



## Legislation Details (With Text)

**File #:** 2485-2015      **Version:** 1

**Type:** Ordinance      **Status:** Passed

**File created:** 9/27/2015      **In control:** Public Utilities Committee

**On agenda:** 11/2/2015      **Final action:** 11/4/2015

**Title:** To authorize the Director of Public Utilities to modify (Mod #1) an existing professional engineering services agreement with Brown and Caldwell for Detailed Design Services for the Southerly Wastewater Treatment Plant Chemically Enhanced Primary Treatment - Preliminary Treatment project; to authorize the appropriation and transfer of \$3,648,350.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund; to authorize the expenditure of up to \$3,648,350.00 from the G.O. Bond Fund, to amend the 2015 Capital Improvements Budget; and to declare an emergency. (\$3,648,350.00)

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** 1. Ord 2485-2015 SWIF SWWTP CEPT Mod #1, 2. Ord 2485-2015 Director's Legislation Mod 1 Info Sheet (10-14-15)

Date	Ver.	Action By	Action	Result
11/4/2015	1	CITY CLERK	Attest	
11/4/2015	1	MAYOR	Signed	
11/2/2015	1	COUNCIL PRESIDENT	Signed	
11/2/2015	1	Columbus City Council	Approved	Pass

**1. BACKGROUND:** This legislation authorizes the Director of Public Utilities to modify (Mod #1) an existing professional engineering services agreement with Brown and Caldwell for Detailed Design Services for the SWWTP Chemically Enhanced Primary Treatment (CEPT) - Preliminary Treatment project. This project is one of three projects to provide Chemically Enhanced Primary Treatment (CEPT) at the Southerly Wastewater Treatment Plant (SWWTP), as approved by the Ohio EPA. The CEPT facilities will provide additional plant capacity to treat wet weather flows in excess of 330 million gallons per day (MGD).

This project, known as SWWTP CEPT - Preliminary Treatment, will focus on upgrades and modifications to the headworks facility, solids handling facilities, and plant control system. This is a contract for professional engineering (Design Professional or "DP") services and Services During Construction. The initial phase of this contract provided Step 1, Preliminary Design Services, for the SWWTP CEPT - Preliminary Treatment. During preliminary design, the number and type of raw sewage pumps, fine screens, and gravity thickeners that should be added and/or replaced was determined. Also, the extent of structural renovations, the number of anti-siphon valves, variable frequency drives, and gates that should be added and/or replaced, and the extent of HVAC improvements was determined.

The next phase of this engineering contract will provide Step 2, Detailed Design and Bidding Services. This contract modification is requesting funding for this phase of the project. During this phase, the DP will develop detailed construction contract documents to define the construction work. Construction contract documents will consist of drawings, specifications, and bidding documents based upon the City's standards and preferences. Detailed design will also include flushing water design improvements, SCADA upgrades, a power quality analysis, and a Reliability-Centered Maintenance analysis. Detailed design services will start in 2015 when the preliminary design phase has

been completed. Bidding services will follow detailed design and will occur during the advertisement, bid opening, and construction contract execution phase of the project.

The actual emplacement of the work will be by construction contract. Step 3, Engineering Services During Construction will be performed in 2017 when the proposed improvements are being constructed. This phase of the engineering contract will provide construction-phase engineering, start-up and commissioning assistance, and record documentation preparation. It is anticipated that a future contract modification will be requested for this work. Construction Management services will be performed by others.

**2. PROJECT TIMELINE:** The DP began Step 1, Preliminary Design Services, after notice to proceed was given on July 23, 2014. Preliminary design will be completed in September 2015. Step 2, Detailed Design Services, will commence immediately after the preliminary design work is approved and after this modification (Mod. No. 1) is approved by City Council and executed. It is estimated that detailed design will be completed during the third quarter of 2016. At the conclusion of the detailed design, it is estimated that the construction contract(s) will be advertised and bid in late 2016 and awarded in early 2017.

The overall contract duration, from initiation of Preliminary Design Services to completion of Services During Construction, is estimated to be 66 months. Brown and Caldwell's services will continue beyond completion of construction to provide "as-built" record drawings of the constructed facilities.

**3. MODIFICATION INFORMATION:**

**Amount of additional funds to be expended: \$3,648,350.00**

Original Contract (Step 1: Preliminary Design Services)	\$ 1,583,073.00
Modification No. 1 (Step 2: Detailed Design & Bidding Services)	\$ 3,648,350.00
Estimated Future Mod No. 2 (Step 3: Engineering Services During Construction) (Budgeted 2017)	\$ 3,000,000.00
<b>CURRENT PROPOSED TOTAL</b>	<b>\$ 8,231,423.00</b>

**Reasons additional goods/services could not be foreseen:**

This contract modification (Modification No. 1) for Step 2, Detailed Design and Bidding Services, was planned and anticipated and the final amount was negotiated between B&C and DOSD. In so much as the majority of the work included in this modification was planned for and anticipated within the original procurement, due to the highly complex and technical nature of this wastewater treatment plant infrastructure, it is not reasonable or cost efficient to undertake a new procurement effort to acquire these services.

**Reason other procurement processes are not used:**

At the inception of a project, budgetary estimates for future design and construction contracts are generated, but it is difficult to determine and define all of the items that may be touched upon during the project's design phases and its construction. At the outset of preliminary design, all project components are not completely defined at that time and are better determined as the preliminary design progresses. Additional items to be addressed by the design effort may only become known during detailed design, as more in-depth design development occurs. As additional items to be addressed by the design effort become known, these items are considered to be integral for the successful completion of the project and are considered to be a part of the original procurement. As the design progresses through preliminary design and detailed design, the project requirements for a complete design of a fully functioning facility come into better focus. The additional project items that become apparent during design are necessary for a fully functioning facility and are considered to be within the project's scope of services in order to provide a full and complete set of bid documents. In so much as the majority of the work included in this modification was planned for and anticipated within the original procurement, due to the highly complex and technical nature of this wastewater treatment plant infrastructure, it is not reasonable or cost efficient to undertake a new procurement effort to acquire independent design services for additional items that may become apparent during the design process and are within the project's initial scope. The lengthy process for initiating a new procurement and for a new entity to gain understanding of the project would likely cause an unacceptable project delay and additional cost.

**How cost of modification was determined:**

A cost proposal was provided by Brown & Caldwell and reviewed by the Division of Sewerage and Drainage and was deemed acceptable.

**4. EMERGENCY DESIGNATION:** An emergency designation **is requested** at this time.

**5. JUSTIFICATION FOR EMERGENCY DESIGNATION:** Prior to beginning the design of the CEPT project, the City decided that CEPT should be divided into three separate design projects (Project Nos. 650367-100002, 650367-100003, and 650367-100004). These projects would have parallel preliminary design paths due to the extensive coordination effort that would be required between the projects. The plan was for these projects to remain on parallel paths through detailed design to maintain the coordination effort. Due to different circumstances during the conclusion of preliminary design and the detailed design legislation approval process, the detailed design engineering agreement modifications for the CEPT projects will be completed at different times. Arcadis' legislation for CIP 367.3 (Clarification) was approved on 7/27/15 and B&N's legislation for CIP 367.4 (Disinfection) was approved 9/28/15. If Brown & Caldwell's legislation goes forward as 30-day legislation, Brown & Caldwell, in all likelihood, will not have an executed mod until late November. That would put B&C four months behind Arcadis and at least a month behind B&N. If legislation for CIP 367.2 is approved to move forward as emergency legislation, then there is a better chance that the CEPT projects can move through detailed design on similar detailed design paths and ultimately, meet the projects' OEPA Consent Order date.

**6. CONTRACT COMPLIANCE NO:** 94-1446346 | MAJ | Exp. 03/18/2016

**7. ECONOMIC IMPACT:** This project will capture and treat wet weather flows in excess of the current plant capacity. Without this improvement, these wastewater flows would be conveyed untreated to the river. The addition of this treatment process will remove solids and disinfect the wastewater which will provide protection of and benefit to the receiving waters.

Public informational meetings are not anticipated for this project. All proposed work should be within the boundaries of the wastewater treatment facility. Regulatory agencies will be notified of the proposed work as appropriate.

**8. FISCAL IMPACT:** This ordinance authorizes the appropriation and transfer of \$3,648,350.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund, Fund 664; to authorize the expenditure of up to \$3,648,350.00 from the G.O. Bond Fund, Fund 664 and to amend the 2015 Capital Improvements Budget for purposes of creating and providing sufficient budget authority for the aforementioned expenditures. Monies for this contract from the Sanitary Sewer Reserve Fund will be provided from a future Bond Sale via the transfer detailed in this ordinance.

To authorize the Director of Public Utilities to modify (Mod #1) an existing professional engineering services agreement with Brown and Caldwell for Detailed Design Services for the Southerly Wastewater Treatment Plant Chemically Enhanced Primary Treatment - Preliminary Treatment project; to authorize the appropriation and transfer of \$3,648,350.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund; to authorize the expenditure of up to \$3,648,350.00 from the G.O. Bond Fund, to amend the 2015 Capital Improvements Budget; and to declare an emergency. (\$3,648,350.00)

**WHEREAS**, this ordinance is a modification of the original contract, EL015877; authorized by ordinance 0966-2014; passed June 09, 2014; executed by the Director June 11, 2014; approved the City Attorney June 22, 2014; and certified by the City Auditor on June 28, 2014; and

**WHEREAS**, this project is one of three projects to provide Chemically Enhanced Primary Treatment (CEPT) at the Southerly Wastewater Treatment Plant (SWWTP), as approved by the Ohio EPA; and

**WHEREAS**, the CEPT facilities will provide additional plant capacity to treat wet weather flows in excess of 330 million gallons per day (MGD); and

**WHEREAS**, this modification provides Step 2, Detailed Design and Bidding Services. The DP will develop detailed construction contract documents that will consist of drawings, specifications, and bidding documents based upon the City's standards and preferences.; and

**WHEREAS**, it is necessary to authorize the appropriation and transfer of funds from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund; and

**WHEREAS**, it is necessary to transfer funds from the Sanitary Sewer Reserve Fund in the amount \$3,648,350.00 for this project; and

**WHEREAS**, it is necessary for City Council to authorize the expenditure of funds from the Sanitary Sewer System GO Bond Fund, Fund 664; and

**WHEREAS**, it is necessary to amend the 2015 Capital Improvements Budget for purposes of creating and providing sufficient budget authority for the aforementioned expenditures; and

**WHEREAS**, this transfer should be considered as a temporary funding method; and

**WHEREAS**, the City will sell notes or bonds to fund this project and will reimburse the Sanitary Reserve Fund; and

**WHEREAS**, the City anticipates incurring certain Original Expenditures (as defined in Section 1.150-2(c) of the Treasury Regulations (the "Treasury Regulations") promulgated pursuant to the Internal Revenue Code of 1986, as amended) with respect to the project described in this ordinance (the "Project"); and

**WHEREAS**, an emergency exists in the usual daily operations of the Department of Public Utilities in that it is immediately necessary to authorize the Director to enter into planned contract modification with Brown and Caldwell for Detailed Design Services for the SWWTP Chemically Enhanced Primary Treatment (CEPT) - Preliminary Treatment project, at the earliest practical date; **Now, Therefore,**

**BE IT ORDAINED BY THE COUNCIL OF THE CITY OF COLUMBUS:**

**SECTION 1.** That the Director of Public Utilities be, and hereby is, authorized to modify (Mod #1) an existing professional engineering services agreement with Brown and Caldwell, 4700 Lakehurst Court, Suite 100, Columbus, OH 43016 for Preliminary Treatment portion of the SWWTP Chemically Enhanced Primary Treatment (CEPT) project in accordance with the terms and conditions as shown in the proposal on file in the office of the Division of Sewerage and Drainage.

**SECTION 2.** That from the unappropriated monies in the Sanitary Sewer Reserve Fund No. 654, and from all monies estimated to come into said fund from any and all sources, and unappropriated for any other purpose during the fiscal year ending December 31, 2015, the sum of \$3,648,350.00 is hereby appropriated to the Division of Sewerage and Drainage: Division 60-05 | OCA Code 655225 | Object Level One 10 | Object Level Three 5502.

**SECTION 3.** That the City Auditor is hereby authorized to transfer and appropriate a total \$3,648,350.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer Bond Fund, Fund 664, into the Preliminary Treatment portion of the SWWTP Chemically Enhanced Primary Treatment (CEPT) project, Mod #1, CIP 650367-100002, at such time as deemed necessary by the Auditor, or so much thereof as may be necessary in the following manner: Division 60-05 | 643672 | Object Level 06 | Object Level Three 6676

**SECTION 4.** That the 2015 Capital Improvements Budget, Ord. 0577-2015 is amended as follows to provide sufficient

budget authority for the project expenditures:

**Fund No. | Project No. | Proj. Name | Current | Revised | (Change)**

664 | 650888-100000 | Scioto Main Sanitary Trunk Rehab | \$8,500,000 | \$5,584,650 | (-\$2,915,350)

664 | 650367-100002 | SWWTP CEPT Preliminary Treatment | \$733,000 | \$3,648,350 | (+\$2,915,350)

**SECTION 5.** That the Director of Public Utilities be and hereby is authorized to expend up to \$3,648,350.00 for the SWWTP Chemically Enhanced Primary Treatment (CEPT) project, Mod #1 in the following manner for the Div. 60-05 | Obj. Lvl 3 6676:

664 | 650367-100002 | SWWTP CEPT Primary Treatment - Preliminary | 643672 | \$3,648,350.00

**SECTION 6.** That said company, Brown and Caldwell Ohio, LLC shall conduct the work to the satisfaction of the Director of Public Utilities and the Administrator of the Division of Sewerage and Drainage.

**SECTION 7.** That the City Auditor is hereby authorized to transfer any unencumbered balance in the project account to the unallocated balance within the same fund upon receipt of certification by the Director of the Department administering said project that the project has been completed and the monies are no longer required for said project; except that no transfer shall be made from a project by monies from more than one source.

**SECTION 8.** That the City Auditor is authorized to establish proper project accounting numbers as appropriate.

**SECTION 9.** That the City Auditor is authorized to make any accounting changes to revise the funding source for all contracts or contract modifications associated with this ordinance.

**SECTION 10.** That upon obtaining other funds for the purpose of funding sanitary sewer system capital improvement work, the City Auditor is hereby authorized to repay the Sanitary Sewer Reserve Fund the amount transferred above (Section 3), and said funds are hereby deemed appropriated for such purposes.

**SECTION 11.** That the City intends that this Ordinance constitute an "official intent" for purposes of Section 1.150-2(e) of the Treasury Regulations, and that the City reasonably expects to reimburse itself for certain Original Expenditures incurred with respect to the Project from the proceeds of obligations to be issued by the City in a principal amount currently estimated to be \$3,648,350.00 (the "Obligations").

The City intends to make a reimbursement allocation on its books for the Original Expenditures not later than eighteen months following the later to occur of the date of the Original Expenditure to be reimbursed or the date the Project for which such Original Expenditures were made is "placed in service" within the meaning of Treasury Regulations Section 1.150-2(c). Upon the issuance of the Obligations, the proceeds of such Obligations shall be used to reimburse Sanitary/Sewer Reserve Fund 654, which is the fund from which the advance for costs of the Project will be made.

**SECTION 12.** That for reasons stated in the preamble hereto, this ordinance is hereby declared to be an emergency measure and shall take effect and be in force and after its passage and approval by the Mayor or ten days after its passage if the Mayor neither approves nor vetoes the same.