



## Legislation Text

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**File #:** 1728-2013, **Version:** 1

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### **BACKGROUND:**

This legislation authorizes the Director of Public Utilities to enter into an engineering services agreement with AECOM Technical Services, in the amount of \$963,273.00 for professional engineering services for the Scioto River Stage Prediction Augmentation Project, Part 2 for the Division of Sewerage and Drainage (DOSD) and the Division of Water (DOW).

The City of Columbus, Division of Sewerage and Drainage (DOSD) maintains and operates components of the West Columbus Local Protection Project (WCLPP - a.k.a. "the Franklinton Floodwall"). The WCLPP centerline of protection is comprised of levee embankments and floodwall sections along with other components like a flow control structure in Rhodes Park with an associated upstream McKinley Avenue emergency overflow structure, several pump stations, gate wells, and both stop log and sandbag gate closures.

Current DOSD operations during heavy rainfall events include: pump station start-up, roller gate closure, stop log gate closures, gate well closures and sandbag gate closures and are based on a flood forecast of Scioto River stage at the Frank Road USGS stream gauge. All of these operations are predicated upon actual and predicted flood elevations.

Currently, the City relies upon the United States National Oceanic and Atmospheric Administration (**NOAA**), National Weather Service (NWS), Advanced Hydrologic Prediction Service (AHPS) for these predictions. However those organizations do not incorporate enough meters, indicators and sensors upstream to assist the division with the best practices of the processes needed in heavy rainfall events.

DOSD in partnership with the National Weather Service are working together to refine and develop a more accurate flood predictor and warning system which will enable the division to deploy processes during heavy rain fall events systematically.

AECOM completed its evaluation of all applicable services, methods and operations, and recommended several augmentations and/or replacements to many parts of the process. DOSD has chosen to accept those recommendations which generally are to: 1) Augment current rain gauge and stream monitoring equipment and networks, repairing existing rain and stream gauges and increasing the density of these networks for more accurate information; 2) Build a new, more detailed and accurate Hydrologic Engineering Centers River Analysis System (**HEC-RAS**) model, calibrate this model with the newer, more densely populated data; and aid in the installation and use of that new model by the NWS; and 3) Establish new Memorandums of Understanding (MOUs) with the NWS, Ohio State Department of Public Safety (ODPS) and the United States Geographic Survey (USGS) for use of this new model; the installation of new equipment and upgrade the existing maintenance and operations of monitoring networks and to upgrade the existing NWS warning procedures on the Scioto River.

The scope of work for the Division of Water includes evaluating the operations of the level gate for the Hoover Reservoir. Using primarily existing hydraulic and hydrologic models the project will thoroughly evaluate DOW's current operating standards and recommend revisions if appropriate. In so doing, the range of impacts level gate operations have on downstream water levels associated with extreme weather events will be determined. This work will be incorporated in two phases; the first phase will be funded by the current agreement. If the City opts to perform the second phase of work it will be funded by a future contract modification. The cost for the current phase of this work is \$91,532.00.

**Project Timeline and Cost:**

Proposals out .....10/11/10 (Actual)  
Proposals received .....11/12/10 (Actual)  
Contract Initiation (NTP) .....8/17/11 (8-26-11-Actual)  
Part 1 (Current Ops evaluated) .....4/22/12 (8-30-13)  
Part 2 (Augmentation Implementation) ...8/5/14 (8-30-13)  
End .....8/5/15 (8-31-15)

**Procurement Information:** The Division sent a Request for Proposals (RFP) on the City of Columbus's Vendor Services website and in the City Bulletin in accordance with the provisions of Section 329.14 of Columbus City Codes. The Division of Sewerage and Drainage opened three requests for proposals on November 12, 2010.

<u>Name</u>	<u>C.C. No.</u>	<u>Exp. Date</u>	<u>Status</u>	<u>City and State</u>
AECOM Technical Svs	95-2661922	07/07/11	MAJ	Columbus, Ohio
DLZ Corp.	31-1126898	02/22/13	MAJ	Columbus, Ohio
Malcolm Pirnie Arcadis	13-2653703	03/09/12	MAJ	Columbus, Ohio

**Contract Compliance No.:** 95-2661922 | MAJ | Expires 10/11/14

This company is not debarred according to the Federal excluded parties listing or prohibited from being awarded a contract to the Auditor of State unresolved findings for recovery certified search.

**Emergency Designation:** Emergency designation **is requested** at this time.

**Economic & Environmental Impact:**

This project enabled local and national experts to assess national and local flood warning prediction processes in the operations of the Franklinton Floodwall. Augmented City procedures and actions in respect to the Floodwall operations are recommended. Such augmented procedures shall affect a savings in the amount of man-power needed to operate the Floodwall, minimize actual flood damage, and decrease the risk of such occurrences. The model, rainfall, river stage, and model-related data will be available for many other applications as well, such as real time control of sanitary collection systems and plant operations and evaluation of development impacts along the river. Such applications could optimize systems operations and lower overflows from the collection system and plants and more accurately estimate impacts of filling or excavating in the flood plain or dam removals.

**Fiscal Impact:** This ordinance authorizes the Director of Public Utilities to transfer within and expend up to \$872,281.00 from the Sanitary Sewer: the Sanitary Sewer: GO Bond Fund, Fund 664; Revenue Bond Fund, Fund 665; Build America Bond Fund, Fund 668; Super Build America Bond Fund, Fund 669; and the Permanent Improvement Bond Fund, Fund 671.

A transfer of \$91,532.00 within the Water Works Enlargement Voted Bonds Fund will also be necessary.

An amendment to the 2013 Capital Improvements Budget will be needed for both Divisions.

To authorize the Director of Public Utilities to enter into an engineering agreement with AECOM Technical Services, Inc. for professional engineering services for the Scioto River Stage Prediction Augmentation Project, Part 2; to authorize the transfer within and expenditure of \$872,281.00 from various Sanitary Sewer Bond Funds; to authorize the transfer within and expenditure of \$91,532.00 from the Water Works Enlargement Voted Bonds Fund; to amend the 2013 Capital Improvements Budget; and declare an emergency. (\$963,813.00)

**WHEREAS,** the City of Columbus, Division of Sewerage and Drainage (DOSD) maintains and operates components of

the West Columbus Local Protection Project (WCLPP - a.k.a. "the Franklinton Floodwall"), as part of the Scioto River Stage Prediction Augmentation Project, Part 2 Project ; and

**WHEREAS**, the Division of Sewerage and Drainage has chosen to accept the recommendations (see above list); and

**WHEREAS**, the Division of Sewerage and Drainage is attempting to increase its flood modeling accuracy by entering into an engineering service agreement with AECOM Technical Services, Inc., for the Scioto River Stage Prediction Augmentation project; and

**WHEREAS**, the City of Columbus, Division of Water (DOW) maintains and operates the Hoover Reservoir and Hoover Dam as part of the Scioto River Watershed system; and

**WHEREAS**, the Division of Water is requesting AECOM Technical Services, Inc. evaluate current standard operating procedures related to the Hoover Dam and recommend revisions if appropriate; and

**WHEREAS**, it is necessary to authorize the transfer within and the expenditure funds from the following Sanitary Sewer funds: the Sanitary Sewer: the Sanitary Sewer GO Bond Fund, Fund 664; Revenue Bond Fund, Fund 665; Build America Bond Fund, Fund 668; Super Build America Bond Fund, Fund 669; and the Permanent Improvement Bond Fund, Fund 671 in the total amount of \$872,281.00 for purposes of providing sufficient funding for the aforementioned project; and

**WHEREAS**, it is necessary to authorize a transfer and expenditure up to \$91,532.00 from the Water Works Enlargement Voted Bonds Fund for purposes of providing sufficient funding for the aforementioned project; and

**WHEREAS**, it is necessary to amend the 2013 Capital Improvements Budget to provide sufficient authority for this project; and

**WHEREAS**, an emergency exists in the usual daily operations of the Division of Sewerage and Drainage, Department of Public Utilities, it is hereby requested that Council authorize the Director of Public Utilities to enter into a professional engineering agreement with AECOM Technical Services, Inc., for the preservation of the public health, peace, property, safety, and welfare; **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 enter into a professional engineering service agreement with AECOM Technical Services, Inc., 300 East Broad Street, Suite 300, Columbus, Ohio 43215, for the Scioto River Stage Prediction Augmentation Project, Part 2 which is on file in the offices of the Division of Sewerage and Drainage and Division of Water.

**SECTION 2.** That the City Auditor is hereby authorized and directed to appropriate the following:

**A.** Division: Sewerage and Drainage  
Dept. /Div. No.: 60-05  
Fund No.: 668  
Fund Name: Sanitary B.A.B.s. Fund  
OL3: 6676

**Fund No. | Project No. | Project Name | OCA | Amount**  
668 | 668999-100000 | Unallocated Balance Fund 668 | 668999 | \$46,210.35

**B.** Division: Sewerage and Drainage  
Dept. /Div. No.: 60-05  
Fund No.: 669

Fund Name: Sanitary Recovery Zone Fund  
OL3: 6676

**Fund No. | Project No. | Project Name | OCA | Amount**

669 | 669999-100000 | Unallocated Balance Fund 669 | 669999 | \$15,183.80

C. Division: Sewerage and Drainage

Dept. /Div. No.: 60-05

Fund No.: 671

Fund Name: Sanitary Permanent Recovery Zone Fund

OL3: 6676

**Fund No. | Project No. | Project Name | OCA | Amount**

671 | 671999-100000 | Unallocated Balance Fund 671 | 999671 | \$112,225.44

**SECTION 3.** That the City Auditor is hereby authorized to transfer \$872,281.00 within the Department of Public Utilities, Division of Sewerage and Drainage | Dept. /Div. No. 60-05 | as follows:

**From:**

**Project No. | Project Name | OCA Code | Change**

See the attached Cash Transfer Sheet

**To:**

**Fund No. | Project No. | Project Name | OCA Code | Change**

664 | Scioto River Stage Prediction Augmentation, Part 2 | 664741 | +\$18,738.99

665 | Scioto River Stage Prediction Augmentation, Part 2 | 665741 | +\$196,806.32

668 | Scioto River Stage Prediction Augmentation, Part 2 | 668741 | +\$500,504.21

669 | Scioto River Stage Prediction Augmentation, Part 2 | 669741 | +\$44,006.04

671 | Scioto River Stage Prediction Augmentation, Part 2 | 671741 | +\$112,225.44

**SECTION 4.** That the City Auditor is hereby authorized to transfer \$91,532.00 within the Department of Public Utilities, Division of Water, Water Works Enlargement Voted Bonds Fund, Fund No. 606, Dept/Div. No. 60-09, Object Level Three 6677, as follows:

**Fund No. | Project No. | Project Name | OCA Code | Change**

606 | 690251-100000 (New Funding) | O'Shaughnessy Dam Hydroelectric | 690251 | -\$91,054.50

606 | 690501-100001 (New Funding) | Old Roberts Rd. WL | 665011 | -\$477.50

606 | 690547-100000 (New Funding) | Scioto River Stage-Hoover Eval. | 606547 | +\$91,532.00

**SECTION 5.** That the 2013 Capital Improvements Budget Ordinance No. 0645-2013 is hereby amended as follows, to provide sufficient budget authority for the Capital Improvement Projects listed herein:

**Division of Sewerage & Drainage:**

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

664 | 650014-100000 | Sanitary Sewer Construction | 6,141 | \$0 | (-\$6141)

664 | 650015-100000 | Long Street Sewer Reimbursement | \$663 | \$0 | (-\$663)

664 | 650604-100000 | Big Run/Hellbranch Subtrunk | \$5,821 | \$0 | (-\$5,821)

664 | 650618-100000 | Chestnut St. Combined Sewer | \$220 | \$0 | (-\$220)

664 | 650698-100000 | Sewer System I/I Elimination | \$1,807 | \$0 | (-\$1807)

664 | 650705-100000 | Alum Creek Sanitary Sewer | \$3,718 | \$0 | (-\$3718)

664 | 650745-100002 | 2010 General Construction | \$372 | \$0 | (-\$372)

664 | 650741-100000 | Scioto River Stage Prediction Augmentation, Part 2 | \$0 | \$18,739 | (+\$18,739)

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

665 | 650350-100000 | WWTP Contingencies | \$6,889 | \$0 | (-\$6,889)  
 665 | 650352-100000 | SWWTP New Headworks S82 | \$18 | \$0 | (-\$18)  
 665 | 650360-100000 | WWTP Upgrade Engineering Co. | \$3,159 | \$0 | (-\$3,159)  
 665 | 650364-100000 | SWWTP New Headworks, Part 2 | \$33,359 | \$0 | (-\$33,359)  
 665 | 650430-100000 | Big Walnut Outfall | \$361 | \$0 | (-\$361)  
 665 | 650491-100000 | Big Walnut / Rickenbacker | \$3,771 | \$0 | (-\$3,771)  
 665 | 650604-100000 | Big Run / Hellbranch Subtrunk | \$56,000 | \$0 | (-\$56,000)  
 665 | 650682-100000 | Chase / High Sanitary Improvements | \$68,061 | \$0 | (-\$68,061)  
 665 | 650691-100000 | OSIS Downtown Odor Control | \$7,336 | \$0 | (-\$7,336)  
 665 | 650701-100000 | Franklin #1 Trunk Sewer | \$48 | \$0 | (-\$48)  
 665 | 650703-100000 | Sanitary Pump Station Instrumentation | \$5,293 | \$0 | (-\$5,293)  
 665 | 650735-100000 | Information Systems Improvements | \$12,518 | \$0 | (-\$12,518)  
 665 | 650741-100000 | Scioto River Stage Prediction Augmentation, Part 2 | \$0 | \$196,807 | (+\$196,807)

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

668 | 650252-100000 | JPWWTP Headworks | \$4,500 | \$0 | (-\$4,500)  
 668 | 650343-100001 | SWWTP Multiple Hearth | \$58,423 | \$0 | (-\$58,423)  
 668 | 650404-100039 | River South Phase II | \$51,787 | \$0 | (-\$51,787)  
 668 | 650510-100032 | SMOC Material Storage | \$146 | \$0 | (-\$146)  
 668 | 650620-100000 | Lockbourne Rd Sanitary Sewer | \$32,927 | \$0 | (-\$32,927)  
 668 | 650691-100000 | OSIS Downtown Odor Control | \$9,440 | \$0 | (-\$9,440)  
 668 | 650742-100001 | Berliner Park Sewer Improvements | \$0 | \$349,211 | +\$349,211 (from cancellation OX146541)  
 668 | 650742-100001 | Berliner Park Sewer Improvements | \$349,211 | \$88,336 | (-\$260,876)  
 668 | 650750-100000 | Livingston / Parsons Sewer Rehabilitation | \$0 | \$36,199 | +\$36,199 (from cancellation OX142280)  
 668 | 650750-100000 | Livingston / Parsons Sewer Rehabilitation | \$36,199 | \$0 | (-\$36,199)  
 668 | 668999-100000 | Unallocated Balance Fund 668 | \$40,617 | \$48,875 | +\$8,258 (to match cash from revenue)  
 668 | 668999-100000 | Unallocated Balance Fund 668 | \$48,875 | \$ 2,664 | (-\$46,211)  
 668 | 650741-100000 | Scioto River Stage Prediction Augmentation, Part 2 | \$500,505 | \$0 | (+\$500,505)

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

669 | 650510-100031 | Sewer Maintenance Operations Center | \$28,823 | \$0 | (-\$28,823)  
 669 | 669999-100000 | Unallocated Balance Fund 669 | \$12,829 | \$16,276 | +\$3,447 (to match cash from revenue)  
 669 | 669999-100000 | Unallocated Balance Fund 669 | \$16,276 | \$1,092 | (-\$15,184)  
 669 | 650741-100000 | Scioto River Stage Prediction Augmentation, Part 2 | \$44,007 | \$0 | (+\$44,007)

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

671 | 671999-100000 | Unallocated Balance Fund 671 | \$72,532 | \$118,023 | +45,491 (to match cash from revenue)  
 671 | 671999-100000 | Unallocated Balance Fund 671 | \$118,023 | \$ 5,797.55 | (-\$112,226)  
 671 | 650741-100000 | Scioto River Stage Prediction Augmentation, Part 2 | \$0 | \$112,226 | (+\$112,226)

**Division of Water:**

**Fund No. | Project No. | Project Name | OCA Code | Change**

606 | 690251-100000 (New Funding) | O'Shaughnessy Dam Hydroelectric | \$91,054 | \$91,055 | +\$1 (establish authority to match cash)  
 606 | 690251-100000 (New Funding) | O'Shaughnessy Dam Hydroelectric | \$91,055 | \$0 | -\$91,055  
 606 | 690501-100001 (New Funding) | Old Roberts Rd. WL | \$639,258 | \$777,590 | +\$138,332 (establish authority to match cash + rounding)

606 | 690501-100001 (New Funding) | Old Roberts Rd. WL | \$777,590 | \$777,112 | -\$478  
606 | 690547-100000 (New Funding) | Scioto River Stage-Hoover Eval. | \$0 | \$91,533 | +\$91,533

**SECTION 6.** That the Director of Public Utilities be and hereby is authorized to expend a total of up to \$872,281.00 from the Sewerage and Drainage Sanitary Sewer Build America Bonds Fund into the Scioto River Stage Prediction Augmentation | Div. 60-05 | 650741-100000 | Object Level Three 6676 as follows:

<u>Fund No.</u>	<u>Project No.</u>	<u>Project Name</u>	<u>OCA Code</u>	<u>Amount (\$)</u>
664		Scioto River Stage Prediction Augmentation, Part 2	664741	+\$18,738.99
665		Scioto River Stage Prediction Augmentation, Part 2	665741	+\$196,806.32
668		Scioto River Stage Prediction Augmentation, Part 2	668741	+\$500,504.21
669		Scioto River Stage Prediction Augmentation, Part 2	669741	+\$44,006.04
671		Scioto River Stage Prediction Augmentation, Part 2	671741	+\$112,225.44

**SECTION 7.** That an expenditure up to \$91,532.00 is hereby authorized for the Scioto River Stage Prediction Augmentation - Hoover Reservoir Evaluation Project within the Water Works Enlargement Voted Bonds Fund, Fund No. 606, Division 60-09, Project No. 690547-100000 (New Funding), OCA Code 606547, Object Level Three 6677.

**SECTION 8.** That said engineering firm, AECOM Technical Services, Inc., shall perform the work to the satisfaction of the Director of Public Utilities and the Administrators of the Division of Sewerage and Drainage and Water.

**SECTION 9.** That the funds necessary to carry out the purpose of this Ordinance are hereby deemed appropriated, and the City Auditor shall establish such accounting codes as necessary.

**SECTION 10.** That the City Auditor is hereby authorized and directed 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 no longer required for said project; except that no transfer shall be made from a project account by monies from more than one source.

**SECTION 11.** That the City Auditor is authorized to establish proper project accounting numbers as appropriate.

**SECTION 12.** 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 13.** 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 after its passage and approval by the Mayor or ten days after its passage if the Mayor neither approves nor vetoes the same.