

The 31st Street Bridge over Metra Electric and Illinois Central Railroad provides a critical vehicular, pedestrian, and cyclist link to 31st Street Beach, 31st Street Harbor, and Burnham Park. Additionally, the bridge serves as an important access route to McCormick Place and Lake Shore Drive. However, the 93 year old bridge is in serious structural condition. The proposed improvement will replace the existing bridge with a new, slightly wider structure in order to improve safety while maintaining community cohesiveness.



31ST STREET BRIDGE OVER METRA ELECTRIC AND ILLINOIS CENTRAL RAILROAD

STRUCTURAL CONDITION



The north side railing has been replaced with temporary concrete barrier over the entire length of the bridge



The south side railing has sections of potentially dangerous openings



South fascia with cracked and loose concrete encasement



The west abutment has large areas of spalling, cracking, and delamination with exposed broken reinforcing steel



Temporary shoring has been installed in front of the west abutment to support the girders



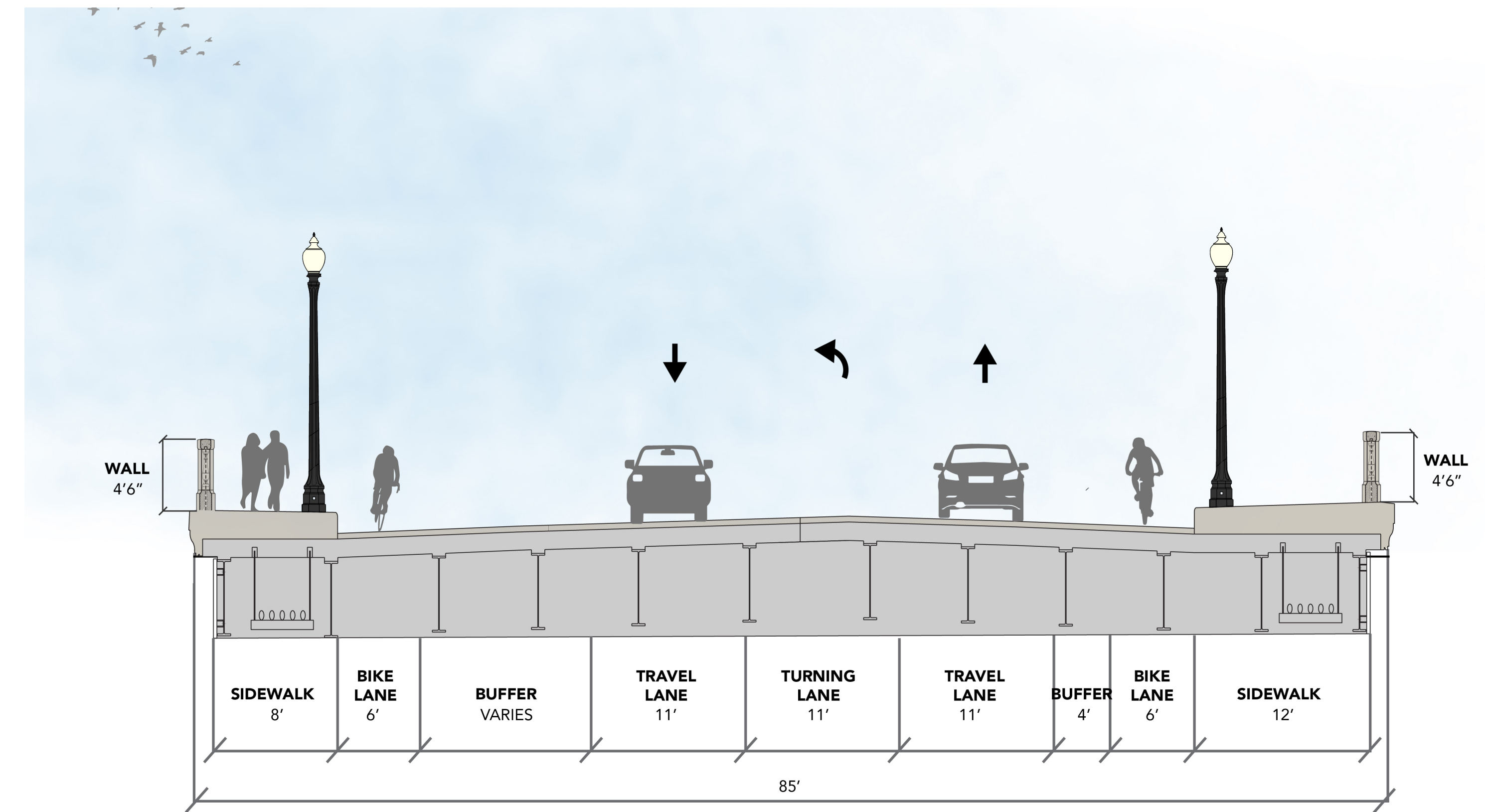
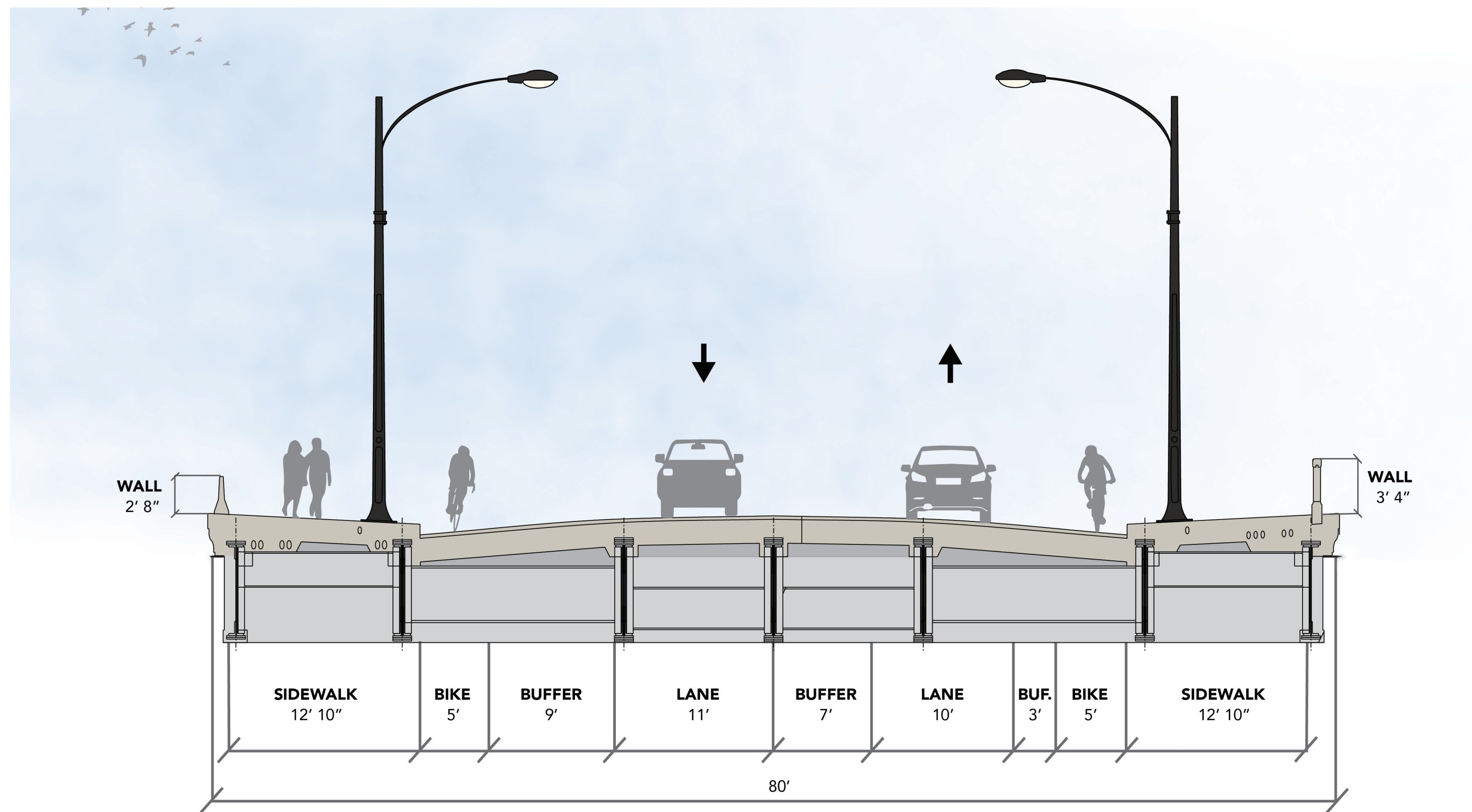
Pier 1 with cracked, delaminated, and spalled encasement

A structural inspection was conducted in 2017. The inspection revealed the following conditions:

- Deck is in poor condition
- Superstructure is in serious condition
- Substructure is in serious condition

Based on the results of the inspection and the 90+ year age of the bridge, it is recommended that the existing structure be completely removed and replaced.

EXISTING AND PROPOSED CROSS SECTIONS



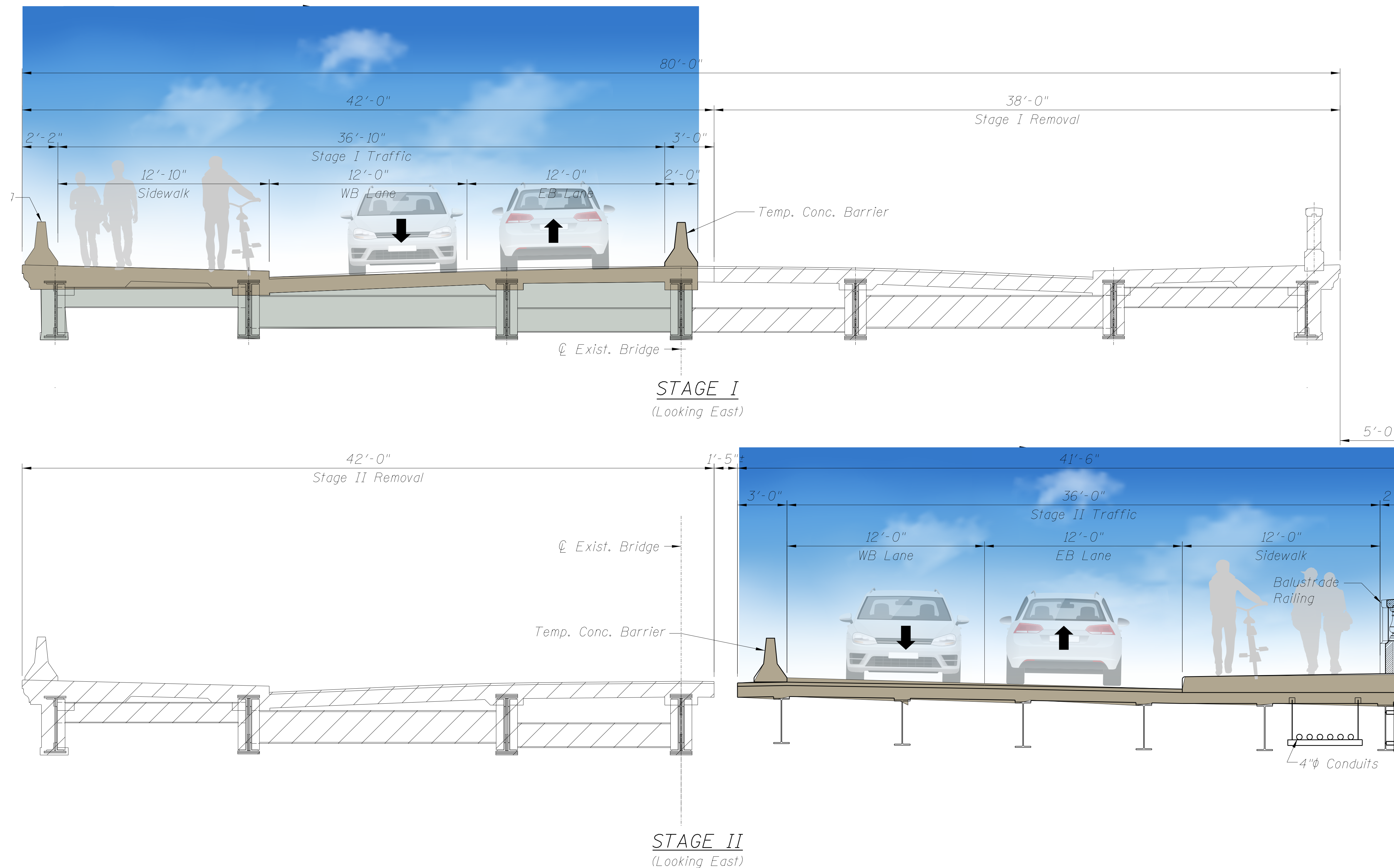
EXISTING CONDITIONS

- The existing structure is a four-continuous-span concrete-encased steel bridge built in 1926
- The overall out-to-out deck width is 80' with 50' roadway width
- The bridge is in serious structural condition

PROPOSED IMPROVEMENTS

- The proposed structure is a three-continuous-span composite multiple steel stringer structure.
- The proposed out-to-out deck width is 85' with 60' roadway width
- Two new piers supported by drilled shafts will be constructed in new locations to improve horizontal clearances to existing tracks
- The balustrades and cornices along both edges of the bridge will be replicated, but will be 54" high to improve pedestrian safety
- City of Chicago acorn luminaire light poles will be installed on each side of the bridge

MAINTENANCE OF TRAFFIC



31st Street construction will take place in two stages, allowing one lane of traffic in each direction and one sidewalk across the bridge to be open throughout construction

- **In Stage 1**, traffic will be shifted to the north half of the bridge while the south half of the bridge is demolished and reconstructed
- **In Stage 2**, traffic will be shifted to the newly constructed south half of the bridge while the remainder of the existing bridge (the north half) is demolished and reconstructed
- No road closures or detour routes will be required

31ST STREET BRIDGE OVER METRA ELECTRIC AND ILLINOIS CENTRAL RAILROAD

TIMELINE

Phase I

WE ARE
HERE

2018 – 2019

- Preliminary engineering
- Environmental studies
- Public meetings
- Project report

Phase II

2019

- Contract plan preparation

Phase III

2020

- Construction



QUESTIONS, COMMENTS AND INFORMATION

For more information about the project, please call 312.742.2590 or email Tanera.Adams@CityofChicago.org

Visit the websites below:

- www.cityofchicago.org/transportation
- <http://www.facebook.com/CDOTNews>

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