority to enter into this Agreement, that there is no impediment that would inhibit its ability to perform their respective obligations under this Agreement, and that the person signing this Agreement on behalf of **CONTRACTOR** has the authority to do so.

IN WITNESS WHEREOF, the said **CITY OF PORTLAND** has caused this Agreement to be signed and sealed by Jon P. Jennings, its City Manager, thereunto duly authorized, **D. & C. CONSTRUCTION CO., INC.** has caused this Agreement to be signed and sealed by RENE L. PERRON, its CONSTRUCTION MANAGER, thereunto duly authorized, the day and date first above written.

WITNESS:

CITY OF PORTLAND

By: _____
Jon P. Jennings
Its City Manager

WITNESS:

D. & C. CONSTRUCTION CO., INC.

By: _____

Print or type name: RENE L. PERRON

Its: CONSTRUCTION MANAGER

Approved as to form:

_____
Corporation Counsel's Office

Approved as to funds:

_____
Finance Director

PROPOSAL

Bid No. 4517
CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS

PROJECT: WOODFORD STREET SEWER SEPARATION

The UNDERSIGNED hereby declares that he/she or they are the only person(s), firm or corporation interested in this application as principal, that it is made without any connection with any other person(s), firm or corporation submitting an application for the same.

The UNDERSIGNED hereby declares that they have read and understand all conditions as outlined in the invitation, and that the application is made in accordance with same.

The UNDERSIGNED hereby declares that any person(s) employed by the City of Portland, Maine, who has direct or indirect personal or financial interest in this application or in any portion of the profits which may be derived therefrom has been identified and the interest disclosed by separate attachment. (Please include in your disclosure any interest which you know of. An example of a direct interest would be a City employee who would be paid to perform services under this application. An example of an indirect interest would be a City employee who is related to any officers, employees, principal or shareholders of your firm or to you. If in doubt as to status or interest, please disclose to the extent known).

The proposer acknowledges the receipt of Addenda numbered 1, 2, 3 (if applicable)

COMPANY NAME: D+C CONSTRUCTION COMPANY, INC.
(Individual, Partnership, Corporation, Joint Venture)

AUTHORIZED SIGNATURE: Gene L. Perron DATE: 1/31/17
(Officer, Authorized Individual or Owner)

PRINT NAME & TITLE: RENE C. PERRON

ADDRESS:
P.O. BOX 415

ROCKLAND, MA. 02370
Zip Code

TELEPHONE: 207-247-6013 FAX: 207-247-6013

24 HOUR #: 207.332-4318

E-MAIL ADDRESS: TLAMCTOTB@YAHOO.COM

FEDERAL TAX I.D. NUMBER: 04-2857181

NOTE: All applications must bear the handwritten signature of a duly authorized member or employee of the organization making the application. This sheet must be signed and returned with proposal page..

BID FORM
PART 1
WOODFORD STREET SEWER
SEPARATION PROJECT
PORTLAND MAINE

Bid Item	Spec No. Pay Item	Quanity	Item with Unit Bid Price Written in Words	Unit Price Dollars	Unit Price Cents	Total Price Dollars	Total Price Cents
1	201.24	EA 5.00	Remove Street Tree and Stump* @SEVEN HUNDRED FIFTY DOLLARS Per Each 00/100	750.	00	3,750.	00
2	202.128	LS 1.00	Removing of Existing Curb, Concrete Sidewalks, and all other Surfacess @TEN THOUSAND DOLLARS Lump Sum 00/100	10,000.	00	10,000.	00
3	202.15	EA 1.00	Remove Manhole or Catch basin @FIVE HUNDRED DOLLARS Per Each 00/100	500.	00	500.	00
4	202.2	SY 3490.00	Remove Bituminous Concrete Pavement (Plan Quantity) @TWO DOLLARS Per Square Yard 00/100	2.	00	6,980.	00
5	203.2	CY 1270.00	Common Excavation @THIRTEEN DOLLARS Per Cubic Yard 00/100	13.	00	16,510.	00
6	203.25	CY 410.00	Granular Borrow* @ ONE CENT Per Cubic Yard		.01	4.	10
7	203.28	VF 30.00	Test Pit Excavation* @FIFTY DOLLARS Per Vertical Foot 00/100	50.	00	1,500.	00
8	203.35	CY 140.00	Crushed Stone (Overdepth)* @ONE CENT Per Cubic Yard		.01	1.	40
9	206.061	CY 140.00	Structural Earth Excavation (Overdepth)* @ONE CENT Per Cubic Yard		.01	1.	40
10	206.07	CY 320.00	Structural Rock Excavation* @ONE CENT Per Cubic Yard		.01	3.	20
11	304.10	CY 1920.00	Agg Subbase Course Type D @TWENTY FOUR DOLLARS Per Cubic Yard 00/100	24.	00	46,080.	00
12	304.15	CY 390.00	Agg Base Course Type B @THIRTY DOLLARS FIFTY CENTS Per Cubic Yard	30.	50	11,895.	00
13	403.207	T 430.00	Hot Mix Asphalt 19.0 MM @NINETY EIGHT DOLLARS Per Ton 00/100	98.	00	42,140	00

Bid Item	Spec No. Pay Item	Quanity	Item with Unit Bid Price Written in Words	Unit Price Dollars	Unit Price Cents	Total Price Dollars	Total Price Cents
14	403.208	T 320.00	Hot Mix Asphalt 12.5 MM @NINETY TWO DOLLARS 00/100 Per Ton	92.	00	29,440.	00
15	603.131	LF 1015.00	8-inch Diameter PVC SDR35 Sewer Pipe @ONE HUNDRED FORTY FOUR DOLLARS 00/100 Per Linear Foot	144.	00	146,160.	00
16	603.159	LF 160.00	12-inch Diameter PVC or HDPE Storm Drain Pipe @NINETY EIGHT DOLLARS 00/100 Per Linear Foot	98.	00	15,680.	00
17	603.199	LF 1215.00	24-inch Diameter PVC or HDPE Storm Drain Pipe @ONE HUNDRED TWENTY DOLLARS 00/100 Per Linear Foot	120.	00	145,800	00
18	603.219	LF 450.00	36-inch Diamater PVC or HDPE Storm Drain Pipe @TWO HUNDRED TWENTY DOLLARS 00/100 Per Linear Foot	220.	00	99,000.	00
19	603.91	EA 2.00	36" Check Valve @THIRTEEN THOUSAND, THREE HUNDRED FIFTY DOLLARS 00/100 Per Each	13,350.	00	26,700.	00
20	604.131	EA 9.00	4-foot Diameter Catch Basin @THREE THOUSAND THREE HUNDRED DOLLARS 00/100 Per Each	3,300.	00	29,700.	00
21	604.15	EA 4.00	4-foot Diameter Manhole @FOUR THOUSAND DOLLARS 00/100 Per Each	4,000.	00	16,000.	00
22	604.151	EA 1.00	4-foot Diameter Outside Drop Manhole @FOUR THOUSAND, EIGHT HUNDRED, FIFTY DOLLARS 00/100 Per Each	4,850.	00	4,850.	00
23	604.153	EA 7.00	5-foot Diameter Manhole @FIVE THOUSAND ONE HUNDRED, FIFTY DOLLARS 00/100 Per Each	5,150.	00	36,050.	00
24	604.154	EA 3.00	6-foot Diameter Manhole @SIX THOUSAND FIVE HUNDRED DOLLARS 00/100 Per Each	6,500	00	19,500.	00
25	604.161	EA 2.00	Altering Catch Basin and Manhole @SEVEN HUNDRED FIFTY DOLLARS 00/100 Per Each	750.	00	1,500.	00
26	604.18	EA 2.00	Adjusting Manhole or Structure to Grade @THREE HUNDRED FIFTY DOLLARS Per Each	350.	00	700.	00

Bid Item	Spec No. Pay Item	Quanity	Item with Unit Bid Price Written in Words	Unit Price Dollars	Unit Price Cents	Total Price Dollars	Total Price Cents
27	608.08	SY 377.00	Reinforced Concrete Sidewalk @NINETY DOLLARS Per Square Yard 00/100	90.	00	33,930.	00
28	608.12	SY 295.00	Bituminous Driveway Apron @FIFTY FIVE DOLLARS Per Square Yard 00/100	55.	00	16,225.	00
29	608.15	SY 25.00	Brick Sidewalk with Bituminous Base @ONE HUNDRED FIFTY DOLLARS Per Square Yard 00/100	150.	00	3,750.	00
30	608.26	SF 66.00	Pedestrian Ramp with Detectable Warning Surface @FIFTY DOLLARS Per Square Foot 00/100	50.	00	3,300.	00
31	608.27	SY 30.00	Stone Dust Path @FIFTY DOLLARS Per Square Yard 00/100	50.	00	1,500.	00
32	609.11	LF 757.00	Vertical Curb Type 1 @TWENTY SEVEN DOLLARS Per Linear Foot 00/100	27.	00	20,439.	00
33	609.12	LF 40.00	Vertical Curb Type 1 Circular @THIRTY NINE DOLLARS FIFTY CENTS Per Linear Foot	39.	50	1,580.	00
34	609.234	EA 12.00	Terminal Curb Type 1 4-foot @ONE HUNDRED FIFTEEN DOLLARS Per Each 00/100	115.	00	1,380.	00
35	609.2341	EA 4.00	Terminal Curb Type 1 4-foot - Circular @ONE HUNDRED SIXTY FIVE DOLLARS Per Each 00/100	165.	00	660.	00
36	609.237	EA 9.00	Terminal Curb Type 1 7-foot @TWO HUNDRED TEN DOLLARS Per Each 00/100	210.	00	1,890.	00
37	609.38	LF 244.00	Remove and Reset Type 1 Curb @TWENTY EIGHT DOLLARS Per Linear Foot 00/100	28.	00	6,832.	00
38	609.5	SY 5.00	Cobblestone Gutter @ONE HUNDRED EIGHTY DOLLARS Per Square Yard 00/100	180.	00	900.	00
39	610.08	CY 70.00	Plain Riprap @FIFTY TWO DOLLARS Per Cubic Yard	52.	00	3,640.	00

Bid Item	Spec No. Pay Item	Quanity	Item with Unit Bid Price Written in Words	Unit Price Dollars	Unit Price Cents	Total Price Dollars	Total Price Cents
40	614.14	EA 2.00	Masonry Plug > 8" @ TWO HUNDRED DOLLARS 00/100 Per Each	200.	00	400.	00
41	615.072	SY 650.00	Loam, Seed and Mulch @ SEVEN DOLLARS FIFTY CENTS Per Square Yard	7.	50	4,875.	00
42	627.711	LF 5960.00	White or Yellow Pavement Marking Line- Plan Quantity @ FORTY SIX CENTS Per Linear Foot		.46	2,741.	60
43	629.05	HR 40.00	Hand Labor, Straight Time* @ FORTY DOLLARS 00/100 Per Hour	40.	00	1,600.	00
44	629.06	HR 40.00	Mason, Straight Time* @ FIFTY DOLLARS 00/100 Per Hour	50.	00	2,000.	00
45	631.105	HR 40.00	Air Tool and Compressor (inc operator)* @ SEVENTY FIVE DOLLARS 00/100 Per Hour	75	00	3,000.	00
46	631.12	HR 40.00	All Purpose Large Capacity Excavator (inc operator)* @ ONE HUNDRED FIFTEEN DOLLARS 00/100 Per Hour	115.	00	4,600.	00
47	631.13	HR 40.00	Bulldozer (inc operator)* @ NINETY DOLLARS 00/100 Per Hour	90.	00	3,600.	00
48	631.172	HR 40.00	Truck - Large or Small (inc operator)* @ SIXTY TWO DOLLARS 00/100 Per Hour	62.	00	2,480.	00
49	631.22	HR 40.00	Front End Loader (inc operator)* @ NINETY DOLLARS 00/100 Per Hour	90.	00	3,600.	00
50	631.36	HR 40.00	Foreman, Straight Time* @ FIFTY DOLLARS 00/100 Per Hour	50.	00	2,000.	00
51	632.054	EA 23.00	4" and 6" Wye Pipe Connection @ ONE HUNDRED FIFTEEN DOLLARS 00/100 Per Each	115.	00	2,645.	00
52	632.055	EA 8.00	4" and 6" Inserta-Tee Pipe Connection* @ TWO HUNDRED DOLLARS 00/100 Per Each	200.	00	1,600	00

Bid Item	Spec No. Pay Item	Quanity	Item with Unit Bid Price Written in Words	Unit Price Dollars	Unit Price Cents	Total Price Dollars	Total Price Cents
53	633.07	LF 557.00	4" or 6" Sewer Lateral @EIGHTY EIGHT DOLLARS Per Linear Foot 00/100	88	00	49,016.	00
54	637.071	LS 1.00	Dust Control @FIVE THOUSAND DOLLARS Lump Sum 00/100	5,000.	00	5,000.	00
55	652.38	HR 1900.00	Flagger @TWENTY NINE DOLLARS Per Hour 00/100	29.	00	55,100.	00
56	652.39	LS 1.00	Work Zone Traffic Control @FORTY THOUSAND DOLLARS Lump Sum 00/100	40,000.	00	40,000.	00
57	654.08	EA 34.00	Trench Density Test @SIXTY DOLLARS Per Each 00/100	60.	00	2,040.	00
58	656.75	LS 1.00	Temp. Soil and Water Pollution Control @FIVE THOUSAND DOLLARS Lump Sum 00/100	5,000	00	5,000.	00
59	670.08	EA 1.00	Nutrient Baffle Box @ONE HUNDRED SIXTEEN THOUSAND, SEVEN HUNDRED SIXTY SEVEN DOLLARS Per Each 00/100	116,767.	00	116,767.	00
60	659.1	LS 1.00	Mobilization and General Conditions @SIXTY TWO THOUSAND DOLLARS Lump Sum 00/100	62,000.	00	62,000.	00

TOTAL AMOUNT OF BASE BID, WRITTEN AND IN FIGURES BASED ON ESTIMATE OF QUANTITIES.	TOTAL PRICE
ONE MILLION, ONE HUNDRED SEVENTY SIX THOUSAND, FIVE HUNDRED THIRTY FIVE DOLLARS, SEVENTY CENTS	1,176,535. 70

The pay items with quantities marked with an asterisk (*) on the bid sheets are for quantities that are indeterminate. Some pay items with an asterisk (*) maybe for work that is not anticipated at time of bid. These items are part of the Contract Proposal and will also be used should any extra work be necessary. Actual quantities will be measured in the field or calculated from the contract drawings. The unit price will be used regardless of final quantity.

BID SCHEDULE
PART 2- PORTLAND WATER DISTRICT
WOODFORD STREET
WATER MAIN REPLACEMENTS

Item No.	Quanity	Item with Unit Bid Price Written in Words	Unit Price Dollars	Unit Price Cents	Total Price Dollars	Total Price Cents
W1	LF 1280.00	8-in Ductile Iron Water Main @ONE HUNDRED THIRTY TWO DOLLARS Per Linear Foot 00/100	132.	00	168,960.	00
W2	LS 1.00	Hydrant Woodford Street Sta 8+90 @FIVE THOUSAND EIGHT HUNDRED DOLLARS Lump Sum 00/100	5,800.	00	5800.	00
W3	LS 1.00	Hydrant Woodford Street Sta 14+40 @FIVE THOUSAND EIGHT HUNDRED DOLLARS Lump Sum 00/100	5,800.	00	5800	00
W4	EA 1.00	12x8 Tapping Sleeve with 8-Inch Gate Valve @SIX THOUSAND TWO HUNDRED DOLLARS Per Each 00/100	6,200	00	6,200.	00
W5	EA 4.00	8-inch Gate Valve @ONE THOUSAND, SEVEN HUNDRED NINETY FIVE DOLLARS Per Each 00/100	1,795.	00	7,180.	00
W6	EA 1.00	2-inch Blowoff @TWO THOUSAND FIFTY DOLLARS Per Each 00/100	2,050.	00	2,050.	00
W7	EA 1.00	1-inch Air Release Valve @SIX HUNDRED FIFTEEN DOLLARS Per Each 00/100	615.	00	615.	00
W8	EA 10.00	1-inch Copper Service - Shortside @ONE THOUSAND, SIX HUNDRED DOLLARS Per Each 00/100	1,600	00	16,000.	00
W9	EA 17.00	1-inch Copper Service - Longside @TWO THOUSAND NINE HUNDRED FIFTY DOLLARS Per Each 00/100	2,950.	00	50,150.	00
W10	EA 1.00	1-1/2 inch Copper Service - Shortside @TWO THOUSAND EIGHT HUNDRED DOLLARS Per Each 00/100	2,800	00	2,800.	00
W11	CY 1.00	1-inch Copper Service - Reconnect @ONE THOUSAND ONE HUNDRED DOLLARS Per Cubic Yard 00/100	1,100.	00	1,100.	00
W12	CY 114.00	Gravel Borrow @ONE CENT Per Cubic Yard		.01	1.	14
W13	CY 114.00	Unsuitable Material Excavated Below Grade @ONE CENT Per Cubic Yard		.01	1.	14
W14	CY 456.00	Rock Excavation @ONE CENT Per Cubic Yard		.01	4.	56
W15	SY 1460.00	Roadway Pavement Removal - Plan Quantity @TWO DOLLARS TWENTY FIVE CENTS Per Square Yard	2.	25	3,285.	00
W16	CY 500.00	Aggregate Subbase Course Type D @TWENTY FOUR DOLLARS Per Cubic Yard 00/100	24.	00	12,000	00

BID SCHEDULE
PART 2- PORTLAND WATER DISTRICT
WOODFORD STREET
WATER MAIN REPLACEMENTS

Item No.	Quanity	Item with Unit Bid Price Written in Words	Unit Price Dollars	Unit Price Cents	Total Price Dollars	Total Price Cents
W17	CY 120.00	Aggregate Base Course Type B @THIRTY DOLLARS, FIFTY CENTS Per Cubic Yard	30.	50	3,660.	00
W18	TON 210.00	HMA Binder Course - 19MM @NINETY EIGHT DOLLARS Per Ton 00/100	98.	00	20,580.	00
W19	TON 160.00	HMA Surface Course - 12.5MM @NINETY TWO DOLLARS Per Ton 00/100	92.	00	14,720.	00
W20	SY 80.00	Reinforced Concrete Sidewalk @NINETY DOLLARS Per Square Yard 00/100	90.	00	7,200.	00
W21	SY 10.00	Brick Sidewalk with Bituminous Base @ONE HUNDRED, EIGHTY FIVE DOLLARS Per Square Yard 00/100	185.	00	1,850.	00
W22	LF 210.00	Remove and Reset Type 1 Curb @TWENTY EIGHT DOLLARS Per Linear Foot 00/100	28.	00	5,880.	00
W23	HR 900.00	Flaggers @TWENTY NINE DOLLARS Per Hour 00/100	29.	00	26,100.	00
W24	HR 20.00	Foreman @FIFTY DOLLARS Per Hour 00/100	50.	00	1,000.	00
W25	HR 20.00	Laborer @FORTY DOLLARS Per Hour 00/100	40.	00	800.	00
W26	HR 20.00	Excavator with Operator @ONE HUNDRED FIFTEEN DOLLARS Per Hour 00/100	115.	00	2,300.	00
W27	HR 20.00	Loader with Operator @NINETY FIVE DOLLARS Per Hour 00/100	95.	00	1,900.	00
W28	HR 20.00	Dump Truck with Driver @SIXTY TWO DOLLARS Per Hour 00/100	62.	00	1,240.	00
W29	LS 1.00	8" Ductile Iron Water Main Offset @FOUR THOUSAND SIX HUNDRED FIFTY DOLLARS Lump Sum 00/100	4,650.	00	4,650.	00
W30	LS 1.00	Hydrant Woodford Street Sta 17+00 @FIVE THOUSAND, EIGHT HUNDRED DOLLARS Lump Sum 00/100	5,800	00	5,800	00

TOTAL AMOUNT OF BASE BID, WRITTEN AND IN FIGURES BASED ON ESTIMATE OF QUANTITIES.	TOTAL COST
THREE HUNDRED SEVENTY NINE THOUSAND, SIX HUNDRED TWENTY SIX DOLLARS, EIGHTY FOUR CENTS	379,626.84

Sewer Separation Bid = $ 1,176,535.10

Water Main Replacement Bid = $ 379,626.84

Total Base Bid = $ 1,556,162.54
(Basis of Award)

The undersigned also agrees as follows:

FIRST: To do any extra work, not covered by the above schedule of items, which may be ordered, and to accept as full compensation therefore such prices as may be agreed upon in writing by the Engineer and the Contractor; or in case no agreement is made, to accept as full compensation the amount determined upon a "force account" basis as provided in the M.D.O.T. Standard Specifications, Revision of November 2014.

SECOND: To begin work on the date specified in the Engineer's "Notice to Commence Work" and to prosecute said work in such a manner as to complete it within the time limits given in the Special Provisions. Further, that monies will be deducted as liquidated damages at the rate specified in Subsection 107.7.2 "Schedule of Liquidated Damages" for each day that the work shall remain uncompleted after the time herein specified for completion of the work.

THIRD: That this offer is to continue open to acceptance until the formal contract is executed by the successful bidder of this work, and the City may at any time without notice accept this proposal whether any other proposal has previously been accepted or not. Provided, however, that the City will accept, in writing, one of the proposals made, or reject all proposals made, within sixty (60) calendar days after the date of opening of the proposals.

The undersigned as Bidder, declares that the only persons or parties interested in this Proposal are those named herein; that the bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on this contract; and that this Proposal is made without collusion with any other person, firm or corporation.

"The undersigned declares that any person(s) employed by the City of Portland, Maine, who has direct or indirect personal or financial interest in this proposal or in any portion of the profits which maybe derived therefrom, has been identified and the interest disclosed by separate attachment. (Please include in your disclosure any interest which you know of. An example of a direct interest would be a City employee who would be paid to perform services under this proposal. An example of an indirect interest would be a City employee who is related to any officers, employees, principal or shareholders of your firm or you.) If in doubt as to status or interest, please disclose to the extent known."

Respectfully submitted this 31 day of January, 2017

IF AN INDIVIDUAL, SIGN HERE

Signature of Bidder_____

Address_____

_____

(Signatures for a Firm, Partnership or Corporation on next page.)

PROPOSAL (continued)

IF A FIRM OR PARTNERSHIP, SIGN HERE

Signature of Bidder_____

Name of Firm or Partnership_____

Business Address_____

Telephone Number_____ Fax Number_____

Soc. Sec. No. or Tax I.D. Number_____

Names and Addresses of Members of Firm or Partnership:

_____

_____

_____

IF A CORPORATION, SIGN HERE

Name of Bidder D+C CONSTRUCTION COMPANY, INC.

Authorized Signature Rene L. Perron C.M.
(name) (title)

Business Address PO BOX 415, ROCKLAND, MASS. 02370.

Telephone Number 207-247-6023 Fax Number 207-247-6013

Soc. Sec. No. or Tax I.D. Number 04-2857181

Incorporated under the Laws of the State of MASSACHUSETTS

Names and Addresses of Officers of the Corporation:

President BRADFORD S CLEAVES

Secretary ANTONIO DIGIACOMO

Treasurer BRADFORD S. CLEAVES ss

Before me, personally appeared RENE L. PERRON and acknowledged that the signature to the preceding bid is his/her signature in his/her official capacity.

Date: 1/26/17

Tatiana Lanctot
Notary Public - Signature and Seal

ALL CORPORATIONS MUST SIGN THIS FORM
AND SUBMIT WITH THE BID PROPOSAL

(Insert copy of that part of the records of the corporation wherein authority is given to the officer of that corporation to sign this bid on behalf of the corporation.)

SEE ATTACHED CERTIFICATE OF VOTE.

1/20/17
(date)

The above is a true copy of the records of the D + C CONSTRUCTION COMPANY, INC.

Corporation, which records are in my legal custody.

RENE L. PERRON
Officer having custody of the records

_____ ss

Before me appeared, RENE L. PERRON

CONSTRUCTION MANAGER of the D + C CONSTRUCTION COMPANY, Corporation, and

made oath that the above statement ~~is true.~~

Tammy Lanctot
Notary Public - Signature of Notary

TAMMY LANCTOT
NOTARY PUBLIC
STATE OF MAINE
MY COMM. EXP. SEPTEMBER 4, 2023

NOTICE

(This Must Be Filled Out)

The full names and residences of all persons interested in this bid as principals are as follows: (In case of Corporation, include and identify President, Treasurer, Manager)

BRADFORD S CLEAVES	PRESIDENT / TREASURER
ANTONIO DIGIACOMO	SECRETARY / CLERK
RENE L. PERRON	CONSTRUCTION / PROJECT MANAGER

ALL CONTRACTORS SHALL FILL IN THE FOLLOWING INFORMATION
BEFORE SUBMITTING BID

	Name and Address of Contractor	Products to be Supplied
1	E.J. PRESCOTT GARNER, ME.	PIPE
2	GEO. ROBERTS Co. ALFRED, ME	PRE-CAST
3	PORTLAND SAND & GRAVEL GRAY, ME	AGGREGATES
4	SUNTREE TECH COCOA, FL.	BAFFLE BOX
5	P	
6		
7		

	Name and Address of Contractor	Service or Trades to be Supplied	Anticipated $ Amount
1	DAYTON SAND & GRAVEL DAYTON ME	PAVING	100,000.00
2	PETER LYFORD, GORHAM ME	SEEDING	1,000.00
3	GRANITE STATE CURB SUNCOOK N.H	CURBING	25,600.00
4	PLOWMAN CONSTRUCTION WINDAM, ME	FLAGGING	61,500.00
5	ZEBRA STRIPING SCARBORO, ME	PAVEMENT MARKINGS	2,400.00
6			
7			

City of Portland - Department of Public Works - Water Resources

Woodford Street Sewer Separation

Payment 6

D&C Construction, Inc.
P.O. Box 123
Waterboro, ME 04087
207-247-6023

Purchase Order No.: 43770

Account No.	Project Code	Amount
375-3100-500.70-10	C17504	$1,083,856.70
300-3100-492.70-10	C17104	$92,679.00

Payment Period:
Through: August 31, 2017
Submitted: September 8, 2017
Processed: September 12, 2017

Base Bid	SRF Vs Non	ITEM #	DESCRIPTION	UNIT	EST QTY	UNIT PRICE	ESTIMATED AMT	Pay Req 6 QTY REQ	Pay Req 6 AMOUNT REQUESTED	Previous Amount PREV QTY	Previous Amount AMOUNT REQUESTED	QTY TO DATE	AMOUNT TO DATE	% COMPLETE
		201.24	Remove Street Tree and Stump	EA	5	$750.00	$3,750.00	✓ 1.0	$750.00	4.00	$3,000.00	5.00	$3,750.00	100%
		202.128	Remove Ex Curb, Sidewalks	LS	1	$10,000.00	$10,000.00		$0.00	1.00	$10,000.00	1.00	$10,000.00	100%
		202.15	Remove Manhole or Catch Basin	EA	1	$500.00	$500.00		$0.00	0.50	$250.00	0.50	$250.00	50%
		202.2	Remove Bit Concrete Pavement	SY	3,490	$2.00	$6,980.00		$0.00	3490.00	$6,980.00	3490.00	$6,980.00	100%
	Non	203.2	Common Excavation	CY	1,270	$13.00	$16,510.00		$0.00	1270.00	$16,510.00	1270.00	$16,510.00	100%
		203.25	Granular Borrow	CY	410	$0.01	$4.10		$0.00	0.00	$0.00	0.00	$0.00	0%
		203.28	Test Pit Excavation	VF	30	$50.00	$1,500.00		$0.00	0.00	$0.00	0.00	$0.00	0%
		203.35	Crushed Stone	CY	140	$0.01	$1.40		$0.00	0.00	$0.00	0.00	$0.00	0%
		206.061	Structural Earth Excavation	CY	140	$0.01	$1.40		$0.00	0.00	$0.00	0.00	$0.00	0%
		206.07	Structural Rock Excavation	CY	320	$0.01	$3.20		$0.00	0.00	$0.00	0.00	$0.00	0%
	Non	304.1	Agg Subbase Course Type D	CY	1,005	$24.00	$24,120.00		$0.00	1005.32	$24,127.68	1005.32	$24,127.68	100%
		304.1	Agg Subbase Course Type D	CY	915	$24.00	$21,960.00		$0.00	914.68	$21,952.32	914.68	$21,952.32	100%
		304.15	Agg Base Course Type B	CY	390	$30.50	$11,895.00		$0.00	390.00	$11,895.00	390.00	$11,895.00	100%
		403.207	Hot Mix Asphalt 19.0MM	TON	430	$98.00	$42,140.00	✓40.20	$3,939.60	460.00	$45,080.00	500.20	$49,019.60	116%
		403.208	Hot Mix Asphalt 12.5 MM	TON	320	$92.00	$29,440.00	✓28.35	$2,608.20	0.00	$0.00	28.35	$2,608.20	9%
		603.131	8" SDR35 Sewer Pipe	LF	1,015	$144.00	$146,160.00		$0.00	995.91	$143,411.04	995.91	$143,411.04	98%
		603.159	12" Storm Drain Pipe	LF	160	$98.00	$15,680.00		$0.00	218.89	$21,451.22	218.89	$21,451.22	137%
		603.199	24" Storm Drain Pipe	LF	1,215	$120.00	$145,800.00		$0.00	1205.16	$144,619.20	1205.16	$144,619.20	99%
		603.219	36" Storm Drain Pipe	LF	450	$220.00	$99,000.00		$0.00	415.00	$91,300.00	415.00	$91,300.00	92%
		603.91	36" Check Valve	EA	2	$13,350.00	$26,700.00	✓0.65	$8,677.50	1.00	$13,350.00	1.65	$22,027.50	83%
		604.131	4' Catch Basin	EA	9	$3,300.00	$29,700.00		$0.00	7.00	$23,100.00	7.00	$23,100.00	78%
		604.15	4' Manhole	EA	4	$4,000.00	$16,000.00		$0.00	4.00	$16,000.00	4.00	$16,000.00	100%
		604.151	4' Outside Drop Manhole	EA	1	$4,850.00	$4,850.00		$0.00	1.00	$4,850.00	1.00	$4,850.00	100%
		604.153	5' Manhole	EA	7	$5,150.00	$36,050.00		$0.00	6.00	$30,900.00	6.00	$30,900.00	86%
		604.154	6' Manhole	EA	3	$6,500.00	$19,500.00		$0.00	3.00	$19,500.00	3.00	$19,500.00	100%
		604.161	Altering CB and MH	EA	2	$750.00	$1,500.00		$0.00	5.00	$3,750.00	5.00	$3,750.00	250%
		604.18	Adjusting MH to Grade	EA	2	$350.00	$700.00	✓ 1.0	$350.00	0.00	$0.00	1.00	$350.00	50%
	Non	608.08	Reinforced Concrete Sidewalk	SY	290	$90.00	$26,100.00	277.09	$24,938.10	0.00	$0.00	277.09	$24,938.10	96%
		608.08	Reinforced Concrete Sidewalk	SY	87	$90.00	$7,830.00	87.00	$7,830.00	0.00	$0.00	87.00	$7,830.00	100%
		608.12	Bituminous Driveway Apron	SY	295	$55.00	$16,225.00	✓171.87	$9,452.85	0.00	$0.00	171.87	$9,452.85	58%
		608.15	Brick Sidewalk with Bit Base	SY	25	$150.00	$3,750.00	✓30.04	$4,506.00	0.00	$0.00	30.04	$4,506.00	120%
		608.26	Pedestrian Ramp w/ Detectable Warning Surface	SF	66	$50.00	$3,300.00	✓28.00	$1,400.00	0.00	$0.00	28.00	$1,400.00	42%
		608.27	Stone Dust Path	SY	30	$50.00	$1,500.00	✓44.4	$2,220.00	24.00	$1,200.00	68.40	$3,420.00	228%
			Base Bid Subtotal				$769,150.10		$66,672.25		$653,226.46		$719,898.71	

277.09
87.

364.09 D+C
362.04 me

Base Bid

ITEM #	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	EST AMT	Pay Req 6 QTY REQ	Pay Req 6 PREVIOUS AMOUNT	Previous Amount PREV QTY	Previous Amount AMOUNT REQUESTED	QTY TO DATE	AMOUNT TO DATE	% COMPLETE
609.11	Non Vertical Curb Type 1	LF	757	$27.00	$20,439.00	693.5	$18,724.50	0.0	$0.00	693.5	$18,724.50	92%
609.12	Non Vertical Curb Type 1 Circular	LF	40	$39.50	$1,580.00	18.5	$730.75	0.0	$0.00	18.5	$730.75	46%
609.234	Non Terminal Curb Type 1 4'	EA	12	$115.00	$1,380.00	4.0	$460.00	0.0	$0.00	4.0	$460.00	33%
609.234	Non Terminal Curb Type 1 4' Circular	EA	4	$165.00	$660.00	5.0	$825.00	0.0	$0.00	5.0	$825.00	125%
609.237	Non Terminal Curb Type 1 7'	EA	9	$210.00	$1,890.00	8.0	$1,680.00	0.0	$0.00	8.0	$1,680.00	89%
609.38	Remove and Reset Type 1 Curb	LF	244	$28.00	$6,832.00	2.0	$56.00	132.3	$3,703.28	134.3	$3,759.28	55%
609.5	Cobblestone Gutter	SY	5	$180.00	$900.00		$0.00	0.0	$0.00	0.0	$0.00	0%
610.08	Plain Riprap	CY	70	$52.00	$3,640.00		$0.00	70.0	$3,640.00	70.0	$3,640.00	100%
614.14	Masonry Plug > 8"	EA	2	$200.00	$400.00		$0.00	6.0	$1,200.00	6.0	$1,200.00	300%
615.072	Loam, Seed and Mulch	SY	650	$7.50	$4,875.00	1633.5	$12,251.25	0.0	$0.00	1633.5	$12,251.25	251%
627.711	Pavement Marking Line	LF	5,960	$0.46	$2,741.60		$0.00	0.0	$0.00	0.0	$0.00	0%
629.05	Hand Labor, Straight Time	HR	40	$40.00	$1,600.00	5.0	$200.00	7.0	$280.00	12.0	$480.00	30%
629.06	Mason, Straight Time	HR	40	$50.00	$2,000.00		$0.00	0.0	$0.00	0.0	$0.00	0%
631.105	Air Tool & Compressor (incl. op)	HR	40	$75.00	$3,000.00		$0.00	0.0	$0.00	0.0	$0.00	0%
631.12	Excavator (incl. operator)	HR	40	$115.00	$4,600.00	11.0	$1,265.00	5.0	$575.00	16.0	$1,840.00	40%
631.13	Bulldozer (incl. operator)	HR	40	$90.00	$3,600.00		$0.00	0.0	$0.00	0.0	$0.00	0%
631.172	Truck (incl. operator)	HR	40	$62.00	$2,480.00	6.0	$372.00	1.0	$62.00	7.0	$434.00	18%
631.22	Front End Loader (incl. operator)	HR	40	$90.00	$3,600.00		$0.00	0.0	$0.00	0.0	$0.00	0%
631.36	Foreman, Straight Time	HR	40	$50.00	$2,000.00	5.0	$250.00	4.0	$200.00	9.0	$450.00	23%
632.054	4" and 6" Wype Pipe Connection	EA	23	$115.00	$2,645.00		$0.00	25.0	$2,875.00	25.0	$2,875.00	109%
632.055	4" and 6" Inserta-Tee Pipe Connection	EA	8	$200.00	$1,600.00		$0.00	2.0	$400.00	2.0	$400.00	25%
633.07	4" or 6" Sewer Lateral	LF	557	$88.00	$49,016.00		$0.00	557.0	$49,016.00	557.0	$49,016.00	100%
637.071	Dust Control	LS	1	$5,000.00	$5,000.00	0.1	$500.00	0.9	$4,500.00	1.0	$5,000.00	100%
652.38	Flagger	HR	1,900	$29.00	$55,100.00	217.5	$6,307.50	1303.5	$37,801.50	1521.0	$44,109.00	80%
652.39	Work Zone Traffic Control	LS	1	$40,000.00	$40,000.00	0.2	$6,000.00	0.9	$34,000.00	1.0	$40,000.00	100%
654.08	Trench Density Test	EA	34	$60.00	$2,040.00		$0.00	12.0	$720.00	12.0	$720.00	35%
656.75	Temp. Soil and Water Pollution Control	LS	1	$5,000.00	$5,000.00	0.1	$500.00	0.9	$4,500.00	1.0	$5,000.00	100%
670.08	Nutrient Baffle Box	EA	1	$116,767.00	$116,767.00		$0.00	1.0	$116,767.00	1.0	$116,767.00	100%
659.1	Mobilization and General Conditions	LS	1	$62,000.00	$62,000.00		$0.00	1.0	$62,000.00	1.0	$62,000.00	100%
	Project Base Bid Total				$1,176,535.70		$116,794.25		$975,466.24		$1,092,260.49	

Contract Amendment 1

ITEM #	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	EST AMT	Pay Req 6 QTY REQ	Pay Req 6 PREVIOUS AMOUNT	Previous Amount PREV QTY	Previous Amount AMOUNT REQUESTED	QTY TO DATE	AMOUNT TO DATE	% COMPLETE
City Funded - 300-3100-492.70-10 C17104												
Retaining wall for the sidewalk installation at 51 Melrose Street												
	Retaining Wall and Fence	LS	1	$18,050.34	$18,050.34	1.0	$18,050.34	0.0	$0.00	1.0	$18,050.34	100%
	Contract Amendment 1				$18,050.34		$18,050.34		$0.00		$18,050.34	
	Project Total				$1,194,586.04		$134,844.59		$975,466.24		$1,110,310.83	93%

BASE BID - SRF ELIGIBLE	$1,083,856.70
BASE BID - NON-SRF	$92,679.00
CA 1 - NON-SRF	$18,050.34
PROJECT TOTAL	$1,194,586.04

TOTAL THIS ESTIMATE	→	$134,844.59
RETAINAGE (5%) - LINE ITEM 1 - C17504	→	$6,742.00
***** PAY THIS ESTIMATE ****		$128,102.59

Purchase Order No.: 43770

PAY THIS ESTIMATE - C17504	LINE ITEM 1	→	$62,693.90
PAY THIS ESTIMATE - C17104	LINE ITEM 2	→	$47,358.35
PAY THIS ESTIMATE - C17104	LINE ITEM 3	→	$18,050.34
	TOTAL PAYMENT		$128,102.59

PAID	
PAY REQUISITION 1	$219,242.62
PAY REQUISITION 2	$233,983.77
PAY REQUISITION 3	$217,625.51
PAY REQUISITION 4	$125,199.38
PAY REQUISITION 5	$130,641.96
PAY REQUISITION 6	$128,102.59
TOTAL PAID TO DATE	$1,054,795.83

RETAINAGE	
PAY REQUISITION 1	$11,539.00
PAY REQUISITION 2	$12,315.00
PAY REQUISITION 3	$11,454.00
PAY REQUISITION 4	$6,589.00
PAY REQUISITION 5	$6,876.00
PAY REQUISITION 6	$6,742.00
TOTAL RETAINAGE TO DATE	$55,515.00

TOTAL PROJECT AMOUNT	$1,194,586.04
(-) TOTAL COST TO DATE	$1,110,310.83
BALANCE OF CONTRACT	$84,275.21

PERCENTAGE PROJECT COMPLETE: FINANCIAL SRF ELIGIBILE	→	93%
PERCENTAGE PROJECT COMPLETE: TIME	→	100%

Authorization Given: February 27, 2017
Due Date: August 31, 2017

Sept. 28, 2017
Date

Bradley A. Roland, P.E.
Senior Project Engineer

Peter Dubail
Associate Engineer

Bradford Cleaves
D&C Construction

AGREEMENT BETWEEN THE
CITY OF PORTLAND
AND
R.E. COLEMAN, INC.

THIS AGREEMENT is entered into this 7th day of September 2017, by and between the **CITY OF PORTLAND,** a body politic and corporate, (hereinafter the "**CITY**"), and **R.E. COLEMAN, INC.,** a Maine corporation with an address of 126 Industrial Way, Portland, Maine 04103-1082 (hereinafter the "**CONTRACTOR**").

W I T N E S S E T H:

WHEREAS, the CITY is in need of a new sewer system on Powsland and Mitton Streets and did advertise a Request for Bids #18004 dated July 17, 2017 entitled "Powsland Street/ Mitton Street Sewer Replacement" as amended by Addenda No. 1 dated July 28, 2017 and No. 2 dated August 2, 2017, (hereinafter, collectively, the "Request for Bids") a copy of which is attached as Exhibit A and made a part hereof; and

WHEREAS, the CONTRACTOR has the requisite knowledge and technical ability to perform the required services and has submitted a proposal for the provision of such services dated August 9, 2017, (hereinafter, the "Proposal") a copy of which is attached as Exhibit B and made a part hereof; and

WHEREAS, after due consideration of all the Bids, the CITY did award the bid to the CONTRACTOR;

NOW, THEREFORE, in consideration of the mutual promises made by each party to the other, the parties covenant and agree as follows:

1. The CONTRACTOR will furnish the materials, supplies, equipment and labor (hereinafter the "Work") in accordance with the Request for Bids, and also in accordance with the CONTRACTOR's Proposal all of which are made a part of this Contract.

   The restatement in this document of any term of the Request for Bids or Proposal shall not be deemed to waive any term not so restated. If any disagreement is found between

the Request for Bids or the Proposal and this document, then this document shall govern; and the Request for Bids shall govern over the Proposal, to the extent they disagree; provided, however, that this document and its attachments shall be construed to be supplemental to one another to the extent possible.

2. The CONTRACTOR covenants and agrees that all Work performed and furnished hereunder shall be free from all defects, and that all Work shall be performed in a good workmanlike manner. Unless a longer warranty period is specified in the Exhibits hereto, all Work provided shall be warranted by the CONTRACTOR for one (1) full year from the date of completion of all Work hereunder and acceptance thereof by the CITY. Notwithstanding the foregoing, any longer period specified in the attachments shall stay in effect.

3. Prior to the execution of this Agreement, the CONTRACTOR will procure and maintain occurrence-based Automobile Liability Insurance and Commercial General Liability Insurance coverage in amounts of not less than Four Hundred Thousand Dollars ($400,000.00) per occurrence for bodily injury, death and property damage, naming the CITY as an additional insured thereon, and also Workers' Compensation Insurance coverage to the extent required by law. With respect to the Automobile and Commercial General Liability Insurance, the CONTRACTOR shall name the CITY as an additional insured for coverage only in those areas where government immunity has been expressly waived by 14 M.R.S. A. § 8104-A, as limited by § 8104-B, and § 8111. This provision shall not be deemed a waiver of any defenses, immunities or limitations of liability or damages available to the CITY under the Maine Tort Claims Act, other Maine statutory law, judicial precedent, common law, or any other defenses, immunities or limitations of liability available to the CITY. Prior to execution of this Agreement, the CONTRACTOR shall furnish the CITY and thereafter maintain certificates evidencing all such coverages, which certificates shall guarantee thirty (30) days' notice to the CITY of termination of insurance from the insurance provider or agent. CONTRACTOR shall also provide a copy of any endorsement naming the CITY as additional insured. A certificate that merely has a box checked under "Addl Insr," or the like, or that merely states the City of Portland is named as an Additional Insured, will not be acceptable. The Workers' Compensation insurance shall include an endorsement waiving all rights of subrogation against the City of Portland, its officers or employees. Upon CITY'S request, CONTRACTOR shall provide CITY with a complete copy of any of the above-referenced policies. CONTRACTOR shall be responsible for any and all deductibles and/or self-insured retentions.

4. The CONTRACTOR shall furnish to the CITY, upon execution of the Contract, a Contract Performance Bond and a Contract Labor and Materials Payment Bond each for the full amount of the Contract and issued by a surety company or surety companies authorized to do business in the State of Maine and approved by the CITY. The Bonds shall remain in effect for one year after final acceptance of the Work, and protect the CITY for at least one year of warranty of the Work hereunder, and also shall insure settlement of claims for the payment of all bills for labor, materials and equipment.

5. To the fullest extent permitted by law, the CONTRACTOR shall defend, indemnify and hold harmless the CITY, its officers and employees, from and against all claims, damages, losses, and expenses, just or unjust, including, but not limited to, the costs of defense and attorney's fees arising out of or resulting from the performance of this Agreement, provided that any such claims, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use therefrom, and (2) is caused in whole or in part by any act or omission of the CONTRACTOR, anyone directly or indirectly employed by it, or anyone for whose act it may be liable. Such obligation of indemnification shall not be construed to negate or abridge any other obligation of indemnification running to the CITY which otherwise exists. The extent of the indemnification provision shall not be limited by the provision for insurance in this Agreement. CONTRACTOR's obligations under this paragraph shall survive termination of this Agreement.

6. Prior to any payment, the CITY reserves the right to require Waivers of Lien for materials and labor from the CONTRACTOR and its subcontractors and suppliers guaranteeing One Hundred Percent (100%) performance, free and clear from all liens and encumbrances. Any mechanic's lien or any other lien which may be filed against the premises which are the subject of this Agreement by reason of the Work described herein shall be defended (by counsel reasonably acceptable to the CITY) and promptly discharged by the CONTRACTOR at its own expense. The CITY may require the CONTRACTOR to provide a bond satisfactory to the CITY to indemnify it against any lien and as a substitution in place of a lien. If the CONTRACTOR should fail either to defend the CITY against the lien or to discharge it, then the CITY may do so at the CONTRACTOR's expense. In the event of such an undertaking by the CITY, the CONTRACTOR will promptly reimburse the CITY for all its costs and expenses in so doing, including, but not limited to, reimbursement of the CITY's reasonable counsel fees, as well as costs which may be incurred by it in substituting a bond in place of a lien. CONTRACTOR's obligations under this paragraph shall survive termination of this Agreement.

7. The CONTRACTOR shall perform the work to the satisfaction of the responsible CITY official who will have the right of inspection at all times, and whose approval and acceptance of the work will be a condition precedent to payments by the CITY under this Contract. CITY inspectors will have the authority to stop work in progress if such work is being done contrary to the plans, specifications or engineering practice. CONTRACTOR acknowledges and agrees that such inspection is for purposes of approving payment alone and such inspection shall not be deemed to impose any duty or liability upon the CITY to supervise any aspect of or approve the quality of the Work.

8. Time is of the essence in the performance of this Agreement. Upon receipt of executed contracts and insurance as required, the CITY will promptly send an executed CITY contract to the CONTRACTOR, which will commence work upon receipt. The work shall be completed, including all underground utility work, sidewalk and curb installation, site stabilization and base course paving complete in place, by July 1, 2018, and final surface restoration shall be completed by July 1, 2019.

9. In the event of any dispute as to the amount, nature or scope of the work required under this Contract, the design and judgment of the Director of the Department of Public Works or his or her designee (hereinafter, the "Director") will be final and binding.

10. For performance of all the terms and conditions of this Agreement, the CITY will pay the CONTRACTOR Four Hundred Forty-Three Thousand Seven Hundred Sixty-Five Dollars and No Cents ($443,765.00) based on the rates set forth in the Proposal.

11. The CITY shall have the right to retain five percent (5 %) of each invoice amount as retainage until the Work is completed and accepted by the CITY.

12. The CONTRACTOR shall keep accurate records of all services performed under this Agreement and shall submit such information to the CITY on a monthly basis. Payment for such Work shall be made to the CONTRACTOR not more than thirty (30) days after receipt of an invoice and acceptance of the Work by the Director.

13. The CITY may terminate this Agreement for cause by written notice to the CONTRACTOR. In the event of such termination, the CONTRACTOR shall not be entitled to any further payment under this Agreement from the date of receipt of said notice.

14. The CITY shall have the right to terminate this Agreement at any time for its convenience on thirty (30) days' prior written notice to the CONTRACTOR. If the Agreement is terminated by the CITY for convenience, the CITY shall pay the CONTRACTOR for all Work performed and all materials purchased pursuant to this Agreement prior to receipt of such notice.

15. Out of concern for the public, CITY employees and the CONTRACTOR's employees, all work performed by the CONTRACTOR shall be in conformance with pertinent OSHA, local, state and federal government regulations.

16. No waiver of any breach of any one or more of the conditions of this Agreement by the CITY shall be deemed to imply or constitute a waiver of any succeeding or other breach hereunder.

17. This Agreement and its attachments represents the entire and complete agreement and understanding between the parties and supersedes any prior agreement or understanding, written or oral, between the parties with respect to the subject matter of this Agreement. This Agreement cannot be amended except by written instrument executed by the CITY and CONTRACTOR.

18. This Agreement shall be construed in all respects in accordance with, and governed by, the laws of the State of Maine. All parties hereto hereby consent to the exclusive jurisdiction of the Superior Court for the County of Cumberland in the State of Maine, for all actions, proceedings and litigation arising from or relating directly or indirectly to this Agreement or any of the obligations hereunder, and any dispute not otherwise resolved as provided herein shall be litigated solely in said Court.

19. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement. A signature in a pdf or electronic document shall be considered the equivalent of an original signature.

20. CONTRACTOR warrants and represents that it has the full right and authority to enter into this Agreement, that there is no impediment that would inhibit its ability to perform their respective obligations under this Agreement, and that the person signing this Agreement on behalf of CONTRACTOR has the authority to do so.

IN WITNESS WHEREOF, the said **CITY OF PORTLAND** has caused this Agreement to be signed and sealed by Jon P. Jennings, its City Manager, thereunto duly authorized, **R.E. COLEMAN, INC.** has caused this Agreement to be signed and sealed by _____, its President, thereunto duly authorized, the day and date first above written.

WITNESS:

_____

CITY OF PORTLAND

By: _____
Jon P. Jennings
Its City Manager

WITNESS:

_____
(William M. Bradstreet)

R.E. COLEMAN, INC.

By: _____

Print or type name: Rodney E. Coleman

Its: President

Approved as to form:

_____
City Corporation Counsel's Office

Approved as to funds:

_____
City Finance Director

CITY OF PORTLAND, MAINE

DEPARTMENT OF PUBLIC WORKS

POWSLAND STREET / MITTON STREET
SEWER REPLACEMENT PROJECT

Proposal of R.E. Coleman, Inc.
Name

Address 126 Industrial Way – Portland, ME, 04103-1082

The name and address shown on the above lines shall be the official name and address of the person, partnership or corporation submitting this bid and shall agree with the "Signature of Bidder" in the case of an individual, the "Name of Firm or Partnership" in the case of a firm or partnership, or the "Name of Bidder" in the case of a corporation.

TO: Matthew Fitzgerald, Purchasing Manager
City Hall, Room 103
389 Congress Street
Portland, ME 04101

Dear Mr. Fitzgerald:

The undersigned, having carefully examined the site of the work, the Plans, the Standard Specifications, including all current amendments or revisions thereof, the Supplemental Specifications, Special Provisions, Contract Agreement and Contract Bonds contained herein, do(es) hereby propose and offer to enter into a contract to supply all the materials, tools, equipment and labor required to perform and construct the whole of the work in strict accordance with the terms and conditions of this contract at the unit prices stated in the following "Schedule of Items" submitted by the undersigned.

This Bid may be accepted by the City of Portland at any time within sixty (60) calendar days after opening of the bids.

(Fill out prices in ink, in writing and in figures; in case of a discrepancy between prices in writing and prices in figures, the writing shall govern. In case of discrepancy between total of items and total of bid amount stated, total of items shall govern. Use the pages in this document when submitting proposal and submit contract document intact.)

Any pay items with quantities marked with an asterisk (*) on the bid sheets are not anticipated at time of bid and therefore are indeterminate. These items are part of the Contract Proposal and will also be used should any extra work be necessary. Actual quantities will be measured in the field or calculated from the contract drawings. The unit bid prices will be used to calculate payment amounts regardless of final quantities.

POWSLAND STREET / MITTON STREET
SEWER REPLACEMENT PROJECT

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
202.11	SY 45	REMOVAL OF COBBLES / CONCRETE @ Thirty Five Dollars and No Cents Per Square Yard	35	00	1,575	00
202.20	SY 6500	REMOVE EXISTING BITUMINOUS CONCRETE PAVEMENT @ Four Dollars and Sixty Cents Per Square Yard	4	60	29,900	00
202.2	CY 700	COMMON EXCAVATION @ Twenty-Four Dollars and No Cents Per Cubic Yard	24	00	16,800	00
203.25*	CY 100	GRANULAR BORROW @ Twenty Dollars and No Cents Per Cubic Yard	20	00	2,000	00
203.28	VF 20	TEST PIT EXCAVATION @ Fifty Dollars and No Cents Per Vertical Foot	50	00	1,000	00
203.31*	CY 100	CRUSHED STONE 703.31 – TYPE A (OVERDEPTH) @ Twenty Five Dollars and No Cents Per Cubic Yard	25	00	2,500	00
206.061*	CY 100	EARTH EXCAVATION, BELOW GRADE (OVERDEPTH) @ Sixteen Dollars and No Cents Per Cubic Yard	16	00	1,600	00

POWSLAND STREET / MITTON STREET
SEWER REPLACEMENT PROJECT

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
206.07*	CY 10	STRUCTURAL ROCK EXCAVATION @ Twenty Dollars and No Cents Per Cubic Yard	20	00	200	00
304.10	CY 475	AGGREGATE SUBBASE COURSE – GRAVEL TYPE "D" @ Thirty-Two Dollars and No Cents Per Cubic Yard	32	00	15,200	00
304.15	CY 740	AGGREGATE BASE COURSE – CRUSHED TYPE "B" @ Thirty Four Dollars and No Cents Per Cubic Yard	34	00	25,160	00
403.208	TON 740	HOT MIX ASPHALT - 12.5 MM NOMINAL MAXIMUM SIZE @ Seventy-Three Dollars and No Cents Per Ton	73	00	54,020	00
403.209	TON 15	HOT MIX ASPHALT - 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, & INCIDENTALS) @ One Hundred and Forty Dollars and No Cents Per Ton	140	00	2,100	00
403.210	TON 550	HOT MIX ASPHALT - 9.5 MM NOMINAL MAXIMUM SIZE @ Seventy-Six Dollars and No Cents Per Ton	76	00	41,800	00
502.56	CY 10	CONCRETE FILL @ One Hundred Dollars and No Cents Per Cubic Yard	100	00	1,000	00

POWSLAND STREET / MITTON STREET
SEWER REPLACEMENT PROJECT

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
603.131	LF 1320	8" DIAMETER SEWER / STORM PIPE @ Sixty-Eight Dollars and No Cents Per Linear Foot	68	00	89,760	00
603.149	LF 300	10" DIAMETER SEWER PIPE @ One Hundred and Two Dollars and No Cents Per Linear Foot	102	00	30,600	00
604.15	EA 7	4' DIAMETER MANHOLE @ Four Thousand, Two Hundred Dollars and No Cents Per Each	4,200	00	29,400	00
614.14	EA 2	MASONRY SEWER PLUG @ Two Hundred Dollars and No Cents Per Each	200	00	400	00
615.071	LS 1	LOAM, SEED & MULCH @ Ten Thousand Dollars and No Cents Per Lump Sum	10,000	00	10,000	00
627.713	LF 60	WHITE OR YELLOW PAVEMENT MARKING LINE @ Five Dollars and No Cents Per Linear Foot	5.	00	300	00
629.05*	HR 10	HAND LABOR, STRAIGHT TIME @ Thirty-Five Dollars and No Cents Per Hour	35	00	350	00

POWSLAND STREET / MITTON STREET
SEWER REPLACEMENT PROJECT

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
629.06*	HR 10	MASON , STRAIGHT TIME @ Forty Dollars and No Cents Per Hour	40	00	400	00
631.12*	HR 10	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR) @ One Hundred and Sixty Dollars and No Cents Per Hour	160	00	1,600	00
631.171*	HR 10	TRUCK – SMALL (INCLUDING OPERATOR) @ Sixty Dollars and No Cents Per Hour	60	00	600	00
631.22*	HR 10	FRONT END LOADER (INCLUDING OPERATOR) @ Ninety Dollars and No Cents Per Hour	90	00	900	00
631.36*	HR 10	FOREMAN, STRAIGHT TIME @ Forty-Five Dollars and No Cents Per Hour	45	00	450	00
632.04	EA 50	4" AND 6" WYE CONNECTION @ One Hundred and Five Dollars and No Cents Per Each	105	00	5,250	00
633.05	LF 1460	4" AND 6" DIAMETER SEWER LATERAL @ Forty-Five Dollars and No Cents Per Linear Foot	45	00	65,700	00
637.071	LS	DUST CONTROL @ Three Thousand-One Hundred Dollars	3,100	00	3,100	00

POWSLAND STREET / MITTON STREET
SEWER REPLACEMENT PROJECT

Item No.	Quantity	Item with Unit Bid Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
	1	and No Cents Per Lump Sum	See	Previous	Page	
652.39	LS 1	WORK ZONE TRAFFIC CONTROL @ Five Thousand, One Hundred Dollars and No Cents Per Lump Sum	5,100	00	5,100	00
654.08	EA 35	DENSITY TEST @ Eighty Dollars and No Cents Per Each	80	00	2,800	00
656.75	LS 1	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL @ Two Thousand Two Hundred Dollars and No Cents Per Lump Sum	2,200	00	2,200	00
TOTAL AMOUNT OF SEWER BID WRITTEN AND IN NUMBERS BASED ON ESTIMATE OF QUANTITIES Four Hundred and Forty-Three, Thousand, Seven Hundred and Sixty-Five Dollars and No Cents *(Written)*			$443,765.00			

GREELEY STREET / MITTON STREET / POWSLAND STREET
WATER MAIN REPLACEMENT PROJECT

Item No.	Quantity	Item with Unit Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
W-1	LF 50	12-INCH DUCTILE IRON WATER MAIN @ One Hundred and Thirty Dollars and No Cents Per Linear Foot	130	00	6,500	00
W-2	LF 2,845	8-INCH DUCTILE IRON WATER MAIN @ Ninety Dollars and No cents Per Linear Foot	90	00	256,050	00
W-3	LF 125	4-INCH DUCTILE IRON WATER MAIN @ Eighty Dollars and No Cents Per Linear Foot	80	00	10,000	00
W-4	EA 1	12-INCH INSERTION GATE VALVE @ Ten Thousand, Two Hundred and Fifty Dollars and No Cents Per Each	10,250	00	10,250	00
W-5	EA 2	12-INCH MJ GATE VALVE @ Two Thousand, Three Hundred and Fifty Dollars and No Cents Per Each	2,350	00	4,700	00
W-6	EA 1	8-INCH X 8-INCH TAPPING SLEEVE & GATE VALVE @ Four Thousand, Three Hundred Dollars and No Cents Per Each	4,300	00	4,300	00
W-7	EA 2	8-INCH INSERTION GATE VALVE @ Six Thousand, One Hundred Dollars and No Cents Per Each	6,100	00	12,200	00

GREELEY STREET / MITTON STREET / POWSLAND STREET
WATER MAIN REPLACEMENT PROJECT

Item No.	Quantity	Item with Unit Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
W-8	EA 13	8-INCH MJ GATE VALVE @ One Thousand, Six Hundred and Eighty Dollars and No Cents Per Each	1,680	00	21,840	00
W-9	EA 1	4-INCH MJ GATE VALVE @ One Thousand, One Hundred and Thirty Dollars and No Cents Per Each	1,130	00	1,130	00
W-10	EA 5	HYDRANT ASSEMBLY @ Four Thousand, Eight Hundred and Ninety Dollars and No Cents Per Each	4,890	00	24,450	00
W-11	EA 2	1-INCH AIR RELEASE VALVE @ Seven Hundred and Forty Dollars and No Cents Per Each	740	00	1,480	00
W-12	EA 1	1-1/2-INCH COPPER SERVICE - RECONNECT @ Two Thousand Dollars and No Cents Per Each	2,000	00	2,000	00
W-13	EA 24	1-INCH COPPER SERVICE - SHORTSIDE @ One Thousand, Four Hundred Dollars and No Cents Per Each	1,400	00	33,600	00
W-14	EA 18	1-INCH COPPER SERVICE - LONGSIDE @ One Thousand, Nine Hundred and Ten Dollars and No Cents Per Each	1,910	00	34,380	00

GREELEY STREET / MITTON STREET / POWSLAND STREET
WATER MAIN REPLACEMENT PROJECT

			UNIT PRICE		TOTAL PRICE	
Item No.	**Quantity**	**Item with Unit Price Written in Words**	**Dollars**	**Cents**	**Dollars**	**Cents**
W-15	EA 7	1-INCH COPPER SERVICE-RECONNECT @ One Thousand Three Hundred Dollars and No Cents Per Each	1,300	00	9,100	00
W-16	CY 105	AGGREGATE SUBBASE COURSE, TYPE D – SEWALL & HOOPER STREETS @ Twenty-Six Dollars and No Cents Per Cubic Yard	26	00	2,730	00
W-17	CY 20	AGGREGATE BASE COURSE, TYPE B – SEWALL & HOOPER STREETS @ Thirty-Eight Dollars and No Cents Per Cubic Yard	38	00	760	00
W-18	TON 60	HMA BINDER COURSE – 19 MM – SEWALL & HOOPER STREETS @ One Hundred and Forty Dollars and No Cents Per Ton	140	00	8,400	00
W-19	TON 35	HMA SURFACE COURSE– 12.5 mm – SEWALL & HOOPER STREETS @ One Hundred and Forty Dollars and No Cents Per Ton	140	00	4,900	00
W-20	CY 100	GRAVEL BORROW @ Sixteen Dollars and No Cents Per Cubic Yard	16	00	1,600	00
W-21	CY 100	ROCK EXCAVATION REC @ ~~Ten~~ One Dollars and No Cents Per Cubic Yard	REC 1 ~~10~~	00 ~~00~~	100 ~~1,000~~	00 REC

GREELEY STREET / MITTON STREET / POWSLAND STREET
WATER MAIN REPLACEMENT PROJECT

Item No.	Quantity	Item with Unit Price Written in Words	UNIT PRICE Dollars	UNIT PRICE Cents	TOTAL PRICE Dollars	TOTAL PRICE Cents
W-22	CY 100	UNSUITABLE MATERIAL EXCAVATED BELOW GRADE @ Ten Dollars and No Cents Per Cubic Yard	10	00	1,000	00
W-23	HR 40	UNIFORMED POLICE OFFICER & CRUISER @ Fifty Dollars and No Cents Per Hour	50	00	2,000	00
W-24	HR 120	FLAGGER @ Twenty-Two Dollars and No Cents Per Hour	22	00	2,640	00
W-25	HR 10	FOREMAN @ Forty-Five Dollars and No Cents Per Hour	45	00	450	00
W-26	HR 10	LABORER @ Thirty-Five Dollars and No Cents Per Hour	35	00	350	00
W-27	HR 10	EXCAVATOR W/OPERATOR @ One Hundred and Sixty Dollars and No Cents Per Hour	160	00	1,600	00
W-28	HR 10	LOADER W/OPERATOR @ Eighty Dollars and No Cents Per Hour	80	00	800	00

GREELEY STREET / MITTON STREET / POWSLAND STREET WATER MAIN REPLACEMENT PROJECT						
			UNIT PRICE		TOTAL PRICE	
Item No.	Quantity	Item with Unit Price Written in Words	Dollars	Cents	Dollars	Cents
W-29	HR 10	DUMP TRUCK W/DRIVER @ Fifty Dollars and No Cents Per Hour	50	00	500	00
TOTAL AMOUNT OF PORTLAND WATER DISTRICT BID WRITTEN IN WORDS BASED ON ESTIMATE OF QUANTITIES Four Hundred and Fifty-Nine Thousand, Eight Hundred and Ten Dollars and No Cents *(Written)*			459,810.00			

BASE BID FORM	
Total of Sewer Bid Written in Numbers	$443,765.00
Total of Water Main Bid Written in Numbers	$459,810.00
Total of Sewer and Water Main Bids (Base Bid & Basis of Award)	$903,575.00

Any pay items with quantities marked with an asterisk (*) on the bid sheets are not anticipated at time of bid and therefore are indeterminate. These items are part of the Contract Proposal and will also be used should any extra work be necessary. Actual quantities will be measured in the field or calculated from the contract drawings. The unit bid prices will be used to calculate payment amounts regardless of final quantities.

The undersigned also agrees as follows:

FIRST: To do any extra work, not covered by the above schedule of items, which may be ordered, and to accept as full compensation therefore such prices as may be agreed upon in writing by the Engineer and the Contractor; or in case no agreement is made, to accept as full compensation the amount determined upon a "force account" basis as provided in the State of Maine Department of Transportation Standard Specifications, November 2014, including all current additions or modifications thereof .

SECOND: To begin work on the date specified in the Engineer's "Notice to Commence Work" and to prosecute said work in such a manner as to substantially complete it by **December 1, 2017**, or within the time limits given in the Special Provisions.

THIRD: That this offer is to continue open to acceptance until the formal contract is executed by the successful bidder of this work, and the City may at any time without notice accept this proposal whether any other proposal has previously been accepted or not. Provided, however, that the City will accept, in writing, one of the proposals made, or reject all proposals made, within sixty (60) calendar days after the date of opening of the proposals.

The undersigned as Bidder, declares that the only persons or parties interested in this Proposal are those named herein; that the bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on this contract; and that this Proposal is made without collusion with any other person, firm or corporation.

"The undersigned declares that any person(s) employed by the City of Portland, Maine, who has direct or indirect personal or financial interest in this proposal or in any portion of the profits which may be derived therefrom, has been identified and the interest disclosed by separate attachment. (Please include in your disclosure any interest which you know of. An example of a direct interest would be a City employee who would be paid to perform services under this proposal. An example of an indirect interest would be a City employee who is related to any

officers, employees, principal or shareholders of your firm or you.) If in doubt as to status or interest, please disclose to the extent known."

Respectfully submitted this 9th day of August, 2017

Acknowledgement of Receipt of Addenda:

Addendum No.	Addendum Date
1	July 28th, 2017
2	August 2nd, 2017

IF AN INDIVIDUAL, SIGN HERE

Signature of Bidder_____

Address_____

_____

Phone # _____

Email Address_____

Social Security Number_____

(Signatures for a Firm, Partnership or Corporation on next page.)

IF A FIRM OR PARTNERSHIP, SIGN HERE

Signature of Bidder_____

Name of Firm or Partnership_____

Business Address_____

Telephone Number_____ Fax Number_____

Email Address_____ SS No. or Tax I.D. Number_____

Names and Addresses of Members of Firm or Partnership:

_____

_____

_____

IF A CORPORATION, SIGN HERE

Name of Bidder R.E. Coleman, Inc.

Authorized Signature [signature] - President
(Name) (Title)

Business Address 126 Industrial Way - Portland, ME, 04103-1082

Telephone Number (207)-797-3779 Fax Number (207)-797-3773

Email Address billrecoleman@maine.rr.com SS No. or Tax I.D. Number 01-0476287

Incorporated under the Laws of the State of Maine

Names and Addresses of Officers of the Corporation:

President Rodney E. Coleman - Falmouth, ME.

Secretary Rodney E. Coleman - Falmouth, ME.

Treasurer Rodney E. Coleman - Falmouth, ME. ss

Before me, personally appeared Rodney E. Coleman and acknowledged that the signature to the preceding bid is his/her signature in his/her official capacity.

Date: 08/09/2017

[signature] William M. Bradbury
Notary Public - Signature and Seal My Commission Expires January 12th, 2022

ALL CORPORATIONS MUST SIGN THIS FORM
AND SUBMIT WITH THE BID PROPOSAL

(Insert copy of that part of the records of the corporation wherein authority is given to the officer of that corporation to sign this bid on behalf of the corporation.)

R.E. Coleman, Inc.
126 Industrial Way
Portland, ME. 04103-1082

(08/09/2017)
(date)

The above is a true copy of the records of the R.E. Coleman Corporation, which records are in my legal custody.

Rodney E. Coleman
Officer having custody of the records

Cumberland / Rodney Coleman ss

Before me appeared, Rodney E. Coleman,

President of the R.E. Coleman Corporation, and made oath that the above statement is true.

William M. Bradshaw
My Commission Expires
January 12th, 2023

Notary Public - Signature and Seal

NOTICE

(This Must Be Filled Out)

The full names and residences of all persons interested in this bid as principals are as follows: (In case of Corporation, include and identify President, Treasurer, Manager)

President - Rodney E. Coleman Falmouth, ME.

Treasurer - Rodney E. Coleman Falmouth, ME.

Manager - Rodney E. Coleman Falmouth, ME.

ALL CONTRACTORS SHALL FILL IN THE FOLLOWING INFORMATION BEFORE SUBMITTING BID

	Name and Address of Materials Supplier	Materials to be Supplied
1	Portland Sand & Gravel – Gray, ME,	Gravels / Stone / Sand
2	Ferguson Water Works – So. Po., ME,	Pipe Package
3	Precast of Maine – Topsham	Precast – Manholes
4		
5		
6		
7		

	Name and Address of Contractor	Service or Trades to be Supplied	Anticipated $ Amount
1	Ace Security – Lewiston, ME,	Flagging	$ 12,000.00
2	Thirsty Turf Irrigation – Portland, ME.	Temporary Water System	$ 26,000.00
3	Payton Paving – Payton, ME.	Bituminous Paving	$ 100,730.00
4			
5			
6			
7			

CITY OF PORTLAND, MAINE

Powsland Street/Mitton Street Sewer Replacement Project
Bid #18004

Current Date: July 28, 2017

The attention of firms submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Contractor's submitted material and the corresponding Contract when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

****

ALL BIDDERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED ON THE BID PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

****

MATTHEW FITZGERALD
PURCHASING MANAGER

We've received the following questions related to this bid and are providing responses:

1. *Will the contractor be allowed to close the roads except for local traffic and emergency vehicles while the project is taking place?* **Yes.**
2. *Does the City have any sewer flow rate information for the two streets?* **We don't, but the flow is probably low.**
3. *Are there any WBE/DBE requirements or Davis-Bacon wages associated with the project?* **No on both.**
4. *Would you mind sending me the bid tab from the Locust-Mountford-Obrion project too?* **Tabsheet attached.**

Receipt of **Addendum No. 1** to the City of Portland's **Bid#18004, Powsland Street/Mitton Street Sewer Replacement Project** is hereby acknowledged.

COMPANY: R.E. Coleman, Inc

NAME: Rodney E. Coleman

SIGNED BY: [signature] DATE: 08/09/2017

PRINT NAME & TITLE: Rodney E. Coleman - President

ADDRESS: 126 Industrial Way

Portland, ME. 04103-1082

ZIP CODE

CITY OF PORTLAND, MAINE

Powsland Street/Mitton Street Sewer Replacement Project
Bid #18004

Current Date: August 2, 2017

The attention of firms submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Contractor's submitted material and the corresponding Contract when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

****

ALL BIDDERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED ON THE BID PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

****

MATTHEW FITZGERALD
PURCHASING MANAGER

Below is our response to a question received related to this bid. This will be the final addendum issued prior to the bid opening on August 9. We will be unable to respond to any further questions:

Does the Portland Water District have any boring information to substantiate the 100 CY of ledge for item W-21?

No, the Portland Water District does not have any boring information. The quantity in the bid form is an assumed amount.

Receipt of **Addendum No. 2** to the City of Portland's **Bid#18004, Powsland Street/Mitton Street Sewer Replacement Project** is hereby acknowledged.

COMPANY: R.E. Coleman, Inc. - 126 Industrial Way - Portland, ME. 04103-1082

NAME: Rodney E. Coleman - President

SIGNED BY: [signature] DATE: 08/09/2017

PRINT NAME & TITLE: Rodney E. Coleman - President

ADDRESS: 126 Industrial Way

Portland, ME. 04103-1082
ZIP CODE

FIRST AMENDMENT TO
AGREEMENT BETWEEN
CITY OF PORTLAND
AND
SHAW BROTHERS CONSTRUCTION, INC.

THIS FIRST AMENDMENT is made as of this 13th day of February, 2016, to the **AGREEMENT** dated February 11, 2015 by and between the **CITY OF PORTLAND**, a body politic and corporate, located in Cumberland County and State of Maine, (hereinafter the "**CITY**"), and **SHAW BROTHERS CONSTRUCTION, INC.**, a Maine corporation with a mailing address of 341 Mosher Road, Gorham, Maine 04036 (hereinafter the "**CONTRACTOR**").

WITNESSETH:

WHEREAS, the **CITY** and the **CONTRACTOR** entered into an agreement dated February 11, 2015 for As-needed Time and Materials for Miscellaneous Construction Equipment & Materials; and

WHEREAS, the parties desire to extend the term of said agreement;

NOW, THEREFORE, the parties agree to amend the original agreement dated as of February 11, 2015 (hereinafter the "Agreement") as follows:

1. TERM OF AGREEMENT. The term of the Agreement, which, pursuant to section 8 of the Agreement expires on February 10, 2016, is hereby extended until February 10, 2019.

2. COMPENSATION. **CONTRACTOR** shall be paid at the hourly and other rates specified in the **CONTRACTOR**'s Proposal for services provided pursuant to this Amendment, attached hereto as Exhibit A.

3. SURVIVING TERMS. Any and all terms of the Agreement not herein amended shall remain in full force and effect for the duration of the Agreement as amended hereby and are hereby ratified. In the event of any conflict between the terms of this Amendment and the terms of the Agreement and any exhibits thereto, the terms of this Amendment shall govern and control so long as this Amendment is in effect.

IN WITNESS WHEREOF, the said **CITY OF PORTLAND** has caused this Agreement to be signed and sealed by Jon P. Jennings, its City Manager, thereunto duly authorized, and **SHAW BROTHERS CONSTRUCTION, INC.** has caused this

Agreement to be signed and sealed by Mark Barnes Project Manager, thereunto duly authorized, the day and year first above written.

WITNESS:

Sonia Bean

CITY OF PORTLAND

By: _____
Jon P. Jennings
Its City Manager

WITNESS:

_____

SHAW BROTHERS CONSTRUCTION, INC.

By: _____

Name: Mark Barnes
Its: Project Manager

Approved as to form:

_____
Corporation Counsel's Office

Approved as to funds:

_____
Budget Office

SHAW BROTHERS CONSTRUCTION, INC.

P.O. Box 69 • 341 Mosher Rd • Gorham, Me 04038

Tel: (207) 839-2552 • Fax: (207) 839-6239

Website: www.shawbrothers.com

Equipment and Labor Rates for 2016 Effective 1/1/16

All Equipment Requires a 4 Hour Minimum

				Hourly w/operator & fuel
		EXCAVATORS		
# 820	2006	HITACHI ZX 800 w/bucket or pulverizor	175,000 LB.	$450.00
# 809	2008	HITACHI ZX 650LC-3	155,000 LB.	$415.00
# 844	2003	HITACHI ZX 600LC	132,000 LB.	$350.00
# 816	2006	HITACHI ZX450 LC-3	104,000 LB.	$310.00
# 814	2005	CAT 345C LC	100,000 LB.	$310.00
# 815	2006	CAT 345C LC	100,000 LB.	$310.00
		100,000 LB-115,000 LB EX. W/12,000 LB HAMMER		$450.00
# 854	2015	KOMATSU PC360	80,000 LB.	$235.00
# 808	2008	CAT 330 DL	80,000 LB.	$235.00
# 818	2006	CAT 330 CL	78,000 LB.	$235.00
# 846	2003	CAT 330 CL	78,000 LB.	$235.00
# 847,848	2004	CAT 330 CL	78,000 LB.	$235.00
		78,000 LB EX W/PULVERIZOR		$290.00
		78,000 LB EX W/60' LONG REACH		$375.00
		78,000 LB EX. W/8,000 LB HAMMER or SHEER		$375.00
# 833,834,835	2012	HITACHI ZX290LC	66,000 LB.	$190.00
# 801	2009	CAT 329D LC	66,000 LB.	$190.00
# 802	2006	CAT 325DL	64,000 LB.	$190.00
# 841	2003	JOHN DEERE 270 C-LC 60' LONG REACH	63,000 LB.	$325.00
		65,000 LB EXCAVATOR W/PULVERIZOR		$250.00
		65,000 LB EXCAVATOR W/5,500 LB HAMMER or SHEER		$320.00
		**With GPS Control add $60.00 an hour		
# 836,837,838	2013	CAT 321 DL	54000 LB.	$175.00
# 839,840	2013	JOHN DEERE 225 DX LC	54,000 LB.	$175.00
# 827	2011	JOHN DEERE 225 DX LC	54,000 LB.	$175.00
# 817	2006	CAT 321 CL	54,000 LB.	$175.00
# 804	2006	CAT 320 CL	46,000 LB.	$165.00
		40,000 LB - 46,000 LB EX. W/3,500 LB HAMMER		$280.00
		46,000 LB. EX. WITH ROTARY BUCKET		$210.00
# 856	2014	CAT M322D VA w/rotary bucket	45,000 LB.	$210.00
# 826	2011	CAT M322D VA w/rotary bucket	45,000 LB.	$210.00
# 855	2014	CAT M318D VA W/rotary bucket	42,000 LB.	$190.00
# 824,828	2013	CAT M318 D VA W/rotary bucket	42,000 LB.	$190.00
# 825	2009	CAT M318 D VA W/rotary bucket	42,000 LB.	$190.00
# 822	2014	VOLVO EW180D w/rotary bucket	42,000 LB.	$190.00
# 821	2012	VOLVO EW180C w/rotary bucket	42,000 LB.	$190.00
# 823	2014	JOHN DEERE 190DW w/rotary bucket	42,000 LB.	$190.00
		With Rail Kit add $20.00 an hour		
		38,000 LB -46,000 LB EX. W/HOE COMPACTOR ADD $35.00 AN HOUR		
# 853	2015	KOMATSU PC170	40,000 LB.	$150.00
		W/3,000 LB HAMMER		$240.00
# 851,852	2014	TAKEUCHI TB290 (rubber tracks)	19,000 LB.	$120.00
# 830,831,832	2012	TAKEUCHI TB285 (rubber tracks)	19,000 LB.	$120.00
# 810	2008	TAKEUCHI TB175 (rubber tracks)	17,000 LB.	$120.00
		19,000 LB EXCAVATOR W/750 LB HAMMER		$175.00
		19,000 LB EXCAVATOR W/COMPACTOR		$131.00
# 813	2005	TAKEUCHI TB135 (rubber tracks)	8,000 LB.	$100.00
		8,000 LB EXCAVATOR W/660 LB HAMMER		$135.00
# 842	2014	JOHN DEERE 27D	6,400 LB.	$95.00
# 850	2004	JOHN DEERE 27C	6,400 LB.	$95.00
# 829	2000	CAT 301.5	3,450 LB.	$70.00
# 849	1999	CAT 301.5	3,450 LB.	$70.00
		3,450 LB EXCAVATOR W/ HAMMER		$120.00
		GRADERS		
# 420	2001	CAT 16H	58,000 LB.	$350.00
# 406	2008	CAT 140M AWD	37,000 LB.	$210.00
# 418	2006	CAT 140H	33,000 LB.	$180.00
# 421	2006	LEE-BOY 635B	8,700 LB.	$130.00
		*With Blade Control add $30.00 per hour		
		**With GPS Blade Control at $60.00 an hour		

SHAW BROTHERS CONSTRUCTION, INC.

P.O. Box 69 • 341 Mosher Rd • Gorham, Me 04038

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Website: www.shawbrothers.com

					Hourly w/operator & fuel	Daily w/o operator & fuel	Weekly w/o operator & fuel	Monthly w/o operator & fuel
		DOZERS						
# 203	2007	CAT D8T		76,000 LB.	$350.00			
# 204	2007	CAT D6T LGP		50,000 LB.	$250.00			
# 208,209	2008	JD 750J LGP		38,000 LB.	$190.00			
# 248	1997	CAT D6M XL		34,000 LB.	$160.00			
# 211	2012	CAT D6K LGP		30,000 LB.	$170.00			
# 213	2014	JOHN DEERE 700K LGP		30,000 LB.	$170.00			
# 212	2012	CAT D5K LGP		21,500 LB.	$150.00			
# 210	2011	CAT D5K LGP		21,500 LB.	$150.00			
# 247	2002	JD 650H LGP		20,000 LB.	$140.00			
# 202	1998	CAT D5C LGP		20,000 LB.	$140.00			
# 205	2008	JD 450J LGP		17,500 LB.	$130.00			
# 201	2006	CAT D3G LGP		17,000 LB.	$130.00			
# 207	1999	JD 450H		16,000 LB.	$110.00			
# 237	1997	KOMATSU D21		9,000 LB.	$85.00			
		*With Blade Control add $30.00 an hour						
		**With GPS Blade Control add $60.00 an hour						
		LOADERS/LOADER-BACKHOES						
# 352	2005	CAT 988H w/on board scales	9.5 YD	112,000 LB.	$400.00			
# 306	2012	CAT 980K w/on board scales	7.5 YD	67,000 LB.	$275.00			
# 309	2011	CAT 980H w/on board scales	7.5 YD	67,000 LB.	$275.00			
# 317	2007	CAT 980H w/on board scales	7.5 YD	67,000 LB.	$275.00			
# 339	2006	CAT 980H w/on board scales	7.5 YD	67,000 LB.	$275.00			
# 338	2003	CAT 972G w/on board scales	6.25 YD	55,000 LB.	$200.00			
# 301	2015	CAT 966M w/on board scales	6 YD	53,000 LB.	$200.00			
# 310	2011	CAT 966H w/on board scales	6 YD	53,000 LB.	$200.00			
# 313	2009	CAT 966H w/on board scales	6 YD	53,000 LB.	$200.00			
# 314	2008	CAT 966H w/on board scales	6 YD	53,000 LB.	$200.00			
# C300	2005	CAT 950G	4 YD	39,000 LB.	$160.00			
# 302	2015	CAT 938K	3.5 YD	36,000 LB.	$150.00			
# 319	2000	CAT IT 38 G	3 YD	29,000 LB.	$140.00			
# 308	2013	CAT 930K	2.75 YD	29,000 LB.	$140.00			
# 307	2012	CAT 930K	2.75 YD	29,000 LB.	$140.00			
# 311	2011	CAT 930H	2.75 YD	29,000 LB.	$140.00			
# 315,316	2008	CAT 930H	2.75 YD	29,000 LB.	$140.00			
# 318	2007	CAT 930G	2.75 YD	29,000 LB.	$140.00			
# 355	2006	CAT 930G	2.75 YD	29,000 LB.	$140.00			
# 354	2005	CAT 930G	2.75 YD	29,000 LB.	$140.00			
# 320	2003	CAT IT 28 G	2.75 YD	27,000 LB.	$140.00			
# 312	2011	CAT IT 14 G	1.5 YD	16,500 LB.	$125.00			
# 327,328	1997	CASE 580XL L/B 4X4		15,000 LB.	$97.00			
		LOADER/BACKHOE W/750 LB HAMMER			$163.00			
# 331	2000	CAT 902	.80 YD	10,000 LB.	$90.00			
# 305	2013	CAT 259 SKID STEER W/Rubber Track		9,000 LB.	$110.00			
# 353	2008	Case 445 SKID STEER III		8,200 LB.	$90.00			
# 341	2006	TAKEUCHI TL130 RUBBER TRACK SKID STEER		7,500 LB.	$110.00			
# 334	2015	CAT 242D SKID STEER HIGH FLOW		7,000 LB.	$100.00			
		With 2' Pavement Grinder			$165.00			
# 303	2014	CAT 242D SKID STEER		7,000 LB.	$100.00			
# 340	2006	CAT 247B RUBBER TRACK SKID STEER		6,700 LB.	$110.00			
# 332	2000	CAT 228 SKID STEER		5,800 LB.	$80.00			
# 304	2011	CAT 226 SKID STEER		5,800 LB.	$80.00			
# 351	1997	CASE 1840 SKID STEER		5,600 LB.	$80.00			
		With 18" Pavement Grinder			$165.00			
# 333	1997	N.H. SKID STEER LX565SS		5,400 LB.	$80.00			
		COMPACTION EQUIPMENT						
# 419	2005	CAT CP563E VIBRATORY PADFOOT W	84 IN.	27,000 LB.	$150.00	$700.00	$2,000.00	$6,000.00
# 479	2006	INGERSOL RAND SD116DX	84 IN.	24,500 LB.	$135.00	$550.00	$1,650.00	$5,000.00
# 401, 424	2000	CAT 563D W/CAB	84 IN.	24,000 LB.	$135.00	$550.00	$1,650.00	$5,000.00
# 422,425	1998	CAT 563C	84 IN.	24,000 LB.	$135.00	$550.00	$1,650.00	$5,000.00
# 477,478	2006	INGERSOL RAND SD77DX	66 IN.	16,500 LB.	$110.00	$500.00	$1,350.00	$4,000.00
# 476	2005	INGERSOL RAND SD77DX	66 IN.	16,500 LB.	$110.00	$500.00	$1,350.00	$4,000.00
# 908	2003	INGERSOL-RAND SD77DX	66 IN.	16,500 LB.	$110.00	$500.00	$1,350.00	$4,000.00

SHAW BROTHERS CONSTRUCTION, INC.

P.O. Box 69 • 341 Mosher Rd • Gorham, Me 04038

Tel: (207) 839-2552 • Fax: (207) 839-6239

Website: www.shawbrothers.com

					Hourly w/operator & fuel	Daily w/o operator & fuel	Weekly w/o operator & fuel	Monthly w/o operator & fuel
		COMPACTION EQUIPMENT - CONT.						
# 402	1997	BOMAG BW 172D-2	66 IN.	15,200 LB.	$105.00	$500.00	$1,350.00	$4,000.00
# 437	2003	INGERSOL/RAND SD-40D	48 IN.	10,000 LB.	$95.00	$350.00	$1,000.00	$3,000.00
# 410	1987	BOMAG BW 142 SF	48 IN.	10,000 LB.	$95.00	$350.00	$1,000.00	$3,000.00
# 451	1992	BOMAG BW 142D	48 IN.	10,000 LB.	$95.00	$350.00	$1,000.00	$3,000.00
		FORWARD REVERSE COMPACTOR		1,000 LB.		$235.00		
		HAND COMPACTOR		150 LB.		$105.00		
		PAVING EQUIPMENT						
# 902	2013	CAT AP1055E 10' TRACK PAVER		44,500 LB.	$300.00			
# 912	2014	CAT AP1000E 10' Rubber Tire		43,000 LB.	$300.00			
# 901	2013	CAT AP555E 8' TRACK PAVER		39,000 LB.	$250.00			
# 918	2015	VOGELE 700 SIDEWALK PAVER		13,000 LB.	$225.00			
# 426	2009	EAGLE SIDEWALK PAVER ES4896			$185.00	$1,050.00	$3,150.00	
# 900	2011	WEILER W530 SHOULDER PAVER			$200.00	$1,500.00	$4,500.00	$13,500.00
# 380	1994	CAT RM350 RECLAIMER		53,000 LB.	$525.00			
# 913	2014	WIRTGEN W50DCI MILL		17,000 LB.	$225.00			
# 914	2015	CAT CB54XW ROLLER 12 TON		26,000 LB.	$120.00			
# 911	2007	CAT CB543D ROLLER 10 TON		26,000 LB.	$105.00			
# 904	2008	HAMM HD90 ROLLER		20,500 LB.	$105.00	$550.00	$1,650.00	$5,000.00
# 907	2000	INGERSOL ROLLER DD90 HF TEN TON		21,500 LB.	$105.00	$550.00	$1,650.00	$5,000.00
# 915	2015	HAMM HD14W ROLLER		10,500 LB	$100.00	$500.00	$1,350.00	$4,000.00
# 903,916	2011	VOLVO PT 240R PNEUMATIC ROLLER		36,000 LB.	$105.00	$550.00	$1,650.00	$5,000.00
# 910	2006	HYPAC C530AH PNEUMATIC ROLLER		13,000 LB.	$89.00	$550.00	$1,650.00	$5,000.00
# 905	2001	CAT CB224D ROLLER 3-5 TON		6,000 LB.	$79.00	$350.00	$1,000.00	$3,000.00
# 427,428	2003	INGERSOL-RAND DD24 3-5 TON		6,000 LB.	$79.00	$350.00	$1,000.00	$3,000.00
# 917	2014	HAMM HD10CW ROLLER		5,500 LB.	$79.00	$350.00	$1,000.00	$3,000.00
# 909	2013	WHACKER DOUBLE DRUM ROLLER		2,500 LB.	$53.00	$315.00		
# 906		1 TON MQR 2000H ROLLER				$210.00		
# CP9	1989	POWER CURBER				$420.00		
# 103-02	2014	FREIGHTLINER 2000 GAL TACK TRUCK			$125.00			
		SCREENING & CRUSHING PLANTS						
# 1466	1998	INNOVATOR 1244 STUMP GRINDER			$420.00			
# 1484	1994	NORDBERG LOKOTRACK LT125 37"x49" JAW CRUSHER			P.O.R.			
# 1458	1996	NORDBERG LOKOTRACK LT100R 30"x40" JAW CRUSHER			$300.00			
# 1486	1999	NORDBERG LOKOTRACK LT105 28"X44" JAW CRUSHER			$300.00			
# 1407	2005	NORDBERG LOKOTRACK LT105 28"X44" JAW CRUSHER			$300.00			
# 1463	1986	PIONEER 30"x42" JAW CRUSHER			P.O.R.			
# 1401	2002	NORDBERG LT300 GPB CRAWLER CONE CRUSHER			P.O.R.			
# 1485	1997	NORDBERG P3006203CC CONE PLANT			P.O.R.			
# 1460	1986	PIONEER 4ft. CONE PLANT w/ 5x16 Screen			P.O.R.			
# 1405	2005	KODIAK FAST TRAK CONE CRUSHER FT 200			$325.00			
# 1403, 1404	2005	METSO/NORDBURG ST 620 6'X20' 3 DECK CRAWLER SCREEN			P.O.R.			
# 1409	2015	ASTEC JCI GT2055 TRACK SCREEN			P.O.R.			
# 1408	2014	ASTEC JCI GT165 TRACK SCREEN			P.O.R.			
# 1418	2000	RETECH TROMMEL SCREEN 620R			$158.00	$1,400.00	$4,000.00	$12,000.00
# 1465	2003	RETECH TROMMEL SCREEN 620R			$158.00	$1,400.00	$4,000.00	$12,000.00
# 1445, 1446	1993	PORTEC 271 4X8 SCREEN PLANT			$126.00	$900.00	$2,700.00	$8,000.00
# 1406	2010	METSO CV100 SCREEN			$126.00	$900.00	$2,700.00	$8,000.00
# 1453	1994	READ SCREEN ALL RD90 C			$126.00	$900.00	$2,700.00	$8,000.00
		FISHER AIR CLASSIFIER			P.O.R.			
# 1486	2003	50YD SURGE HOPPER WITH SYNTRON FEEDER			P.O.R.			
# 1425A		RAWSON 80' STACKER			P.O.R.	$315.00	$735.00	$2,100.00
# 1426	1983	HEWITT STACKER 100 FT			$42.00	$370.00	$1,260.00	$3,780.00

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				Hourly w/operator & fuel	Daily w/o operator & fuel	Weekly w/o operator & fuel	Monthly w/o operator & fuel
	DUMP TRUCKS						
	TRACTOR W/ 3 AXLE FLOWBOY	30 TON	100,000 GVW	$130.00			
	TRACTOR 3 AXLE TRAILER DUMP	28 YD	100,000 GVW	$116.00			
	TRI-AXLE DUMP	18 YD	69,000 GVW	$86.00			
	TRI-AXLE ROCK BODY DUMP	18 YD	69,000 GVW	$100.00			
	10 WHEEL DUMP	14 YD	54,000 GVW	$76.00			
	6 WHEEL DUMP	8 YD	34,000 GVW	$65.00			
	6 WHEEL DUMP	3 YD	17,500 GVW	$55.00			
	WATER TRUCKS						
	CAT 25D 4X4 WATER TRUCK	5000 gals		$179.00	$895.00		
	WATER TRUCK - 10 WHEEL	3500 gals	54,000 GVW	$95.00	$525.00	$1,575.00	$4,200.00
	WATER TRUCK - 6 WHEEL	2000 gals	34,000 GVW	$74.00	$420.00	$1,260.00	$3,150.00
	TRACTORS W/LOWBED						
	TRACTOR W/65 TON LOWBED			$200.00	PLUS PERMITS		
	TRACTOR W/55 TON LOWBED			$135.00	PLUS PERMITS		
	LOG TRAILOR W/PRENTICE LOADER			$130.00			
	TRUCK W/10 TAG ALONG			$80.00			
	ESCORT VEHICLE W/DRIVER			$55.00			
	OFF ROAD DUMPS						
# 371,372,373	CAT 740 6 X 6 HAUL TRUCK	30YD	73,000 LB.	$275.00	$1,700.00	$5,000.00	$15,000.00
# 374,375	VOLVO A35C 6 X 6 HAUL TRUCK	26YD	63,000 LB.	$235.00	$1,400.00	$4,000.00	$12,000.00
# 377,378,381,382	VOLVO A30C 6 X 6 HAUL TRUCK	23YD	46,000 LB.	$200.00	$1,100.00	$3,500.00	$10,000.00
# 376	CAT 25 D 4 X 4 HAUL TRUCK	18 YD	44,000 LB.	$158.00	$1,000.00	$3,000.00	$9,000.00
# 383	KOMATSU TRACK HAUL TRUCK D11(	10 YD	40,000 LB.	$268.00	$1,700.00	$5,000.00	$15,000.00
	EQUIPMENT W/SPECIAL ATTACHMENTS						
	65,000 LB EXC. W/TRAMAC RB60 SHEET			$315.00			
	PILE DRIVER& EXTRACTOR						
	75,000 LB EXC. W/SCREENING BUCKET			$350.00			
	LOADER ATTACHMENTS- FORKS, BROOMS, SIDE DUMPS - P.O.R						
	EXCAVATOR ATTACHMENTS- PLATE COMPACTORS, GRAPPLES, AUGERS,						
	DITCH WITCH, DITCHING BUCKETS, STUMP SPLITTER ETC., HYDRAULIC BARRIER LIFTER - P.O.R						
	WATERPUMPS						
	6" PUMP w/hoses				$370.00		
	2" and 3" PUMPS w/hoses				$130.00		
	TRAFFIC CONTROL ITEMS						
	SITE SAFETY PACKAGE (signs, cones, barrels) per crew				$300.00		
	JERSEY BARRIER RENTAL (mob. & demob. not included)				$6.00 per ft. per month		
	SOLAR POWERED MESSAGE BOARD				$315.00	$790.00	$1,575.00
	ARROW BOARD				$160.00	$315.00	$735.00
	TYPE I BARRIER				$20.00	$40.00	$125.00
	TYPE III BARRIER				$75.00	$200.00	$600.00
	TRAFFIC DRUM				$20.00	$40.00	$125.00
	TRAFFIC CONES				$15.00	$30.00	$90.00
	SIGNS				$20.00	$40.00	$125.00
	SHORING EQUIPMENT						
	SMALL BOXES				$185.00	$550.00	$1,680.00
	TRENCH BOXES				$275.00	$790.00	$2,310.00
	MANHOLE BOXES				$275.00	$790.00	$2,310.00
	STEEL PLATES				$80.00	$235.00	$710.00
	STEEL SHEETING PER LINEAR FT.				$5.00		

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			Hourly w/operator & fuel	Daily w/o operator & fuel	Weekly w/o operator & fuel	Monthly w/o operator & fuel
		TRACTORS				
# 416	1994	JOHN DEERE 6400 4x4 w/Rototiller	$120.00			
# 730	2002	JD GATOR		$210.00		
# 403	2012	POLARIS R12 4WHEELER		$210.00		
		SWEEPERS				
# 058	1997	SCHWARZE M5000 SWEEPER	$140.00			
# 046	2004	ELGIN SWEEPER	$131.00			
# 447	2005	ROSCO 4820 BROOM	$110.00			
# 448	2004	NEW HOLLAND TRACTOR w/sweeper	$110.00			
# 446	2005	MASSEY FERGUSON TRACTOR w/Sweeper	$110.00			
# 445	2005	MASSEY FERGUSON TRACTOR w/Sweeper	$110.00			
		MISCELLANEOUS				
# 384	2012	TIMBERPRO TF830B FORWARDER	$250.00	$2,000.00	$7,000.00	$21,000.00
# 487	1990	JLG 80H FOOT MANLIFT		$735.00	$2,205.00	$5,515.00
		AIR COMPRESSOR W/TOOLS	$37.00	$210.00		
# 417	1999	40 KW MQ GENERATOR DCA 70	$42.00	$265.00		
		8,500 W GENERATOR		$105.00		
		2,500 W GENERATOR		$80.00		
		4,000 WATT LIGHT TOWER		$210.00	$525.00	$1,575.00
		HIGHWAY SAW W/BLADE & WATER	$110.00	$525.00		
		MCELROY #28 PIPE FUSER		$225.00	$955.00	
# 442		GAS MULCHER M60	$79.00	$475.00		
# 443		DIESEL MULCHER TM90	$79.00	$475.00		
		SEWER PIPE TESTER		$210.00		
		WATER PIPE TESTER		$160.00		
		MANHOLE TESTER		$105.00		
		CRANE MATS			$105.00	$160.00
		SUPPORT TRUCKS				
		1 1/2 - 2 TON UTILITY TRUCK W/COMPRESSOR W/HAND TOOLS	$55.00	(no operator)		
		1/2 - 1 TON UTILITY/PICK-UP TRUCK W/HAND TOOLS	$38.00	(no operator)		
		CRANES				
# 400	2008	TEREX RT555 55TON CRANE	$210.00	$1575.00 w/operator		
# 169	1998	10 WHEEL TRUCK W/11 TON ART. 50 FT. CRANE	$110.00			

LABOR RATES-HOURLY

PROJECT MANAGER	$80.00
SUPERVISOR	$90.00
FOREMAN	$65.00
CONSTRUCTION WORKER	$45.00
TRUCK DRIVER	$48.00
OPERATOR	$55.00
MECHANIC	$90.00
MECHANIC W/SERVICE TRUCK	$100.00
2 PERSON LAYOUT CREW w/Vehicle & Survey Equipment	$135.00
ONE PERSON LAYOUT CREW w/Vehicle & GPS System	$150.00

***LABOR RATES DO NOT INCLUDE SUPPORT VEHICLES**

* LABOR RATES SHALL BE TIME AND ONE HALF (1 1/2) AFTER 8 HRS. DAILY OR 40 HOURS WEEKLY. DOUBLE TIME SUNDAYS AND HOLIDAYS AND NIGHTS.

Note: Equipment Rentals

Hourly Rates are based on a four hour minimum and includes an operator and fuel.

Daily, Weekly, & Monthly rates do not include operators or fuel.

Daily= 8 hrs, Weekly=40 hrs, Monthly=160 hrs.

Extended hourly use will be billed on a prorated basis. Moving Charges Not Included.

SHAW BROTHERS CONSTRUCTION, INC.
341 Mosher Road, P.O. BOX 69 GORHAM, ME 04038
(207) 839-2552 □ Fax (207) 839-6239

PROPOSAL

PROPOSAL SUBMITTED TO:	CC:	DATE:
City of Portland	File	June 7, 2017
ADDRESS:	JOB NAME:	FAX:
55 Portland Street	84 Chenery St. Sewer Replacement Project	(207) 874-8816
CITY,STATE, AND ZIP	JOB LOCATION:	PHONE:
Portland, ME 04101	Portland	874-8468
ATTN:	EMAIL:	CELL:
John Emerson	JWE@portlandmaine.gov	318-0239

Shaw Brothers Construction, Inc. will provide all labor, materials, and equipment to replace 220 lineal feet of 10" sewer pipe on Chenery Street in Portland. Our estimate is based on a site meeting between John Emerson, and Kraig Lucas on June 6, 2017. Our scope of work, **lump sum** price, breakdown, and clarifications are shown below, **we would also perform this work on a time and materials basis.**

Scope of Work:

Dig Safe.
Setup and maintain traffic control package, including flaggers.
Saw cut and remove existing pavement.
Supply and install 220' of 10" sewer pipe.
Supply and install 6 new 10"x6" wyes for services.
Supply, place, and compact 18" MDOT type D gravel in trench.
Supply, place, and compact 3" MDOT type B gravel in trench.
Cut back pavement 12" wider then trench.
Supply, place, and compact 2" of 19MM hot mix asphalt in trench.
Supply and install tack coat.
Grind 12" wide butt joints.
Supply, place, and compact 2" of 9.5MM hot mix asphalt in trench.
Cleanup and demobilize.

Clarifications/Exclusions:

Federal and state permit fees have not been included.
City of Portland street opening permits are not included.
Ledge and large boulder excavation and disposal is not included.
Work to be accomplished during normal working hours Monday - Friday. Night work is not included.
Uniformed police officers, if required are not included.
Roadway will be closed for construction, city to notify residents of schedule.
Services will be reconnected at the main, replacing services to the property line is not included.

We Propose hereby to furnish material, labor and equipment to complete the work described above for the lump sum of: **$ 47,739.93**
----------Forty Seven Thousand Seven Hundred Thirty Nine Dollars And Ninety Three Cents----------

Payment to be made as follows: Net 30 days

Interest at 1.5 percent per month on accounts over 30 days. Collection costs and reasonable attorney's fees will be added to account.

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. All alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents, or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Workers Compensation Insurance.

Authorized Signature *Kraig D. Lucas*

NOTE: This proposal may be withdrawn by us if not accepted within **30** days.

Acceptance of Proposal- The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to the work as specified. Payment will be made as outlined above.

Signature _____

Date of Acceptance: _____

Signature _____

Shaw Brothers Construction, Inc.

341 Mosher Road, P.O. Box 69
Gorham, Maine 04038

Bid For: Chenery St. Sewer Replacement
Portland
Bid To: City of Portland

Estimate Breakdown

220' of 10" PVC Sewer, 6-6" service wyes, 8'-9' deep
Narrow street, residential neighborhood.
Existing sewer pipe is 10" clay.

Bid Items

Item	Qty.	Unit	Price	Total
General Conditions:				
Dig Safe	1	ls	$ 500.00	$ 500.00
Equipment Moves	6	hrs	$ 140.00	$ 840.00
Traffic Contol Plan	1	ls	$ 500.00	$ 500.00
Grind Butt Joints	49	sy	$ 15.00	$ 735.00
Site Safety Package	4	cd	$ 300.00	$ 1,200.00
Flaggers (2)	80	hr	$ 27.00	$ 2,160.00
Bypass Pump Rental & Hoses	3	cd	$ 130.00	$ 390.00
Excavation Disposal	130	cy	$ 3.00	$ 390.00
Labor & Equipment:				
Foreman	30	hr	$ 108.00	$ 3,240.00
Siteworker (3)	90	hr	$ 45.00	$ 4,050.00
54,000 LB Rubber Tired Excavator	30	hrs	$ 215.00	$ 6,450.00
19,000 LB Excavator w/Compactor	15	hrs	$ 135.00	$ 2,025.00
3 Yard Loader	30	hrs	$ 145.00	$ 4,350.00
18 Yard Dump (3)	90	hr	$ 90.00	$ 8,100.00
Highway Saw	5	hr	$ 115.00	$ 575.00
Trench Box	3	cd	$ 275.00	$ 825.00
Materials:				
Stone Bedding	41	cy	$ 19.00	$ 779.00
Sand Backfill	51	cy	$ 7.25	$ 369.75
10" SDR-35 Pipe	221	lf	$ 6.58	$ 1,454.18
10"X6" Wye	6	ea	$ 118.00	$ 708.00
18" MDOT Type D	76	cy	$ 10.25	$ 779.00
3" MDOT Type B	18	cy	$ 15.00	$ 270.00
2" 19MM HMA Supplied & Installed	20	ton	$ 150.00	$ 3,000.00
2" 9.5MM HMA Supplied & Installed	26	ton	$ 150.00	$ 3,900.00
Tack	6	gal	$ 25.00	$ 150.00
			Total	**$ 47,739.93**

Portland Maine | Yes: Google's good here.

John Emerson <jwe@portlandmaine.gov>

Chenery

2 messages

John Emerson <jwe@portlandmaine.gov> Wed, Jun 21, 2017 at 12:03 PM
To: "McKinley, Mike" <mikem@gsgravel.com>

Mike:

I'm back at the office.

18" of D Gravel for trench restoration
3" of B Gravel

2" 19MM and 2" of 9.5MM for pavement restoration

Pull the permits and we'll waive the fees

--
Utility Coordinator
Portland Public Services
55 Portland Street
Portland, Maine 04101
207-318-0239

Mike McKinley <mikem@gsgravel.com> Wed, Jun 21, 2017 at 3:40 PM
To: John Emerson <jwe@portlandmaine.gov>

Hi John,

Jim Shaw just informed me that we won't have a pipe crew available for this project until August. If that ends up being acceptable, here is our bid:

- Mobilization
- Pavement saw cutting
- Replace 220' of 10" sewer main
- Tie six sewer service laterals into the new main
- Gravel and pavement restoration
- Flaggers for traffic control
- Street opening permit

Exclusions:

-

Street fees

Inspection fees

Over excavation and replacement materials

Exporting or disposal of hazardous or contaminated materials

Protection and/or repair of unmarked/mismarked underground facilities

$47,885.00

Thanks again for the invite and sorry for the delay!

Mike McKinley

Gorham Sand & Gravel, Inc.

939 Parker Farm Road, Buxton, Maine 04093

Office: (207) 839-2442

Office Fax: (207) 839-5445

Estimating Fax: (866) 226-1316

Cell: (207) 838 - 9107

From: John Emerson [mailto:jwe@portlandmaine.gov]
Sent: Wednesday, June 21, 2017 12:03 PM
To: McKinley, Mike <mikem@gsgravel.com>
Subject: Chenery

[Quoted text hidden]

Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

SHAW BROTHERS CONSTRUCTION, INC.

INVOICE

P.O. BOX 69 GORHAM, MAINE 04038

MAIN OFFICE
839-2552 ~ FAX 839-6239

MATERIAL ORDERS
892-6363 ~ FAX 892-5167

WWW.SHAWBROTHERS.COM

Customer #: 489
Invoice #: 13249
Invoice Date: 7/19/2017
Due Date: 8/18/2017
PO #: 44112
Job No: 101
Description: Misc Jobs

Bill To:
Portland Public Services
John Emerson
55 Portland St

Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
7/20/17				
Shaw Brothers Construction provided all necessary labor, equipment & materials to complete the Chenery Street sewer replacement project per our proposal dated 6/7/17	1.00	ls	47,739.93	47,739.93

All charges are due and payable within (30) thirty days of the date of invoice. A finance charge of 1 1/2% per month (18% per year) shall be imposed monthly if an outstanding invoice is not paid within (30) thirty days of the invoice date. Any account with an invoice outstanding for more than (60) sixty days shall be placed on C.O.D. terms.

Sub-Total:	47,739.93
Sales Tax:	0.00
Retainage Held:	0.00
Current Amount Due:	**47,739.93**

SHAW BROTHERS CONSTRUCTION, INC.

INVOICE

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MAIN OFFICE
839-2552 ~ FAX 839-6239

MATERIAL ORDERS
892-6363 ~ FAX 892-5167

WWW.SHAWBROTHERS.COM

Invoice # : A 126056
Invoice Date : 7/16/2017
Customer # : 489
Terms: Net 30

SOLD TO:
City of Portland
55 Portland Street

Portland, ME 04101

Attn Pat Handrehan

Ticket Date	Number	Units	Measure	Description		Unit Price		Amount
	2017-71		**P.O. John Emerson**					
7/14/2017	690947	90.00	yards of Job	Excavation Back Haul	at	8.00	per yard	720.00 n
7/14/2017	690948	72.00	yards of Job	Screened Sand	at	12.00	per yard	864.00 n
7/14/2017	690949	18.00	yards of Job	4" Gravel	at	15.25	per yard	274.50 n
								---
				Order Subtotal				1,858.50

All Charges are due and payable within (30) thirty days of the date of invoice.A finance charge of 1 1/2% per month (18% per year) shall be imposed monthly if an outstanding invoice is not paid within (30) thirty days of the invoice date.Any account with an invoice outstanding for more than (60) days shall be placed on C.O.D. terms.

Due Date: 8/15/2017

Invoice Subtotal	1,858.50
Invoice Sales Tax	0.00
Amount Due:	**1,858.50**

SHAW BROTHERS CONSTRUCTION, INC.

INVOICE

P.O. BOX 69 GORHAM, MAINE 04038

MAIN OFFICE
839-2552 ~ FAX 839-6239

MATERIAL ORDERS
892-6363 ~ FAX 892-5167

WWW.SHAWBROTHERS.COM

Customer #: 489
Invoice #: 14363
Invoice Date: 12/18/2017
Due Date: 1/17/2018
PO #:
Job No: 101
Description: Misc Jobs

Bill To:

Portland Public Services
Attn: John Emerson
55 Portland Street
Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
Shaw Brothers was directed by the City to repair sewer line on Congress Street inbetween Hempsire Street and India Street. In order for the City to allow our crew to utilize alternating one-way traffic we needed to work at night.				
12/1/17 - Mobilize equipment and set up sign package.				
Street Opening Permit Application	1.00	EA	250.00	250.00
Traffic Control Plan	1.00	ls	500.00	500.00
Dig Safe	1.00	ls	250.00	250.00
Portable Toilet Rental	1.00	ea	75.00	75.00
Site Safety Package - extensive sign package, cones, barrels	1.00	day	600.00	600.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	4.50	hr	90.00	405.00
Utility Truck w/ Tools	4.50	hr	38.00	171.00
Site Worker	6.50	hr	45.00	292.50
Utility Truck w/ Tools	6.50	hr	38.00	247.00
Site Worker	4.50	hr	45.00	202.50
Utility Truck w/ Tools	4.50	hr	38.00	171.00
Move Charge (66,000 LB Excavator)	1.00	ls	195.00	195.00
66,000 LB Excavator	2.00	hr	195.00	390.00
Move Charge (large trench box, small trench box, steel plates)	4.00	hr	140.00	560.00
12/3/17 PM - 12/4/17 PM - Repair 12" sewer. Double time for night work.				
Site Safety Package - extensive sign package, cones, barrels	1.00	day	600.00	600.00
Flaggers	48.00	hr	30.00	1,440.00
Project Manager	1.00	hr	80.00	80.00
Supervisor (double time)	9.00	hr	180.00	1,620.00

SHAW BROTHERS CONSTRUCTION, INC.

INVOICE

P.O. BOX 69 GORHAM, MAINE 04038

MAIN OFFICE
839-2552 ~ FAX 839-6239

MATERIAL ORDERS
892-6363 ~ FAX 892-5167

WWW.SHAWBROTHERS.COM

Customer #: 489
Invoice #: 14363
Invoice Date: 12/18/2017
Due Date: 1/17/2018
PO #:
Job No: 101
Description: Misc Jobs

Bill To:

Portland Public Services
Attn: John Emerson
55 Portland Street
Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
Utility Truck w/ Tools	9.00	hr	38.00	342.00
Foreman (double time)	9.00	hr	140.00	1,260.00
Utility Truck w/ Tools	9.00	hr	38.00	342.00
Site Worker (double time)	8.00	hr	90.00	720.00
Site Worker (double time)	8.00	hr	90.00	720.00
Driver (double time)	9.00	hr	96.00	864.00
Driver (double time)	9.00	hr	96.00	864.00
Driver (double time)	9.00	hr	96.00	864.00
Operator (double time)	8.00	hr	110.00	880.00
Operator (double time)	8.00	hr	110.00	880.00
18 CY Dump Truck (no driver)	9.00	hr	42.00	378.00
18 CY Dump Truck (no driver)	9.00	hr	42.00	378.00
14 CY Dump Truck (no driver)	9.00	hr	32.00	288.00
66,000 LB Excavator (no operator)	8.00	hr	140.00	1,120.00
Move Charge (19,000 LB Excavator)	1.00	ls	125.00	125.00
19,000 LB Excavator (no operator)	7.00	hr	70.00	490.00
Move Charge (2.75 CY Loader)	1.00	ls	145.00	145.00
2.75 CY Loader (no operator)	8.00	hr	90.00	720.00
Move Charge (8 ton Roller)	1.00	ls	110.00	110.00
8 Ton Roller (no operator)	2.00	hr	55.00	110.00
Forward Reverse Compactor	1.00	day	235.00	235.00
Large Trench Box	1.00	day	275.00	275.00
Steel Plates (2)	2.00	day	80.00	160.00
Light Trees (5)	5.00	ea	210.00	1,050.00
Pavement Disposal (no charge)	10.00	cy	0.00	0.00
Excavation Disposal (loaded)	30.00	cy	8.00	240.00

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Job No: 101
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Attn: John Emerson
55 Portland Street
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Description	Quantity	UoM	Unit Price	Extended Price
3/4" Crushed Stone (loaded)	14.00	cy	19.00	266.00
Screened Sand (loaded)	14.00	cy	7.25	101.50
Type D Gravel (loaded)	30.00	cy	11.50	345.00
1.5" Reclaim (loaded)	5.00	cy	17.50	87.50
12" SDR-35 Pipe	25.00	lf	11.00	275.00
12/4/17 PM - 12/5/17 PM - Repair 12" sewer. Double time for night work.				
Site Safety Package - extensive sign package, cones, barrels	1.00	day	600.00	600.00
Flaggers	84.00	hr	30.00	2,520.00
Project Manager	1.00	hr	80.00	80.00
Supervisor (double time)	15.00	hr	180.00	2,700.00
Utility Truck w/ Tools	15.00	hr	38.00	570.00
Foreman (double time)	15.00	hr	140.00	2,100.00
Utility Truck w/ Tools	15.00	hr	38.00	570.00
Site Worker (double time)	14.00	hr	90.00	1,260.00
Site Worker (double time)	14.00	hr	90.00	1,260.00
Driver (double time)	13.00	hr	96.00	1,248.00
Driver (double time)	13.00	hr	96.00	1,248.00
Driver (double time)	14.00	hr	96.00	1,344.00
Operator (double time)	14.00	hr	110.00	1,540.00
Operator (double time)	14.00	hr	110.00	1,540.00
18 CY Dump Truck (no driver)	13.00	hr	42.00	546.00
18 CY Dump Truck (no driver)	13.00	hr	42.00	546.00
14 CY Dump Truck (no driver)	14.00	hr	32.00	448.00
66,000 LB Excavator (no operator)	14.00	hr	140.00	1,960.00

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Description	Quantity	UoM	Unit Price	Extended Price
19,000 LB Excavator (no operator)	14.00	hr	70.00	980.00
2.75 CY Loader (no operator)	14.00	hr	90.00	1,260.00
8 Ton Roller (no operator)	2.00	hr	55.00	110.00
Large Trench Box	1.00	day	275.00	275.00
Light Trees (5)	5.00	day	210.00	1,050.00
Pavement Disposal (no charge)	30.00	cy	0.00	0.00
Excavation Disposal (loaded)	48.00	cy	8.00	384.00
3/4" Crushed Stone (loaded)	28.00	cy	19.00	532.00
Screened Sand (loaded)	28.00	cy	7.25	203.00
Type D Gravel (loaded)	46.00	cy	11.50	529.00
1.5" Reclaim (loaded)	11.00	cy	17.50	192.50
Water Plug (5 gallon bucket)	1.00	ea	54.00	54.00
12/6/17 - Placement of concrete in place of cobble stones per City spec. Regular time for day work.				
Site Safety Package - extensive sign package, cones, barrels	1.00	day	600.00	600.00
Flaggers	14.00	hr	30.00	420.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	7.00	hr	90.00	630.00
Utility Truck w/ Tools	7.00	hr	38.00	266.00
Foreman	7.00	hr	70.00	490.00
Utility Truck w/ Tools	7.00	hr	38.00	266.00
Site Worker	3.00	hr	45.00	135.00
Site Worker	7.00	hr	45.00	315.00
18 CY Dump Truck	4.00	hr	90.00	360.00
18 CY Dump Truck	4.00	hr	90.00	360.00

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Customer #: 489
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Due Date: 1/17/2018
PO #:
Job No: 101
Description: Misc Jobs

Bill To:

Portland Public Services
Attn: John Emerson
55 Portland Street
Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
19,000 LB Excavator	5.00	hr	125.00	625.00
8 Ton Roller	2.00	hr	110.00	220.00
Concrete (delivered)	141.00	cy	28.00	3,948.00
12/7/17 - Pave trench. Regular time for day work.				
Site Safety Package - extensive sign package, cones, barrels	1.00	day	600.00	600.00
Flaggers	10.00	hr	30.00	300.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	8.00	hr	90.00	720.00
Utility Truck w/ Tools	8.00	hr	38.00	304.00
Foreman	7.00	hr	70.00	490.00
Utility Truck w/ Tools	7.00	hr	38.00	266.00
Site Worker	3.00	hr	45.00	135.00
19,000 LB Excavator	4.00	hr	125.00	500.00
12.5mm Hot Mix Asphalt (in-place)	40.27	tn	150.00	6,040.50
Materials Purchased for Sewer Repairs - Portland Sewer District is keeping all exta pipe & fittings.				
Ferguson Waterworks invoices (15% markup)	1.15	ls	5,871.37	6,752.08

All charges are due and payable within (30) thirty days of the date of invoice. A finance charge of 1 1/2% per month (18% per year) shall be imposed monthly if an outstanding invoice is not paid within (30) thirty days of the invoice date. Any account with an invoice outstanding for more than (60) sixty days shall be placed on C.O.D. terms.

Sub-Total:	75,316.08
Sales Tax:	0.00
Retainage Held:	0.00
Current Amount Due:	**75,316.08**

SHAW BROTHERS CONSTRUCTION, INC.

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WWW.SHAWBROTHERS.COM

Customer #: 489
Invoice #: 14061
Invoice Date: 11/8/2017
Due Date: 12/8/2017
PO #:
Job No: 101
Description: Misc Jobs

Bill To:
Portland Public Services
John Emerson
55 Portland St

Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
Chestnut Street emergency sewer break.				
10/13/17 - Placed steel plates & site safety package to cover sink hole until crew arrived on 10/17/17.				
Street Opening Permit Application	1.00	ea	250.00	250.00
Traffic Control Plan	1.00	ls	500.00	500.00
Dig Safe	1.00	ea	250.00	250.00
Portable Toilet Rental	1.00	ls	75.00	75.00
Supervisor	2.00	hr	90.00	180.00
Utility Truck w/ Tools	2.00	hr	38.00	76.00
Foreman	2.00	hr	70.00	140.00
Utility Truck w/ Tools	2.00	hr	38.00	76.00
8 CY Dump Truck w/ Trailer	2.00	hr	85.00	170.00
Steel Plates (2 plates @ 3 weeks/each)	6.00	wk	235.00	1,410.00
10/17/17 - Mobilize equipment and setting up traffic control.				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	4.50	hr	90.00	405.00
Utility Truck w/ Tools	4.50	hr	38.00	171.00
Site Worker	4.50	hr	45.00	202.50
Utility Truck w/ Tools	4.50	hr	38.00	171.00
Site Worker	4.50	hr	45.00	202.50
Move Charge - 80,000 LB Excavator	1.00	ea	240.00	240.00
Move Charge - 19,000 LB Excavator	1.00	ea	125.00	125.00
Move Charge - 2.75 CY Loader	1.00	ea	145.00	145.00
Move Charge - 2 Trench Boxes & 4 Plates	2.00	hr	140.00	280.00

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PO #:
Job No: 101
Description: Misc Jobs

Bill To:
Portland Public Services
John Emerson
55 Portland St

Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
10/18/17 - Sewer repair				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Flaggers	27.00	hr	30.00	810.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	10.00	hr	90.00	900.00
Utility Truck w/ Tools	10.00	hr	38.00	380.00
Foreman	10.00	hr	70.00	700.00
Utility Truck w/ Tools	10.00	hr	38.00	380.00
Site Worker	10.00	hr	45.00	450.00
18 CY Dump Truck	7.00	hr	90.00	630.00
18 CY Dump Truck	7.00	hr	90.00	630.00
19,000 LB Excavator	10.00	hr	125.00	1,250.00
80,000 LB Excavator	8.00	hr	240.00	1,920.00
2.75 CY Loader	9.00	hr	140.00	1,260.00
Large Trench Box (1 box @ 2 weeks/each)	2.00	wk	790.00	1,580.00
Small Trench Box (1 box @ 2 weeks/each)	2.00	wk	550.00	1,100.00
Steel Plates (4 plates @ 2 weeks/each)	8.00	wk	235.00	1,880.00
Forward Reverse Compactor	1.00	day	235.00	235.00
Highway Saw w/ Blade & Water	1.00	day	525.00	525.00
Pavement Disposal (no charge)	10.00	cy	0.00	0.00
Excavation Disposal (loaded)	18.00	cy	8.00	144.00
3/4" Crushed Stone (loaded)	36.00	cy	19.00	684.00
Screened Sand (loaded)	18.00	cy	7.25	130.50
10/19/17 - Sewer repair				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00

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PO #:
Job No: 101
Description: Misc Jobs

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Portland Public Services
John Emerson
55 Portland St

Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
Flaggers	25.00	hr	30.00	750.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	10.00	hr	90.00	900.00
Utility Truck w/ Tools	10.00	hr	38.00	380.00
Foreman	10.00	hr	70.00	700.00
Utility Truck w/ Tools	10.00	hr	38.00	380.00
Site Worker	10.00	hr	45.00	450.00
18 CY Dump Truck	10.00	hr	90.00	900.00
14 CY Dump Truck	10.00	hr	80.00	800.00
19,000 LB Excavator	10.00	hr	125.00	1,250.00
80,000 LB Excavator	10.00	hr	240.00	2,400.00
2.75 CY Loader	10.00	hr	140.00	1,400.00
Move Charge - 8 ton Roller	1.00	ea	110.00	110.00
8 Ton Roller	10.00	hr	110.00	1,100.00
Forward Reverse Compactor	1.00	day	235.00	235.00
Excavation Disposal (loaded)	18.00	cy	8.00	144.00
Type D Gravel (loaded)	36.00	cy	11.50	414.00
10/20/17 - Sewer repair				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Flaggers	25.00	hr	30.00	750.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	10.00	hr	90.00	900.00
Utility Truck w/ Tools	10.00	hr	38.00	380.00
Foreman	10.00	hr	70.00	700.00
Utility Truck w/ Tools	10.00	hr	38.00	380.00

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Description	Quantity	UoM	Unit Price	Extended Price
Site Worker	10.00	hr	45.00	450.00
18 CY Dump Truck	10.00	hr	90.00	900.00
18 CY Dump Truck	10.50	hr	90.00	945.00
19,000 LB Excavator	10.00	hr	125.00	1,250.00
80,000 LB Excavator	10.00	hr	240.00	2,400.00
2.75 CY Loader	10.00	hr	140.00	1,400.00
8 Ton Roller	10.00	hr	110.00	1,100.00
Forward Reverse Compactor	1.00	day	235.00	235.00
Pavement Disposal (no charge)	18.00	cy	0.00	0.00
Excavation Disposal (loaded)	36.00	cy	8.00	288.00
Type D Gravel (loaded)	36.00	cy	11.50	414.00
3/4" Crushed Stone (loaded)	18.00	cy	19.00	342.00
Screened Sand (loaded)	18.00	cy	7.25	130.50
10/23/17 - Sewer repair				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Flaggers	26.00	hr	30.00	780.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	11.00	hr	90.00	990.00
Utility Truck w/ Tools	11.00	hr	38.00	418.00
Foreman	11.00	hr	70.00	770.00
Utility Truck w/ Tools	11.00	hr	38.00	418.00
Site Worker	11.00	hr	45.00	495.00
Site Worker	11.00	hr	45.00	495.00
18 CY Dump Truck	11.00	hr	90.00	990.00
18 CY Dump Truck	11.00	hr	90.00	990.00

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John Emerson
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Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
19,000 LB Excavator	11.00	hr	125.00	1,375.00
80,000 LB Excavator	11.00	hr	240.00	2,640.00
2.75 CY Loader	11.00	hr	140.00	1,540.00
8 Ton Roller	11.00	hr	110.00	1,210.00
Forward Reverse Compactor	1.00	day	235.00	235.00
Excavation Disposal (loaded)	36.00	cy	8.00	288.00
Type D Gravel (loaded)	18.00	cy	11.50	207.00
3/4" Crushed Stone (loaded)	18.00	cy	19.00	342.00
Screened Sand (loaded)	18.00	cy	7.25	130.50
10/24/17 - Sewer repair				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Flaggers	26.50	hr	30.00	795.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	11.00	hr	90.00	990.00
Utility Truck w/ Tools	11.00	hr	38.00	418.00
Foreman	11.00	hr	70.00	770.00
Utility Truck w/ Tools	11.00	hr	38.00	418.00
Site Worker	11.00	hr	45.00	495.00
Site Worker	11.00	hr	45.00	495.00
18 CY Dump Truck	11.00	hr	90.00	990.00
18 CY Dump Truck	11.00	hr	90.00	990.00
19,000 LB Excavator	11.00	hr	125.00	1,375.00
80,000 LB Excavator	11.00	hr	240.00	2,640.00
2.75 CY Loader	11.00	hr	140.00	1,540.00
8 Ton Roller	11.00	hr	110.00	1,210.00

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Job No: 101
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55 Portland St

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Description	Quantity	UoM	Unit Price	Extended Price
Forward Reverse Compactor	1.00	day	235.00	235.00
Pavement Disposal (no charge)	18.00	cy	0.00	0.00
Excavation Disposal (loaded)	36.00	cy	8.00	288.00
Type D Gravel (loaded)	54.00	cy	11.50	621.00
10/27/17 - Sewer repair				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Flaggers	23.00	hr	30.00	690.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	9.50	hr	90.00	855.00
Utility Truck w/ Tools	9.50	hr	38.00	361.00
Foreman	9.50	hr	70.00	665.00
Utility Truck w/ Tools	9.50	hr	38.00	361.00
Site Worker	9.50	hr	45.00	427.50
Site Worker	9.50	hr	45.00	427.50
18 CY Dump Truck	9.50	hr	90.00	855.00
18 CY Dump Truck	9.50	hr	90.00	855.00
19,000 LB Excavator	9.50	hr	125.00	1,187.50
80,000 LB Excavator	9.50	hr	240.00	2,280.00
2.75 CY Loader	9.50	hr	140.00	1,330.00
8 Ton Roller	9.50	hr	110.00	1,045.00
Forward Reverse Compactor	1.00	day	235.00	235.00
Pavement Disposal (no charge)	9.00	cy	0.00	0.00
Excavation Disposal (loaded)	54.00	cy	8.00	432.00
Type D Gravel (loaded)	36.00	cy	11.50	414.00
3/4" Crushed Stone (loaded)	18.00	cy	19.00	342.00

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Description	Quantity	UoM	Unit Price	Extended Price
Screened Sand (loaded)	18.00	cy	7.25	130.50
10/31/17 - Sewer repair				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Flaggers	22.00	hr	30.00	660.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	9.50	hr	90.00	855.00
Utility Truck w/ Tools	9.50	hr	38.00	361.00
Foreman	9.50	hr	70.00	665.00
Utility Truck w/ Tools	9.50	hr	38.00	361.00
Site Worker	9.50	hr	45.00	427.50
Site Worker	9.50	hr	45.00	427.50
18 CY Dump Truck	9.50	hr	90.00	855.00
18 CY Dump Truck	10.00	hr	90.00	900.00
19,000 LB Excavator	9.50	hr	125.00	1,187.50
80,000 LB Excavator	9.50	hr	240.00	2,280.00
2.75 CY Loader	9.50	hr	140.00	1,330.00
8 Ton Roller	9.50	hr	110.00	1,045.00
Forward Reverse Compactor	1.00	hr	235.00	235.00
Excavation Disposal (loaded)	90.00	cy	8.00	720.00
Type D Gravel (loaded)	18.00	cy	11.50	207.00
Screened Sand (loaded)	18.00	cy	7.25	130.50
11/1/17 - Sewer repair, fine grade, base pave trench.				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Flaggers	22.50	hr	30.00	675.00

SHAW BROTHERS CONSTRUCTION, INC.

INVOICE

P.O. BOX 69 GORHAM, MAINE 04038

MAIN OFFICE
839-2552 ~ FAX 839-6239

MATERIAL ORDERS
892-6363 ~ FAX 892-5167

WWW.SHAWBROTHERS.COM

Customer #: 489
Invoice #: 14061
Invoice Date: 11/8/2017
Due Date: 12/8/2017
PO #:
Job No: 101
Description: Misc Jobs

Bill To:
Portland Public Services
John Emerson
55 Portland St

Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
Project Manager	1.00	hr	80.00	80.00
Supervisor	9.50	hr	90.00	855.00
Utility Truck w/ Tools	9.50	hr	38.00	361.00
Foreman	9.50	hr	70.00	665.00
Utility Truck w/ Tools	9.50	hr	38.00	361.00
Site Worker	9.50	hr	45.00	427.50
Site Worker	9.50	hr	45.00	427.50
18 CY Dump Truck	9.50	hr	90.00	855.00
18 CY Dump Truck	9.50	hr	90.00	855.00
19,000 LB Excavator	9.50	hr	125.00	1,187.50
80,000 LB Excavator	9.50	hr	240.00	2,280.00
2.75 CY Loader	9.50	hr	140.00	1,330.00
8 Ton Roller	9.50	hr	110.00	1,045.00
Move Charge - Paving Roller	1.00	ea	105.00	105.00
4 ton Paving Roller	4.00	hr	105.00	420.00
Forward Reverse Compactor	1.00	day	235.00	235.00
Highway Saw w/ Blade & Water	1.00	day	525.00	525.00
Pavement Disposal (no charge)	10.00	cy	0.00	0.00
12.5mm Hot Mix Asphalt (loaded)	34.79	tn	65.00	2,261.35
11/3/2017 - Surface Paving, demobilize equipment & sign package and deliver all remaining pipe material to Sewer District facility				
Site Safety Package - signs, cones, barrels	1.00	day	300.00	300.00
Flaggers	8.50	hr	30.00	255.00
Project Manager	1.00	hr	80.00	80.00
Supervisor	8.50	hr	90.00	765.00

SHAW BROTHERS CONSTRUCTION, INC.

INVOICE

P.O. BOX 69 GORHAM, MAINE 04038

MAIN OFFICE
839-2552 ~ FAX 839-6239

MATERIAL ORDERS
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Customer #: 489
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Invoice Date: 11/8/2017
Due Date: 12/8/2017
PO #:
Job No: 101
Description: Misc Jobs

Bill To:
Portland Public Services
John Emerson
55 Portland St

Portland, ME 04101

Description	Quantity	UoM	Unit Price	Extended Price
Utility Truck w/ Tools	8.50	hr	38.00	323.00
Foreman	8.50	hr	70.00	595.00
Utility Truck w/ Tools	8.50	hr	38.00	323.00
Site Worker	8.50	hr	45.00	382.50
9.5mm Hot Mix Asphalt (in-place)	31.06	hr	150.00	4,659.00
Materials Purchased for Sewer Repairs - Portland Sewer District is keeping all exta pipe & fittings.				
Ferguson Waterworks invoices (15% markup)	1.15	ls	18,933.88	21,773.96

All charges are due and payable within (30) thirty days of the date of invoice. A finance charge of 1 1/2% per month (18% per year) shall be imposed monthly if an outstanding invoice is not paid within (30) thirty days of the invoice date. Any account with an invoice outstanding for more than (60) sixty days shall be placed on C.O.D. terms.

Sub-Total:	147,805.81
Sales Tax:	0.00
Retainage Held:	0.00
Current Amount Due:	**147,805.81**

AGREEMENT BETWEEN THE
CITY OF PORTLAND
AND
PRECISION INDUSTRIAL MAINTENANCE, INC.

THIS AGREEMENT is entered into this 28th day of March, 2017, by and between the **CITY OF PORTLAND,** a body politic and corporate, (hereinafter the "**CITY**"), and **PRECISION INDUSTRIAL MAINTENANCE, INC.**, a New York corporation with an address of 1710 Erie Boulevard, Schenectady, New York 12308 (hereinafter the "**CONTRACTOR**").

W I T N E S S E T H:

WHEREAS, the **CITY** is in need of linings for its sewer pipes and did advertise a Request for Bids #3717 entitled "Ultraviolet Light Cured-in-Place-Pipe Lining Projects" dated November 7, 2016, revised January 18, 2017, as amended by Addendum 1 dated November 14, 2016, Addendum 2 dated November 21, 2016, and Addendum 3 dated November 30, 2016 (hereinafter, collectively, the "Request for Bids"), a copy of which is attached as Exhibit A and made a part hereof; and

WHEREAS, the **CONTRACTOR** has the requisite knowledge and technical ability to perform the required services and has submitted a proposal for the provision of such services dated December 7, 2017, as amended by the Revised Bid Sheet dated January 17, 2017 (hereinafter, collectively, the "Proposal"), a copy of which is attached as Exhibit B and made a part hereof; and

WHEREAS, after due consideration of all the Bids, the **CITY** did award the bid to the **CONTRACTOR;**

NOW, THEREFORE, in consideration of the mutual promises made by each party to the other, the parties covenant and agree as follows:

1. The **CONTRACTOR** will furnish the materials, supplies, equipment and labor (hereinafter the "Work") in accordance with the specifications contained in the Request for Bids and also in accordance with the **CONTRACTOR's** Proposal.

   The restatement in this document of any term of the Request for Bids or Proposal shall not be deemed to waive any term not so restated. If any disagreement is found between Request for Bids or the Proposal and this document, then this document shall govern; and the Request for Bids shall govern over the Proposal, to the extent they disagree; provided, however, that this document and its attachments shall be construed to be supplemental to one another to the extent possible.

2. The **CONTRACTOR** covenants and agrees that all Work performed and furnished hereunder shall be free from all defects, and that all Work shall be performed in a good workmanlike manner. Unless a longer warranty period is specified in the Exhibits hereto, all Work provided shall be warranted by the **CONTRACTOR** for one (1) full year from the date of completion of all Work hereunder and acceptance thereof by the **CITY**. Notwithstanding the foregoing, any longer period specified in the attachments shall stay in effect.

3. Prior to the execution of this Agreement, the **CONTRACTOR** will procure and maintain Automobile Insurance and General Public Liability Insurance coverage in amounts of not less than Four Hundred Thousand Dollars ($400,000.00) per occurrence for bodily injury, death and property damage, naming the **CITY** as an additional insured thereon, and also Workers' Compensation Insurance coverage to the extent required by law. With respect to the General Liability and Automobile Liability Insurance, the **CONSULTANT** shall name the **CITY** as an additional insured for coverage only in those areas where government immunity has been expressly waived by 14 M.R.S. A. § 8104-A, as limited by § 8104-B, and § 8111. This provision shall not be deemed a waiver of any defenses, immunities or limitations of liability or damages available under the Maine Tort Claims Act, other Maine statutory law, judicial precedent or common law. With respect to the Liability Insurance, the **CONTRACTOR** will provide the **CITY** a certificate of insurance evidencing such coverage, in this way: certificate must say either: A) "the policy has been endorsed to name the City of Portland as an Additional Insured" and a copy of the endorsement must come to the City of Portland with the certificate, or B) "the policy already includes an endorsement, such as the General Liability Extension Endorsement, by which the City of Portland is automatically made an additional insured." A Certificate which merely has a box checked under "Addl Insr," or the like, or which merely states the City of Portland is named as an Additional Insured, will not be acceptable. The Workers' Compensation insurance shall include an endorsement waiving all rights of subrogation against the City of Portland, its officers or employees. The **CONTRACTOR** shall furnish the **CITY** and thereafter maintain certificates evidencing all such coverages, which certificates shall guarantee thirty (30) days' notice to the **CITY** of termination of insurance from insurance provider or agent.

4. The **CONTRACTOR** shall furnish to the **CITY**, upon execution of the Contract, a Contract Performance Bond and a Contract Labor and Materials Payment Bond each for the full amount of the Contract and issued by a surety company or surety companies authorized to do business in the State of Maine and approved by the **CITY**. The Bonds shall remain in effect for one year after final acceptance of the Work, and protect the **CITY** for at least one year of warranty of the Work hereunder, and also shall insure settlement of claims for the payment of all bills for labor, materials and equipment.

5. To the fullest extent permitted by law, the **CONTRACTOR** shall defend, indemnify and hold harmless the **CITY**, its officers and employees, from and against all claims, damages, losses, and expenses, just or unjust, including, but not limited to, the costs of defense and attorney's fees arising out of or resulting from the performance of this Agreement, provided that any such claims, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use therefrom, and (2) is caused in whole or in part by any negligent act or omission of the **CONTRACTOR**, anyone directly or indirectly employed by it, or anyone for whose act it may be liable. Such obligation of indemnification shall not be construed to negate or abridge any other obligation of indemnification running to the **CITY** which otherwise exists. The extent of the indemnification provision shall not be limited by the provision for insurance in this Agreement. **CONTRACTOR**'s obligations under this paragraph shall survive termination of this Agreement.

6. Prior to any payment, the **CITY** reserves the right to require Waivers of Lien for materials and labor from the **CONTRACTOR** and its subcontractors and suppliers guaranteeing One Hundred Percent (100%) performance, free and clear from all liens and encumbrances. Any mechanic's lien or any other lien which may be filed against the premises which are the subject of this Agreement by reason of the Work described herein shall be defended (by counsel reasonably acceptable to the **CITY**) and promptly discharged by the **CONTRACTOR** at its own expense. The **CITY** may require the **CONTRACTOR** to provide a bond satisfactory to the **CITY** to indemnify it against any lien and as a substitution in place of a lien. If the **CONTRACTOR** should fail either to defend the **CITY** against the lien or to discharge it, then the **CITY** may do so at the **CONTRACTOR's** expense. In the event of such an undertaking by the **CITY**, the **CONTRACTOR** will promptly reimburse the **CITY** for all its costs and expenses in so doing, including, but not limited to, reimbursement of the **CITY's** reasonable counsel fees, as well as costs which may be incurred by it in substituting a bond in place of a lien. **CONTRACTOR**'s obligations under this paragraph shall survive termination of this Agreement.

7. The **CONTRACTOR** shall perform the work to the satisfaction of the responsible **CITY** official who will have the right of inspection at all times, and whose approval and acceptance of the work will be a condition precedent to payments by the **CITY** under this Contract. **CITY** inspectors will have the authority to stop work in progress if such work is being done contrary to the plans, specifications or engineering practice. **CONTRACTOR** acknowledges and agrees that such inspection is for purposes of

approving payment alone and such inspection shall not be deemed to impose any duty or liability upon the **CITY** to supervise any aspect of or approve the quality of the Work.

8. Time is of the essence in the performance of this Agreement. Upon receipt of executed contracts and insurance as required, the **CITY** will promptly send an executed **CITY** contract to the **CONTRACTOR,** which will commence work upon receipt. The work shall be substantially complete by June 30, 2017.

9. In the event of any dispute as to the amount, nature or scope of the work required under this Contract, the design and judgment of the Director of the Department of Public Works or his or her designee (hereinafter, the "Director") will be final and binding.

10. For performance of all the terms and conditions of this Agreement, the **CITY** will pay the **CONTRACTOR** Eight Hundred Four Thousand One Hundred Seventy-Three Dollars and No Cents ($804,173.00) based on the rates set forth in the Proposal.

11. The **CITY** shall have the retainage right set forth in section 108.3 of the Request for Bids.

12. The **CONTRACTOR** shall keep accurate records of all services performed under this Agreement and shall submit such information to the **CITY** on a monthly basis. Payment for such Work shall be made to the **CONTRACTOR** not more than thirty (30) days after receipt of an invoice and acceptance of the Work by the Director.

13. The **CITY** may terminate this Agreement for cause by written notice to the **CONTRACTOR**. In the event of such termination, the **CONTRACTOR** shall not be entitled to any further payment under this Agreement from the date of receipt of said notice.

14. The **CITY** shall have the right to terminate this Agreement at any time for its convenience on thirty (30) days' prior written notice to the **CONTRACTOR**. If the Agreement is terminated by the **CITY** for convenience, the **CITY** shall pay the **CONTRACTOR** for all Work performed and all materials purchased pursuant to this Agreement prior to receipt of such notice.

15. Out of concern for the public, **CITY** employees and the **CONTRACTOR's** employees, all work performed by the **CONTRACTOR** shall be in conformance with pertinent OSHA, local, state and federal government regulations.

16. No waiver of any breach of any one or more of the conditions of this Agreement by the **CITY** shall be deemed to imply or constitute a waiver of any succeeding or other breach hereunder.

17. This Agreement and its attachments represents the entire and complete agreement and understanding between the parties and supersedes any prior agreement or understanding, written or oral, between the parties with respect to the subject matter of this Agreement.

This Agreement cannot be amended except by written instrument executed by the **CITY** and **CONTRACTOR.**

18. This Agreement shall be construed in all respects in accordance with, and governed by, the laws of the State of Maine. All parties hereto hereby consent to the exclusive jurisdiction of the Superior Court for the County of Cumberland in the State of Maine, for all actions, proceedings and litigation arising from or relating directly or indirectly to this Agreement or any of the obligations hereunder, and any dispute not otherwise resolved as provided herein shall be litigated solely in said Court.

19. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement. A signature in a pdf or electronic document shall be considered the equivalent of an original signature.

20. **CONTRACTOR** warrants and represents that it has the full right and authority to enter into this Agreement, that there is no impediment that would inhibit its ability to perform their respective obligations under this Agreement, and that the person signing this Agreement on behalf of **CONTRACTOR** has the authority to do so.

IN WITNESS WHEREOF, the said **CITY OF PORTLAND** has caused this Agreement to be signed and sealed by Jon P. Jennings, its City Manager, thereunto duly authorized, **PRECISION INDUSTRIAL MAINTENANCE, INC.** has caused this Agreement to be signed and sealed by Scott R. Almas, its Chief Operating Officer, thereunto duly authorized, the day and date first above written.

WITNESS:

Sonia Bean

CITY OF PORTLAND

By: JCP. J-P

Jon P. Jennings
Its City Manager

WITNESS:

_____

PRECISION INDUSTRIAL MAINTENANCE, INC.

By: _____

Print or type name: Scott R. Almas

Its: COO

Approved as to form:

_____
Corporation Counsel's Office

Approved as to funds:

_____
Finance Director

EXHIBIT B

Bid #3717

BID FORM
Ultraviolet Light Cured-in-Place-Pipe Lining Projects
Portland, Maine

				UNIT PRICE		TOTAL PRICE	
Item No.	**Qty.**	**UOM**	**Item with Unit Bid Price Written in Words**	**Dollars**	**Cents**	**Dollars**	**Cents**
602.90	151	L.F.	18" Diameter Cured-In-Place Pipe @ TWO HUNDRED TWELVE Per Linear Foot	212	—	32012	—
602.91	510	L.F.	15" x 18" Horseshoe Shaped Cured-In-Place Pipe @ ONE HUNDRED FIFTY FIVE Per Linear Foot	155	—	79,050	—
602.92	88	L.F.	20" x 30" Horseshoe Shaped Cured-In-Place Pipe @ FOUR HUNDRED SEVENTY Per Linear Foot	470	—	41360	—
602.93	136	L.F.	20" x 42" Horseshoe Shaped Cured-In-Place Pipe @ THREE HUNDRED THIRTY TWO Per Linear Foot	332	—	45152	—
602.94	229	L.F.	42" – 45" Diameter Cured-In-Place Pipe @ FOUR HUNDRED FIFTY SIX Per Linear Foot	456	—	104,424	—
602.95	716	L.F.	48" Diameter Cured-In-Place Pipe @ FOUR HUNDRED SIXTY Per Linear Foot	460	—	329,360	—
602.96	137	L.F.	51" Diameter Cured-In-Place Pipe @ FIVE HUNDRED SEVENTY TWO Per Linear Foot	572	—	78,364	—
602.97	51^	EA	4"-12" Diameter Services Openings @ FOUR HUNDRED FIFTY Per Each	450	—	22950	—
602.98	15^^	EA	Snap Protruding Service Lateral @ FOUR HUNDRED FIFTY Per Each	450	—	6750	—
602.99	1967	L.F.	Light Cleaning of Sewer System @ FIVE Per Linear Foot	5	—	9835	—

602.991	10*	L.F.	Heavy Cleaning of Sewer System @ TWENTY Per Linear Foot	20	~~00~~	200	~~00~~
604.166	10**	EA	Alter (Rehabilitation) of Existing Manhole @ FIVE THOUSAND Per Each	5000	—	50000	—
652.39	1	L.S.	Work Zone Traffic Control @ FIVE THOUSAND Per Lump Sum	5000	—	5000	—
			TOTAL AMOUNT OF BID PROPOSAL, WRITTEN AND IN FIGURES BASED ON ESTIMATE OF QUANTITIES. EIGHT HUNDRED FOUR THOUSAND FOUR HUNDRED FIFTY SEVEN	$804,457			—

NOTES:

^ Recorded services openings. Additional openings may be discovered with further CCTV investigation – particularly between SSMH-3683 and SSMH-1150.

^^ Recorded protruding laterals. Additional laterals may be discovered with further CCTV investigation – particularly between SSMH-3683 and SSMH-1150.

** Only if light cleaning is not satisfactory, footage will vary. Please provide cost per linear foot of cleaning, understanding that the paid length will be based on entire pipe segment needing heavy cleaning. Approval for heavy cleaning must be granted by City.*

*** Only if top of manhole must be removed to install large diameter liner.*

Completed Revised Bid Sheet from
Precision Industrial Maintenance Inc.
2017-01-24

BID FORM
Ultraviolet Light Cured-in-Place-Pipe Lining Projects
Portland, Maine
REVISED 1/18/2017

				UNIT PRICE		TOTAL PRICE	
Item No.	**Qty.**	**UOM**	**Item with Unit Bid Price Written in Words**	**Dollars**	**Cents**	**Dollars**	**Cents**
602.90	151	L.F.	18" Diameter Cured-In-Place Pipe @_____ Per Linear Foot	212	00	32012	00
602.91	510	L.F.	15" x 18" Horseshoe Shaped Cured-In-Place Pipe @_____ Per Linear Foot	155	00	79050	00
602.92	88	L.F.	20" x 30" Horseshoe Shaped Cured-In-Place Pipe @_____ Per Linear Foot	470	00	41360	00
602.93	136	L.F.	36" x 24" Horseshoe Shaped Cured-In-Place Pipe @_____ Per Linear Foot	332	00	45152	00
602.94	229	L.F.	42" – 45" Diameter Cured-In-Place Pipe @_____ Per Linear Foot	456	00	104424	00
602.95	619	L.F.	48" Diameter Cured-In-Place Pipe @_____ Per Linear Foot	460	00	287740	00
602.96	97	L.F.	Geopolymer Lining for 48" Diameter Pipe@_____ Per Linear Foot	600	00	58200	00
602.97	51^	EA	4"-12" Diameter Services Openings @_____ Per Each	450	00	22,950	00
602.98	15^^	EA	Snap Protruding Service Lateral @_____ Per Each	450	00	6750	00
602.99	1967	L.F.	Light Cleaning of Sewer System @_____ Per Linear Foot	5	00	9835	00

602.991	10*	L.F.	Heavy Cleaning of Sewer System @_____ _____ Per Linear Foot	20	00	200	00
602.992	1	L.S.	Feasibility Investigation and Analysis	42500	00	42500	00
604.166	10**	EA	Alter (Rehabilitation) of Existing Manhole @_____ _____ Per Each	5000	00	50000	00
652.39	1	L.S.	Work Zone Traffic Control @_____ _____ Per Lump Sum	24000	00	24000	00
			TOTAL AMOUNT OF BID PROPOSAL, WRITTEN AND IN FIGURES BASED ON ESTIMATE OF QUANTITIES. _____ _____	804,173.00			

NOTES:

^ Recorded services openings. Additional openings may be discovered with further CCTV investigation – particularly between SSMH-3683 and SSMH-1150.

^^ Recorded protruding laterals. Additional laterals may be discovered with further CCTV investigation – particularly between SSMH-3683 and SSMH-1150.

** Only if light cleaning is not satisfactory, footage will vary. Please provide cost per linear foot of cleaning, understanding that the paid length will be based on entire pipe segment needing heavy cleaning. Approval for heavy cleaning must be granted by City.*

*** Only if top of manhole must be removed to install large diameter liner.*

Revisions include:

Changed pipe size of 20" x 42" to 24" x 36"
Removed 97' of 48" Diameter CIPP
Added Geopolymer lining for 97' of 48" pipe (curved section connecting Fore to India)
Added Feasibility Investigation and Analysis lump sum to include:
- ***Confined space entry in all manholes where a liner may be installed***
- ***Confined space entry and access to pipe segments in Fore Street and India Street***
- ***NAASCO rated CCTV of all lines***
- ***Other investigative techniques such as dye tests***

PROPOSAL *(continue)*

The undersigned also agrees as follows:

FIRST: To do any extra work, not covered by the above schedule of items, which may be ordered, and to accept as full compensation therefore such prices as may be agreed upon in writing by the Engineer and the Contractor; or in case no agreement is made, to accept as full compensation the amount determined upon a "force account" basis as provided in the M.D.O.T. Standard Specifications, November 2014.

SECOND: To begin work on the date specified in the Engineer's "Notice to Commence Work" and to prosecute said work in such a manner as to complete it within a period of 90 calendar days or within the time limits given in the Special Provisions. Further, that monies will be deducted as liquidated damages at the rate specified in Subsection 107.7.2 "Schedule of Liquidated Damages" for each day that the work shall remain uncompleted after the time herein specified for completion of the work.

THIRD: That this offer is to continue open to acceptance until the formal contract is executed by the successful bidder of this work, and the City may at any time without notice accept this proposal whether any other proposal has previously been accepted or not. Provided, however, that the City will accept, in writing, one of the proposals made, or reject all proposals made, within sixty (60) calendar days after the date of opening of the proposals.

The undersigned as Bidder, declares that the only persons or parties interested in this Proposal are those named herein; that the bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on this contract; and that this Proposal is made without collusion with any other person, firm or corporation.

"The undersigned declares that any person(s) employed by the City of Portland, Maine, who has direct or indirect personal or financial interest in this proposal or in any portion of the profits which may be derived therefore, has been identified and the interest disclosed by separate attachment. (Please include in your disclosure any interest which you know of. An example of a direct interest would be a City employee who would be paid to perform services under this proposal. An example of an indirect interest would be a City employee who is related to any officers, employees, principal, or shareholders of your firm or you.) If in doubt as to status or interest, please disclose to the extent known."

Respectfully submitted this 7 day of DECEMBER, 20 16

IF AN INDIVIDUAL, SIGN HERE

Signature of Bidder_____

Address_____

_____

(Signatures for a Firm, Partnership or Corporation are required on the next page.)

PROPOSAL *(continue)*

IF A FIRM OR PARTNERSHIP, SIGN HERE

Signature of Bidder_____

Name of Firm or Partnership_____

Business Address_____

Telephone Number_____ Fax Number_____

Soc. Sec. No. or Tax I.D. Number_____

Names and Addresses of Members of Firm or Partnership:

_____

_____

_____

IF A CORPORATION, SIGN HERE

Name of Bidder Precision Industrial Maintenance, Inc.

Authorized Signature [signature] President
(Name) Todd Kilburn (Title)

Business Address 1710 Erie Boulevard Schenectady, NY 12308

Telephone Number 518-346-5800 6204 Fax Number 518-346-6077

Soc. Sec. No. or Tax I.D. Number 14-1785262

Incorporated under the Laws of the State of New York

Names and Addresses of Officers of the Corporation:

President Todd Kilburn

Secretary _____

Treasurer _____

Before me, personally appeared Todd Kilburn and acknowledged that the signature to the preceding bid is his/her signature in his/her official capacity.

Date: 12/7/16

SCOTT R. ALMAS
Notary Public, State of New York
No. 02AL6009176
Qualified in Schenectady County
Commission Expires June 22, 2022

Notary Public - Signature and Seal

Addendum #1

CITY OF PORTLAND, MAINE

Ultraviolet Light Cured-in-Place-Pipe Lining Projects

Bid#3717

Current Date: November 14, 2016

The attention of firms submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Contractor's submitted material and the corresponding Contract when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

****

ALL BIDDERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED ON THE BID PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

****

MATTHEW FITZGERALD
PURCHASING MANAGER

We received the question below and are providing a response via this addendum:

Would you approve use of air steam as an alternative to the UV CIPP as currently specified.

Based on our Department of Public Works Engineering Department's research, they are aware that this is a newer method with somewhat limited availability. The method is being specified for this particular project so it can be test-evaluated for the anticipated benefits as noted on the cover page.

Additionally, Note: Future lining projects will likely not have the UV CIPP only requirement.

Receipt of **Addendum No. 1** to the City of Portland's **Bid #3717: Ultraviolet Light Cured-in-Place-Pipe Lining Projects** is hereby acknowledged.

COMPANY: PRECISION TRENCHLESS, LLC

NAME: TODD KUSURN

SIGNED BY: [signature] DATE: 12/7/16

PRINT NAME & TITLE: TODD KUSURN PRESIDENT

ADDRESS: 1710 UPS BOULEVARD

SCHENECTADY, NY 12308

ZIP CODE

Addendum #2

CITY OF PORTLAND, MAINE

Ultraviolet Light Cured-in-Place-Pipe Lining Projects

Bid#3717

Current Date: November 21, 2016

The attention of firms submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Contractor's submitted material and the corresponding Contract when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

****

ALL BIDDERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED ON THE BID PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

****

MATTHEW FITZGERALD
PURCHASING MANAGER

The bid opening date has been postponed. The new opening date is Thursday, December 8, 2016 at 3:00 p.m.

Receipt of **Addendum No. 2** to the City of Portland's **Bid #3717: Ultraviolet Light Cured-in-Place-Pipe Lining Projects** is hereby acknowledged.

COMPANY: PRECISION TRENCHLESS, LLC

NAME: TODD KILBURN

SIGNED BY: TOK DATE: 12/7/16

PRINT NAME & TITLE: TODD KILBURN PRESIDENT

ADDRESS: 1710 ERIE BOULEVARD

SCHENECTADY, NY 12309

ZIP CODE

Addendum #3

CITY OF PORTLAND, MAINE

Ultraviolet Light Cured-in-Place-Pipe Lining Projects
Bid#3717

Current Date: November 30, 2016

The attention of firms submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Contractor's submitted material and the corresponding Contract when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

****

ALL BIDDERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED ON THE BID PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

****

MATTHEW FITZGERALD
PURCHASING MANAGER

Please find on the following page our response to questions received related to this bid.

Receipt of **Addendum No. 3** to the City of Portland's **Bid #3717: Ultraviolet Light Cured-in-Place-Pipe Lining Projects** is hereby acknowledged.

COMPANY: Precision Trenchless, LLC

NAME: Todd Kilburn

SIGNED BY: [signature] DATE: 12/7/16

PRINT NAME & TITLE: Todd Kilburn President

ADDRESS: 1740 Erie Boulevard

Schenectady, NY 12308

ZIP CODE

BY-LAWS
OF
PRECISION INDUSTRIAL MAINTENANCE, INC.
A New York Corporation

ARTICLE I - OFFICES

The principal office of PRECISION INDUSTRIAL MAINTENANCE, INC. (the "Corporation") shall be in the County of Schenectady and State of New York. The Corporation may also have offices at such other places within or without the State of New York as the Corporation's board of directors (the "Board of Directors") may from time to time determine, or the business of the Corporation may require.

ARTICLE II - SHAREHOLDERS

Section 1 - Annual Meeting - The annual meeting of shareholders entitled to vote of the Corporation shall be held at the location specified by the Board of Directors, during the first six months of each calendar year for the election of Directors and the transaction of such other business as may properly come before such meeting. The exact date of the meeting will be determined by the Board of Directors.

Section 2 - Special Meetings - Special meetings of the shareholders entitled to vote for the transaction of such business as may properly come before the meeting shall be held at the office of the Corporation in the State of New York, or at such other place within or without the State of New York as may be designated from time to time by the Board of Directors. Whenever the Board of Directors shall fail to fix such place, or whenever shareholders entitled to call a special meeting shall call the same, the meeting shall be held at the office of the Corporation in the State of New York. Special meetings of the shareholders shall be held upon call of the holder or holders of a majority of the outstanding common shares entitled to vote of the Corporation, the Board of Directors or by the President, at such time as may be fixed by such holder or holders, the Board of Directors or the President and as shall be stated in the notice of said meeting.

Section 3 - Notice of Meeting - The notice of all meetings shall be in writing, shall state the place, date and hour of the meeting and, unless it is the annual meeting, shall indicate that it is being issued by or at the direction of the person or persons calling the meeting. The notice of an annual meeting shall state that the meeting is called for the election of directors and for the transaction of such other business as may properly come before the meeting and shall state the purpose or purposes of the meeting if any other action is to be taken at such annual meeting which could be taken at a special meeting. The notice of a special meeting shall, in all instances, state the purpose or purposes for which the meeting is called. No amendment of the

Section 2 - Term of Office and Removal – Subject to the Corporation's employment agreements, the term of office of all officers shall be one year and until their respective successors have been elected and qualified, but any officer may be removed from office, either with or without cause, at any time by the Board of Directors or, unless otherwise determined by resolution of the Board of Directors, by the President or pursuant to applicable law. Any vacancy in any office, however arising, may be filled for the unexpired portion of the term by the Board of Directors or the President.

Section 3 - Resignation - Any officer may resign at any time upon written notice to the Corporation and such resignation shall take effect upon receipt thereof by the President or Secretary, unless otherwise specified in the resignation, subject to applicable employment agreements.

Section 4 - President - The President shall be responsible for the overall supervision and management of the Corporation's activities, shall be the chief executive officer of the Corporation and shall have, in addition to any powers specifically described in these By-laws or any resolution of the Board of Directors, the general powers and duties of supervision and management of the Corporation that usually pertain to such office. The President shall also serve as Chairman of the Board and shall preside as such at all meetings of the Board of Directors, shall cast all deciding votes as a director for which there is a tie, shall preside at all meetings of the shareholders and shall perform such other duties as are properly required by the Board of Directors.

Section 5 - Vice Presidents - Each Vice President, if any, shall, in the absence or incapacity of the President and in order of seniority as fixed by the Board, have the authority and perform the duties of the President and each shall have such other authority and perform such other duties as the Board of Directors may prescribe.

Section 6 - Secretary - The Secretary (a) shall attend all meetings of the Board of Directors and all shareholder meetings and record all votes and the minutes of all proceedings in a book for that purpose, (b) shall perform like duties of committees of the Board when required, (c) shall give, or cause to be given, notice of all shareholder meetings and special meetings of the Board of Directors, and (d) shall have such other authority and perform such other duties as usually pertain to the office or as may be prescribed by the Board of Directors.

Section 7 - Treasurer - The Treasurer (a) shall have the care and custody of all the moneys and securities of the Corporation, (b) shall keep or cause to be kept complete and accurate books of account of all moneys received and paid on account of the Corporation, (c) shall sign such instruments as require the Treasurer's signature, and (d) shall have such other authority and perform such other duties as usually pertain to the office or as the Board of Directors may prescribe.

ALL CORPORATIONS MUST SIGN THIS FORM
AND SUBMIT WITH THE BID PROPOSAL

(Insert copy of that part of the records of the corporation wherein authority is given to the officer of that corporation to sign this bid on behalf of the corporation.)

Please see attached: cert of Incorp; consent of Board of Directors electing Todd Kilburn as President; Bylaws describing powers of President

12/7/16
(Date)

The above is a true copy of the records of the Precision Industrial Maintenance Inc. Corporation, which records are in my legal custody.

Officer having custody of the records

Before me Appears, Scott R. Almas, Chief Operating Officer & Secretary of Precision Ind. Maintenance Inc. corporation, and made oath that the above statement is true.

Danielle M. Palmiotto
Notary Public - Signature and Seal

DANIELLE M. PALMIOTTO
Notary Public, State of New York
No. 01PA6155374
Qualified in Saratoga County
Commission Expires Nov. 13, 2018

PURCHASE ORDER

CITY OF PORTLAND, MAINE
City Hall, 389 Congress Street
Portland, Maine 04101
(207) 874-8654

P.O. # 043843
Date: 04/10/17

PRECISION INDUSTRIAL MAINTENAN
1710 ERIE BOULEVARD
SCHENECTADY, NY 12308

City of Portland
PUBLIC WORKS ADMIN.
55 PORTLAND STREET
PORTLAND, ME 04101

VENDOR #
13525

DELIVER BY	SHIP VIA	TERMS
06/30/17		NET

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
TODD KILBURN	KAREN MARSTON	CBAIER (PEARSON)

FREIGHT	CONTRACT NO.	ACCOUNT NO.	PROJECT	REQ. NO.	REQ. DATE
		37031005003500	C16503	4011	04/16

LINE #	QUANTITY	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	804173.00	EA	ULTRAVIOLET LIGHT CURED IN PLACE PIPE LINING	1.0000	804173.00
				SUB-TOTAL	804173.00
				TOTAL	804173.00

REMARKS:
Per your response to the City's Bid #3717 and contract dated 03-28-17. Please coordinate work with Ben Pearson, 207-874-8843.

TERMS & CONDITIONS, AS DEPICTED ON THE REVERSE SIDE OF THIS ORDER, ARE A FORMAL PART OF THIS ORDER

FOR THE CITY OF PORTLAND, MAINE

Karen C. Marston

AUTHORIZED SIGNATURE

Approved: Bryan Pearson
Date: 12/7/2017
Account:
Proj: C16503 PO: 438413

CONTINUATION SHEET AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

Precision # 17-03005

APPLICATION NO:	2
APPLICATION DATE:	2/16/2017
PERIOD TO:	2/8/2017
PROJECT NOS:	15-094
CONTRACT DATE:	3/26/2015

A	B	C	D	E	F	G	H	I	J	K	L	M	N
				WORK COMPLETED									
ITEM NO.	DESCRIPTION OF WORK	ESTIMATED QUANTITY	UNIT PRICE	TOTAL QUANTITY FROM PREVIOUS APPLICATIONS	QUANTITY THIS PERIOD	TOTAL VALUE FROM PREVIOUS APPLICATION	VALUE THIS PERIOD	TOTAL QUANTITY COMPLETED & STORED TO DATE	TOTAL VALUE COMPLETED & STORED TO DATE	% (I div. by C)	BALANCE TO FINISH (QUANTITY) (I - C)	BALANCE TO FINISH ($) (I - C)	5% RETAINAGE (IF VARIABLE RATE)
1	Item #602.90 18" CIPP per LF	151.00	212.00		0.00		0.00	0.00	0.00	0%	-151.00	32,012.00	0.00
2	Item #602.91 15"x18" horseshoe shaped CIPP per LF	510.00	155.00		0.00		0.00	0.00	0.00	0%	-510.00	79,050.00	0.00
3	Item #602.92 20"x30" horseshoe shaped CIPP per LF	88.00	470.00		88.00		41,360.00	88.00	41,360.00	100%	0.00	0.00	2,068.00
4	Item #602.93 36"x24" horseshoe shaped CIPP per LF	136.00	332.00		136.00		45,152.00	136.00	45,152.00	100%	0.00	0.00	2,257.60
5	Item #602.94 42"-45" CIPP per LF	229.00	456.00		229.00		104,424.00	229.00	104,424.00	100%	0.00	0.00	5,221.20
6	Item #602.95 48" CIPP per LF	619.00	460.00		710.00		326,600.00	710.00	326,600.00	115%	91.00	-41,860.00	16,330.00
7	Item #602.96 Geopolymer lining for 48" pipe per LF	97.00	600.00		97.00		58,200.00	97.00	58,200.00	100%	0.00	0.00	2,910.00
8	Item #602.97 4"-12" service openings	51.00	450.00		14.00		6,300.00	14.00	6,300.00	27%	-37.00	16,650.00	315.00
9	Item #602.98 Snap protruding service lateral	15.00	450.00		4.00		1,800.00	4.00	1,800.00	27%	-11.00	4,950.00	90.00
10	Item #602.99 Light cleaning of sewer system per LF	1,967.00	5.00		1,967.00		9,835.00	1,967.00	9,835.00	100%	0.00	0.00	491.75
	Item #602.991 Heavy cleaning of sewer system per LF	10.00	20.00		10.00		200.00	10.00	200.00	100%	0.00	0.00	
11	Item #602.992 Feasibility investigation & analysis	1.00	42,500.00	1.00	0.00	42,500.00	0.00	1.00	42,500.00	100%	0.00	0.00	2,125.00
12	Item #604.166 Alter (rehabilitation) of existing manhole	10.00	5,000.00		0.00		0.00	0.00	0.00	0%	-10.00	50,000.00	0.00
13	Item #652.39 Work zone traffic control	1.00	24,000.00		1.00		24,000.00	1.00	24,000.00	100%	0.00	0.00	1,200.00
	Page TOTALS	3,885.00	75,110.00	1.00	3,256.00	42,500.00	617,871.00	3,257.00	660,371.00	84%	-628.00	140,802.00	33,008.55

PURCHASE ORDER

CITY OF PORTLAND, MAINE
City Hall, 389 Congress Street
Portland, Maine 04101
(207) 874-8654

P.O. # 043930
Date: 05/05/17

ARCADIS U.S. INC.
630 PLAZA DRIVE,
SUITE 100
HIGHLANDS RANCH, CO 80129

City of Portland
PUBLIC WORKS ADMIN.
55 PORTLAND STREET
PORTLAND, ME 04101

VENDOR #
13543

DELIVER BY	SHIP VIA	TERMS
10/24/16		NET/30

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
	RHONDA PROVENCHER	PMH (BP)

FREIGHT	CONTRACT NO.	ACCOUNT NO.	PROJECT	REQ. NO.	REQ. DATE
		30031004927010	C17508	4010	4/24/16

LINE #	QUANTITY	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	750000.00	EA	INFLOW & INFILTRATION PROGRAM	1.0000	750000.00
				SUB-TOTAL	750000.00
				TOTAL	750000.00

TERMS & CONDITIONS, AS DEPICTED ON THE REVERSE SIDE OF THIS ORDER, ARE A FORMAL PART OF THIS ORDER

FOR THE CITY OF PORTLAND, MAINE

AUTHORIZED SIGNATURE

AGREEMENT BETWEEN THE
CITY OF PORTLAND
AND
ARCADIS U.S., INC.

THIS AGREEMENT is entered into this 24th day of April, 2017, by and between the **CITY OF PORTLAND**, a body politic and corporate (hereinafter the "**CITY**"), and **ARCADIS U.S., INC.,** a Delaware corporation with a mailing address of (hereinafter the "**CONSULTANT**").

W I T N E S S E T H:

WHEREAS, the **CITY** is in need of infiltration and inflow removal and monitoring of its sewer and stormwater system and did advertise a Request for Proposals #3217 entitled "Planning and Engineering Services for a Infiltration and Inflow Program of the Sanitary Sewer System," dated October 25, 2016, as amended by Addendum 1 dated November 18, 2016 (hereinafter, collectively, the "Request for Bids"), a copy of which is attached as Exhibit A and made a part hereof; and

WHEREAS, the **CONSULTANT** has the requisite knowledge and technical ability to perform the required services and has submitted a proposal dated November 23, 2016, and an associated Scope of Services dated April 7, 2017 (collectively, the "Proposal"), a copy of which is attached as Exhibit B and made a part hereof; and

WHEREAS, after due consideration, the **CITY** decided to award this contract to **CONSULTANT;**

NOW, THEREFORE, in consideration of the mutual promises made by each party to the other, the parties covenant and agree as follows:

1. The **CONSULTANT** will furnish the materials, supplies, equipment and labor (hereinafter the "Work") in accordance with the specifications contained in the Request for Proposals and the Proposal.

Arcadis may perform the Services through a combination of its own employees and employees of its affiliates and that the use of such affiliate labor shall not be deemed a subcontract for purposes of this agreement.

The restatement in this document of any term of the Request for Proposals or the Proposal shall not be deemed to waive any term not so restated. If any disagreement is found between Request for Bids or the Proposal and this document, then this document shall govern; and the Request for Bids shall govern over the Proposal, to the extent they disagree; provided, however, that this document and its attachments shall be construed to be supplemental to one another to the extent possible.

2. The **CONSULTANT** covenants and agrees that all Work performed and furnished hereunder shall be in accordance with applicable professional standards, and that all Work shall be performed in a good workmanlike manner. Unless a longer warranty period is specified in the Exhibits hereto, all Work provided shall be warranted by the **CONSULTANT** for one (1) full year from the date of completion of all Work hereunder and acceptance thereof by the **CITY**. Notwithstanding the foregoing, any longer period specified in the attachments shall stay in effect.

3. Prior to the execution of this Agreement, the **CONSULTANT** shall, at its own expense, carry Professional Liability Insurance for errors, omissions and negligence, in the amount of One Million Dollars ($1,000,000.00) per claim. The **CONSULTANT** will also procure and maintain General Liability Insurance coverage and Automobile Liability Insurance coverage in amounts of not less than Four Hundred Thousand Dollars ($400,000.00) per occurrence for bodily injury, death and property damage, combined single limit each accident for Automobile Liability, naming the **CITY** as an additional insured thereon. Workers' Compensation Insurance coverage shall be provided by **CONSULTANT** to the extent required by law. With respect to the General Liability and Automobile Liability Insurance, the **CONSULTANT** shall name the **CITY** as an additional insured for coverage only in those areas where government immunity has been expressly waived by 14 M.R.S. A. § 8104-A, as limited by § 8104-B, and § 8111. This provision shall not be deemed a waiver of any defenses, immunities or limitations of liability or damages available under the Maine Tort Claims Act, other Maine statutory law, judicial precedent or common law. **CONSULTANT** will provide the **CITY** a certificate of insurance evidencing such coverage, in this way: certificate must say either: A) "the policy has been endorsed to name the City of Portland as an Additional Insured" and a copy of the endorsement must come to the City of Portland with the certificate, or B) "the policy already includes an endorsement, such as the General Liability Extension Endorsement, by which the City of Portland is automatically made an additional insured." A Certificate which merely has a box checked under "Addl Insr," or the like, or which merely states the City of Portland is named as an Additional Insured, will not be acceptable. The Workers' Compensation insurance shall include an endorsement waiving all rights of subrogation against the City of Portland, its officers or employees. The **CONSULTANT** shall furnish the **CITY** and thereafter maintain certificates evidencing

all such coverages, which certificates shall guarantee thirty (30) days' notice to the **CITY** of termination of insurance from insurance provider or agent.

4. To the fullest extent permitted by law, the **CONSULTANT** shall defend, indemnify and hold harmless the **CITY**, its officers and employees, from and against all claims, damages, losses, and expenses, just or unjust, including, but not limited to, the costs of defense and reasonable attorney's fees to the extent arising out of or resulting from the performance of this Agreement, provided that any such claims, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use therefrom, and (2) is caused in whole or in part by any negligent act or omission of the **CONSULTANT**, anyone directly or indirectly employed by it or its affiliates, or anyone for whose act it may be liable. Such obligation of indemnification shall not be construed to negate or abridge any other obligation of indemnification running to the **CITY** which otherwise exists. The extent of the indemnification provision shall not be limited by the provision for insurance in this Agreement. **CONSULTANT**'s obligations under this paragraph shall survive termination of this Agreement.

5. The **CONSULTANT** shall perform the work to the reasonable satisfaction of the Director of the Department of Public Works (hereinafter, the "Director") who will have the right of inspection at all times, and whose approval and acceptance of the work will be a condition precedent to payments by the **CITY** under this Contract. The **CONSULTANT** acknowledges and agrees that such inspection is for purposes of approving payment alone and such inspection shall not be deemed to impose any duty or liability upon the **CITY** to supervise any aspect of or approve the quality of the Work.

6. Time is of the essence in the performance of this Agreement. Upon receipt of executed contracts and insurance as required, the **CITY** will promptly send an executed contract to the **CONSULTANT**, which will commence work as soon as reasonably possible. The **CONSULTANT** agrees to complete the entire work by the end of a three-year term from the date of execution. The agreement may be extended at the mutual agreement of both parties for an additional two years. The time set for such completion may be extended only by written consent of the Director.

Except for the obligation to make payment for services performed pursuant to this Agreement, any delay in or failure of performance by either party to this Agreement shall not constitute a default under this Agreement nor give rise to any claim for damage, cost, or expense, if and to the extent such delay or failure is caused by an occurrence beyond the control of the delayed or non-performing party. Notwithstanding the foregoing, a party which is delayed in or prevented from performing for any such reason, shall promptly notify the other party in writing of the reason for the non-performance and the anticipated extent of any delay or non-performance, and shall take reasonable steps to minimize the adverse impact of the delay or non-performance.

7. In the event of any dispute as to the amount, nature or scope of the work required under this Contract, the design and judgment of the Director or designee will be final and binding.

8. For performance of all the terms and conditions of this Agreement, the **CITY** will pay the **CONSULTANT** an amount not to exceed One Million Seven Hundred One Thousand Eight Hundred Eighty-Six Dollars ($1,701,886.00) which will include any expenses. If any changes in work scope requested by the City increases or decreases the time required for the performance of the work or cost of the work, or if additional services are requested, an equitable adjustment shall be made by the parties to the Consultant's work schedule or its compensation, or both, as may be agreed upon in writing by the parties.

9. During the term of this Agreement, CITY shall grant to or cause to be made available to CONSULTANT reasonable and necessary nonexclusive access to any location as necessary for purpose of allowing CONSULTANT to perform the Work and fulfill its obligations under this Agreement. The CITY shall notify CONSULTANT if the CITY is unable to provide necessary access within a timely manner. Should ARCADIS be obstructed or delayed in the commencement, performance or completion of the Work due to the CITY's failure to provide timely access to a location, CONSULTANT will be entitled to a reasonable extension in the completion time requirements, provided that such extension is agreed to in writing by the parties.

10. The **CONSULTANT** shall keep accurate records of all services performed under this Agreement and shall submit such information to the **CITY** on a monthly basis. Payment for such Work shall be made to the **CONSULTANT** not more than thirty (30) days after receipt of an invoice and acceptance of the Work by the Director or designee.

11. The **CITY** agrees to furnish or provide access to the **CONSULTANT** to any information or material in its possession which is relevant to the **CONSULTANT**'s performance hereunder and **CITY** staff will cooperate with **CONSULTANT**. The **CONSULTANT** will not, without the **CITY**'s written consent, disclose, or permit disclosure, by any officer, employee, or agent or subcontractor of **CONSULTANT**, of any information or material furnished or generated under this Agreement. The **CONSULTANT** shall be entitled to rely upon the accuracy of such information. The provisions of this Article shall not apply to information which is published or comes into the public domain through no fault of the **CONSULTANT** or is required to be disclosed by law.

The following shall be requirements of this Agreement:

(a) All data collected shall be treated as confidential material and shall be disclosed *only* to authorized **CITY** representatives;

(b) The **CONSULTANT** shall not disclose or permit disclosure of any information or material furnished and/or generated under this Agreement without the **CITY**'s prior written consent; and

(c) All documents, data, studies, estimates, summaries and any other work or material developed under this Agreement shall be the property of the **CITY** and shall be promptly delivered to the appropriate Department Contact person upon completion of a particular service/assignment or upon the request of the **CITY**.

12. The **CITY** may terminate this Agreement for cause by written Notice to the **CONSULTANT**. In the event of such termination, the **CONSULTANT** shall not be entitled to any further payment under this Agreement for work performed after the date of receipt of said Notice.

13. The **CITY** shall have the right to terminate this Agreement at any time for its convenience on thirty (30) days' prior written Notice to the **CONSULTANT**. If the Agreement is terminated by the **CITY** for convenience, the **CITY** shall pay the **CONSULTANT** for all Work performed and all materials purchased pursuant to this Agreement prior to receipt of such Notice.

14. Out of concern for the public, **CITY** employees and the **CONSULTANT's** employees, all work performed by the **CONSULTANT** shall be in conformance with pertinent OSHA, local, state and federal government regulations.

15. No waiver of any breach of any one or more of the conditions of this Agreement by the **CITY** shall be deemed to imply or constitute a waiver of any succeeding or other breach hereunder.

16. This Agreement and its attachments represents the entire and complete agreement and understanding between the parties and supersedes any prior agreement or understanding, written or oral, between the parties with respect to the subject matter of this Agreement. This Agreement cannot be amended except by written instrument executed by the **CITY** and **CONSULTANT.**

17. This Agreement shall be construed in all respects in accordance with, and governed by, the laws of the State of Maine. All parties hereto hereby consent to the exclusive jurisdiction of the Superior Court for the County of Cumberland in the State of Maine, for all actions, proceedings and litigation arising from or relating directly or indirectly to this Agreement or any of the obligations hereunder, and any dispute not otherwise resolved as provided herein shall be litigated solely in said Court.

18. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement. A signature in a pdf or electronic document shall be considered the equivalent of an original signature.

19. **CONSULTANT** warrants and represents that it has the full right and authority to enter into this Agreement, that there is no impediment that would inhibit its ability to perform

its obligations under this Agreement, and that the person signing this Agreement on behalf of **CONSULTANT** has the authority to do so.

IN WITNESS WHEREOF, the said **CITY OF PORTLAND** has caused this Agreement to be signed and sealed by Jon P. Jennings, its City Manager, thereunto duly authorized, and **ARCADIS U.S., INC.** has caused this Agreement to be signed and sealed by Jennifer Kelly Lachmayr its Principal-in-charge thereunto duly authorized, as of the day and date first above written.

WITNESS:

Sonia Bean

CITY OF PORTLAND

By: Jon P. Jennings

Jon P. Jennings
Its City Manager

WITNESS:

Kathryn B Edwards

ARCADIS U.S., INC.

By: Jennifer Kelly Lachmayr

Print or type name: Jennifer Kelly Lachmayr

Its: Principal-in-Charge

Approved as to form:

Corporation Counsel's Office

Approved as to funds:

Finance Director

EXHIBIT A

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
55 Portland Street
Portland, Maine 04101

Request for Proposal
for
Planning and Engineering Services
For a Infiltration and Inflow Program
of the Sanitary Sewer System

RFP # 3217

Dated: October 25, 2016

Sealed bids for providing Planning & Engineering Services and other responsibilities as described herein will be received until **3:00 pm, on Wednesday, November 23, 2016.** Copies of the above documents will be available at the Purchasing Office, Room 103, City Hall, 389 Congress Street, Portland, ME 04101. Each prospective bidder will be required to obtain from the City each copy of the proposal form; e-mail jrl@portlandmaine.gov, phone (207) 874-8654, or fax (207) 874-8652. Late, unsigned proposals, or proposals submitted electronically shall not be accepted.

All questions shall be directed, in writing, to the Matthew Fitzgerald, Purchasing Manager at the above address, and be received at least five business days prior to the stated opening date (FAX 207-874-8652, e-mail MFF@portlandmaine.gov). Questions received after this time will not be addressed. Responses from the City that substantially alter this request will be issued in the form of a written addendum to all document holders registered in the Purchasing office. Oral explanation or interpretation given before the award of the contract will not be binding.

Request for Proposals

The City of Portland Department of Public Works, Water Resources Division, is seeking proposals from engineering firms to perform a city-wide inflow and infiltration (I/I) investigation in the combined and separated wastewater collection system. The engineering firm must be experienced in collection system flow monitoring and metering; data collection and analysis; hydraulic sewer modeling; identification of infiltration and inflow from rain events and ground water impacts; and projects and programs to rehabilitate or replace collection system assets. The successful consultant shall enter into a three (3) year contract. The contract may be extended for up to two (2) years with City and consultant approval.

Project Background

The City of Portland (City) is located in Cumberland County along the Casco Bay in Southern Maine. City sewerage infrastructure consists of approximate 240 miles of sanitary sewer, 6,375 sewer manholes, and ten pumping stations. The Portland Water District (PWD) owns and maintains 15 pumping stations and 17.4 miles of sanitary sewer pipe. The PWD also maintains and operates the East End Wastewater Treatment Facility which is able to provide secondary treatment to approximately 34 million gallons per day and primary treatment for up to 80 million gallons per day. A majority of the sanitary sewer system is a combined system. The Environmental Protection Agency mandated the City to prepare a Capacity, Management, Operation, and Maintenance (CMOM) manual which was completed in 2014. The manual resulted in a Corrective Action Plan which outlines the I/I program in three phases.

Phase 1 – Investigation and quantification of I/I flows – January 1, 2019

Phase 2 – Identification of major I/I sources – July 1, 2019

Phase 3 – Schedule of target opportunities for cost effective mitigation – December 1, 2019

Scope of Work

The City must complete a three phase I/I program. The CMOM manual has recommendations for completing each phase. While the approach detailed in the CMOM has been communicated to the EPA, alternative methods may be considered. The consultant may follow their own methods deemed suitable and advantageous to complete each phase based on their experience with previous I/I investigation with City approval. The City is looking for a cost effective approach to reduce I/I and creative but effective technologies and strategies are encouraged. The three phases and associated deadlines are:

<u>Phase 1 - Investigation and quantification of I/I flows</u> – Completed by January 1, 2019

Phase 1 must identify data gaps within the City's previous modeling and metering work, and the GIS system in order to have an effective and robust hydraulic model. Phase 1 must also identify excessive I/I defined as greater than 4,000 gallons per day per inch-diameter/mile.

Task 1 – Data gathering and Gap Analysis

Activities to be undertaken include the following:

- Meet with City staff to identify available background information and reports;
- Collect and review reports, record drawings, operating and maintenance manuals, SCADA information, GIS information etc. as necessary to gain a full understanding of the wastewater collection system and missing asset information;
- Complete a gap analysis of the existing GIS system and collect data as required;
- Inspect existing facilities, review inspection reports and maintenance records as necessary;
- Review flow data along with available rainfall data from external sources;
- Collect other information considered relevant;
- Conduct a full assessment and of all metering and modeling completed previously; and
- Prepare a Background Information and Gap Analysis Report

Task 2 – Determine and Implement a Flow Monitoring Strategy

Activities to be undertaken include:

- Develop a flow monitoring strategy that includes the review of recommended sites from the CMOM report, identification of other suitable sites, field verification of these sites, recommendation of initial sites, installation of flow monitoring equipment and data collection and maintenance procedures for the flow monitoring equipment;
- Implement the flow monitoring strategy;
- Superimpose rain data on wastewater collection system flow data;
- Identify the potential sources of inflow and infiltration;
- Quantify the amount of inflow and infiltration;
- Prepare an inflow and infiltration Summary Flow Monitoring Report

<u>Phase 2 - Investigation and quantification of I/I flows</u> – Submitted by July 1, 2019

The goal of this phase is to further identify sources of inflow and infiltration in those areas where significant extraneous flows were seen in Phase 1.

Task 3 – Determine and Implement a Strategy for Further Investigation of Extraneous Flows

Activities to be undertaken include:

- Provide a gap analysis of flow data and recommend areas to be further investigation;
- Formulate an investigation strategy that includes manhole inspections, smoke testing, additional camera inspections of sanitary sewer mains and laterals as necessary plus any other investigative methods appropriate for this task.
- Provide recommendations for a future permanent flow monitoring program;
- Implement the investigation strategy;
- Identify significant sources of inflow and infiltration;

- Locate the sources of inflow and infiltration;
- Quantify the amount of inflow and infiltration per source;
- Quantify inflow and infiltration over the period of the study;
- Prepare a Summary Report

Phase 3 - Schedule of target opportunities for cost effective mitigation - Submitted by December 1, 2019

Task 4 – Wastewater Collection System Analysis and Action Plan

Prepare and submit a comprehensive Study Report analyzing the information gathered in all tasks.
Activities to be undertaken include the following:

- Determine strategies to reduce inflow and infiltration flows into the wastewater collection system;
- Prepare a detailed cost estimate for strategies to reduce inflow and infiltration flows;
- Establish priorities in rehabilitation, repair and replacement works;
- Develop a 10-year Capital Plan with short-term and long-term objectives;
- Provide recommendations for the installation of permanent flow monitoring stations; and
- Prepare a comprehensive Inflow and Infiltration Study Report that incorporates the findings of all reports.

The CMOM manual is available at the following FTP site:

Access: ftp://ftp.portlandmaine.gov/
Username: CSO (uppercase)
Password: portland (lowercase)

Submission Requirements

Interested and qualified firms or teams are invited to submit one (1) original, five (5) copies and one (1) CD of materials in PDF format that demonstrate their experience in performing a project of this scale and complexity. The proposal shall be submitted by a lead firm but may contain services from sub consultants.

Letter of Transmittal: Briefly describe your firm, its history, size, and its areas of expertise

The proposal should contain the following information:

1. Provide detail of the firm's qualifications for this type of project. Identify project leadership, reporting responsibilities, and, if applicable, how sub consultants will work within the management structure and what sub consultants are responsible for. Provide resumes of project team personnel along with a list of individual project team member's experience for the prime firm, and if applicable, any sub consultants.

2. For the Prime firm, list past experience with up to five (5) similar projects for other clients, particularly in Maine, for the past five (5) years. Similarly, list no more than three (3) projects per sub consultant which have been completed in the past five (5) years. All listed projects should include references, contact names, and telephone numbers;

3. A complete digital copy of a final report from a project your firm has completed with the past five (5) years that is most similar to this project;

4. Statement of availability, workload, and location of key personnel dedicated to the City of Portland assignment;

5. Provide the organizational structure and any firm specific tools that will be used in the project.

6. Provide a project outline based on your understanding of the project and previous experience.

7. Attach a fee statement in a separate, sealed, envelope to the original set of materials. This fee statement will not be opened or used to shortlist firms.

Additional materials are welcome and may be submitted; however the City reserves the right to make a decision without regard to any additional information submitted.

Selection Process

Firms who provide and meet the submission requirements will be scored using the selection criteria below. A Selection Review Committee will review the submitted documents, evaluate and score each submittal to create a shortlist. Firms that have been shortlisted will be asked to schedule an interview and give a presentation. After conducting the interviews, the Selection Review Committee will recommend a consultant to be awarded a contract.

The presentation should focus on and provide more detail for the firm's project approach and how the firm's previous experience with Inflow and Infiltration investigations have guided and shaped the approach. Firm's should be prepared to discuss the team's staff, organization structure, and demonstrated project experience. The Selection Review Committee will consider the depth of the project approach, quality of answers to questions and concerns, and the ability to work with the City to complete the program within the given time frame. Printed materials should be provided.

The City reserves the right to solicit information about the consultant from all sources available to the City and to request additional information from the consultant. In addition, City may consider history of firm in complying with project programs, schedules, and budgets on previous City projects.

Selection Criteria

The following criteria will be used to evaluate proposals and presentations. (100 points)

Criteria 1: Firm's Demonstrated Experience (past 5 years) - 35 point maximum

City is interested in the firm's and sub consultant's history and demonstrated success with projects of similar programs, goals, and municipal clients as the project described herein. The five submitted projects and references, the firm's ability to comply with project programs, schedules and budgets, and the final report will be considered. Previous experience with municipal entities, specifically the City of Portland, will also be considered.

Criteria 2: Experience and Availability of Proposed Staff, including Project Leadership – 30 point maximum

City is interested in the experience and availability of the proposed staff for this project, including project leadership. Availability and location of staff and experience of the firm and project leadership on similar projects will be considered.

Criteria 3: Project Outline - 20 point maximum

City is interested in the firm's understanding of the project issues, and the general approach to the project, including any innovative ideas to complete the phases. This may include any anticipated project issues and the firm's approach in addressing those issues.

Criteria 4: Team Structure - 15 point maximum

City is interested in the firm's organizational structure, reporting responsibilities, how the lead firm will interact with City staff, and how sub consultants will work within the management structure.

Submittals shall EITHER be mailed OR delivered to:

Purchasing Office
City Hall, Room 103
389 Congress Street
Portland, Maine, 04101

EQUAL EMPLOYMENT OPPORTUNITIES

Vendor shall comply fully with the Nondiscrimination and Equal Opportunity Provisions of the Workforce Investment Act of 1998, as amended (WIA, 29 CFR part 37); the Nontraditional Employment for Women Act of 1991; title VI of the Civil Rights Act of 1964, as amended; section 504 of the Rehabilitation Act of 1973, as amended; the Age Discrimination Act of 1975, as amended; title IX of the Education Amendments of 1972, as amended; and with all applicable requirements imposed by or pursuant to regulations

implementing those laws, including but not limited to 29 CFR part 37 and all other applicable laws, including the Maine Human Rights Act, ordinances and regulations regarding equal opportunity and equal treatment.

GENERAL

The successful bidder shall agree to defend, indemnify and save the City harmless from all losses, costs or damages caused by its acts or those of its agents, and, before signing the contract, will produce evidence satisfactory to the City's Corporation Counsel of coverage for General Public and Automobile Liability insurance in amounts not less than $400,000 per person, for bodily injury, death and property damage, protecting the contractor and the City, and naming the City as an additional insured from such claims, and shall also procure Workers' Compensation insurance.

All materials and equipment used as well as all methods of installation shall comply at a minimum with any and all Federal, OSHA, State and/or local codes, including applicable municipal ordinances and regulations.

It is the custom of the City of Portland, Maine to pay its bills 30 days following equipment delivery and acceptance, and following the receipt of correct invoices for all items covered by the purchase order. If your organization prefers to receive payment via electronic transfer rather than by check, please see the web link below* and include that EFT form with your bid submission. In submitting bids under these specifications, bidders should take into account all discounts; both trade and time allowed in accordance with this payment policy and quote a net price. The City is exempt from the State's sales and use tax as well as all Federal excise taxes.

*** http://www.portlandmaine.gov/DocumentCenter/Home/View/817**

Pursuant to City procurement policy and ordinance, the City is unable to contract with businesses or individuals who are delinquent in their financial obligations to the City. These obligations may include but are not limited to real estate and personal property taxes and sewer user fees. Bidders who are delinquent in their financial obligations to the City must do one of the following: bring the obligation current, negotiate a payment plan with the City's Treasury office, or agree to an offset which shall be established by the contract which shall be issued to the successful bidder.

October 25, 2016

Matthew F. Fitzgerald
Purchasing Manager

Request for Proposal
For
Planning and Engineering Services
For a Infiltration and Inflow Program
Of the Sanitary Sewer System

RFP # 3217

**** THIS SHEET MUST BE INCLUDED IN YOUR PROPOSAL ****

The undersigned hereby declares that he/she or they are the only person(s), firm or corporation interested in this proposal as principal, that it is made without any connection with any other person(s), firm or corporation submitting a proposal for the same, and that no person acting for or employed by the City of Portland is directly or indirectly interested in this proposal or in any anticipated profits which may be derived there from.

The undersigned hereby declares that they have read and understand all conditions as outlined in this Request for Proposals, and that the proposal is made in accordance with the same.

The bidder acknowledges the receipt of Addenda numbered: _____

COMPANY NAME: _____

AUTHORIZED SIGNATURE: _____

DATE: _____

PRINT NAME & TITLE: _____

ADDRESS: _____

E-MAIL ADDRESS: _____

PHONE NUMBER: _____ FAX NUMBER: _____

TYPE OF ORGANIZATION - PARTNERSHIP, CORPORATION, INDIVIDUAL, OTHER:
_____

STATE OF INCORPORATION, IF APPLICABLE: _____

FEDERAL TAX IDENTIFICATION NUMBER (Required): _____

NOTE: Proposals must bear the handwritten signature of a duly authorized member or employee of the organization submitting a proposal.

CITY OF PORTLAND, MAINE

Planning and Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

RFP#3217

Current Date: November 18, 2016

The attention of firms submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Contractor's submitted material and the corresponding Contract when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

****

ALL PROPOSERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED ON THE RFP PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

****

MATTHEW FITZGERALD
PURCHASING MANAGER

Please find on the following pages our response to questions received related to this RFP. This will be the one and only addendum and we will be unable to respond to any further questions.

Receipt of **Addendum No. 1**to the City of Portland's **RFP #3417: Planning and Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System** is hereby acknowledged.

COMPANY: _____

NAME: _____

SIGNED BY: _____ DATE: _____

PRINT NAME & TITLE: _____

ADDRESS: _____

_____

ZIP CODE

Addendum #1

CITY OF PORTLAND, MAINE

Planning and Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

RFP#3217

1. *Task 1 suggests that a gap analysis of the GIS should be completed and we should "collect data as required". Can the City expand on the additional data collection? Is it the collection and review of data that already exists, or the collection of new data in the field? If the later, can the City provide guidance on the anticipated level of this field effort?*

   Response: Additional data collection may require both the collection and review of existing data and collection of new data. Additional data collection effort may vary based on the consultant's approach to the gap analysis and conclusions drawn from that effort. The City cannot anticipate a level of effort associated with the collection of data as the firm will decide what additional data may be necessary to complete the task.

2. *Task 1 suggests we "inspect existing facilities". Can the City expand on the "existing facilities" that are to be inspected? Are they pump stations (if so, how many), manholes, catch basins, etc.?*

   Response: Existing facilities include any sewer infrastructure relevant to the task. The consultant will have to decide whether an inspection of existing facilities is required to gather additional data or to help determine the best approach for completing the Inflow and Infiltration Program.

3. *The schedule in the RFP suggests that Phase 2 (Task 3) – Investigation and Quantification of I/I Flows, is to be completed between January 1, 2019 and July 1, 2019. This type of investigation would produce better results if it were completed in the spring/summer months. Is the City open to slight modifications in the schedule that would promote better data collection and I/I quantification?*

   Response: The winning consultant may choose to revise the initial start dates of the phases and create a schedule that benefits the investigation as needed. At this time, the City is unable to change the completion deadlines set by the Environmental Protection Agency Corrective Action Plan.

4. *Is the City anticipating the need for building inspections to identify specific sources of I/I from private property?*

   Response: The City would expect that the consultant will determine if building inspections will be required based on results from previous tasks and previous experience with Inflow and Infiltration Programs.

CITY OF PORTLAND, MAINE

Planning and Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

RFP#3217

5. *The submission requirements mention a "fee statement". Does the City have a preferred format for the fee statement? Much of the Phase 2 and 3 project scope depends on the results of the Phase 1 work. As such, it would be rather difficult to develop an overall project fee without making a significant number of assumptions. Is the City looking for more of a "unit price menu" that covers the range of potential services along with staff rates? If the City is looking for an overall project fee, can guidance be provided for the purpose of estimating the quantities of I/I Program services (i.e. LF of sewer to CCTV, LF of sewer to smoke test, number of flow meters and metering duration, etc.)?*

   Response: An overall project fee should not be provided for the initial submittal. For the initial submittal, a consultant may provide a fee schedule or a "unit price menu." An overall project fee will only be required of consultants that have been shortlisted and asked to be interviewed. At the interview, a separate sealed envelope with a free statement for the Inflow and Infiltration Program must be provided.

ARCADIS Design & Consultancy for natural and built assets

PROPOSAL

PLANNING AND ENGINEERING SERVICES FOR A INFLITRATION AND INFLOW PROGRAM OF THE SANITARY SEWER SYSTEM

November 2016 | 66026980.0001

ARCADIS Design & Consultancy for natural and built assets

Matthew Fitzgerald
City of Portland
Purchasing Office
City Hall, Room 103
389 Congress Street
Portland, ME 04101

Arcadis U.S., Inc.
500 Edgewater Drive
Suite 511
Wakefield, MA 01880
Tel: 781.224.4488
Fax: 781.224.3033
www.arcadis.com

Subject: Planning and Engineering Services For a Infiltration and Inflow Program of the Sanitary Sewer System (RFP #3217)

Date:
November 23, 2016

Contact:
Jennifer Lachmayr, PE, BCEE

Phone:
781.213.4923

Email:
Jennifer.Lachmayr@arcadis.com

Our ref:
66026980.0001

Copies:
One Original
Five Copies
One CD

Dear Mr. Fitzgerald:

Arcadis U.S., Inc. (Arcadis) is excited for the opportunity to submit our qualifications to assist the City of Portland (City) through its Department of Public Works, Water Resources Division with this important city-wide Infiltration and Inflow (I/I) program.

With over 125 years of experience, Arcadis is an internationally recognized, full-service consulting firm specializing in water and wastewater resources engineering. We offer the City the following advantages:

Extensive Infiltration/Inflow and Sewer Rehabilitation Experience. Our project team has worked on numerous projects with similar urban settings as Portland's system, as demonstrated in Section 1 of our proposal. We have a long and established local presence in New England that will help facilitate communication and coordination with any needed specialty contractors to conduct work. This gives the City the confidence to know that we will always negotiate a fair price for any specialty system investigation work.

Experienced Project Team. We have compiled a team of individuals and subconsultants who are recognized throughout the industry for their breadth of knowledge regarding I/I programs, pipeline improvements, GIS and data management updates. Our project manager, Scott Haynes, PE, BCEE, has over 25 years experience of helping clients and communities reduce extraneous flows in the sanitary system in New England.

Cost Effective Tools. Over the past five years, Arcadis has overseen multi-million dollar sewer rehabilitation programs for systems with more than 3,000 miles of sewer in 10 metropolitan areas. Through this work we have developed tools such as the Arcadis *Data Profiler* and *Times Series Analyzer*. These tools provide our clients with better data analyses and updates to databases and GIS.

Client Satisfaction. We are proud of our client services track record and invite you to contact the references. Our references will provide direct testimony regarding the quality of our work on projects directly relevant to those sought by the City. We have included example reports on the enclosed flash drive.

Arcadis will demonstrate its understanding of the City's vision by using project approaches that are innovative and environmentally focused to help provide sustainable

We look forward to working with the City's staff and helping to support the growing community through sound collection system management practices. If you have any questions about our proposal or would like additional information, please do not hesitate to contact us.

Sincerely,

Arcadis U.S.,Inc.

Jennifer Kelly Lachmayr, PE, BCEE
Principal-in-Charge

Scott Haynes, PE, BCEE
Project Manager

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1. FIRM'S DEMONSTRATED EXPERIENCE

2. EXPERIENCE AND AVAILIBILITY OF PROPOSED STAFF, INCLUDING PROJECT LEADERSHIP

3. PROJECT APPROACH AND SCOPE

4. TEAM STRUCTURE

APPENDIX A. REQUIRED FORM

APPENDIX B. ADDITIONAL INFORMATION

This proposal and its contents shall not be duplicated, used or disclosed — in whole or in part — for any purpose other than to evaluate the proposal. This proposal and its contents shall not be disclosed to any third party except as permitted by applicable laws and regulations.

ARCADIS Design & Consultancy for natural and built assets

CITY OF PORTLAND

PLANNING AND ENGINEERING SERVICES FOR A INFILTRATION AND INFLOW PROGRAM OF THE SANITARY SEWER SYSTEM

1. FIRM'S DEMONSTRATED EXPERIENCE

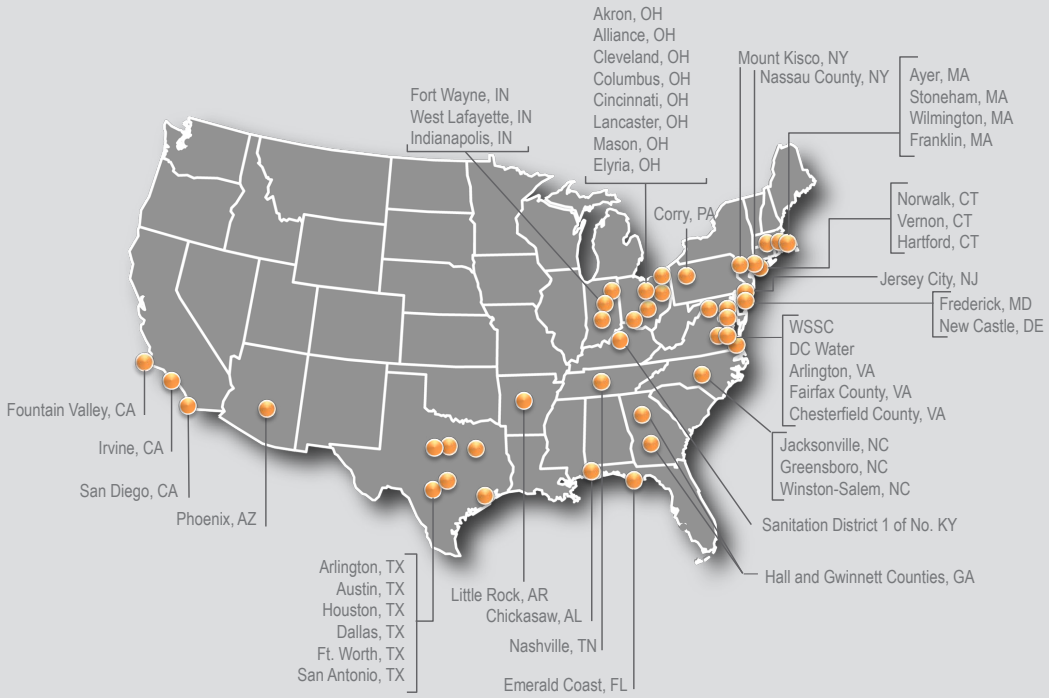
1. FIRM'S DEMONSTRATED EXPERIENCE

In this section we present our success stories for I/ I and prioritized sewer system rehabilitation programs demonstrating our capabilities to provide the services required in the RFP. Our team brings to the City expert knowledge and experience in:

- Successful I/I reduction
- Data collection and analysis
- Ground water influenced I/I
- Hydraulic modeling
- Sewer and manhole investigations, evaluations and recommendations
- Bypass pumping
- Inflow and Infiltration Identification
- Maintenance of traffic
- Life Cycle Cost Analysis
- Prioritized Programs for I/I removal
- Flow monitoring and metering

ARCADIS HAS PREPARED HUNDREDS OF DESIGN PACKAGES NATIONALLY, INCLUDING OVER 30 SEWER REHABILITATION PROJECTS WITHIN NEW ENGLAND IN THE PAST FIVE YEARS. THE MAP TO THE RIGHT HIGHLIGHTS THE LOCATIONS OF OUR I/I AND SEWER REHABILITATION PROGRAMS FOR WHICH MEMBERS OF OUR TEAM CONTRIBUTED AND / OR LED.

SEWER MANAGEMENT AND REHAB PROGRAMS



Arcadis is a trusted consultant throughout the U.S. Focusing on the eastern and southern portions of the U.S., Arcadis has completed sewer management and rehabilitation projects for numerous large and small municipal clients.

The photos to the right are from our construction projects in Franklin and Stoneham, MA.

Brick manhole getting lined

CIPP liner being installed in pipe

Wastewater Collection Systems

Arcadis has been involved in the evaluation, planning, design, and construction of collection and conveyance systems for over 100 years. Our engineers have provided these services to a wide range of municipal, industrial, and private clients, developing new or replacement systems as well as evaluating and upgrading existing systems. The firm's range of services related to wastewater collection systems includes:

- On-call and annual contract studies of sewer systems to quantify infiltration and inflow (I/I), eliminate sewage overflows, and increase hydraulic capacity
- Studies of combined sewer overflows (CSOs) and separate sanitary sewer overflows (SSOs) and their impacts on water quality
- Capacity, condition, and operation and maintenance (O&M) assessments to achieve efficient and effective collection system performance
- Facility planning for the rehabilitation, upgrading, and expansion of wastewater collection systems, or for the construction of new systems in unsewered areas
- Odor investigations and design of odor abatement programs for wastewater collection systems
- Pipeline routing studies and environmental assessments for new sewer systems
- Design, environmental monitoring, and construction phase services for new and rehabilitated trunk sewers, force mains, interceptors, and pump stations

Arcadis provides a full range of services directly related to I/I and other collection system issues:

- I/I reduction
- I/I studies
- Sewer System Evaluation Surveys (SSES)
- Sewer capacity evaluations
- Dynamic hydraulic modeling
- Consent decree compliance/regulatory assistance
- Design services for rehabilitation, replacement and new sewer construction
- Capacity, condition, and hydraulic performance modeling and master planning
- Operation and maintenance assessments to sustain efficient and effective collection system performance
- Rehabilitation and replacement program prioritization and long-term capital planning
- Studies of sewer overflows and their impacts on water quality
- Facility planning for rehabilitation, upgrading and expansion of wastewater collection systems
- Facility planning for construction of new systems in unsewered areas
- Flow Metering
- Odor and corrosion investigations and design of abatement solutions
- Pipeline routing studies and environmental assessments for new sewer systems
- Clearwater elimination
- Structural failure assessments
- Predictive condition assessments
- Construction administration and resident engineering
- Program management services for multi-year, multi-million dollar programs that include various combinations of the elements above

Unlike many of Arcadis' peer firms, we have the flexibility to adapt project delivery methods for SSES, I/I, and sewer rehabilitation services to suit the City's needs.

PRESENTED IN TABLE 1-1 BELOW ARE ARCADIS' REPRESENTATIVE WASTEWATER COLLECTION SYSTEMS PROJECT EXPERIENCE FOR RELEVANT PROJECTS WITHIN THE PAST FIVE YEARS. AS FURTHER DEMONSTRATED IN THE REMAINDER OF THIS SECTION, THE ARCADIS TEAM HAS COMPLETED I/I PROJECTS FOR CITIES OF SIMILAR TYPE, SCOPE, AND COMPLEXITY IN THE NORTHEAST AND THROUGHOUT THE UNITED STATES. FOR EACH PROJECT WE HAVE HIGHLIGHTED THE CLIENT REFERENCE AND CONTACT INFORMATION.

Table 1-1: Relevant Project Experience (Wastewater Collection Systems)	Flow Metering	Smoke/Dye Testing	Flow Isolation	CCTV Inspection	MH Inspection	I/I Reduction	Modeling	Assessment	Design/ Construction	Program Management	Private Source Investigation	Unique Approach/ Feature	Funding Assistance	Regulatory Driver
Greater New Haven WPCA: I / I Sewer Rehabilitation Program, East Haven and Hamden, CT	●				●	●		●	●		●		●	●
Ayer, MA System Wide I/I	●				●	●		●		●				●
Franklin, MA: Sewer System Investigations, Rehabilitation and Sump Pump Inflow Removal Program		●	●	●	●	●	●	●	●	●	●	●	●	
The Metropolitan District, CT: Sewer System Studies and Rehabilitation Design to Eliminate Sanitary Sewer Overflows	●	●	●	●	●	●	●	●	●		●	●		●
Stoneham, MA: Collection System and Pump Station Investigations and Rehabilitation for I/I Removal	●	●	●	●	●	●		●	●	●	●	●	●	●
Greater New Haven, CT WPCA: System-wide Infiltration/Inflow Improvements Program	●			●	●	●		●	●				●	●
Wilmington, MA: Multi-phase Sewer System Investigations and Rehabilitation	●	●	●	●	●	●		●	●	●	●	●	●	●
Norwalk, CT WPCA: Sewer System Master Planning and I/I Rehabilitation - Seaview and Cove and Norwalk River Interceptors	●	●	●	●	●	●	●	●	●	●		●	●	
New London, CT: Sanitary Sewer Capacity Improvements		●		●	●	●		●	●		●		●	
Norwalk, CT WPCA: Beacon Street Interceptor Service Area Sewer Rehabilitation		●		●	●	●		●	●			●		●
Vernon, CT: Sewer Rehabilitation and CMOM Program					●	●		●	●				●	
Groton, CT: Fort Hill Homes Sanitary Sewer Construction and Rehabilitation	●	●						●	●		●	●	●	
Columbus, OH: Comprehensive Rehabilitation Program for Eight Sewer Basins	●						●	●	●	●	●			●
DC Water (Washington D.C.): Sewer Program Management	●			●	●		●	●		●		●		
MWRA: Reading Extension Sewer & Metropolitan Sewer Improvements				●	●	●		●	●	●			●	●
Emerald Coast Utilities Authority (Pensacola FL) - Sewer Rehabilitation/Replacement Program	●	●	●	●	●	●	●	●	●	●				●
Vernon, CT: Vernon Regional Treatment Facility					●	●	●	●		●		●		●
New Castle County, DE: Brandywine Hundred Sewer Rehabilitation and Capacity Assurance Program	●	●	●	●	●	●	●	●	●	●	●		●	●
Bergen County Utilities Authority, NJ: Rain-Derived Infiltration/ Inflow SSO Management Services						●				●	●		●	●
New Castle County, DE: Clearwater Disconnection Pilot Program	●					●			●		●			●

SEWER SYSTEM INVESTIGATIONS AND REHABILITATION AND SUMP PUMP INFLOW REMOVAL PROGRAM

Franklin, Massachusetts

As the population of Franklin has rapidly increased through the 1990's, available conveying capacity in the wastewater collection system has decreased. As a result, the Beaver Street interceptor began to experience SSOs. To reclaim a portion of the capacity, the Town decided to develop an annual on-call services program for sewer system metering, modeling, and inspections and rehabilitation program to address its current and future needs.

Arcadis is helping the Town achieve their goals by providing up-to-date GIS mapping, pipeline and manhole inspections and condition assessment, and designing recommended improvements to address maintenance and capital needs.

I/I Rehabilitation/Sewer Rehabilitation. Arcadis provided design, bidding and construction phase engineering services for four Phases of the Town of Franklin's Sewer Rehabilitation program for the past 15 years.

We assisted the client with bidding and award and provided complete construction phase services, including construction administration and on-site resident engineering. **Through four phases, the Town constructed more than $4 million worth of improvements, including rehabilitation of more than 15 miles of pipeline and 600 manholes.**

Construction consisted of various trenchless repairs, including cured-in-place spot repairs, cured-in-place lining, chemical root treatment, and test and sealing of joints and service connections. Manhole rehabilitation has included manhole lining, chimney seals, sealing of leaks in walls, joints and pipe connections, re-construction of benches and inverts, and replacement of frames and covers.

Sump Pump/Inflow Removal Program. As an integral part of the Town's overall efforts to upgrade, improve and maintain its sanitary sewer collection system, Arcadis assisted the Town of Franklin with development and implementation of a program to find and eliminate sources of inflow by developing a sump pump program consisting of a database of known and suspected sump pumps and a protocol that can be used to verify and track the locations of sump pumps. The ultimate goal is to eliminate these sources of extraneous flows to free capacity for domestic flows and future expansion of the collection system.

Continuous Monitoring. The rehabilitation projects have removed significant extraneous flows from the Franklin sewer system, as shown through our annual flow monitoring program. **Between 2005 and 2013, Franklin's measured peak infiltration rate has decreased by more than 350,000 gpd (30% reduction) and the average infiltration rate has decreased by more than 325,000 gpd (35% reduction)**.

CLIENT
Town of Franklin

CONTACT
Robert Contoreggi
DPW Director
(508) 553-5520

COMPLETION DATE
2001 - Ongoing

I/I FLOW REMOVED
1.4 MGD

RELEVANT FEATURES
- I/I Rehabilitation
- Sewer Rehabilitation

BUDGET / SCHEDULE
Project is on budget and ahead of schedule

SYSTEM-WIDE INFILTRATION / INFLOW IMPROVEMENTS

New Haven, Connecticut

The Greater New Haven Water Pollution Control Authority (GNHWPCA) owns and operates the wastewater collection system and treatment plant that serves more than 2,000 residents in the communities of New Haven, East Haven, Hamden and Woodbridge. **The wastewater collection system includes both combined and separated sewers and consists of approximately 555 miles of sanitary sewer pipe, 14,000 manholes, 30 pump stations, eight (8) siphons.** Combine sewers are located in the city of New Haven only. The average daily flow at the East Shore Water Pollution Abatement Facility is approximately 40 MGD that is discharged to New Haven Harbor. **Arcadis's three most recent infiltration/inlfow removal related projects have targeted the removal of approximately 1.4 MGD of extraneous flows.**

Estimated extraneous flows removed or to be removed from rehabilitation recommendations:

- Phase III Infiltration/Inflow Rehabilitation: approximately 500,000 gpd
- East Haven and Hamden – Infiltration and Inflow Removal Phase II – SSES: 375,000 gpd targeted for ongoing sanitary sewer rehabilitation design
- Meter Area W-2 & W-2A, Woodbridge and Meter Areas 15, 18 & 23, East Haven: 545,000 gpd targeted from SSES recommendations (Report not approved by CTDEEP yet)

Phase III Infiltration/Inflow Rehabilitation. Arcadis provided design, bidding, and construction services to complete sewer rehabilitation in the Lower Farm River, Area 10 in East Haven and the State Street Sewershed in Hamden. Construction is scheduled for completion in early 2016 and consists of cured-in-place lining, service connection lining and sealing and structural manhole rehabilitation.

East Haven Infiltration/Inflow Study. Arcadis performed a study of the East Haven sewer system to examine the system's physical characteristics and identify areas of high I/I. The recommended plan will help reduce extraneous flows and reduce transport and treatment costs while providing a long-term, system-wide approach to effectively preserving the sanitary sewer system.

New Haven and Hamden I/I Rehabilitation. Arcadis provided design, bidding, and construction services to complete sewer rehabilitation in the Morris Cove, Lower Shepard, and Upper Thorpe Sewersheds.

East Haven and Hamden – Infiltration and Inflow Removal Phase II – SSES. Arcadis conducted Phase II SSES in Meter Areas 5, 9, and 13 in East Haven and in the Middle Thorpe Drive Study Area in Hamden to identify excessive I/I sources.

CLIENT

Greater New Haven Water Pollution Control Authority

CONTACT

Gabriel Varca

Director of Finance and Administration

(203) 466-5265

PROJECT DURATION

2012 - Present

I/I FLOW REMOVED

1.4 MGD

RELEVANT FEATURES

- I/I Rehabilitation
- Swer Rehabilitation

BUDGET / SCHEDULE

Project is on budget and on schedule

PROJECT DESCRIPTION - System-wide Infiltration / Inflow Improvements

Woodbridge Infiltration/Inflow Study. Arcadis conducted an I/I Study to identify excessive I/I in the Town of Woodbridge.

Collection System Affordability Study. The Greater New Haven Water Pollution Control Authority (GNHWPCA) is under an Administrative Order to prepare a modified facilities plan to update their Long-Term CSO Control Plan and provide final denitrifiation at the East Shore Water Pollution Abatement Facility and other related infrastructure improvements. Arcadis completed an affordability study in accordance with USEPA guidelines.

SEWER SYSTEM STUDIES AND REHABILITATION DESIGN TO ELIMINATE SANITARY SEWER OVERFLOWS

Hartford, Connecticut

Arcadis has been overseeing SSES studies, planning, and design services under an on-call contract with The Metropolitan District to eliminate sanitary sewer overflows (SSOs) in the Hartford metropolitan area. This work covers three municipalities located in the Windsor Interceptor basin (74 miles of sewer) and Rocky Hill Water Pollution Control Facility basin (148 miles of sewer serving the Towns of Rocky Hill and Wethersfield). Major SSOs historically have occurred at four locations in the two basins. The sanitary sewers in both basins were constructed more than 50 years ago.

The United States Environmental Protection Agency (USEPA) and the State of Connecticut issued a Consent Decree that requires a multi-year compliance program for the two basins**. Arcadis provided a variety of compliance-related services valued at $3.6 million**, which included:

- Flow metering for eight weeks at 46 locations
- Flow isolation testing of 550,000 linear feet (lf) of sewers
- Closed-circuit television inspection of 307,000 lf of sewers
- Inspection of 3,200 manholes
- Smoke testing of 657,000 lf of sewers
- Performance of 1,500 dye tests
- Development of a hydraulic model of the Rocky Hill Water Pollution Control Facility sewershed to determine capacity deficiencies.

We also performed approximately **10,000 building inspections for sump pumps and illicit connections to identify potential I/I sources in these flood-prone areas.** Field investigations revealed numerous private inflow sources that were contributing to SSOs, and the district plans to implement a source removal program. Recommendations included private source disconnection, cured-in-place lining of sewers, manhole rehabilitation, installation of new watertight manhole frames and covers, and other miscellaneous work. Arcadis completed final contract documents for implementing the recommendations from the first phases of our inspection program, including the recently constructed Goff Brook Trunk Sewer - South Branch replacement and rehabilitation.

The SSES work builds on Arcadis' designs of sewer rehabilitation projects prior to issuance of the Consent Decree and supported the design of additional sewer rehabilitation projects to meet the Consent Decree requirements by 2013. We utilized the results of the SSES studies to prepare designs and contract documents for cured-in-place pipe (CIPP) lining of sewers in the two basins.

CLIENT

The Metropolitan District

CONTACT

Alan Pelletier
Project Manager
(860) 278-7850

PROJECT DURATION

2006 - 2012

RELEVANT FEATURES

- SSES Studies
- Flow Metering
- CCTV Inspection
- Development of Hydraulic Model

BUDGET / SCHEDULE

Project was completed on budget and on schedule

BRANDYWINE HUNDRED SEWER REHABILITATION AND CAPACITY ASSURANCE PROGRAM

New Castle County, Delaware

New Castle County owns and operates approximately **1,600 miles of gravity sewer and interceptors** with the Brandywine Hundred portion of the system including four sewersheds and over 420 miles of sewer located in the County's most densely populated areas and containing some of the oldest and most problematic sewers in the County's inventory. This system also contains several structured sanitary sewer overflow structures that discharge excessive storm flows into the Delaware River and its tributaries. There was also a history of documented sanitary sewer overflows within upstream portions of the system.

Arcadis has provided program management, consulting, and engineering services since 2002 to assist in identifying, prioritizing, designing, constructing, and implementing cost-effective solutions to the I&I driven overflow and capacity problems in the Brandywine Hundred system. As part of the program **Arcadis installed flow meters at 42 locations.** The collected flow data was used to support a long-term modeling study for the Brandywine Hundred Sewer Rehabilitation and Capacity Assurance Program and to select and prioritize SSES investigations and subsequent pipe assessment and rehabilitation. By analyzing the flow data Arcadis determined the type and extent of I&I contributions in each subbasin. The subbasins were then prioritized for further investigation based on peak and sustained flow increases and the appropriate investigation methods were selected for each subbasin based on the measured I&I characteristics and qualitative interpretation of storm hydrographs. These efforts have ultimately led to a series of neighborhood sewer rehabilitation projects to reduce infiltration and wet weather overflows using such technologies as: pipe joint grouting, service connection grouting, cured-in-place lining of mains, cured-in-place lining of service laterals, and manhole repairs including chimney seals and reinforced cementitious lining. While most of this work is complete some rehabilitation projects are still in design or construction.

Most recently, **Arcadis installed 65 meters and 7 rain gauges for a 6-month study** to support a model recalibration that would determine the overall effectiveness of the I&I reduction program across the Brandywine Hundred sewershed. Although not all rehabilitation work was completed the **results of the model recalibration demonstrated a 98% reduction of the overflow volume at the structured overflows along the river, 67% reduction in manhole overflow volume across the upstream system, and overall 77% reduction of overflow volume. An innovative approach to evaluating effectiveness of the individual rehabilitation projects using a control basin methodology also demonstrated a range of I&I volume reduction from 32% to 97%.**

CLIENT

New Castle County

CONTACT

Rob Roff

Sewer Operations Manager

302-395-5868

PROJECT DURATION

2002 - Ongoing

I/I FLOW REMOVED

To be determined

RELEVANT FEATURES

- Pipe Inspection and Assessment
- Pipe Replacement, Rehabilitation and Realignment Design
- Easement & Permit Acquisition
- Bidding Support
- Design Services During Construction
- Construction Oversight
- Protection
- Structural

BUDGET / SCHEDULE

Project is on budget and on schedule

ANNUAL COLLECTION SYSTEM AND PUMP STATION INVESTIGATIONS AND REHABILITATION FOR I/I REMOVAL

Stoneham, Massachusetts

Sewer System Investigations and I/I Rehabilitation. To address crumbling infrastructure issues, the Town of Stoneham retained Arcadis to assist in an infrastructure maintenance and rehabilitation program. As part of the program, **Arcadis inspected and analyzed approximately 134,000 lf of 6-in to 15-in sewer lines**. The program included the in-line CCTV and manhole inspection of approximately 25 miles of the Town's collection system in five subareas of the oldest sections and known problem areas in the system. Investigations also included smoke testing, dye water testing and installation of back-flow preventers on low-lying, flood-prone homes.

The majority of Stoneham's collection system consists of asbestos cement pipe, vitrified clay pipe, and brick manholes. As such, the system is prone to severe I/I, particularly during storm events and the high groundwater season. This program successfully addressed these issues and significantly reduced the amount of I/I entering the Town's collection system.

Rehabilitation Construction and Inflow Removal with Backflow Preventers. Arcadis developed detailed construction specifications for five phases of sewer system rehabilitation and provided bidding services, construction services and resident inspection. Work included both open cut and trenchless pipeline rehabilitation or replacement, and manhole rehabilitation. Sources of inflow were also removed by the installation of backflow preventers on low-lying private services.

CLIENT
Town of Stoneham

CONTACT
Bob Radigan
Water and Sewer Foreman
(781) 507-2577

PROJECT DURATION
1998 - Ongoing

I/I FLOW REMOVED
1.1 MGD

RELEVANT FEATURES
- Sewer System Investigation
- I/I Rehabilitation

BUDGET / SCHEDULE
Project is on budget and ahead of schedule

Arcadis has been providing annual assistance to the Stoneham DPW since the late 1990's. As a result of the collection system evaluations and I/I removal rehabilitation projects, the Town has reduced its I/I and the associated costs paid to the Massachusetts Water Resources Authority (MWRA). The entire program has been funded through seven phase of I/I Reduction Grants provided by the MWRA.

BEACON STREET INTERCEPTOR SERVICE AREA, I/I INVESTIGATIONS AND SEWER SYSTEM REHABILITATION

Norwalk, Connecticut

Arcadis evaluated over 6 miles of interceptor and collector sewers for the WPCA, including comprehensive manhole inspections, smoke and dye testing and evaluation of pipeline CCTV videos. From our condition assessment, we designed an I/I removal sewer system rehabilitation construction project for the Beacon Street Interceptor Service Area.

Construction includes cured-in-place lining of 20,000 LF of 8-inch through 18-inch diameter pipe; spot repair liners; open-cut excavation repairs; and comprehensive manhole rehabilitation. Arcadis is currently providing complete construction phase engineering services, including full-time resident engineering.

Some of the challenges on the project included significant bypass pumping set-ups through public streets, City parks and athletic fields and easements. Close coordination amongst the WPCA, the residents and Norwalk's resident engineer and public works departments was facilitated by Arcadis' on-site resident engineers. Several sewer system defects discovered during construction required quick decisions, extra-work order negotiations and emergency construction repairs. Construction is scheduled for completion in June 2015.

Recent Past Projects

Hydraulic Modeling and Scenario Analysis. Arcadis worked with the City to select a hydraulic software package for future use in modeling various scenarios for the sanitary system to anticipate capacity-related remedial measures, and develop a detailed understanding of how the sewer system responds to wet-weather events. We created and calibrated the hydraulic model using the newly created GIS sewer layer data and information gathered during fl ow-monitoring activities. We also trained City personnel in the use of GIS data as well as the hydraulic and financial models.

Seaview and Cove Avenue Interceptor Rehabilitation. The interceptor consists of approximately 4,700 LF of pipe up to 30-inches in diameter, and 17 manholes or chambers between Fifth Street and Moore Place. Rehabilitation consisted of cured-in-place lining of sewers, cementitious and epoxy lining of manholes, and installation of watertight manhole covers on manholes or chambers below the 100-year flood elevation.

Norwalk River Interceptor Rehabilitation. The Norwalk River Interceptor was built in the same era as the Seaview and Cove Ave

CLIENT
City of Norwalk

CONTACT
Lisa Burns, PE
Operations Manager
(203) 854-7797

PROJECT DURATION
2012 - 2016

RELEVANT FEATURES
- I/I Investigations
- Sewer Rehabilitation

BUDGET / SCHEDULE
Project is on budget and completed on time

PROJECT DESCRIPTION - Beacon Street Interceptor Service Area, I/I Investigations and Sewer System Rehabilitation

Interceptor and exhibited many of the same signs of deterioration. This interceptor is also located along Norwalk Harbor and the Norwalk River, and therefore, subject to high infiltration. **Construction of the rehabilitation of over 5,600 lf of 48-in pipe and associated manholes** was completed in 2009. Along with severe hydrogen sulfide corrosion, a collapsed area of the interceptor was found underneath an industrial building. To repair this collapse, the contractor hired a pipe jacking company to jack a 42-in sleeve through the collapse prior to lining.

Arcadis is currently overseeing the construction of the Beacon Street Interceptor Service Area Sewer System Rehabilitation contract. We are working closely with the WPCA, the contractors, residents and various City departments to facilitate a smooth and successful completion to this highly visible project.

CONTINUOUS FLOW MONITORING PROGRAMS

Portland, Maine

Phase 1 (November 2013-January 2015)

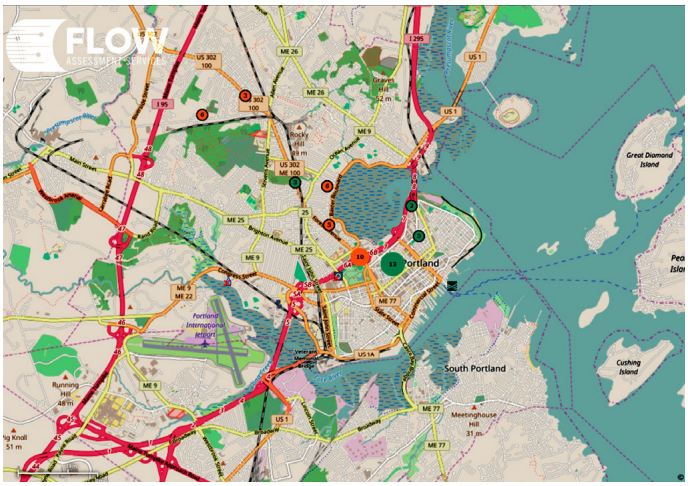
The Portland Public Works hired Flow Assessment Services in November of 2013 to **install twenty six (26) area velocity flow meters for a period of 52 weeks.** The sites were setup using wireless technology so officials could monitor the sites in real-time.

Phase 2 (January 2015-October 2016)

In January 2015 Portland Public Works started working with an Engineering firm to do a study for a storage conduit on Back Cove. The **study started with 15 sites and morphed to include 24 sites** as 9 were added after a brutal winter in May 2015. These sites remained in place through October 2016.

Phase 3 (October 2016-ongoing)

In October 2016 the City of Portland contacted Flow Assessment Services to remove several sites and reinstall the meters in different locations throughout the city. This resulted in monitoring at 16 new locations as well as continuing the metering at several of the original sites. This new phase of the project has been extended



CLIENT

Portland Public Works

CONTACT

Bradley A. Roland, PE
Project Manager
Portland Public Works
(207) 874-8840
Brad@portlandmaine.gov

PROJECT DURATION

2013 - Ongoing

RELEVANT FEATURE

- Flow Meter Installation
- Data Analysis

FLOW ASSESSMENT SERVICES

LONG TERM CSO MONITORING

Portland, Maine

The Portland Water District hired Flow Assessment Services in 2009 to i**nstall 11 flow meters to monitor their CSO sites in the City of Portland.** The sites were also setup to be wireless so the District could monitor the sites in real-time. In some cases, weirs were modified and additional level sensors were also installed.

In 2010 the District again hired Flow Assessment to install another 10 of these systems. **Currently Flow Assessment maintains 21 sites providing monthly reports and maintenance to the meters as necessary.**

CLIENT

Portland Water District

CONTACT

Charlene Poulin,
Project Manager
Portland Water District
(207) 774-5961 Ext. 3105
CPoulin@pwd.org

PROJECT DURATION

2009 - Ongoing

RELEVANT FEATURE

- Flow Meter Installation
- Data Analysis

FLOW ASSESSMENT SERVICES

ARCADIS Design & Consultancy for natural and built assets

CITY OF PORTLAND

PLANNING AND ENGINEERING SERVICES FOR A INFILTRATION AND INFLOW PROGRAM OF THE SANITARY SEWER SYSTEM

2. EXPERIENCE AND AVAILIBILITY OF PROPOSED STAFF, INCLUDING PROJECT LEADERSHIP

2. EXPERIENCE AND AVAILIBILITY OF PROPOSED STAFF

SECTION 2. EXPERIENCE AND AVAILABILITY OF PROPOSED STAFF, INCLUDING PROJECT LEADERSHIP

Introduction to the Arcadis Team

Arcadis is an international engineering firm specializing in the fields of infrastructure, environment, water and buildings. For more than 125 years, Arcadis has been designing the human habitat and setting industry standards with patented technologies and published works.

We have prepared hundreds of sewer designs for communities nationwide in a wide variety of terrain, and we have provided evaluation, design and construction phase services for new and rehabilitated trunk sewers, force mains, interceptors, laterals and branches, manholes, and pump stations. We have designed sanitary sewer interceptors ranging in length from a few hundred feet to more than 40 miles and sizes up to 150 inches in diameter for communities ranging in population from 3,000 to millions.

Our core project management team, located in Wakefield, MA, including Principal-in-Charge, Jennifer Lachmayr, Project Manager, Scott Haynes and Project Engineer, Amy Anderson have a deep understanding of the work to evaluate the Infiltration and Inflow Program of the City's Sanitary Sewer System and a proven track record for successfully removing I/I for many New England clients.. They are supported by the team members outlined in this section and in addition have 800 engineers and scientists located throughout New England and New York to assist. In addition, based on our experience with these types of sewer studies, we realize that needs for other services may arise during the course of a project. As a full service firm, Arcadis can provide a wide variety of requested services in-house.

"The Arcadis team demonstrated great creativity in developing new approaches to solving these I&I and operational problems, including working out how to fix leaking laterals under private property. The level of innovation and perseverance needed to work with thousands of individual home owners cannot be understated. This was achievable only through the use of new technologies that minimized the social and economic impacts of the works. The comprehensive rehabilitation of entire asset networks, including the public and private laterals, has been integral in achieving our goals of eliminating overflows and basement backups. These improvements have contributed to the significant reduction in sewer overflows we experience, a marked reduction in basement backups, and a reduction in O&M requirements for our operations department." ***- Rob Roff, Sewer Operations Manager***

Summary of Key Personnel Sewer Pipeline Experience / Capabilities

	Collection System Flow Monitoring / Metering	Data Collection & Analysis	Hydraulic Sewer Monitoring	I/I From Rain	I/I From Ground Water	Prioritized Rehabilitation Programs
Scott Haynes, PE, BCEE, Project Manager	●	●	●	●	●	●
Jennifer Lachmayr, PE, BCEE, PIC	●	●	●	●	●	●
Amy Anderson, Project Engineer	●	●	●	●	●	●
Paul Batman, PE, Design Quality Leader	●	●	●	●	●	●
Christopher Ranck, Hydraulics	●	●	●	●	●	●
Christopher Heltzel, GIS / Data Gap Analysis	●	●				
Stephen Perry, Resident Engineer	●	●	●	●	●	●
Sean Mitchell, Field Support	●	●	●	●	●	●

OUR PROJECT TEAM HAS WORKED ON NUMEROUS PROJECTS WITH SIMILAR URBAN SETTINGS AS THE CITY'S I/I PROGRAM. WE HAVE A LONG AND ESTABLISHED LOCAL PRESENCE IN NEW ENGLAND THAT WILL HELP FACILITATE COMMUNICATION AND COORDINATION WITH LOCAL CONTRACTORS AND REGULATORS.

We provided five phases of sewer rehabilitation support and CMOM program execution for the Town of Stoneham, MA.

Team members involved: *Scott Haynes, Amy Anderson, Stephen Perry, Sean Mitchell*

We are currently in the design phase of work for MWRA's Reading Extension Sewer Rehabilitation Project.

Team members involved: *Scott Haynes, Jennifer Lachmayr, Paul Batman, Stephen Perry, Sean Mitchell*

As a result of an eight-week flow metering program, we recommended rehabilitation of approximately 12,000 LF of sewer line for the Greater New Haven Water Pollution Control Authority.

Team members involved: *Scott Haynes, Sean Mitchell*

Meet the Arcadis Team Members

In assembling our team, we carefully studied the technical and administrative requirements of the project and selected individuals who possess the right mix of management and technical experience on similar projects.

Jennifer Lachmayr, PE, BCEE, Principal-in-Charge

Ms. Lachmayr is a Principal at Arcadis and resides in our Wakefield, MA office. She has extensive experience managing and conducting large, multi-phased water, wastewater and stormwater projects. Ms. Lachmayr understands the scope of services for this type of project and will ensure that necessary resources are available to the City and that quality work products are prepared and delivered. Ms. Lachmayr is a registered engineer in Maine with 30 years of utility system evaluation and rehabilitation experience.

Current Commitment / Availability: Ms. Lachmayr currently serves as the Project Director on MWRA's Remote Headworks Upgrades Design and HVAC Building Automation and HVAC Unit Replacement, and Reading Extension Sewer and Metropolitan Sewer Rehabilitation Contracts, Prison Point CSO Facilities Upgrade and Town of Ayer I/I Program. We currently anticipate that Ms. Lachmayr will be able to commit between 10% to 20% of her time to the City's Infiltration and Inflow Program of the Sanitary Sewer System.

Scott Haynes, PE, BCEE, Project Manager

Mr. Haynes brings to the City over 27 years of experience in planning, design, and construction engineering for collection system projects in New England. His experience includes collection system and pump station condition assessment and rehabilitation design, I/I analyses, O&M procedures, combined and separate sewer system evaluations, sanitary sewer overflow evaluations, sewer system rehabilitation/replacement projects, and wastewater treatment facility upgrade and expansion projects. With his numerous sewer assessment and rehabilitation projects in New England, proven capability to successfully communicate with our clients and established relationship with local pipeline contractors and regulatory agencies, Mr. Haynes will lead our team to meet the City's key project objectives and provide superior project deliverables. Currently he serves as the Project Manager for several citywide I/I projects in New England communities including the Greater New Haven WPCA, Franklin, Wilmington, Ayer and Stoneham, Massachusetts.

Current Commitment / Availability: Mr. Haynes is currently working as project manager and design quality leader for several collection system rehabilitation projects throughout New England. Some of his current commitments will be winding down and he will be available to begin this assignment in December 2016. We currently anticipate that Mr. Haynes will be able to commit between 25% to 35% of his time to the City's Infiltration and Inflow Program.

Amy Anderson, Project Engineer

Ms. Anderson is a Project Manager specializing in flow metering analysis, SSES programs, SSO elimination programs and I/I reduction program analyses. She has a vast knowledge and experience with analyzing flow data and SSES findings and developing recommendation for long-term I/I identification and removal programs. She also has experience with awareness regarding illicit connections to the sanitary sewer system, hydraulic capacity assessments, SSO evaluations, sanitary sewer rehabilitation projects and GIS mapping. Ms. Anderson manages large teams of staff and subcontractors to deliver and present high quality I/I-SSES studies to our clients.

Current Commitment / Availability: Ms. Anderson currently serves as the project engineer on the MWRA's Chelsea Creek Headworks Upgrade project, a 60 million construction cost project to automate and upgrade all processes of the headworks. She also assists with several sanitary sewer projects throughout New England. Ms. Anderson has 30% availability for this project.

Paul Batman, PE, QA/QC

Mr. Batman is Arcadis' Water Division Technology Knowledge and Innovation leader for Buried Infrastructure. He is aware of all sewer rehabilitation projects (including CIPP) within Arcadis and will bring that expertise to this project. Mr. Batman has supported the assessment and rehabilitation of large diameter sewers constructed of a wide range of materials in the Philadelphia, Washington DC, Baltimore and Cincinnati metropolitan areas and served as the design lead responsible for construction documents requiring detailed access, traffic control, and bypass pumping plans as well as plans for protection of environmentally and culturally sensitive areas. As Design Quality Leader, Mr. Batman will provide technical support to the project team. He also maintains the Arcadis database on rehabilitation construction costs and will assist with LCAA and cost estimates for the project work.

Current Commitment / Availability: Mr. Batman is currently working on the WSSC Consent Decree Sewer Rehabilitation Program, as well as Wilmington Delaware wastewater conveyance on-call, DC Water Sewer Program support, and providing general technical support to various buried infrastructure projects in the Northeast and Mid-Atlantic. Mr. Batman will commit between 5% to 10% of his time to this project.

Christopher Ranck, PE, BCEE, D.WRE, ENV SP, Hydraulics

Mr. Ranck specializes in hydraulics and watersheds, including planning, modeling and design for wastewater, water and stormwater projects. He has particular expertise in hydraulic and water quality modeling, value engineering, combined sewer overflow (CSO) regulatory compliance and Long-Term Control Plan (LTCP) development, green infrastructure master planning, total maximum daily load (TMDL) development, pipeline condition assessment, and preliminary design. Mr. Ranck has performed advanced water treatment (AWT) hydraulic evaluation and design, CSO/AWT value engineering, drainage design, and polychlorinated biphenyl (PCB) remediation. He has also developed several data management methods for linking hydraulic and water quality models to geographic information systems (GIS).

Current Commitment / Availability: Mr. Ranck is currently working on the following projects - Citizens Energy Group Model Expansion, Citizens Energy Group CSO Regulatory On-Call, Citizens Energy Group Hydraulics On-Call, Citizens Westfield I/I Evaluations, Los Angeles Dynamic Design Storm, Fort Wayne CSO Post-Construction Monitoring and Columbus, OH Mohler Street Interceptor. Mr. Ranck can commit 10% - 20% of his time to this project.

Stephen Perry, ENV SP, Resident Engineer

Mr. Perry is a Project Manager who serves on a variety of projects ranging from buried infrastructure condition assessment and rehabilitation oversight to wastewater treatment plant upgrade and improvements. He has extensive design coordination and field supervision experience, and is highly skilled in implementing contract administration. He possesses the project management skills necessary to oversee projects through completion, while ensuring conformance with all contract documents.

Current Commitment / Availability: Mr. Perry is currently involved with the MWRA Deer Island Treatment Plant HVAC Upgrades project 50% of the time and will begin work on two other projects in the near future; Town of Wilmington, MA I/I Analysis project and Trumbull, CT Beardsley Wastewater Pump Station Upgrades project; each are anticipated to involve 10%-15% of his time. Mr. Perry can commit 30 - 50% of his time to this project.

Eric Cathcart, Field Support

Eric Cathcart was hired by Arcadis in February, 2014 as a Risk Assessment Intern in the Portland, ME office. He currently works full time as a Risk Assessment Scientist. Mr. Eric Cathcart's environmental experience has been focused on site assessments. Projects experience have included environmental due diligence assessments, human and ecological risk assessments, and environmental permitting. Mr. Cathcart's experience with environmental site assessments has been focused in the state of Maine, with other project experience in states including but not limited to New Jersey, California, New York, Missouri, Texas, Washington, Massachusetts, New Hampshire, Connecticut and Georgia.

Current Commitment / Availability: Mr. Cathcart is currently working on a receptor evaluation, a vapor intrusion assessment report, two eco risk assessment updates, and other smaller vapor intrusion related tasks. Mr. Cathcart can commit up to 30% of his time to this project.

Sean Mitchell, Field Support

Mr. Mitchell has broad experience in engineering consulting with a strong focus on sanitary sewer collection systems. He has worked on projects in the study, design and construction phase, participating in field work, evaluating data, as well as the design and bidding phases for projects in Massachusetts and Connecticut. He is familiar with the permitting process associated with working in roadway and easement and permitting issues that may arise when evaluating design options.

Current Commitment / Availability: Mr. Mitchell is currently working on multiple I/I removal projects for Greater New Haven WPCA, the Reading Extension Sewer Rehabilitation Design for MWRA and study and design phase I/I removal projects for the Town of Stoneham DPW. Mr. Mitchell can commit up to 50% of his time to this project.

Christopher Heltzel, GIS / Data Gap Analysis

Mr. Heltzel specializes in information management and application development related to asset management. He has extensive experience in managing IT projects, including implementations of geographic information systems, computer-aided design software, hydraulic modeling, computer maintenance management systems, financial information systems, and condition assessment software.

Current Commitment / Availability: Mr. Heltzel is currently working on the following projects - Metropolitan Sewer District of Great Cincinnati Asset Management System Implementation, City of Houston Swepp Infrastructure Design Improvements, Jersey City Municipal Utilities Authority CSO Permit Compliance, as well as a few asset management plan projects. Mr. Heltzel will commit up to 25% of his time to this project.

Edward Kowalski, PE, PMP, SCADA

Mr. Kowalski has over 16 years of experience in the planning, design, and specification of instrumentation & process control systems for water and wastewater treatment facilities. He has extensive experience in WWTP unit process controls, hardware and software selection, automation system configuration, checkout and startup, as well as management of project procurement and delivery for all facets of Supervisory Control and Data Acquisition (SCADA) systems.

Current Commitment / Availability: Mr. Kowalski is working on a SCADA Upgrade Project at 20mgd Plant, a water distribution system design project, a centrifuge project design, high performance HMI specification for a client as well as project and group management. Mr. Kowalski can commit up to 25% of his time to this project.

Fernando Pasquel, CPM, Green Infrastructure

Mr. Pasquel is a water resources manager with 30 years of experience in developing and implementing stormwater management programs that involve monitoring, modeling; policy analysis; establishing funding alternatives; permitting; and designing drainage systems, flood control structures, stormwater management controls and green infrastructure assets. He assisted several municipalities and agencies including New York City Department of Environmental Protection; Washington DC; and Fairfax, Chesterfield, and Henrico Counties and City of Alexandria, VA with implementation of stormwater masterplans, designing of BMPs and green infrastructure, and development of program effectiveness indicators and alternative monitoring programs.

Current Commitment / Availability: Mr. Pasquel is working on NYC, Green Infrastructure Research & Development Program; Chesterfield County, Watershed Management, Stormwater Compliance; Williamsport, PA, Stormwater Utility; and Beatty Development Corporation/Honeywell, Stormwater Infiltration Study. Mr. Pasquel can commit up to 25% of his time to this project.

ARCADIS Design & Consultancy for natural and built assets

CITY OF PORTLAND

PLANNING AND ENGINEERING SERVICES FOR A INFILTRATION AND INFLOW PROGRAM OF THE SANITARY SEWER SYSTEM

3. PROJECT APPROACH AND SCOPE

3. PROJECT APPROACH AND SCOPE

SECTION 3. PROJECT APPROACH AND SCOPE

Project Background and Understanding

On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program, as well as making improvements to the City's collection system GIS by supplementing and correcting data gaps. This I/I Program will address those recommendations and set the course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from the sanitary collection system.

Portland's collection system consists of 240 miles of separated and combined sewers and 9 Pump Stations. For the collection system, the CMOM study evaluated the City's infrastructure primarily by modeling asset conditions and using "risk-based" analysis to identify and prioritize renewal needs. Of the 6,977 pipe segments analyzed, 95% were determined low priority for placement, and only 1% were found to be high priority for renewal. **However, for your I/I Program, prioritizing assets for I/I investigations and rehabilitation needs based on the likelihood and consequence of failure (risk-based analysis), does not necessarily target or address infiltration and inflow mitigation.** As such, the City plans to conduct a well-structured I/I Program, monitoring flows within the collection system, locating and quantifying I/I, prioritizing I/I removal needs, and implementing cost-effective, high priority I/I removal projects.

Work in Progress

The City has begun to lay the foundation for the I/I Program by completing the CMOM, identifying data gaps, updating the hydraulic model, monitoring flows in select locations and inspecting portions of the sewer system using closed circuit television (CCTV) inspection.

Since 2013, the City has monitored flows within the collection system, utilizing approximately 25 meter sites. While most of the sites are within the combined sewer system, the data obtained can still be used to identify, quantify and target I/I for removal, either within the tributary meter area itself, or within adjacent, upstream or downstream areas. It is also helpful that some of the meter sites are currently being relocated, thus providing additional data points throughout the system which can be evaluated and utilized for the I/I Program. As part of this program, existing data can be used to help make decisions about where to place meters within the separated sewer system.

In addition, the City has cleaned and CCTV'd approximately 6% of the collection system annually for the past 3+ years, using both in-house resources and reputable subcontractors. If warranted, these inspections could be used to locate, quantify and target I/I for removal. On the other hand, if minimal or no I/I has been identified in certain pipelines, the information can be used to eliminate areas from the I/I Program, or make them a lower priority.

As shown within the other sections of this proposal, the Arcadis Team includes Flow Assessment Services and Ted Berry Company, subcontractors which have been working for the City of Portland on the collection system work discussed above.

Arcadis proposes to review the existing CCTV inspection findings to evaluate the quantity of I/I and target I/I removal rehabilitation. Our team includes staff who are certified by the Pipeline Assessment and Certification Program (PACP), as provided by the National Association of Sewer Service Companies (NASSCO).

Scope of Work Outline

The following narrative outlines our proposed Scope of Work for the City of Portland I/I Program, structured in accordance with the Phases and Tasks indicated in the RFP. Based on our wide-ranging I/I experience, we have also added proposed scope enhancements and innovative approaches to completing the I/I Program. On our numerous, annual I/I Program Management projects, we have assisted utilities with developing tailored strategies based on their specific needs and priorities. This doesn't always follow or include all the traditional Infiltration/Inflow and Sanitary Sewer System Evaluation Survey (SSES) tasks, but rather focuses I/I investigations and identification where it is more likely that the utility will have the follow-on resources and other support necessary to remove the extraneous flows.

That way, valuable resources are not spent on looking for and quantifying I/I sources that the City will not be able to remove due to financial, community or political hindrances.

PHASE 1: INVESTIGATION OF INFLITRATION / INFLOW SOURCES

Task 1: Data Gathering and Gap Analysis

Per the RFP, Task 1 will include the following items. Below the bullet list, we have expanded on our Approach, proposing specific, cost-effective enhancements to the prescribed tasks.

- Meet with City to identify program goals and develop a detailed Scope for the I/I Program
- Review past reports and studies, SCADA information, GIS files, collection system record drawings
- Perform a gap analysis of existing GIS
- Review available flow and rainfall data
- Assess previously completed metering and hydraulic modeling
- Prepare a background of GAP Analysis Report

For the gap analysis, Arcadis will use our in-house developed **Data Profiler™** software to analyze your collection system GIS for completeness and consistency. Arcadis uses the *Data Profiler* to identify data gaps, relationships between database tables and views, and to compare different versions of data. The Data Profiler has a simple interface that allows the user to:

- Select the source database (the City's Sewer GIS)
- Select which assets or attributes within the GIS you want to analyze
- Create the output results database

Utilizing Data Profiler can benefit your I/I Program by:

- Reducing costs by eliminating the need to manually search GIS databases for data gaps
- Quickly identifying data gaps, such as missing pipes or disconnected assets
- Improving data quality to provide the City with a more accurate and cost effective I/I Program

Data gaps are quantified and can then be prioritized so the most effective and coordinated process can be used to determine and apply corrections.

At the end of this section, we have included a single page information sheet describing *Data Profiler*™, which includes typical output and screen shots from its application.

Task 2: Flow Monitoring Program

Task 2 will include the following RFP items. Below we include details and specific proposed enhancements.

- Review recommended metering sites from the CMOM Report
- Identify other sites where it would be strategic to obtain data
- Field verify sites and install metering equipment
- Implement the selected flow monitoring strategy, including collection of flow and rain data
- Identify sources and quantify I/I
- Prepare a Summary Flow Monitoring Report

We recommend that the city start with a targeted, 8-week flow monitoring program conducted during the high groundwater season (beginning Spring 2017). Depending on your budget and priorities, this can be done system-wide or in a phased fashion, concentrating first on the area's most likely to exhibit high infiltration and inflow. Prioritization of meter locations should consider several sources of information and data, including:

- Recent and on-going flow monitoring and CCTV data
- Historic and recently discovered problem areas, where back-ups, surcharging, and overflows have occurred

- Areas which may not have known back-ups and overflows, but are tributary to areas which have had such problems
- Areas where the hydraulic model indicates potential I/I related capacity issues, such as those related to wet weather events or high groundwater periods
- Areas near water bodies
- The oldest and most densely populated areas of the collection system

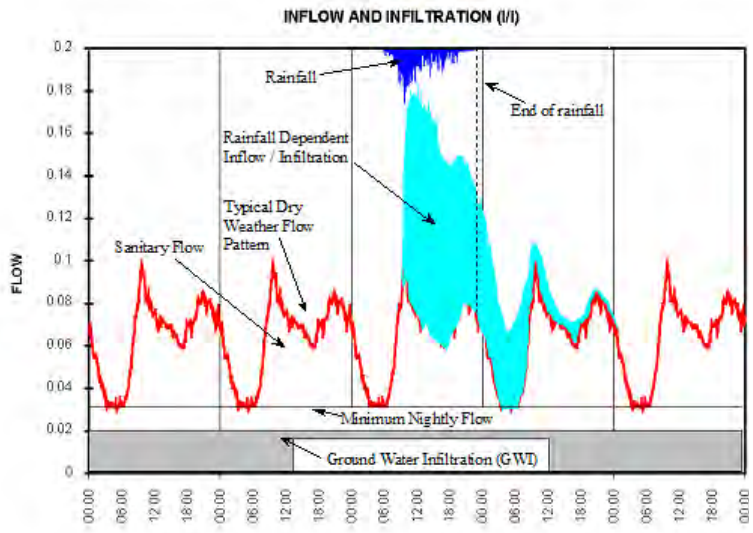
Tidal Impacts

A considerable portion of Portland's collection system is in close proximity to tidally influenced water bodies, including Back Cove, Capisic Brook, Portland Harbor and the Fore River. I/I from tidal influences could result from leaking pipes allowing groundwater to enter the system, or from tidal waters entering manholes covers which are not watertight. This influence might be seen during normal high tides (twice daily), or just during extreme high tides. During a full moon, an extreme high and low tide are present. Tidal impacts on sanitary and combined sewer flows can be evaluated by looking at collection system flow fluctuations with groundwater and tidal data, particularly during extreme high tides. In certain locations, we can also assess the use of salinity gauges during extreme high tides in evaluating tidal impacts.

Analyzing Flow Data and Estimating I/I

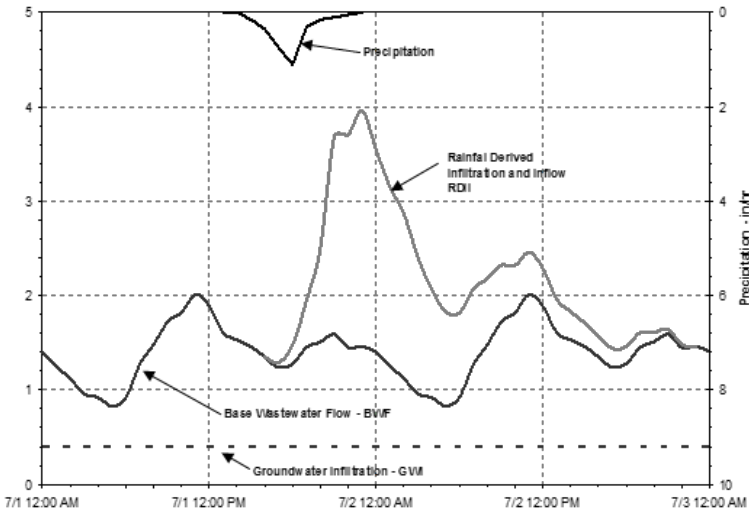
Time Series Analyzer (TSA) is a specialized data management program developed by Arcadis, which is capable of storing and managing extensive amounts of flow and rainfall data. TSA will be used to quickly and cost-effectively evaluate all flow data and calculate average daily flows, peak flows and infiltration and inflow from each of the tributary meter areas. Wet weather and dry weather flow patterns will be established, and peak, minimum and average flow rates will be calculated for each flow component. Daily and annual flow rates and volumes will be calculated.

With flow and rain data imported into TSA, the program calculates the average infiltration rate as 85% of the nighttime sanitary flow measured on dry days, from 12:00 am to 6:00 am, throughout the entire metering period. Only data for days that follow a minimum of 72-hours without a rainfall event are considered "dry days" to avoid inclusion of indirect inflow and rainfall induced infiltration (RII) in the infiltration estimates. The peak infiltration rate is defined as 85% of the nighttime sanitary flow measured on dry days during the high groundwater period.



Output from Time Series Analyzer

Direct inflow is defined and calculated as the portion of inflow that occurs during the actual storm event, emanating from direct cross-connections to the sanitary system, such as catch basins, holes in manhole covers, driveway drains and roof leaders. Delayed inflow is defined and calculated as the portion of inflow generated from indirect connections to the sanitary sewer system such as sump pumps, foundation drains, indirect sewer/ drain interconnections and rainfall-induced infiltration (storm water seeping into the ground and subsequently entering the sewer though manhole or pipeline defects). Indirect connections produce inflow after a significant time delay following the end of each storm event, whereas direct inflow sources have an immediate impact on the sewer system. Total inflow encompasses both direct and delayed inflow.



Graphic representation of Inflow

We will also characterize wet weather I/I by interpreting storm hydrograph signatures that often distinguish wet weather sources such as manhole inundation, roof leaders, area drains, storm drains, sump pumps, and rainfall-derived infiltration.

The analysis provided using TSA provides us with the information needed to rank tributary areas based on I/I severity to determine where SSES activities should be prioritized.

TSA will be applied by Arcadis to develop the flow analysis results necessary for characterizing the I/I severity from each of the monitored tributary areas. Base flow patterns, in conjunction with rain events and measured daily flow are used to quickly produce estimates of infiltration and inflow (I/I) providing efficiencies and cost savings to the City.

PHASE 2: IDENTIFICATION OF MAJOR INFILTRATION/INFLOW SOURCES

Once the Phase 1 flow monitoring program is completed and I/I has been quantified for each meter area, the areas can be prioritized for appropriate additional investigations, such as manhole and pipeline inspections, night-time flow isolation and smoke testing, depending on whether the area exhibited high infiltration, high inflow, or both.

Task 3: Strategy for Further Investigation of Extraneous Flows

Task 3 will include the development and implementation of a targeted, Sewer System Evaluation Survey (SSES):

- Identification of gaps in flow data
- Development and implementation of a strategy for further investigations, such as CCTV inspections, manhole inspections and smoke testing, in areas which exhibited significant extraneous flows
- Identification, location and quantification of I/I by source, and total I/I identified over the course of the study
- Recommendations for a permanent flow monitoring program
- Summary I/I Analysis Report, with recommendations for I/I removal

Once a flow monitoring program identifies high infiltration and inflow areas, most wastewater utilities follow a prescribed process for identifying the specific sources of extraneous flows. While most of these methods are well-proven and would provide benefits to the City of Portland, there are certain aspects of prescribed programs that should be modified in light of your specific goals, priorities and financial commitments.

For high infiltration areas, the strategy would be to perform night-time flow isolation to more precisely pinpoint infiltration resources, which can then be investigated by CCTV inspections. This saves the cost of conducting CCTV in areas where you don't anticipate finding infiltration. Arcadis would review the CCTV inspections completed by our subcontractor and provide evaluation and rehabilitation recommendations by our PACP certified staff.

Targeting the Right I/I Sources

As mentioned previously, Arcadis recommends that Portland focuses SSES investigations where it is more likely that the City will have the follow-on resources and other support necessary to eliminate the extraneous flows. That way, valuable resources are not spent on looking for and quantifying I/I sources that the City will not be able to remove due to financial, community or political hindrances.

Specifically, we often discuss with clients the likelihood of removing certain private sources of inflow, such as sump pumps, roof leaders and driveway drains. In some instances, there is a readily available solution for redirecting these sources away from the sanitary sewer system, but that is not always the case. In particular, permanent removal of sump pumps presents a difficult challenge to communities. While some communities have had success offering amnesty programs or financial incentives to assist with the removal of sump pumps, most times the home owners and businesses do not have a viable alternative to discharge their sump pumps. And forced removal programs can often result in replacement of sump pumps by home owners if an alternative solution is not implemented.

Removal of other sources of private inflow can also be challenging from technical, financial and community relations standpoints. Among other issues, communities struggle with forcing a financial burden on tax paying residents and businesses; and spending public dollars on private property modifications is often challenged by the community. Given these challenges, the City should first determine the likelihood of removing private inflow sources before spending money on locating these sources through such means as building surveys and private source dye testing. The money might better be spent on identification of infiltration and public inflow sources, where the removal of such sources is within better control of they City.

Typically, the most cost-effective sources to target are sources such as severely leaking manholes (internal or surface / covers), directly connected stormwater assets (such as catch basins), and major sources of groundwater infiltration, particularly those which can be fixed by trenchless technologies, as further discussed under Task 4.

PHASE 3: SCHEDULE OF TARGET INFILTRATION/INFLOW MITIGATION

Task 4: Wastewater Collection System Analysis and Action Plan

This Task will include the following scope, as further detailed below:

- Present strategies to reduce I/I to the collection system, as well as associated cost estimates
- Prioritize rehabilitation and replacement
- Assist the City with developing a 10-year capital plan
- Recommend a permanent flow monitoring strategy
- Comprehensive Infiltration and Inflow Study Report

In developing an I/I mitigation Action Plan, we propose to work with the City to first establish short-term and long-term goals. This approach typically involves identifying the “low hanging fruit”, or most efficient and cost-effective I/I removal opportunities: fix the problems that will remove the greatest amount of I/I for the amount of money invested. Prioritizing rehabilitation needs would come directly out of the flow monitoring and SSES results, and phased sewer system rehabilitation projects can be developed in light of I/I removal quantities, available budgets and the criticality of individual rehabilitation needs.

As we do with numerous clients throughout New England and across the country, Arcadis works with communities to develop cost-effective rehabilitation contracts that can be implemented relatively quickly, and with little disruption to the community. Most often, this means designing projects entirely or mostly comprised of “no dig”, or trenchless sewer rehabilitation technologies, such as cured-in-place pipe lining, internal sealing or lining of sewer lateral connections, and in-situ manhole lining. As detailed in Section 1 of this proposal, Arcadis has been managing such annual I/I removal programs for many clients.

Long Term Flow Monitoring

Establishing a long term flow monitoring program is a prudent strategy which would provide many benefits to the City, including:

- Comparison of pre- and post-rehabilitation flow data to track the effectiveness of I/I removal projects
- Compliance with the EPA Order and Corrective Action Plan

- Updates for your hydraulic model
- Identification of new I/I issues which may arise as the collection system ages and other future changes impact the system

Infiltration and Inflow Study Report

The I/I Study Report will summarize all data, information, evaluations and findings and recommendations. The Report will include results from all three phases of the project, and will include an Executive Summary and recommendations for I/I removal and sewer system rehabilitation.

Results of the flow monitoring program and SSES activities will be summarized, and all data, logs, videos and other field-collected data will be provided. Draft versions of the report outline and final report will be submitted for review and comment by the Portland DPW. We will prepare and deliver paper and electronic copies and present the Final Report to the appropriate officials.

The Final Report will include:

- A summary of our review of existing data and past and ongoing related studies and projects
- A clear explanation of our methodology for developing the flow monitoring and SSES strategies
- Maps and plans showing the selected meter areas and meter locations
- A detailed explanation of how data was analyzed, verified, and utilized to calculate the various flow components
- A description of how we used the flow monitoring results to target follow-on SSES
- Cost estimates and a schedule for conducting cost-effective Sewer System Rehabilitation Contracts and other I/I removal activities

Project Schedule

This section presents our proposed schedule. The Schedule outlined below indicates completion of all Tasks well ahead of the 2019 deadlines indicated in the RFP. Thus, the City will have the flexibility to Phase the I/I Program – both flow monitoring and SSES activities - to suit your priorities and reconcile project costs with your annual budget.

We would first like to have a project kick-off meeting with the City's key departments and staff to align project objectives and milestones. Throughout the project, we will meet with the City to assure our direction is coordinated with your goals and budget, as well as regulatory requirements. We anticipate the project will progress as follows:

- **December 2016:** Execute Contract for I/I Program
- **January 2017 – March 2017:** Data gathering and gap analysis
- **March 2017 – April 2017:** Flow monitoring program
- **April 2017 – August 2017:** Analysis of flow metering, I/I source identification, prioritization for SSES activities
- **August 2017 – April 2018:** Conduct Phase 1 SSES activities in high priority I/I areas
- **April 2018 – TBD:** Implementation of long-term flow monitoring program
- **May 2018 – August 2018:** Evaluation of Phase 1 SSES findings, collection system condition assessment, identification of I/I rehabilitation needs
- **September 2018 – October 2018:** Draft and Final ***Wastewater Collection System Analysis and Action Plan*** Report

The *Wastewater Collection System Analysis and Action Plan* Report will lay out the City of Portland's prioritized, short-term and long-term I/I Rehabilitation Program.

Based on the findings of the Phase 1 flow monitoring, I/I analysis and SSES activities, we anticipate that additional I/I identification and SSES activities will take place in successive years, concurrently with prioritized I/I Sewer System Rehabilitation construction. This Phased approach will be determined based on the City's budget and environmental compliance requirements.

ARCADIS Design & Consultancy for natural and built assets

CITY OF PORTLAND

PLANNING AND ENGINEERING SERVICES FOR A INFILTRATION AND INFLOW PROGRAM OF THE SANITARY SEWER SYSTEM

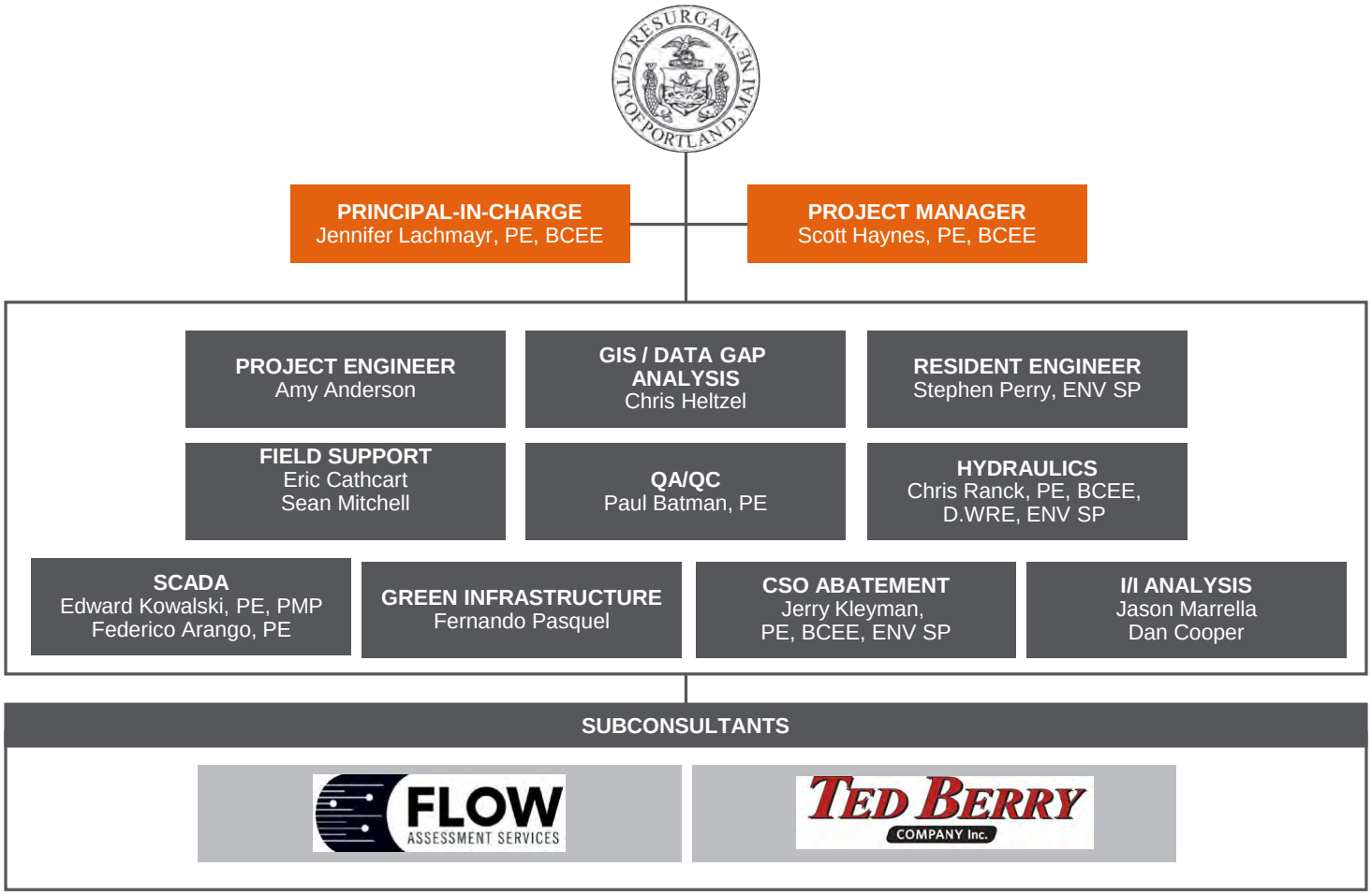
4. TEAM STRUCTURE

4. TEAM STRUCTURE

SECTION 4. TEAM STRUCTURE

Organization Chart

We have a team of experienced personnel managing our speciality subcontractors who are familiar with the City's collection system. This project will be staffed out of our Wakefield, MA office and supported by staff in our Portland, ME office. Provided below is our Project Organization Chart for this assignment. **Resumes for project staff are provided at the end of this section.**



We have a team of seasoned personnel, including speciality subcontractor partners, who are familiar with the City's sewer system.

Management Approach

Interaction with City Staff

To us, Quality Client Service means taking extra steps to assure our technical services and products meet or exceed our client's expectations. Some of the important principles we apply to our projects include:

- Carefully listening to be certain we understand your problem and needs relative to solving the problem.
- Confirming that we are proceeding according to plan through frequent contact.
- Early project planning/review by senior management for proper approach and assignment of project team members.
- Our project management team and approach have been specifically designed to:
- Stay continuously in contact with the Authority on developing strategies in order to address critical coordination functions and issues that are key to achieving the City's objectives.
- Utilize veteran personnel who have first-hand engineering and operational experience with project requirements.
- Provide seasonal management personnel with experience working on similar infrastructure assignments to provide seamless continuity and guidance from start to finish.
- Achieve the all-important managerial balance between the often competing objectives and demands of Quality vs. Budget vs. Schedule.

Project Manager, Scott Haynes will lead overall project administration and execution. He will be continuously involved with and responsible for the production of project deliverables and for the effective use of project staff and resources to the City's best advantage. He will manage subconsultants and will be the primary project team interface for interaction with the City's project manager for project execution.

As Principal-in-Charge (PIC), Jennifer Lachmayr is responsible for promoting the City's satisfaction. She will be in regular contact with Mr. Haynes and City personnel assigned to this project, so that all work phases are completed in a timely and expeditious manner. It is our goal to exceed your expectations and deliver services based on specifications defined by the City.

Schedule and Cost Control

Mr. Haynes will apply the globally accepted Project Management Institute's (PMI) standards so that the project will be initiated, planned, executed, monitored, controlled, and closed in concert with world-class principles and procedures. The following are some benefits to the City resulting from our project management approach:

- Prioritizing competing activities and providing clear direction to the project team will minimize unwanted deviations to scope, schedule, and budget and maintain an efficient production of design.
- The City will have a clear understanding of all key elements of work required to complete the project through the detailed work breakdown structure of the project schedule.
- This will also facilitate understanding of the impact of scope, schedule, and budget changes or of other additional activities.
- Our project schedule will allow the City to understand progress at any point and impacts to the project schedule when critical path activities are affected.
- A critical component to maintaining project control is cost control. We will maintain a scope change log to track deviations in scope, the associated cost impact and the decision regarding the implementation of scope modifications. No changes in scope/cost will be implemented without prior approval from the City.

Computerized Project Management System

Our computerized Project Management System permits managers to monitor projects weekly, or on demand. Our system stresses currency and has proven highly effective in monitoring progress for individual projects on a task-by-task basis, coordinating staff assignments, and projecting short- and long-term manpower and expenditure requirements for project tasks.

Web-Based Information-Sharing Portal

We provide secure project SharePoint web portals for ease of transmission of information among our team members, the project client and all associated contractors, in order to ensure all information is readily available in real-time to those who are granted access.

Subconsultants

Arcadis proposes to use the following subconsultants to assist with the work for this project. Both of these firms currently provide similar services for the City.

- Flow Assessment Services, LLC
- Ted Berry Company Inc.

Flow Assessment Services, LLC

Flow Assessment Services, LLC is a wastewater collection system company providing services in the field of flow monitoring and other sewer system evaluation. They provide the following services in New England and the Mid-Atlantic States:

- Open Channel Flow Monitoring
- Closed Pipe Flow Monitoring
- Inflow/Infiltration Studies
- Pump Station Flow Monitoring
- Smoke Testing
- Flow Isolation
- Telemetry Systems
- Manhole Inspections
- Dye Water Testing/Tracing
- Building Inspection (inflow sources)
- Automatic Sampling

They will provide MH Inspections, flow metering, manhole inspections and follow on investigative work as needed.

Ted Berry Company Inc.

Founded in 1972 the Ted Berry Company Inc. has deep roots in the community with its home base located in Livermore, Maine less than 60 miles from the City of Portland. The Ted Berry Company has completed various projects for the City ranging in size and complexity and has become a trusted service provider to the City. From unplanned emergency services to large scale planned cleaning and CCTV inspection projects the Ted Berry Company has proven its reliability and resiliency. We offer industry leading technology and an extre mely knowledgeable staff of over 60 local employees. A family owned and operated business with the owner and President, Matt Timberlake being intimately involved in the daily operation and management of the company, the Ted Berry Company is the contractor of choice for municipal waste water collection system managers throughout New England. They will provide manhole and pipeline inspection services.

Sanitary Sewer I&I Project Experience:

- The City of Portland utilizes the services of Ted Berry Company to assess the condition of sewer lines and manholes located within the City of Portland Maine. The overall goal is to develop a strategy that will supplement the City's in-house program. The Ted Berry Company performs full service sewer/storm cleaning and inspection. The recently completed 2015-2016 contract with the City of Portland includes 81,000 feet of various sized pipe for cleaning and conditional assessment, with customized reporting. Additions to the original Scope of Work have been provided as funds were released as the result of another contractor's failure to complete the 2014-2015 project.

- In 2015, the Ted Berry Company was involved in a single year contract with the City of Lewiston Public Works Department for cleaning and obtaining CCTV data on existing sanitary sewer mainlines and manholes. Last year, over 170,000 feet of sewer lines and 600 manholes were cleaned and inspected in residential neighborhoods, remotely located pipes, and busy commercial areas. The original Scope of Work called for 93,000 feet of cleaning and inspection, but additional funds were made available from an unspent 2014 budget as another contractor did not complete their Lewiston contract. The 2015 scope increased to 171,000 feet, which Ted Berry completed prior to our contract deadline.

Resumes for each of the project team members identified on the organization chart are presented on the following pages.

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SCOTT HAYNES, PE, BCEE

Project Manager

EDUCATION

- BA Engineering Stonehill College 1987
- BS Civil Engineering University of Notre Dame 1988
- MS Civil Engineering Tufts University 1997

YEARS OF EXPERIENCE

- Total - 28 years
- With Arcadis - 13 years

PROFESSIONAL REGISTRATIONS

- Professional Engineer - MA, CT
- Board Certified Env Engineer - US

PROFESSIONAL ASSOCIATIONS

- American Public Works Association
- American Water Works Association
- Massachusetts Water Works Association
- New England Water Environment Association, Member, Program and Membership Committees

AWARDS

- NEWEA 5S Member -Secret Society of Sanitary Sludge Shovelers

Overview

Mr. Haynes has served as both project manager and technical expert on a variety of I/I, sewer evaluation, hydraulic modeling and sewer rehabilitation projects. He is responsible for project delivery and project management for all phases of projects. Mr. Haynes' experience includes planning, design, and construction engineering services for major sewer rehabilitation projects, wastewater treatment facilities expansions, wastewater collection system and pump station designs, I/I analyses, combined and separate sewer system evaluations, sanitary sewer overflow evaluations, and sewer system rehabilitation/replacement projects.

Project Experience

Reading Extension Sewer and Metropolitan Sewer Rehabilitation

MWRA: Wakefield, Stoneham, and Wodurn, MA

Project Manager on this sanitary sewer rehabilitation contract. Work includes design of cured in place pipe lining and manhole rehabilitation for four sections of interceptor through these three towns, coordination with abutters, municipalities and permitting agencies, plans and specifications and bidding documents as well as bidding and construction phase services.

Phase III – I/I Rehabilitation

Greater New Haven WPCA: CT

Project manager for the continuing I/I reduction program for the Greater New Haven Water Pollution Control Authority. This project includes inspection, evaluation and rehabilitation by cured-in-place lining of 35,000 LF of pipe ranging in size from 8-inch to 27-inch in diameter: Lower Farm River, Area 10, East Haven: 11,400 LF of sewer and 55 manholes; the State Street sewershed, Hamden: 23,350 LF of sewer and 145 manholes; and the Upper Thorpe Drive sewershed Paradise Avenue Easement (UTDSPAE), Hamden: 2,110 LF of pipe and 10 manholes.

Sewer System Rehabilitation

Town of Wilmington: Wilmington MA

Project manager for management and oversight of a construction project recommended on the basis of previous system investigations performed

by Arcadis. The project included construction administration and full-time resident engineering services for manhole and pipeline repairs such as pipeline joint testing and sealing, manhole grouting and lining, and cured-in-place pipeline repairs.

Infiltration/Inflow Analysis Program

Town of Ayer, Massachusetts

Project Director for Ayer's multi-year I/I identification and removal program. Project includes flow monitoring, I/I quantification and follow-on recommendations for sewer system investigations to pinpoint infiltration and inflow for removal.

Sewer System Rehabilitation

Town of Franklin: Franklin, MA

Project Director for five phases of design and construction of this major sewer system rehabilitation project, which was developed based on the recommendation of previous sewer investigations and condition assessments. The projects included trench-less pipeline rehabilitation methods such as CIPPL, cured-in-place spot repairs, and pipeline point testing and sealing. The project also entailed cleaning and CCTV inspection from which the engineer and owner would develop additional rehabilitation recommendations which would be added to the construction contract by work orders. The project is estimated to remove over 500,000 gpd on I/I.

SSO Elimination Program/SSES

The Metropolitan District (MDC): Hartford, CT

Project manager for the MDC's Sanitary Sewer Overflow Elimination Program for the communities of Rocky Hill, Wethersfield and Windsor, CT. This project included a Sewer System Evaluation Survey (SSES), consisting of evaluation of over 100 miles of 8-inch to 39-inch diameter sanitary trunk sewers and interceptors. Work included flow isolation of 550,00 LF of sewers, closed circuit television inspection of 300,000 LF of pipeline, 3,200 manhole inspections, 650,000 LF of smoke testing, dye water testing and flooding and 7,000 building inspections. The goal of the project is to eliminate SSO's in accordance with the EPA and CT DEP Consent Decree by eliminating sources of I/I.

Main Street Interceptor Rehabilitation Planning and Design

Town of Wilmington: MA

Project manager and design quality leader for the inspection, condition assessment and design of in-situ (CIPPL) of this badly deteriorated 36-inch interceptor, which conveys all of the Town's wastewater flow to the MWRA sewer system. Project included CCTV inspection of the pipe, manhole inspections and rehabilitation after removal and disposal of large volumes of sediment.

Tunnel - Storm Drain Design, Logan Airport

Massport and Central Artery: Boston, MA

Engineer for the design of 1,300 l.f. of 72" RCP storm drain and associated cast-in-place drainage structures located at Logan Airport. Developed engineering and construction cost estimates, performed hydraulic analysis, prepared a storm drain design and coordinated with subconsultants, Massport executives, and CA/T personnel.

Grand Gorge I/I

NYCDEP, New York

Project Manager for this sewer system investigation and rehabilitation project for the New York City DEP. The project consists of a fast-track, comprehensive I/I removal project including continuous flow monitoring, flow isolation, closed circuit television inspection, manhole inspections and smoke testing. The project goal is to reduce I/I to the Grand Gorge collection, where I/I outweighs domestic flow within the system during much of the year. Mr. Haynes is responsible for all project deliverables, staff management, sub-contractor coordination and implementation of final rehabilitation recommendations.

Beacon Street Interceptor Service Area Sanitary Sewer System Rehabilitation Construction Services

City of Norwalk, CT

Project manager for the evaluation of CCTV and manhole inspections for 6 miles of interceptors and collection sewers. Based on the condition assessment, Arcadis designed a comprehensive sewer system rehabilitation project to eliminate I/I.

JENNIFER LACHMAYR, PE, BCEE

Principal-in-Charge

EDUCATION

- BS Mechanical Engineer, Cornell University 1985

YEARS OF EXPERIENCE

- Total - 30 years
- With Arcadis - 13 years

PROFESSIONAL REGISTRATIONS

- Professional Engineer - MA NH, ME, CT, RI
- Board Certified Environmental Engineer - US

PROFESSIONAL ASSOCIATIONS

- American Water Works Association
- New England Water Environment Association, Member, WEF Delegate, Executive Committee
- Water Environment Federation, Member, Collection Systems Committee
- American Public Works Association
- New England Water Works Association, Sponsors Committee

AWARDS

- Golden Manhole - WEF Collection Systems Committee
- Golden Shovel -Secret Society of Sludge
- Shovelers - NEWEA

Overview

Ms. Lachmayr serves as Contract Principal for numerous municipal clients in all New England states. She has a strong background in all phases of municipal engineering projects from planning and design through construction. Ms. Lachmayr has managed or designed more than 35 miles of pipe, and has extensive experience in pump station sizing, design, and modifications, and helping clients to meet the United States Environmental Protection Agency's requirements for CSO policy and inflow/infiltration evaluation and elimination projects. Ms. Lachmayr has provided direct oversight in illicit connection detection, best management practices (BMP), and stormwater receiving water quality sampling programs. Ms. Lachmayr currently serves as the Project Director on the MWRA's Remote Headworks Upgrades Design, HVAC Building Automation and HVAC Unit Replacement, Reading Extension Sewer and Metropolitan Sewer Rehabilitation and Prison Point CSO Improvements Contract.

Project Experience

Reading Extension Sewer and Metropolitan Sewer Rehabilitation Contract No. 7163

MWRA: Wakefield, Stoneham, and Woburn, MA

Project Director on this sanitary sewer rehabilitation contract. Work includes design of cured in place pipe lining and manhole rehabilitation for four sections of interceptor through these three towns, coordination with abutters, municipalities and permitting agencies, plans and specifications and bidding documents as well as bidding and construction phase services.

Nut Island Headworks Electrical and Conveyors Improvements Contract No. 7312

Massachusetts Water Resources Authority, Quincy, Massachusetts

Project director providing design, construction administration and resident engineering services for the improvements at the Nut Island Headworks which has an average design flow of 125 mgd and a peak capacity of 400 mgd. The upgrades include replacement of concrete-embedded electrical conduits and wiring; and improvements to the grit and screenings belt conveyor transport systems.

Infiltration/Inflow Analysis Program

Town of Ayer, Massachusetts

Principal-in-Charge of a multi-year infiltration/inflow analysis program. Duties include the development and implementation of sewershed wide flow monitoring program, identifying high infiltration and inflow areas for future investigation and rehabilitation of the sanitary sewer system.

Upper Neponset Valley Sewer Inflow Survey

Boston Water and Sewer Commission: Boston, MA

Project manager for the comprehensive investigation of the sources of stormwater inflow to the sanitary sewers in the West Roxbury neighborhood of Boston. Work included more than 1,150 manhole inspections, detailed analysis of two years of flow metering data, sewer cleaning and television inspection, 1,500 building inspections, smoke testing of 75,000 LF of sewer, and dye testing of 400 downspout and drain sources to identify and quantify sources of inflow. The study identified sources contributing more than six million gallons of inflow during a one-year storm event and recommended a rehabilitation program to eliminate those sources.

Sewer Separation

The Metropolitan District: Hartford, CT

Project manager for sewer separation in Hartford's Upper Albany Avenue area. Work included the design of 11,000 feet of new storm and sanitary pipes to separate the combined system and alleviate local street and basement flooding. Work also included preliminary design, field investigation, hydraulic analysis, traffic management, and permitting.

Sewer Separation

Lynn Water and Sewer Commission

Managed the preliminary and final design and continuing reports for the Eastern Avenue Phase II sewer separation project. The project included 23,500 ft of concrete pipe,18-in-diameter to 8-ft by 7-ft box culvert, jacking, rock removal, and significant utility coordination. Prior to that assignment, served as design engineer for the sewer separation construction projects (Nos. SS-2 and SS-3), which included approximately 6,000 ft of 60-in-diameter to 9-ft by 7-ft box culvert, all installed along Eastern Avenue.

Sewer Separation

Lynn Water and Sewer Commission

Performed SSESs and I/I studies and reports for the Western Interceptor tributary area. Work included groundwater monitoring, continuous-flow gauging, flow isolation, and TV and manhole inspections along sewer pipelines within the area. Summarized the field investigations, performed a cost-effectiveness analysis, and made recommendations for sewer system rehabilitation.

Remote Headworks Concept Design

MWRA: Deer Island, MA

Project director and quality assurance manager for an asset management and planning project to develop a complete inventory of facility components, to conduct condition assessments, and to identify and prioritize replacement / rehabilitation projects for the next 20 years for three large remote headworks facilities. The three facilities provide pretreatment in the form of grit and screenings removal for average daily flows of 135, 90, and 60 mgd respectively, prior to wastewater transport to the Deer Island Treatment Plant. The project involves the preparation of two concept design reports; the first for priority improvements related to screenings, grit separation, and materials handling systems, and the second for all other ancillary components and systems. The scope includes the structures, architectural features and site work, as well as all the mechanical process and support equipment, and the electrical and instrumentation systems. The two reports also contain comparative evaluations of alternatives for six of the most important components or systems in those facilities. The report concludes with the identification of concept level design features, cost estimates, and implementation recommendations for the timing and packaging of construction contracts.

AMY ANDERSON

Project Engineer

EDUCATION

- BS Environmental Engineering Roger Williams University 2005

YEARS OF EXPERIENCE

- Total - 11 years
- With Arcadis - 11 years

Overview

Ms. Anderson specializes in flow metering analysis, SSES programs, SSO elimination programs and I/I reduction program analyses. She has a vast knowledge and experience with analyzing flow data and SSES findings and developing recommendation for long-term I/I identification and removal programs. She also has experience with awareness regarding illicit connections to the sanitary sewer system, hydraulic capacity assessments, SSO evaluations, sanitary sewer rehabilitation projects and GIS mapping. Ms. Anderson manages large teams of staff and subcontractors to deliver and present high quality I/I-SSES studies to our clients.

Project Experience

Town of Franklin: Sewer System Investigations

Town of Franklin: Franklin, MA

Project Manager for the 2005-2016 evaluations of the sanitary sewer system. Project work included the development and implementation of a multi-year sewershed wide flow monitoring program, CCTV investigations and manhole inspections. The project included a capacity assessment and updates to the existing hydraulic model. Duties include detailed flow analysis, project coordination and preparing final deliverables

MDC SSO Elimination Program - SSES

The Metropolitan District: Hartford, CT

Engineer for the MDC's Sanitary Sewer Overflow Elimination Program for the communities of Rocky Hill, Wethersfield and Windsor, CT. This project includes a Sewer System Evaluation Survey, consisting of flow isolation of 550,000 linear feet (LF) of sewers, 280,000 LF of closed circuit television inspection, 3,200 manhole inspections, 640,000 LF of smoke testing, dye water testing and flooding and 10,000 building inspections. The goal of the project is to eliminate SSO's in accordance with the EPA and CT DEP Consent Decree by eliminating sources of infiltration and inflow (I/I).

Infiltration/Inflow Analysis Program

Town of Ayer, Massachusetts

Project Manager of a multi-year infiltration/inflow analysis program. Duties include the development and implementation of sewershed wide flow monitoring program, identifying high infiltration and inflow areas for future investigation and rehabilitation of the sanitary sewer system.

Long Term Flow Study

Metropolitan Sewer District of Greater Cincinnati: Cincinnati, OH

Project Engineer for long term multi-year flow meter study. Duties include scattergraph and hydrograph analysis of sanitary and combined sewer flow data for 250 meters, development of RTK values using EPA SSOAP toolbox and management of GIS data and mapping.

Phase 4 Sanitary Sewer Rehabilitation Project

Town of Franklin: Franklin, MA

Project Manager/resident engineer for the rehabilitation of 10,000 lf of sanitary sewer with the Beaver Street Interceptor Sewershed. Responsibilities included developing all contract documents including contract drawings, specifications and bid documents in accordance with MA General Law, resident engineering and field oversight,construction administration, development of site specific health and safety plan, subcontractor coordination and schedule.

Remote Headworks Upgrade

Massachusetts Water Resources Authority: Chelsea, MA

Project Engineer for the design and construction administration services improvements to the Chelsea Creek Headworks, 160 mgd average flow and 182 to 350 mgd maximum flow. The upgrade will include replacement and automation of all solids handling equipment including screens, grit collector systems and solids conveyance systems; odor control and HVAC systems will be replaced and redundancy added; ancillary systems, including emergency generators and fuel oil tanks, will be replaced; and instrumentation and control systems will be upgraded. This project is funded through the Commonwealth of Massachusetts SRF fund administered by the MADEP.

Grand Gorge Infiltration and Inflow Analysis - SSES

New York City Department of Environmental Protection: NY

Project Engineer for this sewer system investigation and rehabilitation project for the NYCDEP. The project consists of a fast-track, comprehensive I/I removal project including continuous flow monitoring, flow isolation, closed circuit television inspection, manhole inspections and smoke testing. The project goal is to reduce I/I to the Grand Gorge collection, where I/I outweighs domestic flow within the system during much of the year. Ms. Anderson works on all project deliverables, sub-contractor coordination and implementation of final rehabilitation recommendations.

Lower Central Interceptor and Montcalm Siphon Phase 2 Evaluations and Hydraulic Model

Town of Weymouth: Weymouth, MA

Project Engineer for this evaluation of sanitary sewer overflows along the Lower Central Interceptor and Montcalm Siphon. The study included field investigations, two periods of flow monitoring, manhole inspections, CCTV investigations, and the development of a hydraulic model. Responsibilities included writing the report, analyzing flow monitoring and salinity data, assisting with the development of the hydraulic model, sub- contractor coordination, and development of the final rehabilitation recommendations to eliminate SSOs.

PAUL BATMAN, PE

QA / QC

EDUCATION

- BS Environmental Health West Chester University, 1996
- MS Environmental Engineering Drexel University 1999

YEARS OF EXPERIENCE

- Total - 19 years

PROFESSIONAL REGISTRATIONS

- Professional Engineer - DE, MD, DC, MA
- Certified Construction Documents Technologist (CDT)
- NASSCO Pipeline, Lateral, and Manhole Assessment and Certification Programs (PACP, LACP, and MACP)

Mr. Batman has been involved as program manager, project manager, or senior engineer in sewer infrastructure investigation and rehabilitation efforts for projects and programs across the mid-Atlantic region as well as providing technical support for projects nationwide. His experience includes inflow/infiltration (I/I) studies, infrastructure evaluations, physical condition assessments, gravity sewer design, gravity sewer operations and maintenance planning and implementation, water distribution design, sanitary sewer rehabilitation, storm system rehabilitation, preparation of construction/bid documents, construction administration services design support during construction, community relations, and flow data analysis for evaluating effectiveness of I/I reduction efforts.

Mr. Batman is currently Arcadis' national practice leader for buried infrastructure assessment, design and rehabilitation and is responsible for identifying and sharing our best talent, tools and practices with project teams and clients nationwide.

Project Experience

Brandywine Hundred Flow Monitoring and I/I Reduction Effectiveness Evaluation

New Castle County DE

Senior Engineer and Project Manager for the monitoring and analysis of flows across a 500-mile system during a decade long program. The work included all installation and maintenance of flow meters and rain gages (performed 100% by Arcadis) in support of I/I studies, an I/I reduction and sewer rehabilitation program, hydraulic modeling and operational needs. Analysis techniques and tools were developed to determine the effectiveness of rehabilitation at reducing I/I across more than 30 bidded rehabilitation contracts utilizing approximately 60 unique monitoring points. Results across the spectrum of rehabilitation project areas completed to date showed 32% to 97% overall reduction of I&I volume.

Consent Decree Sewer Rehabilitation Program

Washington Suburban Sanitary Commission, Laurel, MD

Principal Engineer and Professional Engineer of record for the physical condition assessment and design of rehabilitation for over twenty individual rehabilitation contract packages across five sewersheds and totaling over $50M in construction costs. Rehabilitation technologies included cured-in-place pipe lining, pipe bursting, excavated repair or replacement, and manhole lining. The work also included stabilization of

streambanks and stream channels for at-risk sewer assets. Also served as Senior Engineer providing guidance and QAQC for staff conducting flow data evaluation work in selection of pilot project locations for private-side I/I reduction.

Brandywine Hundred - Infiltration and Inflow Evaluations

New Castle County, DE

Project Manager and Project Engineer for I/I evaluations for an area spanning 4 sewersheds and containing over 420 miles of sewer and over 20,000 residences and businesses. Smoke testing was conducted to identify inflow sources. Night-time flow isolation weiring to identify pipes with high baseline infiltration and greatest potential for rainfall-derived infiltration. Results were used to prioritize the system for inspection, assessment and ultimately rehabilitation.

Bynum Run Flow Monitoring, I/I Study, and I/I Abatement Program Development

Harford County, MD

Senior Project Engineer and Project Manager responsible for preparing recommendations for an I/I abatement program for a 260-mile sanitary sewer system. Work also included development and implementation of a flow monitoring and I/I study and a night-time flow-isolation and infiltration study. Responsibilities included project planning and administration, data collection, flow data interpretation, site walks, development of recommendations, technical memo and client meetings.

Inflow and Infiltration Study

Lehigh County Authority, Allentown, PA

Senior Project Engineer and Project Manager overseeing I&I analysis of flow data from over 150 flow meters. Responsibilities included project planning, information collection, flow data interpretation, development of recommendations, QAQC, and tracking project progress and schedule as well as budget.

District 3 Flow Monitoring and I/I Study

Erie County, NY

Technical advisor providing project planning, execution guidance and QA/QC for this flow monitoring and I/I analysis utilizing 22 flow meters and 3 rain gages over a 6-month study period.

I/I Study/Rehab Effectiveness

Emerald Coast Utilities Authority, Pensacola, FL

Senior Project Engineer providing QAQC of I&I analysis as well as technical guidance for the implementation of flow monitoring for assessments that would determine the effectiveness of rehabilitation efforts at reducing I&I.

Operation and Maintenance Program Optimization

New Castle County, DE

Project Engineer and Project Manager in development of a new approach to O&M for a 2,000-mile sanitary sewer system aimed at reducing overflows and blockages while managing increasing costs by optimizing the frequency of cleaning and inspection activities. This included the development of program elements addressing issues such as fats, oils, and grease (FOG), mainline blockages and overflows, roots, trunklines, interceptors, and preventive maintenance of collection sewers.

Sewer Management Program

DC Water, Washington, DC

Technical advisor providing guidance, expertise, and quality assurance for pipe inspection and pipe rehabilitation technologies and techniques as well as QA/QC and guidance for Arcadis-performed flow monitoring and analysis work.

Brandywine Hundred Program - Sewer Rehabilitation Projects

New Castle County, DE

Project Manager and Design Leader for a series of sewer rehabilitation projects totaling over 100,000 LF of collection pipe and associated manholes and laterals. Responsible for the PACP-based condition assessment, basis of design, preparation of drawings and specifications, bidding support, and design services during construction. Rehabilitation technologies included cured-in-place pipe lining, pipe joint grouting, and excavated repairs.

Reading Extension Sewer and Metropolitan Sewer Rehabilitation Contract No. 7163

MWRA, Boston, MA

Technical advisor providing technical expertise and quality assurance for cured-in-place pipe lining design of 12,000 LF of 16-24” trunk sewer.

ARCADIS Design & Consultancy for natural and built assets

CHRISTOPHER HELTZEL

GIS / Data Gap Analysis

EDUCATION

- MA Engineering Technology Kent State University 1987
- BS Aerospace Engineer Kent State University 1986

YEARS OF EXPERIENCE

- Total - 29 years
- With Arcadis - 17 years

PROFESSIONAL REGISTRATIONS

- Geographic Information Systems - OH

PROFESSIONAL ASSOCIATIONS

- American Water Works Association
- Water Environment Federation

Overview

Mr. Heltzel specializes in information management and application development related to asset management. He has extensive experience in managing IT projects, including implementations of geographic information systems, computer-aided design software, hydraulic modeling, computer maintenance management systems, financial information systems, and condition assessment software. Additional experience includes custom and retail software development, Local Area Network and Wide Area Network design and administration, corporate email, and relational database administration

Project Experience

SWMP Implementation

Town of North Reading, North Reading, Massachusetts

Mr. Heltzel provided information management assistance for North Readings comprehensive storm water management program. This project included storm water mapping, screening, and outfall assessment for over 400 storm water outfalls. Support was provided for other efforts including creation of storm water system component review and methodologies for follow-on work by town including creation of inspection forms, training, protocols for inspection, database management, and GIS system updates.

Combined Sewer Overflow Long-Term Control Plan Development and Update

Buffalo Sewer Authority, Buffalo, New York

Mr. Heltzel was a member of a team of IT specialists, GIS technicians, and engineers who digitized Buffalos combined sewer system based on as-built drawing records, background maps, and field verification. The information was managed through the MP Digitizer GIS tools that have been specifically designed for buried asset management. This data management approach resulted in the delivery of a complete collection system GIS in addition to the XP-SWMM input files for system modeling.

Asset Management and CIP Planning Services

The Metropolitan District, Hartford, Connecticut

As part of the MDC asset management project, a model has been produced to predict the useful life of the water distribution infrastructure

and to develop a 50-year rehabilitation and replacement R&R budget. This asset model requires supporting data from many sources including the SAP maintenance tracking system, geographic information system, hydraulic model and spreadsheets. From these disparate sources the data relevant to the asset model must be extracted, transformed and loaded ETL into the asset model. GIS was targeted as the platform for the ETL application because much of the data is related spatially. Examples include relating soil condition to the pipes residing within defined areas and aggregating multiple connected pipes with similar characteristics. Additionally the asset model results must be displayed through the GIS to facilitate execution of the R&R plan. Mr. Heltzel designed the GIS-based ETL program that allows the user to specify up to 15 different data sources to be processed. Each source is validated prior to processing and warnings are generated if discrepancies are present in the data. In most cases, problematic data sources can be skipped, allowing the remaining sources to be processed. The user is then only required to correct the discrepancies and process those remaining data sources instead of rerunning the entire ETL program from start to finish. This asset model pre-processing application allows MDC to effectively collect, validate and review the supporting data prior to running the model.

DWSD Oakwood Swmm Modeling

Detroit Water and Sewerage Department, Detroit, Michigan

The Oakwood Sewer District covers approximately 1,200 acres in southern Detroit, land that is evenly divided between residential and industrial occupation. Historically, the district has had significant flooding problems due to an undersized pump station on the downstream end of the system and undersized sewers. To relieve the flooding problems, Mr. Heltzel assisted in enhancing an existing SWMM model of the sewer trunk mains to include system laterals. The MP Digitizer tool set was used to integrate data from varying sources such as the previous model, ArcView shape files, and Microstation CAD files to rapidly develop the new GIS-based model. Once the expanded model has been developed, a variety of different alternatives for alleviating the flooding problems will be examined.

Collection System Model and Analysis

City of Sandusky, Sandusky, Ohio

Lead developer of the MP Digitizer GIS data management program used to digitize the combined sewer system. This tool includes layer management, network validation and tracing, model input file generation, and postprocessing of model results. Using the MP Digitizer allowed multiple engineers to work on the GIS/Model development from different offices at the same time.

Organization and Operational Review

City of Detroit, Michigan

Responsible for management of citywide water distribution GIS and hydraulic model data. Imported disparate sources of data into a unified connected network GIS. The project included development of a data-scrubbing utility to process billing records into water demands that were linked to the distribution model's nodes. Performed additional cleanup on existing GIS information to establish an accurate network topology. The data management system was designed with the capacity to create EPANet hydraulic model files and merge multiple models into one.

Creation of Stormwater Utility

City of Lancaster, Lancaster, Ohio

This project established criteria for storm water rates based on the size of impermeable areas associated with each land owner in the city. Data from the city databases, county databases, and county GIS, together with other layers, were combined in a GIS base information management system. The impermeable area was defined by creating polygon boundaries in the GIS based on orthophotography. The city was then provided with the resulting data in a compatible format with their billing software. Mr. Heltzel designed, implemented and supervised the integration of the necessary data systems for this project.

OEC Capital

City of Columbus, Columbus, Ohio

Mr. Heltzel managed the development and integration of four software tools into a flexible integrated framework. The tools included the Time Series Analyzer - QA/QC, graphing and analysis of large datasets; Qual2e Digitizer - define river network in GIS, capture modeling information and export to Qual2e engine then import result for display and analysis; River Profiler - graph model results and monitor data for multiple locations; WASP Digitizer - define river network in GIS, capture modeling information and export to WASP engine, then import result for display and analysis

STEPHEN PERRY, ENV SP

Resident Engineer

EDUCATION

- BS Civil Engineering Wentworth Institute of Technology 2003

YEARS OF EXPERIENCE

- Total -13 years
- With Arcadis - 13 years

PROFESSIONAL REGISTRATIONS

- Construction Documents Technologist - MA
- Confined Space Training - MA
- Envision Sustainability Professional - ISI
- OSHA Construction Safety Health - OSHA

Overview

Mr. Perry is a Project Manager who serves on a variety of projects ranging from buried infrastructure condition assessment and rehabilitation oversight to wastewater treatment plant upgrade and improvements. He has extensive design coordination and field supervision experience, and is highly skilled in implementing contract administration. He possesses the project management skills necessary to oversee projects through completion, while ensuring conformance with all contract documents.

Project Experience

Infiltration/Inflow Investigation and Analysis

Town of Wilmington, Massachusetts

Project Manager for the installation of eight flow meters and the evaluation of flow monitoring results to estimate average daily flows and I/I rates in eight tributary areas within Town. Project goal is to prioritize high I/I areas for follow-on sanitary sewer evaluation study and assess risk of sanitary sewer overflows and will include 30,000 LF of CCTV inspection and 180 manhole inspections.

Town-Wide Sewer System Investigations

Town of Franklin, Massachusetts

Project Engineer for the 2005-2016 evaluations of the sanitary sewer system. Project work included the development and implementation of a multi-year sewer-shed wide flow monitoring program, CCTV investigations and manhole inspections. The project included a capacity assessment and updates to the existing hydraulic model. Duties included detailed flow analysis, project coordination and preparing final deliverables.

Main Street Interceptor Sewer System Rehabilitation

Town of Wilmington, Massachusetts

Project Engineer and Resident Inspector responsible for all aspects of construction administration and resident inspection for the cured-in-place pipe lining of 3,000 LF of a 36-inch reinforced concrete interceptor. Rehabilitation required an around-the-clock bypass pumping operation to bypass flow around the project area. Other sewer rehabilitations included 3 formed-in-place manhole liners and 13 epoxy lined manholes.

Nut Island Headworks Electrical and Conveyors Improvements

Massachusetts Water Resources Authority, Quincy, Massachusetts

Project Engineer for the design of an electrical improvements and grit/screenings conveyors improvements project which included; replacement of all slab-embedded and wall-embedded electrical wiring from the Electrical Room to the Bottom Level with surface-mounted wiring, waterproofing, replacement of primary belt scrapers and addition of secondary belt scrappers on grit and screenings conveyors, removal of two screenings presses and one edgewall conveyor and replacement with a new edgewall

Owner's Representative for Design-Build-Operate Wastewater System Improvements Contract

City of East Providence, Rhode Island

Project Engineer serving as Owner's Representative for a $51.5M wastewater system improvements project that includes full Phase 2 BNR upgrade to the treatment plant, new Headworks Building, primary treatment improvements, a new 10 MGD pump station and associated force main, and other pumps station/ collection system improvements. Responsibilities on this project include coordination of design review for conformance with design standards detailed in the agreement, shop drawing audits, review of manufacturer start-up and certificate forms, review of acceptance test plans and test results, sign-off on construction payment applications, and attendance at monthly progress meetings with City and D/B firm to discuss all aspects of design/construction and resolution of issues.

Phase 2 and Marble Street/Main Street Rehabilitation

Town of Stoneham, Massachusetts

Project Engineer and Resident Inspection with the responsibilities of assembling the contract documents necessary for Stoneham, MA to bid these sanitary sewer rehabilitation projects. Also, assisted the Town in selecting a qualified contractor and provided Resident Inspection for construction. Projects consisted of approximately 14,000 LF of cured-in-place pipe lining, 9 open cut excavation spot repairs, and 1 open cut excavation pipe replacement.

Deer Island Treatment Plant North Main Pump Station Rehabilitation

Massachusetts Water Resources Authority, Boston, Massachusetts

Deputy Project Manager for the replacement of 10 variable frequency drives and 10 pump motors at the North Main Pump Station located at the Deer Island Treatment Plant. Responsibilities for this project included; coordination with the design group to ensure project deadlines are met and overall monitoring of design progress, presentation of design concepts and resolution of issues with the MWRA, field investigation work to aid in the design, budget tracking, monthly project reporting, including the monthly progress report, preparation of specifications and attendance at monthly project meetings.

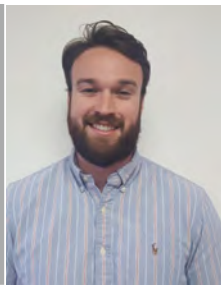
Deer Island Treatment Plant HVAC Building Automation and HVAC Units Replacement

Massachusetts Water Resources Authority, Boston, Massachusetts

Project Controls/Coordinator for the replacement of HVAC systems, laboratory fume hoods, and the building automation control system at Deer Island Treatment Plant (DITP). Project includes preliminary design, final design, and engineering services during construction, for these HVAC upgrades and improvements, which are mainly focused on the Administration and Laboratory Building, but also includes equipment and control work in many other buildings at DITP.

ERIC CATHCART

Field Support



EDUCATION

- BS Biology, Providence College, 2012

YEARS OF EXPERIENCE

- Total - 2 years
- With Arcadis - 2 years

Overview

Eric Cathcart was hired by Arcadis in February, 2014 as a Risk Assessment Intern in the Portland, ME office. He currently works full time as a Risk Assessment Scientist. Mr. Eric Cathcart's environmental experience has been focused on site assessments. Projects experience have included environmental due diligence assessments, human and ecological risk assessments, and environmental permitting. Mr. Cathcart's experience with environmental site assessments has been focused in the state of Maine, with other project experience in states including but not limited to New Jersey, California, New York, Missouri, Texas, Washington, Massachusetts, New Hampshire, Connecticut and Georgia. Throughout his time with Arcadis he has been involved in the various aspects of human risk assessment with a particular focus on vapor intrusion investigations for national and international sites. He also has experience with ecological risk assessment. His particular involvement in risk assessing has included: compiling analytical tables, writing investigative reports, assisting in CADD and GIS figure production, site recommendations, field sampling, and guidance documents reviews.

Project Experience

Phase I ESA and Environmental Audits – Solar Energy

Maine

Completed a facility Phase I ESA reports, including the site visit and environmental audit site visit, for a proposed solar photovoltaic installation. The environmental assessment included an environmental due diligence aspect, and was responsible for technical support and recordkeeping of provided facility documentation.

Environmental Site Assessment – Industrial Facilities

Maine

Assessed housekeeping activities at a chemical packaging and distribution facility. Assessed site practices according to ASTM standards internally for the client. Activities include the write up of the summary report, coordinator of site visit activities, and conductor of site interviews.

National VI Program

Develop and implement indoor air quality assessments for our client according to various state guidance's. Evaluate data to determine what, if any, mitigation measures are necessary. Coordinate with subcontractor's a field personnel to install mitigation systems according to state specific specifications if deemed necessary.

North Adams, Massachusetts

Coordinate a residential vapor intrusion sampling program for properties overlying an impacted groundwater plume. Oversee third-party utility clearance procedure prior to invasive, subsurface sampling activates. Interpret and evaluate the resulting data and determine if mitigation measures are necessary. Oversee installation of remediation systems, if deemed necessary.

Indiana, Various Sites

Oversee the installation of a vapor intrusion mitigation system and the closed cell foam sealing subcontractor. Oversee direct push drilling technique subcontractors as they assist in the collection of soil samples.

St Louis, Missouri

Design and implement a vapor intrusion study on a 50,000 square foot chemical handling facility. Oversee third-party utility clearance activities. Interpret data and report recommendations to client and state regulator.

Kenvil, New Jersey

Developed an ecological risk assessment for a TNT production facility which included trophic level modeling to evaluate different levels of the food chain. Determined proper remedial efforts and assisted in developing a pilot study to calibrate the remediation effort

Springfield, Massachusetts

Design and implement a vapor intrusion study on a 180-acre manufacturing site with multiple possible at risk buildings. Oversee third-party utility clearance activities. Interpret data and report recommendations to client and state regulator.

Nassau, Bahamas

Evaluate on-site and off-site properties following a petroleum leak. Perform data evaluation and risk calculations

California

Executed a risk assessment on exposed portions of an Air Force Base available to receptors

SEAN MITCHELL

Field Support

EDUCATION

- BS Environmental Engineer University of New Hampshire 2012

YEARS OF EXPERIENCE

- Total - 4 years
- With Arcadis - 4 years

Overview

Mr. Mitchell has broad experience in engineering consulting with a strong focus on sanitary sewer collection systems. He has worked on projects in the study, design and construction phase, participating in field work, evaluating data, as well as the design and bidding phases for projects in Massachusetts and Connecticut. He is familiar with the permitting process associated with working in roadway and easement and permitting issues that may arise when evaluating design options.

Project Experience

Infiltration and Inflow Removal Phase 2

Greater New Haven WPCA, New Haven, Connecticut

Project Engineer for a Sanitary Sewer Evaluation Survey (SSES) of Meter Areas 5, 9, and 13 in East Haven and the Middle Thorpe Drive Study Area in Hamden to identify excessive I/I sources. SSES tasks included evaluation of 120,000 linear feet of flow isolation data to make CCTV recommendations. 638 manhole inspections and 60,000 linear feet of CCTV data were evaluated and a cost effective analysis was developed to establish a cost effective approach to revitalizing the aging system. Various figures and tables were developed for the report to show characteristics of the system and to back up recommendations made. The report is expected to be completed by the end of 2013 and follow on rehabilitation design work is expected.

Phase III - I/I Rehabilitation Design and Bidding

Greater New Haven WPCA, New Haven, Connecticut

Project Engineer for the continuing I/I reduction program for the Greater New Haven Water Pollution Control Authority. The project consisted of design and bidding services for Area 10, Lower Farm River, Sewershed in East Haven, and the State Street Sewershed in Hamden. The Lower Farm River, Area 10, East Haven consists of 11,400 linear feet of sanitary sewer and 55 manholes being rehabilitated. The State Street Sewershed in Hamden consists of 23,350 linear feet of sewer and 145 manholes being rehabilitated. Design tasks included assisting with site plans, site visits for verification of manhole locations and conditions, and obtaining local inland wetlands permits. Design was completed in the spring of 2013 and construction begin in 2014.

Buckeye Permitting East Hartford and Rocky Hill

Buckeye Pipeline Company, East Hartford, Connecticut

Project Engineer for permitting assistance for two test pits and repair of a petroleum pipeline located within the flood protection system of the Connecticut River. Required permits included an Army Corps of Engineers Work Plan, Major Development Permit in Flood Hazard Zone and Inland Wetlands Permit from the Town of East Hartford and a General Permit for Water Resource Construction from the Connecticut Department of Energy and Environmental Protection. Permitting tasks included site visits, development of the permit applications and site plans, and presentations to the Town of East Hartford's Planning and Zoning Commission and Inland Wetlands Commission. Permits were obtained in 2012 and construction was completed in spring of 2013. During construction, tasks included coordination with town engineers and contractors and ensuring all construction activity was compliant with permit requirements.

Hartford Water Pollution Control Facility Wet Weather Expansion Project

The Metropolitan District, Hartford, Connecticut

Project Engineer for $400 million WWEP. Task included assisting with staging of potable water tie-ins and shutdowns during construction to ensure vital processes are not taken out of service and assisting the startup and developing the Standard Operating Procedure for the Temporary Sodium Hypochlorite Disinfection System for wet weather overflow.

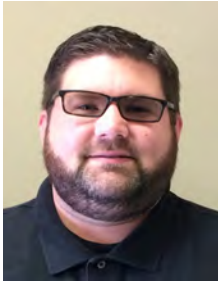
Phase II BRN Ca Services

The Metropolitan District, Hartford, Connecticut

Project Engineer for BNR upgrades project to implement improvements included in the Hartford Water Pollution Control Facility Master Plan. Project included upgrade of the six existing aeration tanks, upgrade and replacement of process equipment and new electrical, instrumentation and controls. Tasks included reviewing contractor submittals and revisions to Operation and Maintenance Manuals. Field tasks included assisting with loop checks and functional testing of all valves, gates, mixers and instruments for startup of aeration tanks.

JASON MARRELLA

I/I Analysis



EDUCATION

- BS Civil Engineering Lehigh University 2003

YEARS OF EXPERIENCE

- Total -13 years
- With Arcadis - 13 years

PROFESSIONAL REGISTRATIONS

- Fundamentals of Engineering (PA, Civil)
- Certified Construction Document Technologist (CDT), CSI
- NASSCO Pipeline, Lateral, and Manhole Assessment and Certification Programs (PACP, LACP, and MACP)
- Maryland Erosion and Sediment Control Certification (Green and Yellow Card)
- Delaware Sediment and Stormwater Management Certification (Blue Card)

Overview

Mr. Marrella has 13 years environmental engineering experience including condition assessment, design engineering, and construction management for collection systems. He has experience in municipal wastewater design, construction, and rehabilitation systems. Mr. Marrella's engineering experience includes: inflow/infiltration studies and infrastructure evaluations; conceptual through detailed construction design of gravity sewers and force mains; preparation of construction documents; and construction services.

Project Experience

I/I and Sewer Rehabilitation Program

Town of Wallkill, New York

Served as primary field lead and project engineer for the Phase II Infiltration and Inflow (I/I) study for 5 priority mini-areas. Data was collected and analysed for 20 weiring locations. 515 manholes were inspected with estimated contributing I/I rates. 58,000 LF of sanitary sewer were CCTV inspected, reviewed and PACP coded for defects and leakage. 4 of the 5 mini-areas were smoke tested. Access databases were developed for storage of data from manhole inspections, CCTV inspections and smoke testing. Dye testing was performed in selected areas. Photos and videos were digitally recorded. Developed recommendations and costs for I/I rehab and replacement of system components contributing I/I. Prepared contract documents (Phase III Stage I Design) for the sewer rehabilitation work including open cut replacement, cured-in-place pipe lining, pipe bursting and manhole rehabilitation

Highland Woods Trunk Line Assessment and Rehabilitation

New Castle County, New Castle, Delaware

Performed the condition assessment using PACP CCTV results, manhole inspections, trunk line walk and development of basis of rehabilitation for the Highland Woods project area. The project area consisted of 60 pipes and 10,000 linear feet of sanitary sewer. Prepared the rehabilitation design for the trunk line pipes and manholes.

Brandywine Hundred SSES

New Castle County, New Castle, Delaware

Member of the field team that performed smoke testing in to identify inflow sources in the North Brandywine and Naamans sewersheds which contained more than 200 miles of pipe. Notified residents of smoke testing procedure and purpose. Conducted smoke testing, manhole inspections, and basement sump pump and floor drain inspections. Photo-documented findings and entered results into GIS database.

Clearwater Elimination Pilot Program

New Castle County, New Castle, Delaware

Project engineer for effort to remove illicit clearwater connections such as sump pumps in targeted neighborhoods of North Brandywine encompassing over 600 residences. Tasks performed included conducting basement inspections of homes to identify clearwater connections and oversight of construction work to disconnect clearwater connections to the sanitary sewer system with typical types of work including adjustments to floor drains, french drains and sump pumps

Consent Decree Sewer Rehabilitation Program BOA

Washington Suburban Sanitary Commission, Laurel, Maryland

Design leader for the five-year consent decree program including 35 miles of PACP-based condition assessment and ensuing design of sewer rehabilitation and replacement projects. To support the WSSC sewer consent decree program, the project team produced design documents and provided construction observation and environmental compliance monitoring (COEM) services for projects located in Environmentally Sensitive Areas (ESA). The project areas include pipelines ranging from 6 to 84 inches in diameter as well as 500 manholes, 400 cleanouts and 1,400 laterals. Rehabilitation technologies included cured-in-place pipe lining, excavation and replacement, pipe bursting, and manhole lining.

Storm Sewer System Rehabilitation Program

Fairfax County MSM Division, Fairfax, Virginia

Design engineer for the rehabilitation design of 30,000 linear feet of stormwater conveyance pipes, channels, and related structures for the Catchment 126 project area. Conducted the condition assessment of pipes, channels and structures by reviewing PACP CCTV inspections of all pipes, inspecting all structures and making rehabilitation recommendations for each. Technologies included of cured-in-place pipe liners, packer injection grouting, and open-cut excavation and replacement of structures and pipes. Prepared construction documents for each type of rehabilitation work.

Inspection and Cleaning Program

DC Water, Washington, DC

Project Manager for the management and oversight of cleaning and inspection of the DC Water sewer system at a rate of 60-75 miles per year. Tasks include preparing bid packages, permits, and access agreements; identifying flow control, access and permitting issues and heavy cleaning needs; field locating of assets to be inspected; preparing cost estimates; negotiating task orders with contractors; reviewing PACP inspection deliverables; and recommending payment for completed work.

Brandywine Hundred 2009 Test and Seal Construction

New Castle County, New Castle, Delaware

Provided construction oversight for trenchless rehabilitation project using pipe joint and service connection testing and sealing (grouting) technologies. Project included rehab of 40,000 linear feet of 8”-12” diameter sanitary sewer mains, 750 laterals, and 10 manholes. 38 spot repairs were performed using Cured-in-Place methods.

Also provided coordination, field training of other inspectors, and oversight of post-construction warranty testing, and analysis of warranty testing results.

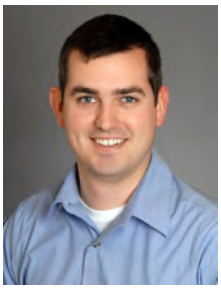
NA2 and Ashbourne Hills Manhole Rehabilitation Design

New Castle County, New Castle, Delaware

Performed condition assessment of 221 manholes located in the NA2 and Ashbourne Hills project areas. Assisted in making recommendation for rehabilitation utilizing technologies including manhole lining, chimney seal, injection grouting and rebuild and replace. Prepared bid package including plans, specifications and cost estimate. Prepared and obtained DelDOT permit. Provided bidding assistance, including evaluation of prequalification statements. Prepared and obtained Temporary Access Agreements.

DANIEL COOPER

I/I Analysis



EDUCATION

- BS Environmental Systems Engineer Pennsylvania State University-Main Campus 2007

YEARS OF EXPERIENCE

- Total - 9 years
- With Arcadis - 9 years

PROFESSIONAL REGISTRATIONS

- Fundamentals of Engineering - PA
- Construction Document Technologist
- NASSCO Pipeline, Lateral, and Manhole Assessment and Certification Programs (PACP, LACP, and MACP)

PROFESSIONAL ASSOCIATIONS

- Water Environment Federation
- Chesapeake Water Environment Association

Overview

Mr. Cooper's an experienced water resources engineer who has provided design and construction support for projects involving water, storm, combined, and sanitary sewer pipelines throughout the Mid-Atlantic region. He has led investigative field studies for the condition assessment of sanitary sewer pipelines and manholes and supporting rehabilitation prioritization while applying industry recognized NASSCO PACP standards. He is proficient with design phase services, including utility coordination, permitting, geotechnical investigations and reporting, contract drawing development utilizing AutoCAD, AutoCAD Civil 3D, and GIS, contract specification development, project management, and cost estimation.

Project Experience

Consent Decree BOA Sewer Rehabilitation

Washington Suburban Sanitary Commission, Laurel, Maryland

Project engineer for the development of sewer system rehabilitation & replacement plans and designs for two major sewer basins: Northeast Branch (42 sq. mi; 298 miles of sewer) and Parkway (14 sq mi; 140 miles). The sewer system rehabilitation & replacement work was organized into two sets of construction bid packages for each basin: work located within the road system; and work located within Environmentally Sensitive Areas (ESAs). This project was driven by a consent decree with EPA and the state environmental agency and is aimed at reducing wet weather overflows.

SP-23 Sewer Rehabilitation Design

New Castle County, New Castle County, Delaware

Assisted the Project Design Leader to determine the most applicable rehabilitation approach and develop the contract drawings and specifications for: Cured-in-place Pipe Lining contract, the Cleanout Installations contract, and the Lateral Lining contract for this subbasin project. This included the review of sonding information and figures from a subcontractor to determine the location of over 220 cleanouts and extent of the corresponding lateral liners to be installed, and preparation and negotiation of Lateral Rehabilitation Agreements to gain access to private properties to install cleanouts and rehabilitate the laterals. The series of rehabilitation projects for the SP-23 subbasin yielded 49%

reduction in I&I volume within the subbasin based on flow monitoring conducted before and after rehabilitation.

SP-27 Sewer Rehabilitation Design

New Castle County, New Castle County, Delaware

Assisted the Project Design Leader to determine the most applicable rehabilitation approach and develop the contract drawings and specifications for: Joint and Service Connection Grouting contract, Cured-in-place Pipe Lining contract, Cleanout Installations contract, Lateral Lining contract, and Manhole Rehabilitation contract for this subbasin project. The series of rehabilitation projects for the SP-27 subbasin yielded 69% reduction in I&I volume within the subbasin based on flow monitoring conducted before and after rehabilitation.

Sewer Capacity and Rehabilitation Program

Lehigh County Authority, Allentown, Pennsylvania

Performed the condition assessment for over seven miles of the Western Lehigh Interceptor which ranges from 24 to 36” in diameter. Assessment phase involved review of closed-circuit television inspections of all pipes, assigning physical condition ratings based on the condition of the assets including PACP defects, and making the recommendations for rehabilitation that would restore structural integrity and remove I&I.

Sewer Management Program

DC Water, Washington, District of Columbia

Responsible for drafting reports about major sewer assets for the client’s 2014 Sanitary Sewer Facilities Plan, which included the history from initial construction, previous assessments and rehabilitation, criticality, condition and risk assessments should an asset fail, and recommendations of future CIP projects. Responsible for developing remaining service life estimates for each major asset that led to the development of cost estimations for CIP budget prioritization purposes

I&I Study, SSES and Condition Assessment

Emerald Coast Utilities Authority, Pensacola, Florida

Performed SSES including night-time weiring in various locations across Pensacola to obtain baseline infiltration measurements for further SSES activities. Performed the condition assessment for about five miles of pipe in the downtown south area of the city involving the review of PACP CCTV inspections of all pipes, assigning physical condition ratings based on the PACP defects of the assets, and prepare recommendations for rehabilitation.

Old Shellpot Interceptor Rehabilitation

New Castle County, Wilmington, Delaware

Assisted in the design of access ways and interceptor rehabilitation plans for approximately 3.5 miles of interceptor located in largely inaccessible easements. Performed a field assessment of local topography to efficiently design the access ways. Assisted in the development of drawings and specifications. Also performed easement research and acquisition of legal access to private properties as needed to conduct the construction work. Performed prequalification of potential bidders for the Phase I portion of the project that included contacting references on past projects to confirm the contractors’ qualifications.

Crosslands Manhole Rehabilitation

Nichols Excavating, Middletown, Delaware

Provided construction oversight for the rehabilitation of 25 new precast manholes due to an improper precast material used that was not hydrogen sulfide resistant. Rehabilitation included the installation of a fiber-reinforced cementitious lining to create a barrier resistant to hydrogen sulfide degradation

Brandywine Hundred Construction Administration and Observation

New Castle County, Wilmington, Delaware

Provided construction oversight and construction administration support for sewer rehabilitation projects across the Brandywine Hundred system. Rehabilitation technologies included grouting of pipe joints and service connections, cured-in-place lining of mains and laterals, point repairs and various manhole rehabilitation technologies. Observed contractor activities to ensure compliance with specifications, completed daily reports, attended progress meetings, communicated with residents, and coordinated with the client. Served as inspector for the installation of 5,000 LF of 15-inch trunk sewer including a 250-foot installation by jack and bore method under a major thoroughfare

CHRISTOPHER RANCK, PE, BCEE, D.WRE, ENV SP

Hydraulics

EDUCATION

- MS Engineering University of Michigan-Ann Arbor

YEARS OF EXPERIENCE

- Total - 16 years
- With Arcadis - 4 years

PROFESSIONAL REGISTRATIONS

- Professional Engineer - HI
- Professional Engineer - IN
- Envision Sustainability Professional - ISI
- Diplomate, Water Resources Eng - National
- Board Certified Env Engineer - US

Overview

Mr. Ranck specializes in hydraulics and watersheds, including planning, modeling and design for wastewater, water and stormwater projects. He has particular expertise in hydraulic and water quality modeling, value engineering, combined sewer overflow (CSO) regulatory compliance and Long-Term Control Plan (LTCP) development, green infrastructure master planning, total maximum daily load (TMDL) development, pipeline condition assessment, and preliminary design. He was the first person in the state of Indiana to be awarded both the Diplomate of Water Resource Engineering (D.WRE) certification from the American Academy of Water Resources Engineers (AAWRE) and the Board Certified Environmental Engineer (BCEE) certification from the American Academy of Environmental Engineers (AAEE). He was the fourth person in the state of Indiana to be awarded the Envision Sustainable Professional (ENV SP) certification from the Institute for Sustainable Infrastructure (ISI).

Mr. Ranck also has performed advanced water treatment (AWT) hydraulic evaluation and design, CSO/AWT value engineering, drainage design, and polychlorinated biphenyl (PCB) remediation. He has developed several data management methods for linking hydraulic and water quality models to geographic information systems (GIS). He is an experienced user of SWMM, WASP, TAP, STORM, SSOAP, EPANET, MIKESWMM, MIKE URBAN, InfoWorks ICM, StormNET, WaterNetworks, KYPIPE, SLIICER, ArcView GIS, Spatial Analyst, and 3D Analyst

Project Experience

Interceptor Hydraulic Modeling

Citizens Energy Group

Served as Project Manager and Technical Lead for a 5-year continuous simulation of the full-system Indianapolis SWMM model. Developed custom model post-processing routines to evaluate alternate LTCP configurations and wrote a detailed technical memorandum. The technical memorandum served as the foundation for several value engineering initiatives.

Served as Citizens' hydraulic modeling liaison for sustainable initiatives, industrial discharge, private developer, and design team data requests. Provided technical review for hydraulic models developed by design teams.

Served as Project Manager and Technical Lead for the following sanitary interceptor model expansion projects utilizing SWMM and InfoWorks ICM:

- Belmont West: 2007
- Castleton: 2008
- West Marion County: 2008
- Bridgeport: 2009
- Lick Creek, Bean Creek, East Marion County Relief: 2010
- Nora, Williams Creek: 2011
- Upper Pleasant Run: 2011
- Upper Bridgeport: 2012
- Upper Fall Creek: 2012

Model expansion project tasks included flow monitoring coordination, sewershed delineation, model development, calibration, hydraulic assessment, and the technical report. The completed hydraulic assessments are used to assist in interceptor and lift station facility planning and design. The total length of interceptor model expansion for the seven projects is 130 miles.

In 2012, Mr. Ranck provided technical leadership and oversight for the conversion of the 9000-node EPA SWMM model to InfoWorks ICM. The converted model was successfully verified for consistency and accuracy with the legacy SWMM model.

CSO Long-Term Control Plan

City of Noblesville Wastewater Utility, Noblesville, Indiana

Developed and calibrated a planning-level NetSTORM model of the combined sewer system to characterize the combined sewer system and LTCP facility sizing. Assisted in the development of the LTCP alternatives analysis, cost estimation, implementation schedule, and report writing. Provided technical support in regulatory meetings with IDEM. The LTCP was approved in 2007.

Downtown Combined System Renovations (CIP 650719)

City of Columbus, Division of Sewerage and Drainage, Columbus, Ohio

Deputy Project Manager and Technical Lead for the development of combined sewer hydraulic profiles using GIS, record, and operational data. Confirmed the findings using the City's SWMM 4.4h model, and MIKEVIEW. Provided technical review on the basis-of-design report.

Wet Weather Flow Data Analysis

Knoxville Utilities Board, Knoxville, Tennessee

Reviewed GIS and flow data for the South Knoxville basin. Assisted in developing the wet-weather data review and analysis procedures; coordinated the sewershed delineation; and performed flow monitoring QA/QC, SHAPE analysis, and SWMM model simulations to evaluate the impacts of future growth.Reviewed GIS and flow data for the South Knoxville basin. Assisted in developing the wet-weather data review and analysis procedures; coordinated the sewershed delineation; and performed flow monitoring QA/QC, SHAPE analysis, and SWMM model simulations to evaluate the impacts of future growth.

Interceptor Hydraulic Model Expansion: South Marion County Regional and Belmont North

City of Indianapolis, Indianapolis, Indiana

Expanded the Indianapolis EXTRAN model to include additional sanitary interceptors, utilizing EPA SWMM and MIKESWMM. Project responsibilities included the development and execution of an advanced water consumption data geocoding process, and inflow/infiltration characterization using the SHAPE program. Developed the South Marion County Regional and Belmont North Interceptor Model Expansion reports.

U.S. 31 Hamilton County and U.S. 31 South Bend

Indiana Department of Transportation, Indianapolis, Indiana

Deputy Project Manager and Technical Reviewer for the drainage design associated with U.S. 31 expansions. Managed schedule and performed technical review for detention design, culvert sizing, and bridge hydraulic analysis for DNR/FIS permitting. Coordinated drainage analysis using HY-8, WinTR-20, Hydroflow Hydrographs, and HEC- RAS software packages

EDWARD KOWALSKI, PE, PMP

SCADA

EDUCATION

- B.Eng Electrical Engineering Hofstra University 1995
- BS Electrical and Computer Engineering Hofstra University 1995

YEARS OF EXPERIENCE

- Total - 16

PROFESSIONAL REGISTRATIONS

- Professional Engineer - NY
- Certified Construction Documents Technologist (CDT)
- LEED Green Associate
- Project Management Professional

Mr. Kowalski has over 16 years of experience in the planning, design, and specification of instrumentation & process control systems for water and wastewater treatment facilities. He has extensive experience in WWTP unit process controls, hardware and software selection, automation system configuration, checkout and startup, as well as management of project procurement and delivery for all facets of Supervisory Control and Data Acquisition (SCADA) systems.

Project Experience

Bay Park Sewage Treatment Plant Program Management Support

Nassau County Department of Public Works, NY

Quality control instrumentation and controls / SCADA engineer for multiple design projects for Tier I and Tier II facilities needing rehabilitation due to Hurricane Sandy. Designs include Dewatering Facility 30% design, new Effluent Pumping System 30% design, SCADA site coordination.

Yonkers Joint WWTP Post-Hurricane Sandy Rehabilitation - Phase III

Westchester County, NY

Design leader responsible for scoping of identified tasks and determination of rehabilitation method – replacement and/or mitigation. Responsible to coordinate instrumentation and controls, electrical and mechanical disciplines on project execution. Project included hazardous materials remediation. Worked with team to prepare detailed configuration budget to rehabilitate the plant's SCADA system in conjunction with the rehabilitation project work.

Wards Island Water Pollution Control Plant – Plant Stabilization 2 – BNR Treatment and Miscellaneous Improvements

New York City DEP, Bronx, NY

Responsible for Instrumentation design services during Construction and field/startup assistance for the BNR project for the 275 mgd plant. Modifications included RAS / WAS replacement and controls, plant aeration tanks and process air system installation for BNR, the addition

of a hypochlorite system to support process operations, upgrade of blower system including new control panels, cascade control automation, and overall SCADA system to link 12 aeration tanks (4 batteries). Successful implementation and loop tuning of automatic blower control and aeration DO control strategy.

Plant-wide Control System and SCADA System Upgrade

Stamford Water Pollution Control Authority / Stamford, CT

Project Manager for the ongoing plant-wide SCADA system upgrade project, involving migration from Honeywell PlantScape DCS to Allen-Bradley Control Logix PLC and GE Proficy Human Machine interface platform and installation of new secure SCADA network.

Coney Island WPCP Primary Settling Tanks Odor Control System (Contract 105)

New York City Department of Environmental Protection, Brooklyn, NY

Managed instrumentation/controls design, PLC/HMI configuration, and startup for odor control system consisting of 3 scrubbers, chemical addition, and 11 carbon absorbers with flow s of 55,000 cfm. Control system consists of 5 ControlLogix PLC panels linked over Ethernet fiber optic and the control room Factory Talk HMI.

Aeration and Final Settling Tanks Improvement Project

The Metropolitan District, Hartford, CT

Instrumentation and controls quality assurance/quality control for instrumentation and controls for 90 mgd plant expansion. The expansion included an addition of two aeration tanks and two final settling tanks and the upgrade of an existing RAS pump station. The upgrades also included A-B Compact Logix platform and DeviceNet valve network for all valves associated with both new aeration tanks and final settling tanks as well as the new valves in the existing RAS pump station.

Blower System Rehabilitation Project

Town of Greenwich, Greenwich, CT

Lead instrumentation designer for replacement of existing aeration blower system and associated process controls for the 19 mgd plant. System consists of three 250hp single-stage centrifugal blowers with automated control system. AB Logix platform selected for blower controls with Ethernet link back to the plant Foxboro DCS system. Coordinated interface between blower control strategy and existing automatic DO control strategy existing for optimal operational efficiency.

Headworks Rehabilitation Project

Town of Greenwich, Greenwich, CT

Lead instrumentation designer for rehabilitation of the headworks for the 19 mgd plant. System included four main sewage pumps, and a washer compactor system. AB Logix platform selected for blower controls with Ethernet radio link back to the plant Foxboro DCS system.

Plant Optimization and Automation Projects

Westchester County, Westchester County, NY

Planned, designed, managed and implemented SCADA upgrades and additions to all eight Department of Environmental Facilities' wastewater treatment plants ranging from 5 to 80 mgd. Close coordination with County IT department to setup secure reliable TCP/IP connections to 8 plants, 26 computer workstations and 50 remote facilities. Improvements included automation and optimization of screening, grit handling, chlorination, dechlorination, chemical addition, aeration tank DO control, primary and secondary sludge handling, blower controls. Designed and implemented a web platform for centralized SCADA monitoring and data collection/reporting for all 8 facilities and the 45+ pump stations in the collection system. Created working Standards documents currently in use by the County for instrumentation and controls design and SCADA implementation at the plants and pump stations.

ARCADIS Design & Consultancy for natural and built assets

FEDERICO ARANGO, PE

SCADA

EDUCATION

- BME Mechanical Design University of America (Colombia) 1999
- ME Environmental Engineering Manhattan College 2008

YEARS OF EXPERIENCE

- Total - 14 years

PROFESSIONAL REGISTRATIONS

- Professional Engineer - NY
- ABB Composer Automation Architect
- ABB Configuring Process Portal B Parts 1 & 2
- ABB Harmony Rack I/O Hardware
- CDT(Construction Document Technologist)
- Intellution Fix 32 Programming Software
- RSView SE Programming

Mr. Arango has extensive experience designing and specifying instrumentation and control systems for water and wastewater treatment plants. He is proficient in PLC programming, HMI and OIT configuration, LAN Network design, SCADA and Radio Telemetry Systems design, process loop checkout and start-up activities. In addition, he has been involved in CCTV system design and security vulnerability assessments.

Project Experience

Plant-wide Control System and SCADA System Upgrade

Stamford Water Pollution Control Authority / Stamford, CT

As I&C technical advisor, responsible for the SCADA upgrade work from the initial assessment/study, design up to the final implementation. It includes replacement of seven Honeywell PlantScape DCS system control panels, HMI and historian software. Control panels were retrofit with Allen Bradley Controllogix series PLC, Proficy iFix and iHistorian software what use HMI and data collection. The new SCADA system also includes a completely secure Ethernet network that allows safe remote monitoring of the system, alarm notification via emails and automatic report generation and delivery.

Alternative Water Supply for the Northern Kensico Bronx Pipeline UV Facilities

Westchester County / White Plains, NY

As Instrumentation & Controls discipline leader, responsible for the Design of the instrumentation and control of two UV facilities. One of them shall be integrated into the operations of a pump station owned by others. The design include hardwired interlocks between the pump station and the UV facility.

Provided design services during construction. Responsible for the submittal reviews of the UV reactors, instrumentation and redundant PLC system that will act as the Master Control, response to inquirers of contractors, and design or resolution of change orders.

Led the configuration of the control system at each UV facility. The configuration of each site consisted on programming a redundant Allen Bradley Controllogix PLC, Panel View Plus and a Micrologix 1400 that interface with the generator. The facility shall be connected to the County-wide SCADA system for monitoring, alarming and report generation.

Ultraviolet Disinfection Replacement

Town of Wallkill / Wallkill, NY

Led instrumentation and control system design team for the upgrade of the UV system. Project included remote alarming and monitoring of the UV system from the admin building. Communication were accomplished using 900 MHz unlicensed Ethernet radios. Commissioning successfully completed in 2015.

CatDel UV Disinfection Water Treatment Plant

New York City DEP / Valhalla, NY

Assisted during the startup phase and commissioning of the facility as part of the Construction Management team. Worked relentlessly at resolving issues, navigating commissioning, prodding contractors and designers, pushing commissioning and loop checks both hardwired and over communication link, witnessing testing, resolving complex control strategy issues, pushing for and resolving alarm issues, nuisance alarms, alarm floods, complex network communication issues, bridging the gap with operations and water quality staff. Verified system compliance to specifications and recommended best practices of extracting historical data for more than 65,000 point using Historian software. Overseen the development of regulatory reports and its automation.

WSA C4 Detailed Design

Williamsport Sanitary Authority / Williamsport, PA

Led instrumentation and control system design team for the upgrade of the central plant to a Control Logix PLC & Rockwell Automation HMI platform. Project included evaluating HMI software for both Central and West plants, instrumentation and control design for the headworks building, Primary and secondary settling tanks, BNR, denitrification filter, chlorination and de-chlorination systems of Central Plant. Assisted on the Design of the West Plant BNR implementation project.

Commissioning successfully completed in 2014.

Distributed Control System

Narragansett Bay Commission / Providence, RI

Design of I&C for Phase I of the Narragansett Bay Combined Sewer Overflow (CSO) Facilities Program. The design involved a 900 MHz license radio telemetry system to monitor and control a 350-feet deep-rock tunnel, underground storage facilities, a pump stations and seven drawdown flow control structures, and integration with the existing DCS network.

Provided design services during construction. Responsible for the submittal reviews of the Remote telemetry system, instrumentation and ABB DCS system, response to inquirers of contractors, and design or resolution of change orders.

Led the configuration of the ABB DCS unit that monitor and control the CSO tunnel and its underground structure. The configuration consisted on programming four bridge controllers and their back-ups, integration with the existing Infi 90 loop, 35 HMI screen and 1500 I/O points. The SCADA system consisted on two servers and three clients. Commissioning successfully completed in 2009.

SCADA Implementation

Walnut Valley Water District / Walnut, CA

Lead programmer responsible for development of new SCADA system for remote monitoring and control capabilities of over thirty sites from the Water District's central operations building. Work included: configuration of thirty remote Modicon PLCs, optimization of the Ethernet radio network and serial radio links, field testing of network communications with the SCADA system, loop checks and start up. Commissioning successfully completed in 2012.

FERNANDO PASQUEL, CPM

Green Infrastructure

EDUCATION

- MS, Civil Engineering/ Water Resources, Virginia Polytechnic Institute & State University, 1985
- BS, Civil Engineering, Virginia Polytechnic Institute & State University, 1981
- Master's Certificate in Project Management, University of Pittsburgh, Katz Graduate School of Business, 2006

YEARS OF EXPERIENCE

Total - 32 years

PROFESSIONAL REGISTRATIONS

- Certified Project Manager, PMLG

PROFESSIONAL QUALIFICATIONS

- Serves as Arcadis National Director for Stormwater and Watersehd Management
- Member of WEF Watershed Management Committee (Current Chair)
- Member of the Board of Directors, Center for Watershed Protection (2003 – 2012)
- American Society of Civil Engineers

Mr. Pasquel is a water resources manager with 30 years of experience in developing and implementing stormwater management programs that involve monitoring, modeling; policy analysis; establishing funding alternatives; permitting; and designing drainage systems, flood control structures, stormwater management controls and green infrastructure assets. He assisted several municipalities and agencies including New York City Department of Environmental Protection; Washington DC; and Fairfax, Chesterfield, and Henrico Counties and City of Alexandria, VA with implementation of stormwater masterplans, designing of BMPs and green infrastructure, and development of program effectiveness indicators and alternative monitoring programs. Mr. Pasquel manages multidisciplinary programs/projects requiring the expertise of hydrologists, landscape architects, ecologists, environmental scientists, engineers, public information and GIS specialists, project managers, and economists.

Project Experience

Project Tracking and Asset Management System

New York City Department of Environmental Protection Office of Green Infrastructure, NY

Subject Matter Expert supporting the delivery of project monitoring and quality assurance services to evaluate, select, and implement a green infrastructure Project Tracking and Asset Management System (PTAMS). The system will facilitate compliance with DEP amended Consent Order; track green infrastructure assets from concept development and planning to design, construction, and maintenance; and will include a database, GIS mapping, asset management. He is also serves as QA/QC lead and technical advisor for several NYC GI design projects.

Low-Impact Development (LID) / Green Infrastructure (GI) Implementation Projects

Washington DC, Fairfax County and City of Alexandria, Virginia

Led a team in the planning, design, and implementation of several sustainable LID/GI projects at the site and watershed level. Participated in stakeholder meetings and project management activities.

General Engineering Services for Design of Green Stormwater Infrastructure (GSI)

Philadelphia Water Department, Pennsylvania

Program Manager responsible for overall program/ project execution and leading design teams. GSI improvements are located in the urban environment at various publicly owned sites. These locations include streets, alleys, parking lots, schools, parks and recreation properties, and vacant lots. The improvements include disconnecting imperious areas, stormwater street bumpouts, subsurface infiltration beds, bioswales and tree trenches. Coordinate client services.

Design Manuals and Training

He has coauthored BMP/LID/green infrastructure manuals in Pennsylvania (1998 BMP Handbook for Developing Areas), Virginia (1992 Northern Virginia BMP Handbook and 2007 LID Design Supplement) and WEF (2014 GI Implementation - Chapter on Financing Strategies). He has conducted over 71 workshops covering all aspects of water resources management, including the use of green infrastructure for stormwater management and flood risk management.

Stormwater Engineering Services

Loudoun County, VA

Project director and task leader for a team that completed a variety of stormwater engineering tasks. Developed comprehensive public information and outreach program for the County's MS4 program; conducted an organizational analysis of the County's Public Works and Facilities Maintenance departments; and conducted a study to investigate potential sources of sedimentation accumulating in a stormwater facility. Also supported the development of cost estimates and evaluation of policies for compliance with the Chesapeake Bay TMDL.

Watershed Planning and Stormwater Improvements Project

Metropolitan Saint Louis Sewer District, MO

Task leader for the development of a stormwater detention policy and watershed management strategy to integrate the combined sewer overflow (CSO), sanitary sewer overflow (SSO), and stormwater permit requirements.

Little Calumet River / Cal Sag Channel Gray/Green Infrastructure Pilot Program

Metropolitan Water Reclamation District of Greater Chicago, IL.

Technical Advisor for the development of a stormwater master plan to redefine urban drainage with technically feasible, innovative green infrastructure solutions that take into account wet weather vulnerability risks, hydraulic model analysis, and long-term capital planning. The master plan includes green and gray solutions to minimize flooding, optimize water quality, spur economic development, and improve quality of life for local residents.

Watershed Management Professional Engineering Services

Chesterfield County, VA

Project Director for a 5 year contract to assist with the development of a compliance plan for the stormwater MS4 permit and Chesapeake Bay TMDL requirements. The project also involves development stormwater management plans, identification of green infrastructure/stormwater control measures to achieve compliance, and development and implementation of a stormwater systems inspection program.

JERRY KLEYMAN, PE, BCEE, ENV SP

CSO Abatement

EDUCATION

- MS, Civil and Environmental Engineering, State University of New York, Buffalo, 1994
- BS, Civil/Structural Engineering, Moscow Engineering Institute, 1984

YEARS OF EXPERIENCE

- Total - 29

PROFESSIONAL REGISTRATIONS

- Professional Engineer: NY
- Board Certified Environmental Engineer
- Envision Sustainability Professional

Overview

Mr. Kleyman worked on wet weather planning studies and completed Long-Term Control Plans (LTCPs) for numerous facilities with wet weather capacities ranging from 6 to 600 mgd. He serves as Arcadis' Global Leader for Water Conveyance and NYWEA Green Infrastructure Task Force member. Mr. Kleyman's area of expertise is maximizing CSO reduction and other benefits of GI programs. He served as technical manager for a recently completed multi-year CSO compliance planning program for Buffalo Sewer Authority. The final LTCP approved by USEPA included a cost-effective balance of green and grey technologies, increased the level of control and reduced the compliance costs by 30% as compared to the original plan.

Project Experience

Preliminary Design Services for GI Work in Connection with Newtown Creek DEP Priority CSO Tributary Area (NCQ-077)

DDC, NY

Arcadis Project Manager for ongoing Preliminary Site Assessment, Hydraulic Evaluations and Field Reconnaissance Task Order (No. 1) for 175 ROW Bioswales and Green Streets in DEP priority Tributary Area NCQ-077. Technical advisor for ongoing design phase.

Preliminary Green Infrastructure Design

Bridgeport Water Pollution Control Authority, Bridgeport CT

Technical advisor for an ongoing project to select GI technologies and develop preliminary GI design within the downtown area of the City to reduce CSO discharges and minimize the need for additional gray improvements. Project activities include state-of- the-art 2D H&H modeling, site selection, GI technology evaluations and citywide standard development.

CSO Long-Term Control Plan

Buffalo Sewer Authority, Buffalo NY

Technical manager for a multiphase CSO Long-Term Control Plan (LTCP). Phase 1 involved system mapping, data collection, development of a system-wide hydraulic model, CSO control alternatives and incorporating them into a comprehensive system-wide LTCP. Phase II involved

additional collection system and water quality sampling and model refinement activities. Phase III included development and evaluation of additional CSO control alternatives including system- wide green infrastructure, innovative technologies and real-time control evaluations. The final LTCP has been developed per US EPA administrative order requirements and recently accepted by US EPA

LTCP

City of Bridgeport, Bridgeport CT

Technical advisor for the development of a LTCP for CSO abatement. Project included development and evaluation of CSO control alternatives, receiving water quality evaluations, affordability analyses and an implementation schedule preparation.

Upper Allegheny Basin Planning

Allegheny County Sanitary Authority, Pittsburgh, PA

Project manager for the recently completed ALCOSAN Upper Allegheny Basin Wet Weather Planning project. Project involved development and calibration of combined and separate sewer system hydraulic models, and evaluating overall wet weather flow management alternatives for the ALCOSAN facilities as well as a number of customer municipalities' combined and separate sanitary sewer systems. Evaluated alternatives for the ALCOSAN and customer municipalities included a wide range of green source control, green infrastructure, conveyance, and storage and treatment technologies.

Williamsport Sanitary Authority Act 537 Facilities Plan, CSO and BNR Study

Williamsport Sanitary Authority, Williamsport, PA

Project manager for comprehensive facilities planning to address two regulatory requirements for the Williamsport Sanitary Authority- Enhanced Nutrient Removal (driven by the Chesapeake Bay Nutrient Reduction Program) and revision of their CSO control plan. The studies involved an evaluation of a range of compliance alternatives and identification of the environmental benefit for each. The LTCP has been developed per USEPA administrative order requirements and approved by US EPA (Region 3) and PA DEP.

Combined Sewer Overflow Management and Control Program

Capital Region Water, Harrisburg, PA

Technical advisor for the development of a comprehensive CSO management and control program, which included all aspects of CSO planning such as flow monitoring, collection system modeling, water quality monitoring and modeling, and alternatives evaluation. Project manager for a nitrogen removal study at THAs high-purity oxygen advanced wastewater treatment facility. The first milestone for this program included development of a detailed Action Plan. The Action Plan outlined the major activities and implementation schedule to complete the CSO management and control program. The major activities include:Planning and implementation of a field data collection program, flow monitoring and water quality sampling and testing programs.Development of a computerized conveyance system hydraulic model and existing system characterization.Development and evaluation of alternatives for CSO abatement. Selection of recommended alternative and completion of LTCP report. The planning and implementation of the field data collection program have been completed and the modeling and system characterization activities are currently underway. The project also involved a study that examined modification of the existing secondary process at the AWTF to accommodate nitrification and denitrification, as well as separate processes for nutrient removal.

ARCADIS Design & Consultancy for natural and built assets

CITY OF PORTLAND

PLANNING AND ENGINEERING SERVICES FOR A INFILTRATION AND INFLOW PROGRAM OF THE SANITARY SEWER SYSTEM

APPENDIX A. REQUIRED FORM

Request for Proposal
For
Planning and Engineering Services
For a Infiltration and Inflow Program
Of the Sanitary Sewer System

RFP # 3217

**** THIS SHEET MUST BE INCLUDED IN YOUR PROPOSAL ****

The undersigned hereby declares that he/she or they are the only person(s), firm or corporation interested in this proposal as principal, that it is made without any connection with any other person(s), firm or corporation submitting a proposal for the same, and that no person acting for or employed by the City of Portland is directly or indirectly interested in this proposal or in any anticipated profits which may be derived there from.

The undersigned hereby declares that they have read and understand all conditions as outlined in this Request for Proposals, and that the proposal is made in accordance with the same.

The bidder acknowledges the receipt of Addenda numbered: N/A

COMPANY NAME: Arcadis U.S., Inc.

AUTHORIZED SIGNATURE: Jennifer K. Lachmayr

DATE: November 23, 2016

PRINT NAME & TITLE: Jennifer Lachmayr, PE, BCEE / Principal-in-Charge

ADDRESS: 500 Edgewater Drive, Suite 511, Wakefield, MA 01880

E-MAIL ADDRESS: jennifer.lachmayr@arcadis.com

PHONE NUMBER: 718-213-4923 FAX NUMBER: N/A

TYPE OF ORGANIZATION - PARTNERSHIP, CORPORATION, INDIVIDUAL, OTHER: Corporation

STATE OF INCORPORATION, IF APPLICABLE: Delaware

FEDERAL TAX IDENTIFICATION NUMBER (Required): 57-0373224

NOTE: Proposals must bear the handwritten signature of a duly authorized member or employee of the organization submitting a proposal.

CITY OF PORTLAND, MAINE

Planning and Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

RFP#3217

Current Date: November 18, 2016

The attention of firms submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Contractor's submitted material and the corresponding Contract when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

****

ALL PROPOSERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED ON THE RFP PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

****

MATTHEW FITZGERALD
PURCHASING MANAGER

Please find on the following pages our response to questions received related to this RFP. This will be the one and only addendum and we will be unable to respond to any further questions.

Receipt of **Addendum No. 1** to the City of Portland's **RFP #3417: Planning and Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System** is hereby acknowledged.

COMPANY: Arcadis U.S., Inc.

NAME: Jennifer Lachmayr

SIGNED BY: _____ DATE: November 23, 2016

PRINT NAME & TITLE: Jennifer Lachmayr, PE, BCEE / Principal-in-Charge

ADDRESS: 500 Edgewater Drive, Suite 511

Wakefield, MA 01880

ARCADIS Design & Consultancy for natural and built assets

CITY OF PORTLAND

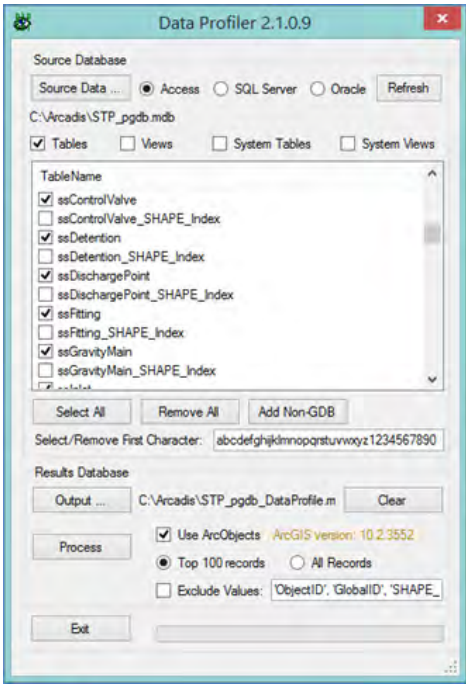
PLANNING AND ENGINEERING SERVICES FOR A INFILTRATION AND INFLOW PROGRAM OF THE SANITARY SEWER SYSTEM

APPENDIX B. ADDITIONAL INFORMATION

APPENDIX B. ADDITIONAL INFORMATION

COST SAVINGS TOOLS

ARCADIS *DATA PROFILER™*



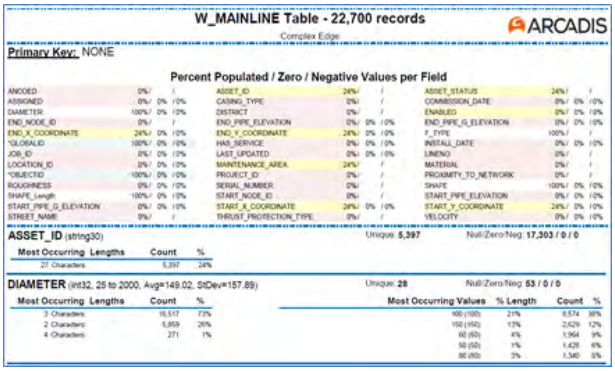
The Arcadis Data Profiler is used to analyze GIS and other databases for completeness and consistency. Arcadis uses the Data Profiler to identify data gaps, relationships between database tables and views, and to compare different versions of data.

The Data Profiler has a simple interface that allows the user to perform the following steps:

1. Select the source database (the City's Sewer GIS)
2. Display the database tables and/or views
3. Select the tables or view objects to analyze (which assets or attributes within the GIS you want to analyze)
4. Select the output results database
5. Specify options to use ArcGIS, include all values or exclude values

Output Data / Views

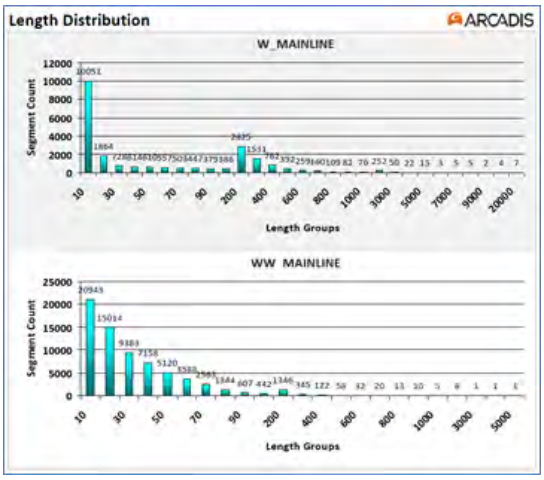
The results are stored in a Microsoft Access database that contains queries and reports about the data.

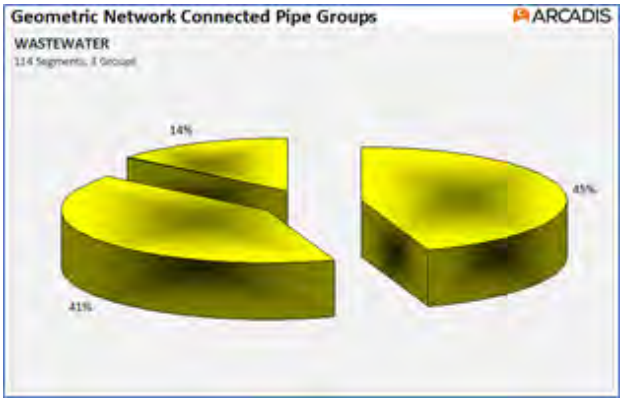


The primary "Table Analysis" report lists the profiled database object names and their record counts. Empty objects are highlighted red and tables without a Primary Key are highlighted yellow. Each field is listed with the percent populated, zero and negative values. Details are listed for each field regarding their data type and range of values.

GIS specific functionality reports on the types of geometric features, domain values, length distribution of records and geometric network connectivity.

Arcadis Data Profiler provides a quick understanding of large datasets by quantifying their content and enabling prioritized recommendations for filling data gaps and correcting or enhancing a utility's data.





ARCADIS Design & Consultancy for natural and built assets

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T: 207 828 0046

500 Edgewater Drive, Suite 511
Wakefield, Massachusetts 01880
T: 781 224 4488

www.arcadis.com

City of Portland, ME

Proposal for Planning and Engineering Services for Infiltration/Inflow Program

Scope of Services

Project Background and Goals

On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program, as well as making improvements to the City's collection system GIS by supplementing and correcting data gaps. This I/I Program will address those recommendations and set the course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from the sanitary collection system.

Portland's collection system consists of 240 miles of separated and combined sewers and 9 Pump Stations. For the collection system, the CMOM study evaluated the City's infrastructure primarily by modeling asset conditions and using "risk-based" analysis to identify and prioritize renewal needs. Of the 6,977 pipe segments analyzed, 95% were determined low priority for placement, and only 1% were found to be high priority for renewal. However, for this I/I Program, prioritizing assets for I/I investigations and rehabilitation needs based on the likelihood and consequence of failure (risk-based analysis), does not necessarily target or address infiltration and inflow mitigation. As such, the City plans to conduct a well-structured I/I Program, monitoring flows within the collection system, locating and quantifying I/I, prioritizing I/I removal needs, and implementing cost-effective, high priority I/I removal projects. To assist the City of Portland with these initiatives, Arcadis proposes to complete the following Scope of Services on behalf of the City.

Task 1: Project Management

Project management will be provided throughout the three-year contract duration and includes: coordination and meetings with the City of Portland and other City entities, stakeholders, staff and subcontractors; presentations to the City at the completion of each task or key milestone; scheduling and management of staff resources; quality assurance/quality control; budgeting, cost controls and monthly billing; progress reports; and development and enforcement of a project-specific Health and Safety Plan.

Task 1 deliverables will include:

- Meeting agendas and minutes
- Project Health and Safety Plan

- Progress reports, schedules and budget updates
- Slide show presentation to the City annually, or at the completion of key milestone tasks, outlining work completed, progress made, Infiltration and Inflow identified and proposed next steps for the I/I Program
- Updates and suggested budgets for anticipated, related work and costs to be incurred as required to complete the services under the I/I Program, including:

    - ✓ Water use and debris disposal costs associated with field work.
    - ✓ Police details/traffic control where needed for field work.
    - ✓ Access to private property facilitated by the City.
    - ✓ Updates to the City's website.

Task 2: Kickoff Workshop, Data Gathering, Public Participation

Arcadis proposes that the project begin with a Kickoff Workshop amongst DPW staff, Arcadis and any other parties you suggest. We have assumed a two-day, in-person workshop, to be followed by continued discussions and coordination as the final approach and schedule is shaped. At the Workshop, we will discuss project goals, individual tasks, project schedule, personnel, responsibilities, lines of communication and coordination protocols.

- Prior to the Workshop (and during the Workshop), we will collect and review any available, pertinent data regarding your collection system, including GIS and other mapping, the collection system hydraulic model, metering data and other pertinent reports, studies, and data from past or on-going sewer system investigations.

This task also includes Public Participation meetings and preparation of informational materials for use related to field activities or other desired discussion topics. We have assumed two meetings per year over the three-year contract term, and will provide additional information for the City to add to the City or DPW website, or to utilize through other public outreach mediums.

Task 2 deliverables will include:

- Agenda and goals for the Project Kickoff Workshop
- Letter or memorandum summarizing Kickoff Workshop discussions, conclusions, and decisions regarding the course of the I/I Program
- Agendas and necessary materials for Public Participation meetings
- Sample public information notices and bulletins for the City to disseminate through the City website or other media outlets

Task 3: Data Gap Analysis

GIS Gap Analysis

Arcadis will utilize our *Arcadis Data Profiler* program to complete a gap analysis of the City's GIS and make recommendations for filling the data gaps. We will review the data gaps with the City's staff to ensure that you know what missing information needs to be obtained.

Arcadis will use Data Profiler to identify data gaps, relationships between database tables and views, and to compare different versions of data. Data Profiler's interface allows us to:

- Select the source database (the City's Sewer GIS)
- Select which assets or attributes to analyze
- Create the output results database to allow for identification of data gaps

In addition to utilizing Data Profiler, and in conjunction with the data gathering conducted under Task 2, Arcadis will collect and review reports, record drawings, operating and maintenance manuals and other GIS information, as necessary to gain a full understanding of the wastewater collection system and assess missing asset information.

Wherever field investigations conducted under other Tasks of the I/I Program coincide with GIS data gaps, we will collect and provide information for the City to fill the data gaps. For example, if we are inspecting a manhole where there is missing information on system connectivity or flow direction, we will record this information and relay it to the City to update the GIS.

Hydraulic Model Gap Analysis: Arcadis will evaluate the City's hydraulic model(s) and determine if the modeled network should be expanded and if the model should be recalibrated. We will make recommendations for updating or improving the model by adding data points or other information, to support the I/I Program or any related programs the City is undertaking.

Wherever field investigations conducted under other Tasks of the I/I Program coincide with hydraulic model gaps, we will collect and provide information for the City to fill the model data gaps.

Background Information and Gap Analysis Report, which will summarize the existing information, data and reports which have been reviewed and state the findings and recommendations from the GIS and Hydraulic Model Gap analysis.

Task 3 deliverables will include:

- *Background Information and Data Gap Analysis Letter Report*, including recommendations for the City to update the Sewer GIS and hydraulic model(s) to close or correct data gaps.
- Meeting with the City to discuss the Gap Analysis Report recommendations

Task 4: Flow Monitoring Program

Under this Task, Arcadis will assist the City with developing a flow monitoring strategy that includes review of recommended meter sites from the CMOM report, identification of other suitable sites, field verification of these sites, recommendation of initial sites, installation of flow monitoring equipment and data collection and maintenance procedures for the flow monitoring equipment. In conjunction with implementation of the flow monitoring program, we will superimpose rain data on wastewater collection system flow data and identify excessive infiltration and inflow study areas.

The flow monitoring program will consist of:

- Installation, maintenance and monitoring of 40 flow meters (over a two-year program)
- Each meter will be in operation for a period of 12 weeks (480 meter-weeks in total)
- One permanent groundwater gauge and one rainfall gauge, both of which can be supplemented with additional gauges which already exist within the City.

Prioritization of meter locations will take into consideration a number of factors and sources of information, including:

- Recent and on-going flow monitoring and CCTV data
- Historic and recently discovered problem areas, where back-ups, surcharging, and overflows have occurred
- Areas which may not have known back-ups and overflows, but are tributary to areas which have had such problems
- Areas where the hydraulic model indicates potential I/I related capacity issues, such as those related to wet weather events or high groundwater periods
- Areas near water bodies and areas which are tidally influenced
- The oldest and most densely populated areas of the collection system

Tidal Impacts: A considerable portion of Portland's collection system is in close proximity to tidally influenced water bodies, including Back Cove, Capisic Brook, Portland Harbor and the Fore River. I/I from tidal influences could result from leaking pipes allowing groundwater to enter the system, or from tidal waters entering manholes covers which are not watertight. This influence might be seen during normal high tides (twice daily), or just during extreme (full moon) high tides. Tidal impacts on sanitary and combined sewer flows can be evaluated by looking at collection system flow fluctuations with groundwater and tidal data, particularly during extreme high tides. In certain locations, we will assess the use of salinity gauges during extreme high tides in evaluating tidal impacts.

Engineering Analysis of Flow Data: Arcadis will provide engineering analysis of flow data, including calculation of average daily flow, peak daily flow and peak hourly flow for each meter area. We will quantify infiltration and inflow by meter area and for entire metered system. Meter areas will be ranked by quantity of infiltration and inflow, and follow-on investigation recommendations (SSES activities, per Task 5) will be made according to those prioritized rankings to further investigate major I/I sources. We will provide a summary flow monitoring report for each year of flow monitoring and meet with the City to discuss findings and SSES recommendations.

Task 4 deliverables will include:

- Meeting with the City to discuss the Flow Monitoring Program strategy and implementation
- Annual "Flow Monitoring Program Letter Report", with findings, results and SSES recommendations

Task 5: Investigation of Major I/I Sources - Sewer System Evaluation Survey (SSES)

Under this Task, Arcadis will develop and conduct a collection system I/I investigation strategy that includes flow isolation, closed circuit television (CCTV) inspections, manhole inspections, smoke testing, dye testing and building inspections as appropriate to identify major source of I/I.

SSES Investigations

We have assumed that the following units of field investigations and SSES activities will be completed:

- Flow isolation: 317,000 LF, representing 25% of the collection system
- Pipeline cleaning and CCTV: 76,000 LF, representing 6% of the collection system
  - We propose to analyze this quantity of CCTV video, plus an additional 76,000 LF of CCTV video to be obtained under your separate, annually CCTV contract
  - The total linear footage of CCTV to be analyzed will be approximately 152,000 LF, representing 12% of the collection system.
  - We have also assumed a mix of large and small diameter pipes, and some light and some heavy cleaning, based on past experience.
- Manhole inspections: 956 manholes, representing 15% of the collection system
- Smoke testing: 126,700 LF, representing 10% of the collection system
- Dye testing: 10 days
- Large building inspections: 45 buildings
- Large building dye testing: 15 days

Percentages are based on the entire (presumed) 240 miles of sewers and 6,375 manholes in your collection system, which includes both combined and separated sewers.

CCTV Inspections: The CCTV inspection work will be accomplished with a combination jet vacuum truck and mobile television studio truck with two operators. All observations, pipe defects and I/I sources will be recorded in an electronic database with digital pictures and digital movie clips for each line segment. Digital video files on DVDs will be provided after the conclusion of the inspection work. Two hard copies of the reports will also be provided.

We understand that the City will budget separately from this contract for costs associated with water supply, sewer cleaning debris disposal, access to private property or easements and police details, as needed.

The CCTV inspection database will be delivered to the City in Pipeline Assessment and Certification Program (PACP) format and inspection video files will be provide in .mpg format.

Infiltration and inflow (I/I) will be estimated and rehabilitation recommendations will be made as described below.

Manhole Inspections: Manhole inspections will utilize Arcadis' or its subcontractor's Standard Manhole Inspection Form and will document the following information:

1. Manhole identification by number;
2. Manhole cover type, number of holes in cover, whether cover is subject to ponding;
3. Condition of manhole frame and number of manhole grade adjustments;
4. Cracks or breaks in the walls, shelf, or invert;
5. Infiltration, at any place, estimated in gallons per minute (GPM);
6. Integrity of joints between barrel sections;
7. Construction materials and condition;
8. Manhole depth;
9. High water mark;
10. Groundwater level at manhole, if monitored;
11. Condition of the corbel
12. Condition of steps; and
13. Digital photographs of each manhole.

The influent and effluent sewer lines connected to the manholes will also be inspected by lamping during internal manhole inspections. The following information will be recorded:

1. Length, size and type of pipe;
2. Offsets or misalignment of any part;
3. Protruding taps;
4. Root intrusion;

5. Visible infiltration/inflow sources estimated in gallons per minute (GPM);
6. Type and depth of debris in pipe;
7. Sluggish flow or wastewater backing up into manhole
8. Condition of pipe or corrosion; and
9. Digital photographs of each influent and effluent sewer.

The influent and effluent sewer lines connected to the manhole will be observed from the ground surface to document the relative direction of the sewer lines during surface manhole inspections. Pipe sizes and flow characteristics will be noted when possible.

Manhole inspection field data will be evaluated and summarized. Individual log sheets of each manhole inspected will be prepared. The summaries of the manhole inspection will include all observed infiltration contributed to the sanitary sewer system, all defects and other abnormalities, and potential extraneous flow sources. Sewer line configurations will be verified and information will be provided to the City for the City to update the Sewer GIS, as needed.

Condition Assessment and Rehabilitation Recommendations

ARCADIS will analyze all data collected by the field crews to isolate and identify sources of I/I in the system. Field data to be analyzed includes all information collected during SSES activities: CCTV and manhole inspections, flow isolation, smoke testing, building inspections and dye testing. All information will be collected, stored and submitted to the City in accordance with standard geodatabase format for the City to import into its GIS if desired.

The collection system condition assessment deliverable will include a listing of all sources of I/I identified during the SSES activities and recommendations for rehabilitating or replacing each deficient component of the sewer system contributing excessive I/I. For all SSES activities, I/I will be estimated and rehabilitation recommendations will be made. A schedule for implementing the recommended rehabilitation/replacement measures, including engineering design and construction, will be included.

Task 5 deliverables will include:

- CCTV inspection database in Pipeline Assessment and Certification Program (PACP) format and inspection video files in .mpg format
- Manhole inspections database and logs
- Field logs and databases for all other SSES activities: flow isolation, smoke testing, building inspection and dye testing results and recommendations

The above deliverables will be included in the final *Wastewater Collection System Analysis and Action Plan* Report described below under Task 6. The report will include recommendations,

budgetary cost estimates and an implementation plan developed from the analysis of the SSES findings.

Task 6: Wastewater Collection System Analysis and Action Plan

This task will consist of developing and presenting a report with recommendations for sewer system rehabilitation and renewal for I/I reduction to meet the requirements of the EPA Order for Compliance. This will include a short-term (2-5 year) and long term (10-year) I/I Mitigation Capital Improvement Plan, the development of which will be closely coordinated with the DPW.

Under this task, Arcadis will work with the City to determine strategies to reduce inflow and infiltration into the wastewater collection system, establish priorities for rehabilitation, repair and replacement projects, and prepare associated cost estimates and implementation plans.

The *Wastewater Collection System Analysis and Action Plan* Report will summarize all data, information, evaluations and findings and recommendations. The Report will include results from all phases of the project, and will include an Executive Summary and recommendations for I/I removal and sewer system rehabilitation.

Results of the flow monitoring program and SSES activities will be summarized, and all data, logs, videos and other field-collected data will be provided. Draft versions of the report outline and final report will be submitted for review and comment by the Portland DPW. We will prepare and deliver paper and electronic copies and present the Final Report to the appropriate officials.

Long-term Flow Monitoring: Under this Task, Arcadis will also evaluate the benefits of a long-term flow monitoring program. This will include consideration of such benefits as: comparison of pre- and post-rehabilitation flow data to track the effectiveness of I/I removal projects; continued compliance with the EPA Order and Corrective Action Plan; updates for your hydraulic model; and identification of new I/I issues which may arise as the collection system ages and other future changes impact the system.

The final *Wastewater Collection System Analysis and Action Plan* Report will include:

- A summary of our review of existing data and past and ongoing related studies and projects
- A clear explanation of our methodology for developing the flow monitoring and SSES strategies
- Maps and plans showing the selected meter areas and meter locations
- A detailed explanation of how metering data was analyzed, verified, and utilized to calculate the various flow components

- A description of how we used the Flow Monitoring Program results to prioritize meter areas for targeted follow-on SSES
- A summary of SSEES activities, findings and recommendations (see Task 5 deliverables)
- Cost estimates and a schedule for conducting cost- effective Sewer System Rehabilitation Contracts and other I/I removal activities
- Recommendations for a future permanent flow monitoring program (including recommended meter locations)

Task 6 deliverables will include:

- *Wastewater Collection System Analysis and Action Plan* Report
- Presentation of Final Report and recommendations to the City

Project Schedule

Attached to this Scope of Work is our proposed Project Schedule. We propose that data review and gap analysis tasks begin in the Spring of 2017 and that the first phase of flow monitoring begin in the Fall of 2017. As shown, we propose that the Flow Monitoring Program be implemented over two high-groundwater seasons, and that follow-on SSES activities follow each phase of flow monitoring. The proposed schedule has been developed with the goal of meeting the deadlines of the EPA Order of Compliance.

INVOICE

ARCADIS Design & Consultancy for natural and built assets

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

BENJAMIN PEARSON, PE, COMPLIANCE COORDINATOR
PORTLAND DEPARTMENT OF PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, ME 04101

Invoice Date:	June 8, 2017
Project No:	26980001.0000
Invoice No:	0849636
Payment Terms:	30 Days
Invoice Due Date:	July 8, 2017

SANITARY SEWER SYSTEM INFILTRATION/INFLOW PROGRAM - PO# 043930

WORK COMPLETED THIS PERIOD:
- PROJECT SET-UP AND PRELIMINARY INFORMATION REVIEW
- COORDINATION WITH DPW AND SUBCONTRACTORS
- KICKOFF MEETING WITH CITY/DPW

Professional Services from April 24, 2017 to May 21, 2017

Task 00100 Project Management

Professional Personnel

	Hours	Rate	Amount	
PROJECT MANAGER				
HAYNES, SCOTT	1.00	195.00	195.00	
Totals	1.00		195.00	
Total Labor				**195.00**
		Total this Task		**$195.00**

Task 00200 Kickoff, Data Collection, Publ

Professional Personnel

	Hours	Rate	Amount	
ENGINEER/SCIENTIST/ARCHITECT II				
CATHCART, ERIC	6.00	106.00	636.00	
SENIOR ENGINEER/SCIENTIST/ARCHITECT				
ANDERSON, AMY	11.00	175.00	1,925.00	
PROJECT MANAGER				
HAYNES, SCOTT	7.50	195.00	1,462.50	
PROJECT DIRECTOR / PRINCIPAL IN CHARGE				
LACHMAYR, JENNIFER	7.00	205.00	1,435.00	
Totals	31.50		5,458.50	
Total Labor				**5,458.50**

Reimbursable Expenses

TOLLS,PARKING,TRANSPORT,GAS

5/16/2017	ANDERSON, AMY	Kickoff Meeting Parking	12.10

Project	26980001.0000	Citywide I/I Program		Invoice	0849636
	5/16/2017	ANDERSON, AMY	Tolls	13.20	
	5/16/2017	CATHCART, ERIC	Parking	2.20	
REIMB EMPLOYEE MILEAGE					
	5/16/2017	ANDERSON, AMY	Kickoff Meeting	115.56	
		Total Reimbursables		**143.06**	**143.06**
				Total this Task	**$5,601.56**
				Total this Invoice	**$5,796.56**

INVOICE

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Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

BENJAMIN PEARSON, PE, COMPLIANCE COORDINATOR
PORTLAND DEPARTMENT OF PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, ME 04101

Invoice Date:	July 10, 2017
Project No:	26980001.0000
Invoice No:	0855266
Payment Terms:	30 Days
Invoice Due Date:	August 9, 2017

SANITARY SEWER SYSTEM INFILTRATION/INFLOW PROGRAM - PO# 043930

WORK COMPLETED THIS PERIOD:
- REVIEW OF PAST STUDIES AND INFORMATION
- GIS EXAMINATION/GAP ANALYSIS
- COORDINATION WITH DPW
- MEETINGS WITH METERING SUBCONTRACTORS ON PAST METERING SITES, RESULTS

Professional Services from May 22, 2017 to July 2, 2017

Task 00100 Project Management

Professional Personnel

	Hours	Rate	Amount	
ADMINISTRATIVE / TECHNICIAN				
SLATER, DUANE	1.00	85.00	85.00	
PROJECT MANAGER				
HAYNES, SCOTT	2.00	195.00	390.00	
Totals	3.00		475.00	
Total Labor				**475.00**
			Total this Task	**$475.00**

Task 00200 Kickoff, Data Collection, Publ

Professional Personnel

	Hours	Rate	Amount
ENGINEER/SCIENTIST/ARCHITECT III			
MITCHELL, SEAN	52.00	125.00	6,500.00
PROJECT ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, SETH	1.00	155.00	155.00
SENIOR ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, AMY	33.00	175.00	5,775.00
PROJECT MANAGER			
HAYNES, SCOTT	17.00	195.00	3,315.00

Project	26980001.0000	Citywide I/I Program			Invoice	0855266
PROJECT DIRECTOR / PRINCIPAL IN CHARGE						
LACHMAYR, JENNIFER			6.00	205.00	1,230.00	
	Totals		109.00		16,975.00	
	Total Labor					**16,975.00**
					Total this Task	**$16,975.00**

Task 00400 Flow Monitoring Program and I/I Analysis

Professional Personnel

		Hours	**Rate**	**Amount**	
ENGINEER/SCIENTIST/ARCHITECT I					
BEAUREGARD, BRANDON		4.00	96.00	384.00	
ENGINEER/SCIENTIST/ARCHITECT II					
JENKINS, CAMERON		5.50	106.00	583.00	
	Totals	9.50		967.00	
	Total Labor				**967.00**
				Total this Task	**$967.00**
				Total this Invoice	**$18,417.00**

INVOICE

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Bank of America | Acct. No. 8188093937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

BENJAMIN PEARSON, PE, COMPLIANCE COORDINATOR
PORTLAND DEPARTMENT OF PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, ME 04101

Invoice Date:	July 31, 2017
Project No:	26980001.0000
Invoice No:	0858108
Payment Terms:	30 Days
Invoice Due Date:	August 30, 2017

SANITARY SEWER SYSTEM INFILTRATION/INFLOW PROGRAM - PO# 043930

WORK COMPLETED THIS PERIOD:
- CONTINUED REVIEW OF EXISTING METERING SITES AND GIS DATA
- DEVELOPMENT OF GIS PLANS/GAP ANALYSIS
- DETERMINATION OF SEWER SYSTEM CONFIGURATION
- PRELIMINARY DELINEATION OF SEWERSHEDS

Professional Services from July 3, 2017 to July 23, 2017

Task 00100 Project Management

Professional Personnel

	Hours	Rate	Amount	
ADMINISTRATIVE / TECHNICIAN				
FONSECA, FRAN	.10	85.00	8.50	
SLATER, DUANE	.40	85.00	34.00	
PROJECT MANAGER				
HAYNES, SCOTT	1.50	195.00	292.50	
Totals	2.00		335.00	
Total Labor				**335.00**
			Total this Task	**$335.00**

Task 00200 Kickoff, Data Collection, Publ

Professional Personnel

	Hours	Rate	Amount
ENGINEER/SCIENTIST/ARCHITECT I			
MACDONALD, SETH	28.00	96.00	2,688.00
SENIOR ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, AMY	9.00	175.00	1,575.00
PROJECT MANAGER			
HAYNES, SCOTT	12.50	195.00	2,437.50

Project	26980001.0000	Citywide I/I Program			Invoice	0858108
PROJECT DIRECTOR / PRINCIPAL IN CHARGE						
LACHMAYR, JENNIFER			3.00	205.00	615.00	
	Totals		52.50		7,315.50	
	Total Labor					**7,315.50**
					Total this Task	**$7,315.50**

Task	00400	Flow Monitoring Program and I/I Analysis			
Professional Personnel					
		Hours	**Rate**	**Amount**	
ENGINEER/SCIENTIST/ARCHITECT II					
JENKINS, CAMERON		64.50	106.00	6,837.00	
	Totals	64.50		6,837.00	
	Total Labor				**6,837.00**
				Total this Task	**$6,837.00**
				Total this Invoice	**$14,487.50**

INVOICE

ARCADIS Design & Consultancy for natural and built assets

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
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62638 Collections Center Drive | Chicago, IL 60693-0626

BENJAMIN PEARSON, PE, COMPLIANCE COORDINATOR
PORTLAND DEPARTMENT OF PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, ME 04101

Invoice Date:	August 30, 2017
Project No:	26980001.0000
Invoice No:	0863773
Payment Terms:	30 Days
Invoice Due Date:	September 29, 2017

SANITARY SEWER SYSTEM INFILTRATION/INFLOW PROGRAM - PO# 043930

WORK COMPLETED THIS PERIOD:
- CONTINUED REVIEW OF EXISTING METERING SITES AND GIS DATA
- DEVELOPMENT OF GIS PLANS/GAP ANALYSIS
- DETERMINATION OF SEWER SYSTEM CONFIGURATION
- CONTINUED DELINEATION OF SEWERSHEDS
- INITIAL ANALYSIS OF HYDRAULIC MODEL INFORMATION
- PROGRESS UPDATE MEETING WITH DPW

Professional Services from July 24, 2017 to August 20, 2017

Task 00100 Project Management

Professional Personnel

	Hours	Rate	Amount	
ADMINISTRATIVE / TECHNICIAN				
SLATER, DUANE	.20	85.00	17.00	
PROJECT MANAGER				
HAYNES, SCOTT	5.00	195.00	975.00	
PROJECT DIRECTOR / PRINCIPAL IN CHARGE				
LACHMAYR, JENNIFER	2.00	205.00	410.00	
Totals	7.20		1,402.00	
Total Labor				**1,402.00**
			Total this Task	**$1,402.00**

Task 00200 Kickoff, Data Collection, Publ

Professional Personnel

	Hours	Rate	Amount
ENGINEER/SCIENTIST/ARCHITECT II			
JENKINS, CAMERON	17.00	106.00	1,802.00
PROJECT ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, SETH	1.00	155.00	155.00
SENIOR ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, AMY	16.00	175.00	2,800.00

PROJECT MANAGER			
HAYNES, SCOTT	17.00	195.00	3,315.00
PROJECT DIRECTOR / PRINCIPAL IN CHARGE			
LACHMAYR, JENNIFER	8.00	205.00	1,640.00
Totals	59.00		9,712.00
Total Labor			**9,712.00**
		Total this Task	**$9,712.00**

Task 00300 Data Gap Analysis

Professional Personnel

	Hours	**Rate**	**Amount**
SENIOR ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, AMY	4.00	175.00	700.00
GOULDING, GUNILLA	4.00	175.00	700.00
PROJECT MANAGER			
HAYNES, SCOTT	1.00	195.00	195.00
Totals	9.00		1,595.00
Total Labor			**1,595.00**
		Total this Task	**$1,595.00**

Task 00400 Flow Monitoring Program and I/I Analysis

Professional Personnel

	Hours	**Rate**	**Amount**
ENGINEER/SCIENTIST/ARCHITECT II			
JENKINS, CAMERON	39.00	106.00	4,134.00
Totals	39.00		4,134.00
Total Labor			**4,134.00**

Reimbursable Expenses

REIMB EMPLOYEE MILEAGE			
8/15/2017 JENKINS, CAMERON		110.75	
Total Reimbursables		**110.75**	**110.75**
		Total this Task	**$4,244.75**
		Total this Invoice	**$16,953.75**

INVOICE

Remit Payments To:
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62638 Collections Center Drive | Chicago, IL 60693-0626

BENJAMIN PEARSON, PE, COMPLIANCE COORDINATOR
PORTLAND DEPARTMENT OF PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, ME 04101

Invoice Date:	October 2, 2017
Project No:	26980001.0000
Invoice No:	0869348
Payment Terms:	30 Days
Invoice Due Date:	November 1, 2017

SANITARY SEWER SYSTEM INFILTRATION/INFLOW PROGRAM - PO# 043930

WORK COMPLETED THIS PERIOD:
- CONTINUED REVIEW OF EXISTING METERING SITES AND GIS DATA
- DEVELOPMENT OF GIS PLANS/GAP ANALYSIS
- DETERMINATION OF SEWER SYSTEM CONFIGURATION
- CONTINUED DELINEATION OF SEWERSHEDS
- ANALYSIS OF HYDRAULIC MODEL INFORMATION

Professional Services from August 21, 2017 to September 24, 2017

Task 00100 Project Management

Professional Personnel

	Hours	Rate	Amount	
ADMINISTRATIVE / TECHNICIAN				
FONSECA, FRAN	.60	85.00	51.00	
SLATER, DUANE	.30	85.00	25.50	
SENIOR ENGINEER/SCIENTIST/ARCHITECT				
PERRY, STEPHEN	2.50	175.00	437.50	
PROJECT MANAGER				
HAYNES, SCOTT	3.00	195.00	585.00	
Totals	6.40		1,099.00	
Total Labor				**1,099.00**
			Total this Task	**$1,099.00**

Task 00200 Kickoff, Data Collection, Publ

Professional Personnel

	Hours	Rate	Amount
SENIOR ENGINEER/SCIENTIST/ARCHITECT			
GOULDING, GUNILLA	8.40	175.00	1,470.00
PROJECT MANAGER			
HAYNES, SCOTT	14.50	195.00	2,827.50

PROJECT DIRECTOR / PRINCIPAL IN CHARGE						
LACHMAYR, JENNIFER			6.00	205.00	1,230.00	
	Totals		28.90		5,527.50	
	Total Labor					**5,527.50**
Reimbursable Expenses						
TOLLS,PARKING,TRANSPORT,GAS						
8/15/2017	ANDERSON, AMY	Portland Project Meeting			11.00	
8/15/2017	ANDERSON, AMY	Portland Project Meeting			10.00	
MEALS						
8/15/2017	ANDERSON, AMY	Portland Project Meeting			64.51	
REIMB EMPLOYEE MILEAGE						
8/15/2017	HAYNES, SCOTT	mileage			110.21	
8/15/2017	ANDERSON, AMY	Portland Project Meeting			136.43	
	Total Reimbursables				**332.15**	**332.15**
					Total this Task	**$5,859.65**

Task 00300 Data Gap Analysis

Professional Personnel

			Hours	Rate	Amount	
SENIOR ENGINEER/SCIENTIST/ARCHITECT						
ANDERSON, AMY			29.00	175.00	5,075.00	
	Totals		29.00		5,075.00	
	Total Labor					**5,075.00**
					Total this Task	**$5,075.00**

Task 00400 Flow Monitoring Program and I/I Analysis

Professional Personnel

			Hours	Rate	Amount	
ENGINEER/SCIENTIST/ARCHITECT II						
JENKINS, CAMERON			65.50	106.00	6,943.00	
	Totals		65.50		6,943.00	
	Total Labor					**6,943.00**
					Total this Task	**$6,943.00**
					Total this Invoice	**$18,976.65**

INVOICE

Remit Payments To:
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Bank of America | Acct. No. 8188093937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

BENJAMIN PEARSON, PE, COMPLIANCE COORDINATOR
PORTLAND DEPARTMENT OF PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, ME 04101

Invoice Date:	November 2, 2017
Project No:	26980001.0000
Invoice No:	0874462
Payment Terms:	30 Days
Invoice Due Date:	December 2, 2017

SANITARY SEWER SYSTEM INFILTRATION/INFLOW PROGRAM - PO# 043930

WORK COMPLETED THIS PERIOD:
- CONTINUED REVIEW OF EXISTING METERING SITES AND GIS DATA
- DEVELOPMENT OF GIS PLANS/GAP ANALYSIS
- DETERMINATION OF SEWER SYSTEM CONFIGURATION
- CONTINUED DELINEATION OF SEWERSHEDS
- ANALYSIS OF HYDRAULIC MODEL INFORMATION
- PLANNING WORKSHOP HELD WITH DPW

Professional Services from September 25, 2017 to October 22, 2017

Task 00100 Project Management

Professional Personnel

	Hours	Rate	Amount	
ADMINISTRATIVE / TECHNICIAN				
FONSECA, FRAN	.10	85.00	8.50	
SLATER, DUANE	.20	85.00	17.00	
PROJECT MANAGER				
HAYNES, SCOTT	2.00	195.00	390.00	
PROJECT DIRECTOR / PRINCIPAL IN CHARGE				
LACHMAYR, JENNIFER	2.00	205.00	410.00	
Totals	4.30		825.50	
Total Labor				**825.50**
		Total this Task		**$825.50**

Task 00200 Kickoff, Data Collection, Publ

Professional Personnel

	Hours	Rate	Amount
ENGINEER/SCIENTIST/ARCHITECT II			
JENKINS, CAMERON	33.50	106.00	3,551.00
SENIOR ENGINEER/SCIENTIST/ARCHITECT			
GOULDING, GUNILLA	8.30	175.00	1,452.50
PROJECT MANAGER			
HAYNES, SCOTT	9.00	195.00	1,755.00

PROJECT DIRECTOR / PRINCIPAL IN CHARGE			
LACHMAYR, JENNIFER	6.00	205.00	1,230.00
Totals	56.80		7,988.50
Total Labor			**7,988.50**
		Total this Task	**$7,988.50**

Task 00300 Data Gap Analysis

Professional Personnel

	Hours	**Rate**	**Amount**
ENGINEER/SCIENTIST/ARCHITECT II			
JENKINS, CAMERON	49.00	106.00	5,194.00
SENIOR ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, AMY	35.00	175.00	6,125.00
GOULDING, GUNILLA	4.80	175.00	840.00
PROJECT MANAGER			
HAYNES, SCOTT	10.00	195.00	1,950.00
Totals	98.80		14,109.00
Total Labor			**14,109.00**
		Total this Task	**$14,109.00**

Task 00400 Flow Monitoring Program and I/I Analysis

Professional Personnel

	Hours	**Rate**	**Amount**
PROJECT MANAGER			
HAYNES, SCOTT	5.00	195.00	975.00
Totals	5.00		975.00
Total Labor			**975.00**
		Total this Task	**$975.00**
		Total this Invoice	**$23,898.00**

INVOICE

ARCADIS Design & Consultancy for natural and built assets

Remit Payments To:
Arcadis US, Inc.
Bank of America | Acct. No. 8188093937
ACH: 071 000 039 | Wire: 026009 593 | SWIFT: BOFAUS3N
Remittance Info: remit-mailbox@arcadis-us.com
62638 Collections Center Drive | Chicago, IL 60693-0626

BENJAMIN PEARSON, PE, COMPLIANCE COORDINATOR
PORTLAND DEPARTMENT OF PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, ME 04101

Invoice Date:	December 4, 2017
Project No:	26980001.0000
Invoice No:	0879975
Payment Terms:	30 Days
Invoice Due Date:	January 3, 2018

SANITARY SEWER SYSTEM INFILTRATION/INFLOW PROGRAM - PO# 043930

WORK COMPLETED THIS PERIOD:
- CONTINUED REVIEW OF EXISTING METERING SITES AND GIS DATA
- DEVELOPMENT OF GIS PLANS/GAP ANALYSIS
- DETERMINATION OF SEWER SYSTEM CONFIGURATION
- CONTINUED DELINEATION OF SEWERSHEDS
- ANALYSIS OF HYDRAULIC MODEL INFORMATION

Professional Services from October 23, 2017 to November 26, 2017

Task 00100 Project Management

Professional Personnel

	Hours	Rate	Amount	
ADMINISTRATIVE / TECHNICIAN				
CHUNG, SEUL	.30	85.00	25.50	
FONSECA, FRAN	.20	85.00	17.00	
PROJECT MANAGER				
HAYNES, SCOTT	2.00	195.00	390.00	
PROJECT DIRECTOR / PRINCIPAL IN CHARGE				
LACHMAYR, JENNIFER	1.00	205.00	205.00	
Totals	3.50		637.50	
Total Labor				**637.50**
		Total this Task		**$637.50**

Task 00200 Kickoff, Data Collection, Publ

Professional Personnel

	Hours	Rate	Amount
ENGINEER/SCIENTIST/ARCHITECT I			
MACDONALD, SETH	10.00	96.00	960.00
ENGINEER/SCIENTIST/ARCHITECT II			
JENKINS, CAMERON	4.00	106.00	424.00
PROJECT ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, SETH	42.00	155.00	6,510.00

PROJECT MANAGER			
HAYNES, SCOTT	20.00	195.00	3,900.00
PROJECT DIRECTOR / PRINCIPAL IN CHARGE			
LACHMAYR, JENNIFER	2.00	205.00	410.00
Totals	78.00		12,204.00
Total Labor			**12,204.00**
		Total this Task	**$12,204.00**

Task 00300 Data Gap Analysis

Professional Personnel

	Hours	**Rate**	**Amount**
ENGINEER/SCIENTIST/ARCHITECT II			
JENKINS, CAMERON	22.50	106.00	2,385.00
SENIOR ENGINEER/SCIENTIST/ARCHITECT			
ANDERSON, AMY	32.00	175.00	5,600.00
GOULDING, GUNILLA	70.20	175.00	12,285.00
PROJECT MANAGER			
HAYNES, SCOTT	7.00	195.00	1,365.00
Totals	131.70		21,635.00
Total Labor			**21,635.00**

Reimbursable Expenses

REIMB EMPLOYEE MILEAGE			
10/12/2017 HAYNES, SCOTT	mileage	112.35	
Total Reimbursables		**112.35**	**112.35**
		Total this Task	**$21,747.35**

Task 00400 Flow Monitoring Program and I/I Analysis

Professional Personnel

	Hours	**Rate**	**Amount**
ENGINEER/SCIENTIST/ARCHITECT II			
JENKINS, CAMERON	75.50	106.00	8,003.00
PROJECT MANAGER			
HAYNES, SCOTT	17.00	195.00	3,315.00
Totals	92.50		11,318.00
Total Labor			**11,318.00**
		Total this Task	**$11,318.00**
		Total this Invoice	**$45,906.85**

Appendix B – Sanitary Sewer Overflow Reports

Appendix B – Sanitary Sewer Overflow Reports

Maine Department of Environmental Protection

NON-COMPLIANCE/DISCHARGE INCIDENT REPORT

Facility: Franklin Street Station **Municipality:** Portland

Date of Incident/Exceedence: 1-29-2017 through 1-31-2017

Verbal Notification Date: 1-31-2017 **To Whom:** Stuart Rose/Alex Rosenberg

Caller: John Emerson via e mail **Phone #:** 874-8468

Parameter/Pollutant Quantity and Concentration of Release/Exceedence (include test results):

Sanitary sewage. 2,490,000 gallons estimated based on CSO overflow monitoring data. *Volume figures are being reviewed and possibly modified by Jordan Engineering.* Modified totals will be forward when they become available. No water quality testing was performed.

Specific Location and Duration of Release/Exceedence:

Overflow occurred at the outfall of CSO 18. CSO 18 empties in to Back Cove just north westerly of the 295 overpass at Exit 7. Overflow commenced at approximately 02:30 on 1/29/17. At this point, the overflow stopped at 1/30/17 at 08:30. A possible event may have occurred on 1/31/17. We are awaiting confirmation from flow analysis being performed at Jordan Engineering.

Observed Environmental Effects:

Overflow sites at CSO outfalls were inspected at low tide. No negative environmental effects were observed. No floatables or sewage oriented debris observed.

Describe specifically what happened, when, and why (include all details, and use additional pages if needed, including maps, diagrams as necessary):

Franklin Street pump station's level control system failed. The wet well alarm system was disabled by a Water Resources on call operator. The real time alarm system at CSO 18 failed to notify either Water Resources personnel or Portland Water District personnel.

See attached summary memo.

Remedial Actions Taken and Times When Taken:

Portland Water District staff notified Water Resources of a possible overflow event at CSO 18. Water Resources personnel responded to Franklin Street pump station, pumped down the surcharge, corrected the control problem and reenabled the wet well alarm. See attached summary memo.

Specific Measures Needed to Prevent Recurrence:

Analyze and improve the wet well level control system. Reprogram wet well alarms to permanently "latch" and not cycle. Rewrite protocols to forbid disabling of alarms without administrative approval. Investigate the real time monitoring system at all CSO's. Revisit and correct problems with real time dry weather notification. See attached summary memo.

Implementation Schedule:

Action Item Description	Projected Completion Date
All measures specified are in progress	February 28, 2017
SCADA and level control modifications	February 28, 2017

Prepared By: John Emerson	**Date:** 2-3-17

Non-compliance/Discharge Incident Report Form

The Discharge Incident Report Form can be used by treatment facility personnel to notify the Department when any licensed parameter has been exceeded or when reporting combined sewer overflow related dry weather overflows (DWO's), bypasses, sanitary sewer overflows (SSO's), spills from facility premises to surface waters, or other incidents which violate license conditions as per Chapter 523 Rules regarding "Waste Discharge License Conditions." This form is not mandatory, but if you choose not to use it, be sure that the form or letter you do use includes all the information that this one does.

As per Chapter 523 "Waste Discharge License Conditions," the permittee shall report any non-compliance which may endanger health or the environment orally within 24 hours followed up by a written submission within 5 days of the time the permittee became aware of the circumstances. The following shall also be included as information which must be reported within 24 hours:

- any unanticipated bypass which exceeds any effluent limitation in the permit [including sanitary sewer overflows (SSO's) and dry weather overflows (DWO's) from CSO discharge points]
- any upset which exceeds any effluent limitation in the permit
- violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit

PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL MERCER
COMMISSIONER

312 Canco Road
Portland, ME 04103
(207) 822-6300

MAR 15 2017

March 10, 2017

Nancy Gallinaro, Director
Water Quality Division
Public Services Department
55 Portland Street
Portland, ME 04101

RE: **Letter of Warning:** Portland, City, report of dry weather overflow at CSO#18, from Franklin Street pump station overflow. Waste Discharge License # W008010-5T-F-R; MEPDES NPID # ME0101435

Dear Nancy:

John Emerson reported to the Department on January 31, 2017, the occurrence of a dry weather overflow from CSO # 18 to Back Cove, Class SC, due to a malfunction at the Franklin Street pump station to which CSO # 18 is connected. The discharge started on January 29, 2017, and lasted through January 31st. The malfunction resulted in an estimated 2.49 million gallons of untreated sanitary wastewater being discharged to Back Cove. John reported in detail the series of mishaps that heightened the severity of the event (see attached "Chronology of events"). In summary, the pump station's level control system failed thereby initiating the overflow. There was no alert to the City via the high level alarm because the alarm had been disabled by a City operator days before during a rain event, apparently because the alarm kept going on and off as pumps cycled on and off creating a nuisance for the operator. A further complication was that the CSO flow monitoring system employed by Portland Water District and the City (through contracts with ADS and Flowserv) incorrectly recognized the discharge as a wet weather event and did not send an alarm notification for the dry weather overflow that occurred. There was also a failure of a remote monitoring tablet pc used by maintenance personnel to check system functionality. This failure meant back-up system checks, a form of redundancy, was not possible. The incident constitutes a violation of waste discharge license Special Condition A(2), "Prohibited Discharges", as well as the accompanying "Standard Conditions Applicable to all Permits", Section B(5)(d).

The incident report outlines a list of measures specified to prevent recurrence, including:

(1) Analyze and improve wet well level control system,
(2) reprogram wet well alarms to permanently "latch" and not cycle,

(3) rewrite protocols to forbid disabling of alarms without administrative approval,
(4) investigate real time monitoring system at all CSO's, and
(5) revisit and correct problems with real time dry weather notification.

The incident report states that all these specified measures are in progress as of February 28, 2017, and the SCADA and level control modifications have been completed on that date.

The intent of this letter of warning is to make sure the remedial measures have been completed and/or implemented. On or before March 24, 2017, please send me an excerpt of the rewritten protocols regarding the administrative approval of disabling alarms. By the same date, please inform me in writing of the status of all other measures, including, if necessary, a timeframe for final implementation.

If you have any questions or concerns please contact me. If the requested information assures me that the remedial measures specified in your incident report have been implemented I shall consider the issue resolved.

Sincerely,

Stuart Rose

Stuart Rose
Division of Water Quality Management
Bureau of Water Quality

cc: Pam Parker, Water Enforcement, DEP Augusta
Michael Riley, CSO Coordinator, DEP Augusta
Alex Rosenberg, Compliance & Enforcement Officer, USEPA Region 1
John Emerson, Utility Coordinator, Portland Public Works

Memo: For the record

From: John Emerson

Date: February 3, 2017

Re: Franklin Street pump station failure report

Chronology of events

Transducer failed
↓ Pumped down to low level

January 29, 2017 @ 02:30

The pump control system failed rendering the pump delivery system inoperable

Pump did not shut down & failed

January 30, 2017 @ 07:30

Dennis Welch, at the Portland Water District, called John Emerson to report what appeared to be overflow activity and the Franklin Street CSO #18

January 30, 2017 @ 08:00

Water Resources operators Mike Foley and Walter Gray arrive at Franklin Street, confirm the failed pump control system and immediately put a pump in manual to pump down the surcharged system. Wet well float systems were checked and cleaned as was the wet well level pressure transducer. Operator Foley checked the local SCADA panel and recognized that the wet well alarm was disabled. He immediately enabled the wet well alarm which triggered the heretofore missing wet well alarm.

January 31, 2017 @ 06:20

The control system failed again triggering the now enabled wet well alarm system. Operator Gray responded and reset the pump control system returning the Franklin Street pump station to automatic mode.

February 1, 2017

Woodard and Curran Engineers met with operations staff at the Franklin Street pump station. Control systems were analyzed and it was determined that the low/low wet well pump cutoff floats were malfunctioning. New floats were immediately ordered.

Status

Causal Analysis

Wet well alarm system disabled

Operator Mike Foley disabled the Franklin Street wet well alarm during a rain event on January 23, 2017. The wet well alarm was coming on and off during each pump lag cycle due to the pump stations inability to keep up with the flow with one pump. The alarm was deemed nuisance and was disabled and should have been enabled the following day.

Low level pump cutoff float failure

Franklin Street control schema includes a low wet well level pump cut off float. If for some reason, the pumps fail to shut down, the low float ball will trip and shut the pumps off. In this instance, the low wet well float triggered a pump shut down. Unfortunately, as the wet well began to refill, the float switch did not reset and, as such, the pumps failed to restart.

Redundant CSO overflow alarm did not trigger a dry weather overflow alarm

The Portland Water District manages a real time CSO flow monitoring program in conjunction with ADS Environmental Services and FlowServ Inc. The system is designed to calculate overflow volumes and sen real time alarms for both wet weather and dry weather alarms. These alarm systems are programmed to call both Portland Water District and Portland Water Resources personnel when a dry weather event is triggered. For some reason, as yet to be determined, the flow monitoring system characterized this event as a wet weather incident. As a consequence, the notification alarm system was not activated.

Remote monitoring table PC failure

The on call operator utilizes a tablet PC to remotely check and control the pump station system through SCADA. For an as yet undetermined reason, the VPN connection for this tablet was disabled. This tablet is routinely checked several times a day exclusive of alarm conditions. Having the tablet out of service meant that opportunistic system checks were not possible.

Summary Causal Analysis

As the above analysis indicates, there seemed to be a perfect storm of both human, mechanical and technical failures. That being said, disabling of the wet well alarm (and failure to reenable) was the prime cause of the overflow event.

Estimated volume of overflow

Preliminary Portland Water District analysis suggests a total overflow volume of 2.49 million gallons. Jordan Engineering will be using the data gathered to cross check the veracity of the overflow numbers.

Observed environmental impacts

Outfalls at both CSO 18 and CSO 17 were inspected at low tide. There was no evidence of floatables or sewage oriented debris at either outfall location. No water quality testing was performed relative to the event.

Mitigating measures

- Low level cut off control floats will be replaced and the entire control system will be analyzed for possible improvements in level control approach.
- Alarm protocols will be reviewed with wet well alarms "latching" in the "full on" position (to prevent nuisance cycling of alarms).
- Standard operating procedures will be revisited with a strict prohibition against disabling alarms without prior administrative, engineering or SCADA support team approval.

Cc: Nancy Gallinaro

Executive Department
Jon P. Jennings, City Manager

March 24, 2017

Stuart Rose, Wastewater Compliance
Division of Water Quality Management
Bureau of Water Quality
312 Canco Road
Portland, Maine 04103

SUBJECT: Franklin Street Pump Station Dry Weather Overflow Event
Remedial Measures Update
Waste Discharge License # W008010-5T-F-R
MEPDES NPID # ME0101435

Dear Mr. Rose,

I have received your March 10th, 2017 Letter of Warning given for a dry weather overflow event at the Franklin Street Pump Station on January 30th and 31st. The dry weather overflow event occurred due to a series of mechanical and human mishaps as detailed in the incident report. To address the issues which led to the incident, a total of five measures will be implemented to prevent a similar sequence of events from happening. Please accept the following updates on each measure in reply to your requests within the Letter of Warning.

(1) Analyze and improve wet well level control system

New floats and redundant transducers have been ordered from Stevens Pump and Electric. The new components will improve the mechanical portion of the wet well level control system. Upgrades to these components will prevent another low level pump cutoff float failure, which occurred during the overflow event. Programmable aspects will be implemented during installation in coordination with Woodard & Curran. It is anticipated that the components will be installed by the end of this month. Additional programming is included in the SCADA upgrades as detailed within the next measure.

(2) Reprogram wet well alarms to permanently "latch" and not cycle.

To address this measure, the SCADA system must be upgraded to operate in this mode. Prior to this overflow event, Woodard & Curran was under contract to prepare a SCADA Assessment Report. The report was initiated to assess existing SCADA systems at City owned pumping stations and to provide recommendations and costs to implement SCADA system upgrades. The City of Portland will work with Woodard & Curran to complete the recommendations within the SCADA

assessment report which include the design, purchase, program, and commission an upgraded SCADA system and radio path study. A separate contract for Troubleshoot, Repair, and Maintain (TRM) services will be awarded to Woodard & Curran which will address specific issues to pump stations, including Franklin Street. As part of the upgrade process and TRM services, City staff will work with Woodard & Curran to ensure that the wet well alarms are programmed to latch in the full-on position to prevent the nuisance cycling of alarms. Once under contract, the SCADA upgrade, including new computer components and radio migration, should take 4 months. The TRM services related work for the Franklin Street pump station will be completed within 90 days of the contract being awarded.

(3) Rewrite protocols to forbid disabling of alarms without administrative approval

This measure has been completed by the Water Resources Utility Coordinator. The protocol clarifies what positions within the organization are permitted to enable or disable SCADA alarms. Any alarm modification must be approved by the Coordinator. A copy of the protocol is attached.

(4) Investigate real time monitoring system at all CSO's

Currently, 27 of the 30 Combined Sewer Overflow pipes have real-time monitoring. The monitoring services are provided by ADS and Flow Assessment through contracts with Portland Water District (PWD). The remaining three CSOs rely on a visual assessment utilizing a wood block. The blocks are check weekly and after rain events. These three CSOs did not overflow in 2016. A breakdown of each CSO and monitoring service is attached.

(5) Revisit and correct problems with real time dry weather notification

Portland Water District has discussed the failure to send notification for a dry weather overflow event with ADS. As part of the discussion, PWD has reached out to the City to determine who should be notified of any overflows and how, whether through email, phone or text message. Once completed, test notifications will be sent for both dry weather and wet weather alarms. It is anticipated that the testing will be complete before the end of April. The testing and verification of the notifications should prevent a similar situation from occurring in the future.

In addition to these measures being taken, two of the three pumps at Franklin Street Pump Station will be either rebuilt or brand new within this year. Currently, pump number two is being rebuilt and is anticipated to be delivered by the end of the month. Also, the City has begun processing a quote with Timken Motor & Crane to replace the third pump at a cost of $78,500. The lead time on the pump is roughly 16 – 20 weeks.

With these measures and additional investments, the City feels confident that these measures will prevent future occurrences of dry weather overflow events.

Should you have any questions, feel free to contact my staff at 874-8846.

Sincerely yours,

Jon P. Jennings
City Manager
City of Portland

CC:
Danielle West-Chuhta – Corporation Counsel
Jeff Levine – Director of Planning and Urban Development
Christopher Branch – Director of Public Works
Nancy Gallinaro – Water Resources Manager

Maine Department of Environmental Protection

NON-COMPLIANCE/DISCHARGE INCIDENT REPORT

Facility: Four Winds Road Sewer **Municipality:** Portland

Date of Incident/Exceedence: 2-22-17

Verbal Notification Date: 2-23-2017 **To Whom:** Stuart Rose/Alex Rosenberg via email

Caller: John Emerson **Phone #:** 874-8468

Parameter/Pollutant Quantity and Concentration of Release/Exceedence (include test results):

Sanitary sewage. No release to the environment. Two to three inches of sewage backed up in the cellar of #80 Four Winds Road.

Specific Location and Duration of Release/Exceedence:

The cellar of #80 Four Winds Road. Complaint came in at 21:15 on February 22, 2017. It appears that the cellar had been flooded for a couple of hours.

Four Winds Road is part of a subdivided enclave between Brighton Avenue and Ludlow Street in Portland. Location maps attached.

Observed Environmental Effects:

Damage to the cellar area and contents. Home owner called ServPro to clean up the damage.

Describe specifically what happened, when, and why (include all details, and use additional pages if needed, including maps, diagrams as necessary):

A large root mass curtain, at a joint in the 8" vitrified clay main, blocked system flow and caused the backup at # 80 Four Winds Road.

A TV photo of the root mass curtain is attached.

Remedial Actions Taken and Times When Taken:

A mechanical rodder was used to free up the blockage at 23:00 on February 22, 2017. The main was televised the following day to confirm the existence of the root mass. The main was then hydraulically root cut and retelevised to ensure complete removal of the obstruction.

Specific Measures Needed to Prevent Recurrence:

The Four Winds gravity sewer main will be added to our root intrusion "trouble list". The main will be added to our list of sewers to be relined later in the summer of 2017.

Implementation Schedule:

Action Item Description	Projected Completion Date
Add main to the root intrusion trouble list	Completed
Reline the main as part of our annual relining program	10-1-2017

Prepared By: John Emerson	**Date:** 3-2-2017

Non-compliance/Discharge Incident Report Form

The Discharge Incident Report Form can be used by treatment facility personnel to notify the Department when any licensed parameter has been exceeded or when reporting combined sewer overflow related dry weather overflows (DWO's), bypasses, sanitary sewer overflows (SSO's), spills from facility premises to surface waters, or other incidents which violate license conditions as per Chapter 523 Rules regarding "Waste Discharge License Conditions." This form is not mandatory, but if you choose not to use it, be sure that the form or letter you do use includes all the information that this one does.

As per Chapter 523 "Waste Discharge License Conditions," the permittee shall report any non-compliance which may endanger health or the environment orally within 24 hours followed up by a written submission within 5 days of the time the permittee became aware of the circumstances. The following shall also be included as information which must be reported within 24 hours:

- any unanticipated bypass which exceeds any effluent limitation in the permit [including sanitary sewer overflows (SSO's) and dry weather overflows (DWO's) from CSO discharge points]
- any upset which exceeds any effluent limitation in the permit
- violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit

Maine Department of Environmental Protection

NON-COMPLIANCE/DISCHARGE INCIDENT REPORT

Facility: Sanitary sewer system **Municipality:** Portland

Date of Incident/Exceedence: 5/26/17

Verbal Notification Date: 5/30/17 **To Whom:** Stuart Rose/Alex Rosenberg via email

Caller: John Emerson **Phone #:** 874-8468

Parameter/Pollutant Quantity and Concentration of Release/Exceedence (include test results):

Sanitary sewage. No quantity of quality estimates.

Specific Location and Duration of Release/Exceedence:

8" vitrified clay main in the sidewalk area in front of 753 – 757 Brighton Avenue. See attached map indicating location.

Observed Environmental Effects:

The sewer system backed up and flooded the cellars of both 753 and 757 Brighton Avenue. Sewage was confined to the cellars and back yard areas of both referenced residences.

Describe specifically what happened, when, and why (include all details, and use additional pages if needed, including maps, diagrams as necessary):

The combination of root intrusion and flushable wipes blocked the sewer system and caused the backup. The system backup was reported on the afternoon of 5/26/17. With the surcharge corrected by 18:00 on 5/26/17. Properties at 753 and 757 Brighton Avenue sustained damage to personal property as a result of the backup.

Remedial Actions Taken and Times When Taken:

The sewer system was immediately rodded and the surcharge relieved. The sewer system in question was televised and root intrusion was determined to be the main cause of the backup. Photos of the root intruded sewer are attached.

Specific Measures Needed to Prevent Recurrence:

The sewer system will be full cleaned and root cut. Once cleaned the system will be inspected on a monthly basis and will be included on the root intrusion trouble list. The sewer section in question will be added to the sewer lining list and will be lined before the end of 2017.

Implementation Schedule:

Action Item Description	Projected Completion Date
Clean and root cut the sewer main	Underway
Add the impacted sewer system to the root control trouble list	Complete
Line the root intruded sewer section as identified	11/15/2017
Prepared By: John Emerson	**Date:** 6/1/2017

Non-compliance/Discharge Incident Report Form

The Discharge Incident Report Form can be used by treatment facility personnel to notify the Department when any licensed parameter has been exceeded or when reporting combined sewer overflow related dry weather overflows (DWO's), bypasses, sanitary sewer overflows (SSO's), spills from facility premises to surface waters, or other incidents which violate license conditions as per Chapter 523 Rules regarding "Waste Discharge License Conditions." This form is not mandatory, but if you choose not to use it, be sure that the form or letter you do use includes all the information that this one does.

As per Chapter 523 "Waste Discharge License Conditions," the permittee shall report any non-compliance which may endanger health or the environment orally within 24 hours followed up by a written submission within 5 days of the time the permittee became aware of the circumstances. The following shall also be included as information which must be reported within 24 hours:

- any unanticipated bypass which exceeds any effluent limitation in the permit [including sanitary sewer overflows (SSO's) and dry weather overflows (DWO's) from CSO discharge points]
- any upset which exceeds any effluent limitation in the permit
- violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit

Appendix C – Municipal Budget Documents

Appendix C – Municipal Budget Documents

Sewer Fund

The principal function of the Sewer Fund Enterprise is to account for the sewer services provided to City residents and business establishments. The Portland Water District (not a city department) owns and operates the wastewater treatment plant for which the Sewer Fund pays a monthly fee. The City owns and maintains the infrastructure sewer lines and is responsible for the costs of maintenance, improvements, and expansion.

All users of the system pay monthly or quarterly fees, based upon water volume, to support the expenses of the fund.

The Sewer Fund expenditures increased $1,081,856, or 4.6%. This increase is mainly attributed to the additional funding for sewer collapse repairs and sewer inspections in the Sewer Districting division, as well as an increase in the Portland Water District (PWD) assessment fees. Other significant changes include an increase in the allocation for maintenance & repairs and a decrease in the Sewer Debt Service expenditures.

Department Summary

Department: Public Works **Account:** 570

		FY17 Approp.	FY17 Projected Expend.	FY18 Department Submission	FY18 Manager's Recomm.	FY18 Finance Comm.	FY18 Final Allowance
Classification Breakdown							
Payroll		1,987,692	1,786,346	1,960,909	1,960,909	1,960,909	1,960,909
Benefits		918,909	775,879	951,535	884,235	884,235	884,235
Administrative Services		12,120,795	12,037,220	12,655,168	12,679,677	12,679,677	12,679,677
Contractual Services		735,867	882,989	1,149,476	1,159,476	1,159,476	1,159,476
Maintenance and Repairs		213,350	233,989	504,695	504,695	504,695	504,695
Rentals		28,442	34,418	57,108	57,108	57,108	57,108
Insurance		25,833	18,337	30,862	30,862	30,862	30,862
Supplies		266,158	248,261	283,497	256,497	256,497	256,497
Minor Capital Items		0	0	0	12,000	12,000	12,000
Utilities		101,540	87,959	117,324	117,324	117,324	117,324
Contributions		0	35	0	0	0	0
Capital Outlay		0	0	0	12,000	12,000	12,000
Debt Service		7,279,439	7,058,895	6,892,494	7,085,098	7,085,098	7,085,098
Total		23,678,025	23,164,328	24,603,068	24,759,881	24,759,881	24,759,881
Summary by Division							
Sewer Finance	(15-03)	90,430	76,985	91,337	91,337	91,337	91,337
Sewer Public Works Administration	(31-01)	877,450	790,970	807,783	807,783	807,783	807,783
Sewer Districting	(31-12)	1,766,068	1,849,869	2,853,513	2,850,513	2,850,513	2,850,513
Sewer Communications	(31-15)	67,533	59,882	64,056	64,056	64,056	64,056
Sewer Engineering	(31-37)	328,391	273,958	353,808	353,808	353,808	353,808
Sewer Debt Service	(31-55)	7,574,206	7,353,662	6,892,494	7,095,098	7,095,098	7,095,098
Sewer Fringe Benefits	(31-56)	1,325,943	1,183,646	1,390,215	1,347,424	1,347,424	1,347,424
PWD Assessment	(31-58)	11,648,004	11,575,356	12,149,862	12,149,862	12,149,862	12,149,862
Total		23,678,025	23,164,328	24,603,068	24,759,881	24,759,881	24,759,881
Less Revenues		(23,678,025)	(23,164,328)	(24,603,068)	(24,759,881)	(24,759,881)	(24,759,881)
Net Department Total		0	0	0	0	0	0

Sewer Finance

This division's services are provided by the City's Finance Department. Finance provides billing and collection services, as well as lien processing for delinquent accounts. The Finance Department also maintains the financial records for the Sewer Fund and the computer network system.

Division Summary

Department: Finance **Division:** Sewer Finance **Account:** 570-15-03

	FY17 Approp.	FY17 Projected Expend.	FY18 Department Submission	FY18 Manager's Recomm.	FY18 Finance Comm.	FY18 Final Allowance
Classification Breakdown						
Payroll	70,297	66,015	71,604	71,604	71,604	71,604
Administrative Services	5,833	2,750	5,433	5,433	5,433	5,433
Contractual Services	12,500	6,520	12,500	12,500	12,500	12,500
Supplies	1,800	1,700	1,800	1,800	1,800	1,800
Total	90,430	76,985	91,337	91,337	91,337	91,337

Personnel Services Detail

Department: Finance **Division:** Sewer Finance Administration **Account:** 570-15-03

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Finance - Budget/Accounting	100		30,349		31,026		31,026		31,026		31,026
Finance - Treasury	100		39,948		40,578		40,578		40,578		40,578
Gross Personnel Services			70,297		71,604		71,604		71,604		71,604

FY18 DIVISION LINE CATEGORY SUMMARY

REPORT: FA-DIV

	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
	FUND 570 Sewer Utility						
	DEPT 15 Finance						
	DIV 03 Acct, Budget & Purchasing						
*	Payroll	70,297	66,015	71,604	71,604	71,604	71,604
*	Administrative Services	5,833	2,750	5,433	5,433	5,433	5,433
*	Contractual Services	12,500	6,520	12,500	12,500	12,500	12,500
*	Supplies	1,800	1,700	1,800	1,800	1,800	1,800
**	Acct, Budget & Purchasing	90,430	76,985	91,337	91,337	91,337	91,337
***	Finance	90,430	76,985	91,337	91,337	91,337	91,337

Personnel Services Detail

Department: Finance **Division:** Sewer Finance Administration **Account:** 570-15-03

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Finance - Budget/Accounting	100		30,349		31,026		31,026		31,026		31,026
Finance - Treasury	100		39,948		40,578		40,578		40,578		40,578
Gross Personnel Services			70,297		71,604		71,604		71,604		71,604

FY18 DIVISION LINE ITEM SUMMARY
REPORT: FA-LINE

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 15 Finance							
DIV 03 Acct, Budget & Purchasing							
570-1503-500.01-10	Salaries and Wages	70,297	66,015	71,604	71,604	71,604	71,604
*	Payroll	70,297	66,015	71,604	71,604	71,604	71,604
570-1503-500.20-10	Postage and Freight	5,433	2,750	5,433	5,433	5,433	5,433
570-1503-500.20-20	Travel/Training/Meetings	400	0	0	0	0	0
*	Administrative Services	5,833	2,750	5,433	5,433	5,433	5,433
570-1503-500.35-00	Contractual Services	12,500	6,520	12,500	12,500	12,500	12,500
*	Contractual Services	12,500	6,520	12,500	12,500	12,500	12,500
570-1503-500.55-60	Minor Equipment	1,600	1,500	1,600	1,600	1,600	1,600
570-1503-500.55-70	Office Supplies	200	200	200	200	200	200
*	Supplies	1,800	1,700	1,800	1,800	1,800	1,800
**	Acct, Budget & Purchasing	90,430	76,985	91,337	91,337	91,337	91,337
***	Finance	90,430	76,985	91,337	91,337	91,337	91,337

FY18 FA Expenditure Explanatories

Acct	Line #	Description	Detail $	FA Request
570 15 03		***Sewer Utility Acct, Budget & Purchasing***		
570-1503-500.01-10		**Payroll / Salaries and Wages**		**$71,604**
	1	FY18 PRELIM WAGE (JLR 01/23/17):	0	
	2	1) BUDGET OFFICE (1501): T-$31,026	0	
	3	A) SR ADMIN OFFICER (RAP): 26% OF $56,664	14,733	
	4	B) SR. ACCT (VAC): 32% OF $50,914.50	16,293	
	5	2) TREASURY (1502): T-$40,578	0	
	6	A) FINANCIAL ADMIN ASST (NC): 50% * $39,504	19,752	
	7	B) FINANCIAL ADMIN ASST (DP): 50% * $41,652	20,826	
	8	.	0	
570-1503-500.20-10		**Administrative Services / Postage and Freight**		**$5,433**
	1	1) CERTIFIED LIEN NOTICES: 600 * $6.49	3,894	
	2	2) CERTIFIED FORECLOSURE NOTICES: 100 * $6.49	649	
	3	3) FIRST BILLING AFTER PWD TURNOVER: 600 * $.40	240	
	4	4) 3RD NOTICE DUNNING LETTER/MAILING: 400 * $.40	160	
	5	5) FLAT HANDLING FEE PROVISION (BERKLEY)	350	
	6	6) CERTIFIED LIENS MAILED: 350 * $.40	140	
	7	.	0	
570-1503-500.20-20		**Administrative Services / Travel/Training/Meetings**		**$0**
	1	TRAINING CLASSES	0	
	2	.	0	
570-1503-500.35-00		**Contractual Services**		**$12,500**
	1	1) TITLE SEARCH: 300 * $12	3,600	
	2	2) LIEN FILINGS: 250 * $19	4,750	
	3	3) LIEN DISCHARGES: 200 * $19	3,800	
	4	4) PRINTING CERTIFIED MAILERS	350	
	5	.	0	
570-1503-500.55-60		**Supplies / Minor Equipment**		**$1,600**
	1	MISC OFFICE ITEMS:	1,600	
	2	PC AND CHAIR	0	
	3	.	0	
570-1503-500.55-70		**Supplies / Office Supplies**		**$200**
	1	MISC SUPPLIES	200	
	2	.	0	
		Division Total: 15 03 Acct, Budget & Purchasing		**$91,337**
		Department Total: 15 Finance		**$91,337**

FY18 Department Wage Subm[illegible]on Detail Information

Org 15-03-500

Position 910 (1) CHARGES FROM — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

CHARGES FROM, 00001 XXX-XX-1603 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-1503-500-0110 100 % *City*

		FY18 Yrs:			*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**	
					*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$40,578.00
Rule	606	*Start / End*	*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	7/1/2017	0.00 1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt		*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$40,578.00
Review	6/30/2017	*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00 *Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base****:		$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
		FY17 Base Ending Salary:		$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**	Charges from Finance Treasury (15-02) Fin Admin Assts (1) NC: $39,504 * 50% = $19,752 (2) DP: $41,652 * 50% = $20,826	
								Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No *PN Date:* 1/6/2017 *Postion Note:* Charges from Finance Treasury (15-02) Fin Admin Assts (1) NC: $39,504 * 50% = $

Position 910 (2) CHARGES FROM — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

CHARGES FROM, 00002 XXX-XX-1604 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-1503-500-0110 100 % *City*

		FY18 Yrs:			*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**	
					*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$31,026.00
Rule	606	*Start / End*	*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	7/1/2017	0.00 1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt		*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$31,026.00
Review	6/30/2017	*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00 *Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base****:		$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
		FY17 Base Ending Salary:		$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**	Charges from Finance Admin (15-01): (1) Sr Adm Off (RAP): $56,664 * 26% = $14,733 (2) Sr Acct (Vac): $50,914.50 * 32 % = $16,293	
								Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: Yes *PN Date:* 1/6/2017 *Postion Note:* Charges from Finance Admin (15-01): (1) Sr Adm Off (RAP): $56,664 * 26% = $14,7

Position 902 (6) OVERTIME — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

OVERTIME, 00006 XXX-XX-1485 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-1503-500-0140 100 % *City*

		FY18 Yrs:			*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**	
					*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$0.00
Rule	606	*Start / End*	*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	7/1/2017	0.00 1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt		*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$0.00
Review	6/30/2017	*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00 *Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base****:		$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
		FY17 Base Ending Salary:		$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**		
								Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Org. Totals: **15-03-500**

HTE:	*Base*	$0	*Mid YearCOLA*	$0	*AddPct*	$0	*S/C*	$0	*Vac Bonus*	$0	*Holiday*	$0	*AddPay*	$0	*AddRate*	$0	
** HTE:*	*Yrly Add Pay*	$0	*FTE*	0.00	*Base*	$0	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$0**					
** Dept Request:*	*Yrly Add Pay*	$0	*FTE*	0.00	*Base*	$71,604	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$71,604**					
*** Diff Dept / HTE:*		$0		0.00		$71,604		$0		$0		**$71,604**					

**Label Descriptor May not be 100% Accurate Due to Contract Settlement Delays & Mid-Yr Contracts*

***Represents Accumulated COLAs (ie FY17 Pay Plan in Effect After Download)*

Fund Dept Total: **570-15**

HTE:	*Base*	$0	*Mid YearCOLA*	$0	*AddPct*	$0	*S/C*	$0	*Vac Bonus*	$0	*Holiday*	$0	*AddPay*	$0	*AddRate*	$0	
** HTE:*	*Yrly Add Pay*	$0	*FTE*	0.00	*Base*	$0	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$0**					
** Dept Request:*	*Fitness Pay*	$0	*FTE*	0.00	*Base*	$71,604	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$71,604**					
*** Diff Dept / HTE:*		$0		0.00		$71,604		$0		$0		**$71,604**					

City Totals:

HTE Postion Count: 0.00 *Dept Postion Count:* 0.00

HTE:	*Base*	$0	*Mid YearCOLA*	$0	*AddPct*	$0	*S/C*	$0	*Vac Bonus*	$0	*Holiday*	$0	*AddPay*	$0	*AddRate*	$0	
HTE:	*Fitness Pay*	$0	*FTE*	0.00	*Base*	$0	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$0**					
Dept Request:	*Fitness Pay*	$0	*FTE*	0.00	*Base*	$71,604	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$71,604**					
*** Diff Dept / HTE:*		$0		0.00		$71,604		$0		$0		**$71,604**					

Sewer Public Works Administration

This division accounts for the associated costs incurred by the Department of Public Works administrative staff for sewer related activities.

The FY18 Administration expenditures show a decrease of $69,667, or 7.9%, largely due to the reduction of a full-time position and the elimination of the office reconfiguration funds allocated in FY17. The Administration budget also includes increased funding for Fats, Oils & Greases (FOG) inspection fees.

Division Summary

Department: Public Works **Division:** Sewer Public Works Administration **Account:** 570-31-01

	FY17 Approp.	FY17 Projected Expend.	FY18 Department Submission	FY18 Manager's Recomm.	FY18 Finance Comm.	FY18 Final Allowance
Classification Breakdown						
Payroll	610,054	539,268	553,268	553,268	553,268	553,268
Benefits	1,120	(83)	1,740	1,740	1,740	1,740
Administrative Services	20,960	19,095	28,535	28,535	28,535	28,535
Contractual Services	116,050	106,987	133,550	133,550	133,550	133,550
Maintenance and Repairs	50,250	49,249	50,000	50,000	50,000	50,000
Supplies	75,800	75,452	37,450	25,450	25,450	25,450
Minor Capital Items	0	0	0	12,000	12,000	12,000
Utilities	3,216	1,002	3,240	3,240	3,240	3,240
Total	877,450	790,970	807,783	807,783	807,783	807,783

Personnel Services Detail

Department: Public Works **Division:** Sewer Public Works Administration **Account:** 570-31-01

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Water Resources Manager	100	1	92,021	1	93,854	1	93,854	1	93,854	1	93,854
Compliance Section Coordinator	100	1	57,827	1	67,322	1	67,322	1	67,322	1	67,322
(1) Asset Manager	100	0	0	1	64,457	1	64,457	1	64,457	1	64,457
(2) Asset & Information Mgmt Spec	100	1	54,912	0	0	0	0	0	0	0	0
Water Quality Technician	100	1	45,610	1	51,556	1	51,556	1	51,556	1	51,556
Senior Water Resouces Tech	100	1	46,995	1	49,103	1	49,103	1	49,103	1	49,103
(3) Programmer-Analyst	100	1	47,581	0	0	0	0	0	0	0	0
Asset Management Tech	100	2	88,200	2	94,735	2	94,735	2	94,735	2	94,735
(4) Call Center Specialist	100	0	0	1	41,048	1	41,048	1	41,048	1	41,048
(5) Customer Service Specialist	100	1	37,429	0	0	0	0	0	0	0	0
Charges from Admin (GF)	100		135,852		76,422		76,422		76,422		76,422
Overtime	100		3,627		14,771		14,771		14,771		14,771
Gross Personnel Services		9.0	610,054	8.0	553,268	8.0	553,268	8.0	553,268	8.0	553,268

Notes:

(1) 1 Position Reclass Approved from Asset & Information Mgmt Spec in FY18
(2) (1) Position Reclass Approved to Asset Manager in FY18
(3) (1) Position Eliminated during FY17
(4) 1 Position Reclass Approved from Customer Service Specialist in FY18
(5) (1) Position Reclass Approved to Call Center Specialist in FY18

FY18 DIVISION LINE CATEGORY SUMMARY

REPORT: FA-DIV

	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
	FUND 570 Sewer Utility						
	DEPT 31 Public Works						
	DIV 01 Administration						
*	Payroll	610,054	539,268	553,268	553,268	553,268	553,268
*	Benefits	1,120	83-	1,740	1,740	1,740	1,740
*	Administrative Services	20,960	19,095	28,535	28,535	28,535	28,535
*	Contractual Services	116,050	106,987	133,550	133,550	133,550	133,550
*	Maintenance and Repairs	50,250	49,249	50,000	50,000	50,000	50,000
*	Supplies	75,800	75,452	37,450	25,450	25,450	25,450
*	Minor Capital Items	0	0	0	12,000	12,000	12,000
*	Utilities	3,216	1,002	3,240	3,240	3,240	3,240
**	Administration	877,450	790,970	807,783	807,783	807,783	807,783

Personnel Services Detail

Department: Public Works **Division:** Sewer Public Works Administration **Account:** 570-31-01

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Water Resources Manager	100	1	92,021	1	93,854	1	93,854	1	93,854	1	93,854
Compliance Section Coordinator	100	1	57,827	1	67,322	1	67,322	1	67,322	1	67,322
(1) Asset Manager	100	0	0	1	64,457	1	64,457	1	64,457	1	64,457
(2) Asset & Information Mgmt Spec	100	1	54,912	0	0	0	0	0	0	0	0
Water Quality Technician	100	1	45,610	1	51,556	1	51,556	1	51,556	1	51,556
Senior Water Resouces Tech	100	1	46,995	1	49,103	1	49,103	1	49,103	1	49,103
(3) Programmer-Analyst	100	1	47,581	0	0	0	0	0	0	0	0
Asset Management Tech	100	2	88,200	2	94,735	2	94,735	2	94,735	2	94,735
(4) Call Center Specialist	100	0	0	1	41,048	1	41,048	1	41,048	1	41,048
(5) Customer Service Specialist	100	1	37,429	0	0	0	0	0	0	0	0
Charges from Admin (GF)	100		135,852		76,422		76,422		76,422		76,422
Overtime	100		3,627		14,771		14,771		14,771		14,771
Gross Personnel Services		9.0	610,054	8.0	553,268	8.0	553,268	8.0	553,268	8.0	553,268

Notes:

(1) 1 Position Reclass Approved from Asset & Information Mgmt Spec in FY18
(2) (1) Position Reclass Approved to Asset Manager in FY18
(3) (1) Position Eliminated during FY17
(4) 1 Position Reclass Approved from Customer Service Specialist in FY18
(5) (1) Position Reclass Approved to Call Center Specialist in FY18

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works							
DIV 01 Administration							
570-3101-500.01-10	Salaries and Wages	606,427	537,649	538,497	538,497	538,497	538,497
570-3101-500.01-40	Overtime Payments	3,627	1,619	14,771	14,771	14,771	14,771
*	Payroll	610,054	539,268	553,268	553,268	553,268	553,268
570-3101-500.02-71	Wearing Apparel	1,120	83-	1,740	1,740	1,740	1,740
*	Benefits	1,120	83-	1,740	1,740	1,740	1,740
570-3101-500.20-00	Administrative Services	3,110	3,021	2,085	2,085	2,085	2,085
570-3101-500.20-10	Postage and Freight	100	106	300	300	300	300
570-3101-500.20-20	Travel/Training/Meetings	17,750	15,968	19,850	19,850	19,850	19,850
570-3101-500.20-40	Taxes & Licenses	0	0	6,300	6,300	6,300	6,300
*	Administrative Services	20,960	19,095	28,535	28,535	28,535	28,535
570-3101-500.35-00	Contractual Services	107,600	102,229	125,100	125,100	125,100	125,100
570-3101-500.35-10	Advertising	2,000	1,000	2,000	2,000	2,000	2,000
570-3101-500.35-50	Lab and Medical Services	6,250	3,558	6,250	6,250	6,250	6,250
570-3101-500.35-60	Printing	200	200	200	200	200	200
*	Contractual Services	116,050	106,987	133,550	133,550	133,550	133,550
570-3101-500.40-15	Computer Equipment	48,500	47,499	48,500	48,500	48,500	48,500
570-3101-500.40-20	Other Equipment	1,750	1,750	1,500	1,500	1,500	1,500
*	Maintenance and Repairs	50,250	49,249	50,000	50,000	50,000	50,000
570-3101-500.55-60	Minor Equipment	72,700	72,626	33,500	21,500	21,500	21,500
570-3101-500.55-70	Office Supplies	3,100	2,826	3,950	3,950	3,950	3,950
*	Supplies	75,800	75,452	37,450	25,450	25,450	25,450
570-3101-500.56-00	Minor Capital Items	0	0	0	12,000	12,000	12,000
*	Minor Capital Items	0	0	0	12,000	12,000	12,000
570-3101-500.63-41	Cellular Phones	3,216	1,002	3,240	3,240	3,240	3,240
*	Utilities	3,216	1,002	3,240	3,240	3,240	3,240
**	Administration	877,450	790,970	807,783	807,783	807,783	807,783

Acct	Line #	Description	Detail $	FA Request
31 01		***Sewer Utility Administration***		
570-3101-500.01-10		**Payroll / Salaries and Wages**		**$538,497**
	1	1) FY18 8.0 FTE COUNT (03/16/17)	462,075	
	2	*SEE FY18 WAGE ADJUSTMENT: 570-3156-0100	0	
	3	.	0	
	4	2) OTHER WAGES	0	
	5	A) INCLUDES CHARGES FROM GF ADMIN: T-$76,422	76,422	
	6	(1) DIR (FROM 31-01): $118,814 * 25% = $29,703	0	
	7	(2) PAO II (FROM 31-01): $76,775 * 25% = $19,194	0	
	8	(3) FA (FROM 31-01): $70,084 * 25% = $17,521	0	
	9	(4) ACCT (FROM 31-01): $40,014 * 25% = $10,004	0	
	10	(*BOOKED AS REVENUE TO 100-3101-395-0000)	0	
	11	.	0	
	12	B) INCLUDES CHARGES TO STORMWATER: T- $187,358	0	
	13	(1) WATER RES MGR: $93,854 * 50% = $46,927	0	
	14	(2) COMPL SECT COORD: $67,322 * 50% = $33,661	0	
	15	(3) ASSET MGR (FY18 RECLASS REQ):	0	
	16	$64,457 * 50% = $32,228	0	
	17	(4) 1 ASSET MGR TECH: $48,424 * 50% = $24,212	0	
	18	(5) SR WATER RSCS TECH: $49,103 * 50% = $24,552	0	
	19	(6) WATER QUALITY TECH: $51,556 * 50% = $25,778	0	
	20	(*BOOKED AS REVENUE BUDGETED 570-3100-395-0000)	0	
	21	.	0	
570-3101-500.01-40		**Payroll / Overtime Payments**		**$14,771**
	1	A) SEWER ADMIN OT:	0	
	2	1) CUSTOMER SERVICE: 10 HRS * $19.61 * 1.5	294	
	3	2) ASBUILT CONVERSION TO GIS (JG): 40 HRS * $45.74	1,830	
	4	3) SANITARY SEWER PROG ENFORCEMENT 40 HRS * $40.00	1,600	
	5	.	0	
	6	B) PROTECH COMP-TIME PAYOFF (1ST WK DEC 2017)	11,047	
	7	FY17-FY19: OT/COMPENSATIORY TIME SECTION 11.2.7	0	
	8	YEARLY COMP BALANCE PAYOUT TO $0	0	
	9	.	0	
	10	SEWER: 31-01, 31-12 & 31-37 HRS (JLR: 01/12/17)	0	
	11	295.26 HRS OR $11,047	0	
	12	.	0	
	13	UPDATED PMH 1/19/17	0	
570-3101-500.02-71		**Benefits / Wearing Apparel**		**$1,740**
	1	1) CONTRACTUAL CLOTHING:	0	
	2	BOOT ALLOWANCE (CE,JG,AF,BP,RS,CM,VAC2)	1,280	
	3	2) NON-CONTRACTUAL CLOTHING:	0	
	4	BOOTS (NG)	160	
	5	3) GLOVES, HATS, REFLECTIVE GEAR ETC	300	
570-3101-500.20-00		**Administrative Services**		**$2,085**
	1	1) REFERENCE BOOKS	800	
	2	2) WEF/NEWEA DUES (NG)(DR)(JG) (RS)(COORD)	925	
	3	3) ASCE DUES (BP)	150	
	4	4) MEWEA DUES (NG,JG,RS,BP,AF,VAC)	210	
-3101-500.20-10		**Administrative Services / Postage and Freight**		**$300**
	1	MINIMAL AMOUNT BUDGETED FOR EPA MAILINGS ETC	100	
	2	SEWER UTILITY ADMIN MAILINGS (DEP/EPA/INDUSTRY)	200	

Acct	Line #	Description	Detail $	FA Request
31 01		***Sewer Utility Administration***		
570-3101-500.20-20		**Administrative Services / Travel/Training/Meetings**		**$19,850**
	1	1) EMPL APPRECIATION FUNCTIONS: (25% SF, 75% GF):	0	
	2	A) AWARDS CELEBRATION : $2,800 * 25%	700	
	3	B) HOLIDAY MEAL: $2,800 * 25%	700	
	4	2) MEETINGS/LUNCHEONS	300	
	5	3) LICENSE RENEWAL (NG/JG)	200	
	6	4) WEF CONFERENCE (NG)	3,000	
	7	5) STORMWATER OR UTILITY MGT CONFERENCE (NG)	2,000	
	8	6) EPA REGION 1 IPP CONF (RS,CM,BP,VAC)	300	
	9	7) ENVIRONMENTAL:	0	
	10	A) EPA/DEP SEMINARS 2 * $300	600	
	11	B) MEWEA COURSES 4 * $300	1,200	
	12	C) OSHA HAZ WASTE REFRESHER 2 *$300	600	
	13	8) NEARC SPRING CONF (JG,AF) (ONE DAY)	450	
	14	9) NEARC FALL CONG (JG) (THREE DAY)	1,000	
	15	10) CITYWORKS CONFERENCE (JG)	4,000	
	16	11) NEWEA CONF (RS,BP,JG,AF)	1,400	
	17	12) ASSET MGT/GIS TRAINING (JF,AF)	1,000	
	18	13) ASCE TECHNICAL SEMINAR (BP)	200	
	19	14) MAINE STORMWATER CONF (BP, RS, NG)	900	
	20	15) MEWEA SPRING CONF (RS,BP,JG,AF)	300	
	21	16) MEWAE FALL CONF (RS,BP,JG,AF)	1,000	
570-3101-500.20-40		**Administrative Services / Taxes & Licenses**		**$6,300**
	1	1) WASTE DISCHARGE LIC CSO (MEPDES) (FROM 3137)	1,200	
	2	2) WATER QUALITY IMPROV FUND (DEP) (FROM 3137)	5,100	
	3	.	0	
	4	UPDATED (03/16/17)	0	
	5	.	0	
570-3101-500.35-00		**Contractual Services**		**$125,100**
	1	1) ASSET MANAGMENT - BMP	30,000	
	2	(CMOM: ASSET MANAGEMENT PROG DEV)	0	
	3	2) PUBLIC HEALTH FOG INSPECTOR CHG	40,000	
	4	3) LINKO RENEWAL (FROM 3137)	5,100	
	5	4) IT PIPES WEB SOFTWARE LICENSE	20,000	
	6	5) IPP FEES/SURCHARGE ANALYSIS	30,000	
570-3101-500.35-10		**Contractual Services / Advertising**		**$2,000**
	1	1) NEWSPAPER/PROFESSIONAL JOURNALS FOR POSITION	1,500	
	2	OPENINGS	0	
	3	2) IPT ASSOC NEWSPAPER ADVERTISING	500	
	4	.	0	
570-3101-500.35-50		**Contractual Services / Lab and Medical Services**		**$6,250**
	1	1) RESPIRATOR FIT TESTING & MEDICAL SERVICES:	0	
	2	A) QUESTIONNAIRES: 20 * $10	200	
	3	B) FIT TEST SUPPLIES (PURCHASED BY CITY HALL)	300	
	4	C) ADDITIONAL MEDICAL TESTING	1,200	
	5	.	0	
	6	2) PRE-EMPLOYMENT PHYSICALS: 3 * $100	300	
	7	.	0	
	8	3) HEPATITIS SHOTS FOR NEW EMPLOYEES:	0	
	9	3 EMPL * $250 PER SERIES	750	
	10	.	0	

Acct	Line #	Description	Detail $	FA Request
31 01		***Sewer Utility Administration***		
	11	MEDICAL EVALUATION: FIT FOR DUTY	3,500	
570-3101-500.35-60		**Contractual Services / Printing**		**$200**
	1	OUTSIDE PRINTING SERVICES	200	
	2	.	0	
570-3101-500.40-15		**Maintenance and Repairs / Computer Equipment**		**$48,500**
	1	1) CITIWORKS MAINTENANCE (EXCL STORMWATER):	0	
	2	2/3% SEWER & 1/3% GENERAL ADMIN ($70,000 / 3)	46,000	
	3	.	0	
	4	2) IT PIPES ANNUAL LICENSE	2,500	
	5	.	0	
570-3101-500.40-20		**Maintenance and Repairs / Other Equipment**		**$1,500**
	1	1) COMPUTER,FAX MACHINE,COLOR PRINTER REPAIRS	250	
	2	2) ANNUAL MAINTENANCE & REPAIR OF:	750	
	3	SAMPLERS, FLOWMETERS, AIRBLOWERS & GAS DETECTORS	0	
	4	3) 2 WAY RADIO REPAIR	500	
570-3101-500.55-60		**Supplies / Minor Equipment**		**$21,500**
	1	1) EMPLOYEE AWARDS/PLAQUES	700	
	2	2) MISC MINOR EQUIPMENT: (INCLUDING NEW STAFF)	2,000	
	3	ERGONOMIC CHAIRS,PRINTERS, ETC	0	
	4	3) COMPUTER (ASSET MGR(2)/COMP COORD)	6,000	
	5	4) SUBMETER PROGRAM:	12,500	
	6	PURCHASE SUBMETERS FROM PWD:	0	
	7	50 METERS * $250	0	
	8	5) ICE MACHINE FOR SAMPLING	300	
	9	.	0	
	10	FY18 CM TRANSFER TO LINE 56-00 (04/02/17):	0	
	11	A) ISCO FLOW SAMPLER: (-$5K)	0	
	12	B) GPS DATA COLLECTOR: (-$7K)	0	
	13	.	0	
570-3101-500.55-70		**Supplies / Office Supplies**		**$3,950**
	1	1) OFFICE SUPPLIES:	0	
	2	A) CALENDARS,BINDERS,GENERAL SUPPLIES	500	
	3	B) PAPER: 25 CASES * $30	750	
	4	2) COMPUTER SUPPLIES:	0	
	5	A) DVDS,UPGRADES,HARDWARE,ETC.	450	
	6	B) COMPUTER EQUIP. ERGONOMIC IMPROVEMENTS	1,500	
	7	3) NEW EMPLOYEE OFFICE SET-UP	750	
570-3101-500.56-00		**Minor Capital Items**		**$12,000**
	1	FY18 CM TRANSFER FROM LINE 55-60 (04/02/17):	0	
	2	A) ISCO FLOW SAMPLER: +$5K	5,000	
	3	B) GPS DATA COLLECTOR: +$7K	7,000	
	4	.	0	
570-3101-500.63-41		**Utilities / Cellular Phones**		**$3,240**
	1	1) WATER RESOURCES MGR (NG): $30 * 12 MOS	360	
	2	2) SR WR TECH (RS): $30 * 12 MOS	360	
	3	3) ASST MGMT TECH (JG): $30 * 12 MOS	360	
	4	4) COMPL. SECTION COORD (BP) $30 * 12 MOS	360	
	5	5) DATA PLANS: 3 * $50 MO * 12 MOS	1,800	
	6	.	0	

Acct	Line #	Description	Detail $	FA Request
31	01	***Sewer Utility Administration***		
		Division Total: 31 01 Administration		**$807,783**

FY18 Department Wage Sub. n Detail Information

Org 31-01-500

Position 900 (1) ASSET & INFORMATION MGT SPEC *Union* 15 *Grade* PT8 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 5 6 *Step Range* 1 10 *FTE* 1.00

GOOCH, JESSICA XXX-XX-9976 *FTE* 1.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50

Dist / Dist % 570-3101-500-0110 100 % *City* 3/10/2014

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$28.43		*FY18 Annual Base*	$58,646.25	**Dept. Revised Figures**		
						*COLAs***	$1.15	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$0.00	
Rule	72	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$29.58	$1,109.25	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	3/10/2014	3.31	4.31 *Step 1*	889.29	$26,305.07	*FY18 Step Increase*	$0.91		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt	12/14/2015	1.55	2.55 *Step 2*	1,060.71	$32,341.18	*FY18 Base End Hrly Rate*	$30.49	$1,143.38	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$0.00	
Review	12/14/2017		*StepTotal*	1,950.00	$58,646.25	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base***:*	5	$29.00		$56,550.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
			FY17 Base Ending Salary:		$55,438.50	*FY18 Total End Hrly Rate*	$30.49	$1,143.38	*Total Salary*	**$58,646.25**	Deleted in DR after CM Lvl Copied (FY18 Reclass Request)		
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: Yes *PN Date:* 3/16/2017 *Postion Note:* FY18 Reclass Request to New Title Asset Manager PT9; Pos #

Position 907 (1) ASSET MANAGEMENT TECH *Union* 20 *Grade* C18 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 3 4 *Step Range* 1 10 *FTE* 1.00

FISHER, ALLISON XXX-XX-9672 *FTE* 1.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50

Dist / Dist % 570-3101-500-0110 100 % *City* 4/11/2016

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$23.74		*FY18 Annual Base*	$48,424.07	**Dept. Revised Figures**		
						*COLAs***	$0.95	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$48,424.07	
Rule	160	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$24.69	$925.88	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	4/11/2016	1.22	2.22 *Step 1*	1,521.43	$37,564.07	*FY18 Step Increase*	$0.65		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt	4/11/2016	1.22	2.22 *Step 2*	428.57	$10,860.00	*FY18 Base End Hrly Rate*	$25.34	$950.25	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$48,424.07	
Review	4/11/2018		*StepTotal*	1,950.00	$48,424.07	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:*	37.50
FY17 Budget	*Current Step / Base***:*	2	$23.76		$46,332.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
			FY17 Base Ending Salary:		$46,293.00	*FY18 Total End Hrly Rate*	$25.34	$950.25	*Total Salary*	**$48,424.07**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: No

Position 907 (2) ASSET MANAGEMENT TECH *Union* 20 *Grade* C18 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 10 *FTE* 0.00

Unfilled auth, 907(2)+ XXX-XX-3101 *FTE* 0.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50

Dist / Dist % 570-3101-500-0110 100 % *City*

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$46,310.92	
Rule	0	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$23.26	$872.25	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	7/1/2017	0.00	0.00 *Step 1*			*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt		0.00	0.00 *Step 2*			*FY18 Base End Hrly Rate*	$24.24	$909.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$46,310.92	
Review	7/1/2018		*StepTotal*			*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:*	37.50
FY17 Budget	*Current Step / Base***:*		$0.00		$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
0.00	$0.00		*FY17 Base Ending Salary:*		$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**	anticipated start date 7/1/17. midway between step 1 & 2		
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: Yes *PN Date:* 2/15/2017 *Postion Note:* FY17-B Vacant Position (New FY17): Not Set up in LIVE as of 02/15/17

Position 993 (999) Asset Manager+ *Union* 15 *Grade* PT9 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 5 6 *Step Range* 1 10 *FTE* 0.00

Unfilled auth, FY18 993(999)+ XXX-XX-3101 *FTE* 0.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50

Dist / Dist % 570-3101-500-0110 100 % *City*

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$64,457.25	
Rule	0	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$32.58	$1,221.75	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	7/1/2017	0.00	0.00 *Step 1*			*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt		0.00	0.00 *Step 2*			*FY18 Base End Hrly Rate*	$33.53	$1,257.38	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$64,457.25	
Review	7/1/2018		*StepTotal*			*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:*	37.50
FY17 Budget	*Current Step / Base***:*		$0.00		$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
0.00	$0.00		*FY17 Base Ending Salary:*		$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**	Jessica Gooch Reclass (New FY18 Title): 26 wks * $32.58 * 37.5 hr (=$31,765.50) + 26 wks * $33.53 * 37.5 hr (=$32,691.75) = $64,457.25; Added to DR after CM Lvl Copied		
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: Yes *PN Date:* 3/16/2017 *Postion Note:* FY18 Reclass from Asset & Info Mgt Spec Pos #900 (Grade PT8 to PT9) per PH 03/

Position 938 (999) CALL CENTER SPECIALIST — **Union** 20 **Grade** C11 **Review Type** US — **FY18 Step Eligible** Y **Beg / Ending Step** 7 7 **Step Range** 1 10 **FTE** 0.00

Unfilled auth, FY18 938(999)+ XXX-XX-3101 **FTE** 0.00 **Hrs / Yr** 1,950 **Hrs / Wk** 37.50

Dist / Dist % 570-3101-500-0110 100 % **City**

		FY18 Yrs:				FY17 Ending Hrly Rate*	$0.00		FY18 Annual Base	$0.00	Dept. Revised Figures
Rule	0	Start / End		Hrs	Amount	COLAs**	$0.00	Wkly Rate	Mid Year COLA	$0.00	Base Wage: $41,047.50
Hire	7/1/2017	0.00	0.00 Step 1			FY18 Base Start Hrly Rate	$21.05	$789.38	AddPct Total	$0.00	Add Pct, S/C, Fire: $0.00
Appt		0.00	0.00 Step 2			FY18 Step Increase	$0.00		S/C	$0.00	Add Pay/Add Rate: $0.00
Review	7/1/2018		StepTotal			FY18 Base End Hrly Rate	$21.05	$789.38	Fire Vac. Bonus / Holiday Pay	$0.00	Total Salary: $41,047.50
FY17 Budget	Current Step / Base***:			$0.00	$0.00	Add Pct	0.00 %		Supr/AddPay Total	$0.00	Position Count: 1.00 Wkly Hrs: 37.50
0.00	$0.00	FY17 Base Ending Salary:			$0.00	Add Rate	$0.00		AddRate Total	$0.00	Dept. Revised Wage Desc.:
						FY18 Total End Hrly Rate	$0.00	$0.00	Total Salary	$0.00	Catherine Ellis Reclass: 1,950 hrs * $21.05 = $41,047.50; Added to DR after CM Lvl Copied (FY18 Reclass Request)
									Elm 02 Yrly Add Pay	$0.00	

Empl Note*: Yes **PN Date:** 3/16/2017 **Postion Note:** FY15 Reclass from Customer Svc Specialist Pos #935(1) (Grade C08 to C11) per P

Position 973 (1) COMPLIANCE SECTION COORDINATOR — **Union** 15 **Grade** PT9 **Review Type** US — **FY18 Step Eligible** N **Beg / Ending Step** 5 5 **Step Range** 1 10 **FTE** 1.00

PEARSON, BENJAMIN XXX-XX-1903 **FTE** 1.00 **Hrs / Yr** 1,950 **Hrs / Wk** 37.50

Dist / Dist % 570-3101-500-0110 100 % **City** 12/30/2013

		FY18 Yrs:				FY17 Ending Hrly Rate*	$31.31		FY18 Annual Base	$63,511.50	Dept. Revised Figures
Rule	72	Start / End		Hrs	Amount	COLAs**	$1.26	Wkly Rate	Mid Year COLA	$0.00	Base Wage: $63,511.50
Hire	12/30/2013	3.50	4.50 Step 1	0.00	$0.00	FY18 Base Start Hrly Rate	$32.57	$1,221.38	AddPct Total	$3,810.69	Add Pct, S/C, Fire: $3,810.69
Appt	7/18/2016	0.95	1.95 Step 2	0.00	$0.00	FY18 Step Increase	$0.00		S/C	$0.00	Add Pay/Add Rate: $0.00
Review	7/18/2018		StepTotal	0.00	$0.00	FY18 Base End Hrly Rate	$32.57	$1,221.38	Fire Vac. Bonus / Holiday Pay	$0.00	Total Salary: $67,322.19
FY17 Budget	Current Step / Base***:		5 $31.94		$62,283.00	Add Pct	6.00 %		Supr/AddPay Total	$0.00	Position Count: 1.00 Wkly Hrs: 37.50
		FY17 Base Ending Salary:			$61,054.50	Add Rate	$0.00		AddRate Total	$0.00	Dept. Revised Wage Desc.:
						FY18 Total End Hrly Rate	$34.52	$1,294.66	Total Salary	$67,322.19	
									Elm 02 Yrly Add Pay	$0.00	

Empl Note*: No

Position 935 (1) CUSTOMER SERVICE SPECIALIST — **Union** 20 **Grade** C08 **Review Type** US — **FY18 Step Eligible** N **Beg / Ending Step** 7 7 **Step Range** 1 10 **FTE** 1.00

ELLIS, CATHERINE XXX-XX-0288 **FTE** 1.00 **Hrs / Yr** 1,950 **Hrs / Wk** 37.50

Dist / Dist % 570-3101-500-0110 100 % **City** 7/28/2008

		FY18 Yrs:				FY17 Ending Hrly Rate*	$18.85		FY18 Annual Base	$38,239.50	Dept. Revised Figures
Rule	100	Start / End		Hrs	Amount	COLAs**	$0.76	Wkly Rate	Mid Year COLA	$0.00	Base Wage: $0.00
Hire	7/28/2008	8.93	9.93 Step 1	0.00	$0.00	FY18 Base Start Hrly Rate	$19.61	$735.38	AddPct Total	$0.00	Add Pct, S/C, Fire: $0.00
Appt	8/3/2015	1.91	2.91 Step 2	0.00	$0.00	FY18 Step Increase	$0.00		S/C	$0.00	Add Pay/Add Rate: $0.00
Review	7/28/2020		StepTotal	0.00	$0.00	FY18 Base End Hrly Rate	$19.61	$735.38	Fire Vac. Bonus / Holiday Pay	$0.00	Total Salary: $0.00
FY17 Budget	Current Step / Base***:		7 $19.23		$37,498.50	Add Pct	0.00 %		Supr/AddPay Total	$0.00	Position Count: 0.00 Wkly Hrs: 0.00
1.00	$37,429.07	FY17 Base Ending Salary:			$36,757.50	Add Rate	$0.00		AddRate Total	$0.00	Dept. Revised Wage Desc.:
						FY18 Total End Hrly Rate	$19.61	$735.38	Total Salary	$38,239.50	Deleted in DR after CM Lvl Copied (FY18 Reclass Request)
									Elm 02 Yrly Add Pay	$0.00	

Empl Note*: Yes **PN Date:** 3/16/2017 **Postion Note:** FY18 DR Pos Eliminated: Reclass Request to Call Center Specialist Pos #938 C11 (

Position 343 (1) SENIOR WATER RESOURCES TECH — **Union** 20 **Grade** C18 **Review Type** US — **FY18 Step Eligible** Y **Beg / Ending Step** 3 4 **Step Range** 1 10 **FTE** 1.00

SMITH, RACHEL XXX-XX-5552 **FTE** 1.00 **Hrs / Yr** 1,950 **Hrs / Wk** 37.50

Dist / Dist % 570-3101-500-0110 100 % **City** 9/28/2015

		FY18 Yrs:				FY17 Ending Hrly Rate*	$23.74		FY18 Annual Base	$49,103.09	Dept. Revised Figures
Rule	158	Start / End		Hrs	Amount	COLAs**	$0.95	Wkly Rate	Mid Year COLA	$0.00	Base Wage: $49,103.09
Hire	9/28/2015	1.76	2.76 Step 1	476.79	$11,771.84	FY18 Base Start Hrly Rate	$24.69	$925.88	AddPct Total	$0.00	Add Pct, S/C, Fire: $0.00
Appt	9/28/2015	1.76	2.76 Step 2	1,473.21	$37,331.25	FY18 Step Increase	$0.65		S/C	$0.00	Add Pay/Add Rate: $0.00
Review	9/28/2017		StepTotal	1,950.00	$49,103.09	FY18 Base End Hrly Rate	$25.34	$950.25	Fire Vac. Bonus / Holiday Pay	$0.00	Total Salary: $49,103.09
FY17 Budget	Current Step / Base***:		3 $24.21		$47,209.50	Add Pct	0.00 %		Supr/AddPay Total	$0.00	Position Count: 1.00 Wkly Hrs: 37.50
1.00	$46,994.95	FY17 Base Ending Salary:			$46,293.00	Add Rate	$0.00		AddRate Total	$0.00	Dept. Revised Wage Desc.:
						FY18 Total End Hrly Rate	$25.34	$950.25	Total Salary	$49,103.09	
									Elm 02 Yrly Add Pay	$0.00	

Empl Note*: No

Position 827 (1) WATER QUALITY TECHNICIAN — *Union* 20 *Grade* C15 *Review Type* US — *FY18 Step Eligible* Y *Beg / Ending Step* 7 8 *Step Range* 1 10 *FTE* 1.00

MOORE, CHARLES~ XXX-XX-9186 *FTE* 1.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50

Dist / Dist % 570-3101-500-0110 100 % *City* 7/25/2005

		FY18 Yrs:											
Rule	98	*Start / End*		*Hrs*	*Amount*	*FY17 Ending Hrly Rate**	$22.93		*FY18 Annual Base*	$47,583.43	**Dept. Revised Figures**		
						*COLAs***	$0.93	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$51,556.29	
Hire	7/25/2005	11.94	12.94 *Step 1*	128.57	$3,067.71	*FY18 Base Start Hrly Rate*	$23.86	$894.75	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Appt	5/1/2010	7.17	8.17 *Step 2*	1,821.43	$44,515.71	*FY18 Step Increase*	$0.58		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Review	7/25/2017		*StepTotal*	1,950.00	$47,583.43	*FY18 Base End Hrly Rate*	$24.44	$916.50	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$51,556.29	
FY17 Budget	*Current Step / Base***:*	7 $25.35			$49,432.50	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 37.50	
1.00	$45,610.50	*FY17 Base Ending Salary:*			$44,713.50	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
						FY18 Total End Hrly Rate	$24.44	$916.50	*Total Salary*	**$47,583.43**	FY18 Est: 128.57 hrs * $25.86 (=$3,324.82) + 1,821.43 hrs * $26.48 (=$48,231.47) = $51,556.29		
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: Yes *PN Date:* 12/23/2016 *Postion Note:* FY17-FY19 Contract Reclass (C15 to C17: 12/04/16): FY18: $51,556.29

Position 827 (998) WATER QUALITY TECHNICIAN — *Union* 20 *Grade* C17 *Review Type* US — *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 10 *FTE* 0.00

Unfilled auth, FY18 827(998)+ XXX-XX-3101 *FTE* 0.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50

Dist / Dist % 570-3101-500-0110 100 % *City*

		FY18 Yrs:											
Rule	0	*Start / End*		*Hrs*	*Amount*	*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$0.00	
Hire	7/1/2017	0.00	0.00 *Step 1*			*FY18 Base Start Hrly Rate*	$22.02	$825.75	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Appt		0.00	0.00 *Step 2*			*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Review	7/1/2018		*StepTotal*			*FY18 Base End Hrly Rate*	$22.96	$861.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$0.00	
FY17 Budget	*Current Step / Base***:*			$0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:* 0.00	
0.00	$0.00	*FY17 Base Ending Salary:*			$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
						FY18 Total End Hrly Rate	$0.00	$0.00	*Total Salary*	**$0.00**	Deleted in DR after CM Lvl Copied		
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: Yes *PN Date:* 3/16/2017 *Postion Note:* Delete New Request @ DR Lvl (per PH 03/16/17); +1.0 New Position Request (of 2

Position 873 (1) WATER RESOURCES MANAGER — *Union* 01 *Grade* N11 *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 3 3 *Step Range* 1 3 *FTE* 1.00

GALLINARO, NANCY XXX-XX-4359 *FTE* 1.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50

Dist / Dist % 570-3101-500-0110 100 % *City* 5/12/2014

		FY18 Yrs:											
Rule	18	*Start / End*		*Hrs*	*Amount*	*FY17 Ending Hrly Rate**	$47.19		*FY18 Annual Base*	$93,853.50	**Dept. Revised Figures**		
						*COLAs***	$0.94	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$93,853.50	
Hire	5/12/2014	3.14	4.14 *Step 1*	0.00	$0.00	*FY18 Base Start Hrly Rate*	$48.13	$1,804.88	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Appt	5/12/2014	3.14	4.14 *Step 2*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Review	5/12/2018		*StepTotal*	0.00	$0.00	*FY18 Base End Hrly Rate*	$48.13	$1,804.88	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$93,853.50	
FY17 Budget	*Current Step / Base***:*	3 $47.19			$92,020.50	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 37.50	
1.00	$92,020.50	*FY17 Base Ending Salary:*			$92,020.50	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
						FY18 Total End Hrly Rate	$48.13	$1,804.88	*Total Salary*	**$93,853.50**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: No

Position 910 (48) CHARGES FROM — *Union* *Grade* AB *Review Type* — *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

CHARGES FROM, 00048 XXX-XX-1625 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3101-500-0110 100 % *City*

		FY18 Yrs:											
Rule	606	*Start / End*		*Hrs*	*Amount*	*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$76,422.00	
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Appt			*Step 2*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Review	6/30/2017		*StepTotal*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$76,422.00	
FY17 Budget	*Current Step / Base***:*			$0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:* 0.00	
		FY17 Base Ending Salary:			$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
						FY18 Total End Hrly Rate	$0.00	$0.00	*Total Salary*	**$0.00**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: Yes *PN Date:* 3/16/2017 *Postion Note:* Charges from GF Admin (100-3101-430)

Position 902 (69) OVERTIME *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

OVERTIME, 00069 XXX-XX-1516 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00 *FY18 Annual Base* $0.00 **Dept. Revised Figures**

Dist / Dist % 570-3101-500-0140 100 % *City* *FY17 Ending Hrly Rate** $0.00 *Mid Year COLA* $0.00 *Base Wage:* $3,724.00

FY18 Yrs: *COLAs*** $0.00 *Wkly Rate* *AddPct Total* $0.00 *Add Pct, S/C, Fire:* $0.00

Rule 606 *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $0.00 $0.00 *S/C* $0.00 *Add Pay/Add Rate:* $0.00

Hire 7/1/2017 0.00 1.00 *Step 1* 0.00 $0.00 *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $3,724.00

Appt *Step 2* 0.00 $0.00 *FY18 Base End Hrly Rate* $0.00 $0.00 *Supr/AddPay Total* $0.00 *Position Count:* 0.00 *Wkly Hrs:* 0.00

Review 6/30/2017 *StepTotal* 0.00 $0.00 *Add Pct* 0.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*

FY17 Budget *Current Step / Base****:* $0.00 $0.00 *Add Rate* $0.00 *Total Salary* **$0.00**

FY17 Base Ending Salary: $0.00 *FY18 Total End Hrly Rate* $0.00 $0.00 *Elm 02 Yrly Add Pay* $0.00

*Empl Note**:* No

Position 902 (120) OVERTIME *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

OVERTIME, 902(120)+ XXX-XX-3101 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00 *FY18 Annual Base* $0.00 **Dept. Revised Figures**

Dist / Dist % 570-3101-500-0140 100 % *City* *FY17 Ending Hrly Rate** $0.00 *Mid Year COLA* $0.00 *Base Wage:* $11,047.00

FY18 Yrs: *COLAs*** $0.00 *Wkly Rate* *AddPct Total* $0.00 *Add Pct, S/C, Fire:* $0.00

Rule *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $0.00 $0.00 *S/C* $0.00 *Add Pay/Add Rate:* $0.00

Hire 7/1/2017 0.00 *Step 1* 0.00 $0.00 *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $11,047.00

Appt *Step 2* 0.00 $0.00 *FY18 Base End Hrly Rate* $0.00 $0.00 *Supr/AddPay Total* $0.00 *Position Count:* 0.00 *Wkly Hrs:* 0.00

Review 6/30/2017 *StepTotal* 0.00 $0.00 *Add Pct* 0.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*

FY17 Budget *Current Step / Base****:* $0.00 $0.00 *Add Rate* $0.00 *Total Salary* **$0.00** 295.26 Hrs or $11,047 (01/12/17): FY17-FY19: OT/Compensatory Time Section 11.2.7 Payout; Based on Dept 570-31 Hrs 31-01, 31-12 & 31-27

FY17 Base Ending Salary: $0.00 *FY18 Total End Hrly Rate* $0.00 $0.00 *Elm 02 Yrly Add Pay* $0.00

*Empl Note**:* Yes *PN Date:* 1/17/2017 *Postion Note:* 295.26 Hrs or $11,047 (01/12/17): FY17-FY19: OT/Compensatory Time Section 11.2

Org. Totals: **31-01-500**

HTE: Base $399,361 *Mid YearCOLA* $0 *AddPct* $3,811 *S/C* $0 *Vac Bonus* $0 *Holiday* $0 *AddPay* $0 *AddRate* $0

* *HTE:*	*Yrly Add Pay*	$0	*FTE*	**7.00**	*Base*	$399,361	*AddPct, S/C, Fire*	$3,811	*AddPay / AddRate*	$0	*Total Salary*	**$403,172**
* *Dept Request:*	*Yrly Add Pay*	$0	*FTE*	**8.00**	*Base*	$549,457	*AddPct, S/C, Fire*	$3,811	*AddPay / AddRate*	$0	*Total Salary*	**$553,268**
** *Diff Dept / HTE:*		$0		**1.00**		$150,096		$0		$0		**$150,096**

Label Descriptor May not be 100% Accurate Due to Contract Settlement Delays & Mid-Yr Contracts

****Represents Accumulated COLAs (ie FY17 Pay Plan in Effect After Download)***

Org 31-12-500

Sewer Districting

The Sewer Districting division is responsible for the maintenance and repair of the City's sanitary sewer and stormwater systems including pump station operations and maintenance, catch basin cleaning, right of way inspections and maintenance, and sewer inspections and investigations.

Division expenditures have increased $1,084,445, or 61.4%. This division includes a significant increase in contractual services, including increased funding for emergency collapse sewer repairs and sewer inspections, building maintenance and repair used for outfitting the new building at 109 District Road, and necessary maintenance and repair of other equipment. The budget also includes the reduction of one position and the restructuring of staff.

Division Summary

Department: Public Works **Division:** Sewer Districting **Account:** 570-31-12

	FY17 Approp.	FY17 Projected Expend.	FY18 Department Submission	FY18 Manager's Recomm.	FY18 Finance Comm.	FY18 Final Allowance
Classification Breakdown						
Payroll	988,117	911,759	944,240	944,240	944,240	944,240
Benefits	10,910	9,271	13,765	13,765	13,765	13,765
Administrative Services	25,330	20,656	63,720	63,720	63,720	63,720
Contractual Services	289,600	452,187	984,276	984,276	984,276	984,276
Maintenance and Repairs	159,100	182,251	454,000	454,000	454,000	454,000
Rentals	26,242	32,218	54,608	54,608	54,608	54,608
Supplies	171,325	157,132	227,700	212,700	212,700	212,700
Utilities	95,444	84,395	111,204	111,204	111,204	111,204
Capital Outlay	0	0	0	12,000	12,000	12,000
Total	1,766,068	1,849,869	2,853,513	2,850,513	2,850,513	2,850,513

Personnel Services Detail

Department: Public Works **Division:** Sewer Districting **Account:** 570-31-12

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Wastewater Facilites Coord	100	1	71,315	1	73,554	1	73,554	1	73,554	1	73,554
(1) Sr Public Services Supervisor	100	2	103,584	3	149,323	3	149,323	3	149,323	3	149,323
Sewer Inspector	100	3	158,746	3	161,928	3	161,928	3	161,928	3	161,928
Sewer Facilities Technician	100	1	43,451	1	44,325	1	44,325	1	44,325	1	44,325
(2) Public Works Foreman	100	3	142,646	0	0	0	0	0	0	0	0
(3) Maintenance Worker III	100	8	348,445	9	398,923	9	398,923	9	398,923	9	398,923
Meal Allow/Standby Pay	100		26,516		27,206		27,206		27,206		27,206
Winter Stipends	100		5,400		0		0		0		0
Temporary Help	100		40,000		40,000		40,000		40,000		40,000
Overtime	100		48,014		48,981		48,981		48,981		48,981
Gross Personnel Services		18.0	988,117	17.0	944,240	17.0	944,240	17.0	944,240	17.0	944,240

Notes:

(1) 1 New Position Approved in FY18

(2) (1) Position Reclassed to MW III & (2) Positions Eliminated during FY17

(3) 1 Position Reclassed from PW Foreman during FY17

FY18 DIVISION LINE CATEGORY SUMMARY

REPORT: FA-DIV

	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
	FUND 570 Sewer Utility						
	DEPT 31 Public Works						
	DIV 12 Districting						
*	Payroll	988,117	911,759	944,240	944,240	944,240	944,240
*	Benefits	10,910	9,271	13,765	13,765	13,765	13,765
*	Administrative Services	25,330	20,656	63,720	63,720	63,720	63,720
*	Contractual Services	289,600	452,187	984,276	984,276	984,276	984,276
*	Maintenance and Repairs	159,100	182,251	454,000	454,000	454,000	454,000
*	Rentals	26,242	32,218	54,608	54,608	54,608	54,608
*	Supplies	171,325	157,132	227,700	212,700	212,700	212,700
*	Utilities	95,444	84,395	111,204	111,204	111,204	111,204
*	Capital Outlay	0	0	0	12,000	12,000	12,000
**	Districting	1,766,068	1,849,869	2,853,513	2,850,513	2,850,513	2,850,513

Personnel Services Detail

Department: Public Works **Division:** Sewer Districting **Account:** 570-31-12

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Wastewater Facilites Coord	100	1	71,315	1	73,554	1	73,554	1	73,554	1	73,554
(1) Sr Public Services Supervisor	100	2	103,584	3	149,323	3	149,323	3	149,323	3	149,323
Sewer Inspector	100	3	158,746	3	161,928	3	161,928	3	161,928	3	161,928
Sewer Facilities Technician	100	1	43,451	1	44,325	1	44,325	1	44,325	1	44,325
(2) Public Works Foreman	100	3	142,646	0	0	0	0	0	0	0	0
(3) Maintenance Worker III	100	8	348,445	9	398,923	9	398,923	9	398,923	9	398,923
Meal Allow/Standby Pay	100		26,516		27,206		27,206		27,206		27,206
Winter Stipends	100		5,400		0		0		0		0
Temporary Help	100		40,000		40,000		40,000		40,000		40,000
Overtime	100		48,014		48,981		48,981		48,981		48,981
Gross Personnel Services		18.0	988,117	17.0	944,240	17.0	944,240	17.0	944,240	17.0	944,240

Notes:

(1) 1 New Position Approved in FY18

(2) (1) Position Reclassed to MW III & (2) Positions Eliminated during FY17

(3) 1 Position Reclassed from PW Foreman during FY17

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works							
DIV 12 Districting							
570-3112-500.01-10	Salaries and Wages	900,103	822,083	855,259	855,259	855,259	855,259
570-3112-500.01-30	Temporary Help	40,000	35,000	40,000	40,000	40,000	40,000
570-3112-500.01-40	Overtime Payments	48,014	54,676	48,981	48,981	48,981	48,981
*	Payroll	988,117	911,759	944,240	944,240	944,240	944,240
570-3112-500.02-71	Wearing Apparel	10,910	9,271	13,765	13,765	13,765	13,765
*	Benefits	10,910	9,271	13,765	13,765	13,765	13,765
570-3112-500.20-00	Administrative Services	1,740	1,805	2,160	2,160	2,160	2,160
570-3112-500.20-10	Postage and Freight	1,300	518	1,300	1,300	1,300	1,300
570-3112-500.20-20	Travel/Training/Meetings	14,040	10,333	21,760	21,760	21,760	21,760
570-3112-500.20-40	Taxes & Licenses	8,250	8,000	38,500	38,500	38,500	38,500
*	Administrative Services	25,330	20,656	63,720	63,720	63,720	63,720
570-3112-500.35-00	Contractual Services	288,200	450,937	981,776	981,776	981,776	981,776
570-3112-500.35-10	Advertising	500	500	500	500	500	500
570-3112-500.35-60	Printing	900	750	2,000	2,000	2,000	2,000
*	Contractual Services	289,600	452,187	984,276	984,276	984,276	984,276
570-3112-500.40-10	Buildings	12,000	11,997	222,500	222,500	222,500	222,500
570-3112-500.40-20	Other Equipment	95,600	120,554	196,500	196,500	196,500	196,500
570-3112-500.40-30	Vehicles	13,500	12,403	12,000	12,000	12,000	12,000
570-3112-500.40-31	Veh. Commercial Repairs	28,100	24,489	10,000	10,000	10,000	10,000
570-3112-500.40-32	Veh. Labor (Internal)	6,900	11,808	10,000	10,000	10,000	10,000
570-3112-500.40-33	Vehicle Tires	3,000	1,000	3,000	3,000	3,000	3,000
*	Maintenance and Repairs	159,100	182,251	454,000	454,000	454,000	454,000
570-3112-500.45-10	Land and Building Rentals	5,742	13,342	13,608	13,608	13,608	13,608
570-3112-500.45-20	Vehicle/Equipment Rental	20,500	18,876	41,000	41,000	41,000	41,000
*	Rentals	26,242	32,218	54,608	54,608	54,608	54,608
570-3112-500.55-10	Agricultural Supplies	5,400	4,557	10,000	10,000	10,000	10,000
570-3112-500.55-20	Supplies - All Other	15,900	16,913	23,700	23,700	23,700	23,700
570-3112-500.55-30	Construction Supplies	103,600	95,094	117,100	117,100	117,100	117,100
570-3112-500.55-35	Cleaning Supplies	800	774	5,000	5,000	5,000	5,000
570-3112-500.55-40	Fuel - Vehicles	15,675	15,178	20,200	20,200	20,200	20,200
570-3112-500.55-60	Minor Equipment	25,250	20,281	45,000	30,000	30,000	30,000
570-3112-500.55-70	Office Supplies	4,700	4,335	6,700	6,700	6,700	6,700

A NT NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works							
DIV 12 Districting							
*	Supplies	171,325	157,132	227,700	212,700	212,700	212,700
570-3112-500.63-15	Heating Fuel	5,205	19,064	17,405	17,405	17,405	17,405
570-3112-500.63-20	Electricity	53,965	45,459	54,265	54,265	54,265	54,265
570-3112-500.63-30	Water and Sewer Charges	6,300	5,854	7,300	7,300	7,300	7,300
570-3112-500.63-35	Stormwater charges	18,674	6,732	18,674	18,674	18,674	18,674
570-3112-500.63-40	Telephone	2,560	5,030	12,840	12,840	12,840	12,840
570-3112-500.63-41	Cellular Phones	8,740	2,256	720	720	720	720
*	Utilities	95,444	84,395	111,204	111,204	111,204	111,204
570-3112-500.70-40	Other Equipment	0	0	0	12,000	12,000	12,000
*	Capital Outlay	0	0	0	12,000	12,000	12,000
**	Districting	1,766,068	1,849,869	2,853,513	2,850,513	2,850,513	2,850,513

Acct	Line #	Description	Detail $	FA Request
0 31 12		***Sewer Utility Districting***		
570-3112-500.01-10		**Payroll / Salaries and Wages**		**$855,259**
	1	FY18 WAGES: 17.0 FTE (03/16/17)	828,053	
	2	.	0	
	3	2) MEAL ALLOWANCE:	1,300	
	4	.	0	
	5	3) STANDBY PAY:	0	
	6	A) SEWER PRIMARY BEEPER (L&T 19M HOURLY RATE):	0	
	7	1) 249 DAYS * $25.95	6,162	
	8	2) 116 DAYS * $38.93 ($25.95*1.5)	4,516	
	9	B) SEWER SECONDARY BEEPER (MW III):	0	
	10	1) 249 DAYS * $18.00	4,482	
	11	2) 116 DAYS * 27.00	3,132	
	12	C) PUMP STATIONS:	0	
	13	1) 249 DAYS * $18.00	4,482	
	14	2) 116 DAYS * $27.00	3,132	
	15	.	0	
570-3112-500.01-30		**Payroll / Temporary Help**		**$40,000**
	1	FY18 INPUT OF INSPECTION DATA AND FIELD COLLECTION	40,000	
	2	DATA	0	
	3	.	0	
570-3112-500.01-40		**Payroll / Overtime Payments**		**$48,981**
	1	1) WEEKEND INSPECTIONS:	0	
	2	WW INSPCTR: 180 HRS * $38.93($25.95 * 1.5X)	7,007	
	3	2) PUMPING STATIONS AND SEWER EMERGENCIES:	0	
	4	A) SEWER FAC TECH: 100HRS*$31.97 ($21.31*1.5X)	3,197	
	5	B) WW COORD: 100 HRS * $37.72	3,772	
	6	3) INSPECTIONS (DIGSAFES, SEWER EMERGENCIES):	0	
	7	A) SW INSP: 3 EE*130HRS * $38.93 ($25.95*1.5X)	15,183	
	8	4) SEWER/STREET INFRASTRUCTURE CLEANING (MW III):	0	
	9	A) NIGHTS: 2 EE*155 HRS* $31.97 ($21.31 * 1.5X)	9,911	
	10	B) BACKUPS: 2 EMPL * 155 HRS * $31.97	9,911	
	11	.	0	
	12	OT HISTORY (INCLUDING CALLBACK):	0	
	13	FY16: $35,444	0	
	14	FY15: $41,438	0	
	15	FY14: $35,189	0	
	16	FY13: $39,900	0	
	17	.	0	
570-3112-500.02-71		**Benefits / Wearing Apparel**		**$13,765**
	1	1) CONTRACTUAL CLOTHING:	0	
	2	A) BOOTS: (CEBA:): 1 * $160	160	
	3	B) UNIFORMS: 15 * $375	5,625	
	4	.	0	
	5	2) NON-CONTRACTUAL CLOTHING:	0	
	6	A) SAFETY CLOTHING (TYVEK SUITS,GLOVES,ETC):	0	
	7	16 EMPL * $150	2,400	
	8	B) EMERGENCY UNIFORM REPLACEMENTS	500	
	9	C) FOUL WEATHER GEAR	800	
	10	.	0	
	11	3) SAFETY STIPEND FOR L&T, SUPV:	0	
	12	15 * $200 + 1 * $240	3,240	
	13	4) L&T PPE:	0	

Acct	Line #	Description	Detail $	FA Request
70 31 12		***Sewer Utility Districting***		
	14	16 * $65	1,040	
	15	.	0	
570-3112-500.20-00		**Administrative Services**		**$2,160**
	1	1) WATER ENVIRONMENT FEDERATION (JE,JM,RG)	1,200	
	2	2) MAINE WASTEWATER CONTROL ASSOC: 6 * $60	420	
	3	(JS, FR, CL, JF, JE, RG)	0	
	4	3) APWA (JE, JM, RG)	540	
570-3112-500.20-10		**Administrative Services / Postage and Freight**		**$1,300**
	1	1) FREIGHT FOR SEWER EQUIPMENT REPAIRS	300	
	2	2) FREIGHT FOR SEWER CAMERA REPAIRS	1,000	
	3	.	0	
570-3112-500.20-20		**Administrative Services / Travel/Training/Meetings**		**$21,760**
	1	1) OSHA HAZ WASTE REFRESHER(JS,FR,CL): 3 * $200	600	
	2	2) RECERTIFICATION FOR WASTEWATER LICENSES	4,160	
	3	THROUGH JETCC (JE + 15 EE): 16 * $260	0	
	4	3) NASSCO TRAINING (PIPELINE ASSMT): 4 * $2,250	10,000	
	5	4) WEF/NEWEA CONFERENCE (JE)	5,000	
	6	5) MANAGEMENT CANDIDATE SCHOOL 2 * $1,000	2,000	
	7	.	0	
570-3112-500.20-40		**Administrative Services / Taxes & Licenses**		**$38,500**
	1	PERMANENT STREET OPENING REPAIRS:	38,500	
	2	700 SQ YD * $55	0	
	3	.	0	
570-3112-500.35-00		**Contractual Services**		**$981,776**
	1	1) SEWER DISTRICTING 100% CHARGES:	0	
	2	A) RAT CONTROL (EMPHASIS ON PENINSULA)	8,000	
	3	B) ELECTRICAL SYSTEM REPAIRS (CONTRACTED OUT)	20,000	
	4	FOR CODE VIOLATIONS	0	
	5	C) SCADA MONITORING CONTRACT: 12 MO * $1,100	30,000	
	6	D) GAS DETECTION DEVICE MONITORING:	7,200	
	7	SET IN CRADLES,CHECKED THROUGH INTERNET	0	
	8	.	0	
	9	2) % SPLIT WITH STORMWATER (571-3140-500-3500):	0	
	10	TOTAL DR COST: $74,152	0	
	11	(A) FUND 570 DR COST:	0	
	12	(B) FUND 571 DR COST: $25,076	0	
	13	A) VACTOR TRUCK DISPOSAL COSTS (ECOMAINE):	0	
	14	400 TONS * $120	48,000	
	15	-LESS STORMWATER (25%): $48,000 * 25%	-12,000	
	16	-SEWER DISTRICTING (75%) $36,000	0	
	17	B) DIG SAFE: 12 * $1,829	21,952	
	18	-LESS STORMWATER (50%): $21,952 * 50%	-10,976	
	19	-SEWER DISTRICTING (50%): $10,976	0	
	20	C) ANSWERING SERVICE (STERICYCLE)	4,200	
	21	-LESS STORMWATER (50%): $4,200 * 50%	-2,100	
	22	-SEWER DISTRICTING (50%): $2100	0	
	23	.	0	
	24	3) CONTRACTED MANHOLE STRUCTURE ADJUSTMENTS:	0	
	25	75 * $2,000	150,000	
	26	4) CONFINED SPACE RESCUE OSHA MANDATED-PFD	70,000	
	27	FLAT FEE TO FIRE DEPT RESCUE TEAM	0	

Acct	Line #	Description	Detail $	FA Request
70 31 12		***Sewer Utility Districting***		
	28	5) RIGHT-OF-WAY SURVEY	50,000	
	29	6) DEFECTIVE SEWER LATERAL INVESTIGATION	7,500	
	30	OUTSIDE HIRED PLUMBING SERVICES:	0	
	31	15 LATERALS * $500 HOUSE	0	
	32	7) COLLAPSE SEWER REPAIRS	340,000	
	33	8) SEWER INSPECTIONS	250,000	
	34	.	0	
570-3112-500.35-10		**Contractual Services / Advertising**		**$500**
	1	RFP'S & RFQ'S	500	
	2	.	0	
570-3112-500.35-60		**Contractual Services / Printing**		**$2,000**
	1	1) MAILINGS & DOOR HANGERS/NOTICES	900	
	2	2) BUSINESS CARDS	200	
	3	3) OTHER	900	
570-3112-500.40-10		**Maintenance and Repairs / Buildings**		**$222,500**
	1	1) PUMPING STATIONS: (9 STATIONS)	0	
	2	A) PAVING RIVERSIDE AND 109 DISTRICT RD	30,000	
	3	B) RIVERSIDE & FRANKLIN PAINT	8,000	
	4	C) PLUMBING SUPPLIES	2,500	
	5	D) ELECTRICAL RPRS & LOCAL ALARM SYSTEMS	7,000	
	6	2) STRUCTURAL STEEL	15,000	
	7	3) 109 DISTRICT RD EMERGENCY GEN CONNECT	25,000	
	8	4) 109 DISTRICT RD ROOF REPAIR	50,000	
	9	5) 109 DISTRICT RD VIDEO SURVEILLANCE	25,000	
	10	6) 109 DISTRICT RD TRUCK BAY HEATING SYSTEM	60,000	
570-3112-500.40-20		**Maintenance and Repairs / Other Equipment**		**$196,500**
	1	1) PUMPING STATIONS:	0	
	2	A) CONTROLS,RELAYS,PLC I/O CARDS (SCADA SYSTEM)	0	
	3	SCADA UPGRADES REPLACEMENT SOFTWARE	20,000	
	4	B) REPLACEMENT PUMP PARTS (MOTOR,VFD,SHAFT,	0	
	5	IMPELLER,ETC)3 REBUILDS	35,000	
	6	2) CONFINED SPACE AIR BLOWERS/SAFETY EQUIPMENT	9,000	
	7	3) CEMENT MIXER & PLATE WACKER	6,000	
	8	4) VALVE & PIPE REPLACEMENTS:	0	
	9	A) RIVERSIDE PUMP STATION(REFURB INFLUENT GRIND	25,000	
	10	B) FRANKLIN PUMP STATION (WW ACCESS DOOR)	15,000	
	11	5) CONDUIT MAINTENANCE	50,000	
	12	6) RECERTIFICATION & REHABILIATION OF	0	
	13	CONFINED ENTRY MAN LIFT	6,000	
	14	7) ROOT CUTTER RECERT & INSPECTION	2,000	
	15	8) CHAIN, CABLE & LIFTING DEVICE	0	
	16	RECERTIFICATION (BOL REQUIREMENT)	5,000	
	17	9) SMALL ENGINE PARTS, EQUIP	1,500	
	18	10) PORTABLE PUMP REPAIR	2,000	
	19	11) GENERATOR REPAIRS:	0	
	20	A) CAT GENERATOR RIVERSIDE ST	1,300	
	21	B) CAT GENERATOR FRANKLIN ST	1,300	
	22	C) CAT GENERATOR HOPE LANE	1,200	
	23	D) ONAN GENERATOR CLAPBOARD RD	1,200	
	24	12) DISTRICTING VACTOR:	0	
	25	ANNUAL FACTORY SERVICE-TENCO	0	
	26	TOTAL COST $20,000 25% SPLIT WITH STORMWATER	15,000	

Acct	Line #	Description	Detail $	FA Request
'0 31 12		***Sewer Utility Districting***		
	27	(571-3140-500-3500)	0	
	28	.	0	
570-3112-500.40-30		**Maintenance and Repairs / Vehicles**		**$12,000**
	1	1) FLEET SERVICE CHARGES: PARTS*	12,000	
	2	*VM REVENUE OFFSET: 100-3145-395-0000	0	
	3	.	0	
570-3112-500.40-31		**Maintenance and Repairs / Veh. Commercial Repairs**		**$10,000**
	1	1) FLEET SERVICES CHARGES:	0	
	2	*VM REVENUE OFFSET: 100-3145-395-0000	0	
	3	A) DISTRICTING COMMERCIAL REPAIRS: T-$10,000	0	
	4	1) GENERAL COMMERCIAL REPAIRS	20,000	
	5	2) LESS SPLIT WITH STORMWATER 50%	-10,000	
	6	.	0	
570-3112-500.40-32		**Maintenance and Repairs / Veh. Labor (Internal)**		**$10,000**
	1	1) FLEET SERVICES CHARGES: LABOR	10,000	
	2	*VM REVENUE OFFSET: 100-3145-395-0000	0	
	3	.	0	
570-3112-500.40-33		**Maintenance and Repairs / Vehicle Tires**		**$3,000**
	1	FLEET SERVICE CHARGES: TIRES	3,000	
	2	*VM REVENUE OFFSET: 100-3145-395-0000	0	
	3	.	0	
)-3112-500.45-10		**Rentals / Land and Building Rentals**		**$13,608**
	1	1) JETPORT LAND LEASE (OUTER CONGRESS STREET)	0	
	2	*DATA COMES FROM JETPORT (RM)	13,608	
	3	.	0	
570-3112-500.45-20		**Rentals / Vehicle/Equipment Rental**		**$41,000**
	1	1) TOOLS,PUMPS,OXYGEN & ACETYLENE TANK RENTALS	1,000	
	2	2) MOWERS & BACKHOE RENTALS-RIGHT OF WAY MAINT	0	
	3	EXCAVATOR, TRAILER, CHIPPER, FORK LIFT	20,000	
	4	3) SPECIALTY RENTALS FOR CONSTRUCTION ACTIVITY	20,000	
570-3112-500.55-10		**Supplies / Agricultural Supplies**		**$10,000**
	1	1) GRASS SEED, SOD,FERTILIZER, LOAM	7,000	
	2	(ROW RESTORATION SOD FOR 117 REGAN LANE)	0	
	3	2) EROSION CONTROL MATS (ROW REPAIR BMP'S)	3,000	
	4	.	0	
570-3112-500.55-20		**Supplies / Supplies - All Other**		**$23,700**
	1	1) SEWER GREASE REMOVER: 100 GAL * $80	8,000	
	2	2) ACETYLENE, OXYGEN, NITROGEN	1,500	
	3	3) TRACING DYE, TESTING CHEMICALS	300	
	4	4) INDUSTRIAL DETERGENT & VEHICLE WASH	1,200	
	5	5) OIL PADS	1,200	
	6	6) 4 MAGNETIC COVER LIFTING DEVICES	4,000	
	7	7) SEWER INSPECTOR MARKING PAINT	2,000	
	8	8) STEAM CLEANER SUPPLIES	1,500	
	9	9) BARRICADES, GRADE STAKES, LUMBER	4,000	
570-3112-500.55-30		**Supplies / Construction Supplies**		**$117,100**
	1	1) DRIVEWAY REPAIRS & SEALER - PUMPING STATIONS	500	

Acct	Line #	Description	Detail $	FA Request
570 31 12		***Sewer Utility Districting***		
	2	2) HOT TOP: 115 TONS * $75	8,625	
	3	3) COLD PATCH: 35 TONS * $125	4,375	
	4	4) MORTAR & CEMENT: 50 BAGS * $10	500	
	5	5) MORTAR SAND: 50 YDS * $10	500	
	6	6) CRUSHED STONE: 150 YDS * $16	4,800	
	7	7) GRAVEL: 150 YDS * $14	2,100	
	8	.	0	
	9	% SPLIT WITH STORMWATER (571-3140-500-5530):	0	
	10	(FY16 STORMWATER FUND CHANGE: 570 TO 571)	0	
	11	1) PRECAST TUBS & CONES:	10,000	
	12	-LESS STORMWATER (40%): $4,000	-4,000	
	13	-SEWER DISTRICTING (60%): $6,000	0	
	14	2) MANHOLE & CATCH BASIN FRAMES/COVERS ($21,000):	0	
	15	A) REPLACEMENT COVERS: 50 * $150	7,500	
	16	B) FRAME & COVERS: 30 * $900	27,000	
	17	-LESS STORMWATER (40%): $8,400	-13,800	
	18	-SEWER DISTRICTING (60%): $12,600	0	
	19	3) CASCO TRAPS: 300 * $350 = $105,000	105,000	
	20	-LESS STORMWATER (40%): $42,000	-42,000	
	21	-SEWER DISTRICTING (60%): $63,000	0	
	22	4) LOAM 200 YARDS	6,000	
570-3112-500.55-35		**Supplies / Cleaning Supplies**		**$5,000**
	1	JANITORIAL SUPPLIES (3 BUILDINGS)	5,000	
	2	.	0	
)-3112-500.55-40		**Supplies / Fuel - Vehicles**		**$20,200**
	1	1) FUEL CHARGES FROM FLEET:	0	
	2	*VM REVENUE OFFSET: 100-3145-395-0000	0	
	3	A) DIESEL: 4,000 GAL * $2.20/GAL	8,800	
	4	B) UNLEADED: 6,000 GAL * $1.90/GAL	11,400	
	5	.	0	
570-3112-500.55-60		**Supplies / Minor Equipment**		**$30,000**
	1	1) OTHER MINOR EQUIPMENT:	0	
	2	A) RODDING & JETTING EQUIP:	10,000	
	3	REPLACEMENT HOSES/ASSORTED CLEANING NOZZLES	0	
	4	B) REFLECTIVE CONES & SIGNS	2,000	
	5	.	0	
	6	2) % SPLIT WITH STORMWATER (571-3140-500-5560):	0	
	7	(FY16 STORMWATER FUND CHANGE: 570 TO 571)	0	
	8	A) VARIOUS HAND TOOLS, MASON TOOLS $6,000	6,000	
	9	-LESS STORMWATER (40%): $2,400	-2,400	
	10	-SEWER DISTRICTING (60%): $3,600	0	
	11	B) JACK HAMMER HOSES AND EQUIPMENT: $1,500	1,500	
	12	-LESS STORMWATER (40%): $600	-600	
	13	-SEWER DISTRICTING (60%): $900	0	
	14	C) REPLACE VACTOR HOSE/BOOM PIPING (12,500)	12,500	
	15	-LESS STORMWATER (40%): $5,000	-5,000	
	16	-SEWER DISTRICTING (60%) $7,500	0	
	17	.	0	
	18	3) 3 LAPTOPS WITH TRUCK MOUNTS	6,000	
	19	.	0	
	20	CM LVL REDUCTION (03/31/17):	0	
	21	A) TABLET COMPUTERS (5 * $600): (-$3K)	0	
	22	B) HYDRAULIC ROOT CUTTER CM TFR TO 70-40: (-$12K)	0	

Acct	Line #	Description	Detail $	FA Request
0 31 12		***Sewer Utility Districting***		
	23	.	0	
570-3112-500.55-70		**Supplies / Office Supplies**		**$6,700**
	1	1) PENS,PENCILS,PAPER FOR LARGE FORMAT PRINTER	1,000	
	2	2) COMPUTER SUPPLIES	1,700	
	3	3) BLANK DVD,S	400	
	4	4) PLASTIC SAMPLING BOTTLES	100	
	5	5) SEWER INSPECTOR FIELD BOOKS & MAP BOOKS	500	
	6	6) PRINTER SUPPLIES/COLOR PRINTER INK SETS	3,000	
	7	.	0	
570-3112-500.63-10		**Utilities / Gas Service**		**$0**
	1	COMBINED WITH 63-15	0	
570-3112-500.63-15		**Utilities / Heating Fuel**		**$17,405**
	1	1) GENERATORS:	0	
	2	A) FRANKLIN ST PUMP STATION GENERATOR & HEATING:	0	
	3	NO 2 FUEL OIL: 800 GAL * $3.35	2,000	
	4	.	0	
	5	B) HOPE LANE EMERGENCY GENERATOR:	0	
	6	DIESEL: 100 GAL * $3.35/GAL	335	
	7	.	0	
	8	C) FRANKLIN ST EMERGENCY GENERATOR:	0	
	9	DIESEL: 100 GAL * $3.35/GAL	335	
	10	.	0	
	11	D) PORTABLE 40KW EMERGENCY GENERATOR SET:	0	
	12	DIESEL: 100 GAL * $3.35/GAL	335	
	13	.	0	
	14	2) NATURAL GAS:	0	
	15	UNITIL #5120189-5034712	0	
	16	1222 RIVERSIDE ST 04103 (PORTLAND CITY OF)	0	
	17	12 MO * $100/MO	1,200	
	18	.	0	
	19	3) PROPANE	0	
	20	CURTIS ROAD PUMP STATION:	0	
	21	ENERGY USA ACCT # 13425L	0	
	22	12 MO * $100/MO	1,200	
	23	.	0	
	24	4) DISTRICT RD PROPANE	12,000	
570-3112-500.63-20		**Utilities / Electricity**		**$54,265**
	1	BUDGET SUMMARY BILL #211-0457012-001:	0	
	2	INCLUDES FOLLOWING PUMP STATIONS:	0	
	3	.	0	
	4	MEDIUM ACCTS:	0	
	5	1) 441-143-8768-011 FRANKLIN/MARGINAL WAY(MED)	26,400	
	6	SUP $11,946,C $1,819(207,761 KWH); DEL $12,278	0	
	7	2) 441-143-9986-011 RIVERSIDE STREET (MED)	20,200	
	8	SUP $8,832,C $1,215 (153,600 KWH); DEL $9,931	0	
	9	3) CONDUIT BACK COVE	1,000	
	10	.	0	
	11	SMALL ACCTS:	0	
	12	1) 441-143-9897-011 CASTINE AVE	740	
	13	SUPPLY $211,C $30 (3,867 KWH); DEL $446	0	
	14	2) 441-144-0101-011 CLAPBOARD LANE (CURTIS RD)	2,900	
	15	SUPPLY $1,108,C $84 (19,262 KWH); DEL $1,288	0	

Acct	Line #	Description	Detail $	FA Request
31 12		***Sewer Utility Districting***		
	16	3) 441-144-0666-011 PARTRIDGE ROAD	290	
	17	SUPPLY $26,C $4 (451 KWH); DEL $163	0	
	18	4) 441-159-9088-001 LINDEN ST	275	
	19	SUPPLY $30,C $3 (514 KWH); DEL $167	0	
	20	5) 441-167-9713-001 PENNELL AVE	700	
	21	SUPPLY $223,C $13 (3,881 KWH); DEL $369	0	
	22	6) 441-171-5456-001 HOPE LANE	1,460	
	23	SUPPLY $576,C $41 (10,013 KWH); DEL $735	0	
	24	7) 441-183-8996-001 GOWEN RD	300	
	25	SUPPLY $42, CAP $3 (724 KWH); DEL $180	0	
	26	.	0	
	27	**USAGE IS BASED ON RAINFALL AND VARIES YEARLY**	0	
	28	NOT FEASIBLE TO DO A PERCENTAGE INCREASE	0	
	29	.	0	
	30	ACTUALS:	0	
	31	FY16: $53,126	0	
	32	FY15: $48,558	0	
	33	FY14: $49,716	0	
	34	FY13: $47,796	0	
	35	.	0	
570-3112-500.63-30		**Utilities / Water and Sewer Charges**		$7,300
	1	WATER CHARGES:	0	
	2	.	0	
	3	1) 126552-01 1222 RIVERSIDE ST PUMP STN:	0	
	4	$500 * 12 MO	6,000	
	5	2) 145856-01 335 FRANKLIN ST PUMP STN:	0	
	6	$25 * 12 MO	300	
	7	3) 109 DISTRICT RD	1,000	
	8	** NO SEWER CHARGES**	0	
	9	.	0	
	10	FY16 ACTUAL: $5,705	0	
	11	FY15 ACTUAL $6,671	0	
	12	FY14 ACTUAL: $4,723	0	
	13	FY13 ACTUAL: $4,628	0	
	14	FY12 ACTUAL: $5,575	0	
	15	.	0	
570-3112-500.63-35		**Utilities / Stormwater charges**		$18,674
	1	CONGRESS ST SLUDGE STORAGE	18,674	
	2	103 BLUEBERRY RD (NEW FY17)	0	
	3	.	0	
570-3112-500.63-40		**Utilities / Telephone**		$12,840
	1	MONTHLY TIME WARNER CHARGE $130 * 12MOS	1,560	
	2	.	0	
	3	FAIRPOINT COMMUNICATION $50. * 12MOS	600	
	4	.	0	
	5	VERIZON WIRELESS AIRCARD 6 * 50/MO * 12 MOS	3,600	
	6	1) 272-0601 CL TRUCK	0	
	7	2) 650-1492 JS LAPTOP/TRUCK	0	
	8	3) 317-1561 JM TRUCK	0	
	9	4) 650-2117 FR LAPTOP	0	
	10	5) 272-0152 JE LAPTOP	0	
	11	6) FIELD LAPTOP	0	
	12	.	0	

Acct	Line #	Description	Detail $	FA Request
1 31 12		***Sewer Utility Districting***		
	13	DATA PLANS:	0	
	14	1) TABLETS 9 * $50 * 12MOS	5,400	
	15	.	0	
	16	CITY CELL PHONES:	0	
	17	4 * $35 * 12MOS (JM, CL, JS, FR)	1,680	
	18	.	0	
570-3112-500.63-41		**Utilities / Cellular Phones**		**$720**
	1	CELL PHONE REIMBURSEMENT PLAN:	0	
	2	(JE, MF) 2 * $30 * 12MOS	720	
	3	.	0	
570-3112-500.70-40		**Capital Outlay / Other Equipment**		**$12,000**
	1	1) HYDRAULIC ROOT CUTTER: +$12K	12,000	
	2	*FY18 CM INCR.(03/31/17): TFR FROM LINE 55-60	0	
	3	.	0	
		Division Total: 31 12 Districting		**$2,850,513**

Position 456 (46) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N — *Beg / Ending Step* 7 7 — *Step Range* 1 7 — *FTE* 1.00

COGILL SR, BRIAN — XXX-XX-3613 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 6/30/2003

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48			*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**	
						*COLAs***	$0.83	*Wkly Rate*		*Mid Year COLA*	$0.00	*Base Wage:*	$44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40		*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	6/30/2003	14.01	15.01 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00			*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt	11/17/2008	8.62	9.62 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$44,324.80
Review	6/30/2018		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %			*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7	$20.48		$42,598.40	*Add Rate*	$0.00			*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
0.00	$0.00	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40		*Total Salary*	**$44,324.80**		
										Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Position 456 (40) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N — *Beg / Ending Step* 7 7 — *Step Range* 1 7 — *FTE* 1.00

COTE, DUANE — XXX-XX-4005 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 10/28/2002

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48			*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**	
						*COLAs***	$0.83	*Wkly Rate*		*Mid Year COLA*	$0.00	*Base Wage:*	$44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40		*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	10/28/2002	14.68	15.68 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00			*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt	7/13/2006	10.98	11.97 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$44,324.80
Review	10/28/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %			*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7	$20.48		$42,598.40	*Add Rate*	$0.00			*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
1.00	$44,286.80	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40		*Total Salary*	**$44,324.80**		
										Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Position 456 (3) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N — *Beg / Ending Step* 7 7 — *Step Range* 1 7 — *FTE* 1.00

DAIGLE, ADAM — XXX-XX-5316 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 10/3/2005

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48			*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**	
						*COLAs***	$0.83	*Wkly Rate*		*Mid Year COLA*	$0.00	*Base Wage:*	$44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40		*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	10/3/2005	11.75	12.75 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00			*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt	11/17/2008	8.62	9.62 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$44,324.80
Review	10/3/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %			*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7	$20.48		$42,598.40	*Add Rate*	$0.00			*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
1.00	$43,451.20	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40		*Total Salary*	**$44,324.80**		
										Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Position 456 (19) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N — *Beg / Ending Step* 7 7 — *Step Range* 1 7 — *FTE* 1.00

DAY, DAVID — XXX-XX-3088 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 9/21/1992

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48			*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**	
						*COLAs***	$0.83	*Wkly Rate*		*Mid Year COLA*	$0.00	*Base Wage:*	$44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40		*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	9/21/1992	24.79	25.79 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00			*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt	8/29/2004	12.85	13.84 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$44,324.80
Review	9/21/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %			*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7	$20.48		$42,598.40	*Add Rate*	$0.00			*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
1.00	$43,451.20	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40		*Total Salary*	**$44,324.80**		
										Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Position 456 (51) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

HEBERT, BRUCE — XXX-XX-8657 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 9/28/1987

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48			*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**	
						*COLAs***	$0.83	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	9/28/1987	29.78	30.78 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt	10/8/2006	10.74	11.73 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$44,324.80
Review	9/28/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7 $20.48			$42,598.40	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
1.00	$43,451.20	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40	*Total Salary*	**$44,324.80**		
									Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Position 456 (47) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

JOHNS JR, GEORGE — XXX-XX-1447 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 12/12/2005

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48			*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**	
						*COLAs***	$0.83	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	12/12/2005	11.56	12.56 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt	11/17/2008	8.62	9.62 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$44,324.80
Review	12/12/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7 $20.48			$42,598.40	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
1.00	$43,451.20	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40	*Total Salary*	**$44,324.80**		
									Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Position 456 (49) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

KRYSINSKI, MIROSLAW — XXX-XX-0910 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 2/2/2004

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48			*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**	
						*COLAs***	$0.83	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	2/2/2004	13.42	14.42 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt	11/17/2008	8.62	9.62 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$44,324.80
Review	2/2/2018		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7 $20.48			$42,598.40	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
1.00	$43,451.20	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40	*Total Salary*	**$44,324.80**		
									Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Position 456 (18) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

PESCE SR, ROCCO — XXX-XX-1933 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 11/5/1990

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48			*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**	
						*COLAs***	$0.83	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00
Hire	11/5/1990	26.67	27.67 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Appt	3/19/2007	10.29	11.29 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$44,324.80
Review	11/5/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00	*Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7 $20.48			$42,598.40	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
1.00	$43,451.20	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40	*Total Salary*	**$44,324.80**		
									Elm 02 Yrly Add Pay	$0.00		

*Empl Note**: No

Position 456 (8) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* MX *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

SHAW, DAVID XXX-XX-1309 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 11/12/2002

		FY18 Yrs: Start / End		Hrs	Amount
Rule	172				
Hire	11/12/2002	14.64	15.64 *Step 1*	0.00	$0.00
Appt	11/20/2005	11.62	12.62 *Step 2*	0.00	$0.00
Review	11/12/2017		*StepTotal*	0.00	$0.00

*FY17 Budget Current Step / Base***:* 7 $20.48 $42,598.40

1.00 $43,451.20 *FY17 Base Ending Salary:* $42,598.40

Empl Note:* No

*FY17 Ending Hrly Rate**	$20.48		
*COLAs***	$0.83	*Wkly Rate*	
FY18 Base Start Hrly Rate	$21.31	$852.40	
FY18 Step Increase	$0.00		
FY18 Base End Hrly Rate	$21.31	$852.40	
Add Pct	0.00 %		
Add Rate	$0.00		
FY18 Total End Hrly Rate	$21.31	$852.40	

FY18 Annual Base	$44,324.80
Mid Year COLA	$0.00
AddPct Total	$0.00
S/C	$0.00
Fire Vac. Bonus / Holiday Pay	$0.00
Supr/AddPay Total	$0.00
AddRate Total	$0.00
Total Salary	**$44,324.80**
Elm 02 Yrly Add Pay	$0.00

Dept. Revised Figures

Base Wage:	$44,324.80
Add Pct, S/C, Fire:	$0.00
Add Pay/Add Rate:	$0.00
Total Salary:	$44,324.80
Position Count: 1.00	*Wkly Hrs:* 40.00
Dept. Revised Wage Desc.:	

Position 456 (992) MAINTENANCE WORKER III — *Union* 21 *Grade* L18 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 7 *FTE* 0.00

Unfilled auth, FY18 456(992)+ XXX-XX-3112 *FTE* 0.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City*

		FY18 Yrs: Start / End		Hrs	Amount
Rule	0				
Hire	7/1/2017	0.00	0.00 *Step 1*		
Appt		0.00	0.00 *Step 2*		
Review	7/1/2018		*StepTotal*		

*FY17 Budget Current Step / Base***:* $0.00 $0.00

0.00 $0.00 *FY17 Base Ending Salary:* $0.00

Empl Note:* Yes *PN Date:* 3/16/2017 *Postion Note:* Delete New Request @ DR Lvl (per PH 03/16/17); +1.0 New Position Request (per P

*FY17 Ending Hrly Rate**	$0.00		
*COLAs***	$0.00	*Wkly Rate*	
FY18 Base Start Hrly Rate	$18.22	$728.80	
FY18 Step Increase	$0.00		
FY18 Base End Hrly Rate	$18.95	$758.00	
Add Pct	0.00 %		
Add Rate	$0.00		
FY18 Total End Hrly Rate	$0.00	$0.00	

FY18 Annual Base	$0.00
Mid Year COLA	$0.00
AddPct Total	$0.00
S/C	$0.00
Fire Vac. Bonus / Holiday Pay	$0.00
Supr/AddPay Total	$0.00
AddRate Total	$0.00
Total Salary	**$0.00**
Elm 02 Yrly Add Pay	$0.00

Dept. Revised Figures

Base Wage:	$0.00
Add Pct, S/C, Fire:	$0.00
Add Pay/Add Rate:	$0.00
Total Salary:	$0.00
Position Count: 0.00	*Wkly Hrs:* 0.00
Dept. Revised Wage Desc.:	

Deleted in DR after CM Lvl Copied

Position 296 (998) Public Works Foreman+ — *Union* 23 *Grade* S24 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 7 *FTE* 0.00

Unfilled auth, FY18 296(998)+ XXX-XX-3112 *FTE* 0.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City*

		FY18 Yrs: Start / End		Hrs	Amount
Rule	0				
Hire	7/1/2017	0.00	0.00 *Step 1*		
Appt		0.00	0.00 *Step 2*		
Review	7/1/2018		*StepTotal*		

*FY17 Budget Current Step / Base***:* $0.00 $0.00

0.00 $0.00 *FY17 Base Ending Salary:* $0.00

Empl Note:* Yes *PN Date:* 3/16/2017 *Postion Note:* Delete New Request @ DR Lvl (per PH 03/16/17); +1.0 New Position (of 2) Request

*FY17 Ending Hrly Rate**	$0.00		
*COLAs***	$0.00	*Wkly Rate*	
FY18 Base Start Hrly Rate	$18.87	$754.80	
FY18 Step Increase	$0.00		
FY18 Base End Hrly Rate	$19.62	$784.80	
Add Pct	0.00 %		
Add Rate	$0.00		
FY18 Total End Hrly Rate	$0.00	$0.00	

FY18 Annual Base	$0.00
Mid Year COLA	$0.00
AddPct Total	$0.00
S/C	$0.00
Fire Vac. Bonus / Holiday Pay	$0.00
Supr/AddPay Total	$0.00
AddRate Total	$0.00
Total Salary	**$0.00**
Elm 02 Yrly Add Pay	$0.00

Dept. Revised Figures

Base Wage:	$0.00
Add Pct, S/C, Fire:	$0.00
Add Pay/Add Rate:	$0.00
Total Salary:	$0.00
Position Count: 0.00	*Wkly Hrs:* 0.00
Dept. Revised Wage Desc.:	

Deleted in DR after CM Lvl Copied

Position 296 (999) Public Works Foreman+ — *Union* 23 *Grade* S24 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 7 *FTE* 0.00

Unfilled auth, FY18 296(999)+ XXX-XX-3112 *FTE* 0.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City*

		FY18 Yrs: Start / End		Hrs	Amount
Rule	0				
Hire	7/1/2017	0.00	0.00 *Step 1*		
Appt		0.00	0.00 *Step 2*		
Review	7/1/2018		*StepTotal*		

*FY17 Budget Current Step / Base***:* $0.00 $0.00

0.00 $0.00 *FY17 Base Ending Salary:* $0.00

Empl Note:* Yes *PN Date:* 3/16/2017 *Postion Note:* Delete New Request @ DR Lvl (per PH 03/16/17); +1.0 New Position (of 2) Request

*FY17 Ending Hrly Rate**	$0.00		
*COLAs***	$0.00	*Wkly Rate*	
FY18 Base Start Hrly Rate	$18.97	$758.80	
FY18 Step Increase	$0.00		
FY18 Base End Hrly Rate	$19.62	$784.80	
Add Pct	0.00 %		
Add Rate	$0.00		
FY18 Total End Hrly Rate	$0.00	$0.00	

FY18 Annual Base	$0.00
Mid Year COLA	$0.00
AddPct Total	$0.00
S/C	$0.00
Fire Vac. Bonus / Holiday Pay	$0.00
Supr/AddPay Total	$0.00
AddRate Total	$0.00
Total Salary	**$0.00**
Elm 02 Yrly Add Pay	$0.00

Dept. Revised Figures

Base Wage:	$0.00
Add Pct, S/C, Fire:	$0.00
Add Pay/Add Rate:	$0.00
Total Salary:	$0.00
Position Count: 0.00	*Wkly Hrs:* 0.00
Dept. Revised Wage Desc.:	

Deleted in DR after CM Lvl Copied

Position 323 (1) SEWER FACILITIES TECHNICIAN — *Union* 21 *Grade* L18 *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

FOLEY, MICHAEL — XXX-XX-7883 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 4/23/1990

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$20.48		*FY18 Annual Base*	$44,324.80	**Dept. Revised Figures**
						*COLAs***	$0.83	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:* $44,324.80
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$21.31	$852.40	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:* $0.00
Hire	4/23/1990	27.21	28.21 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:* $0.00
Appt	9/10/2007	9.81	10.81 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$21.31	$852.40	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:* $44,324.80
Review	4/23/2018		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00 *Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7 $20.48			$42,598.40	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*
1.00	$43,451.20	*FY17 Base Ending Salary:*			$42,598.40	*FY18 Total End Hrly Rate*	$21.31	$852.40	*Total Salary*	**$44,324.80**	
									Elm 02 Yrly Add Pay	$0.00	

*Empl Note**: No

Position 324 (3) SEWER INSPECTOR — *Union* 21 *Grade* 19M *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

LEONARD, CARL — XXX-XX-0343 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 3/13/1989

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$24.94		*FY18 Annual Base*	$53,976.00	**Dept. Revised Figures**
						*COLAs***	$1.01	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:* $53,976.00
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$25.95	$1,038.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:* $0.00
Hire	3/13/1989	28.32	29.32 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:* $0.00
Appt	10/12/2004	12.73	13.72 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$25.95	$1,038.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:* $53,976.00
Review	3/13/2018		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00 *Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7 $24.94			$51,875.20	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*
1.00	$52,915.20	*FY17 Base Ending Salary:*			$51,875.20	*FY18 Total End Hrly Rate*	$25.95	$1,038.00	*Total Salary*	**$53,976.00**	
									Elm 02 Yrly Add Pay	$0.00	

*Empl Note**: No

Position 324 (1) SEWER INSPECTOR — *Union* 21 *Grade* 19M *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

RUBINO, FRANK — XXX-XX-1326 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 12/13/1992

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$24.94		*FY18 Annual Base*	$53,976.00	**Dept. Revised Figures**
						*COLAs***	$1.01	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:* $53,976.00
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$25.95	$1,038.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:* $0.00
Hire	12/13/1992	24.56	25.56 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:* $0.00
Appt	3/28/2005	12.27	13.27 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$25.95	$1,038.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:* $53,976.00
Review	12/13/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00 *Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7 $24.94			$51,875.20	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*
1.00	$52,915.20	*FY17 Base Ending Salary:*			$51,875.20	*FY18 Total End Hrly Rate*	$25.95	$1,038.00	*Total Salary*	**$53,976.00**	
									Elm 02 Yrly Add Pay	$0.00	

*Empl Note**: No

Position 324 (2) SEWER INSPECTOR — *Union* 21 *Grade* 19M *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

SLOAN, JAMES — XXX-XX-2154 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3112-500-0110 100 % *City* 2/27/1989

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$24.94		*FY18 Annual Base*	$53,976.00	**Dept. Revised Figures**
						*COLAs***	$1.01	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:* $53,976.00
Rule	172	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$25.95	$1,038.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:* $0.00
Hire	2/27/1989	28.36	29.36 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:* $0.00
Appt	7/23/2004	12.95	13.95 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$25.95	$1,038.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:* $53,976.00
Review	2/27/2018		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 1.00 *Wkly Hrs:* 40.00
FY17 Budget	*Current Step / Base***:*	7 $24.94			$51,875.20	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*
1.00	$52,915.20	*FY17 Base Ending Salary:*			$51,875.20	*FY18 Total End Hrly Rate*	$25.95	$1,038.00	*Total Salary*	**$53,976.00**	
									Elm 02 Yrly Add Pay	$0.00	

*Empl Note**: No

Position 745 (13) SR PUBLIC SERVICES SUPERVISOR *Union* 23 *Grade* S27 *Review Type* MX *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00
GIAMPETRUZZI, ROBERT XXX-XX-1644 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00 *FY18 Annual Base* $52,832.00 **Dept. Revised Figures**
Dist / Dist % 570-3112-500-0110 100 % *City* 5/16/1988 *FY17 Ending Hrly Rate** $24.41 *Mid Year COLA* $0.00 *Base Wage:* $52,832.00
FY18 Yrs: *COLAs*** $0.99 *Wkly Rate* *AddPct Total* $0.00 *Add Pct, S/C, Fire:* $0.00
Rule 206 *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $25.40 $1,016.00 *S/C* $0.00 *Add Pay/Add Rate:* $0.00
Hire 5/16/1988 29.15 30.14 *Step 1* 0.00 $0.00 *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $52,832.00
Appt 7/7/1996 21.00 21.99 *Step 2* 0.00 $0.00 *FY18 Base End Hrly Rate* $25.40 $1,016.00 *Supr/AddPay Total* $0.00 *Position Count:* 1.00 *Wkly Hrs:* 40.00
Review 5/16/2018 *StepTotal* 0.00 $0.00 *Add Pct* 0.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*
*FY17 Budget Current Step / Base***:* 7 $24.90 $51,792.00 *Add Rate* $0.00 *Total Salary* **$52,832.00**
1.00 $51,792.00 *FY17 Base Ending Salary:* $50,772.80 *FY18 Total End Hrly Rate* $25.40 $1,016.00 *Elm 02 Yrly Add Pay* $0.00
*Empl Note**: No

Position 745 (8) SR PUBLIC SERVICES SUPERVISOR *Union* 23 *Grade* S27 *Review Type* MX *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00
MCCANN, JAMES XXX-XX-7074 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00 *FY18 Annual Base* $52,832.00 **Dept. Revised Figures**
Dist / Dist % 570-3112-500-0110 100 % *City* 7/18/1977 *FY17 Ending Hrly Rate** $24.41 *Mid Year COLA* $0.00 *Base Wage:* $52,832.00
FY18 Yrs: *COLAs*** $0.99 *Wkly Rate* *AddPct Total* $0.00 *Add Pct, S/C, Fire:* $0.00
Rule 206 *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $25.40 $1,016.00 *S/C* $0.00 *Add Pay/Add Rate:* $0.00
Hire 7/18/1977 39.98 40.98 *Step 1* 0.00 $0.00 *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $52,832.00
Appt 9/3/1984 32.85 33.84 *Step 2* 0.00 $0.00 *FY18 Base End Hrly Rate* $25.40 $1,016.00 *Supr/AddPay Total* $0.00 *Position Count:* 1.00 *Wkly Hrs:* 40.00
Review 7/18/2017 *StepTotal* 0.00 $0.00 *Add Pct* 0.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*
*FY17 Budget Current Step / Base***:* 7 $24.90 $51,792.00 *Add Rate* $0.00 *Total Salary* **$52,832.00**
1.00 $51,792.00 *FY17 Base Ending Salary:* $50,772.80 *FY18 Total End Hrly Rate* $25.40 $1,016.00 *Elm 02 Yrly Add Pay* $0.00
*Empl Note**: No

Position 745 (999) SR PUBLIC SERVICES SUPERVISOR *Union* 23 *Grade* S27 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 7 *FTE* 0.00
Unfilled auth, FY18 745(999)+ XXX-XX-3112 *FTE* 0.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00 *FY18 Annual Base* $0.00 **Dept. Revised Figures**
Dist / Dist % 570-3112-500-0110 100 % *City* *FY17 Ending Hrly Rate** $0.00 *Mid Year COLA* $0.00 *Base Wage:* $43,659.20
FY18 Yrs: *COLAs*** $0.00 *Wkly Rate* *AddPct Total* $0.00 *Add Pct, S/C, Fire:* $0.00
Rule 0 *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $20.58 $823.20 *S/C* $0.00 *Add Pay/Add Rate:* $0.00
Hire 7/1/2017 0.00 0.00 *Step 1* *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $43,659.20
Appt 0.00 0.00 *Step 2* *FY18 Base End Hrly Rate* $21.40 $856.00 *Supr/AddPay Total* $0.00 *Position Count:* 1.00 *Wkly Hrs:* 40.00
Review 7/1/2018 *StepTotal* *Add Pct* 0.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*
*FY17 Budget Current Step / Base***:* $0.00 $0.00 *Add Rate* $0.00 *Total Salary* **$0.00** 26 wks * $20.58 * 40 hr (=$21,403.20) + 26
0.00 $0.00 *FY17 Base Ending Salary:* $0.00 *FY18 Total End Hrly Rate* $0.00 $0.00 *Elm 02 Yrly Add Pay* $0.00 wks * $21.40 * 40 hr (=$22,256) = $43,659.20; Added to DR after CM Lvl Copied
*Empl Note**: Yes *PN Date:* 3/16/2017 *Postion Note:* FY18 New Position Request (per PH 03/16/17)

Position 594 (1) WASTEWATER FACILITIES COORD *Union* 15 *Grade* PT9 *Review Type* MX *FY18 Step Eligible* N *Beg / Ending Step* 10 10 *Step Range* 1 10 *FTE* 1.00
EMERSON, JOHN XXX-XX-7660 *FTE* 1.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50 *FY18 Annual Base* $73,554.00 **Dept. Revised Figures**
Dist / Dist % 570-3112-500-0110 100 % *City* 11/19/2007 *FY17 Ending Hrly Rate** $36.26 *Mid Year COLA* $0.00 *Base Wage:* $73,554.00
FY18 Yrs: *COLAs*** $1.46 *Wkly Rate* *AddPct Total* $0.00 *Add Pct, S/C, Fire:* $0.00
Rule 70 *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $37.72 $1,414.50 *S/C* $0.00 *Add Pay/Add Rate:* $0.00
Hire 11/19/2007 9.62 10.62 *Step 1* 0.00 $0.00 *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $73,554.00
Appt 11/19/2007 9.62 10.62 *Step 2* 0.00 $0.00 *FY18 Base End Hrly Rate* $37.72 $1,414.50 *Supr/AddPay Total* $0.00 *Position Count:* 1.00 *Wkly Hrs:* 37.50
Review 11/19/2017 *StepTotal* 0.00 $0.00 *Add Pct* 0.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*
*FY17 Budget Current Step / Base***:* ## $36.99 $72,130.50 *Add Rate* $0.00 *Total Salary* **$73,554.00**
1.00 $71,314.71 *FY17 Base Ending Salary:* $70,707.00 *FY18 Total End Hrly Rate* $37.72 $1,414.50 *Elm 02 Yrly Add Pay* $0.00
*Empl Note**: No

Position 910 (12) CHARGES FROM — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

CHARGES FROM, 00012 XXX-XX-1626 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3112-500-0110 100 % *City*

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$0.00	
Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$0.00	
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base***:*			$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: No

Position 905 (22) LESS CHARGES — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

LESS CHARGES, 00022 XXX-XX-1582 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3112-500-0110 100 % *City*

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$0.00	
Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$0.00	
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base***:*			$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: No

Position 890 (10) MEAL ALLOW/STANDBY PAY — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

MEAL ALLOW/STANDBY PA XXX-XX-1376 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3112-500-0110 100 % *City*

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$27,206.00	
Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$27,206.00	
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base***:*			$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: No

Position 895 (3) WINTER STIPENDS — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

WINTER STIPENDS, 00003 XXX-XX-1402 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3112-500-0110 100 % *City*

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$0.00	
Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$0.00	
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base***:*			$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: No

Position 901 (56) TEMPORARY HELP — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

TEMPORARY HELP, 00056 XXX-XX-1429 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3112-500-0130 100 % *City*

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$40,000.00	
Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$40,000.00	
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base***:*			$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: No

Position 902 (70) OVERTIME — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

OVERTIME, 00070 XXX-XX-1518 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3112-500-0140 100 % *City*

		FY18 Yrs:				*FY17 Ending Hrly Rate**	$0.00		*FY18 Annual Base*	$0.00	**Dept. Revised Figures**		
						*COLAs***	$0.00	*Wkly Rate*	*Mid Year COLA*	$0.00	*Base Wage:*	$48,981.00	
Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*AddPct Total*	$0.00	*Add Pct, S/C, Fire:*	$0.00	
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00	
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$48,981.00	
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*Supr/AddPay Total*	$0.00	*Position Count:* 0.00	*Wkly Hrs:*	0.00
FY17 Budget	*Current Step / Base***:*			$0.00	$0.00	*Add Rate*	$0.00		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Total Salary*	**$0.00**			
									Elm 02 Yrly Add Pay	$0.00			

*Empl Note**: No

Org. Totals: **31-12-500**

HTE: Base $784,394 *Mid YearCOLA* $0 *AddPct* $0 *S/C* $0 *Vac Bonus* $0 *Holiday* $0 *AddPay* $0 *AddRate* $0

* *HTE:*	*Yrly Add Pay*	$0	*FTE*	**16.00**	*Base*	$784,394	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$784,394**
* *Dept Request:*	*Yrly Add Pay*	$0	*FTE*	**17.00**	*Base*	$944,240	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$944,240**
** *Diff Dept / HTE:*		$0		**1.00**		$159,846		$0		$0		**$159,846**

**Label Descriptor May not be 100% Accurate Due to Contract Settlement Delays & Mid-Yr Contracts*

***Represents Accumulated COLAs (ie FY17 Pay Plan in Effect After Download)*

Org 31-15-500

Sewer Communications

The Public Works Sewer Communications division accounts for the associated costs incurred for sewer related functions including service requests, street flooding and Dig Safe requests.

The expenditures decreased $3,477 or 5.1%.

Division Summary

Department: Public Works **Division:** Sewer Communications **Account:** 570-31-15

	FY17 Approp.	FY17 Projected Expend.	FY18 Department Submission	FY18 Manager's Recomm.	FY18 Finance Comm.	FY18 Final Allowance
Classification Breakdown						
Payroll	57,644	54,736	58,799	58,799	58,799	58,799
Benefits	5,247	500	615	615	615	615
Administrative Services	100	50	100	100	100	100
Rentals	1,200	1,200	1,500	1,500	1,500	1,500
Supplies	3,342	3,396	3,042	3,042	3,042	3,042
Total	67,533	59,882	64,056	64,056	64,056	64,056

Personnel Services Detail

Department: Public Works **Division:** Sewer Communications **Account:** 570-31-15

Position	Funding Source City	Fed	Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Senior Operations Dispatcher	100			1	51,792	1	52,832	1	52,832	1	52,832	1	52,832
Meal Allow/Standby Pay	100				100		100		100		100		100
Overtime	100				5,752		5,867		5,867		5,867		5,867
Gross Personnel Services				1.0	57,644	1.0	58,799	1.0	58,799	1.0	58,799	1.0	58,799

FY18 DIVISION LINE CATEGORY SUMMARY

REPORT: FA-DIV

	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
	FUND 570 Sewer Utility						
	DEPT 31 Public Works						
	DIV 15 Communications						
*	Payroll	57,644	54,736	58,799	58,799	58,799	58,799
*	Benefits	5,247	500	615	615	615	615
*	Administrative Services	100	50	100	100	100	100
*	Rentals	1,200	1,200	1,500	1,500	1,500	1,500
*	Supplies	3,342	3,396	3,042	3,042	3,042	3,042
**	Communications	67,533	59,882	64,056	64,056	64,056	64,056

Personnel Services Detail

Department: Public Works **Division:** Sewer Communications **Account:** 570-31-15

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Senior Operations Dispatcher	100	1	51,792	1	52,832	1	52,832	1	52,832	1	52,832
Meal Allow/Standby Pay	100		100		100		100		100		100
Overtime	100		5,752		5,867		5,867		5,867		5,867
Gross Personnel Services		1.0	57,644	1.0	58,799	1.0	58,799	1.0	58,799	1.0	58,799

JNT NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works							
DIV 15 Communications							
570-3115-500.01-10	Salaries and Wages	51,892	51,892	52,932	52,932	52,932	52,932
570-3115-500.01-40	Overtime Payments	5,752	2,844	5,867	5,867	5,867	5,867
*	Payroll	57,644	54,736	58,799	58,799	58,799	58,799
570-3115-500.02-71	Wearing Apparel	5,247	500	615	615	615	615
*	Benefits	5,247	500	615	615	615	615
570-3115-500.20-20	Travel/Training/Meetings	100	50	100	100	100	100
*	Administrative Services	100	50	100	100	100	100
570-3115-500.45-30	Office Equipment Rental	1,200	1,200	1,500	1,500	1,500	1,500
*	Rentals	1,200	1,200	1,500	1,500	1,500	1,500
570-3115-500.55-60	Minor Equipment	2,542	2,451	2,542	2,542	2,542	2,542
570-3115-500.55-70	Office Supplies	800	945	500	500	500	500
*	Supplies	3,342	3,396	3,042	3,042	3,042	3,042
**	Communications	67,533	59,882	64,056	64,056	64,056	64,056

Acct	Line #	Description	Detail $	FA Request
31 15		***Sewer Utility Communications***		
570-3115-500.01-10		**Payroll / Salaries and Wages**		**$52,932**
	1	1) FY18 WAGES: 1.0 FTE (03/16/17)	52,832	
	2	2) MEAL ALLOWANCE	100	
	3	.	0	
570-3115-500.01-40		**Payroll / Overtime Payments**		**$5,867**
	1	DISPATCHER COVERAGE (FLOODS, SEWER BACK-UP, ETC):	0	
	2	1) 8 DAYS * 8 HRS * $38.10 ($25.40* 1.5X)	2,438	
	3	2) 30 WKS * 3 HRS * $38.10	3,429	
	4	.	0	
	5	FY16: $1,835	0	
	6	FY15: $5,870	0	
	7	FY14: $1,308	0	
	8	.	0	
	9	UPDATED PMH 1/19/17	0	
570-3115-500.02-71		**Benefits / Wearing Apparel**		**$615**
	1	1) CONTRACTUAL CLOTHING:	0	
	2	UNIFORM: 1 EMPL * $375	375	
	3	.	0	
	4	2) SAFETY STIPEND FOR L&T BOOTS AND SUPV PPE:	0	
	5	B) SEWER COMMUNICATIONS (3115): 1 EMPL * $240	240	
	6	.	0	
570-3115-500.20-20		**Administrative Services / Travel/Training/Meetings**		**$100**
	1	STAFF MEETINGS/CUSTOMER SERVICE	100	
	2	.	0	
570-3115-500.45-30		**Rentals / Office Equipment Rental**		**$1,500**
	1	COPIER RENTAL: 12 MO * $125/MO	1,500	
	2	.	0	
570-3115-500.55-60		**Supplies / Minor Equipment**		**$2,542**
	1	1) PORTABLE RADIOS: 1 * $2,017	2,017	
	2	2) BATTERIES: 7 * $75	525	
	3	.	0	
570-3115-500.55-70		**Supplies / Office Supplies**		**$500**
	1	DISPATCH SUPPLIES	500	
	2	.	0	
		Division Total: 31 15 Communications		**$64,056**

Position 442 (1) SENIOR OPERATIONS DISPATCHER — *Union* 23 *Grade* S27 *Review Type* MX — *FY18 Step Eligible* N *Beg / Ending Step* 7 7 *Step Range* 1 7 *FTE* 1.00

SPRAGUE JR, MAYNARD^ XXX-XX-2912 *FTE* 1.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3115-500-0110 100 % *City* 4/18/1978

Loc 31-15-430 *Rule* 204 *Hire* 4/18/1978 *Appt* 12/25/1994 *Review* 4/18/2018

FY18 Yrs: Start / End		*Hrs*	*Amount*
39.23	40.23 *Step 1*	0.00	$0.00
22.53	23.53 *Step 2*	0.00	$0.00
	StepTotal	0.00	$0.00

*FY17 Budget Current Step / Base***:* 7 $24.90 $51,792.00

1.00 $51,792.00 *FY17 Base Ending Salary:* $50,772.80

*FY17 Ending Hrly Rate**	$24.41		
*COLAs***	$0.99	*Wkly Rate*	
FY18 Base Start Hrly Rate	$25.40	$1,016.00	
FY18 Step Increase	$0.00		
FY18 Base End Hrly Rate	$25.40	$1,016.00	
Add Pct	0.00 %		
Add Rate	$0.00		
FY18 Total End Hrly Rate	$25.40	$1,016.00	

FY18 Annual Base	$52,832.00
Mid Year COLA	$0.00
AddPct Total	$0.00
S/C	$0.00
Fire Vac. Bonus / Holiday Pay	$0.00
Supr/AddPay Total	$0.00
AddRate Total	$0.00
Total Salary	**$52,832.00**
Elm 02 Yrly Add Pay	$0.00

Dept. Revised Figures

Base Wage:	$52,832.00
Add Pct, S/C, Fire:	$0.00
Add Pay/Add Rate:	$0.00
Total Salary:	$52,832.00
Position Count: 1.00	*Wkly Hrs:* 40.00
Dept. Revised Wage Desc.:	

Empl Note:* Yes *PN Date:* 12/16/2016 *Postion Note:* Chg GF Org to 3115-500; W-40/Sum-37.5(Pd 40);FY18: Base-$52,

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Position 442 (999) SENIOR OPERATIONS DISPATCHER — *Union* 23 *Grade* S27 *Review Type* US — *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 7 *FTE* 0.00

Unfilled auth, FY18 442(999)+ XXX-XX-3115 *FTE* 0.00 *Hrs / Yr* 2,080 *Hrs / Wk* 40.00

Dist / Dist % 570-3115-500-0110 100 % *City*

Rule 0 *Hire* 7/1/2017 *Appt* *Review* 7/1/2018

FY18 Yrs: Start / End		*Hrs*	*Amount*
0.00	0.00 *Step 1*		
0.00	0.00 *Step 2*		
	StepTotal		

*FY17 Budget Current Step / Base***:* $0.00 $0.00

0.00 $0.00 *FY17 Base Ending Salary:* $0.00

*FY17 Ending Hrly Rate**	$0.00		
*COLAs***	$0.00	*Wkly Rate*	
FY18 Base Start Hrly Rate	$20.58	$823.20	
FY18 Step Increase	$0.00		
FY18 Base End Hrly Rate	$21.40	$856.00	
Add Pct	0.00 %		
Add Rate	$0.00		
FY18 Total End Hrly Rate	$0.00	$0.00	

FY18 Annual Base	$0.00
Mid Year COLA	$0.00
AddPct Total	$0.00
S/C	$0.00
Fire Vac. Bonus / Holiday Pay	$0.00
Supr/AddPay Total	$0.00
AddRate Total	$0.00
Total Salary	**$0.00**
Elm 02 Yrly Add Pay	$0.00

Dept. Revised Figures

Base Wage:	$0.00
Add Pct, S/C, Fire:	$0.00
Add Pay/Add Rate:	$0.00
Total Salary:	$0.00
Position Count: 0.00	*Wkly Hrs:* 0.00
Dept. Revised Wage Desc.:	

Deleted in DR after CM Lvl Copied

Empl Note:* Yes *PN Date:* 3/16/2017 *Postion Note:* Delete New Request @ DR Lvl (per PH 03/16/17); +1.0 New Position Request in FY

Position 890 (17) MEAL ALLOW/STANDBY PAY — *Union* *Grade* AB *Review Type* — *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

MEAL ALLOW/STANDBY PA XXX-XX-1379 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3115-500-0110 100 % *City*

Rule 606 *Hire* 7/1/2017 *Appt* *Review* 6/30/2017

FY18 Yrs: Start / End		*Hrs*	*Amount*
0.00	1.00 *Step 1*	0.00	$0.00
	Step 2	0.00	$0.00
	StepTotal	0.00	$0.00

*FY17 Budget Current Step / Base***:* $0.00 $0.00

FY17 Base Ending Salary: $0.00

*FY17 Ending Hrly Rate**	$0.00		
*COLAs***	$0.00	*Wkly Rate*	
FY18 Base Start Hrly Rate	$0.00	$0.00	
FY18 Step Increase	$0.00		
FY18 Base End Hrly Rate	$0.00	$0.00	
Add Pct	0.00 %		
Add Rate	$0.00		
FY18 Total End Hrly Rate	$0.00	$0.00	

FY18 Annual Base	$0.00
Mid Year COLA	$0.00
AddPct Total	$0.00
S/C	$0.00
Fire Vac. Bonus / Holiday Pay	$0.00
Supr/AddPay Total	$0.00
AddRate Total	$0.00
Total Salary	**$0.00**
Elm 02 Yrly Add Pay	$0.00

Dept. Revised Figures

Base Wage:	$100.00
Add Pct, S/C, Fire:	$0.00
Add Pay/Add Rate:	$0.00
Total Salary:	$100.00
Position Count: 0.00	*Wkly Hrs:* 0.00
Dept. Revised Wage Desc.:	

Empl Note:* No

Position 902 (81) OVERTIME — *Union* *Grade* AB *Review Type* — *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

OVERTIME, 00081 XXX-XX-1521 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00

Dist / Dist % 570-3115-500-0140 100 % *City*

Rule 606 *Hire* 7/1/2017 *Appt* *Review* 6/30/2017

FY18 Yrs: Start / End		*Hrs*	*Amount*
0.00	1.00 *Step 1*	0.00	$0.00
	Step 2	0.00	$0.00
	StepTotal	0.00	$0.00

*FY17 Budget Current Step / Base***:* $0.00 $0.00

FY17 Base Ending Salary: $0.00

*FY17 Ending Hrly Rate**	$0.00		
*COLAs***	$0.00	*Wkly Rate*	
FY18 Base Start Hrly Rate	$0.00	$0.00	
FY18 Step Increase	$0.00		
FY18 Base End Hrly Rate	$0.00	$0.00	
Add Pct	0.00 %		
Add Rate	$0.00		
FY18 Total End Hrly Rate	$0.00	$0.00	

FY18 Annual Base	$0.00
Mid Year COLA	$0.00
AddPct Total	$0.00
S/C	$0.00
Fire Vac. Bonus / Holiday Pay	$0.00
Supr/AddPay Total	$0.00
AddRate Total	$0.00
Total Salary	**$0.00**
Elm 02 Yrly Add Pay	$0.00

Dept. Revised Figures

Base Wage:	$5,867.00
Add Pct, S/C, Fire:	$0.00
Add Pay/Add Rate:	$0.00
Total Salary:	$5,867.00
Position Count: 0.00	*Wkly Hrs:* 0.00
Dept. Revised Wage Desc.:	

Empl Note:* No

Org. Totals: **31-15-500**

HTE:	*Base*	$52,832	*Mid YearCOLA*	$0	*AddPct*	$0	*S/C*	$0	*Vac Bonus*	$0	*Holiday*	$0	*AddPay*	$0	*AddRate*	$0			
** HTE:*	*Yrly Add Pay*	$0	*FTE*	1.00	*Base*	$52,832	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$52,832**							
** Dept Request:*	*Yrly Add Pay*	$0	*FTE*	1.00	*Base*	$58,799	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$58,799**							
*** Diff Dept / HTE:*		$0		0.00		$5,967		$0		$0		**$5,967**							

Label Descriptor May not be 100% Accurate Due to Contract Settlement Delays & Mid-Yr Contracts

*****Represents Accumulated COLAs (ie FY17 Pay Plan in Effect After Download)***

Org 31-37-500

Position 30 (998) Asst Engineer+ *Union* 15 *Grade* PT7 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 10 *FTE* 0.00

Unfilled auth, FY18 30(998)+ XXX-XX-3137 *FTE* 0.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50 *FY18 Annual Base* $0.00 **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0110 100 % *City* *FY17 Ending Hrly Rate** $0.00 *Mid Year COLA* $0.00 *Base Wage:* $47,316.75

FY18 Yrs: *COLAs*** $0.00 *Wkly Rate* *AddPct Total* $0.00 *Add Pct, S/C, Fire:* $0.00

Rule 0 *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $23.91 $896.63 *S/C* $0.00 *Add Pay/Add Rate:* $0.00

Hire 7/1/2017 0.00 0.00 *Step 1* *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $47,316.75

Appt 0.00 0.00 *Step 2* *FY18 Base End Hrly Rate* $24.62 $923.25 *Supr/AddPay Total* $0.00 *Position Count:* 1.00 *Wkly Hrs:* 37.50

Review 7/1/2018 *StepTotal* *Add Pct* 0.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*

*FY17 Budget Current Step / Base***:* $0.00 $0.00 *Add Rate* $0.00 *Total Salary* **$0.00** Est H-07/01/17 975 hrs * $$23.91 + 975 hrs *

0.00 $0.00 *FY17 Base Ending Salary:* $0.00 *FY18 Total End Hrly Rate* $0.00 $0.00 *Elm 02 Yrly Add Pay* $0.00 $24.62 = $47,316.75; Added to DR after CM Lvl Copied

Empl Note:* Yes *PN Date:* 3/16/2017 *Postion Note:* +1.0 New Position Request in FY18 (per PH 03/16/17)

Position 285 (9) PROJECT ENGINEER *Union* 15 *Grade* PT8 *Review Type* US *FY18 Step Eligible* N *Beg / Ending Step* 10 10 *Step Range* 1 10 *FTE* 1.00

SMITH, NATHANIEL XXX-XX-6405 *FTE* 1.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50 *FY18 Annual Base* $66,924.00 **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0110 100 % *City* 6/30/2008 *FY17 Ending Hrly Rate** $32.99 *Mid Year COLA* $0.00 *Base Wage:* $66,924.00

FY18 Yrs: *COLAs*** $1.33 *Wkly Rate* *AddPct Total* $2,007.72 *Add Pct, S/C, Fire:* $2,007.72

Rule 72 *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $34.32 $1,287.00 *S/C* $0.00 *Add Pay/Add Rate:* $0.00

Hire 6/30/2008 9.01 10.01 *Step 1* 0.00 $0.00 *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $68,931.72

Appt 6/30/2008 9.01 10.01 *Step 2* 0.00 $0.00 *FY18 Base End Hrly Rate* $34.32 $1,287.00 *Supr/AddPay Total* $0.00 *Position Count:* 1.00 *Wkly Hrs:* 37.50

Review 6/30/2018 *StepTotal* 0.00 $0.00 *Add Pct* 3.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*

*FY17 Budget Current Step / Base***:* 9 $32.67 $63,706.50 *Add Rate* $0.00 *Total Salary* **$68,931.72**

1.00 $65,617.70 *FY17 Base Ending Salary:* $64,330.50 *FY18 Total End Hrly Rate* $35.35 $1,325.61 *Elm 02 Yrly Add Pay* $0.00

Empl Note:* Yes *PN Date:* 12/14/2016 *Postion Note:* Prot Pos #285 Stp 9 (06/30/12); FY17: 12 Yr (MX) 06/30/17

Sewer Engineering

The environmental engineering component of the Engineering division concentrates on sewer and storm water systems and compliance programs. Services include sanitary sewer and storm water system construction and rehabilitation, separation of sewage and storm water systems, investigation of drainage complaints and system failures, various environmental permitting, and enforcement of City ordinances and technical standards for sewage, stormwater and industrial waste discharge. This group is also responsible for the implementation of the Combined Sewer Overflow (CSO) abatement program and the industrial pretreatment program, both federally mandated by the Clean Water Act.

Overall the FY18 Sewer Engineering expenditures reflect an increase of $25,417, or 7.7%, largely due to the addition of one new position.

Division Summary

Department: Public Works **Division:** Sewer Engineering **Account:** 570-31-37

	FY17 Approp.	FY17 Projected Expend.	FY18 Department Submission	FY18 Manager's Recomm.	FY18 Finance Comm.	FY18 Final Allowance
Classification Breakdown						
Payroll	261,580	214,568	307,998	307,998	307,998	307,998
Benefits	1,640	1,000	1,180	1,180	1,180	1,180
Administrative Services	20,450	19,195	7,400	7,400	7,400	7,400
Contractual Services	22,950	22,528	19,150	19,150	19,150	19,150
Maintenance and Repairs	4,000	2,489	695	695	695	695
Rentals	1,000	1,000	1,000	1,000	1,000	1,000
Supplies	13,891	10,581	13,505	13,505	13,505	13,505
Utilities	2,880	2,562	2,880	2,880	2,880	2,880
Contributions	0	35	0	0	0	0
Total	328,391	273,958	353,808	353,808	353,808	353,808

Personnel Services Detail

Department: Public Works **Division:** Sewer Engineering **Account:** 570-31-37

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
(1) Senior Engineer	100	0	0	1	77,967	1	77,967	1	77,967	1	77,967
(2) Senior Project Engineer	100	1	76,458	0	0	0	0	0	0	0	0
Project Engineer	100	2	124,383	2	124,447	2	124,447	2	124,447	2	124,447
(3) Associate Engineer	100	0	0	1	47,317	1	47,317	1	47,317	1	47,317
Charges from Eng (GF)	100		51,898		49,256		49,256		49,256		49,256
Overtime	100		8,841		9,011		9,011		9,011		9,011
Gross Personnel Services		3.0	261,580	4.0	307,998	4.0	307,998	4.0	307,998	4.0	307,998

Notes:

(1) 1 Title Change from Senior Project Engineer during FY17

(2) (1) Title Change to Senior Engineer during FY17

(3) 1 New Position Approved in FY18

FY18 DIVISION LINE CATEGORY SUMMARY

REPORT: FA-DIV

	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
FUND 570 Sewer Utility							
DEPT 31 Public Works							
DIV 37 Engineering							
*	Payroll	261,580	214,568	307,998	307,998	307,998	307,998
*	Benefits	1,640	1,000	1,180	1,180	1,180	1,180
*	Administrative Services	20,450	19,195	7,400	7,400	7,400	7,400
*	Contractual Services	22,950	22,528	19,150	19,150	19,150	19,150
*	Maintenance and Repairs	4,000	2,489	695	695	695	695
*	Rentals	1,000	1,000	1,000	1,000	1,000	1,000
*	Supplies	13,891	10,581	13,505	13,505	13,505	13,505
*	Utilities	2,880	2,562	2,880	2,880	2,880	2,880
*	Contributions	0	35	0	0	0	0
**	Engineering	328,391	273,958	353,808	353,808	353,808	353,808

Personnel Services Detail

Department: Public Works **Division:** Sewer Engineering **Account:** 570-31-37

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
(1) Senior Engineer	100	0	0	1	77,967	1	77,967	1	77,967	1	77,967
(2) Senior Project Engineer	100	1	76,458	0	0	0	0	0	0	0	0
Project Engineer	100	2	124,383	2	124,447	2	124,447	2	124,447	2	124,447
(3) Associate Engineer	100	0	0	1	47,317	1	47,317	1	47,317	1	47,317
Charges from Eng (GF)	100		51,898		49,256		49,256		49,256		49,256
Overtime	100		8,841		9,011		9,011		9,011		9,011
Gross Personnel Services		3.0	261,580	4.0	307,998	4.0	307,998	4.0	307,998	4.0	307,998

Notes:

(1) 1 Title Change from Senior Project Engineer during FY17

(2) (1) Title Change to Senior Engineer during FY17

(3) 1 New Position Approved in FY18

ACCOUNT NUMBER * ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works						
DIV 37 Engineering						
570-3137-500.01-10 Salaries and Wages	252,739	210,836	298,987	298,987	298,987	298,987
570-3137-500.01-40 Overtime Payments	8,841	3,732	9,011	9,011	9,011	9,011
* Payroll	261,580	214,568	307,998	307,998	307,998	307,998
570-3137-500.02-71 Wearing Apparel	1,640	1,000	1,180	1,180	1,180	1,180
* Benefits	1,640	1,000	1,180	1,180	1,180	1,180
570-3137-500.20-00 Administrative Services	1,500	1,415	1,250	1,250	1,250	1,250
570-3137-500.20-10 Postage and Freight	100	80	100	100	100	100
570-3137-500.20-20 Travel/Training/Meetings	6,050	4,969	4,600	4,600	4,600	4,600
570-3137-500.20-40 Taxes & Licenses	12,800	12,731	1,450	1,450	1,450	1,450
* Administrative Services	20,450	19,195	7,400	7,400	7,400	7,400
570-3137-500.35-00 Contractual Services	5,150	4,485	850	850	850	850
570-3137-500.35-10 Advertising	750	519	750	750	750	750
570-3137-500.35-20 Arch and Engineering	16,500	17,090	17,000	17,000	17,000	17,000
570-3137-500.35-30 Auto Expense Reimbursed	200	100	200	200	200	200
570-3137-500.35-60 Printing	350	334	350	350	350	350
* Contractual Services	22,950	22,528	19,150	19,150	19,150	19,150
570-3137-500.40-20 Other Equipment	2,500	2,000	0	0	0	0
570-3137-500.40-30 Vehicles	500	5	300	300	300	300
570-3137-500.40-31 Veh. Commercial Repairs	500	484	0	0	0	0
570-3137-500.40-32 Veh. Labor (Internal)	500	0	395	395	395	395
* Maintenance and Repairs	4,000	2,489	695	695	695	695
570-3137-500.45-30 Office Equipment Rental	1,000	1,000	1,000	1,000	1,000	1,000
* Rentals	1,000	1,000	1,000	1,000	1,000	1,000
570-3137-500.55-20 Supplies - All Other	200	200	200	200	200	200
570-3137-500.55-40 Fuel - Vehicles	141	51	55	55	55	55
570-3137-500.55-50 Medical Supplies	200	100	200	200	200	200
570-3137-500.55-60 Minor Equipment	5,350	5,340	4,950	4,950	4,950	4,950
570-3137-500.55-70 Office Supplies	8,000	4,890	8,100	8,100	8,100	8,100
* Supplies	13,891	10,581	13,505	13,505	13,505	13,505
570-3137-500.63-41 Cellular Phones	2,880	2,562	2,880	2,880	2,880	2,880

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works							
DIV 37 Engineering							
*	Utilities	2,880	2,562	2,880	2,880	2,880	2,880
570-3137-500.65-00	Contributions	0	35	0	0	0	0
*	Contributions	0	35	0	0	0	0
**	Engineering	328,391	273,958	353,808	353,808	353,808	353,808

Acct	Line #	Description	Detail $	FA Request
1 31 37		***Sewer Utility Engineering***		
570-3137-500.01-10		**Payroll / Salaries and Wages**		**$298,987**
	1	A) FY18 WAGES: 4.0 FTE (03/16/17)	249,731	
	2	.	0	
	3	B) CHARGEBACKS FROM GF ENGINEERING: T-$49,256	0	
	4	1) ENG MGR (KE): 2.5% * $101,513 = $2,538	2,538	
	5	2) SENIOR ENGINEERS (WC & VAC): T-$10,270	10,270	
	6	(A) SR ENG (WC): 7.5% * $77,967 = $5,847	0	
	7	(B) SR ENG (VAC): 7.5% * $58,968 = $4,423	0	
	8	3) CHIEF SURVEYOR (WS): 10% * $77,988 = $7,799	7,799	
	9	4) SR SURVEYOR (CA, LS, CW): T-$13,389	13,389	
	10	(A) SR SRVYR (CA): 7.5% * $61,349 = $4,601	0	
	11	(B) SR SRVYR (LS): 7.5% * $59,612 = $4,471	0	
	12	(C) SR SRVYR (CW): 7.5% * $57,564 = $4,317	0	
	13	5) SURVEYOR (NEW REQ): 12.5% * $45,611 = $5,701	5,701	
	14	6) GIS MAP'G SPEC (TY): 7.5% * $48,424 = $3,632	3,632	
	15	7) GIS MAP'G TECH (KD): 7.5% * $45,426 = $3,407	3,407	
	16	8) ASSOC ENG (ES): 5% * $50,408 = $2,520	2,520	
	17	*REVENUE OFFSET 100-3137-395-0000	0	
	18	.	0	
	19	NOTE: CHARGEBACKS ARE BOOK AS JOURNAL TRANSFERS	0	
	20	BASED ON TIMESHEETS SUBMITTED.	0	
	21	.	0	
	22	FY18 DR POSTION NOTE:	0	
	23	A) STORMWATER WAGE REIMB: ($38,984)	0	
	24	1) SR ENGINEER (BR): $77,967 * 50% = $38,984	0	
	25	**SEE REVENUE IN 570-3100-395-0000	0	
	26	.	0	
570-3137-500.01-40		**Payroll / Overtime Payments**		**$9,011**
	1	1) NON-PROJECT RELATED EMERGENCIES AND SPECIAL	0	
	2	REQUESTS: 6 EE * 30 HR * $39.00	7,020	
	3	2) POLICE DEPT TRAFFIC CONTROL:	0	
	4	4 HRS * 12 MO * $41.48	1,991	
	5	*ONGOING PWD CSO MONITORING REQUIREMENT	0	
	6	.	0	
	7	FY16: $ 772	0	
	8	FY15: $1,170	0	
	9	FY14: $4,214	0	
	10	FY13: $4,971	0	
	11	.	0	
	12	UPDATED PMH 1/19/17	0	
570-3137-500.02-71		**Benefits / Wearing Apparel**		**$1,180**
	1	1) CONTRACTUAL CLOTHING:	0	
	2	A) BOOT ALLOWANCE: 3 EMPL * $160	480	
	3	2) NON-CONTRACTUAL CLOTHING:	400	
	4	VESTS-GLOVES-HARD HATS-RAIN GEAR	0	
	5	3) OUTER WEAR (BIBS & JACKET): 1 EE * $300	300	
	6	.	0	
570-3137-500.20-00		**Administrative Services**		**$1,250**
	1	DUES & MEMBERSHIPS:	0	
	2	1) A.S.C.E. : 3 * $250	750	
	3	AMERICAN SOCIETY OF CIVIL ENGINEERS	0	
	4	2) MWWCA:	250	

Acct	Line #	Description	Detail $	FA Request
570 31 37		***Sewer Utility Engineering***		
	5	MAINE WASTEWATER CONTROL ASSOC (GROUP RATE)	0	
	6	3) CCTV RECERT (NS)	250	
570-3137-500.20-10		**Administrative Services / Postage and Freight**		**$100**
	1	SHIPPING CHARGES - EQUIPMENT REPAIRS-MONITORS,	100	
	2	SAMPLING	0	
	3	.	0	
570-3137-500.20-20		**Administrative Services / Travel/Training/Meetings**		**$4,600**
	1	PROFESSIONAL DEVELOPMENT:	0	
	2	1) EPA/DEP SEMINARS: 3 * $200	600	
	3	2) APWA COURSES/MAINE LOCAL ROADS: 3 * $200	600	
	4	3) MEWEA COURSES: 3 * $300	900	
	5	4) OSHA HAZ. WASTE (BAR)	250	
	6	5) NEWEA 3 * $500	1,500	
	7	6) STORMWATER CONFERENCE 3 * 250	750	
	8	.	0	
570-3137-500.20-40		**Administrative Services / Taxes & Licenses**		**$1,450**
	1	TAXES/LICENSES/INSURANCE:	0	
	2	.	0	
	3	1) PAN AM:	0	
	4	YEARLY LICENSE FEE FOR RAND ROAD DRAIN	300	
	5	2) HYDROCAD	1,000	
	6	3) SEWER AND DRAINAGE MAINE DOT	150	
	7	.	0	
570-3137-500.35-00		**Contractual Services**		**$850**
	1	1) LIM/SURVEY:	0	
	2	CUMB COUNTY REGISTRY OF DEEDS (RESEARCH/COPIES)	0	
	3	A) PHYSICAL RESEARCH BILLED BY REGISTER OF DEEDS	0	
	4	EST 300	300	
	5	R.O.W. STORM & SANITARY SEWER RESEARCH	0	
	6	.	0	
	7	2) GENERAL: (SHARED 1/2 W/100-3137)	0	
	8	VAULT FIRE PROTECTION ANNUAL INSPECTION	550	
	9	.	0	
570-3137-500.35-10		**Contractual Services / Advertising**		**$750**
	1	HIRING ADS IN PROFESSIONAL PUBLICATIONS	750	
	2	.	0	
570-3137-500.35-20		**Contractual Services / Arch and Engineering**		**$17,000**
	1	1) LIM MAPPING SERVICES:	17,000	
	2	*SPLIT COST W/ GF (100) & STORMWATER (571)	0	
	3	.	0	
570-3137-500.35-30		**Contractual Services / Auto Expense Reimbursed**		**$200**
	1	PERSONAL VEHICLE USE	200	
	2	.	0	
	3	IRS STANDARD MILEAGE RATE: $0.535 (EFF. 01/01/17)	0	
	4	.	0	
570-3137-500.35-60		**Contractual Services / Printing**		**$350**
	1	GENERAL BUSINESS CARDS, LETTERHEAD	350	

Acct	Line #	Description	Detail $	FA Request
0 31 37		***Sewer Utility Engineering***		
570-3137-500.40-20		**Maintenance and Repairs / Other Equipment**		**$0**
	1	1) ANNUAL MAINTENANCE & REPAIRS OF:	0	
	2	SAMPLERS, FLOWMETERS, AIRBLOWER, GAS DETECTORS,	0	
	3	COMPUTERS,PRINTERS,COPIERS,SCANNERS	0	
	4	2) TWO WAY RADIO REPAIRS:	0	
	5	REPLACEMENT BATTERIES, MIC'S, OTHER REPAIRS	0	
	6	.	0	
	7	FY18 NOTE: MOVED TO ADMIN (3101	0	
570-3137-500.40-30		**Maintenance and Repairs / Vehicles**		**$300**
	1	CHARGES FROM FLEET	300	
570-3137-500.40-32		**Maintenance and Repairs / Veh. Labor (Internal)**		**$395**
	1	CHARGES FROM FLEET	395	
570-3137-500.45-30		**Rentals / Office Equipment Rental**		**$1,000**
	1	55 PORTLAND SHARED COPIER	1,000	
	2	.	0	
570-3137-500.55-20		**Supplies / Supplies - All Other**		**$200**
	1	TRACING DYE, TESTING CHEMICALS	200	
	2	.	0	
570-3137-500.55-40		**Supplies / Fuel - Vehicles**		**$55**
	1	CHARGES FROM FLEET:	0	
	2	25 GALLONS UNLEADED * $2.2	55	
570-3137-500.55-50		**Supplies / Medical Supplies**		**$200**
	1	FIRST AID KIT REFILLS	200	
	2	.	0	
570-3137-500.55-60		**Supplies / Minor Equipment**		**$4,950**
	1	1) VARIOUS HAND & MASON TOOLS, REFLECTIVE CONES &	1,650	
	2	SIGNS, PAINT, CLEANING SUPPLIES, LAB SUPPLIES	0	
	3	2) COMPUTER	2,500	
	4	3) IPAD	800	
	5	.	0	
570-3137-500.55-70		**Supplies / Office Supplies**		**$8,100**
	1	1) DESIGN:	0	
	2	GENERAL OFFICE SUPPLIES,STORAGE DVD'S,LABELS	1,200	
	3	2) GENERAL:	0	
	4	A) GENERAL OFFICE SUPPLIES	600	
	5	B) GENERAL COMPUTER SUPPLIES	800	
	6	C) DIGITAL STORAGE MEDIA	500	
	7	3) NEW OFFICE SET-UP	5,000	
	8	.	0	
570-3137-500.63-41		**Utilities / Cellular Phones**		**$2,880**
	1	1) PHONE REIMBURSEMENTS: $30 * 12 MOS * 3 EE	1,080	
	2	2) 3 DATA PLANS FOR IPADS	1,800	
	3	.	0	
		Division Total: 31 37 Engineering		**$353,808**

Position 285 (11) PROJECT ENGINEER — *Union* 15 *Grade* PT8 *Review Type* 6M *FY18 Step Eligible* Y *Beg / Ending Step* 1 3 *Step Range* 0 0 *FTE* 1.00

Unfilled auth, 00011 285(11) — *FTE* 1.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50 — *FY18 Annual Base* $53,596.71 — **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0110 100 % *City* 1/1/2017 — *FY17 Ending Hrly Rate** $25.27 — *Mid Year COLA* $0.00 — *Base Wage:* $55,515.00

FY18 Yrs: — *COLAs*** $1.81 *Wkly Rate* — *AddPct Total* $0.00 — *Add Pct, S/C, Fire:* $0.00

		Start / End		*Hrs*	*Amount*						
Rule	78					*FY18 Base Start Hrly Rate*	$27.08	$1,015.50	*S/C*	$0.00	*Add Pay/Add Rate:* $0.00
Hire	1/1/2017	0.50	1.49 *Step 1*	985.71	$26,693.14	*FY18 Step Increase*	$0.82		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:* $55,515.00
Appt			*Step 2*	964.29	$26,903.57	*FY18 Base End Hrly Rate*	$27.90	$1,046.25	*Supr/AddPay Total*	$0.00	*Position Count:* 1.00 *Wkly Hrs:* 37.50
Review	1/1/2018		*StepTotal*	1,950.00	$53,596.71	*Add Pct*	0.00 %		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*
FY17 Budget		*Current Step / Base***:*		$0.00	$0.00	*Add Rate*	$0.00		*Total Salary*	**$53,596.71**	Anticipated start date 7/1/17. Start midway between step 1 and step 2
		FY17 Base Ending Salary:			$49,276.50	*FY18 Total End Hrly Rate*	$27.90	$1,046.25	*Elm 02 Yrly Add Pay*	$0.00	

*Empl Note**: No

Position 285 (998) PROJECT ENGINEER — *Union* 15 *Grade* PT8 *Review Type* US *FY18 Step Eligible* Y *Beg / Ending Step* 1 2 *Step Range* 1 10 *FTE* 0.00

Unfilled auth, FY18 285(998)+ XXX-XX-3137 *FTE* 0.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50 — *FY18 Annual Base* $0.00 — **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0110 100 % *City* — *FY17 Ending Hrly Rate** $0.00 — *Mid Year COLA* $0.00 — *Base Wage:* $0.00

FY18 Yrs: — *COLAs*** $0.00 *Wkly Rate* — *AddPct Total* $0.00 — *Add Pct, S/C, Fire:* $0.00

		Start / End		*Hrs*	*Amount*						
Rule	0					*FY18 Base Start Hrly Rate*	$26.30	$986.25	*S/C*	$0.00	*Add Pay/Add Rate:* $0.00
Hire	7/1/2017	0.00	0.00 *Step 1*			*FY18 Step Increase*	$0.00		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:* $0.00
Appt		0.00	0.00 *Step 2*			*FY18 Base End Hrly Rate*	$27.08	$1,015.50	*Supr/AddPay Total*	$0.00	*Position Count:* 0.00 *Wkly Hrs:* 0.00
Review	7/1/2018		*StepTotal*			*Add Pct*	0.00 %		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*
FY17 Budget		*Current Step / Base***:*		$0.00	$0.00	*Add Rate*	$0.00		*Total Salary*	**$0.00**	Deleted in DR after CM Lvl Copied
0.00	$0.00	*FY17 Base Ending Salary:*			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Elm 02 Yrly Add Pay*	$0.00	

*Empl Note**: Yes *PN Date:* 3/16/2017 *Postion Note:* Delete New Request @ DR Lvl (per PH 03/16/17); +1.0 New Position Request in FY

Position 767 (3) SENIOR ENGINEER — *Union* 15 *Grade* PT9 *Review Type* MX *FY18 Step Eligible* N *Beg / Ending Step* 10 10 *Step Range* 1 10 *FTE* 1.00

ROLAND, BRADLEY XXX-XX-1378 *FTE* 1.00 *Hrs / Yr* 1,950 *Hrs / Wk* 37.50 — *FY18 Annual Base* $73,554.00 — **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0110 100 % *City* 1/16/1998 — *FY17 Ending Hrly Rate** $36.26 — *Mid Year COLA* $0.00 — *Base Wage:* $73,554.00

FY18 Yrs: — *COLAs*** $1.46 *Wkly Rate* — *AddPct Total* $4,413.24 — *Add Pct, S/C, Fire:* $4,413.24

		Start / End		*Hrs*	*Amount*						
Rule	70					*FY18 Base Start Hrly Rate*	$37.72	$1,414.50	*S/C*	$0.00	*Add Pay/Add Rate:* $0.00
Hire	1/16/1998	19.47	20.47 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:* $77,967.24
Appt	7/5/2009	7.99	8.99 *Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$37.72	$1,414.50	*Supr/AddPay Total*	$0.00	*Position Count:* 1.00 *Wkly Hrs:* 37.50
Review	1/16/2018		*StepTotal*	0.00	$0.00	*Add Pct*	6.00 %		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*
FY17 Budget		*Current Step / Base***:*	##	$36.99	$72,130.50	*Add Rate*	$0.00		*Total Salary*	**$77,967.24**	
		FY17 Base Ending Salary:			$70,707.00	*FY18 Total End Hrly Rate*	$39.98	$1,499.37	*Elm 02 Yrly Add Pay*	$0.00	

*Empl Note**: No

Position 910 (14) CHARGES FROM — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

CHARGES FROM, 00014 XXX-XX-1627 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00 — *FY18 Annual Base* $0.00 — **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0110 100 % *City* — *FY17 Ending Hrly Rate** $0.00 — *Mid Year COLA* $0.00 — *Base Wage:* $49,256.00

FY18 Yrs: — *COLAs*** $0.00 *Wkly Rate* — *AddPct Total* $0.00 — *Add Pct, S/C, Fire:* $0.00

		Start / End		*Hrs*	*Amount*						
Rule	606					*FY18 Base Start Hrly Rate*	$0.00	$0.00	*S/C*	$0.00	*Add Pay/Add Rate:* $0.00
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:* $49,256.00
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Supr/AddPay Total*	$0.00	*Position Count:* 0.00 *Wkly Hrs:* 0.00
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*
FY17 Budget		*Current Step / Base***:*		$0.00	$0.00	*Add Rate*	$0.00		*Total Salary*	**$0.00**	Charges from General Fund Engineering (100-3137)
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Elm 02 Yrly Add Pay*	$0.00	

*Empl Note**: No

Position 890 (12) MEAL ALLOW/STANDBY PAY — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

MEAL ALLOW/STANDBY PA XXX-XX-1382 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00 — *FY18 Annual Base* $0.00 — **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0110 100 % *City* — *FY17 Ending Hrly Rate** $0.00 — *Mid Year COLA* $0.00 — *Base Wage:* $0.00

FY18 Yrs: — *COLAs*** $0.00 *Wkly Rate* — *AddPct Total* $0.00 — *Add Pct, S/C, Fire:* $0.00

Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$0.00
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Supr/AddPay Total*	$0.00	*Position Count:* 0.00 *Wkly Hrs:*	0.00
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
FY17 Budget		*Current Step / Base***:*		$0.00	$0.00	*Add Rate*	$0.00		*Total Salary*	**$0.00**		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Elm 02 Yrly Add Pay*	$0.00		

*Empl Note**: No

Position 901 (54) TEMPORARY HELP — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

TEMPORARY HELP, 00054 XXX-XX-1434 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00 — *FY18 Annual Base* $0.00 — **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0130 100 % *City* — *FY17 Ending Hrly Rate** $0.00 — *Mid Year COLA* $0.00 — *Base Wage:* $0.00

FY18 Yrs: — *COLAs*** $0.00 *Wkly Rate* — *AddPct Total* $0.00 — *Add Pct, S/C, Fire:* $0.00

Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$0.00
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Supr/AddPay Total*	$0.00	*Position Count:* 0.00 *Wkly Hrs:*	0.00
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
FY17 Budget		*Current Step / Base***:*		$0.00	$0.00	*Add Rate*	$0.00		*Total Salary*	**$0.00**		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Elm 02 Yrly Add Pay*	$0.00		

*Empl Note**: No

Position 902 (72) OVERTIME — *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 1 1 *Step Range* 0 0 *FTE* 0.00

OVERTIME, 00072 XXX-XX-1525 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00 — *FY18 Annual Base* $0.00 — **Dept. Revised Figures**

Dist / Dist % 570-3137-500-0140 100 % *City* — *FY17 Ending Hrly Rate** $0.00 — *Mid Year COLA* $0.00 — *Base Wage:* $9,011.00

FY18 Yrs: — *COLAs*** $0.00 *Wkly Rate* — *AddPct Total* $0.00 — *Add Pct, S/C, Fire:* $0.00

Rule	606	*Start / End*		*Hrs*	*Amount*	*FY18 Base Start Hrly Rate*	$0.00	$0.00	*S/C*	$0.00	*Add Pay/Add Rate:*	$0.00
Hire	7/1/2017	0.00	1.00 *Step 1*	0.00	$0.00	*FY18 Step Increase*	$0.00		*Fire Vac. Bonus / Holiday Pay*	$0.00	*Total Salary:*	$9,011.00
Appt			*Step 2*	0.00	$0.00	*FY18 Base End Hrly Rate*	$0.00	$0.00	*Supr/AddPay Total*	$0.00	*Position Count:* 0.00 *Wkly Hrs:*	0.00
Review	6/30/2017		*StepTotal*	0.00	$0.00	*Add Pct*	0.00 %		*AddRate Total*	$0.00	*Dept. Revised Wage Desc.:*	
FY17 Budget		*Current Step / Base***:*		$0.00	$0.00	*Add Rate*	$0.00		*Total Salary*	**$0.00**		
		FY17 Base Ending Salary:			$0.00	*FY18 Total End Hrly Rate*	$0.00	$0.00	*Elm 02 Yrly Add Pay*	$0.00		

*Empl Note**: No

Org. Totals: **31-37-500**

HTE: Base $194,075 *Mid YearCOLA* $0 *AddPct* $6,421 *S/C* $0 *Vac Bonus* $0 *Holiday* $0 *AddPay* $0 *AddRate* $0

* *HTE:*	*Yrly Add Pay*	$0	*FTE*	**3.00**	*Base*	$194,075	*AddPct, S/C, Fire*	$6,421	*AddPay / AddRate*	$0	*Total Salary*	**$200,496**
* *Dept Request:*	*Yrly Add Pay*	$0	*FTE*	**4.00**	*Base*	$301,577	*AddPct, S/C, Fire*	$6,421	*AddPay / AddRate*	$0	*Total Salary*	**$307,998**
** *Diff Dept / HTE:*		$0		**1.00**		$107,502		$0		$0		**$107,502**

**Label Descriptor May not be 100% Accurate Due to Contract Settlement Delays & Mid-Yr Contracts*

***Represents Accumulated COLAs (ie FY17 Pay Plan in Effect After Download)*

Org 31-56-500

Position 876 (999) WAGE ADJUSTMENT *Union* *Grade* AB *Review Type* *FY18 Step Eligible* N *Beg / Ending Step* 0 0 *Step Range* 0 0 *FTE* 0.00

WAGE ADJUSTMENT, FY18 XXX-XX-3156 *FTE* 0.00 *Hrs / Yr* 0 *Hrs / Wk* 0.00 *FY18 Annual Base* $0.00 **Dept. Revised Figures**

Dist / Dist % 570-3156-500-0100 100 % *City* *FY17 Ending Hrly Rate** $0.00 *Mid Year COLA* $0.00 *Base Wage:* $25,000.00

FY18 Yrs: *COLAs*** $0.00 *Wkly Rate* *AddPct Total* $0.00 *Add Pct, S/C, Fire:* $0.00

Rule 0 *Start / End* *Hrs* *Amount* *FY18 Base Start Hrly Rate* $0.00 $0.00 *S/C* $0.00 *Add Pay/Add Rate:* $0.00

Hire 7/1/2017 0.00 0.00 *Step 1* *FY18 Step Increase* $0.00 *Fire Vac. Bonus / Holiday Pay* $0.00 *Total Salary:* $25,000.00

Appt 0.00 0.00 *Step 2* *FY18 Base End Hrly Rate* $0.00 $0.00 *Supr/AddPay Total* $0.00 *Position Count:* 0.00 *Wkly Hrs:* 0.00

Review 6/30/2017 *StepTotal* *Add Pct* 0.00 % *AddRate Total* $0.00 *Dept. Revised Wage Desc.:*

FY17 Budget *Current Step / Base****:* $0.00 $0.00 *Add Rate* $0.00 *Total Salary* **$0.00**

0.00 $0.00 *FY17 Base Ending Salary:* $0.00 *FY18 Total End Hrly Rate* $0.00 $0.00 *Elm 02 Yrly Add Pay* $0.00

Empl Note:* Yes *PN Date:* 2/24/2017 *Postion Note:* FY18 Sewer Fund (570-31) Position Upgrades Planned: Unknown Specifics as to Po

Org. Totals: **31-56-500**

HTE:	*Base*	$0	*Mid YearCOLA*	$0	*AddPct*	$0	*S/C*	$0	*Vac Bonus*	$0	*Holiday*	$0	*AddPay*	$0	*AddRate*	$0			
* *HTE:*	*Yrly Add Pay*	$0	*FTE*	**0.00**	*Base*	$0	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$0**							
* *Dept Request:*	*Yrly Add Pay*	$0	*FTE*	**0.00**	*Base*	$25,000	*AddPct, S/C, Fire*	$0	*AddPay / AddRate*	$0	*Total Salary*	**$25,000**							
** *Diff Dept / HTE:*		$0		**0.00**		$25,000		$0		$0		**$25,000**							

**Label Descriptor May not be 100% Accurate Due to Contract Settlement Delays & Mid-Yr Contracts*

***Represents Accumulated COLAs (ie FY17 Pay Plan in Effect After Download)*

Fund Dept Total: **570-31**

HTE:	*Base*	$1,430,662	*Mid YearCOLA*	$0	*AddPct*	$10,232	*S/C*	$0	*Vac Bonus*	$0	*Holiday*	$0	*AddPay*	$0	*AddRate*	$0			
* *HTE:*	*Yrly Add Pay*	$0	*FTE*	**27.00**	*Base*	$1,430,662	*AddPct, S/C, Fire*	$10,232	*AddPay / AddRate*	$0	*Total Salary*	**$1,440,894**							
* *Dept Request:*	*Fitness Pay*	$0	*FTE*	**30.00**	*Base*	$1,879,073	*AddPct, S/C, Fire*	$10,232	*AddPay / AddRate*	$0	*Total Salary*	**$1,889,305**							
** *Diff Dept / HTE:*		$0		**3.00**		$448,411		$0		$0		**$448,411**							

City Totals:

HTE Postion Count: 27.00 *Dept Postion Count:* 30.00

HTE:	*Base*	$1,430,662	*Mid YearCOLA*	$0	*AddPct*	$10,232	*S/C*	$0	*Vac Bonus*	$0	*Holiday*	$0	*AddPay*	$0	*AddRate*	$0			
HTE:	*Fitness Pay*	$0	*FTE*	**27.00**	*Base*	$1,430,662	*AddPct, S/C, Fire*	$10,232	*AddPay / AddRate*	$0	*Total Salary*	**$1,440,894**							
Dept Request:	*Fitness Pay*	$0	*FTE*	**30.00**	*Base*	$1,879,073	*AddPct, S/C, Fire*	$10,232	*AddPay / AddRate*	$0	*Total Salary*	**$1,889,305**							
** *Diff Dept / HTE:*		$0		**3.00**		$448,411		$0		$0		**$448,411**							

Sewer Fringe Benefits

The Fringe Benefits account provides for the sewer fund's portion of the employees' fringe benefit costs as well as its share of the administrative services provided by the City's staff departments.

Division Summary

Department: Public Works **Division:** Sewer Fringe Benefits **Account:** 570-31-56

	FY17 Approp.	FY17 Projected Expend.	FY18 Department Submission	FY18 Manager's Recomm.	FY18 Finance Comm.	FY18 Final Allowance
Classification Breakdown						
Payroll	0	0	25,000	25,000	25,000	25,000
Benefits	899,992	765,191	934,235	866,935	866,935	866,935
Administrative Services	400,118	400,118	400,118	424,627	424,627	424,627
Insurance	25,833	18,337	30,862	30,862	30,862	30,862
Total	1,325,943	1,183,646	1,390,215	1,347,424	1,347,424	1,347,424

FY18 DIVISION LINE CATEGORY SUMMARY

REPORT: FA-DIV

	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
	FUND 570 Sewer Utility						
	DEPT 31 Public Works						
	DIV 55 Debt Service						
*	Contractual Services	294,767	294,767	0	10,000	10,000	10,000
*	Debt Service	7,279,439	7,058,895	6,892,494	7,085,098	7,085,098	7,085,098
**	Debt Service	7,574,206	7,353,662	6,892,494	7,095,098	7,095,098	7,095,098

FY18 DIVISION LINE CATEGORY SUMMARY

REPORT: FA-DIV

	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
	FUND 570 Sewer Utility						
	DEPT 31 Public Works						
	DIV 56 Fringe Benefits						
*	Payroll	0	0	25,000	25,000	25,000	25,000
*	Benefits	899,992	765,191	934,235	866,935	866,935	866,935
*	Administrative Services	400,118	400,118	400,118	424,627	424,627	424,627
*	Insurance	25,833	18,337	30,862	30,862	30,862	30,862
**	Fringe Benefits	1,325,943	1,183,646	1,390,215	1,347,424	1,347,424	1,347,424

FY18 DIVISION LINE CATEGORY SUMMARY

REPORT: FA-DIV

ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
FUND 570 Sewer Utility						
DEPT 31 Public Works						
DIV 58 PWD Assessment						
* Administrative Services	11,648,004	11,575,356	12,149,862	12,149,862	12,149,862	12,149,862
** PWD Assessment	11,648,004	11,575,356	12,149,862	12,149,862	12,149,862	12,149,862
*** Public Works	23,587,595	23,087,343	24,511,731	24,668,544	24,668,544	24,668,544
**** Sewer Utility	23,678,025	23,164,328	24,603,068	24,759,881	24,759,881	24,759,881
	23,678,025	23,164,328	24,603,068	24,759,881	24,759,881	24,759,881

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works							
DIV 55 Debt Service							
570-3155-500.35-00	Contractual Services	294,767	294,767	0	10,000	10,000	10,000
*	Contractual Services	294,767	294,767	0	10,000	10,000	10,000
570-3155-500.75-10	Interest	1,452,496	1,231,952	1,088,286	1,167,603	1,167,603	1,167,603
570-3155-500.75-20	Principal	5,826,943	5,826,943	5,804,208	5,917,495	5,917,495	5,917,495
*	Debt Service	7,279,439	7,058,895	6,892,494	7,085,098	7,085,098	7,085,098
**	Debt Service	7,574,206	7,353,662	6,892,494	7,095,098	7,095,098	7,095,098

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works							
DIV 56 Fringe Benefits							
570-3156-500.01-00	Payroll	0	0	25,000	25,000	25,000	25,000
*	Payroll	0	0	25,000	25,000	25,000	25,000
570-3156-500.02-60	Workers' Compensation	60,000	56,099	65,000	65,000	65,000	65,000
570-3156-500.02-80	Medicare	23,198	18,867	30,499	30,499	30,499	30,499
570-3156-500.02-85	Pension	381,625	352,281	430,766	414,879	414,879	414,879
570-3156-500.02-95	Health Insurance	435,169	337,944	407,970	356,557	356,557	356,557
*	Benefits	899,992	765,191	934,235	866,935	866,935	866,935
570-3156-500.20-30	Indirect Costs	400,118	400,118	400,118	424,627	424,627	424,627
*	Administrative Services	400,118	400,118	400,118	424,627	424,627	424,627
570-3156-500.50-10	Gen'l Liability Insurance	833	837	862	862	862	862
570-3156-500.50-20	Workers' Compensation	25,000	17,500	30,000	30,000	30,000	30,000
*	Insurance	25,833	18,337	30,862	30,862	30,862	30,862
*	Fringe Benefits	1,325,943	1,183,646	1,390,215	1,347,424	1,347,424	1,347,424

A[illegible]T NUMBER	ACCOUNT DESCRIPTION	FY17 REVISED APPRO	FY17 TOTAL PROJ	FY18 DEPT REQUEST	FY18 MGR RECOMM.	FY18 FINANCE COMM.	FY18 FINAL ALLOW
DEPT 31 Public Works							
DIV 58 PWD Assessment							
570-3158-500.20-00	Administrative Services	11,648,004	11,575,356	12,149,862	12,149,862	12,149,862	12,149,862
*	Administrative Services	11,648,004	11,575,356	12,149,862	12,149,862	12,149,862	12,149,862
**	PWD Assessment	11,648,004	11,575,356	12,149,862	12,149,862	12,149,862	12,149,862
***	Public Works	23,587,595	23,087,343	24,511,731	24,668,544	24,668,544	24,668,544

Personnel Services Detail

Department: Public Works **Division:** Sewer Fringe Benefits **Account:** 570-31-56

Position	Funding Source City Fed Oth	FY17 Approved #	FY17 Approved Amount	FY18 Submission #	FY18 Submission Amount	FY18 Manager's Recommendation #	FY18 Manager's Recommendation Amount	FY18 Finance Committee #	FY18 Finance Committee Amount	FY18 Final Allowance #	FY18 Final Allowance Amount
Wage Adjustment	100		0		25,000		25,000		25,000		25,000
Gross Personnel Services			0		25,000		25,000		25,000		25,000

FY18 FA Expenditure Explanatories

Acct	Line #	Description	Detail $	FA Request
31 55		***Sewer Utility Debt Service***		
570-3155-500.35-00		**Contractual Services**		**$10,000**
	1	FY18 CM LEVEL INCREASE (BTO 04/03/17): +$10K	10,000	
	2	.	0	
	3	FY18 DR LVL (NOT UPDATED): $0	0	
	4	.	0	
	5	═══════════════════════════	0	
	6	FY17 EXPLANATORIES:	0	
	7	1) CURRENT DEBT (PRIOR FY16):	0	
	8	MMBB FEE & DEP FEE: $272,617	0	
	9	2) FY17 EST BASED ON $50.0M BORROWING: T-$22,150	0	
	10	A) BOND COUNSEL, NEW ISSUE: $2.3K	0	
	11	B) ISSUANCE COSTS SEWER CIP(17% OF TOTAL):$13.6K	0	
	12	C) MMBB FEE & DEP NEW ISSUE: $6,250	0	
	13	.	0	
570-3155-500.75-10		**Debt Service / Interest**		**$1,167,603**
	1	FY18 DEBT SERVICE INTEREST (03/31/17)	1,167,603	
	2	.	0	
	3	FY17 DEBT SERVICE INTEREST: B-$1,452,496	0	
	4	FY18 DR: $1,088,286	0	
	5	.	0	
	6	FY18 CM LVL INCREASE (03/31/17): +$79,317	0	
	7	.	0	
570-3155-500.75-20		**Debt Service / Principal**		**$5,917,495**
	1	FY18 DEBT SERVICE PRINCIPAL (03/31/17)	5,917,495	
	2	.	0	
	3	FY17 DEBT SERVICE PRINCIPAL: B-$5,826,943	0	
	4	FY18 DR: $5,804,208 (02/28/17)	0	
	5	.	0	
	6	FY18 CM LVL INCREASE (03/31/17): +$113,287	0	
	7	.	0	
		Division Total: 31 55 Debt Service		**$7,095,098**

Acct	Line #	Description	Detail $	FA Request
31 56		***Sewer Utility Fringe Benefits***		
570-3156-500.01-00		**Payroll**		**$25,000**
	1	FY18 SEWER FUND WAGE ADJUSTMENT	25,000	
	2	.	0	
	3	NOTES (W/ PH 03/16/17):	0	
	4	A) POSITION UPGRADES PLANNED	0	
	5	B) UNKNOWN SPECIFICS ON POSITIONS AFFECTED &	0	
	6	DEGREE OF UPGRADES	0	
	7	.	0	
570-3156-500.02-60		**Benefits / Workers' Compensation**		**$65,000**
	1	FROM HR: OLD ACCOUNTS:	65,000	
	2	.	0	
	3	HISTORY:	0	
	4	FY16: $64,203	0	
	5	FY15: $67,229	0	
	6	FY14: $58,343	0	
	7	FY13: $126,381	0	
	8	FY12: $37,480	0	
	9	FY11: $16,861	0	
	10	.	0	
	11	EST (02/26/17)	0	
570-3156-500.02-80		**Benefits / Medicare**		**$30,499**
	1	FY18 FICA EST:	30,499	
	2	ELM 01 WAGES * 1.45%	0	
	3	.	0	
	4	*BASED ON PRELIMWAGES (02/24/17)	0	
	5	.	0	
	6	JLR (02/25/17)	0	
	7	.	0	
570-3156-500.02-85		**Benefits / Pension**		**$414,879**
	1	FY18 CM DECREASE (DR EST. 03/21/17):	0	
	2	A) EF DR COMPLETED AFTER GF DR CLOSE: DR REVISIONS	-15,887	
	3	SEWER (30.0; $182,407): (-$15,887)	0	
	4	.	0	
	5	1) FY18 PENSION BASED ON WAGES (ELM 01):	0	
	6	FTE: 35.0; T-$198,294	0	
	7	A) BASED ON FY18 PRELIMWAGE FTE COUNTS (02/24/17)	191,857	
	8	B) INCLUDE DISABILITY INSURANCE FOR ICMA EE	6,437	
	9	(JLR 02/25/17)	0	
	10	.	0	
	11	2) FY18 IUUAL PENSION BOND UNFUNDED	232,472	
	12	*BASED ON FY18 100-4700-395-0000 ENTRY (02/28/17)	0	
	13	.	0	
570-3156-500.02-95		**Benefits / Health Insurance**		**$356,557**
	1	FY18 CM DECREASE (DR EST. 03/21/17):	0	
	2	A) EF DR COMPLETED AFTER GF DR CLOSE: DR REVISIONS	-51,413	
	3	SEWER (30.0; $356,557): (-$51,413)	0	
	4	.	0	
	5	FY18 SEWER HEALTH INSURANCE CHARGEBACK EST:	407,970	
	6	FTE: 35.0	0	
	7	.	0	
	8	NOTES:	0	

Acct	Line #	Description	Detail $	FA Request
31 56		***Sewer Utility Fringe Benefits***		
	9	A) BASED ON FY18 PRELIMWAGE FTE COUNTS (02/24/17)	0	
	10	B) FY18: EST 1.0% RATE INCREASE (PER JK 01/07/17)	0	
	11	C) BASED ON EE PLANS AS OF 01/03/17	0	
	12	.	0	
	13	JLR (02/25/17)	0	
	14	.	0	
570-3156-500.20-30		**Administrative Services / Indirect Costs**		**$424,627**
	1	FY18 CM UPDATE (04/03/17): +$24,509	24,509	
	2	.	0	
	3	FY17 CHARGEBACK FOR INDIRECTS (03/01/16):	0	
	4	1) CITY MANAGER	59,800	
	5	2) FINANCE ADMIN	70,445	
	6	3) TREASURY	43,624	
	7	4) LEGAL	34,446	
	8	5) HR	49,386	
	9	6) IT	142,417	
	10	.	0	
570-3156-500.50-10		**Insurance / Gen'l Liability Insurance**		**$862**
	1	FY18 ESTIMATE (02/26/17):	0	
	2	1) BUILDINGS & CONTENTS:	713	
	3	(FY16: $633; FY15: $603; FY14 $600; FY13: $602	0	
	4	2) CRIME BOND:	149	
	5	(FY16-$160; FY15: $162; FY14: $99; FY13: A-$99	0	
	6	.	0	
	7	*BASED ON LIABILITY FY16 REVENUE EST (100-6204)	0	
	8	(JLR 02/26/17)	0	
	9	.	0	
570-3156-500.50-20		**Insurance / Workers' Compensation**		**$30,000**
	1	FY18 CHARGEBACK ESTIMATE:	30,000	
	2	MEDICAL CLAIMS, LEGAL, VOC. & ADMIN COSTS	0	
	3	.	0	
	4	HISTORY:	0	
	5	FY15 $29,096	0	
	6	FY14: $21,020	0	
	7	FY13: $45,254	0	
	8	FY12: $61,967	0	
	9	FY11: $12,752	0	
	10	.	0	
		Division Total: 31 56 Fringe Benefits		**$1,347,424**

Acct	Line #	Description	Detail $	FA Request
31 58		***Sewer Utility PWD Assessment***		
570-3158-500.20-00		**Administrative Services**		**$12,149,862**
	1	FY18 (02/28/17):	0	
	2	1) JULY-DEC 2017: $986,831 * 6 MO	5,920,986	
	3	2) JAN-JUNE 2018: $1,038,146 * 6 MO	6,228,876	
	4	.	0	
	5	2017 CALENDAR YR: $11,841,972 / 12 MO	0	
	6	2018 CALENDAR YR: $12,457,755 / 12 MOS	0	
	7	2018 PWD PROJ INCREASE: 5.2%	0	
	8	.	0	
	9	PWD CONTACT: DAVID KANE 774-5961(1)	0	
	10	*BASED ON PWD PROJECTIONS (JLR W/ DAVE: 02/28/17)	0	
	11	.	0	
		Division Total: 31 58 PWD Assessment		**$12,149,862**
		Department Total: 31 Public Works		**$24,668,544**

Sewer Debt Service

The Debt Service account provides for the sewer fund's portion of the principal and interest on the City's outstanding general obligation bonds.

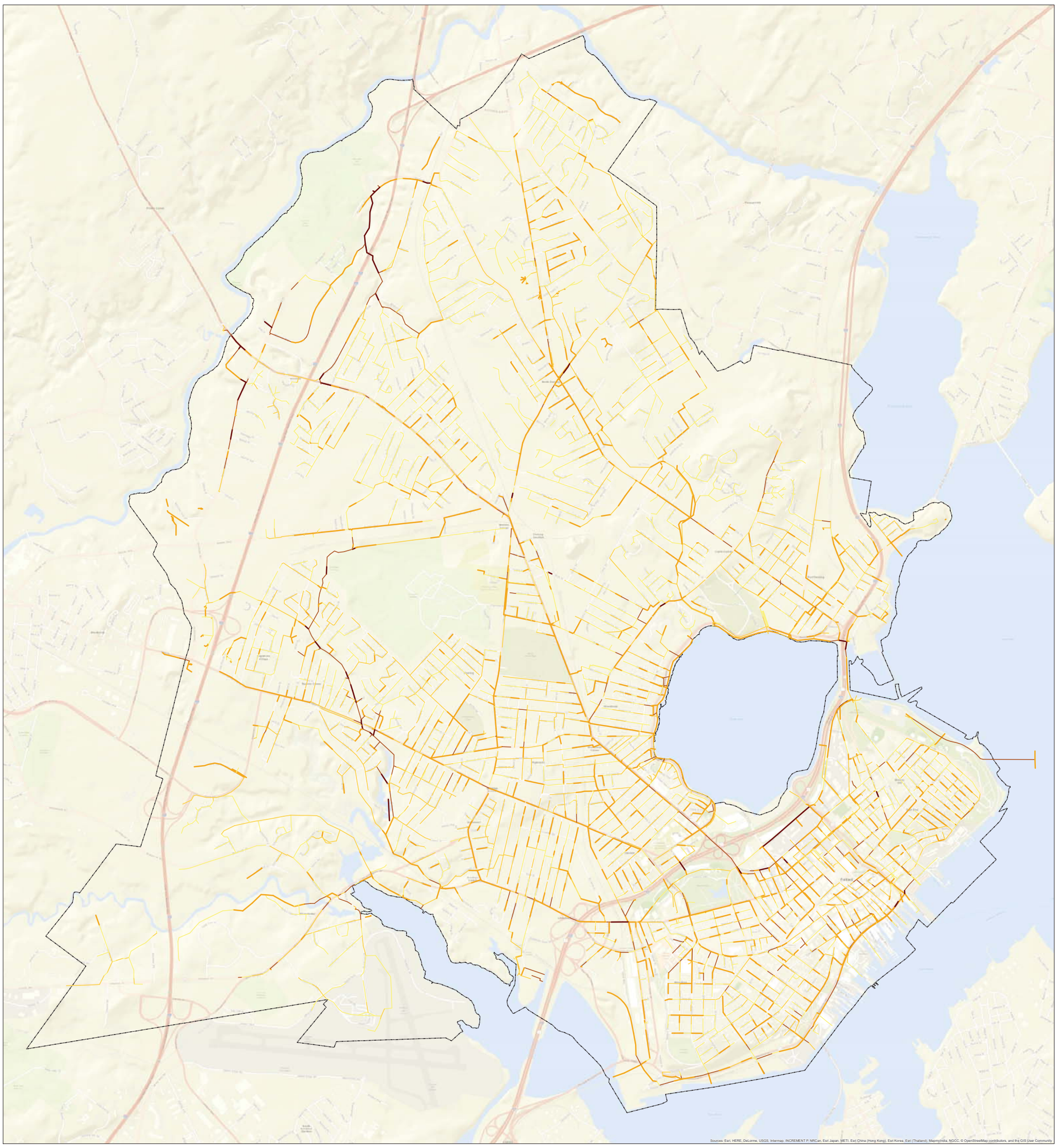
Division Summary

Department: Public Works **Division:** Sewer Debt Service **Account:** 570-31-55

	FY17 Approp.	FY17 Projected Expend.	FY18 Department Submission	FY18 Manager's Recomm.	FY18 Finance Comm.	FY18 Final Allowance
Classification Breakdown						
Contractual Services	294,767	294,767	0	10,000	10,000	10,000
Debt Service	7,279,439	7,058,895	6,892,494	7,085,098	7,085,098	7,085,098
Total	7,574,206	7,353,662	6,892,494	7,095,098	7,095,098	7,095,098

Appendix D – Risk Analysis Map and Rehabilitation Priorities

Appendix D – Risk Analysis Map and Rehabilitation Priorities



City of Portland Sewer Main Risk Map

Legend

Sewer Gravity Main Risk

Risk Number

- 2 - 3
- 4
- 5 - 6
- 7 - 8
- 9 - 12

Risk number was calculated by multiplying the Consequence of Failure (COF) by the Likelihood of Failure (LOF). Consequence of Failure was determined by calculating the scores of each pipe as it relates to proximity to critical users, street classification, pipe diameter, proximity to surface waters, proximity to railroads and force vs. gravity mains. Likelihood of Failure was calculated using the calculated NASSCO condition rating of the pipes when available as well as the wet weather hydraulic performance. When NASSCO data was not available, assumptions were made based on the pipe's age, type, and location.

N
W E
S

Date: 1/26/2018

SEWER REHABILITATION LIST

Presumpscot North Interceptor

Facility Identifier	*From Manhole*	*To Manhole*	*Location Description*	*Width*	*Height*	*Diameter*	*Length*	*Material*
SSGM-03129	SSMH-4932	SSMH-4931	Riverside Industrial Pkwy	18"	18"	18"	211	Vitrified Clay Pipe
SSGM-03069	SSMH-5377	SSMH-5378	Riverside St	24"	24"	24"	264	Vitrified Clay Pipe
SSGM-03070	SSMH-5378	SSMH-5379	Riverside St	24"	24"	24"	213	Vitrified Clay Pipe
SSGM-03071	SSMH-5379	SSMH-6303	Riverside St	24"	24"	24"	271	Vitrified Clay Pipe
SSGM-03131	SSMH-2998	SSMH-0196	Riverside St	24"	24"	24"	162	Vitrified Clay Pipe
SSGM-03134	SSMH-0196	SSMH-6287	Riverside St	24"	24"	24"	110	Vitrified Clay Pipe
SSGM-03136	SSMH-6287	SSMH-5377	Riverside St	24"	24"	24"	234	Vitrified Clay Pipe
SSGM-07195	SSMH-6303	SSMH-6304	Riverside St	24"	24"	24"	273	Vitrified Clay Pipe
SSGM-07196	SSMH-6304	SSMH-0837	Riverside St	24"	24"	24"	213	Vitrified Clay Pipe

West Side Interceptor

Facility Identifier	*From Manhole*	*To Manhole*	*Location Description*	*Width*	*Height*	*Diameter*	*Length*	*Material*
SSGM-02527	SSMH-2801	SSMH-4131	Lucas St	24"	24"	24"	49	Reinforced Concrete Pipe
SSGM-06877	SSMH-5206	SSMH-4131	Lucas St	24"	24"	24"	177	Reinforced Concrete Pipe
SSGM-02855	SSMH-0782	SSMH-2902	Mayer Rd	24"	24"	24"	30	Vitrified Clay Pipe
SSGM-02856	SSMH-0781	SSMH-0782	Mayer Rd	24"	24"	24"	17	Vitrified Clay Pipe
SSGM-03587	SSMH-0929	SSMH-0781	Mayer Rd	24"	24"	24"	83	Vitrified Clay Pipe
SSGM-02550	SSMH-0927	SSMH-0266	WSIS Section 7	24"	24"	24"	215	Vitrified Clay Pipe
SSGM-06881	SSMH-4133	SSMH-4134	X-Country	60"	60"	60"	279	Polypropylene
SSGM-06882	SSMH-4134	SSMH-4135	X-Country	60"	60"	60"	325	Polypropylene
SSGM-02526	SSMH-4569	SSMH-2801	Lucas St	24"	24"	24"	94	Vitrified Clay Pipe
SSGM-02854	SSMH-2902	SSMH-4569	Mayer Rd	24"	24"	24"	213	Vitrified Clay Pipe
SSGM-03586	SSMH-5276	SSMH-0929	WSIS Section 6	24"	24"	24"	61	Vitrified Clay Pipe
SSGM-02548	SSMH-2766	SSMH-5214	WSIS Section 7	24"	24"	24"	240	Vitrified Clay Pipe
SSGM-02549	SSMH-5214	SSMH-0927	WSIS Section 7	24"	24"	24"	257	Vitrified Clay Pipe
SSGM-02251	SSMH-0656	SSMH-0657	Hicks St Cross Country	48"	48"	48"	136	Brick
SSGM-02141	SSMH-2644	SSMH-2643	West Side Interceptor	54"	54"	54"	212	Brick
SSGM-02263	SSMH-2640	SSMH-5151	West Side Interceptor	54"	54"	54"	239	Brick

Known SSO Areas

Facility Identifier	*From Manhole*	*To Manhole*	*Location Description*	*Width*	*Height*	*Diameter*	*Length*	*Material*
ssgm-04902	**ssmh-5794**	**ssmh-5795**	Murray Street	8"	8"	8"	200	Vitrified Clay Pipe
ssgm-04903	ssmh-5795	ssmh-1421	Murray Street	8"	8"	8"	250	Vitrified Clay Pipe

Facility Identifier	*From Manhole*	*To Manhole*	*Location Description*	*Width*	*Height*	*Diameter*	*Length*	*Material*
ssgm-00004	ssmh-1421	ssmh-1422	Murray Street	10"	10"	10"	150	Vitrified Clay Pipe
ssgm-04904	ssmh-1422	ssmh-5796	Murray Street	12"	12"	12"	175	Vitrified Clay Pipe
ssgm-02629	**ssmh-0744**	**ssmh-0753**	Crosby Street	8"	8"	8"	298	Vitrified Clay Pipe
ssgm-02857	**ssmh-0265**	**ssmh-0783**	Brighton Avenue	8"	8"	8"	335	Vitrified Clay Pipe
ssgm-02487	ssmh-5524	ssmh-5525	Four Winds Way	8"	8"	8"	233	Vitrified Clay Pipe
ssgm-02489	ssmh-5525	ssmh-5526	Four Winds Way	8"	8"	8"	256	Vitrified Clay Pipe
ssgm-02488	ssmh-5226	ssmh-2761	Four Winds Way	8"	8"	8"	113	Vitrified Clay Pipe
ssgm-02442	**ssmh-2761**	**ssmh-0708**	Four Winds Way	8"	8"	8"	186	Vitrified Clay Pipe
ssgm-00742	ssmh-0292	ssmh-0291	Revere Street	8"	8"	8"	410	Vitrified Clay Pipe
ssgm-00743	ssmh-0291	ssmh-0290	Revere Street	8"	8"	8"	312	Vitrified Clay Pipe
ssgm-00744	**ssmh-0290**	**ssmh-1841**	Revere Street	8"	8"	8"	110	Vitrified Clay Pipe
ssgm-04329	ssmh-1841	ssmh-4346	Revere Street	8"	8"	8"	250	Vitrified Clay Pipe
ssgm-00745	ssmh-4346	ssmh-4347	Revere Street	8"	8"	8"	40	Vitrified Clay Pipe
ssgm-00746	ssmh-4347	ssmh-1840	Revere Street	8"	8"	8"	202	Vitrified Clay Pipe
ssgm-00567	ssmh-1855	ssmh-1854	Codman Street	8"	8"	8"	327	Vitrified Clay Pipe
ssgm-00568	ssmh-1854	ssmh-1852	Codman Street	10"	10"	10"	349	Vitrified Clay Pipe
ssgm-00570	ssmh-1852	ssmh-1853	Codman Street	12"	12"	12"	275	Vitrified Clay Pipe
ssgm-04212	**ssmh-1853**	**ssmh-3387**	Codman Street	15"	15"	15"	273	Vitrified Clay Pipe
ssgm-04241	ssmh-3387	ssmh-340	Codman Street	15"	15"	15"	240	Vitrified Clay Pipe
ssgm-04325	ssmh-4344	ssmh-4670	Bay View Drive	10"	10"	10"	48	Vitrified Clay Pipe
ssgm-00571	ssmh-4670	ssmh-4669	Bay View Drive	10"	10"	10"	48	Vitrified Clay Pipe
ssgm-00573	ssmh-4669	ssmh-0301	Bay View Drive	10"	10"	10"	271	Vitrified Clay Pipe
ssgm-00574	**ssmh-0301**	**ssmh-0300**	Bay View Drive	10"	10"	10"	173	Vitrified Clay Pipe
ssgm-04324	**ssmh-0300**	**ssmh-4343**	Bay View Drive	10"	10"	10"	147	Vitrified Clay Pipe
ssgm-04323	**ssmh-4343**	**ssmh-3808**	Bay View Drive	10"	10"	10"	140	Vitrified Clay Pipe
ssgm-04326	ssm-0299	ssmh-4345	Chenery Street	10"	10"	10"	205	Vitrified Clay Pipe
ssgm-04327	ssmh-4345	ssmh-0298	Chenery Street	10"	10"	10"	185	Vitrified Clay Pipe
ssgm-000564	ssmh-0298	ssmh-0297	Chenery Street	10"	10"	10"	400	Vitrified Clay Pipe
ssgm-000565	ssmh-0297	ssmh-0296	Chenery Street	10"	10"	10"	190	Vitrified Clay Pipe
ssgm-04213	ssmh-1856	ssmh-3388	Chenery Street	10"	10"	10"	165	Vitrified Clay Pipe

Identified via CCTV

Facility Identifier	*From Manhole*	*To Manhole*	*Location Description*	*Width*	*Height*	*Diameter*	*Length*	*Material*
SSGM-01822	SSMH-0597	SSMH-0598	Auburn St	15"	15"	15"	187	Vitrified Clay Pipe
SSGM-04783	SSMH-5776	SSMH-4578	Falmouth St	24"	24"	24"	310	Vitrified Clay Pipe

Needs Investigation

Facility Identifier	*From Manhole*	*To Manhole*	*Location Description*	*Width*	*Height*	*Diameter*	*Length*	*Material*
SSGM-06224	SSMH-3960	SSMH-0789	Waldo St	18"	18"	18"	367	Ductile Iron Pipe
SSGM-00365	SSMH-1684	SSMH-4571	Brighton Ave	10"	10"	10"	287	Vitrified Clay Pipe
SSGM-03535	SSNS-0085	SSMH-3146	Maple St	45"	45"	45"	303	Brick
SSGM-06767	SSMH-5384	SWDP-0638	Riverside St	15"	15"	15"	63	Corrugated Metal Pipe
SSGM-06085	SSMH-5983	SSMH-1265	Auburn St	48"	48"	48"	187	Reinforced Concrete Pipe
SSGM-03245	SSMH-0208	SSMH-5414	Forest Ave	12"	12"	12"	304	Polyvinyl Chloride
SSGM-03251	SSMH-3041	SSMH-3042	Forest Ave	12"	12"	12"	222	Polyvinyl Chloride
SSGM-06544	SSMH-3050	SSMH-4043	Riverside St	12"	12"	12"	288	Polyvinyl Chloride
SSGM-06547	SSMH-4044	SSMH-4046	Riverside St	12"	12"	12"	200	Polyvinyl Chloride
SSGM-02731	SSMH-5277	SSMH-5276	Brighton Ave	12"	12"	12"	240	Polyvinyl Chloride
SSGM-02772	SSMH-0265	SSMH-5206	Brighton Ave	24"	24"	24"	28	Reinforced Concrete Pipe
SSGM-03252	SSMH-3042	SSMH-2987	Forest Ave	10"	10"	10"	214	Polyvinyl Chloride
SSGM-00969	SSMH-2125	SSNS-0093	Middle St	24"	24"	24"	185	Reinforced Concrete Pipe
SSGM-05640	SSMH-3800	SSMH-2124	Middle St	24"	24"	24"	119	Vitrified Clay Pipe
SSGM-03083	SSMH-3017	SSMH-3016	North Port Business Park	48"	48"	48"	64	Reinforced Concrete Pipe
SSGM-03052	SSMH-4554	SSMH-5371	Riverside St	8"	8"	8"	118	Polyvinyl Chloride
SSGM-03117	SSMH-5384	SSMH-5381	Riverside St	24"	24"	24"	200	Vitrified Clay Pipe
SSGM-03119	SSMH-0837	SSMH-5384	Riverside St	24"	24"	24"	174	Vitrified Clay Pipe
SSGM-03247	SSMH-5415	SSMH-5416	Riverside St	12"	12"	12"	280	Polyvinyl Chloride
SSGM-03248	SSMH-5416	SSMH-5417	Riverside St	12"	12"	12"	300	Polyvinyl Chloride
SSGM-03249	SSMH-5371	SSMH-5417	Riverside St	8"	8"	8"	15	Polyvinyl Chloride
SSGM-06546	SSMH-4045	SSMH-5415	Riverside St	12"	12"	12"	279	Polyvinyl Chloride
SSGM-04183	SSMH-5661	SSMH-3297	Washington Ave	8"	8"	8"	238	Vitrified Clay Pipe
SSGM-03421	SSMH-3110	SSMH-5472	Westbrook St	10"	10"	10"	103	Ductile Iron Pipe
SSGM-03422	SSMH-0267	SSMH-3110	Westbrook St	10"	10"	10"	278	Ductile Iron Pipe
SSGM-02567	SSMH-5240	SSMH-5248	Wingate Dr	24"	24"	24"	50	Reinforced Concrete Pipe
SSGM-02419	SSMH-5205	SSMH-5206	Brighton Ave	18"	18"	18"	136	Reinforced Concrete Pipe
SSGM-02352	SSMH-5188	SSMH-6214	Off Cedarhurst Ln	15"	15"	15"	150	Vitrified Clay Pipe