



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION VII
Iowa, Kansas,
Missouri, Nebraska

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FTA Findings For Kansas City Streetcar Riverfront Extension Project Kansas City, Missouri

FTA determines that the Kansas City Streetcar Riverfront Extension Project meets the criteria for a Documented Categorical Exclusion (dCE) in accordance with **23 CFR 771.118(d)**. The Kansas City Streetcar Authority (KCSA), Kansas City Area Transportation Authority (KCATA), the Kansas City Port Authority (PortKC), and the City of Kansas City, Missouri (KCMO), have partnered to extend the Kansas City Streetcar starter alignment from 3rd Street and Grand Boulevard in the River Market area to the Berkley Riverfront Project. The proposed Project would tie into the existing downtown streetcar track on the curve at 3rd Street and Grand Boulevard with a new station platform constructed at this location, then travel north over the Grand Boulevard Viaduct. At the east end of the Grand Boulevard Viaduct, the streetcar will briefly ride on Riverfront Road until it makes a gentle turn to the north and travel off but adjacent to Riverfront Road continuing east and ending at a new station platform at the approximate midpoint of the Berkley Riverfront Development. A ‘Spartan Stop’ platform will be constructed west of the Berkley Riverfront stop to accommodate off-boarding of passengers during large events.

The scope of work involves the extension of the existing downtown Kansas City Streetcar system to provide a double track facility within and adjacent to existing public rights-of-way. The streetcar station platform design and route lighting, signage, and catenary design would resemble that of the existing downtown line. To provide additional connectivity for bicyclists and pedestrians into and out of the riverfront area, a bicycle/pedestrian facility would be constructed on a separate structure parallel to the streetcar line from the existing Grand Boulevard park-n-ride, adjacent to the Grand Boulevard Viaduct, and connect to the existing shared use path that parallels Riverfront Road. The standalone bicycle/pedestrian structure would be constructed approximately nine feet east of and parallel to the Grand Boulevard Viaduct and located within the existing public right-of-way for Grand Boulevard/Grand Boulevard Viaduct. The existing streetcar station platform at 3rd Street would be abandoned and removed. A new bidirectional, center-style stop platform would be constructed to the north of the 3rd Street and Grand Boulevard intersection. Power for the streetcar would be provided through connections into the existing downtown streetcar catenary system. A power distribution module would be installed under the Grand Boulevard Viaduct to support power needs for this section of the line. Signal systems would also be installed (1) on the north/river-side of the project to protect the streetcar’s gentle turn off of the Grand Boulevard Viaduct right-of-way, and (2) between 2nd and 3rd Streets to protect streetcar movements from the existing Vehicle Maintenance Facility (VMF) at East 3rd Street and Holmes Street south of the Project, to the revenue tracks, and to protect movements over a new crossover between these two locations.

Pursuant to Section 106 of the National Historic Preservation Act, 36 CFR Part 800, FTA determines a finding of **“No Adverse Effects to Historic Properties”** as a result of the project. The SHPO concurred with this determination on December 18, 2019.

Pursuant to 23 CFR Part 774, FTA determines that no land, feature, or attribute from a Section 4(f) resource will be acquired or substantially impaired by the project; therefore, there is no use of Section 4(f) property associated with the project.

The following project commitments/mitigation measures are not subject to change without prior written approval from FTA. If there is any change in the scope of work or project footprint, KCSA must contact FTA to evaluate potential impacts



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- KCSA will file a Section 402 of the Clean Water Act, National Pollutant Discharge Elimination System (NPDES) – Notice of Intent with the MDNR to request authorization under the Missouri State Operating Permit.
- KCSA will prepare a Construction Noise and Vibration Management Plan - KCSA will require contractors to develop and implement a construction noise and vibration management plan and include vibration performance specifications and best management practices in the construction contract documents and track design.
- Should construction activities that involve excavations to depths greater than 18 inches reveal the presence of hazardous materials near the nine EDR sites identified, mitigation and clean up measures would be defined in conjunction with the MDNR. Any work within the area of the Riverfront Park Development site should follow the Soil Disturbance Contingency Plan for the site and may require coordination with the MDNR's Brownfields/Voluntary Clean-up Section due to activity and use limitations (AULs) as described in Appendix E.
- KCSA will develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to describe the appropriate BMPs to be implemented during construction. An Erosion Control Plan will be developed and approved by the City Engineer and BMPs implemented to minimize release of sediment into the stormwater system during construction of the track and TPSS as required by the City and MDNR.
- If required, KCSA will pursue a Floodplain Development Permit application with the KCMO Floodplain Administrator and a permit obtained prior to the start of construction.
- A SOI-qualified archaeologist will monitor excavations during construction activities of the bicycle/pedestrian structure, and immediately notify FTA and the MO SHPO of any unanticipated discoveries.

Prepared By Beth Held

Beth Held
Environmental Specialist, FTA Region VII

Date: 9/10/2020

Approved By Mokhtee Ahmad

Mokhtee Ahmad
Regional Administrator, FTA Region VII

Date: 9/11/2020

Project Name Kansas City Streetcar Riverfront Extension

Grant No.

STIP/TIP Item Number: N/A

STIP/TIP Approval Date: N/A

Proposed Action

The Kansas City Streetcar Authority (KCSA), Kansas City Area Transportation Authority (KCATA), the Kansas City Port Authority (PortKC), and the City of Kansas City, Missouri (KCMO), have partnered to extend the Kansas City Streetcar starter alignment from 3rd Street and Grand Boulevard in the River Market area to the Berkley Riverfront (Project) (see ATTACHMENT A – Study Area Map and Project Layout Drawings). The Project would tie into the existing downtown streetcar track on the curve at 3rd Street and Grand Boulevard with a new station platform constructed at this location, then travel north over the Grand Boulevard Viaduct. At the east end of the Grand Boulevard Viaduct, the streetcar will briefly ride on Riverfront Road until it makes a gentle turn to the north and travel off but adjacent to Riverfront Road continuing east and ending at a new station platform at the approximate midpoint of the Berkley Riverfront Development. A ‘Spartan Stop’ platform will be constructed west of the Berkley Riverfront stop to accommodate off-boarding of passengers during large events.

This proposed extension of the existing downtown Kansas City Streetcar system would provide a double track facility within and adjacent to existing public rights-of-way. The streetcar station platform design and route lighting, signage, and catenary design would resemble that of the existing downtown line. To provide additional connectivity for bicyclists and pedestrians into and out of the riverfront area, a bicycle/pedestrian facility would be constructed on a separate structure parallel to the streetcar line from the existing Grand Boulevard park-n-ride, adjacent to the Grand Boulevard Viaduct, and connect to the existing shared use path that parallels Riverfront Road. The standalone bicycle/pedestrian structure would be constructed approximately nine feet east of and parallel to the Grand Boulevard Viaduct and located within the existing public right-of-way for Grand Boulevard/Grand Boulevard Viaduct. The existing streetcar station platform at 3rd Street would be abandoned and removed. A new bidirectional, center-style stop platform would be constructed to the north of the 3rd Street and Grand Boulevard intersection.

Power for the streetcar would be provided through connections into the existing downtown streetcar catenary system. A power distribution module would be installed under the Grand Boulevard Viaduct to support power needs for this section of the line. Signal systems would also be installed (1) on the north/river-side of the project to protect the streetcar’s gentle turn off of the Grand Boulevard Viaduct right-of-way, and (2) between 2nd and 3rd Streets to protect streetcar movements from the existing Vehicle Maintenance Facility (VMF) at East 3rd Street and Holmes Street south of the Project, to the revenue tracks, and to protect movements over a new crossover between these two locations.

Categorical Exclusion Determination

The project is categorically excluded from further NEPA review under 23 CFR 771.118 (d):

activity category _____, or

general exclusion (no specific activity category applies, but the project is still exempt per the conditions of 23 CFR 771.118(a) and (b))

Environmental Evaluation Summary

The Project study area extends from the intersection of 3rd Street and Grand Boulevard within the River Market area of downtown Kansas City, Missouri to the approximate mid-point of the Berkley Riverfront Development along the Missouri River; an approximate distance of 0.6 miles.

Environmental resource topics were screened against FTA Region VII’s Guidance on Categorical Exclusions. The following discussion focuses on the potential impacts of the proposed Project.

- A. **CONSISTENCY WITH LOCAL PLANS:** The proposed riverfront extension is included in the Mid-America Regional Council (MARC) Long-Range Transportation Plan, *Transportation Outlook 2040*, as Project #3020. The proposed Project provides consistency and connectivity with the initial Kansas City Downtown Streetcar line extending from River Market to Union Station (FTA FONSI issued October 20, 2012) and the Kansas City Streetcar Main Street Extension (FTA FONSI issued May 31, 2019).
- B. **LAND OWNERSHIP AND LAND USE:** The Project would be constructed and operated within existing public rights-of-way owned by KCMO and PortKC along 3rd Street, Grand Boulevard/Grand Boulevard Viaduct, and Riverfront Road. The line would be constructed through a heavily urbanized area with a mix of commercial, light industrial, and residential uses adjacent to the Missouri River. The eastern portion of the project area is within the Berkley Riverfront, a rapidly developing residential/commercial area owned by PortKC. No direct changes in existing or planned land uses would result from implementation of the Project. See ATTACHMENT A and ATTACHMENT B – Land Use and KCMO/PortKC MOU.
- C. **LAND ACQUISITIONS & RELOCATIONS:** No relocations are required for this Project. Streetcar infrastructure will be located within public right-of-way owned by KCMO (Grand Boulevard and Grand Boulevard Viaduct). An easement from PortKC, owner and

developer of the Berkley Riverfront Development and a subdivision of the State of Missouri approved by the Missouri Highways and Transportation Commission (RSMo 68.010). The easement would extend from the east end of the Grand Boulevard Viaduct to accommodate the streetcar line, shared-use path proposed to connect the proposed bicycle/pedestrian facility with the existing shared-use path north of and roughly parallel to Riverfront Road, the proposed station stop, and the proposed Spartan stop at the end of the line. See ATTACHMENTS A and B.

- D. **ENVIRONMENTAL JUSTICE:** The Project would extend through a census block group that consists of 42.8 percent low income and 51.9 percent minority, both higher than Kansas City as a whole. This census block includes the Columbus Park neighborhood, which was evaluated for direct impacts during the assessment of the existing downtown streetcar line in 2012. The Columbus Park neighborhood includes the Kite Singleton Yard-Kansas City Streetcar VMF constructed as part of the initial line. The Columbus Park neighborhood is separated from the area proposed for the riverfront extension by active rail lines and the Columbus Park Industrial Park. No direct effects, disproportionate or adverse, would occur to low income or minority residents. Columbus Park residents would benefit from the proposed extension as it would provide connectivity to additional downtown activity centers accessible from the proposed 3rd Street and Grand Boulevard station stop. The Berkley Riverfront, under development as a mixed-use residential and commercial complex, is also located within this same census block. See ATTACHMENT C – Environmental Justice.
- E. **NOISE & VIBRATION:** A noise and vibration analysis was conducted for the Project in accordance with FTA's noise and vibration guidance manual, *Transit Noise and Vibration Impact Assessment* (FTA 2006). Existing noise levels in the Project area are relatively loud and typical of an urban arterial street dominated by transportation noise. Construction will result in temporary increases in noise levels, but none that would exceed the 90 dBA threshold at 200 feet from the centerline of the Project. No mitigation for construction-related noise impacts is required. Operation of the proposed streetcar extension (including use of the streetcar's audible on-board warning bell and external warning horn) will not result in noise impacts that exceed FTA thresholds for sensitive receptors located near the streetcar line. KCSA will require contractors to develop and implement a construction noise and vibration management plan and include vibration performance specifications in the construction contract documents. With implementation of such a plan, no vibration impacts are anticipated to result from construction or operation of the proposed streetcar extension. See ATTACHMENT D – Noise and Vibration.
- F. **HAZARDOUS MATERIALS:** Nine previously contaminated sites are located close to the proposed streetcar extension and could pose a medium to high risk to construction of the Project. These sites are associated with historic uses of the properties that resulted in the release of potential hazardous materials into the surrounding soil or underlying groundwater. Many of the sites have undergone remediation and have been issued No Further Action letters or have a Certification of Completion issued by the US Environmental Protection Agency (EPA) or Missouri Department of Natural Resources (MDNR). Because the depth of excavation to construct the streetcar line extension should not exceed 18 inches within most areas of the existing rights-of-way and proposed easements where the likelihood of encountering soil/groundwater contamination is low to moderate. Construction requiring deeper excavation associated with the station stops, bicycle/pedestrian facility, and power module would occur in limited locations. Two previously recorded sites - the Riverfront Park Development State and Tribal Institutional Control/VCP site (near the location of the proposed station platform in Berkley Riverfront) and the Barrett Pitch Plant VCP site (near the east end of the Grand Boulevard Bridge) - could pose an increased risk to encountering hazardous materials in excavations deeper than 18 inches below the surface. For these locations, site-specific information may need to be obtained by KCMO or KCSA and used to determine whether additional Phase I and/or Phase II environmental site investigations are required to determine the potential for soil contamination. Should these activities reveal the presence of hazardous materials, mitigation and clean up measures would be defined in conjunction with the MDNR. In addition, any work within the limits of the Riverfront Park Development site should follow the Soil Disturbance Contingency Plan developed for the site and may require coordination with the MDNR's Brownfields/Voluntary Cleanup Section due to activity and use limitations (AULs) as described in Section 5.0 of the Hazardous Materials and Waste Sites Summary Technical Report provided in ATTACHMENT E – Hazardous Materials.

If unanticipated sources of hazardous or regulated materials are encountered during construction, specific mitigation would be immediately implemented. The handling, characterization, treatment, and disposal of any hazardous materials would occur in full compliance with all Federal, state, and local requirements. The discharge of any wastewater suspected of containing hazardous/regulated materials would be subject to a Missouri Pollutant Discharge Elimination System (NPDES) Permit issued by the MDNR. If concentrations of hazardous constituents exceed the discharge levels allowed under an NPDES permit, contaminated water would need to be collected and hauled to a permitted disposal facility. See ATTACHMENT E.

- G. **STORMWATER PERMIT/SECTION 402 OF THE CWA:** In accordance with the 2010 Consent Decree, the proposed riverfront extension would need to include green infrastructure solutions as well as construction best management practices (BMPs), as applicable, to address issues associated with stormwater management during both construction and operation. Future design work during Preliminary Engineering and Final Design would incorporate these storm water management details in the design of the improvements. The discharge of stormwater during construction would be authorized under the current State of Missouri General Operating Permit for the discharge of stormwater resulting from construction activity. A stormwater pollution prevention plan (SWPPP) would also be developed to identify the appropriate BMPs for

implementation during construction. Under the 2010 Consent Decree, the Overview Control plan was developed by KCMO to meet regulatory requirements put forth by the EPA and the MDNR related to minimizing overflows from the City's combined sewer and separate sewer systems. The Combined Sewer Overflow (CSO) control measures were identified for implementation by drainage basin. The Overflow Control Plan includes citywide improvements targeted at eliminating or capturing for treatment approximately 88 percent of the wet weather flow in the combined sewers and controlling sanitary sewer overflows during a 5-year rainfall event. The Overflow Control Plan emphasizes green infrastructure solutions and programs that encourage incorporate rain gardens, underground stormwater storage tanks, bioswales, and/or permeable pavement into public works projects.

H. **FLOODPLAINS:** The Project is in an area behind the Missouri River levee where much of the current elevation was achieved with the placement of fill materials in the 1990s. The FEMA FIRM panel 29095C0252G (effective January 20, 2017) for the Project area indicates it is mapped as Zone X, area subject to a 0.2 percent annual chance flood (500-yr) and protected by a levee from a 1 percent annual chance flood (100-yr) (see ATTACHMENT F – Floodplains). The FIRM panel notes that the levee along the Missouri River in the Project area does not demonstrate compliance with Section 65.10 of the National Flood Insurance Program (NFIP) regulations. The flood hazard data within the Zone X boundary on the current FIRM panel (republished from the August 5, 1986 FIRM) should continue to be used until the FIRM is updated. As a result of consultation with KCMO, the levee accreditation process involves a lengthy public review period on the proposed draft maps, after which FEMA and KCMO will proceed with steps in the formal adoption process of the new effective FIRMs. All floodplain reviews in this project area will be based on the current FEMA FIRM Panel No 29095C0252G effective January 20, 2017 until the new maps become effective in February 2023. A Floodplain Development Permit from Jackson County may be required for construction of the Project.

I. **TRAFFIC, PARKING, PEDESTRIANS, AND BICYCLES:** Streetcar operations would affect traffic in a manner similar to a bus operating in travel lanes, including temporary lane blockages during passenger boarding and alighting at station stops with an approximate 20-second dwell time. No changes would occur in the existing lane configuration of Grand Boulevard/Grand Boulevard Viaduct, East Front Street/Berkley Parkway, or Riverfront Road. An existing parking lot within the Berkley Riverfront would be removed, with the surface parking replaced as part of the station platform development near that location. The streetcar extension would be designed to maximize safety in its interactions with traffic. The streetcar would run in mixed traffic and would follow the same rules of the road as vehicles – except at locations where special transit-only signal phases would be added to facilitate safe streetcar movements (mainly turns). Streetcar operators would be required to meet applicable safety training and performance criteria. The streetcar extension would not have a substantial effect on emergency response services operating on Grand Boulevard or within the Berkley Riverfront. No substantial project-related impacts were identified related to on and off-street parking, vehicle loading, or property access.

The streetcar extension and its companion bicycle/pedestrian facility would connect activity centers downtown with those at the riverfront. The station stop platforms would be designed to maximize accessibility. The system is being designed to meet current Americans with Disabilities Act (ADA) standards for boarding including consideration of both 10-inch platforms, with bridge plates, and 14-inch platforms. Streetcars accommodate bicycles on-board (rather than on external racks as with the bus system), and level or near-level boarding to facilitate boarding and de-boarding of bicyclists.

J. **CULTURAL RESOURCES:**

- FTA initiated consultation with the Missouri State Historic Preservation Office (MO SHPO) on May 24, 2018. FTA defined the direct area of potential effects (APE) as all areas subject to potential direct effects from the proposed Project, including temporary construction and staging areas. As identified in the information provided with the consultation request, 12 resources on 8 properties were identified within the APE; 11 of which are either National Register of Historic Places (NRHP)-listed, have been determined NRHP-eligible, or appear to qualify for NRHP eligibility. The remaining resource lacked integrity and was determined ineligible for NRHP inclusion in 2011. None of these resources would be directly affected by the Project, which would occur primarily within existing rights-of-way. Because of the historic presence of streetcar within the downtown and riverfront area, re-introduction of streetcar infrastructure would not have the potential to adversely affect any of the resources' character-defining features, including their setting or ability to reflect their role in local historic development patterns. FTA requested MO SHPO concurrence on a finding of "No Adverse Effects" to historic properties under Section 106 of the National Historic Preservation Act (NHPA). See ATTACHMENT G - Section 106 Coordination.
- MO SHPO concurred with the "**No Adverse Effects**" to historic resources on August 14, 2018. See ATTACHMENT G.
- Bicycle-pedestrian bridge redesign – in late 2018, the proposed Project design was revised to include a separate bicycle/pedestrian structure (bridge) east of and parallel to the Grand Boulevard Viaduct. MO SHPO requested additional evaluation of the indirect/visual APE for the project and a review of the potential effects on archaeological deposits that could be present within the project footprint. Additional information was submitted to MO SHPO on February 25, 2019. See ATTACHMENT G.
- MO SHPO concurred with the FTA recommendation that a Phase I Archaeological Survey (e.g., deep testing) be conducted within the areas where new abutments and piers would be constructed to support the proposed

bicycle/pedestrian bridge. Deep testing was conducted by mechanical trenching - use of a backhoe to open a trench approximately 15 feet-long and 4 feet-wide in the areas proposed for construction of the supporting piers/foundations. The materials removed from the trench were examined for the presence of artifacts and the side walls of each trench were also evaluated to determine if undisturbed deposits were present. Testing confirmed the survey area had been systematically filled over time to extend the area of useable land towards the Missouri River. Remnants of a mid-to-late nineteenth century boarding house indicated on Sanborn maps were discovered approximately 10 feet below the surface. Ceramics/pottery, glass containers, shoes, and other domestic artifacts were recovered. The site excavation and artifact cataloging were overseen by a Secretary of the Interior (SOI) qualified geoarchaeologist and SOI-qualified architectural historian, respectively. More than 200 artifacts were catalogued from the survey and are being curated at the University of Missouri's Museum of Anthropology. No artifacts indicating the remnants of shipwrecks or Native American occupation of the area were observed or recorded. The results of the Phase I Archaeological Survey were submitted to MO SHPO on December 6, 2019 with the recommendation that the site remain unevaluated regarding NRHP eligibility because the historical association and site extent remain unknown. A recommendation was also made that archeological monitoring in accordance with SOI Standards occur during Project construction. See ATTACHMENT G.

- MO SHPO concurred with FTA's determination of "**No Adverse Effects**" to historic properties and with the recommendation to provide archaeological monitoring during construction on December 18, 2019. See ATTACHMENT G.
- FTA initiated Section 106 consultation with thirteen (13) Federally Recognized Tribes, that have previously expressed interest in projects occurring in the Kansas City Metropolitan area, by sending a scoping letter dated June 16, 2020 to invite them to provide comments on the proposed Project under Section 106. FTA received one substantive response from the Miami Tribe of Oklahoma regarding historical background information and their travels through the area associated with sites along the Missouri River. FTA provided a response to the tribe summarizing the survey results which is included in ATTACHMENT G.

K. SECTION 4(f) RESOURCES:

Kansas City Parks & Recreation Department (KCPRD) maintains control over not only parks but certain boulevards and city streets as part of the overall Parks & Boulevards System. The proposed streetcar extension would be constructed within the existing right-of-way along Grand Boulevard/Grand Boulevard Viaduct that are both part of the KCPRD Parks & Boulevard System. The primary use of Grand Boulevard is for transportation, not as a public park or recreation facility and is not considered a Section 4(f) resource. The streetcar extension would expand the transportation use of this section of Grand Boulevard, tying into the initial streetcar line at 3rd Street and Grand Boulevard.

The streetcar extension would provide connectivity between downtown activity centers and the riverfront, providing access to development and open space within the Berkley Riverfront - a multi-use development accommodating both public open space and residential/commercial uses which is currently under development. The proposed streetcar extension would require acquisition of an easement within the Berkley Riverfront from PortKC, owner of the Berkley Riverfront property, an agency partner in the streetcar extension project, and as noted previously a subdivision of the State of Missouri approved by the Missouri Highways and Transportation Commission. PortKC's mission is based in transportation and economic development. As described under Section C Land Acquisitions & Relocations, the easement would extend from the east end of the Grand Boulevard Viaduct to a midpoint with the Berkley Riverfront. Because of PortKC's transportation mission, the easement would not result on a use of public land protected under Section 4(f). The proposed Project would benefit the continued development of the area by supporting access, connectivity, and mobility between the riverfront and downtown Kansas City.

The proposed bicycle/pedestrian structure would be constructed along the east edge of and parallel to Grand Boulevard/Grand Boulevard Viaduct within the existing right-of-way. The approximately 14'-8" wide structure would provide a 12 foot-wide shared-use path with concrete railings and overhead lighting (see ATTACHMENT H - Public Involvement). Access for construction purposes would occur from under the Grand Boulevard Viaduct (on PortKC property). All areas disturbed during construction would be restored to pre-construction conditions. No materials would be stored within areas accessible by the public within the Berkley Riverfront Development. Use of the existing sidewalk/shared use path along the north edge of Riverfront Road may be temporarily disrupted while the connection to the sidewalk/shared-use path is constructed. The Riverfront Heritage Trail, located along the Missouri River and north of the proposed streetcar extension alignment, would not be affected by the proposed Project. The Riverfront Heritage Trail is managed by Kansas City River Trails, Inc., a recognized Missouri Not for Profit Organization (KCRiverTrails.org). Because KCRT is not a public entity, properties owned/managed by KCRT do not qualify for protection under Section 4(f).

As noted in Section J of this document, the MO SHPO has concurred with a "**No Adverse Effect**" to historic resources determination under Section 106 of the NHPA. No constructive or permanent use of any park, recreation area, wildlife refuge, wildlife management area, or historic resource would occur from the proposed Project. KCSA and PortKC will work with KCMO to provide information to the public on any temporary closures of the sidewalk/shared-use path, or roadways during construction and the designation of appropriate detours. Based on this evaluation of overall effects, the proposed

Project would not result in the use of nor affect the activities, features, or attributes of any resource that could be provided protection under Section 4(f).

- L. **CONSTRUCTION IMPACTS:** The short-term and temporary effects of construction would include traffic interruption, stormwater discharges, noise, and fugitive dust. KCSA and KCMO would develop a maintenance of traffic (MOT) plan to address detours and traffic movement on roadways affected by construction. Equipment and material staging areas would also be designated within public rights-of-way and/or on KCMO/KCATA/PortKC-owned properties through the development of cooperative agreements. Traffic lanes along Grand Boulevard/Grand Boulevard Viaduct would be closed temporarily to accommodate track construction. Utilities would be relocated before track construction would begin. KCSA will require contractors to develop and implement a construction noise and vibration management plan to reduce the effect of noise on nearby residences and businesses. Construction would be prohibited during nighttime hours. Stormwater discharges from construction sites would be managed in compliance with the SWPPP implemented for the project.
- M. **UTILITIES:** No impacts to major utilities (e.g., petroleum pipelines, water mains, overhead or underground electrical transmission lines) would occur. Utilities located within the existing right-of-way (e.g., localized water supply, electrical/telecom conduits, sanitary sewer, etc.) may require relocation if located within the proposed travel lane of the streetcar. Relocations would take place within existing rights-of-way, as can be accommodated, in the same manner as completed for the initial streetcar line. All utility relocations will be coordinated with the applicable City department and utility companies.

Power for the streetcar extension would be provided via a traction power substation (TPSS) to be located under the Grand Boulevard Viaduct. The TPSS would be sited to be shielded from view behind an existing bridge pier and placed on a pad to elevate it above the 500-year flood elevation.

Project Commitments

List mitigation measures and permits applicable to the project.

- Section 402 of the Clean Water Act, National Pollutant Discharge Elimination System (NPDES) – A Notice of Intent would need to be filed with the MDNR to request authorization under the Missouri State Operating Permit. A Stormwater Pollution Prevention Plan (SWPPP) would need to be developed and implemented. An Erosion Control Plan and a Stormwater Management Plan will be developed and approved by the City Engineer. BMPs will be implemented to minimize release of sediment into the stormwater system during construction of the track and TPSS as required by the City and MDNR.
- Construction Noise and Vibration Management Plan - KCSA will require contractors to develop and implement a construction noise and vibration management plan and include vibration performance specifications and best management practices in the construction contract documents and track design.
- Should construction activities that involve excavations to depths greater than 18 inches reveal the presence of hazardous materials near the nine EDR sites identified, mitigation and clean up measures would be defined in conjunction with the MDNR. Any work within the area of the Riverfront Park Development site should follow the Soil Disturbance Contingency Plan for the site and may require coordination with the MDNR's Brownfields/Voluntary Cleanup Section due to activity and use limitations (AULs) as described in Appendix E.
- A SWPPP will be developed to describe the appropriate BMPs to be implemented during construction.
- If required, a Floodplain Development Permit application will be initiated with the KCMO Floodplain Administrator and a permit obtained prior to the start of construction.
- A SOI-qualified archaeologist will monitor excavations during construction activities of the bicycle/pedestrian structure, and immediately notify FTA and the MO SHPO of any unanticipated discoveries.

ATTACHMENTS (list)

ATTACHMENT A - Study Area Map and Project Layout Drawings

ATTACHMENT B – Land Use and KCMO/PortKC MOU

ATTACHMENT C – Environmental Justice

ATTACHMENT D – Noise and Vibration

ATTACHMENT E – Hazardous Materials

ATTACHMENT F – Floodplains

ATTACHMENT G - Section 106 Coordination

ATTACHMENT H – Public Involvement

Submitted By: 
Tom Gordon

Date: 9/9/2020

Title: Executive Director

Project Sponsor/Grantee: Kansas City Streetcar Authority