



Department Source: Public Works

To: City Council

From: City Manager & Staff

Council Meeting Date: November 4, 2024

Re: Authorizing the Missouri Regional Bridge Program grant application for the replacement of the Old Plank Road culvert structure.

Executive Summary

Staff has prepared a resolution for Council consideration authorizing the City Manager to submit an application for the Missouri Department of Transportation (MoDOT) Regional Bridge Program matching grant. The funding request will be for the Old Plank Road culvert structure replacement project.

Discussion

MoDOT's Missouri Regional Bridge (BRO) Program provides funding for replacement of bridge structures that are structurally deficient. This application is requesting funding for the replacement of the Old Plank Road culvert structure. An ephemeral stream runs through the culverts. The structure is located just south of the intersection of Forum Boulevard with Old Plank Road. The existing structure was constructed 1986 and consist of three 66" diameter corrugated metal pipes with an asphalt driving surface. The size of the three culverts falls under MoDOT's definition of a bridge and therefore, are eligible for the BRO funding. The culverts are 90% rusted through on the bottom with a loss of bedding material resulting in a serious (very poor) rating for the pipe condition.

The rusted culverts lead to erosion of the pipe bedding; thus, reducing the integrity of the pipes and roadway surface. In addition, with three culverts next to each other, debris can accumulate on the upstream end resulting in slowing down the water flow and placing additional pressure on the pipes.

The improvement for the structure will include removing the three existing culverts and replacing them with a single opening box culvert or arch pipe. The approximate dimensions of the proposed box culvert could be 12'x5'x52'. The 52' length would allow for 2-12' driving lanes with room for future bike lanes and sidewalk on both sides of the road to address the proposed future road profile for Old Plank Road.

The application requests a funding match of 80 percent with the City's match of 20 percent. The total project cost estimate is \$237,100 and the City's match will be funded with the capital improvement program sales tax.



Fiscal Impact

Short-Term Impact: The City's match is anticipated to be \$47,420 for the project and will be funded with the capital improvement program sales tax.

Long-Term Impact: Routine maintenance.

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Reliable and Sustainable Infrastructure, Secondary Impact: Secondary,

Tertiary Impact: Tertiary

Comprehensive Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Inter-Governmental Cooperation, Tertiary Impact: Mobility, Connectivity, and Accessibility

Legislative History

Date	Action
NA	NA

Suggested Council Action

Adopt the resolution authorizing the City Manager to submit an application to MoDOT for the Missouri Regional Bridge Program for the Old Plank Road culvert structure replacement.