



CITY OF NORMAN, OK STAFF REPORT

MEETING DATE: 06/28/2022

REQUESTER: Jason Murphy, Stormwater Program Manager

PRESENTER: Shawn O'Leary, Director of Public Works

TITLE: CONSIDERATION OF ADOPTION REJECTION, AMENDMENT, AND/OR POSTPONEMENT OF RESOLUTION R-2122-138: A RESOLUTION OF THE COUNCIL OF THE CITY OF NORMAN, OKLAHOMA, APPROPRIATING \$3,000,000 IN CITY OF NORMAN AMERICAN RESCUE PLAN ACT (ARPA) ENTITLEMENT FUNDS FROM THE SPECIAL GRANT FUND BALANCE TO BE USED FOR FUNDING THE LOWER IMHOFF CREEK BANK STABILIZATION PROJECT.

BACKGROUND:

On March 11, 2021, the United States Federal Government enacted the \$1,900,000,000,000 American Rescue Plan Act of 2021 (ARPA), "to speed up the United States' recovery from the economic and health effects of the COVID-19 pandemic and the ongoing economic recession". Specific funding of approximately \$350,000,000,000 was made available in the ARP Act to state, county and city governments and tribal nations in the "Coronavirus State and Local Fiscal Recovery Fund" (SLFRF). As a Community Development Block Grant entitlement city, the City of Norman has received \$22,245,542 in ARPA funding in two payments: \$11,122,771 on May 19, 2021 and \$11,122,771 on June 6, 2022.

In the July 27, 2021 meeting, the Council approved Resolution R-2122-128, appropriating \$9,500,000 in ARPA entitlement funds toward the construction of the Emergency Operations and Communications Center. On August 24, 2021, the Council approved Resolution R-2122-35, appropriating \$100,000 of ARPA entitlement funds to the Norman Arts Council. On September 14, 2021, Council approved Resolution R-2122-34, appropriating \$500,000 of ARPA entitlement funds for COVID vaccination incentive programs.

The City Council has programmed additional ARPA entitlement funds to be used within eligible categories of expenditure, generally as follows, and directed City staff to explore programs for the future use and appropriation of remaining ARPA entitlements:

- Affordable Housing \$4,500,000
- Non-Profit Support \$1,900,000
- Stormwater Capital Projects \$3,000,000
- Entrepreneur Grants \$1,000,000

A Storm Water Master Plan (SWMP) was developed for the City of Norman by PBS&J and accepted by City Council in November 2009. Among other things, this plan delineated the various watersheds in the City, identified stream segments, which needed restoration and improvement, and identified projects to provide this restoration including concept designs. As stated in the SWMP, solutions for problems in the Imhoff Creek watershed are by far the most significant compared to solutions in other watersheds. One such stream segment is the Lower Imhoff Creek between Lindsey Street and Imhoff Creek's confluence with the Canadian River.

In the Storm Water Master Plan, Lower Imhoff Creek is divided into two problem areas, or reaches: IC-1 and IC-2. IC-1 is the portion of Imhoff Creek between State Highway 9 and its confluence with the Canadian River. IC-2 is that portion of Imhoff Creek between State Highway 9 and a point some 2,000 linear feet north of Imhoff Road. IC-2 is the focus of the current project (see attached map).

The SWMP recommends design and installation of stream bank stabilization techniques along stream segment IC-2. The identified problem in the SWMP for IC-2 is "4,200 LF of severe bank erosion along both banks beginning at the upstream face of Highway 9 to approximately 2,000 LF upstream of Imhoff Rd. The erosion along the banks has caused property fences and trees to fall into the creek."

As Imhoff Creek adjusted to changing upstream conditions, down cutting and widening resulted in extreme bank and bed erosion, which are characteristic in this portion of Imhoff Creek. Continued development along the length of the stream has exacerbated the runoff problems leading to trees and fences falling into the creek, loss of property and threats to infrastructure including the Imhoff Road Bridge. In July of 2021, a critical failure of this bridge due to increasing erosion problems, led to this road closure until April of 2022 and a repair bill for just under \$2 million dollars. In the past, conventional wisdom directed efforts away from form and function toward armoring of stream channel bottoms and slopes to address in-stream erosion problems. This approach increased water velocity and tended to take problems downstream, which eventually worked back upstream as erosion occurring at the interface of the natural stream and the hard armor surfaces. Utilizing more natural stream restoration techniques, which provide for form and function, has proven to be a more effective method of urban stream repair.

On June 9, 2015, Council approved Contract K-1415-134 by and between the City of Norman and Meshek & Associates, LLC, in the amount of \$143,000. The contract services included:

- Kickoff Meeting and Channel Walk
- Data Collection and Processing
- Easement and Right-of-Way Evaluation
- Hydrology and Hydraulic Modeling
- Ecological Inventory
- Development of Stream Restoration Alternatives and Recommendations
- Council and Public Meetings
- Surveying and Geotechnical Investigations

On June 30, 2017, Meshek and Associates submitted the Lower Imhoff Creek Study Final Report. On July 11, 2017, City staff and Brandon Claborn, Principal Engineer for Meshek and Associates, presented the findings of this report to City Council. The conceptual designs and priority recommendations presented in the report will be used to perform engineering design and construction plans for the Phase I stream improvements.

On August 8, 2017, Council approved Resolution R-1718-21 accepting the Lower Imhoff Creek Study Final Report. The Lower Imhoff Creek Study Final Report recommended several preventative and mitigation recommendations based on the data gathered during this study as follows:

- Implementation of a 5-year Monitoring Plan to evaluate the rate of degradation to channel;
- Provide training to City maintenance staff to learn new techniques for maintaining more natural stream restoration devices such as gabion walls, cross vanes, and others;
- Design and construct stream mitigation improvements in two phases:
 - Phase 1 will begin at Imhoff Road and end approximately 1200 feet downstream of Imhoff Road. This section should be addressed first due to the risk to existing infrastructure. Estimated cost is \$3,150,300.
 - Phase 2 will begin upstream of Imhoff Road and end at the end of the improved channel. Estimated cost is \$4,347,950.

Construction of the stream mitigation improvements were divided into two phases due to the cost to construct the entire project at one time. Meshek and Associates recommended that Phase I of the improvements be addressed first because the greatest impact to existing infrastructure can be found in this area, including potential impacts to Imhoff Road bridge and several sewer lines. Homes on the east side of the Phase I project area are also located closer to the streambank than those in the Phase II project area.

On April 27, 2021, City Council approved Amendment No. 1 to Contract K-1415-134 with Meshek and Associates to ensure that all three recommendations were undertaken. The first two recommendations have since been completed and the third phase will be addressed through the completion of the following tasks:

- Federal Emergency Management Agency (FEMA) Grant Application and Preparation Services for construction costs and project coordination
- Detailed Topographic Survey
- Environmental (404 permitting)
- Hydrology & Hydraulic Modeling
- Preparation of a Conditional Letter of Map Revision (CLOMR)
- Geotechnical Report
- Preliminary Plans
- Final Construction Plans and Bid Documents
- Erosion Control Workshop
- Bank Erosion Monitoring Site Installation
- Project Management

DISCUSSION:

Due to the importance of this project, Council appropriated \$550,000 per year for seven years beginning with the FYE22 budget. With these allocations, design for Phase I is already underway with 90% plans completed and paid for through amended Contract K-1415-134. Given the estimated costs of construction for each phase of this project and the limited funds available for stormwater projects in the City's Capital Fund, City staff has been pursuing alternate sources of funding beginning with Phase I. FEMA has a long-term hazard mitigation planning and projects following a Presidential major disaster declaration Hazard Mitigation Grant Program (HMGP). As part of the amendment, City staff worked with Meshek and Associates to complete an application for HMGP program funding for Phase I construction costs and reimbursement of design costs as part of the Pre-Award services listed above.

This is an opportunity to apply for Federal funding assistance, which if secured, would greatly improve the conditions of Imhoff Creek and protect vital infrastructure, including Imhoff Road bridge from future erosion and several sanitary sewer lines, as well as help prevent further loss of resident property as their backyards continue to erode.

This grant for Phase I (south of Imhoff Road) fell under the Consolidated Appropriations Act of 2022, which granted a minimum of 90% federal cost share for any emergency or major disaster declared during or having an incident period between January 1, 2020 and December 31, 2021. This grant is itself divided into two phases. The first, Phase A, is design. Phase A total cost of \$383,647 including 90% Federal funds in the amount of \$345,282.30 and 10% local match of \$38,364.70. The total cost of Phase A has already been paid for by the City and, if awarded the grant, would result in a reimbursement of up to \$364,347.30. The construction phase, Phase B, would award grant money in the amount of \$3,391,354.19 of which \$3,052,218.78 is the 90% federal funds and \$339,135.41 is the 10% local match. If awarded, funds are available in project DR0062, 50595531-46101 for local match for both phases. Phase A should be completed by August 2022. If awarded, this grant along with funds already procured from council action, would allow Phase I of the Lower Imhoff rehabilitation to be completed by late 2023 or early 2024.

The City set aside \$3,000,000 in American Rescue Plan Act (ARPA) of 2021 funds to be directed towards stormwater capital projects. Specifically, stream bank improvements for Lower Imhoff Creek (IC-2) were identified as likely uses of these funds. If the City receives the HMGP grant described above, the ARPA entitlement funds would be applied towards completing Phase II of this project. These grant and the ARPA entitlement funds would allow for the completion of both Phases of the Lower Imhoff bank stabilization project by late 2024 or early 2025. If the City is not awarded the HMGP grant, ARPA entitlement funds can be used in conjunction with \$550,000 the City has already appropriated in FYE22 to move forward with completion of Phase I of the project and allow the annual Capital Project request of \$550,000 from subsequent years to be applied towards Phase II. If the City does not receive the HMGP grant and it does not apply the ARPA funds towards Lower Imhoff bank stabilization, Phase I of the project would not be completed until late 2028 or early 2029. This time frame is based on no additional funding aside from the \$550,000 already appropriated and the additional \$550,000 for each of the next six years (if funding remains available and is approved by Council each year).

| Scenario A | Phase I | Phase II | Total |
|----------------------------|----------------------|-----------------------------|--------------|
| Project Cost | \$ 3,775,001 | \$ 4,400,000 | |
| HMGP Grant Award | \$ (3,401,938) | \$ - | |
| HMGP Grant City Cost Share | \$ 373,063 | \$ - | |
| HMGP Grant Reimbursement | \$ (364,347) | \$ - | |
| Remaining Project Balance | \$ 381,778 | \$ 4,400,000 | \$ 4,781,778 |
| Completion Date | late 2023/early 2024 | late 2024/early 2025 | |
| | | Lower Imhoff Current Budget | \$ 1,100,000 |
| | | ARPA Funds | \$ 3,000,000 |
| | | Cost to Complete Phase I | \$ - |
| | | Cost to Complete Phase 2 | \$ 681,778 |
| | | Total Cost to Complete | \$ 681,778 |

| Scenario B | Phase I | Phase II | Total |
|----------------------------|----------------------|-----------------------------|--------------|
| Project Cost | \$ 3,775,001 | \$ 4,400,000 | |
| HMGP Grant Award | \$ - | \$ - | |
| HMGP Grant City Cost Share | \$ - | \$ - | |
| HMGP Grant Reimbursement | \$ - | \$ - | |
| Remaining Project Balance | \$ 3,775,001 | \$ 4,400,000 | \$ 8,175,001 |
| Completion Date | late 2023/early 2024 | unknown | |
| | | Lower Imhoff Current Budget | \$ 1,100,000 |
| | | ARPA Funds | \$ 3,000,000 |
| | | Cost to Complete Phase I | \$ (674,999) |
| | | Cost to Complete Phase 2 | \$ 4,400,000 |
| | | Total Cost to Complete | \$ 3,725,001 |

| Scenario C | Phase I | Phase II | Total |
|----------------------------|--------------|-----------------------------|--------------|
| Project Cost | \$ 3,775,001 | \$ 4,400,000 | |
| HMGP Grant Award | \$ - | \$ - | |
| HMGP Grant City Cost Share | \$ - | \$ - | |
| HMGP Grant Reimbursement | \$ - | \$ - | |
| Remaining Project Balance | \$ 3,775,001 | \$ 4,400,000 | \$ 8,175,001 |
| Completion Date | unknown | unknown | |
| | | Lower Imhoff Current Budget | \$ 1,100,000 |
| | | ARPA Funds | \$ - |
| | | Cost to Complete Phase I | \$ 2,325,001 |
| | | Cost to Complete Phase 2 | \$ 4,400,000 |
| | | Total Cost to Complete | \$ 6,725,001 |

RECOMMENDATION 1:

Staff recommends approval of Resolution R-2122-138, appropriating funds in the amount of \$3,000,000 to the Lower Imhoff Creek Bank Stabilization Project in the Public Works Stormwater Capital Fund through the American Rescue Plan Act of 2021.