

REPORT FROM

OFFICE OF THE CITY ADMINISTRATIVE OFFICER

Date:

CAO File No. 0220-6058-0000

Council District: 4

To: Municipal Facilities Committee

From: CAO Staff, Office of the City Administrative Officer

Subject: **LOS ANGELES ZOO: LANGUR BRIDGE STRUCTURAL DEFICIENCIES,
REPAIRS, AND/OR REPLACEMENT**

RECOMMENDATIONS

That the Municipal Facilities Committee:

1. Authorize the General Services Department (GSD) to utilize a consultant to proceed with the initiation of the Langur Bridge Repair / Replacement project, due to the urgency and impact to the operations of the Los Angeles Zoo (Zoo), including anticipated revenue losses;
2. Instruct the Office of the City Administrative Officer (CAO), GSD, and the Zoo, to work with the appropriate Public Works Bureaus and the Department of Building and Safety to implement any available measures to expedite the necessary repairs or replacement of the Langur Bridge;
3. Instruct the Office of the City Administrative Officer (CAO) to seek the necessary Council approval to repurpose Municipal Improvement Corporation of Los Angeles (MICLA) funding capacity available within previously authorized funding for Municipal Facilities capital projects, with the funding level to be determined based on MICLA eligibility criteria, and to work with the Los Angeles Zoo to identify other funding that may be needed to address any MICLA-ineligible expenses, as needed to proceed with the necessary repairs and/or replacement of the Langur Bridge; and,
4. Instruct the General Services Department to report back to the Municipal Facilities Committee within 60 days, with a final project budget and timeline, and to request any additional funding required to complete the project through the City Budget process, to the extent that any funding identified in the current year is not sufficient.

BACKGROUND

In November 2022, the Office of the City Administrative Officer (CAO) was notified by the Los Angeles Zoo (Zoo) of severe structural damage to the Langur Bridge (Bridge). The Bridge is located on Zoo property adjacent to the Langur Monkey exhibit and serves as a major entryway and path of travel for the northwest quadrant of the Zoo, providing access to the Tiger exhibit.

On November 16, 2022, the Bureau of Engineering (BOE) performed a visual inspection of Bridge noting significant structural damage and instability in two of the four pier connections to the superstructure, including concrete spalling and exposed bearing plates and anchor bolts, leaving at least one bearing plate with no structural support. Furthermore, the concrete girders appear to have shifted approximately two inches contributing to large distresses on supporting piers (refer to the attached BOE technical report).

Due to the structural distresses, BOE recommended that the bridge be closed immediately to both vehicular and pedestrian traffic and for the Zoo to hire a licensed civil or structural engineer to provide repair recommendations.

The Zoo has obtained a preliminary estimate and repair schedule to restore the piers that was prepared by the General Services Department (GSD), Construction Forces Division. However, additional cost for enhanced inspections, testing, and professional engineering services will likely be required to finalize the repair and/or replacement alternatives and determine whether temporary measures can be taken to re-open the bridge safely.

Preliminary Budget, Project Timeline & Proposed Funding Source

The preliminary cost estimate for repairs ranges between \$300,000 - \$500,000. However, this cost could increase if a determination is made based on additional testing that more extensive repairs up to the full replacement of the bridge is necessary. At this time, the Project Management Team is estimating a minimal construction term of four months. The PMT will work with other City Departments to determine if there are any options to accelerate this timeline.

At its meeting held on September 29, 2022, the Municipal Facilities Committee (MFC) took action to defer Phase II of the Fire Station No. 4 (FS#4) project due to scope and budgetary increases that needed to be evaluated and prioritized through the City Budget process. MFC instructed the Program Management Team at that time to report back on potential uses of up to \$800,000 in Municipal Improvement Corporation of Los Angeles (MICLA) capacity available from the Phase II deferral of the FS#4 project.

Given the critical need to implement the Langur Bridge Repair/Replacement project due to the public safety element and adverse impact to Zoo operations and potential revenue losses, use of this MICLA capacity is recommended to fund the cost of current-year inspection and repairs, subject to the appropriate eligibility determination. Our Office would work with the Zoo to determine funding options for any MICLA-ineligible costs.

Zoo Operational Impact & Accreditation

Based on BOE's preliminary structural analysis, the Zoo has taken the appropriate safety precautions to effectuate a full closure of the Bridge to both vehicles and pedestrians traffic since November 2022. Detour signage of the closure is in place and Zoo staff have been reassigned from regular duties to assist guests with navigating through the detours. While these measures are necessary, the closures will likely result in adverse impact to Zoo revenues. The Zoo has received ongoing feedback from dissatisfied patrons and the closures are adversely impacting Zoo operations with the reassignment of staff and also contribute to accessibility issues for patrons with disabilities.

The Zoo is currently undergoing its accreditation process, with an on-site inspection scheduled in January 2023. While there are no immediate steps that can be taken to complete the necessary repairs prior to this timeframe, it is critical for the Zoo to have the ability to demonstrate there is a viable plan in place to expedite the needed repairs or replacement of the bridge.

Every five years, the Zoo undergoes the AZA Accreditation process to maintain its certification status. Federal agencies including the Occupational Safety and Health Administration (OSHA) and the United States Department of Agriculture consider AZA standards as the national standard and refer to AZA standards when evaluating the operations and safety of zoo and aquarium organizations. To achieve accreditation, the Zoo must meet and maintain a comprehensive set of rigorous industry standards. Among other core areas, the AZA standards include excellence in physical facilities maintenance and improvements, with requirements to identify and address maintenance and major repairs in a timely manner.

FISCAL IMPACT

There is no additional General Fund impact anticipated in the current year for capital expenses, to the extent that existing Municipal Improvement Corporation of Los Angeles (MICLA) capacity can be utilized to address the cost of repairs and associated work. The Project Management Team will work to confirm MICLA eligibility, seek the necessary Council approvals to repurpose the funding, and determine options for funding any MICLA ineligible expenses.

Other potential impacts on the General Fund that may occur as a result of potential revenue losses for the Los Angeles Zoo will be reported through subsequent Financial Status Reports.

CITY OF LOS ANGELES
INTERDEPARTMENTAL CORRESPONDENCE

Date: December 7, 2022

To: Darryl Pon
Manager of Planning and Development Programs
Los Angeles Zoo Department

From: 
Shailesh "Sunny" Patel, S.E., Division Engineer
Structural Engineering Division

Subject: **LA Zoo – Langur Bridge Inspection**

INTRODUCTION

On November 15th, Structural Engineer Division (SED) received a request from Darryl Pon, Manager of Planning and Development Programs at the LA Zoo, to inspect Langur Bridge at the LA Zoo for distress and determine the urgency of repair for spalling occurring at the substructure. The following day, SED staff performed a visual inspection and provided recommendations to shut down the bridge to pedestrian and vehicular traffic.

BRIDGE DESCRIPTION

The subject bridge is located adjacent to the Langur Monkey exhibit at the LA Zoo. The bridge is three spans with a total length of approximately 103-ft long by 16-ft wide with two bents and abutment at each end directly below supporting precast double tee girders.

The as-built plans provided by LA Zoo staff are not for the Langur Bridge. However, various sections and details correlate per visual inspection.

STRUCTURAL FINDINGS

The superstructure, deck, and girders appear to be in good condition with minor deck spalling on the East and West sides. The double tee girders connecting to the North pier are in poor condition. There are two significant spalls, approximately 18" H x 29" W x 6.5" D and 20" H x 32" W x 4" D, at the bearing plates exposing the anchor bolts and reinforcement at the north pier on one face. The bearing plates on the pier have no supports remaining, therefore it poses a major safety concern. From an elevation view, the concrete girders seated on the supporting piers are offset approximately two inches at the north pier and may be a contributing factor to the large distress.

The South supporting pier has minor spalling occurring on the south face.

RECOMMENDATIONS

It is recommended to close the bridge immediately to both vehicular and pedestrian traffic and for LA Zoo or GSD to hire a licensed Civil or Structural Engineer in the State of California to provide the repair recommendations. Alternatively, depending upon LA Zoo's needs, the existing bridge can be demolished for the construction of a new bridge.

If you have any questions or need additional information, please contact Melvin Agagas at melvin.agagas@lacity.org or Karan Patel at karan.patel@lacity.org.

Thank you,


SP/MA/KP

cc: Jose Fuentes, Deputy City Engineer
SED File



Offset Concrete Girder



Spalls With Exposed Rebars on the North Pier



Minor Spalls on the South Pier