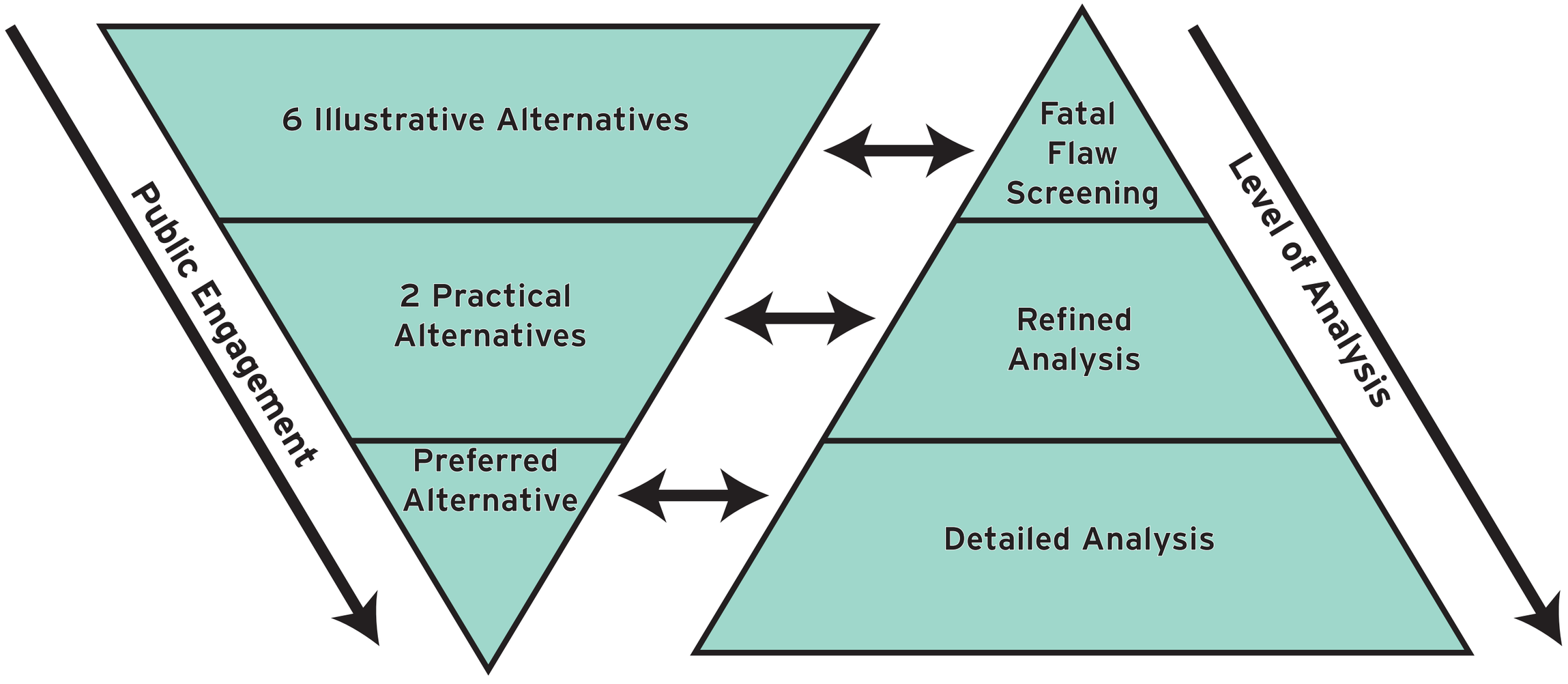
I-375 Improvement Project Reference Book

Environmental Process

The I-375 Improvement Project Environmental Assessment (EA) is a process used to analyze and mitigate the potential effects of a project. It is part of NEPA, the National Environmental Policy Act, which requires that the project follow specific steps to reach the preferred altnerative. As a part of the process, MDOT will continually engage community stakeholders to provide updates and received feedback.



Purpose and Need

2014 Planning and Environmental Linkages (PEL) Study Purpose and Need:

Project Purpose
The purpose is to identify a transportation improvement alternative that will:

- Address the deterioration of the bridges and roadway with an appropriate solution which considers long-term life-cycle costs.
- Address existing and future transportation needs and roadway safety for users.
- Consider connectivity improvements to surrounding areas for both vehicular and non-motorized users, and also consider connections to existing and planned transit services.
- Enable potential economic development opportunities along the corridor which support official land use plans and long-term development objectives.

Project Need
The proposed project will address the following:

- Deteriorated bridges crossing I-375, which are over 50 years old, and deteriorated pavement conditions.
- Outdated existing geometric conditions, such as ramp widths and sharp curvature at the south end of the corridor, along with insufficient weave/ merge areas, which result in elevated crash rates and increased congestion.
- Lack of a direct connection for vehicles and pedestrians to the developing East Riverfront from the I-375 corridor.
- Poor connectivity and confusing access to downtown destinations through the I-75/I-375 interchange and Gratiot Avenue connector.
- Operational congestion and safety issues along the Jefferson Avenue corridor west of I-375 due to high volumes and inefficient left turning movements.
- Poor environment in I-375 and Jefferson Avenue corridors for transit and non-motorized travel, including long pedestrian crossing distances, lack of bike facilities, and poor connectivity to existing transit services.

Proposed 2017 Environmental Assessment (EA) Purpose and Need:

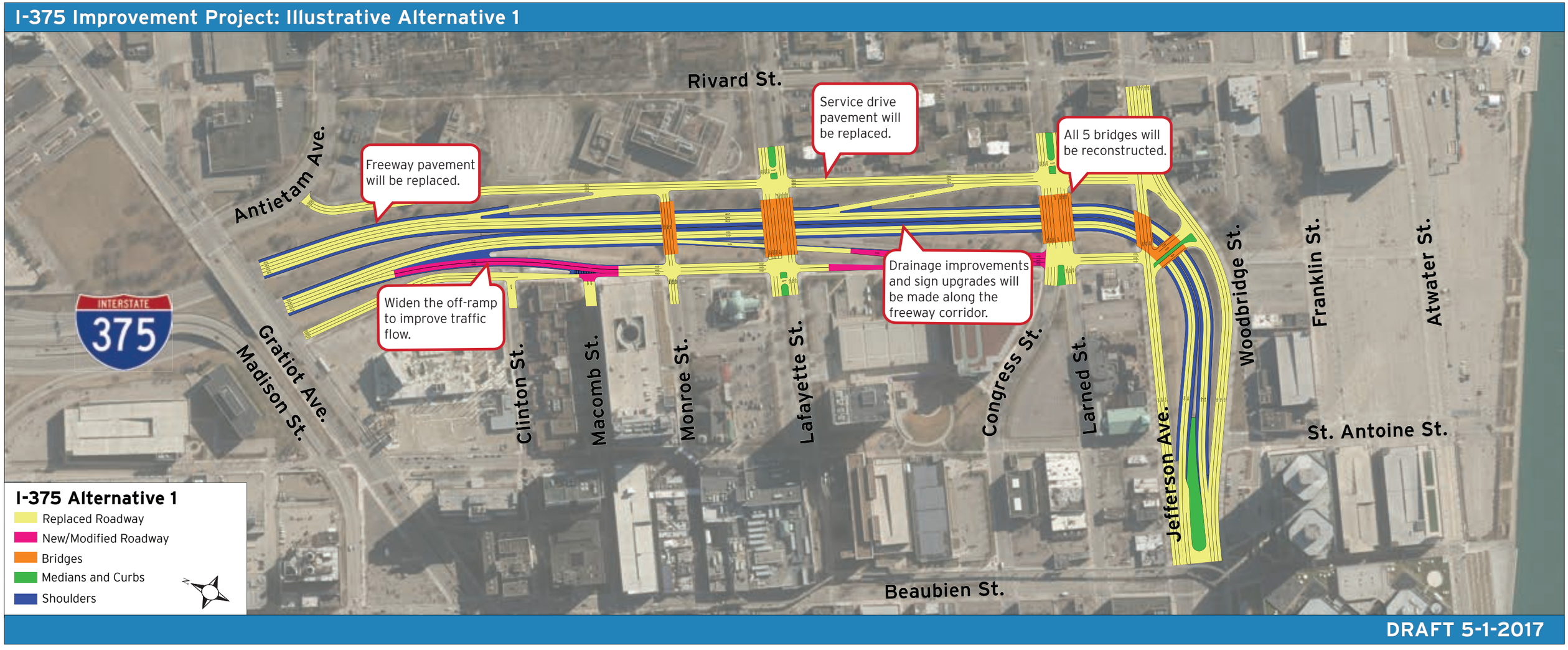
Project Purpose
The purpose is to identify a transportation improvement alternative that will:

- Address **functionally obsolete interchange design, deteriorated bridges and roadway** with an appropriate solution which considers **safety, operations** and long-term life-cycle costs.
- Address existing and future transportation needs and roadway safety for all users.
- **Improve** connectivity to surrounding areas for both vehicular and non-motorized users, **and enhance connections to existing and planned transit services which may result in improved community health**
- **Enhance access to enable future development and other place-making opportunities envisioned in official** land use and long-term economic development plans.

Project Need (*no change)
The proposed project will address the following:

- Deteriorated bridges crossing I-375, which are over 50 years old, and deteriorated pavement conditions.
- Outdated existing geometric conditions, such as ramp widths and sharp curvature at the south end of the corridor, along with insufficient weave/ merge areas, which result in elevated crash rates and increased congestion.
- Lack of a direct connection for vehicles and pedestrians to the developing East Riverfront from the I-375 corridor.
- Poor connectivity and confusing access to downtown destinations through the I-75/I-375 interchange and Gratiot Avenue connector.
- Operational congestion and safety issues along the Jefferson Avenue corridor west of I-375 due to high volumes and inefficient left turning movements.
- Poor environment in I-375 and Jefferson Avenue corridors for transit and non-motorized travel, including long pedestrian crossing distances, lack of bike facilities, and poor connectivity to existing transit services.

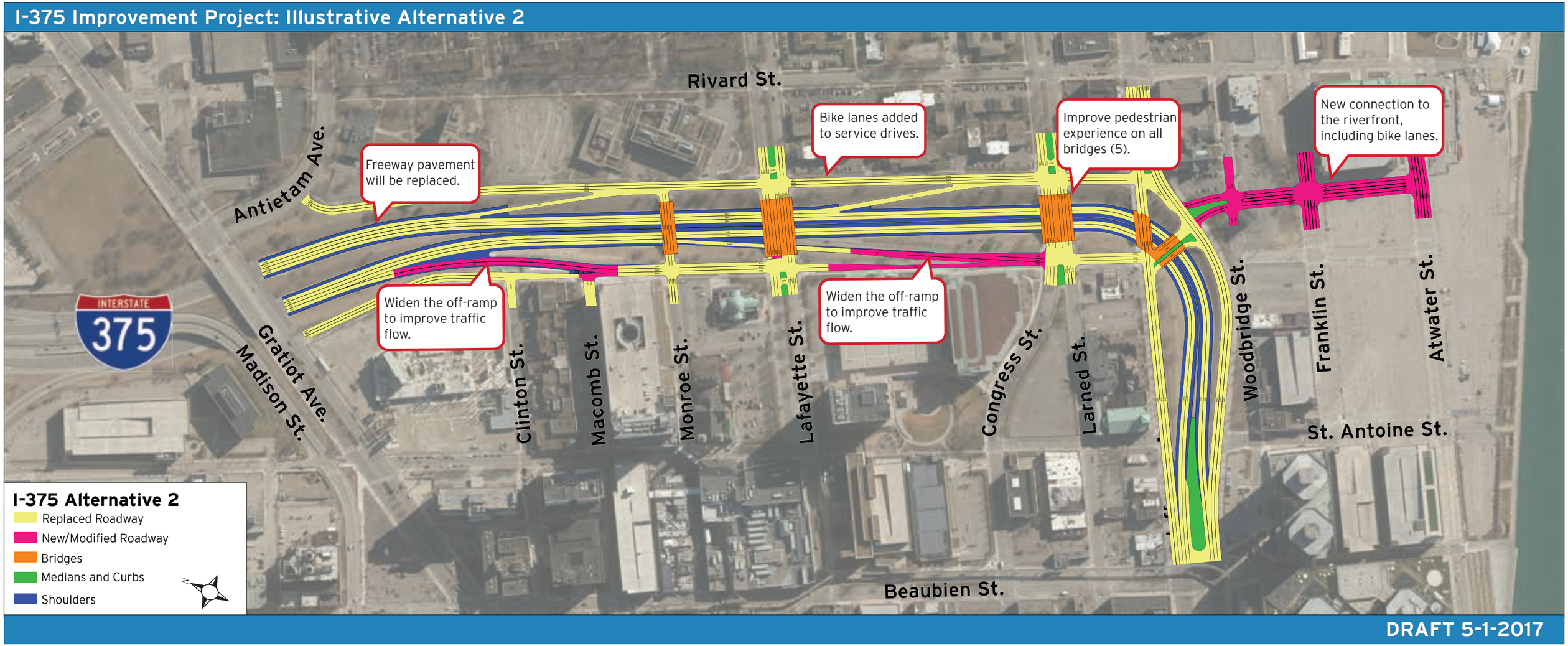
Illustrative Alternative 1: Reconstructed Freeway As Is



Alternative 1 will reconstruct the freeway as is within the existing right-of-way, with the exception of proposed ramp improvements/widening to the southbound off-ramps at Lafayette and Larned/E. Jefferson. No other significant changes are proposed under Alternative 1 beyond standard improvements such as sign upgrades, replacement of the existing bridges, upgrade of ramp signals and drainage improvements.

CROSS-SECTION LOOKING NORTH SHOWING PROPOSED CONDITIONS

Illustrative Alternative 2: Reconstructed Freeway with Riverfront Connection

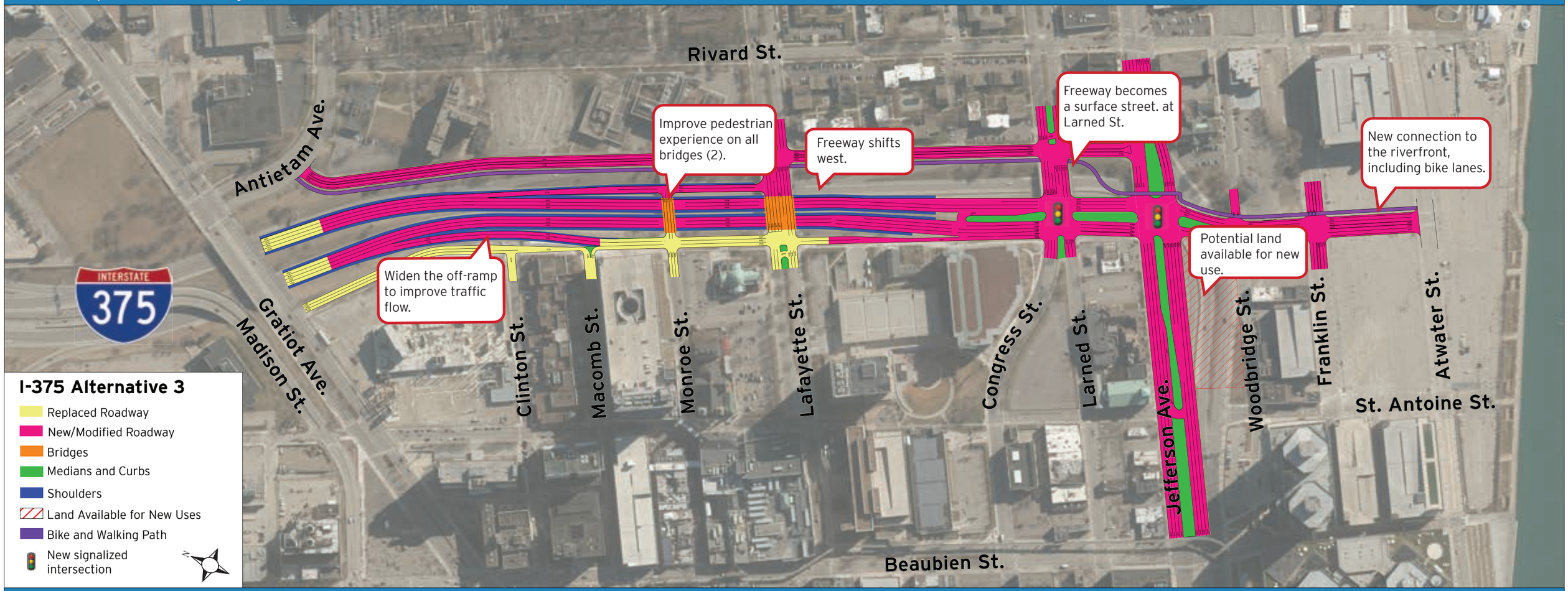


Alternative 2 is identical to Alternative 1, with the addition of addition of an at-grade roadway extension connecting Jefferson Avenue to Atwater Street that will provide improved access to the East Riverfront area. No changes to the freeway are proposed except for the addition of terraced stormwater management slopes would be constructed.

CROSS-SECTION LOOKING NORTH SHOWING PROPOSED CONDITIONS

Illustrative Alternative 3: Freeway to Become Surface Street at Larned St.

I-375 Improvement Project: Illustrative Alternative 3



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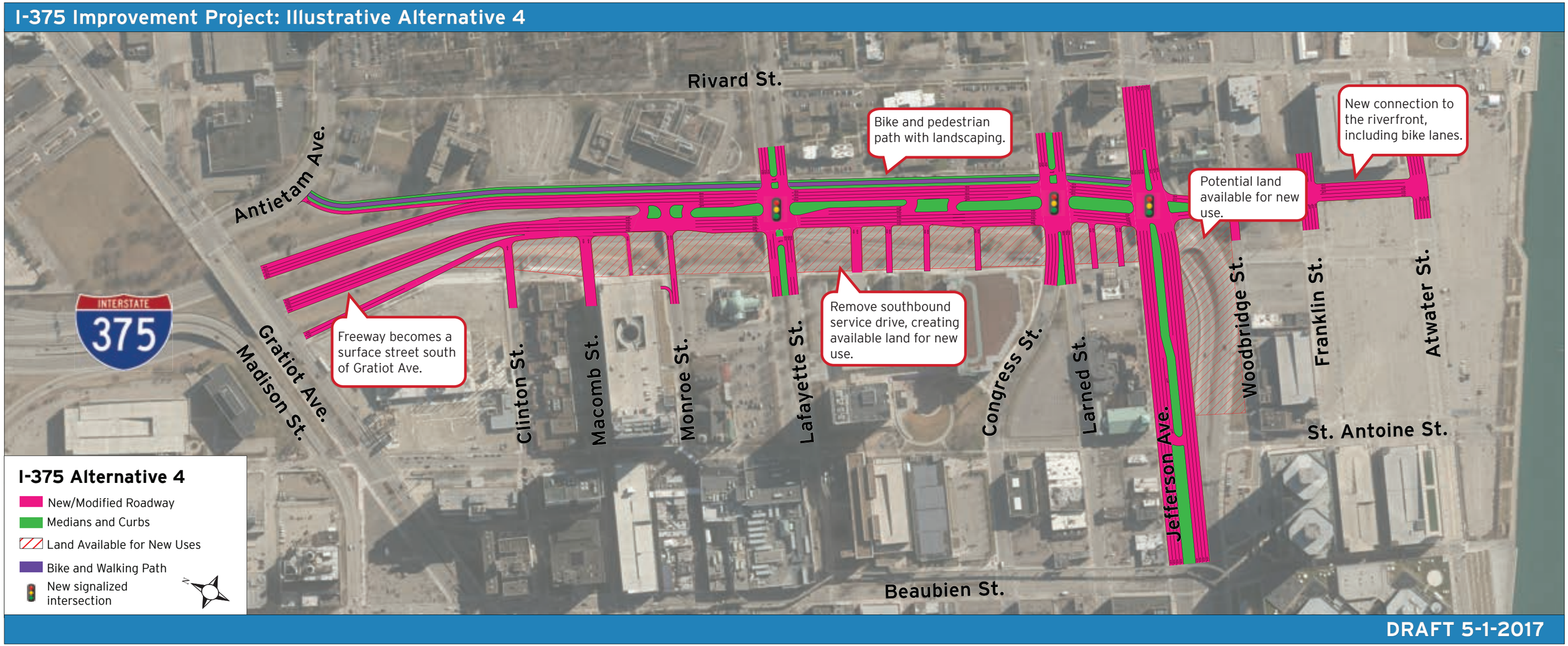
Under Alternative 3, the I-375 freeway would transition to a surface street south of Lafayette Avenue, and include intersections with traffic signals at Larned Street and Jefferson Avenue. The surface roadway was assumed to be four lanes in each direction between Lafayette and Jefferson. The surface roadway would continue through Jefferson Avenue to Atwater, with two lanes in each direction. The freeway portion would be shifted to the west approximately 85 feet.

CROSS-SECTION LOOKING NORTH SHOWING PROPOSED CONDITIONS

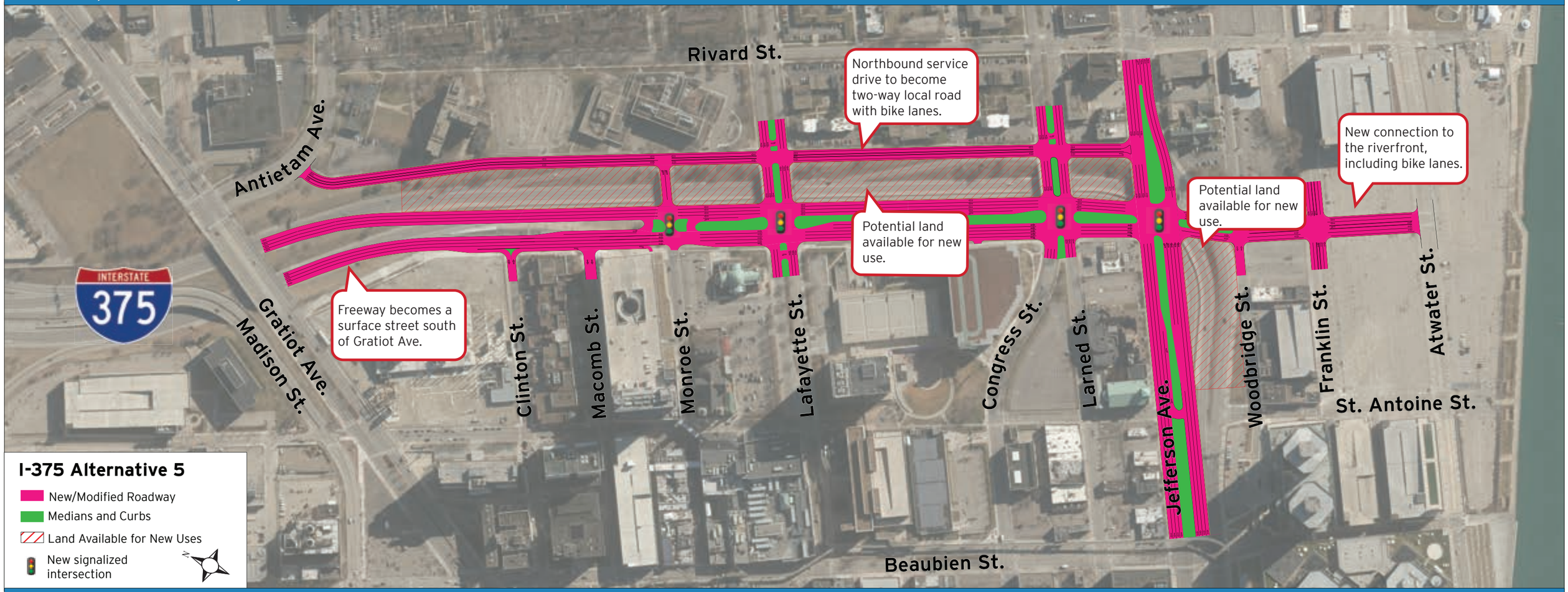
Illustrative Alternative 4: Boulevard on the East Edge



Under Alternative 4, the I-375 freeway would transition to a surface street, with four lanes in each direction, south of Gratiot Avenue, coming to a surface intersection near Clinton Street. The roadway would be aligned on the east side of the existing corridot footprint. Both service drives would be eliminated under this scenario. The new urban boulevard would continue south of Jefferson Avenue to Atwater Street with two lanes in each direction.

CROSS-SECTION LOOKING NORTH SHOWING PROPOSED CONDITIONS

Illustrative Alternative 5: Boulevard on the West Edge

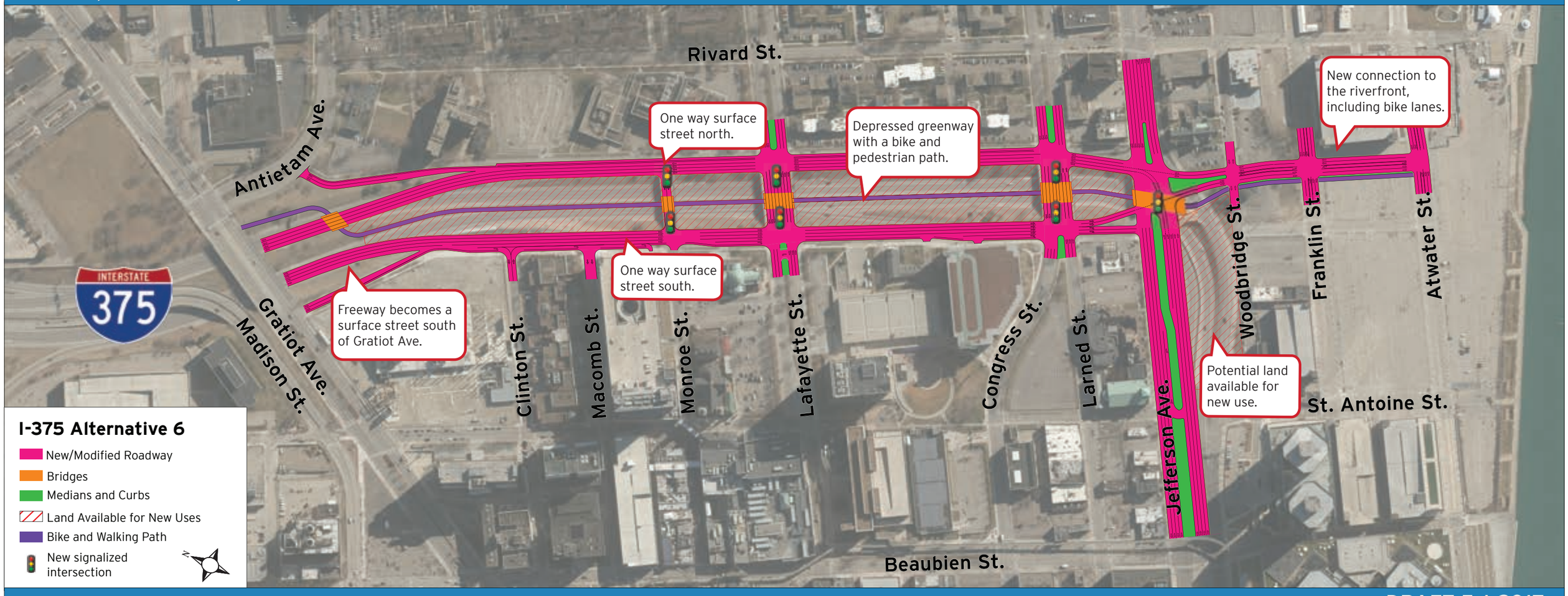


Similar to Alternative 4, Alternative 5 would include a surface roadway with four lanes in each direction from south of Gratiot Avenue. However, under this alternative, the surface roadway would be aligned along the west (central business district) side of the corridor. The new urban boulevard would continue south of Jefferson Avenue to Atwater Street with two lanes in each direction. In addition, the northbound service drive would be maintained as a two-way local roadway.

CROSS-SECTION LOOKING NORTH SHOWING PROPOSED CONDITIONS

Illustrative Alternative 6: Two One-Way Streets with a Depressed Greenway

I-375 Improvement Project: Illustrative Alternative 6



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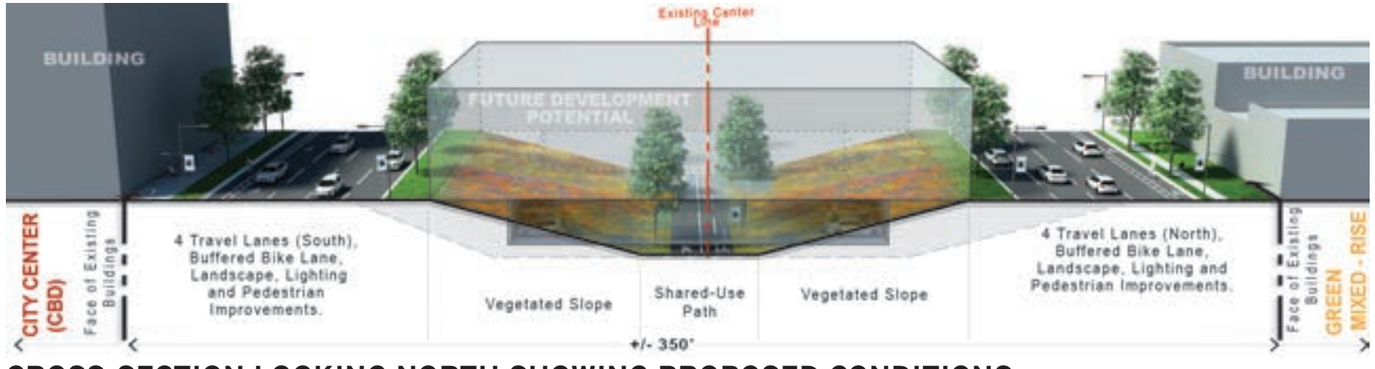
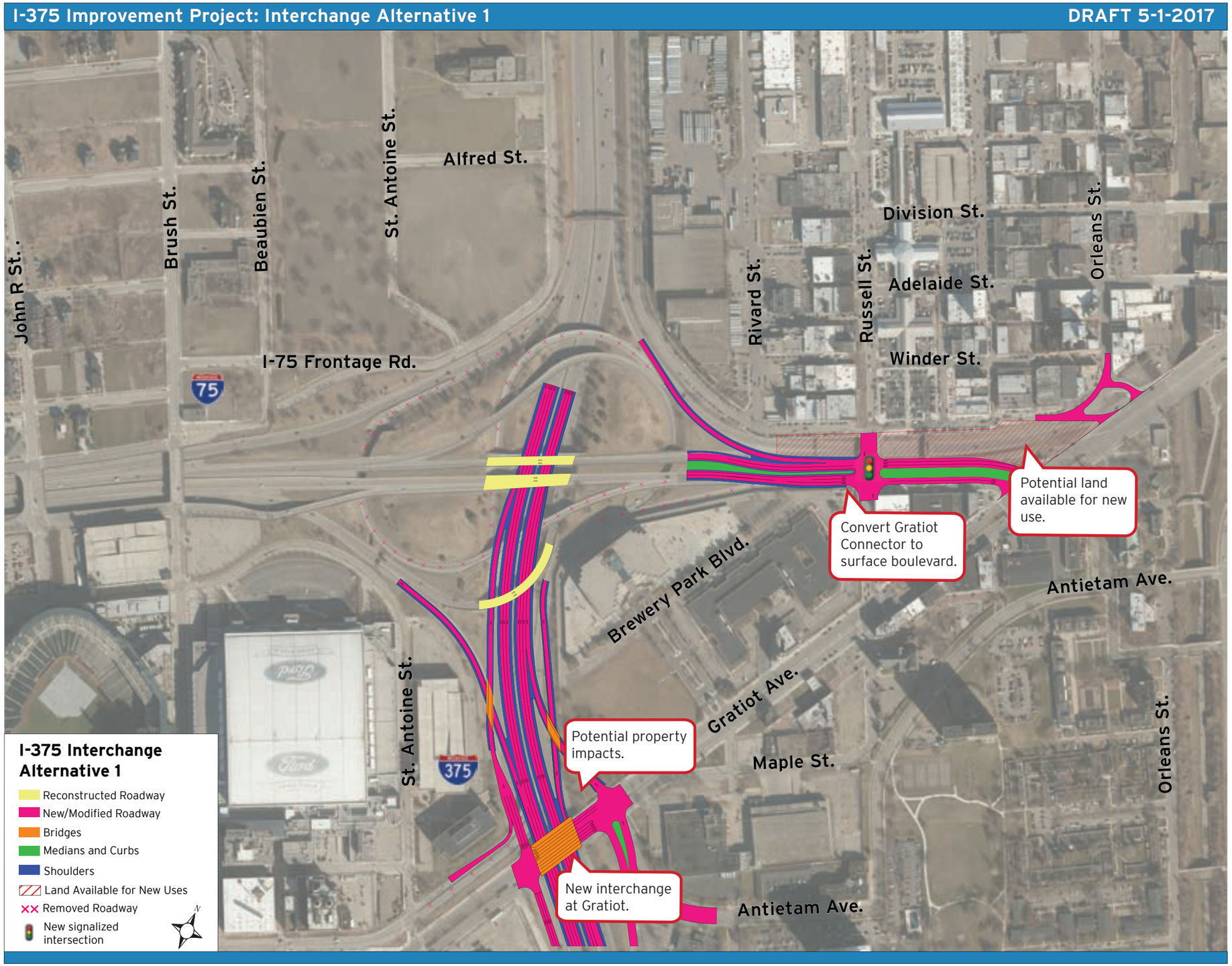
Under Alternative 6, the surface roadway south of Gratiot Avenue would take the form of two one-way roadways, aligned with the existing services drives, with four lanes in each direction. The roadway would continue south of Jefferson Avenue to Atwater Street with two lanes in each direction.



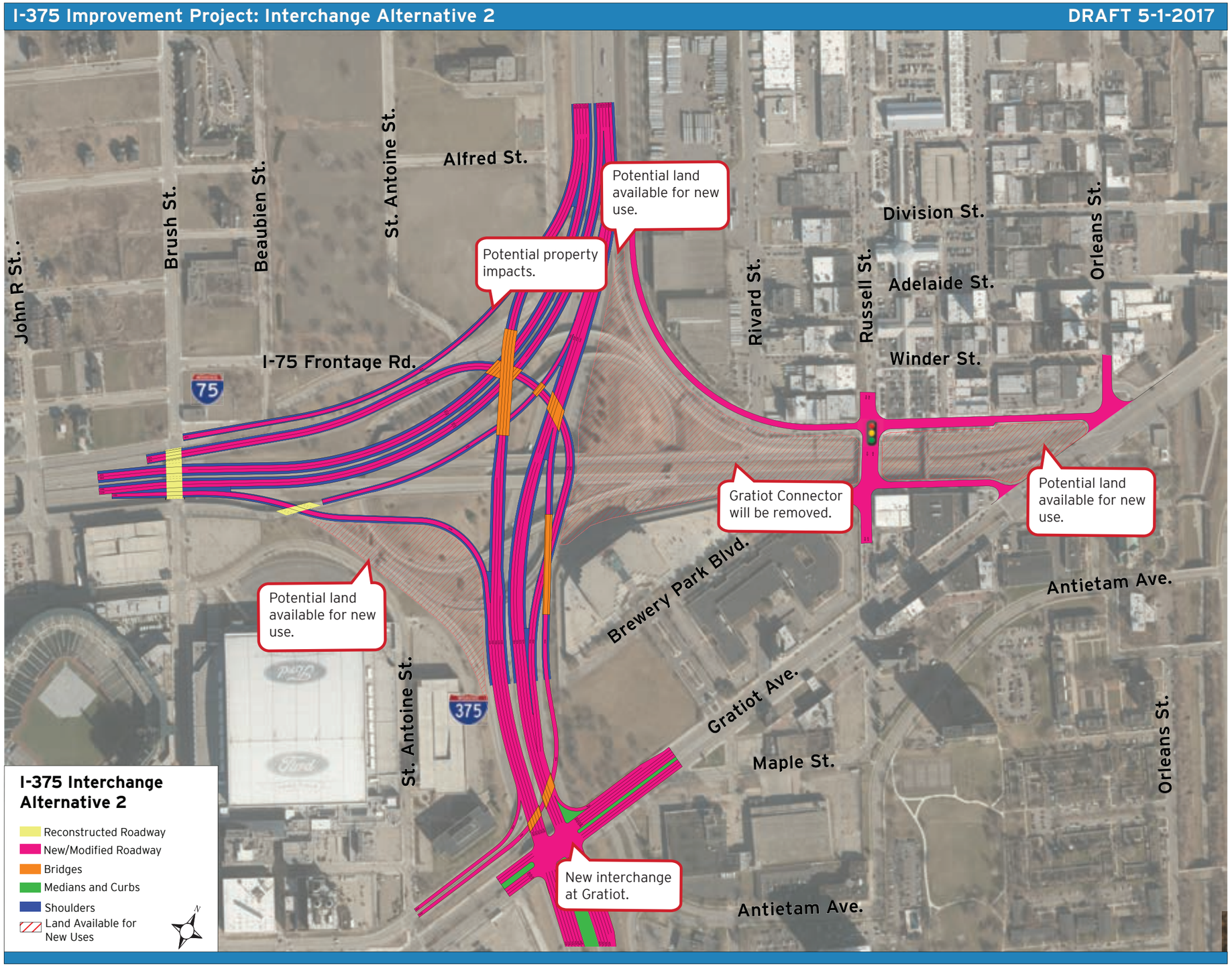
CROSS-SECTION LOOKING NORTH SHOWING PROPOSED CONDITIONS

Interchange Alternative 1



Alternative 1 is intended as a lower-cost upgrade of the interchange area, which would eliminate the current left-hand ramps to Madison Avenue, and create a more traditional interchange at Gratiot Avenue. It would also include conversion of the Gratiot connector to a surface roadway with a signalized intersection at Russell Street. This alternative is compatible with all six of the I-375 alternatives.

Interchange Alternative 2



Under Alternative 2, the interchange area would be completely reconstructed, with I-75 reconfigured as the through-traffic movement. A surface street intersection would be created with Gratiot Avenue at I-375, replacing the need for the Gratiot connector and allowing for its elimination. In addition, new access would be created to and from the north on I-75 at Brush Street, and access to Madison Avenue maintained. This alternative is compatible only with I-375 Alternatives 4, 5 and 6.