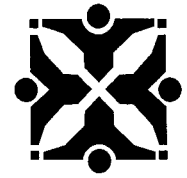


City of Columbia

701 East Broadway, Columbia, Missouri 65201



Agenda Item Number: R 127-14

Department Source: Public Works

To: City Council

From: City Manager & Staff

Council Meeting Date: July 21, 2014

Re: Cost Sharing Agreement for Planning Assistance with US Army Corps of Engineers for Oak Forest Detention Retrofits

Documents Included With This Agenda Item

Council memo, Resolution/Ordinance, Cost Sharing Agreement for Planning Assistance

Supporting documentation includes: Maps

Executive Summary

Authorizing a Cost Sharing Agreement for planning assistance with U.S. Army Corps of Engineers (USACE) for the Oak Forest Detention Retrofits (also known as the Kelly Detention Retrofits). The resolution estimate for the City's portion of the project is \$50,000, and will be paid from Stormwater Utility funds previously appropriated to the Kelly Detention Retrofits project.

Discussion

The two Oak Forest detention basins were constructed as regional detention basins by private developers in 2005, then deeded to the City's Stormwater Utility for ownership, operation and maintenance. The two detention basins were designed and constructed to provide flood protection for existing homes in the neighboring subdivisions, but do very little for water quality or stream channel protection.

Staff has long felt that these two detention basins have the potential to provide water quality treatment and stream channel protection in addition to the flood protection functions. The purpose of this study is to determine how the existing detention basins can be retrofitted in order to accomplish this. Since the two basins are tributary to the Hinkson Creek, staff feels it is important to add water quality treatment and stream channel protection functions in order to help protect the overall water quality of the Hinkson Creek.

Staff is proposing to partner with the USACE to fund this study by utilizing their Planning Assistance Cost Share program. The total project is estimated to cost \$100,000, which will be split between the City and USACE. The details of the scope of the proposed study is outlined in appendix A, and it is anticipated that the study will be completed within 12 months.

City of Columbia

701 East Broadway, Columbia, Missouri 65201



Fiscal Impact

Short-Term Impact: The City's contribution to the total project cost will be \$50,000. Funding for the study will come from Stormwater Utility funds that have been previously appropriated to the Kelly Detention Retrofit Project.

Long-Term Impact: None

Vision, Strategic & Comprehensive Plan Impact

Vision Impact: Environment

Strategic Plan Impact: Infrastructure

Comprehensive Plan Impact: Environmental Management, Infrastructure

Suggested Council Action

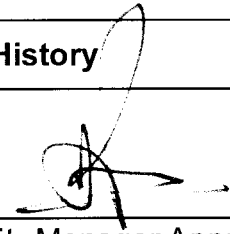
Authorize the Cost Sharing Agreement for planning assistance with U.S. Army Corps of Engineers (USACE) for the Oak Forest Detention Retrofits (also known as the Kelly Detention Retrofits).

Legislative History

None



Department Approved



City Manager Approved

Introduced by _____ Council Bill No. R 127-14

A RESOLUTION

authorizing a cost sharing agreement for planning assistance with the U.S. Army Corps of Engineers for water quality treatment and stream channel protection retrofits to the Oak Forest detention basins.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF COLUMBIA, MISSOURI, AS FOLLOWS:

SECTION 1. The City Manager is hereby authorized to execute a cost sharing agreement for planning assistance with the U.S. Army Corps of Engineers for water quality treatment and stream channel protection retrofits to the Oak Forest detention basins. The form and content of the agreement shall be substantially as set forth in "Exhibit A" attached hereto and made a part hereof.

SECTION 2. The City Manager or the City Manager's appointed designee, acting as the City Manager's representative, is authorized to furnish all information to the U.S. Army Corps of Engineers, to sign all documents on behalf of the City and to furnish all assurances required by law or regulation which are necessary or incidental to comply with the terms of the agreement.

ADOPTED this _____ day of _____, 2014.

ATTEST:

City Clerk

Mayor and Presiding Officer

APPROVED AS TO FORM:

City Counselor

**COST SHARING AGREEMENT FOR PLANNING ASSISTANCE
BETWEEN THE U.S. ARMY CORPS OF ENGINEERS
AND THE CITY OF COLUMBIA, MISSOURI
FOR
OAK FOREST DETENTION RETROFITS**

THIS AGREEMENT, is entered into this ____ day of _____ 2014, by and between the United States of America (hereinafter called the "Government"), represented by the District Engineer executing this Agreement, and the City of Columbia, Missouri (hereinafter called the "Sponsor"), represented by the City Manager.

WITNESSETH, that

WHEREAS, the Congress has authorized the Corps of Engineers in Section 22 of the Water Resources Development Act of 1974, Pub. L. 93-251, 42 U.S.C. § 1962d-16, to assist the States in the preparation of comprehensive plans for the development, utilization and conservation of water and related land resources; and,

WHEREAS, Section 319 of the Water Resources Development Act of 1990, Pub. L. 101-640, 42 U.S.C. § 1962d-16(b), authorized the Government to collect from non-Federal entities fees for the purpose of recovering fifty (50) percent of the cost of the program; and,

WHEREAS, the Sponsor has reviewed Columbia's comprehensive water plans and identified the need for the planning assistance as described in the Scope of Study attached hereto and incorporated as a part of this Agreement at Appendix A; and,

WHEREAS, the Sponsor has the authority and capability to furnish the cooperation hereinafter set forth and is willing to participate in study cost-sharing and financing in accordance with the terms of this agreement;

NOW THEREFORE, the parties agree as follows:

1. The Government, subject to receiving funds appropriated by the Congress of the United States and using those funds and funds provided by the Sponsor, shall expeditiously prosecute and complete the study, estimated to be completed within 12 months from the date of this Agreement, substantially in compliance with the Scope of Study attached as Appendix A and in conformity with applicable Federal laws and regulations and mutually acceptable standards of engineering practice.

2. The Government and the Sponsor shall each contribute fifty (50) percent of all study costs, the total cost of which is currently estimated to be \$100,000 as specified in the cost estimate attached as Appendix B. The Sponsor agrees to provide its share in the amount of \$50,000 in the following manner:

- The amount of \$50,000 shall be made payable to FAO, USAED, (Kansas City District), prior to any work being performed under this Agreement.

3. Sponsor shall provide any cash contribution required under Paragraph 2 of this Agreement within 30 days of the execution of this Agreement. Sponsor shall provide the Government the full amount of the required funds by delivering a cashier or certified check to the District Engineer, or by utilizing an Electronic Funds Transfer or wire transfer in accordance with procedures established by the Government.
4. Sponsor shall not use Federal program funds to meet its obligations for the Study under this Agreement unless the Federal agency providing the Federal portion of such funds verifies in writing that expenditure of such funds for such purpose is expressly authorized by Federal law.
5. Any claims or disputes arising under or relating to this agreement shall be resolved in accordance with Federal law and the terms of this Agreement.
6. Before any party to the Agreement may bring suit in any court concerning any issue relating to this Agreement, such party must first seek in good faith to resolve the issue through negotiation or another form of nonbinding alternate dispute resolution mutually acceptable to the parties.
7. In the event that any one or more of the provisions of this Agreement is found to be invalid, illegal, or unenforceable, by a court of competent jurisdiction, the validity of the remaining provisions shall not in any way be affected or impaired and shall continue in effect until the Agreement is completed.
8. The provisions of this Agreement may be modified or amended only by the written mutual consent of the parties to this Agreement.
9. Either party may terminate this Agreement by providing written notice to the other party. In the event of termination, the Sponsor shall continue to be responsible for its share of all costs incurred by the Government under the Agreement.
10. This agreement shall become effective upon the signature of both parties.

CITY OF COLUMBIA MISSOURI

U.S. ARMY CORPS OF ENGINEERS:

By: _____
Mike Matthes
City Manager
City of Columbia,
Missouri

By: _____
Andrew D. Sexton
Colonel, Corps of Engineers
District Commander

Date: _____

Date: _____

Attest: (SEAL)

By _____
Sheela Amin
Title _____
City Clerk

APPROVED AS TO FORM:

By _____
Nancy Thompson
Title _____
City Counselor

I hereby certify that the above expenditure is within the purpose of the appropriation to which it is charged, Account No. 558-6688-881.40-23, C49108, and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefore.

John Blattel, Finance Director

**APPENDIX A
SCOPE OF STUDY
FOR
CITY OF COLUMBIA, MISSOURI
OAK FOREST DETENTION RETROFITS (070214)**

INTRODUCTION

The Oak Forest detention basins detain water from approximately 325 acres of mostly commercial development in south central Columbia, Missouri. The outfalls of the basins drain directly to Hinkson Creek through 4,000 feet of steep, eroded channels.

Hinkson Creek is the focus of a Collaborative Adaptive Management process (CAM) to address impairments due to unknown pollutants.

The Oak Forest detention basins were designed for flood control and do little or nothing for water quality or channel protection. Uncontrolled erosion and deposition of sediments ranging from fines to cobbles in the channels downstream of the basins make the efficacy of their flood prevention purpose uncertain.

SCOPE OF STUDY

The purpose of this study is to determine how the existing detention basins can be retrofitted to provide water quality and channel protection benefits while still maintaining their flood prevention functions. The tasks required to conduct this study are as follows:

Specific Analysis and Work Tasks to be Performed

- Prepare a HEC-RAS model of the 2500 feet of downstream channel most likely to be responsible for house and street flooding.
- Characterize the sediments of the downstream channels to aid in sediment transport calculations.
- Verify available volumes in the two detention basins.
- Verify that the dams are competent to hold water for a longer period of time.
- Analyze the potential to utilize and modify existing structures to accomplish project goals
- Make recommendations on spillway designs that accomplish the three primary goals:
 - improve water quality,
 - protect downstream channels from further erosion, and
 - protect the downstream neighborhood from flooding.

Deliverables and Documentation

- Prepare summary documentation of the steps above. Documentation will include draft outline, draft report, and final report.

- A section on the competency of the Oak Forest basin dams will be included in the summary documentation.
- A conclusion section with recommendations will be included in the summary documentation.
- Submit the HEC-RAS model for the downstream channel. The model will include profiles for the 1, 2, 10, 25, and 100-yr return events.
- A power point presentation of study findings will be presented to Columbia Public Works prior to the preparation of the draft report.

Coordination, Reporting, and Schedule

A kick-off meeting will be scheduled with Columbia Public Works following the signature of the PAS agreement. Additional coordination meetings will be held periodically during project execution.

The QA/QC plan with a detailed schedule for this work will be provided within 10 days following the kick-off meeting.

PROJECT MANAGEMENT

The USACE will manage this project in accordance with requirements for the Planning Assistance to States Program. The USACE will hold meetings with participants to review and report on the progress of work plan development and to prepare budget information. These meetings will also include discussion of work plan technical elements.

BUDGET AND SCHEDULE

As required by federal law, a non-federal Sponsor must bear an equal share of the study costs. The total cost of the study will not be increased without the mutual approval of the Sponsor and the USACE. The study cost estimate is shown in Appendix B. This scope of study will be completed within 12 months from the signature of the agreement.

	APPENDIX B	
	COST ESTIMATE	
	FOR	
	CITY OF COLUMBIA, MISSOURI	
	OAK FOREST DETENTION RETROFITS	
	TASKS	COST
Task 1	Specific Analysis and Work Tasks to be Performed	\$62,000
Task 2	Deliverables and Documentation	\$17,000
Task 3	Coordination, Reporting, and Schedule	\$11,000
	Project Management, Contracting and Quality Control	\$10,000
	TOTAL ESTIMATED PROJECT COSTS	\$100,000
	TOTAL ESTIMATED FEDERAL COSTS (50%)	\$50,000
	TOTAL ESTIMATED NON-FEDERAL COSTS (50%)	\$50,000



SUPPORTING DOCUMENTS INCLUDED WITH THIS AGENDA ITEM ARE AS FOLLOWS:

Maps

