SUMMARY OF ENGINEERING RECOMMENDATIONS

"Kellogg 3rd Street Bridge" Project

Report Prepared 2-16-22
Public Hearing 2-23-22

PROJECT

This project is to acquire right-of-way (ROW) and reconstruct Kellogg-Third Street Bridge No. 62080/62080A, and Kellogg Boulevard road infrastructure between Broadway Street and Mounds Boulevard, that will replace structurally deficient infrastructure and improve facilities for bus transit, motorists, bicyclists and pedestrians.

EXISTING CONDITIONS

The existing 2,116 foot Kellogg-Third Street Bridge was constructed in 1982 by MnDOT and was transferred to City ownership following construction and subsequent rerouting of Trunk Highway 5 (from Third Street to Seventh Street). The existing bridge was designed to carry four vehicular lanes and a 10-foot wide combined use bicycle/pedestrian sidewalk.

In 2014, a structural evaluation determined that the deteriorated pier cap cantilevers could not support any live load under the current MnDOT-approved analysis method. The bridge was temporarily closed to allow for installation of concrete barriers that restrict all modes of traffic to the center portion of the pier caps. The bridge reopened as a reconfigured three vehicular lane bridge (two inbound and one outbound) with substandard 1.75-foot shoulders and a substandard 6-foot wide bicycle/pedestrian sidewalk.

Kellogg Boulevard is classified as an "A-minor reliever" roadway. The road serves a critical neighborhood link between Dayton's Bluff and Lowertown. As the east-most segment of Kellogg Boulevard it provides an equally essential connection to regional and interstate traffic as well, which enter the system from freeway connections at Third Street/Mounds Boulevard. Kellogg Boulevard is a main artery of the transportation system through downtown, bounded on each end by interstate freeways (Interstate 35E at the west, Interstate 94 at the east). With the restricted bridge configuration, Kellogg Boulevard is reduced to three lanes. This reduction presents problems with traffic congestion, road network resiliency, and trip reliability (especially important considering the soon-to-be operation of bus rapid transit along the corridor).

After reducing use of the bridge deck in the interest of public safety, the City sought assistance from State Legislature for several years to fund the reconstruction project. Local funds were used to begin the development of design plans in 2018. In October 2020, the State appropriated $52 Million in General Obligation Bonds to help fund the project. The following year, the City received a $7 Million Federal grant through the Regional Solicitation program. Plans and specifications are nearing completion and Public Works expects to be ready to bid the project in

winter 2022. Construction could start as early as 2023. The expected construction duration is 3 years.

PROPOSED IMPROVEMENTS

Project scope includes reconstruction and/or rehabilitation of Kellogg Boulevard roadway elements between Broadway Street and Lafayette Street, and reconstruction of Kellogg-Third Street Bridge between Lafayette Street and Mounds Boulevard.

The typical road section will include four vehicle lanes (two in each direction) with a center turn lane. Where center turn lane is not needed and as a strategy to improve motorist-pedestrian safety, a raised center median will be provided. The center median will be planted with trees, provide refuge space for pedestrian crossing, and control access to driveways along the road segment. The existing north sidewalk has substandard width and will be widened to provide adequate width for downtown pedestrian use. Additionally, sidewalk does not exist at one location west of Lafayette Street; new sidewalk will in-fill this missing segment. On the south side of the road, the City will acquire ROW necessary to construct new curb, turf boulevard (with tree plantings) and a 10-foot wide sidewalk. The additional width of the south sidewalk will support its future operation as an off-road bikeway, consistent with the Saint Paul Bicycle Plan. The sidewalk will connect to the existing off-road trail that travels along Kellogg Boulevard north of Union Depot and is anticipated to be extended in future years to the east, to destinations like Bruce Vento Nature Sanctuary (via Mounds Boulevard). Kellogg Boulevard at Lafayette Street will be developed into a primary signalized intersection with the project. The Mounds Boulevard intersection will be reconstructed in coordination with Metropolitan Council to accommodate a station and signal phasing for Gold Line Bus Rapid Transit.

The typical bridge section will continue the four vehicle lanes (two in each direction) with 4-foot wide shoulders to support maintenance operations. On each outer side of the bridge deck, a barrier-protected 12-foot wide sidewalk will support shared pedestrian-bicycle use. The south sidewalk will transition seamlessly into the road sidewalk west of the bridge. The north sidewalk is a new facility and will enable pedestrians to move between Lowertown (CHS Field area) and Dayton's Bluff (Metro State University area) without requiring crossings of Kellogg Boulevard. Other bridge improvements include increased span lengths, reduced number of bridge joints, efficient crossing of railroad properties, accommodations for bus rapid transit, improved lighting and aesthetic treatments.

The project fulfills numerous transportation goals put forward in the regional 2040 Transportation Policy Plan. Some of these goals include preserving and maintaining an efficient regional transportation system, operating roads to support movement of people and freight, and making improvements to motorist safety and non-motorized use. Others include improving multi-modal access to destinations (like CHS Field), to regional job centers (like Lowertown), and to low-income/under-represented/racially-concentrated neighborhoods (including Dayton's Bluff).

PROPOSED ROW ACQUISITION

The project will require acquisition of permanent ROW easements (PE's) and temporary construction easements (TE's) adjacent to Kellogg Boulevard and the Kellogg-Third Street

Bridge (between existing Broadway Street to the west and extending to Mounds Boulevard to the east) to accommodate the roadway, retaining walls, sidewalks, bridge, utilities, and other public infrastructure.

22 parcels of public and private property will be impacted by the acquisition:

Parcel 1 – City of Saint Paul – PIN No. 32-29-22-43-0013
Parcel 2 – RCRRA – PIN No. 32-29-22-33-0360
Parcel 3 – RCRRA – PIN No. 32-29-22-34-0011
Parcel 4 – RCRRA – PIN No. 32-29-22-34-0018
Parcel 5 – UP RR – PIN No. 32-29-22-34-0017
Parcel 6 – BNSF – PIN No. 32-29-22-34-0016
Parcel 7 – BNSF – PIN No. 32-29-22-43-0012
Parcel 8 – City of Saint Paul – PIN No. 32-29-22-43-0013
Parcel 9 – City of Saint Paul – PIN No. 32-29-22-42-0042
Parcel 10 Crotty & Sons – PIN No. 32-29-22-42-0055
Parcel 11 Donerly – PIN No. 32-29-22-34-0022
Parcel 12 –D Oren B– PIN No. 32-29-22-34-0019
Parcel 13 –BNSF – PIN No. 32-29-22-34-0007
Parcel 14 –BNSF – PIN No. 32-29-22-31-0027
Parcel 15 –BNSF – PIN No. 32-29-22-31-0051
Parcel 16 –RCRRA – PIN No. 32-29-22-31-0050
Parcel 17 –RCRRA – PIN No. 32-29-22-42-0057
Parcel 18 –City of Saint Paul – PIN No. 32-29-22-42-0019
Parcel 19 –City of Saint Paul – PIN No. 32-29-22-42-0020
Parcel 20 –City of Saint Paul – PIN No. 32-29-22-42-0021
Parcel 21 –City of Saint Paul – PIN No. 32-29-22-42-0023
Parcel 22 –Greatwestern Condo – PIN No. 32-29-22-34-0011

The parcels are depicted on the drawings accompanying this report.

ALTERNATES

No alternate locations exist for the Kellogg-Third Street Bridge. The original platted City ROW consisted of a 66-foot wide road corridor. Around 1980, MnDOT acquired a variety of easements along the corridor that expanded public agency rights by an additional 27’ to the south and 17’ to the north. This ROW transferred to the City along with the road and bridge, and provides much of what is needed to construct the new bridge. However additional permanent easement is required, especially west of the bridge, to tie the bridge structure and approach road retaining walls into the downtown streetscape and to obtain boulevard area on the south side of Kellogg Boulevard near Broadway Street. Additionally, temporary easement will be required along the entire project length to provide space for contractor staging, storage and access.

Several repair or rehabilitation options and typical bridge section layouts were considered by Public Works and reviewed extensively with City leadership in the years following bridge

restrictions. Reconstruction to the proposed layout was selected for its long-term benefits to lifecycle operations and maintenance, to transportation system goals, and to multi-modal use.

A series of alternate road and bridge alignments were analyzed during preliminary design phase. Changes to property impacts with respect to varying alignment options are relatively minor, because the corridor is constrained by buildings, parking facilities, Highway 52 bridge piers, and subsurface utilities on each side in the Lowertown area. The selected alignment balances property impacts and also mitigates the relocation of substantial in-place infrastructure including a tower supporting high-voltage overhead transmission lines adjacent to the bridge.

POSITIVE BENEFITS

The Kellogg-Third Street Bridge forms an essential connection between Downtown/Lowertown and Dayton's Bluff/greater east metropolitan area for public transit, roadway users, bicyclists and pedestrians.

As detailed above under the heading "Proposed Improvements" the benefits to be realized through execution of this project are wide-reaching, and include social/economic factors as well as transportation-focused improvements.

ADVERSE EFFECTS

Portions of private property currently being used as parking lots will need to be acquired for ROW purposes.

Normal disruptions typical of construction including dust, noise and access issues will occur during the course of the project.

TIME SCHEDULE

Plans and specifications are nearing completion and Public Works expects to be ready to bid the project in late 2022. Construction could start as early as 2023. The expected construction duration is 3 years. Exact timing and schedule of the project will be coordinated with other major work activities that are planned in the area. Those improvements include City-led projects (Capital City Bikeway extensions, Minnesota Street reconstruction, Robert Street reconstruction), State-led projects (TH5/US61 resurfacing and improvements, I35E/I94 improvements), and Metropolitan Council's Gold Line Bus Rapid Transit (BRT) development.

COST ESTIMATE

Final estimate of project cost will be developed prior to bidding. Due to recent-year volatility and increases in bid prices (due to cost escalation factors including labor shortages, supply chain issues, and global pandemic) costs shown below are preliminary and subject to change.

Construction	$	60,900,000

Design Engineering and Inspection	$	11,300,000	
ROW Acquisition, Real Estate Fees	$	2,000,000	
PROJECT TOTAL	**$**	**74,200,000**	

ESTIMATED FINANCING

State General Obligation Bonds STBGP	$	52,000,000	
Federal Regional Solicitation Grant LBRP	$	7,000,000	
Local Municipal State Aid MSA	$	2,612,000	
Local Capital Improvement Bonds CIB	$	1,125,000	
Infrastructure Investment & Jobs Act IIJA	$	11,463,000	Pending
PROJECT TOTAL	**$**	**74,200,000**	

SOURCE OF ADDITIONAL INFORMATION

For additional information, contact the Project Engineer, Brent Christensen, at 266-6182.

SUMMARY AND RECOMMENDATION

The Department of Public Works believes that this is a critical project, and the Engineering Recommendation is for approval of the project and financing.

Respectfully submitted,

Brent Christensen, PE
Public Works