



ARLINGTON COUNTY, VIRGINIA

**County Board Consent Agenda Item
Meeting of June 13, 2009**

DATE: May 20, 2009

SUBJECT: Award of a Contract for the Construction of the Potomac Interceptor Sewer System Improvements project, Invitation to Bid No. 345-08, Project No. 07-465-S.

C. M. RECOMMENDATIONS:

1. Award a contract for the construction of the Potomac Interceptor Sewer System Improvements project to Total Engineering Inc. in the amount of \$14,609,718.15 and authorize an allocation of \$2,921,943.85 as a contingency for change orders and increased quantities, and \$876,583.00 for stipulated price items. The total project authorization is therefore \$18,408,245.00.
2. Authorize the Purchasing Agent to execute the contract documents subject to review by the County Attorney.

ISSUES: This is an award of a contract to the lowest responsible and responsive bidder for the construction of the Potomac Interceptor Sewer System Improvements project and no issues have been identified.

SUMMARY: This project consists of the installation of approximately 8,900 linear feet of new sanitary sewer pipeline to relieve an existing undersized gravity sewer main that has experienced sewage overflows and is projected to have further overflow as development continues in the Potomac Interceptor sewershed. The proposed construction methods for this project include both the traditional open cut method and the trenchless method of microtunneling, which will be used mainly for crossing under existing roadways. A major portion of this sanitary sewer main will be located within the boundary of the Arlington National Cemetery ("ANC"). As part of the construction of the sewer project, ANC staff requested to have their aging 16-inch water main replaced by the County sewer main contractor in order to minimize the disturbance to the ANC site. A Memorandum of Agreement ("MOA") between the County and ANC detailing the provision of funding from ANC to the County for the cost of the installation of this new water main was approved by the County Board in September 2007, and signed in October 2007.

BACKGROUND: The 1992 Arlington County Sanitary Sewer System Master Plan recommended the Potomac Interceptor Sanitary Sewer Improvements Project ("PI project"), which consists of construction of a parallel relief main to improve the capacity deficiency in the

County Manager: _____

County Attorney: _____

Staff: Jerry Kuo, Department of Environmental Services

existing trunk main which serves Rosslyn. In 1995, the Department of Public Works advertised a Request for Proposal for the preliminary engineering, final design and construction management services to be performed on three separate projects located within different sewersheds as identified in the Master Plan, including the PI project. The County Board awarded a contract to Camp, Dresser & McKee, Inc. (“CDM”) for the study and design of these three projects in January of 1996.

Staff has encountered significant difficulty obtaining the necessary easements and permits for the PI project that crosses the River Place Co-operative property, as well as Virginia Department of Transportation (“VDOT”), Washington Metropolitan Transit Authority (“WMATA”), National Park Service (“NPS”), and Arlington National Cemetery (“ANC”) lands or rights-of-way. The design for this project was further complicated by numerous utility conflicts, including storm, water, electrical, and telecommunications. After working for years with the aforementioned property owners, all necessary real estate interests, except for three permanent and two temporary easements over four parcels of real property at the northern end of the project, have been obtained. Construction in the northern portion of this project is not expected to begin until the end of 2010. The contractor shall start the construction within the areas of the outstanding easements only after receiving a separate Notice to Proceed from the County as part of the special provisions included in the bid documents. If these last real estate interests are not obtained in time, construction on this project would cease at that point until the interests could be obtained or the construction contract would be terminated for the convenience of the County in accordance with the contract agreement.

The final design of the PI project specifies the installation of approximately 8,900 linear feet of gravity sanitary sewer pipeline ranging from 30-inch to 48-inch in diameter. The northern (upstream) end of this project is located on the River Place Apartments property just north of Arlington Boulevard. The proposed pipe alignment proceeds southward across Arlington Boulevard and the WMATA right-of-way. The pipeline continues south crossing NPS property in the vicinity of the U.S. Marine Corps War Memorial before entering ANC property. The majority of the interceptor (approximately 6,500 linear feet) will be constructed within the ANC boundary. The last portion of the proposed pipeline near the southern (downstream) end of this project will exit ANC property and cross under Columbia Pike. The final connection will be made to an existing 54-inch sewer main within the VDOT right-of-way just south of Columbia Pike.

The crossings of Arlington Boulevard and Columbia Pike will be accomplished using a trenchless technology known as microtunneling. This method of construction will eliminate the need to close the roadways during construction, and minimize any other traffic impacts on these roadways. The remainder of the construction will be done primarily utilizing traditional open trench methods.

This project also includes the installation of a new federally owned 16-inch water main between Columbia Pike and Memorial Avenue along Eisenhower Drive within ANC in order to replace an existing aging 16-inch water main currently in use. A major portion of this new water main will be placed parallel to the new County sanitary sewer main approximately 10 feet away under Eisenhower Drive and at much shallower depth than the sewer main. The construction of the water main as part of this project will minimize disruption to ANC and allow for more burial

space as well as facilitate water main relocations required for the County new sewer main. All costs for the design and construction of this water main will be borne by ANC.

All the construction work within the ANC boundary will be performed by the contractor during evening hours. This night-work is required in order to eliminate any interruptions to official ANC daily activities. The anticipated duration for this project is 730 days.

DISCUSSION: The Purchasing Agent received the following responsive bids on May 7, 2009, at 2:00 p.m.:

<u>Bidders</u>	<u>Bid Amount</u>
Total Engineering Inc.	\$ 14,609,718.15
Morgan Contracting, Inc.	\$ 15,197,065.00
Fort Myer Construction Corporation	\$ 16,790,681.50
Flippo Construction Company, Inc.	\$ 16,877,902.50
Corinthian Contractors, Inc.	\$ 18,962,238.04
Corman Construction, Inc.	\$ 19,370,746.00
American Infrastructure – VA, Inc.	\$ 19,812,345.00

The low bidder, Total Engineering Inc., was found to be a responsible bidder and the bid submitted was found to be responsive to the Invitation to Bid #345-08. Total Engineering's bid amount is less than the engineer's estimate.

A contingency fund of \$2,921,943.85 is recommended for any necessary change orders and increased quantities. An additional amount of \$876,583.00 for stipulated price items is also recommended. Therefore, the total recommended project authorization is \$18,408,245.00.

FISCAL IMPACT: The Utility Fund has \$17,632,196.00 available to finance construction of the Potomac Interceptor Sewer System Improvements project. Funding includes \$16,000,000.00 in general obligation bond funds, and \$1,632,196.00 from Paygo. Debt service costs are included in the annual projections for the Water/Sewer Rate. Rate increases are projected to range from 5-10% per year for several years to properly fund Utilities Fund projects and operating expenses. The following accounts should be used for the sanitary sewer project expenditures (excluding the ANC water main replacement):

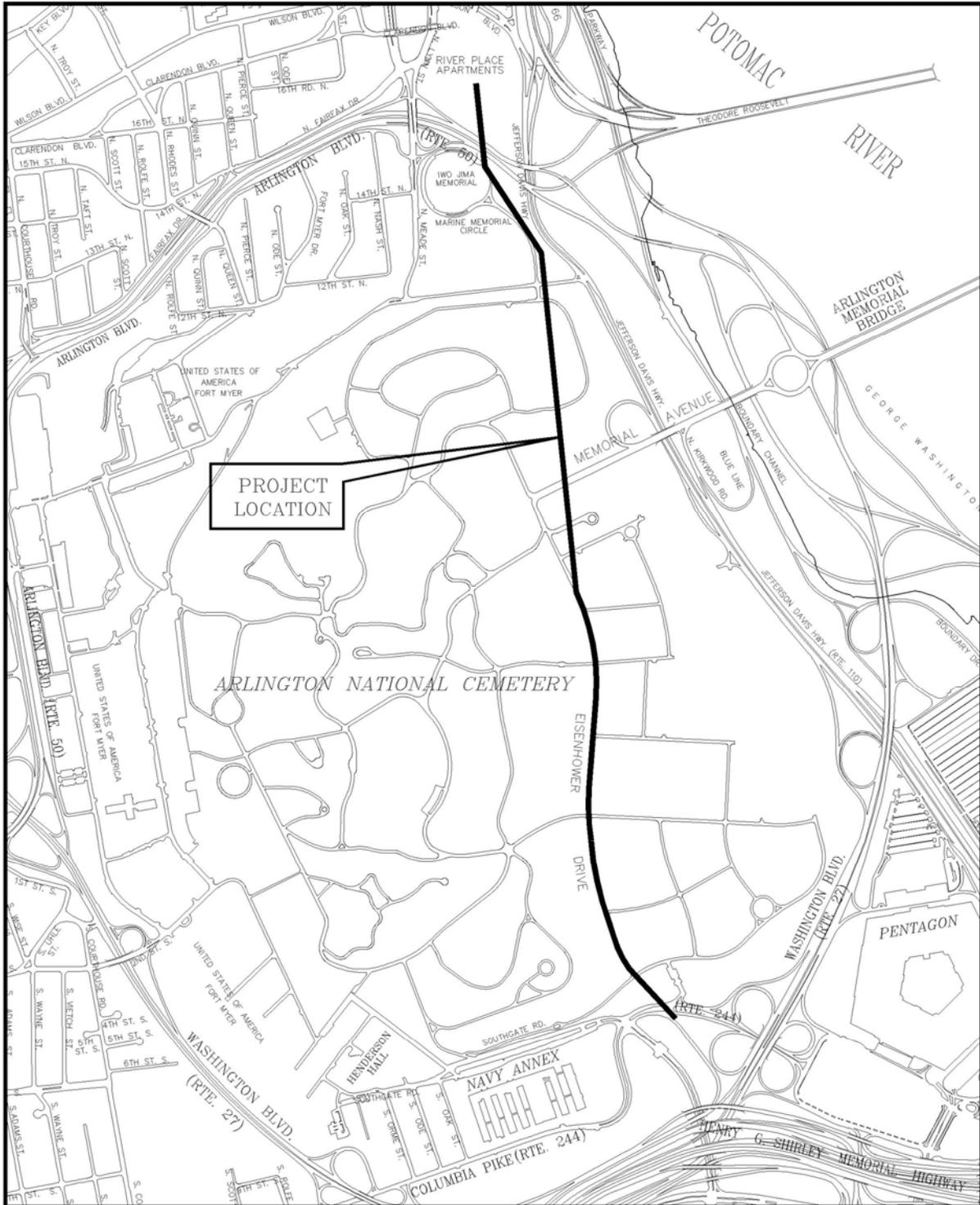
\$10,000,000.00; Account 528.43544.SA20.U06.0000
(GO Bonds approved in 2006, issued in 2007, Series Part 1)

\$6,000,000.00; Account 528.43544.SA20.WJJ.0000
(GO Bonds approved in 2000, issued in 2005, Series Part 2)

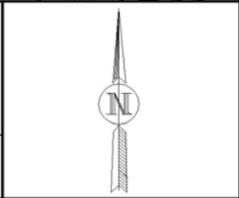
\$1,632,196.00; Account 519.43544.SA20.0339.0000
(Paygo)

The estimated cost for the ANC water main replacement portion of the project is \$776,049.00. All of the construction expenditures associated with the ANC water main replacement will be borne by ANC, and should be charged to the following account:

\$776,049.00; Account 519.43544.FOWM.FEDG.0000
(ANC)



POTOMAC INTERCEPTOR
 SANITARY SEWER IMPROVEMENTS PROJECT
 FROM ROSSLYN THROUGH THE ARLINGTON
 NATIONAL CEMETERY TO COLUMBIA PIKE



LOCATION MAP
 (Not To Scale)