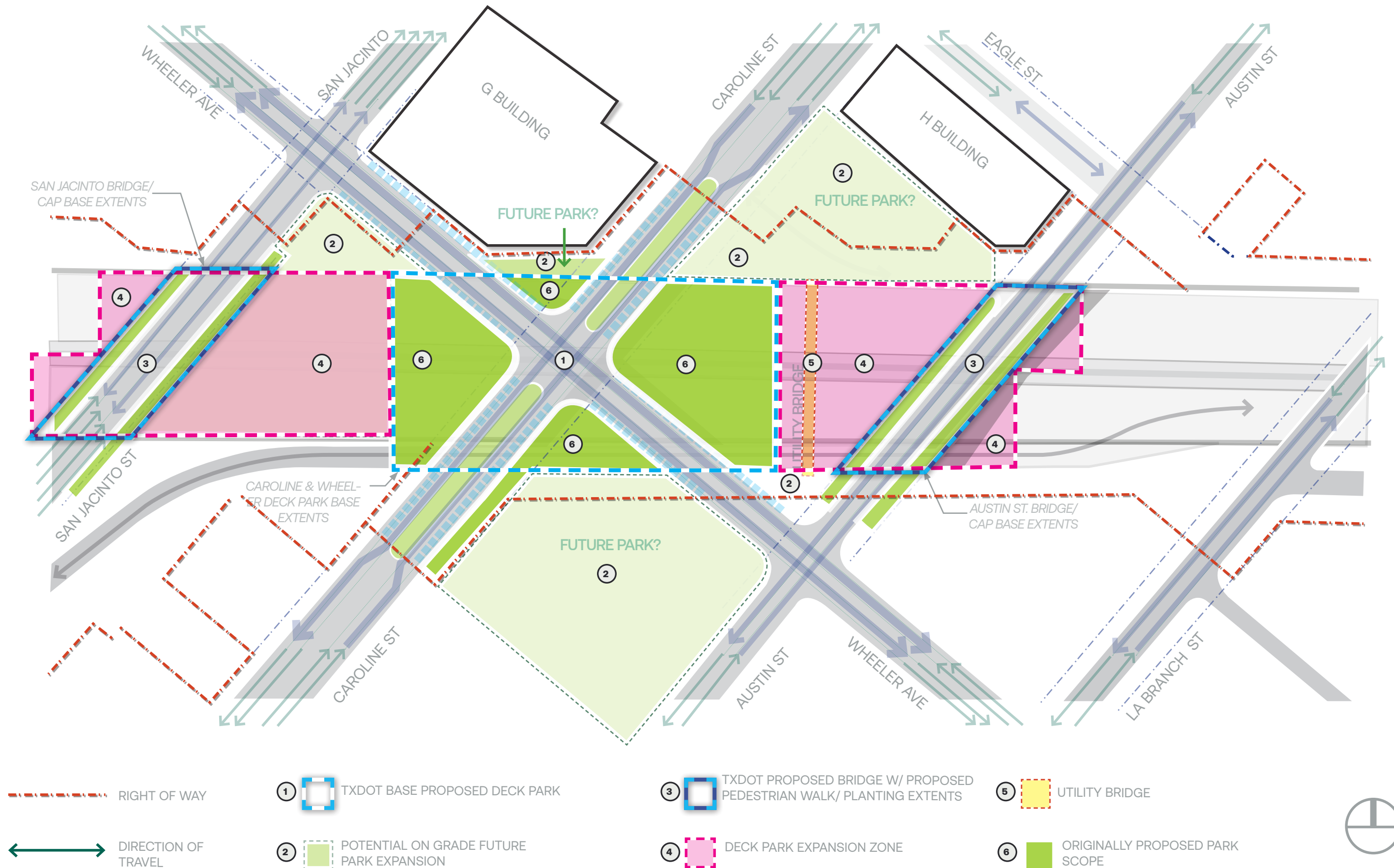


# CAROLINE & WHEELER I PARK EXPANSION STUDY



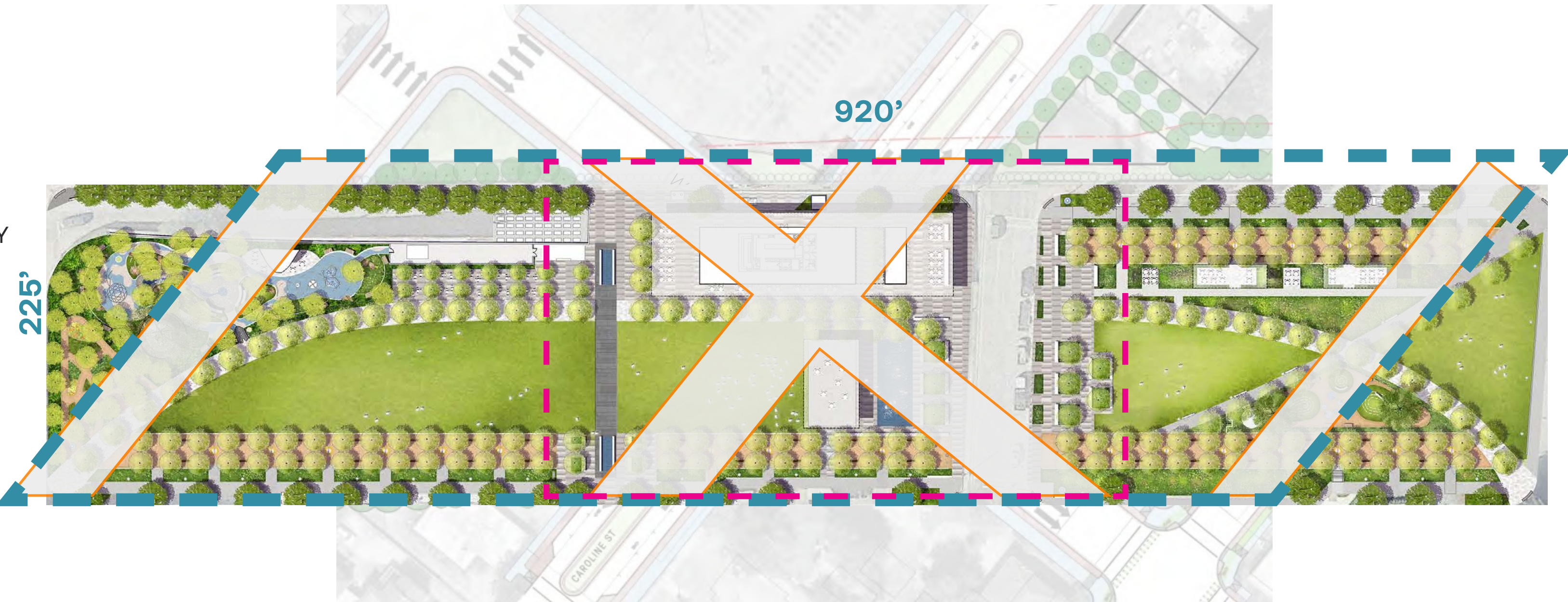


## CAROLINE AT WHEELER CAP I SCALE STUDY

KLYDE WARREN PARK, DALLAS TEXAS 5.2 ACRES

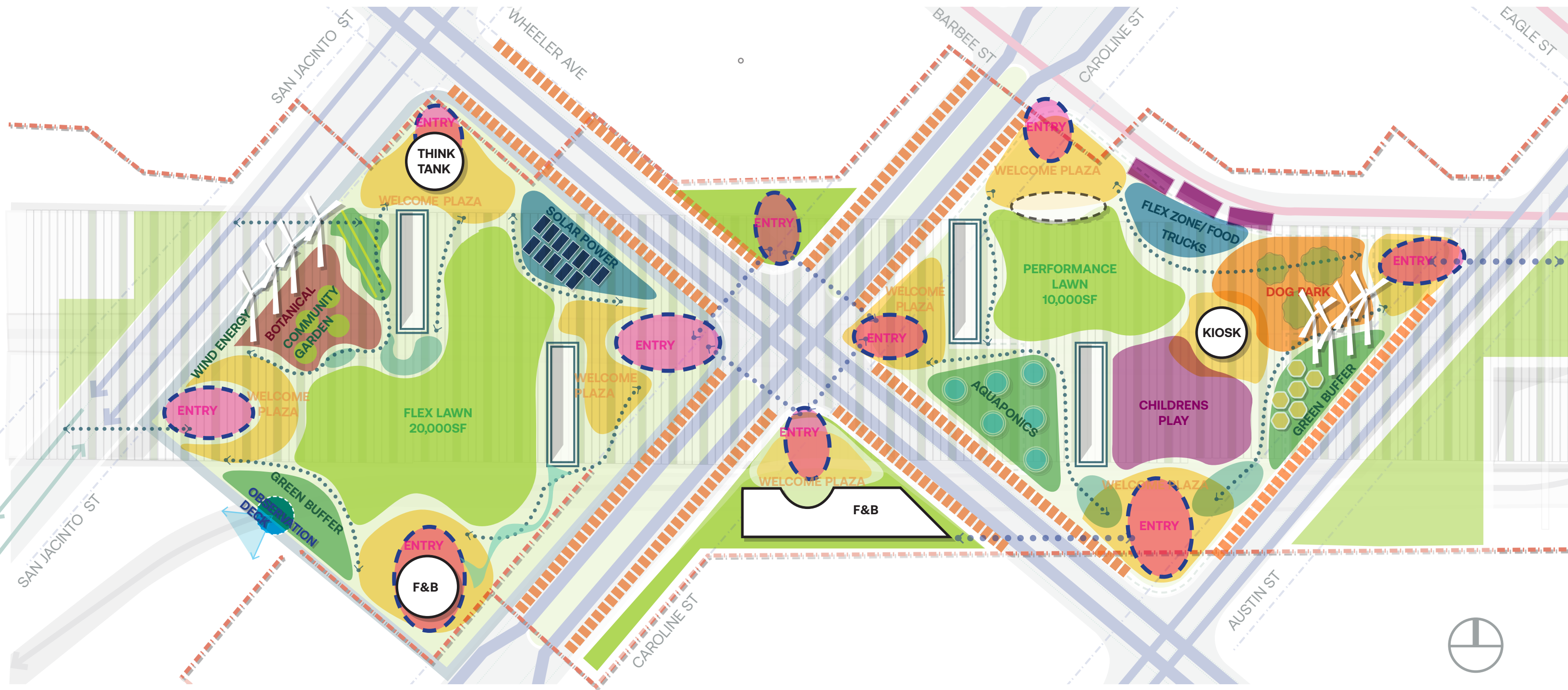
PLANNED CAP I APPROXIMATELY 2.1 ACRES




POTENTIAL CAP EXPANSION I 4.75 ACRES











# DESIGN CONSIDERATIONS I PROGRAM STUDY A





-  WELCOME ENTRY
-  PLAZA
-  AQUAPONICS

-  GREEN BUFFER
-  FLEXIBLE LAWN
-  APIARIES

-  PLAY GARDEN
-  DOG PARK
-  FLEX SPACE

-  BUILDING
-  BOTANICAL EXPERIENCE
-  PROMENADE

-  STREET PARKING
-  PEDESTRIAN CIRCULATION



## CONCEPTUAL RENDER I *OPTION W/ ELEVATED WALK*





CONCEPTUAL RENDER I *OPTION W/ ELEVATED WALK*





CAROLINE & WHEELER | *BUDGET WORKSHOP*

GROUND LEVEL CONCEPTUAL PLAN | *AREAS*



- 1 Dog Park

2 East Lawn

3 Entry Plaza 1

4 Entry Plaza 2
- 5 Entry Plaza 3

6 Entry Plaza 4

7 Entry Plaza 5

8 Entry Plaza 6
- 9 Event Lawn

10 F & B Kiosk Dog Park

11 F & B Kiosk Raised Overlook

12 Flexible Raised Terrace
- 13 Flexible Raised Terrace 1

14 Flexible Raised Terrace 2

15 Flexible Raised Terrace 4

16 Grand Stair
- 17 Innovation Terrace W/ Urban Farm

18 Innovation Terrace W/ Water

19 Performance Pavilion

20 Playground
- 21 Restaurant

22 Streetscape 1

23 Streetscape 2

24 Urban Ag
- 25 Urban Ag 1

26 Urban Ag 2

27 Urban Ag 3

28 Urban Ag 4

ELEVATED WALK CONCEPTUAL PLAN | *AREAS*



- 1 East Raised Walk

2 Entry Stair

3 Entry Stair 1

4 F & B Dog Park
- 5 Overlook

6 Pavilion Extension

7 Raised Walk Connection

8 Roadway Connection
- 9 West Roadway Extension

Midtown Caroline Wheeler Deck Park

Preliminary Budgetary Estimate  
MT-CWD

6/15/2023

PARK AMENITY AND GREENSPACE

Cost of Work Estimate		\$52,398,404
General Conditions	2.70%	\$1,414,757
General Requirements	2%	\$1,047,968
		\$2,462,725
<b>Contingency</b>		
Design Contingency	15%	\$8,229,169
Construction Contingency	5%	\$3,154,515
		\$11,383,684
<b>Insurance &amp; Bonds</b>		
Bonds	1%	\$662,448
Builders Risk	0.45%	\$298,102
General Liabilities	0.70%	\$463,714
		\$1,424,263
<b>Fee</b>		
Contractor's Fee	3%	\$2,030,072
Tax	excluded	-
<b>PARK AMENITY TOTAL</b>		<b>\$69,699,149</b>

TxDOT STRUCTURE ESTIMATE

*	Deck Park Structure (410')	\$21,374,593
	Additional Deck Park Structure Premium larger Structure O&M Costs Over 30-Year Service (Fire suppression & Life safety)	\$15,297,004
*	Baseline 410 feet cap	\$34,239,344
	Extended Larger Cap Structure (Cost Premium in addition to Baseline 410 cap)	\$21,017,516
<b>TxDot DECK STRUCTURE &amp; O&amp;M TOTAL</b>		<b>\$91,928,457</b>

PARK AMENITY TOTAL	\$69,699,149
TxDOT DECK STRUCTURE TOTAL	\$91,928,457
<b>GRAND TOTAL</b>	<b>\$161,627,606</b>

\*Exclusions

Operations & Maintenance costs (other than fire suppression & life safety)  
Soft costs

**\* Total TxDOT Participation - \$55,613,937**





# I-45 NHHIP Segment 3A

## Design Refinements & Structural Caps

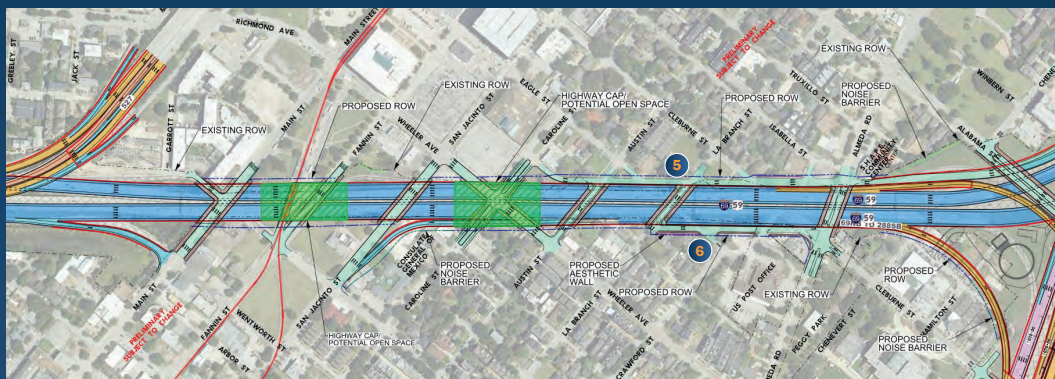
For additional information about the Project, visit us online at: [www.txdot.gov/nhhp](http://www.txdot.gov/nhhp)

To view this exhibit in other languages, please scan the QR code here:

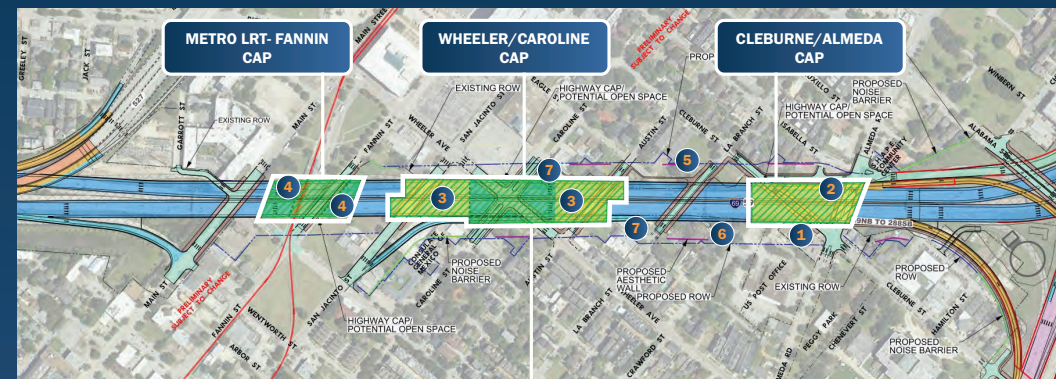
Para ver esta presentación en otros idiomas, por favor escanee el código QR aquí:



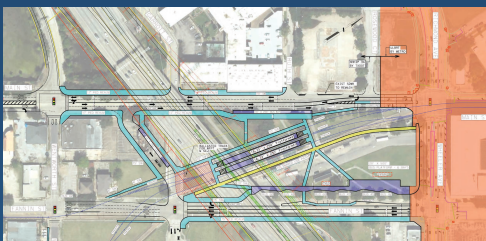
### FEIS APPROVED



### PROPOSED CHANGES \*



### Working with METRO



TxDOT is partnering with METRO on a plan that would take the METRO Rail Red Line from the nearby Wheeler Transit Station across I-69. In addition to providing 3 light rail tracks, new bus turnouts and platforms will be installed along Fannin St. and across I-69. Above is a rendering of what this proposed idea would look like.

1

Extend Cleburne St. across I-69, preserving this important connection between Third Ward and Midtown.

- Community request and VRA commitment

2

Develop potential roadway cap extension opportunity between Almeda Rd. and Cleburne St.

- City of Houston and management districts request

3

Develop potential roadway cap extension opportunity, which would increase the cap area from Wheeler Ave. and Caroline St. to include San Jacinto and Austin streets.

4

Develop potential roadway cap extension opportunity which would increase the cap area to the west of the METRO Rail crossing, and to the east of the Fannin St. crossing.

- Requested by METRO, City of Houston, and management districts

5

Shorten I-69 southbound frontage road to end at Cleburne St.

- Requested by City of Houston and management districts
- Enhanced bicycle/pedestrian opportunities in space where frontage road removed

6

Remove proposed I-69 northbound frontage road between La Branch St. and Almeda Rd.

- Requested by City of Houston and management districts
- Proposed frontage road creates adverse cross street intersections and does not enhance access and operations
- Enhanced bicycle/pedestrian opportunities in space where frontage road removed

7

Build specialized retaining walls due to high groundwater and excavation depth.

- Impacts amount of right of way required



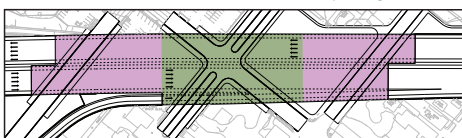
These walls will be diaphragm walls or "D-Walls" for short. They are built deep into the ground in solid concrete rectangular sections which are interlocked with watertight vertical joints. Horizontal rods called tiebacks help stabilize these walls.

\* NEPA reevaluations will be performed as needed when proposed changes deviate from the FEIS

### WHAT IS A CAP?

A cap is the concrete infrastructure required to build a roadway at natural ground level over a highway that is below ground level. The cap also provides the opportunity for the "Art of the Possible." Through public and private funding partnerships, the cap can become an iconic destination for the community. The exhibits below demonstrate possible cap features that can be employed to define how the community can repurpose the space. You can either utilize the QRC or fill out a comment form to provide feedback.

The Wheeler/Caroline cap is being used as an example here, but all the potential amenities could be added to each of the structural caps in Segment 3A.

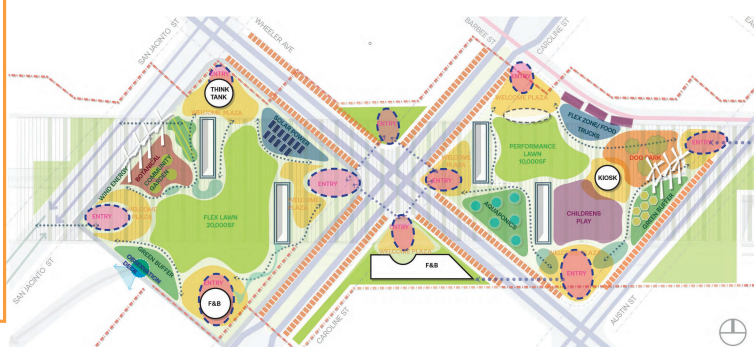


### WHEELER/CAROLINE CAP

## CAPS: THE ART OF THE POSSIBLE

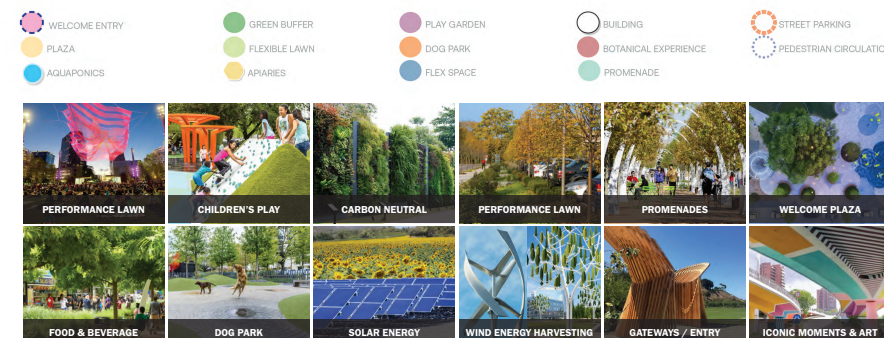


Scan to complete survey



### WHEELER/CAROLINE CAP PROPOSAL

The Wheeler/Caroline Cap Proposal image is one of many options for how the various features and amenities could be laid out in the cap spaces.



### POSSIBLE CAP FEATURES & AMENITIES



# Neighborhood Access & Equity Grant Application

DOT-NAE-FY23-01

NHHIP  
Connections

City of Houston  
611 Walker St.  
Houston, TX 77002

September  
**2023**







# CITY OF HOUSTON

**Sylvester Turner**

Mayor

P.O. Box 1562  
Houston, Texas 77251-1562

Telephone – Dial 311  
[www.houstontx.gov](http://www.houstontx.gov)

September 20, 2023

The Honorable Pete Buttigieg  
Secretary, U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

As Mayor for the City of Houston, I am committed to ensuring transportation projects serve as means to our city's goals: equity, safety, and resilience. The North Houston Highway Improvement Project serves as the epitome of this approach; what was originally a roadway project to speed drivers in and out of downtown is now a multimodal project that addresses flooding, housing, safety, and more for all neighborhoods along the corridor.

To further this effort, I am pleased to submit this application on behalf of the City of Houston for the Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant to fund the NHHIP Connections: 24 bridges and caps that can be so much more than roadways, they can be true community assets. The Federal Highway Administration (FHWA), the Texas Department of Transportation (TxDOT), and the City have each worked on this project for years now, and this grant is one of the first steps in bringing to life our shared vision of an equitable transportation system for Houston.

The Voluntary Resolution Agreement (VRA) signed by FHWA and TxDOT on March 6<sup>th</sup> of this year outlined ways to mitigate for potential harm to impacted communities by the project, with specific focus on:

1. Reducing the NHHIP footprint
2. Minimizing displacements
3. Mitigating for flooding
4. Mitigating for air quality impacts
5. Adding structural caps over portions of the highway system
6. Expanding opportunities for parks/open space/trails/pedestrian and bicycle facilities
7. Ensuring safe access to the city during construction
8. Ensuring meaningful access for people with Limited English Proficiency



September 20, 2023

Page Two

This grant application for capital construction funding to support a series of 18 garden bridges, three cap parks, and three signature bridges which directly addresses item 5 of the VRA and is a prerequisite for items 3, 4, and 6 as the project is constructed. The City is requesting funding for the structural improvements necessary to support future parks and enhanced pedestrian and bicycle realms on TxDOT-constructed facilities, in accordance with the VRA.

Approximately 65% of the facilities included in the application are in disadvantaged areas as defined by FHWA, and TxDOT is coordinating with the local special tax districts who will be providing the 20% match for the 35% of facilities in this application that are located outside of a disadvantaged area. Of the 24 facilities included in this application, 18 make direct improvements to our High Injury Network in alignment with the City's Vision Zero goals. The project also maintains the support of the FHWA through its oversight of the VRA.

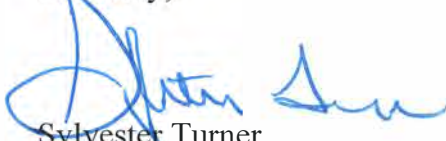
Future improvements will enhance the lives of our community members through connection and continuity across major highways and creation of greenspace, repairing past harmful transportation policies and mitigating against the urban heat island effect that adds an extra two to five degrees to temperatures experienced by residents crossing these highways on any given day. Houston has a once-in-a-generation opportunity to create infrastructure that allows for reallocation of space from automobiles to pedestrians in a safe, accessible, and inspiring way.

This grant application enjoys wide support from community partners and stakeholders all along the corridor, from Congress members to civic club leaders, community organizers to redevelopment authorities, and of course, TxDOT as owner of the facility and project partner.

In the words of FHWA Administrator Shailen Bhatt, **"This agreement moves forward an important project, responds to community concerns, and improves the North Houston Highway Improvement Project in ways that will make a real difference in people's lives. Through this agreement the community will have a greater voice in the design and throughout the project's life cycle."**

I could not agree more and hope you do too. Your consideration and support will help us create a greener, safer, more equitable city.

Sincerely,



Sylvester Turner  
Mayor



## A. Overview

The North Houston Highway Improvement Project (NHHIP) is a Texas Department of Transportation (TxDOT)-led \$7 billion realignment and widening of IH-45 and other highways (see Figure 1). This grant application is for \$50,803,566.40 from the Neighborhood Access and Equity (NAE) grant fund to support construction of 24 spans over these highways so that NHHIP connects the neighborhoods in and around Downtown Houston with bridge cap parks, garden bridges, and signature bridges. Collectively, these facilities are named throughout this application as the “**NHHIP Connections.**”

Figure 1: NHHIP Project Map. (Source: TxDOT)



Of the 24 facilities included in this NHHIP Connections NAE application, 15 are located partially or wholly within a disadvantaged area, 18 are on Houston’s high-injury network (defined as the 6% of streets where 60% of traffic deaths and serious injuries occur), and all are located within urban heat islands, in part, due to the sheer mass of multilane highway concrete with little to no park space or tree cover. This grant provides the opportunity to address some of the historic negative impacts of highway development on these communities, providing safer, cooler, and greener connections. As TxDOT is working to deliver the highway project, the City of Houston (City) is focused on transforming the State’s infrastructure through a community-led solution to cap the highways and reclaim the communities’ access to high quality social and economic opportunities.

In 2017, Houston Mayor Sylvester Turner initiated a new dialogue with TxDOT that provided an opportunity for the community to be heard about NHHIP. Mayor Turner established and engaged a Facilitation Group comprised of civic leaders and community members around the theme of reducing the environmental impact and disruption of neighborhoods by highway expansion while embracing growth. When TxDOT’s NHHIP Record of Decision did not fully address community concerns, several community organizations submitted a complaint to the Federal Highway Administration (FHWA).<sup>1</sup> Ultimately, TxDOT and FHWA entered into a Voluntary Resolution

<sup>1</sup> Texas Appleseed. “Complaint under Title VI of the Civil Rights Act of 1964.” December 16, 2021. <https://www.texasappleseed.org/sites/default/files/12-15-21%20Title%20VI%20Complaint%20-%20TxDOT.pdf>



Agreement (see **Appendix A**), ensuring that TxDOT would collaborate with the City and other stakeholders to design the project in a way that mitigated potential harm to impacted communities, with specific focus on:

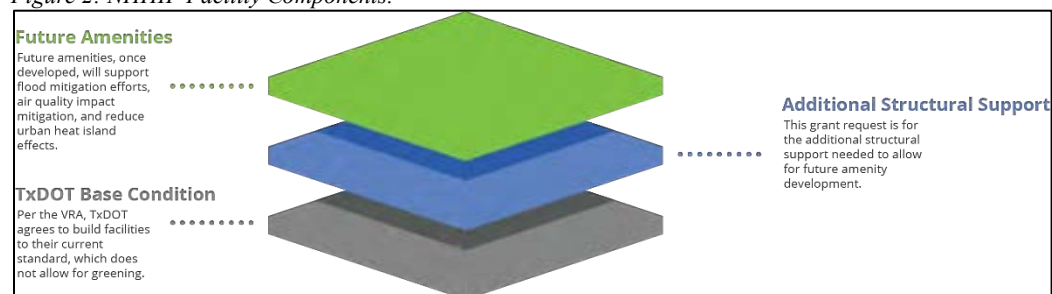
1. Reducing the NHHIP footprint
2. Minimizing displacements
3. Mitigating for flooding
4. Mitigating for air quality impacts
5. **Adding structural caps over portions of the highway system**
6. Expanding opportunities for parks/open space/trails/pedestrian and bicycle facilities
7. Ensuring safe access to the city during construction
8. Ensuring meaningful access for people with Limited English Proficiency

This NAE grant application directly addresses item 5 of the VRA and is a prerequisite for items 3, 4, and 6 as the project is constructed. TxDOT and the City have been doing the work, have developed the local support, are committed to this project, and want to partner with FHWA.

### 1. Current Context and Scope

The City of Houston is requesting funding from FHWA to ensure that TxDOT can build the infrastructure required to physically support future development of parks, greenspace, shade, and pedestrian and bicycle components designed to today's best practices. This grant application does not include capital costs for construction of future amenities; it ensures that the garden bridges, signature bridges, and bridge caps in this application are built to a specification that can physically support the future amenities that will stitch together Downtown Houston and the surrounding neighborhoods. The cost of future amenities and their operations and maintenance will be funded later through a combination of public and private investment. Without funding the current construction of this infrastructure during NHHIP, the envisioned future amenities will not be possible (see Figure 2). Fifteen of the 24 proposed NHHIP Connections in the application are located partially or wholly within a disadvantaged area and are eligible for 100% project funding through the NAE program, while the remaining nine NHHIP Connections would require a 20% local match of funds. (Overall, this would result in a 15% match for the grant application). This grant will support the joint efforts of the City and TxDOT to safely address the barriers posed by wide highways, support flood mitigation efforts, mitigate air quality impacts, and reduce urban heat island effects<sup>2, 3</sup> along what would otherwise be plain concrete corridors across a complex system of highways. These benefits are described further in the section on Merit Criteria.

Figure 2: NHHIP Facility Components.



<sup>2</sup> Hsu, A., Sheriff, G., Chakraborty, T. et al. 2021. "Disproportionate exposure to urban heat island intensity across major US cities." *Nature Communications* 12, 2721. <https://www.nature.com/articles/s41467-021-22799-5>

<sup>3</sup> Hoverter, Sarah. 2012. "Adapting to Urban Heat: A Toolkit for Local Governments." [https://www.georgetownclimate.org/files/report/Urban%20Heat%20Toolkit\\_9.6.pdf](https://www.georgetownclimate.org/files/report/Urban%20Heat%20Toolkit_9.6.pdf)



### a. Budget

The overall programmed budget for Segment 3 of the NHHIP project as listed in the region's Transportation Improvement Program (TIP), including the NHHIP Connections, is \$828,940,000. That gross amount is a combination of \$594,752,000 from the metropolitan planning organization (Houston-Galveston Area Council) and \$234,188,000 from TxDOT. The ask of \$50,803,566.40 in this grant application for structural supports represents roughly 5% of the overall project cost.

### b. Benefits Cost Analysis (BCA) Summary

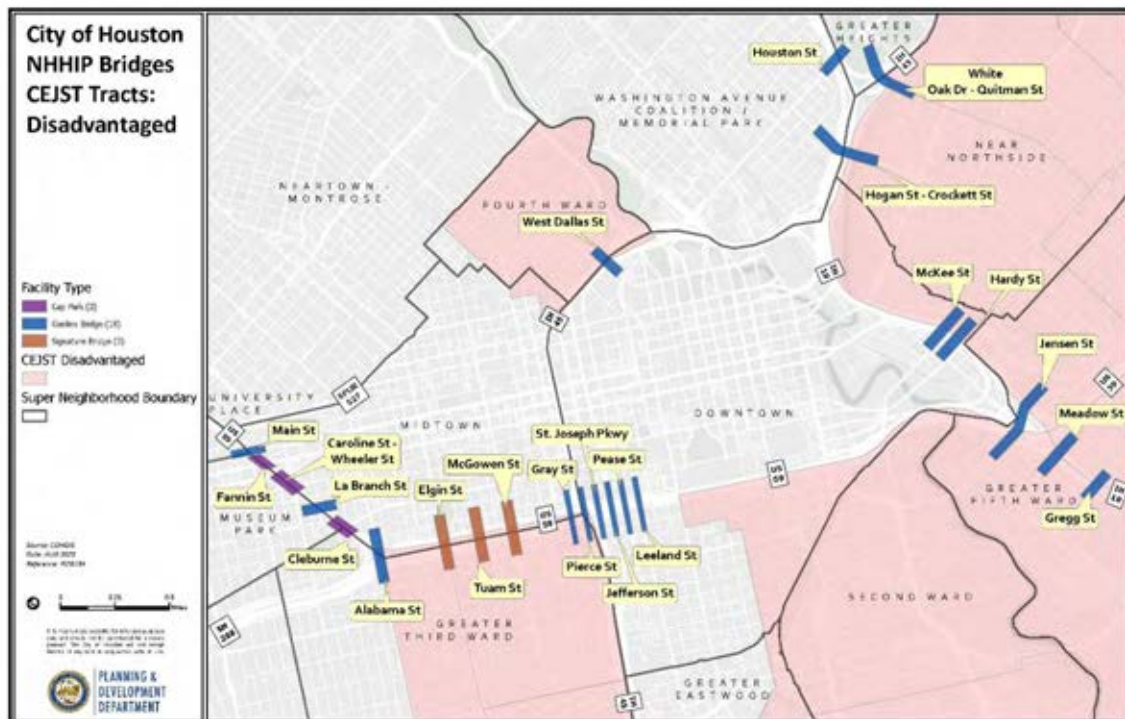
The BCR for the project is .6. Beyond the economic potential the highway caps and improved bridges can offer, other benefits were quantified to understand how the project's mobility, environmental, and safety benefits compare to its costs. Project benefits are based on safety improvements on improved bridges and a general increase in active transportation, which assume over 99 injury or death-causing crashes mitigated, over 1 million new bike and pedestrian trips, and over 616,000 VMT saved over the course of the project's timeline. A copy of the BCA for this project and an accompanying technical memo are included with this application as

**Appendix B.**

### B. Location & Map

The NHHIP Connections are primarily located within the urban core of Houston. Figure 3 shows the location of each facility, the major highways, each Super Neighborhood, and the boundaries of disadvantaged areas, as defined by the U.S. Council on Environmental Quality's Climate and Economic Justice Screening Tool; the following sections describe each Super Neighborhood with a proposed NHHIP Connections facility.

Figure 3: NHHIP Connections Facilities. Source: Climate and Economic Justice Screening Tool and City of Houston.





## 1. Impacted Neighborhoods

The City of Houston uses Super Neighborhood boundaries as the primary designation for planning purposes. Each active Super Neighborhood has its own unique set of characteristics, its own Super Neighborhood Council, and its own goals for future development. In addition to Super Neighborhoods, Management Districts provide services tailored to meet the needs of the specific district, while Tax Increment Reinvestment Zones (TIRZ) use tax increment financing to incentivize development in a given area. Super Neighborhoods, Management Districts, and TIRZ's present in the NHHIP Connections area are supportive of this grant application (see **Appendix C** for Letters of Support). Overarching planning initiatives like the Houston Climate Action Plan<sup>4</sup>, Resilient Houston Plan<sup>5</sup>, Houston Bike Plan<sup>6</sup>, and Complete Communities<sup>7</sup> identify the bridges and caps included in the NHHIP Connections project, further showing the communities' long-term engagement and resulting support for this grant application.

### a. Downtown

*Garden Bridges: West Dallas St., McKee St., Hardy St., Pierce St., St. Joseph Pkwy., Jefferson St., Pease St., Leeland St.*

Downtown is the birthplace of Houston. The construction of a ring of freeways in the 1960-70s created the modern boundaries of Downtown, undermining the easy pedestrian access enjoyed by surrounding neighborhoods prior to highway construction. The Downtown area has absorbed portions of the Second Ward, Third Ward, Fourth Ward, and Fifth Ward due to division of these neighborhoods by the highway system. As of 2021, Downtown was 37% White, 34% Black, 22% Hispanic or Latino, 4% Asian, 3% Two or More Races, and 1% Native American or Alaskan Native. The median household income was \$100,878.<sup>8</sup>

Downtown is experiencing a renaissance of development that should again be easily accessible to surrounding neighborhoods. Today, more than \$1.9 billion in new Downtown construction projects are underway and/or in pre-development/design, ranging from residential to hospitality, high rise office towers to exciting new public spaces. The goal of this grant application is to build facilities that repair the connectivity lost due to highway construction, reengaging Downtown and its surrounding neighborhoods.

### b. Fourth Ward (Disadvantaged)

*Garden Bridge: W. Dallas St.*

Fourth Ward has been a community in transition for an extended period. The historic heart of this community was Freedman's Town, a settlement of freed slaves on the western edge of the city. Fourth Ward was initially established as a major commercial and cultural center for Houston's African American community. The construction of I-45 bisected the Fourth Ward and isolated the eastern edge of the community, which was subsequently absorbed into Downtown and has been redeveloped with retail and office space. As of 2021, Fourth Ward was 40% White, 26% Black,

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<sup>4</sup> City of Houston. 2020. "Houston Climate Action Plan." <http://greenhoustontx.gov/climateactionplan/>

<sup>5</sup> City of Houston. 2020. "Resilient Houston." <https://www.houstontx.gov/mayor/chief-resilience-officer.html>

<sup>6</sup> City of Houston. 2017. "Houston Bike Plan." <https://houstonbikeplan.org/documents/>

<sup>7</sup> City of Houston. 2017. "Houston Complete Communities Action Plans." <https://www.houstoncc.org/>

<sup>8</sup> For all Super Neighborhood data throughout this application, please see: City of Houston. "Super Neighborhoods." <https://www.houstontx.gov/supeneighborhoods/>



21% Hispanic or Latino, 5% Asian, 8% Two or More Races, and 0% Native American or Alaskan Native. The median household income was \$78,077.

*Figure 4: Current I-45 overpass at W. Dallas showing that it is not ADA-accessible, has no protected bike lane, has narrow sidewalks with no buffer from traffic, and no shade.*



The W. Dallas Street garden bridge will restore some of what was lost when I-45 was constructed by creating a safe, accessible, multimodal direct path across I-45 for residents of the Fourth Ward neighborhood into Downtown. This facility represents one of only two east-west crossings for the Fourth Ward area into Downtown for several blocks north and south.

#### **c. Greater Fifth Ward (Disadvantaged)**

*Garden Bridges: Jensen St., Meadow St., Gregg St.*

Greater Fifth Ward grew from the north bank of Buffalo Bayou across from the original town site for Houston. Originally a multi-racial community, Fifth Ward quickly became one of the centers of Houston's African-American community. Its commercial streets, especially Lyons and Jensen, provided retail outlets and entertainment for the residents of the small wood frame homes that were prevalent in the area. Small clusters of brick homes identified a small middle-class population. As of 2021, Greater Fifth Ward was 50% Hispanic or Latino, 44% Black, 3% White, 1% Asian, and 2% Two or More Races. The median household income was \$29,564.

Highway construction decimated the Fifth Ward—bisecting the community and removing more than 900 structures in the footprint of the highways. Before being cut off from the rest of the city by the construction of I-10 and SH-59, the Fifth Ward was a thriving, working-class neighborhood. Being cut off from the economic center of Houston led to decline of retail and residential uses and an increase in industrial land uses, bringing the harms that come along with it to the residents who remained.<sup>9, 10</sup>

<sup>9</sup> Garnham, Juan Pablo. "Texas' \$7 billion plan to remake Houston highways once again targets homes, businesses in communities of color." Texas Tribune. October 11, 2019.

<sup>10</sup> Shelton, Kyle. "Right In The Way: Generations Of Highway Impacts In Houston." The Metropole Blog. April 19, 2021.



Figure 5: Jensen St. at I-69 showing the current facility crossing under several elevated highway lanes without trees or protected bike facilities.



In February of 2023,<sup>11</sup> the Environmental Protection Agency (EPA) issued a press release announcing that they have ordered Union Pacific Railroad (UPRR) to assess creosote contamination in the Greater Fifth Ward neighborhood due to the confirmed presence of a cancer cluster at the former site of a wood preserving facility that was acquired by UPRR in 1997 when they merged with Southern Pacific. Greater Fifth Ward is in desperate need of mitigation of harm from environmental injustice and would benefit from restoration of the connection between the areas north and south of I-10.

The Jensen St., Meadow St., and Gregg St. garden bridges will help address these needs in part by creating safe, shaded paths across the highway system for pedestrians and cyclists. The Jensen St. bridge will connect north and south across two major freeways (I-10 and I-69), while also connecting the trails at Buffalo Bayou to greenspace north of I-10. The Meadow St. garden bridge will create a direct connection between Swiney Park on the south side of I-10 and Brewster Park on the north. The Gregg St. garden bridge represents the last north-south pedestrian crossing for over half a mile east past Gregg on I-10.

#### d. Greater Third Ward (Disadvantaged)

*Garden Bridges: Alabama St., Gray St., Pierce St.; Cap Parks: Cleburne St.; Signature Bridges: Elgin St., Tuam St., McGowen St.*

Greater Third Ward is home to some of the most important institutions in Houston's African-American community, including Texas Southern University, UNITY (Texas' only black-owned bank), and dozens of prominent churches. Originally a small community of modest frame homes, the growing African-American middle class found more substantial brick homes in areas formerly reserved for Whites. The communal center of Third Ward is Emancipation Park, a 10-acre site that was purchased by former slaves in 1872 to serve as a place to annually celebrate the end of slavery in Texas. Most of the city's African American newspapers started in Third Ward, and the first radio station stations targeting black audiences began there as well.

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<sup>11</sup> Environmental Protection Agency. "EPA Orders Union Pacific to Assess Contamination in Houston's Greater Fifth Ward Neighborhood." Press Release, February 27, 2023



Neighborhood household income has not kept pace with the rest of the City; however, rapid redevelopment in the Third Ward is creating concerns about maintaining affordability. As of 2021, Greater Third Ward was 57% Black, 19% White, 13% Hispanic or Latino, 8% Asian, and 3% Two or More Races. The median household income was \$51,183.

*Figure 6. intersection of Alameda St. and Cleburne St. as they each run under I-69.*

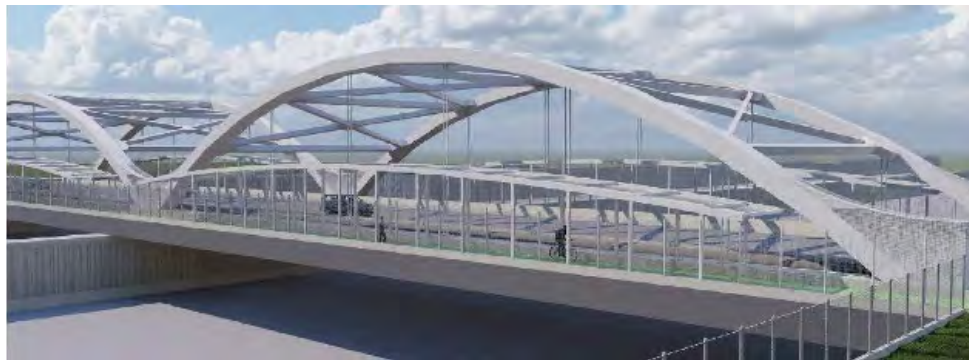


*Figure 7. Rendering of potential cap park design at Alameda St. and Cleburne St. showing the opportunity for tree canopy, shade structures, and pedestrian and bicycle facilities.*



The project's three proposed signature bridges (Elgin St., Tuam St., and McGowen St.) are all located over I-69, connecting Third Ward and Midtown. The signature bridges present a unique opportunity to incorporate elements of community identity and history into design as they connect two very different neighborhoods whose development has been defined by the highway running through them. Midtown has prospered while Third Ward has suffered until recently, despite Third Ward's robust history, plentiful higher education campuses, and established churches.

*Figure 8: Proposed signature bridge concept showing pedestrians and cyclists moving safely in a protected and shaded path.*



*Figure 9: Concepts for incorporating the history and community character of Third Ward into signature bridges. Amenities like these are only possible with the increased structural support we are requesting funding for in this grant application.*



Material: Perforated Steel

Inspiration: Historic Third Ward



#### e. Midtown

*Garden Bridges: Alabama St., Gray St.; Signature Bridges: Elgin St., Tuam St., McGowen St; Cap Park: Cleburne St, Fannin St.*

Midtown was a fashionable residential district before World War I. However, encroaching commercial development and heavy traffic sent high-income homeowners in search of quieter neighborhoods. The area became a mix of old homes, small apartment buildings, and low-rise commercial buildings. For many years, the only stability in the community was several surviving churches and the Houston Community College campus in the old San Jacinto High School building. A Vietnamese business district has arisen along Milam, Webster, Fannin, and San Jacinto. Spurred by the Midtown TIRZ, new apartment/townhome construction and retail investments have recently revitalized the area.

*Figure 10. Current condition at Alabama St. and SH-288 and I-69. The photo shows there are narrow sidewalks along Alabama St. without a meaningful buffer from vehicular traffic.*



With nearly 9,500 residents, Midtown Houston is now one of the most walkable neighborhoods in Houston. The area now has over 140 restaurants, bars, and coffee shops within walking distance, allowing people the option of walking to an average of eight restaurants, bars, and coffee shops and other establishments in less than five minutes. Walk Score®, an organization that ranks the walkability of major metropolitan areas on their proximity to walkable destinations, gives Midtown a “very walkable” designation score of 86 for walkability and 72 for bikeability.<sup>12</sup> It is also home to the City’s innovation hub, the [Ion District](#) – a public private partnership between Rice University/Rice Management Company and the City. The Ion District goals include building an inclusive tech workforce, entrepreneurship development, affordable housing, homeless initiatives, and community capacity building. As of 2021, Midtown was 50% White, 20% Hispanic or Latino, 13% Asian, 12% Black, and 6% Two or More Races. The median household income was \$86,712. Creating safe pedestrian connectivity between Midtown and Third Ward is a meaningful step in equitably distributing the benefits of and fostering access to Midtown economic successes.

<sup>12</sup> Midtown Management District: “History.” <https://midtownhouston.com/about/history/>



f. Museum Park

*Garden Bridges: Main St., La Branch; Cap Parks: Caroline-Wheeler, Cleburne St., Fannin St.*

The Museum Park neighborhood, just south of Midtown, is home to 19 of the City's museums. Originally part of Third Ward, Museum Park was disconnected during the 1970s with the construction of Highway 288. Museum Park is a district of large homes, small apartment buildings, and scattered commercial buildings. Many of the pre-World War II buildings have been renovated, converted to 'missing middle' housing, and some new residential construction has occurred. As of 2021, Museum Park was 48% White, 17% Hispanic or Latino, 15% Asian, 11% Black, and 8% Two or More Races. The median household income was \$100,767.

g. Near Northside (Disadvantaged)

*Garden Bridges: Hogan St. – Crockett St., Houston Ave., White Oak St. – Quitman St. The McKee St. and Hardy St. garden bridges are outside of Near Northside, but they will be integral to its connectivity to Downtown.*

Near Northside is immediately north of Downtown, with I-10 acting as a barrier in between. The southern two thirds of the neighborhood consist of wood frame homes surrounding commercial properties. A major rail yard lies on the neighborhood's southern edge leaving only two streets to connect the northern and southern half of the neighborhood. There is also rail yard that defines the eastern border of the community. Moody Park is an important gathering place in the center of the community, as is the Davis High School-Marshall Middle School-Carnegie Library complex in the southern part of the community.

Figure 11. McKee St. with an unshaded sidewalk with no buffer from vehicular traffic.



The predominantly Hispanic area has been impacted by construction of I-45, I-10, I-69, and the Hardy Toll Road at a macro level, and by construction of the METRORail Red Line and Elysian Viaduct projects on a micro level. The Elysian Viaduct project alone required acquisition of approximately five acres of right of way from 12 properties, resulting in the displacement of six single-family homes, one multi-family home, four commercial businesses, and one industrial business.<sup>13</sup> As of 2021, Near Northside was 11% White, 79% Hispanic or Latino, 0% Asian,

<sup>13</sup> Texas Department of Transportation. 2010. "Elysian Viaduct Project Notice of Public Hearing." f



11% Black, 3% Two or More Races, and 0% Native American or Alaskan Native. The median household income for the Near Northside in 2021 was \$42,167. Preservation Texas, an organization dedicated to preserving historic resources in the state of Texas, named Near Northside Neighborhood to list of Texas' most endangered historic places in 2005, and it was added to the National Register of Historic Places in 2011.<sup>14</sup>

#### h. Washington Avenue/Memorial Park

*Garden Bridges: Hogan St. – Crockett St., Houston Ave., White Oak St. – Quitman St.*

Washington Avenue is a corridor stretching from the northern edge of downtown on the east to Loop 610 on the west. It includes many of Houston's most historic sites such as Memorial Park, one of the city's primary environmental assets located on the former grounds of Camp Logan, a World War I Army training camp. The Washington Avenue / Memorial Park Super Neighborhood is bounded on the east by the western part of Downtown, on the south by Buffalo Bayou, on the West by IH-610, and on the north by Hempstead Road, train tracks, White Oak Bayou, and I-10. As of 2021, Washington Avenue / Memorial Park was 57% White, 20% Hispanic or Latino, 12% Asian, 6% Black, 5% Two or More Races, and 0% Native American or Alaskan Native. The median household income was \$143,111. This area has the highest square feet per capita of parks and greenspace of all the facility locations. Connection between this area and the Near Northside area is vital to equitably balance access to parks and greenspace.

### C. Response to Merit Criteria

#### 1. Equity and Environmental Justice

Fifteen of the 24 NHHIP Connections included in the grant application are in disadvantaged neighborhoods according to the Climate and Economic Justice Screening Tool (CEJST) criteria, most with an established history of harmful environmental justice impacts from transportation infrastructure construction (see Figure 12). A 63% ratio of facilities located in disadvantaged areas is above and beyond the policy goal within the Justice40 initiative that aims for 40% of the overall benefits of Federal investments to go to disadvantaged communities that have been historically marginalized, underserved, and overburdened by pollution. As shown in Figure 12, disadvantaged facilities are often vulnerable in several ways, creating cumulative harm that is more impactful than if there were a single layer of burden per facility area.

The disadvantaged neighborhoods described in prior sections and shown here based on Federally-recognized quantitative analytics did not spontaneously become disadvantaged. It was not random or by happenstance. It was the direct result of original highway construction. The present highway reconstruction represents a chance to prioritize whether to allow transportation policy to continue harming disadvantaged communities or whether to build these facilities in a way that helps heal these communities.

Awarding funding for the structural support required to develop future pedestrian, bicycle, and greenspace amenities would support Houston's paradigm shift of transportation policy in alignment with the Biden Administration and Environmental Protection Agency's EJ 2020 Action Agenda goal to do community-based work that expands the federal government's positive impact within overburdened communities. These structural improvements will allow for an

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<sup>14</sup> Preservation Texas. "Near Northside." <https://www.preservationtexas.org/allmep/near-northside?rq=northside>



eventual increase in greenspace, addressing Climate, Health, and Pollution goals. The NHHIP Connections also improve accessible pedestrian and bicycle mobility, addressing Energy, Transportation, and Workforce policy goals by increasing multimodal transportation options and access to economic development opportunities for disadvantaged neighborhoods.

Figure 12: NHHIP Connections facilities identified by CEJST Disadvantaged status<sup>15</sup>

Facility	Climate and Economic Justice Screening Tool Criteria						
	Climate	Energy	Health	Housing	Pollution	Transportation	Workforce
Alabama St.	•	•	•	•		•	•
Caroline St. – Wheeler Ave.							
Cleburne St.							
Elgin St.	•	•	•	•		•	•
Gray St.	•	•	•	•		•	•
Gregg St.	•	•	•	•	•	•	•
Hardy St.	•	•	•	•	•	•	•
Hogan St. – Crockett St.	•	•	•	•	•	•	•
Houston St.							
Jefferson St.							
Jensen St.	•	•	•	•	•	•	•
La Branch St.							
Leeland St.							
Main St.							
McGowen St.	•	•	•	•		•	•
McKee St.	•	•	•	•	•	•	
Meadow St.	•	•	•	•	•	•	
Pease St.							
Pierce St.	•	•	•	•		•	
St. Joseph Pkwy.							
Tuam St.	•	•	•	•		•	
W. Dallas St.	•	•		•	•	•	
White Oak St. – Quitman St.	•	•	•	•	•	•	

## 2. Access

One of the primary benefits of this project is that it provides safe non-vehicle access possible where it did not exist before. Replacing the existing substandard crossings will connect the communities on either side of each major highway providing access to work, live, and play including to Eleanor Tinsley Park, Buffalo Bayou Park, and the Buffalo Bayou trails system.

Houston’s “Walkable Places” initiative consists of the following design principles: be sensitive to local context, ensure walkable urban form along proposed streets, promote safe multi-modal transportation, create a pleasant experience, and obtain local support. Of the 24 facilities included in this application, 9 of them create safer connections to designated Walkable Places streets. In addition, 9 of them are in direct proximity to a Transit-Oriented Development-designated street, which have street- and site-level design standards focused on pedestrian safety, softscapes, and trees to create an inviting and accessible pedestrian realm.

## 3. Facility Suitability

### a. Highways as a Barrier

I-45, I-10, and I-69 all present significant barriers to access, mobility, and economic development and are poorly suited for the surrounding communities (see Figure 13). These

<sup>15</sup> Rows with a dot have a portion of the facility is in a census tract that meets the criteria to be considered Disadvantaged.



impacts began when the facilities were originally constructed and will continue after the NHHIP reconstruction as currently designed without the additional structural support required to allow for development of safe, green amenities across the highway system. Creating a connective system of garden bridges, cap parks, and signature bridges allows for direct mitigation of these barriers and will reconnect several previously bifurcated communities surrounding Downtown Houston so that people can live, work, play, and move freely and safely via all modes.

Most of the sidewalk infrastructure in the application was constructed decades ago, and while the widths and condition may have followed the standards of that time, improvement is necessary. The City's sidewalk standards require a minimum of 8' width in the central business district and primary TOD streets, 6' for all secondary TOD Streets, and 5' for all other streets. Figure 13 provides distance that cross the highway system via sidewalks that are often substandard according to the City's current standards. The "Current City Standard Met" column is marked "N" when a facility fails to meet the City's width requirements or when it meets the width requirements but is rendered impassable due to the condition of the sidewalk.

Without the structural support for development of future amenities, Houstonians will be left with a sea of concrete crossings and caps, as illustrated in Figure 14.

*Figure 13: Key Conditions of the NHHIP Connections.*

Facility	Approximate Length (feet)	Shade (Y/N/Partial)	Current City Standard Met
Alabama St.	743'	Partial	N
Caroline St. – Wheeler Ave.	230'	Partial	N
Cleburne St.	230'	Partial	Y
Elgin St.	505'	N	N
Gray St.	850'	N	Y
Gregg St.	250'	Partial	Y
Hardy St.	215'	N	N
Hogan St. -Crockett St.	680'	N	N
Houston St.	365'	N	N
Jefferson St.	350'	N	N
Jensen St.	980'	Partial	N
La Branch St.	165'	Partial	N
Leeland St.	350'	N	N
Main St.	165'	Y	Y
McGowen St.	505'	N	Y
McKee St.	225'	N	N
Meadow St.	395'	N	N
Pease St.	350'	N	N
Pierce St.	1,900'	Partial	N
St. Joseph Pkwy.	680'	N	Y
Tuam St.	505'	N	N
W. Dallas St.	275'	N	N
White Oak St. – Quitman St.	515'	N	N



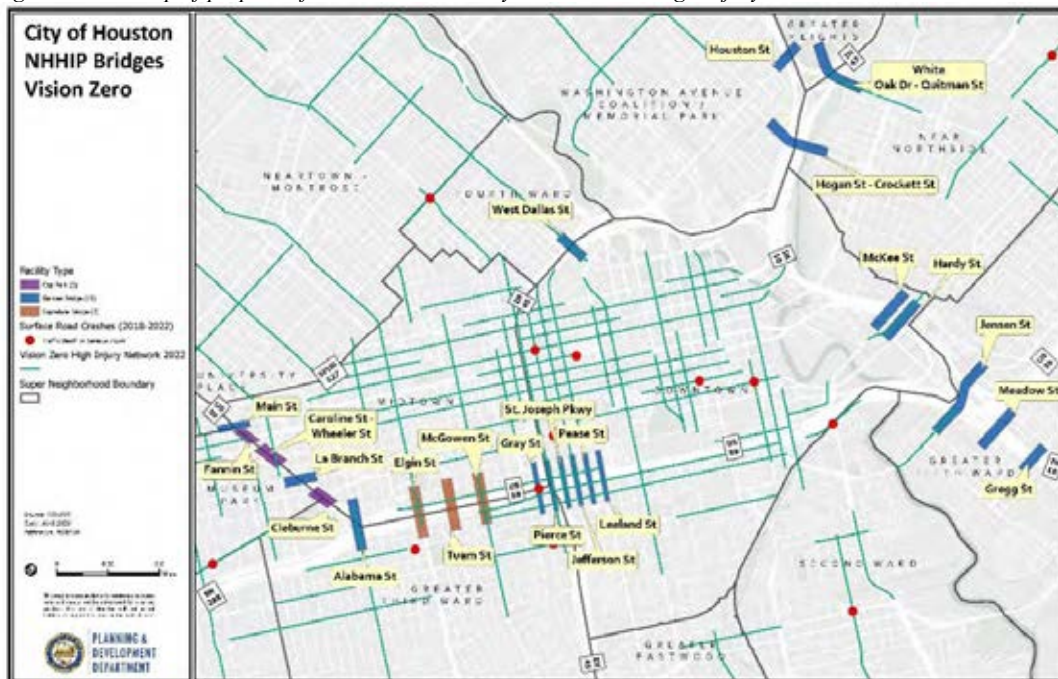
Figure 14: Example of a cap structure built to the TxDOT minimum standard, without meaningful greenspace.



## b. Safety

Eighteen of the 23 NHHIP Connections facilities intersect with the City's High Injury Network: the 6% of City streets where 60% of serious injuries occur (see Figure 15). Houston is committed to ending traffic deaths and serious injuries by 2030; the number of traffic deaths and serious injuries declined year over year in 2022 for the first time since the start of the Vision Zero program. Houston's design interventions work. The funding proposed in this grant, if awarded, will allow for construction of fully protected bike lanes and sidewalks on the NHHIP. In addition, the highway and connecting streets are being designed in a way that safely accommodates future truck and freight access. This will allow for greater economic development opportunities in affected neighborhoods while still prioritizing pedestrian safety and mobility.

Figure 15. Overlap of proposed facilities with the City's Vision Zero High Injury Network.





## 2. Community Engagement and Community-Based Stewardship, Management, and Partnerships

### a. Community Engagement

#### *City of Houston Engagement Efforts*

The City maintains several tools for ongoing community engagement around the NHHIP project and other initiatives, including [www.houstontx.gov/planning/nhhip](http://www.houstontx.gov/planning/nhhip) as a repository of project information and [www.letstalkhouston.org/nhhip](http://www.letstalkhouston.org/nhhip) to help the community understand the NEPA process. Mayor Turner established the NHHIP Facilitation Group to provide a community-centered approach for direct feedback on local priorities. When surveyed, the Facilitation Group did not ask to stop NHHIP, they asked to improve it with components like the facilities proposed in this grant request. The City serves as the connective tissue between the multiple partners who are working together to implement the future amenities that this grant will make possible (see Figure 16). Houston's Super Neighborhoods are overlaid with special tax districts (TIRZs) and management districts that bolster development efforts. These districts will be responsible for the local match requirement and for operations and maintenance of future amenities.

*Figure 16: Community-Based Organizations Engaged in NHHIP*

Super Neighborhoods	Tax Increment Reinvestment Zones	Management Districts
<ul style="list-style-type: none"> <li>• Downtown #61</li> <li>• Fourth Ward #60</li> <li>• Greater Eastwood #64</li> <li>• Greater Fifth Ward #55</li> <li>• Greater Heights #15</li> <li>• Greater Third Ward #67</li> <li>• Midtown #62</li> <li>• Museum Park #66</li> <li>• Near Northside #51</li> <li>• Neartown-Montrose #24</li> <li>• Washington Avenue Coalition / Memorial Park #22</li> </ul>	<ul style="list-style-type: none"> <li>• East Downtown #15</li> <li>• Fourth Ward #14</li> <li>• Greater Houston #24</li> <li>• Main Street / Market Square #3</li> <li>• Midtown #2</li> <li>• Montrose #27</li> <li>• OST/Almeda #7</li> </ul>	<ul style="list-style-type: none"> <li>• Downtown</li> <li>• East Downtown</li> <li>• Greater Northside</li> <li>• Greater Southeast</li> <li>• Midtown</li> </ul>

The NHHIP Connections are outlined in the VRA executed by TxDOT and FHWA and supported by years of prior planning studies. Figure 17 presents the extensive listing of City-led plans that support the concept of the NHHIP Connections for future development of pedestrian, cyclist, and cultural amenities in alignment with the grant criteria. Each of these plans had their own robust public engagement processes to define stated goals.

*Figure 17: Goals of City-sponsored plans to-date that align with the goals for the NAE grant program.*

City of Houston Goal Summary	Relevant City Plans	Climate	Energy	Health	Housing	Pollution	Transportation	Workforce
Expand opportunities for safely walking and biking in the neighborhood, encourage active living	Complete Communities: Near Northside; Plan Houston	•		•			•	
Prioritize streetscape enhancements on major arterial roads	Complete Communities: Near Northside; Plan Houston	•		•		•	•	
Expand area bike lanes and hike and bike trails	Complete Communities: Near Northside and Third Ward			•		•	•	
Link the Little White Oak Greenway to Quitman Station	Complete Communities: Near Northside			•			•	

City of Houston Goal Summary	Relevant City Plans	Climate	Energy	Health	Housing	Pollution	Transportation	Workforce
Expand public art	Complete Communities: Near Northside and Third Ward; Plan Houston; Resilient Houston			•	•			
Foster mixed-use development in the neighborhood	Complete Communities: Third Ward	•	•	•	•		•	•
Improve area streets (curb and gutter, cross walk striping, streetlights, wheelchair ramps, landscaping, and tree planting)	Complete Communities: Third Ward	•			•		•	
Create a cultural trail through the Third Ward that connects businesses, historic landmarks, art institutions, and parks	Complete Communities: Third Ward			•			•	
Reduce vehicle miles traveled (VMT)	Houston Climate Action Plan	•	•	•		•	•	
Restore, protect, and enhance Houston's natural ability to capture and store carbon	Houston Climate Action Plan	•	•	•		•	•	
Provide equitable and safe mobility choices	Houston Climate Action Plan	•		•			•	
Equal access to opportunity and prosperity and expanded access to wealth-building opportunities	Plan Houston; Resilient Houston	•					•	•
A community that respects our history	Plan Houston			•				
An affordable, multi-modal transportation network providing convenient access and mobility for people and goods	Plan Houston; Resilient Houston	•	•	•	•	•	•	•
Ensure all neighborhoods are healthy, safe, and climate ready	Resilient Houston	•	•	•	•		•	
Demonstrate leadership on climate change through action	Resilient Houston	•	•	•	•	•	•	•
Modernize Houston's infrastructure to address the challenges of the future	Resilient Houston	•	•	•		•	•	•

#### *b. TxDOT Engagement Efforts*

After release of the Draft EIS in 2017, TxDOT continued NHHIP public engagement through community meetings and by posting updated technical reports for public comments. Feedback received during that period resulted in project design changes as well as new information on the project's environmental concerns, impacts, and mitigation measures. In total, TxDOT attended more than 300 stakeholder meetings with individuals, groups, or organizations over the course of the project's development.

TxDOT will lead community engagement efforts throughout NHHIP construction, including meetings designed according to the FHWA-approved *Environmental Handbook for Public Involvement*. TxDOT will engage affected communities in advance of these meetings and provide meeting notices in English and in the most common languages spoken by individuals with limited English proficiency (LEP) in each community. During these public meetings, TxDOT will provide the community with up-to-date information regarding the Project, informational assistance regarding the implementation of the VRA, and provide an open forum for the community to provide feedback, raise issues, and ask questions. TxDOT will consider and incorporate information provided at these meetings, as applicable, during the design and construction of the project.

#### *c. Community-Based Stewardship, Management, and Partnerships*

Funding for this project is a collaborative effort. The total cost of NHHIP is an estimated \$7 billion. The cost for NHHIP Segment 3 where the NHHIP Connections are located is an estimated \$829 million, according to its listing in the metropolitan planning organization's TIP.



Estimates for structural requirements were based on the conceptual landscape architecture designs provided by consultants to Central Houston, Inc. (the management district for the Downtown Houston area) and Midtown Management District at an approximate cost of \$70k to-date for concept design. The community is invested in this project with commitments of both time and funding.

Though the City is listed as the primary applicant, TxDOT will be the entity receiving and administering funds as the facility owner. Once awarded, TxDOT will finalize funding agreements with each affected TIRZ or management district, which have indicated support. TxDOT has agreed to construct the NHHIP Connections as part of the overall NHHIP project to a standard that can bear the load of future improvements based on the willingness of the TIRZs and management districts to provide the local match required for the facilities in non-disadvantaged areas (no match would be required for facilities in disadvantaged areas) and to assume responsibility for operations and maintenance of all future amenities once design for them is complete. TxDOT will be executing agreements with each TIRZ or Management District that has NHHIP Connections to formalize the partnership upon award of grant funding.

#### 4. Equitable Development

Creating connections between communities separated by the highway system creates possibility for mixed-use, walkable/rollable development on either side of the highway where none existed before. Future amenity designs will incorporate community history and characteristics wherever possible once the structure exists to support those amenities.

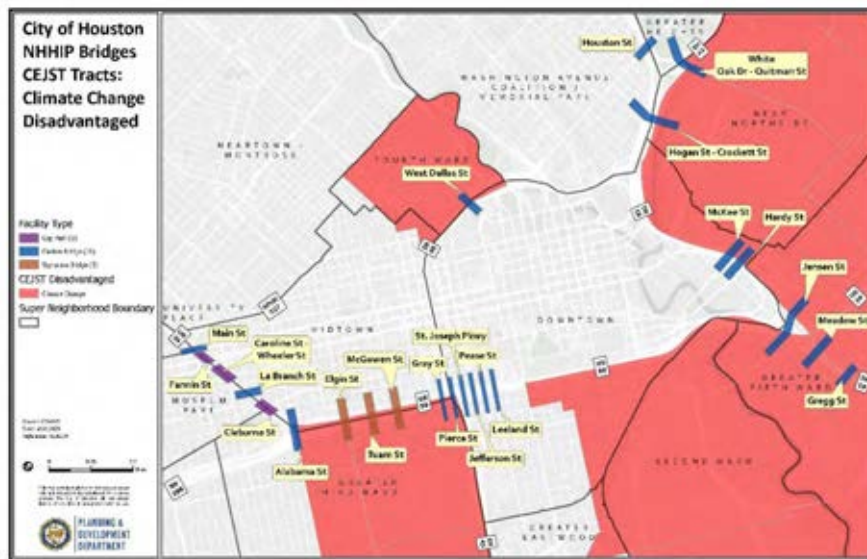
With only a few exceptions, the City does not regulate land use or density. Voters rejected zoning in 1946, again in 1962, and a third time in 1993. Yet coupled with the City's policies that encourage Transit-Oriented Development (TOD) and walkability, the City's famous lack of traditional zoning creates an environment uniquely conducive to TOD. Recent changes to the Code of Ordinances allows the City to keep the best aspects of the no-zoning approach – responsiveness to market demand and a low barrier of entry to increase supply – while encouraging denser, pedestrian-friendly development near high-capacity transit.

TxDOT has committed in the VRA to providing \$27 million to support affordable housing initiatives in the neighborhoods most affected by the project in addition to the individual acquisition and relocation compensation provided to homeowners, renters, and businesses that would be displaced. TxDOT has also agreed to commit an additional \$3 million, for a total of \$30 million, to affordable housing entities like Houston Housing Authority to aid in the implementation of these affordable housing initiatives. TxDOT is in discussion with the City on the use of portions of the Project's future surplus right-of-way for affordable and workforce housing as developed by third parties in potential partnership with the City.

#### 5. Climate and Environment

Each of the plans Houston has created and is in the process of implementing prioritizes adaptation to climate change: [Plan Houston](#), [Resilient Houston](#), [Houston Climate Action Plan](#), and the [Complete Communities initiative](#). The structural support proposed in this application is required for Houston to realize its vision of a connected, resilient, adaptable City by making it possible for construction of future amenities to address safety, shade, and connectivity.

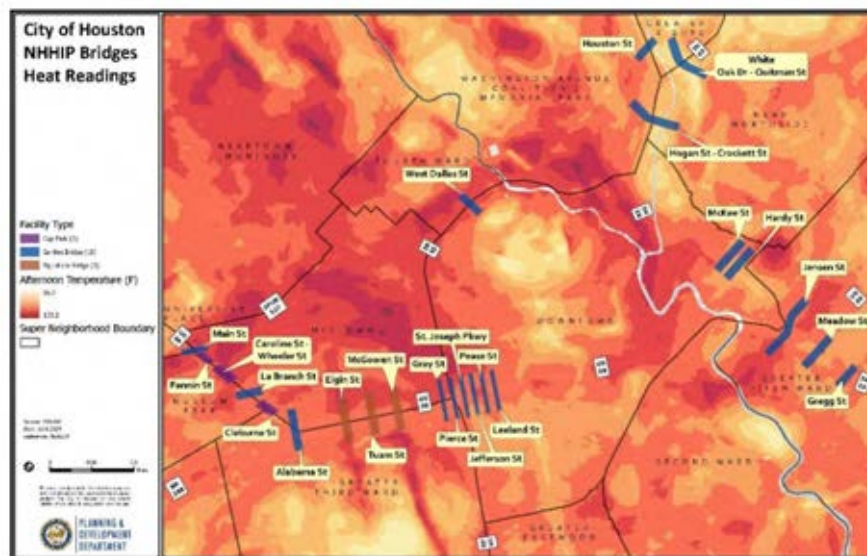
Figure 18. Proposed facilities and their proximity to areas particularly vulnerable to climate change.



#### a. Heat and Shading

"Urban heat islands" occur when cities replace natural land cover with dense concentrations of pavement, buildings, and other surfaces that absorb and retain heat. Houston has been experiencing record-breaking high temperatures due to both climate change and the urban heat island effect, averaging temperatures that surpass 100 degrees every day. Currently, community members are forced to traverse expanses as far as 1,900 feet to cross the highway in these temperatures without shade. (Figure 19 captures the extremity of the conditions). Roughly 200,000 Houstonians use public transportation each day, but many transit stops lack adequate shelter and shade. The grant will allow for the structure of the NHHIP Connections to support shaded areas across the highway system, creating relief for the people who use them.

Figure 19. Most of the NHHIP Connections fall in areas that experience afternoon temperatures up to and over 100 degrees.





One of the primary ways to mitigate the heat island effect is through vegetation. While tree canopy density is directly linked to lower experienced temperatures,<sup>16</sup> only 18% of Houston is currently covered by tree canopy. The lack of tree canopy and vegetation cover in most of the NHHIP Connections neighborhoods makes the Project a valuable opportunity to address this condition (see Figure 20).<sup>17, 18</sup> Conceptual plans for future amenities include adding an average of 35 trees per garden bridge and over 13,800 linear feet of custom metal planters.

Figure 20. The difference in tree canopy and vegetation density per neighborhood that proposed facilities are located in. Museum Park, Midtown, and Downtown have the least canopy cover.



## b. Flood Risk Management

A primary objective of NHHIP is to construct a resilient highway system that functions during extreme weather events. Each of the NHHIP Connections plays a part in connecting the greenspaces and bayou trails that function as a support to the City's stormwater system, and each of these proposed facilities has an opportunity to contribute to stormwater management and flood mitigation through landscape design interventions like bioswales if funding is received to build them to a standard to physically support this type of design.

## c. Lower-Carbon Travel

The NHHIP Connections will link existing and proposed bikeways as well as improving the walk to transit across the freeways. Figure 21 presents a snapshot of the ways the NHHIP Connections strengthen access to lower-carbon travel options.

Figure 21. NHHIP Connections providing connectivity to lower-carbon travel options of bike paths and public transit.

Facility	Connects to Bike Paths (Y/N/Proposed)	Connects to METRO Bus Stop (2-block radius)
Alabama St.	Proposed	N
Caroline St. – Wheeler Ave.	Proposed	N
Cleburne St.	Y	N
Elgin St.	N	Y

<sup>16</sup> Wang, Chenghao, Zhi-Hua Want, Jiachuan Yang. 2018. "Cooling Effect of Urban Trees on the Built Environment of Contiguous United States." *Earth's Future*, Vol. 6 Issue 8.

<sup>17</sup> Environmental Protection Agency. "Heat Island Compendium."

<sup>18</sup> Olin, Andy. "Trees battle Houston's brutal heat, but many poorer areas are left unshaded." July 16, 2021.

Facility	Connects to Bike Paths (Y/N/Proposed)	Connects to METRO Bus Stop (2-block radius)
Gray St.	Y	N
Gregg St.	Proposed	Y
Hardy St.	Y	N
Hogan St. -Crockett St.	Proposed	N
Houston St.	Y	N
Jefferson St.	N	N
Jensen St.	Proposed	N
La Branch St.	Y	Y
Leeland St.	Proposed	N
Main St.	Proposed	Y
McGowen St.	Proposed	Y
McKee St.	Proposed	N
Meadow St.	N	Y
Pease St.	N	N
Pierce St.	Proposed	Y
St. Joseph Pkwy.	N	Y
Tuam St.	Proposed	Y
W. Dallas St.	Proposed	Y
White Oak St. – Quitman St.	Proposed	N

## 6. Workforce Development and Economic Opportunity

TxDOT, the City’s strategic partner (and the facility owner and proposed grant recipient), has a robust Disadvantaged Business Enterprise (DBE) program. Participation goals are set on all federally funded projects to encourage contracting with DBE-certified small businesses. TxDOT matches the FHWA DBE triennial goal methodology for FYs 2020-2022 overall goal of 14.4%. Different from DBE goals, Historically Underutilized Business (HUB) Program goals are implemented statewide; any contracts or purchases with businesses actively certified as a HUB will count towards the goal for the appropriate spending category.

### D. Project Readiness

#### 1. Environmental Risk

The risk associated with the NHHIP Connections is very low as the overall NHHIP project has already completed the NEPA process, has been evaluated by FHWA, and has been found to be in full compliance with all requirements.

#### 2. Project Schedule

The NHHIP Connections are one facet of the larger NHHIP project, which is being designed and constructed on a phased schedule by segment. The NHHIP Connections are in Segment 3, which will be designed and included in construction immediately upon award and grant agreement. The schedule assumes obligation of NAE funds by the summer of calendar year 2024, and it anticipates the completion of construction elements by Fall 2035 (see Figure 22).

##### a. Permitting Requirements

Construction permits will be required of TxDOT by the City; other permits (stormwater, etc.) will be required by Harris County Flood Control District or relevant entities. All of these entities are coordinating design and permitting.



Figure 22: NHHIP Project Schedule for Segment 3 (includes all NHHIP Connections Facilities)

Segment	3A I-69	3B I-69 at SH-288	3C-1 I-10 and I-45 North	3C-2 I-10 and I-45 North	3D I-69
Included Facilities	Fannin St. Main St. Caroline St. at Wheeler Ave. La Branch St. Clebune St. Almeda St.	Alabama St. Elgin St. Tuam St. McGowen St.	White Oak St. at Quitman St. Hogan St. at Crockett St. McKee St. Hardy St.	Jensen St. Meadow St. Gregg St.	W. Dallas St. Gray St. Pierce St. St. Joseph Pkwy. Jefferson St. Pease St. Leeland St.
30% Plans	1/15/2024	Complete	2025	2026	Complete
60% Plans	7/15/2024	10/13/2023	Not Yet Defined	Not Yet Defined	Complete
90% Plans	1/15/2025	1/17/2024	Not Yet Defined	Not Yet Defined	10/19/2023
100% Plans	6/16/2025	3/27/2024	Not Yet Defined	Not Yet Defined	1/29/2024
Project Letting	June 2026	March 2025	Not Yet Defined	Not Yet Defined	June 2024
Construction Begin	2026	2025	2029	2027	2031
Construction End	2032	2029	2033	2032	2037

#### *b. State/Local Planning Approvals and Inclusion in Planning Documents*

Segment 3 of NHHIP is included in the metropolitan planning organization's current TIP. Resolution No. 2021-11 (March 26, 2021), confirms the continued inclusion of the project in the TIP by the Transportation Policy Council. There are no additional legislative approvals necessary for the project. This project is also supported by multiple City-sponsored plans (see Figure 17).

#### *c. Public Engagement*

Please see Section C.5 for Community Engagement and Community-Based Stewardship, Management, and Partnerships/Community Engagement.

#### *d. Assessment of Project Risks and Mitigation Strategies*

The City understands that all major transportation capital projects include a level of risk and has worked with TxDOT and the FHWA to fully assess and address potential risks associated with NHHIP. The City and TxDOT both understand the reporting requirements and financial best practices associated with responsibility as a federal funding recipient. The City has identified the following project risks and considered the most feasible mitigation strategies for each.

##### *Risk 1. Funding and Project Readiness*

TxDOT and the affected TIRZs and management districts need to execute a formal written agreement for the cost of the 20% local match on the NHHIP Connections in non-disadvantaged areas. The design on NHHIP is moving forward regardless of grant outcome, but without grant funding, the NHHIP Connections project will not happen. There will be no opportunity to add future amenities over the highway system, meaning the FHWA and Justice40 goals of reconnecting communities divided by highways in the fourth-largest city in the nation will go unrealized.

##### *Risk 2. ROW Acquisition*

Segment 3 Right of Way (ROW) acquisition that was cleared under the ROD is moving forward without any issues. There are small sections of Segments 3A that may require re-evaluation of ROW needs due to design changes; no delays are anticipated currently.

# Neighborhood Access & Equity Grant Application

DOT-NAE-FY23-01

NHHIP  
Connections

Appendix A  
Voluntary Resolution  
Agreement

September  
**2023**





## **VOLUNTARY RESOLUTION AGREEMENT**

### **I. Purpose and Background**

This Voluntary Resolution Agreement (Agreement) is entered into by the Federal Highway Administration (FHWA) and the Texas Department of Transportation (TxDOT) to resolve the FHWA investigation of TxDOT regarding the North Houston Highway Improvement Project (Project) under Title VI of the Civil Rights Act of 1964, 42 U.S.C. 2000d to 2000d-7 (Title VI) by setting forth specific mitigation actions for the Project. These actions will ensure that TxDOT carries out the Project consistent with the requirements of Title VI.

FHWA investigated TxDOT's compliance with Title VI and the U.S. Department of Transportation's (DOT) Title VI regulations, at Title 49 of the Code of Federal Regulations (C.F.R.), Part 21, in response to administrative complaints filed by the following individuals or entities: 1) Air Alliance Houston on January 18, 2021 (DOT Complaint No. 2021-0092); 2) Texas Housers on January 26, 2021 (DOT Complaint No. 2021-0095); 3) Modesti Cooper on February 28, 2021 (DOT Complaint No. 2021-0103); and 4) by Harris County on October 8, 2021 (DOT Complaint No. 2021-0250). The complaints alleged the Project would result in race, color, or national origin discrimination against multiple communities in the Project area in violation of Title VI. The complaints also alleged that the public participation process for the Project discriminated against individuals on the basis of race and national origin.

FHWA initiated its investigation in March 2021. TxDOT completed the environmental clearance process for the Project under the National Environmental Policy Act (NEPA) on February 3, 2021. To preserve the status quo during the course of its investigation, FHWA requested that TxDOT pause contract letting, property acquisition, and final design work, and TxDOT complied.

From April 2021 to March 2022, FHWA sent three Requests for Information to TxDOT, in response to which TxDOT provided nearly 9,000 documents, along with access to hundreds of additional documents. In addition to these documents, FHWA reviewed thousands of pages of publicly available documents developed through the NEPA process. Over the course of two site visits to Houston, FHWA conducted approximately 100 in-person interviews and 20 virtual interviews with members of the community affected by the Project, in addition to numerous interviews with TxDOT staff.

In accordance with DOT's Title VI regulations, FHWA entered into discussions with TxDOT in 2022 focused on reaching a voluntary resolution agreement on the concerns raised in the Title VI complaints. This Agreement is a result of those negotiations.

### **II. Title VI Jurisdiction**

Title VI provides that "[n]o person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving Federal

financial assistance.” 42 U.S.C. §2000d. Title VI’s prohibition against national origin discrimination requires that recipients of federal funds take reasonable steps to provide meaningful access to persons with limited English proficiency (LEP). DOT’s Title VI regulations at 49 C.F.R. Part 21 provide that recipients may not, directly or through contractual or other arrangements, utilize criteria or methods of administration which have the effect of subjecting persons to discrimination because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program with respect to individuals of a particular race, color, or national origin. TxDOT is a recipient of Federal financial assistance from the FHWA, and the Project includes Federal financial assistance. DOT has jurisdiction over TxDOT under Title VI and its Title VI regulations because TxDOT receives federal financial assistance from DOT. As a recipient, TxDOT must comply with Title VI in its programs and activities, which include not only this Project, but also “all of the operations of” TxDOT. 42 U.S.C. §2000d-4a.

### **III. General Terms**

1. This Agreement, and all provisions and Exhibits herein, are between TxDOT and FHWA as the sole parties to the Agreement. This Agreement will be applicable to, and binding upon, the parties to this Agreement, their officers, agents, employees, assignees, and successors in office. The FHWA Texas Division Office has been delegated responsibility for leading the oversight and implementation of this agreement.
2. The provisions and Exhibits herein constitute the entire Agreement.
3. If any part of the Agreement is deemed invalid, all other provisions remain valid.
4. The signatories represent that they are authorized to bind TxDOT and FHWA.
5. By signing this Agreement, TxDOT does not admit that any Title VI violation has occurred and voluntarily agrees to implement these actions.
6. This Agreement resolves this Title VI investigation and is limited to the facts and issues presented in the complaints identified during this investigation. This Agreement does not affect TxDOT’s continuing obligation to comply with Title VI, and all other federal laws and applicable regulations, or preclude FHWA from taking appropriate action to evaluate TxDOT’s compliance with any laws enforced by FHWA.
7. Neither TxDOT nor any entity or business party to an agreement to carry out the actions herein shall intimidate, threaten, coerce, or discriminate against any individual for the purpose of interfering with any right or privilege secured by Section 601 of Title VI or 49 C.F.R. Part 21, or because they have made a complaint, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing pursuant to Title VI . 49 C.F.R. § 21.11(e).
8. The term of this Agreement (Term) shall commence on the date that both parties sign this Agreement (Effective Date).



9. This Agreement shall terminate after the date that all terms in Article IV have been completed, except that Articles VIII and IX will survive the termination of this Agreement as necessary to effectuate their intent. If the Project is terminated, this agreement will cease to be effective. Should the project be suspended due to funding or legal action, the actions required in this Agreement are suspended during the time of the Project suspension, with the exception of those actions in Article IV.2.a (compliance with Uniform Act); Article IV.2.f (Affordable Housing initiatives); Article IV.2.l (project website); Article IV.6.k.vi (participation in Emancipation Trail feasibility study); Article IV.6.k.vii (Olivewood National Register of Historic Places); and Article IV.8.g (LEP SOP).
10. This Agreement may be modified by mutual agreement of both FHWA and TxDOT after negotiating in good faith and in writing.
11. If TxDOT is unable to comply with the initial timelines in this Agreement, then TxDOT may send FHWA a written extension request detailing the reasons for the request and the new dates requested. The new dates will become effective only if FHWA responds in writing to TxDOT accepting the request terms. FHWA may propose a counterproposal to the terms proposed by TxDOT. If TxDOT does not comply with the timelines agreed to under this Agreement and does not otherwise secure an extension request from FHWA, then FHWA may pursue potential sanctions, as discussed in Section IX of this Agreement.
12. All mitigation measures described in the Final Environmental Impact Statement (FEIS), Record of Decision (ROD), and this Agreement mitigate impacts resulting from the Project and represent reasonable public expenditures after considering the impacts of the action and the benefits of the proposed mitigation measures. As such, the mitigation measures described in the FEIS, ROD, and this Agreement are eligible for federal reimbursement pursuant to 23 CFR §771.105(e).
13. TxDOT will cooperate in a timely manner with FHWA regarding all additional requests for information and documentation, pursuant to 49 C.F.R. § 21.9, et seq.
14. Nothing in this Agreement shall be construed as creating any liability in favor of any third party or parties against FHWA or TxDOT.

#### **IV. TxDOT Actions**

As the Recipient of Federal-Aid Highway funds from FHWA, TxDOT is solely responsible for effectuating the actions described in this Agreement. Except where noted, the actions described below will be performed in addition to the mitigation actions already committed to by TxDOT, as they relate to the Project, contained within the ROD. TxDOT agrees to comply with the Americans with Disabilities Act and with Section 504 of the Rehabilitation Act of 1973 in constructing all pedestrian-related elements associated with the Project.

TxDOT will perform or effectuate the following<sup>1</sup>:

**1. Reducing the NHHIP Footprint During Detailed Design**

- a) Consistent with the requirements of all state and federal law, including NEPA and Title VI, and consistent with actions established by the ROD and FEIS, TxDOT remains committed to evaluating reasonable opportunities to reduce the project footprint in ways that would not compromise the integrity and functionality of the purpose and need of the Project, as described in the ROD. TxDOT agrees that requests to reduce the Project footprint should be evaluated with a focus on the following:
  - i. Strengthening Houston's economy;
  - ii. Reducing flooding on and off the freeway;
  - iii. Making travel safer for all road users;
  - iv. Providing long-term capacity for all users of the roadway, including automobile, freight, and transit;
  - v. Serving and preserving the neighborhoods along the corridor while enhancing connectivity between neighborhoods;
  - vi. Mitigating impacts to existing parks and open space while creating additional opportunity for open space; and
  - vii. Ensuring accessible evacuation routes.
- b) TxDOT agrees to use the least amount of right-of-way as allowed and defined by law, after evaluation of the project footprint.
- c) It is important to note that any proposals to reduce the Project footprint must not compromise safety, flooding mitigation, design standards, freight mobility and evacuation effectiveness.

**2. Displacements, Relocations, Housing, and Other Community Impacts**

TxDOT is committed to minimizing residential, business, and community resource displacements due to the Project to the extent practicable, consistent with meeting the purpose and need of the Project and consistent with Title VI requirements. In addition, TxDOT recognizes the impacts of the Project on the already limited availability of affordable housing in the Project area and is committed to mitigating such impacts as set forth in the Project Record of Decision (ROD) and this VRA. TxDOT will continue to engage and inform the public about project developments

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<sup>1</sup> Unless otherwise provided, nothing in this Agreement should be construed to be limited by the terms of the agreements between TxDOT and the City of Houston, and between TxDOT and Harris County, regarding the NHHIP.



and construction impacts as the Project moves forward and provide competent language assistance services, interpretation and translation for persons with LEP.

#### Displacements

- a) TxDOT will comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 *et seq.*) (Uniform Act) and associated regulations at 49 CFR Part 24 throughout the course of the Project. TxDOT will include the data elements in Parts B and C of Appendix B, 49 CFR part 24, for all residential and non-residential displacements associated with the Project in the Progress Reports required by Article VI of this VRA. Additionally, for each displacement reported in the previous sentence, TxDOT will provide documentation of benefits provided in accordance with the Uniform Act. TxDOT will redact all personally identifiable information in its reports, but shall make the information available for review by FHWA upon request.
- b) Within 90 days of signing this VRA, TxDOT will complete a survey of all non-residential businesses, services, or other organizations displaced by the Project, accommodating those entities' language preferences, to confirm their receipt of relocation services under the Uniform Relocation Act. For those entities that have already relocated and respond that they did not receive relocation services or did not receive adequate relocation services, TxDOT will provide such relocation services as committed to for non-residential relocations under the NHHIP ROD within 150 days of signing this VRA. TxDOT will document progress in providing the non-residential relocation services described herein, including the number of non-residential businesses, services, or other organizations that have received such services, which services have been requested, which services have been provided, and the cost of the services provided, in the Progress Reports as required by Article VI of this VRA.
- c) With the first Progress Report under Article VI of this VRA, TxDOT will submit to FHWA a plan for how TxDOT will ensure that roadway, transit, and pedestrian/bicycle access to essential services, including but not limited to health care facilities, grocery stores, pharmacies, schools, places of worship, and voting locations, will be maintained during and after construction in neighborhoods where such essential services will be impacted by the Project. In developing the access plan, TxDOT will coordinate with local governments and community stakeholders to identify access impacts to specific types of services, effective alternative routes, and alternative resource locations nearby to ensure that the public retains use of these services.
- d) Prior to resuming acquisition and demolition activities on individual parcels, TxDOT will review the properties included in the relocation impacts identified in the FEIS and ROD. Should TxDOT determine that the proposed acquisition or demolition of that specific parcel was not included in the FEIS or ROD, prior to

proceeding with the action on the parcel, TxDOT will conduct a re-evaluation under 23 CFR 771.129(c) to determine whether a Supplemental Environmental Impact Statement (SEIS) is required. This commitment will apply to all segments of the Project. This commitment does not apply to the state-funded acquisition of any remainder that is voluntarily sold by a property owner to TxDOT pursuant to Texas Transportation Code Section 203.0521 and that will not be used in connection with the Project. TxDOT will provide information on any acquisition or demolition of a parcel that was not included in the FEIS or ROD, including state-funded acquisitions that are voluntarily sold by a property owner to TxDOT, in the Progress Reports required by Article VI of this VRA.

- e) TxDOT, during final design of each segment of the NHHIP, will evaluate changes to the Project (as compared to what was approved in the ROD) that would reduce the amount of right-of-way needed and the displacement impacts, especially with respect to multi-family housing units, while ensuring that the final design meets the project Purpose and Need as described in the ROD. TxDOT will document in the Progress Reports as required by Article VI of this VRA instances where right-of-way needs and displacements have been reduced.
- f) TxDOT committed in the ROD to providing \$27 million to support affordable housing initiatives in the neighborhoods most affected by the project in addition to the individual acquisition and relocation compensation provided to homeowners, renters and businesses that would be displaced. Through this VRA, TxDOT agrees to commit an additional \$3 million, for a total of \$30 million, to affordable housing entities to aid in the implementation of these affordable housing initiatives. TxDOT will coordinate with Houston Housing Authority (HHA) and develop an opportunity for the public to provide input on how these funds might be utilized and distributed. Following the completion of this public outreach, TxDOT will prepare a plan and a schedule for disbursement and use of the funds and provide to FHWA within 90 days of completion of the plan. As part of this plan, TxDOT will describe considerations given to the viability of a community land trust(s) as part of affordable housing mitigation. TxDOT will include a report on implementation of this paragraph in the Progress Reports required by Article VI of this VRA.
- g) TxDOT will discuss with the City of Houston (City) the use of portions of the Project's future surplus right-of-way for affordable and workforce housing as developed by third parties in potential partnership with the City, with the understanding that any surplus property must be acquired pursuant to TxDOT policy. TxDOT will include a report on implementation of this paragraph in the Progress Reports required by Article VI of this VRA.



## Relocations

- h) TxDOT will make relocation benefits available to all eligible displacees and not deny benefits in cases that would result in exceptional and extremely unusual hardship to such a displacee. TxDOT will report to FHWA in each Progress Report any displacee who is denied relocation benefits and the benefits denied.
- i) As committed to in the ROD, TxDOT will provide enhanced relocation services by conducting workshops with residential property owners and renters who would be displaced, including topics such as:
  - Getting to know household members and future goals and ability to accomplish such goals;
  - Developing communications that are culture- and context-sensitive;
  - Determining needs and preferences;
  - Explaining relocation benefits in language used by household, assist with relocation interview and explain relocation schedule;
  - Providing assistance in keeping appointments with relocation service providers;
  - Supplying information on other federal and state programs offering assistance;
  - Providing counseling to minimize hardships;
  - Explaining the acquisition process;
  - Explaining the relocation process;
  - Explaining the appraisal process;
  - Providing title information and review of documents;
  - Explaining property tax & exemption impacts;
  - Providing moving resources and move planning;
  - Providing first-time homebuyer seminars;
  - Explaining escrow process and title clearing;
  - Explaining how to update voter registration information;
  - Explaining how to get social services and benefits;
  - Explaining how to select a real estate agent;
  - Explaining how to check your credit and improve your score;
  - Explaining household budgeting; and
  - Explaining household maintenance.

TxDOT will prepare a plan for offering enhanced relocation services and submit the plan to FHWA within 30 days of completion. TxDOT will document within the plan all future discussions held with U.S. Department of Housing and Urban Development and HHA regarding enhanced relocation services provided to residents of Clayton Homes and Kelly Village. TxDOT will document progress in providing the enhanced relocation services described herein, including the number of property owners and tenants who have received such services, which services

have been requested, which services have been provided, and the cost of services provided, in the Progress Reports as required by Article VI of this VRA.

- j) TxDOT shall identify whether its planned ROW acquisition for the NHHIP will leave any residential or non-residential owners or renters outside of the Project footprint isolated or cut off from the rest of the community and assess whether it must provide relocation acquisition or assistance or advisory services pursuant to the Uniform Act and associated regulations at 49 CFR Part 24, as well as this VRA, to such owners or renters to mitigate such impacts. TxDOT shall report to FHWA in the Progress Reports required by VRA Article VI on this issue after the conclusion of each acquisition phase of the Project.

### Housing

- k) TxDOT will inform all residential and non-residential property owners of the option to enter into an Occupancy Agreement for parcels that TxDOT acquires well in advance of the start of associated project construction. The Occupancy Agreement would allow property owners an option to continue to occupy the property after it has been acquired by TxDOT while the property owner gets reestablished at their new location until such time the property needs to be prepared for the start of associated project construction.
- l) Within 30 days of this agreement, TxDOT will establish a publicly available project-specific website. The website will be maintained and updated regularly through completion of the Project. The website will provide information in English, Spanish, and all other languages for which translation has been requested at NHHIP public meetings. The website will include the following information, as it becomes available:
  - Eligibility requirements for the move out stipend, rent stipend, and weatherization and energy efficiency programs;
  - Move out dates for public housing residents, and how public housing residents can claim their priority status for housing at the new Houston Housing Authority affordable housing developments;
  - How residents and businesses can communicate with TxDOT about common construction issues including the clean-up of construction debris, filing nuisance dust reports and alerting TxDOT of potential best management practice issues such as silt fencing maintenance needs;
  - Information on NHHIP-related jobs and job fairs;
  - Advance notice of specific disruptions during construction, including bus reroutes, road closures and detours, trail closures, demolitions, and late-night activity;
  - Links to local air quality status (code red days), and monitoring information produced by the project;



- Flooding mitigation plan development/implementation, including public involvement opportunities, and notice of alerts when access to depressed sections of the highways is closed in the event of a pump failure;
- Active transportation options in the project corridor;
- A link to the Emancipation National Historic Trail Study;
- School Access and the project ombudsman;
- Copies of the memoranda with the City of Houston and Harris County and periodic progress reports of the implementation of the memoranda;
- Transit access; and
- Noise barrier decision processes.

TxDOT will explore alternative ways to communicate the information provided through the website to low literacy residents, seniors, and people without internet access. This may include outreach and engagement with, among others, leaders of community organizations, places of worship, and legal service organizations to understand the effective methods to communicate website and critical information related to displacements, relocations, housing, and other community impacts.

#### Community Impacts

##### m) *Clayton Homes*:

- i. TxDOT's acquisition of Clayton Homes is being undertaken in two phases. TxDOT has completed Phase 1, which included units no longer occupied. TxDOT will not complete the acquisition of the second phase until all residents are relocated from the Phase 2 portion of the property.
- ii. In addition to the Tenant Protection Vouchers being offered by HHA, TxDOT will also offer housing relocation supplements (up to market-valued rent) to Clayton Homes residents as an alternate relocation path under the Uniform Act. This alternate path would not rely on and therefore not exhaust available voucher capacity and would be available to all displacees even if they do not qualify for HHA Tenant Protection Vouchers. Should a Clayton Homes resident choose the alternate relocation path in the interim while the Clayton replacement units are being constructed but want to exercise their first right to return to the Clayton replacement units which are intended to be voucher based, they would be eligible to do so assuming they meet the HHA Tenant Protection Vouchers criteria at the time of their return to the replacement units.
- iii. TxDOT will work with HHA to maintain active contact information for Clayton Homes displacees in order to offer the first option to move to replacement dwellings once completed.

n) *Kelly Village*:

- i. In addition to the Tenant Protection Vouchers that would be offered by HHA, TxDOT will also offer housing relocation supplements (up to market-valued rent) to Kelly Village residents as an alternate relocation path under the Uniform Act. This alternate path would not rely on and therefore not exhaust available voucher capacity and would be available to all displacees even if they do not qualify for HHA Tenant Protection Vouchers. Should a Kelly Village resident choose the alternate relocation path in the interim while the Kelly Village replacement units are being constructed but want to exercise their first right to return to the Kelly Village replacement units which are intended to be voucher based, they would be eligible to do so assuming they meet the HHA Tenant Protection Vouchers criteria at the time of their return to the replacement units.
  - ii. TxDOT will work with HHA to maintain active contact information for Kelly Village displacees in order to offer the first option to move to replacement dwellings once completed.
- o) TxDOT will coordinate with the City of Houston and homeless services providers to develop a plan to assist in addressing the services needed by persons experiencing homelessness within the Project limits TxDOT will submit this plan to FHWA for review within 30 days of finalization of the plan to address services needed by persons experiencing homelessness.
- p) TxDOT will review the strategies in the October 2022 DOT report on “Promising Practices for Meaningful Public Involvement in Transportation Decision-Making” to continue to meet with stakeholders and consider public input as it proceeds through future project development phases. Additionally, TxDOT will continue to coordinate with the NHHIP Housing and Communities Focus Group to explore and define best practices, identify opportunities to leverage existing programs and resources, and develop strategies to achieve positive solutions during project implementation. TxDOT will report on what strategies they are using for considering public input in each Progress Report as required by Article VI of this VRA. To the extent necessary, FHWA will provide feedback on these strategies and work with TxDOT on improvements.
- q) TxDOT will hold public engagement meetings—consistent with the public meeting provisions, including language access provisions, in its FHWA-approved Environmental Handbook for Public Involvement—twice each calendar year in each segment while design and construction is ongoing in the segment. TxDOT will provide FHWA a list of those invited to these meetings and its methods for publicizing the meetings a week before they occur. In advance of these meetings, TxDOT will engage affected communities and provide meeting notices in English and in the most common languages spoken by individuals with LEP in the



communities. During these public meetings, TxDOT will provide the community with up-to-date information regarding the Project, informational assistance regarding the implementation of this agreement, and will provide an open forum for the community to provide feedback, raise issues, and ask questions about the Project or TxDOT's compliance with this agreement. TxDOT will include updates of public engagement meetings in the Progress Reports as required by Article VI of this VRA. These meetings will be held at times and locations that are convenient and accessible for affected communities, and TxDOT will take reasonable steps to ensure meaningful access for persons with LEP, including the provision of language assistance services free of cost to the persons with LEP. TxDOT will consider and incorporate information provided at these meetings, as applicable, during the design and construction of the project.

### **3. Flooding**

TxDOT understands that transportation infrastructure is integrated into the overall drainage pattern of a project and its surrounding areas. A primary objective of the NHHIP is to construct a resilient highway system that functions during extreme weather events. In the event that the National Oceanic and Atmospheric Administration (NOAA) publishes a subsequent version to Atlas 14 for the integration of future climate projections, TxDOT will take actions that will use such updates to inform the final design should they be published prior to completion of design activities as stated below. Another key objective is to improve the status quo by reducing flooding in the project area. TxDOT has and will continue to work closely with the City of Houston and Harris County Flood Control District to develop partnerships that will leverage the roles and responsibilities, as well as the resources, of each entity to deliver beneficial drainage improvements throughout the overall drainage system, prioritizing areas that are most vulnerable to flooding.

- a) Prior to completing final design for each segment of the NHHIP, TxDOT will use Atlas 14 rainfall data to complete drainage studies. Such drainage studies will rely on the state of practice HEC-RAS 2D model approach. In the event NOAA publishes a subsequent version to Atlas 14 to account for variations in climate conditions, TxDOT will incorporate such updates into individual NHHIP projects that have not exceeded the 30% detailed design phase.
- b) Consistent with item (a) above, TxDOT will perform a detailed drainage study for Segment 1 prior to the final design for Segment 1 and submit it to FHWA with the first Progress Report due after finalization of the study under Article VI of this VRA.
- c) Before submittal to the Texas Transportation Commission for consideration, FHWA must review and approve any and all Final Requests for Proposal for Design-Build Contract, which include the specifications that would control the design parameters once the design-build contract is executed.

- d) For any portion of the NHHIP that is delivered by design-build method, TxDOT will require design-build contractors to abide by the same drainage design criteria that TxDOT will require for design-bid-build projects, in order to reduce the latitude of design-build contractors to deviate from drainage design parameters.
- e) As may be requested by Harris County Flood Control District (HCFCD) and mutually agreed upon by HCFCD and TxDOT, TxDOT will transfer maintenance responsibilities of certain drainage basins and channels to HCFCD within the State's right-of-way.
- f) As may be requested by HCFCD and mutually agreed upon by HCFCD and TxDOT, TxDOT will enter into funding, design, and construction, operations, and maintenance agreements for HCFCD to build and maintain drainage basins that would have a broader regional drainage benefit and would supplement and not impair the planned NHHIP drainage improvement.
- g) Contingent upon TxDOT receiving the necessary FHWA approvals for the NHHIP and upon mutual agreement between TxDOT and the City of Houston , TxDOT will enter into an Advanced Funding Agreement with the City in which TxDOT will provide \$20 million to the City for the design and construction of the north canal project.
- h) TxDOT will fund, design and construct its alternative for the south canal. Upon mutual agreement between TxDOT and the City, TxDOT would enter into the necessary agreements to permit the City to modify TxDOT's alternative for the south canal.
- i) TxDOT will collaborate with HCFCD as the NHHIP drainage improvements are being designed so that TxDOT can accommodate future planned improvements to be implemented by HCFCD.
- j) TxDOT will collaborate with HCFCD to identify locations to evaluate the design and construction of bridges in a manner that would accommodate improvements to the drainage channel while taking upstream and downstream channel impacts into consideration.
- k) TxDOT will collaborate with HCFCD and other governmental entities for the planning, design, construction, operations and maintenance of trails on the upper banks of the bayous that are crossed by the NHHIP (*see Exhibit A*). TxDOT will design, fund and construct trails that are within the State's right of way for the NHHIP and such trails would be operated and maintained by a third-party governmental entity and would not impair the primary drainage function of the bayous.
- l) TxDOT will collaborate with HCFCD to develop a process in which one party performs a peer review of the other party's proposed drainage improvement



projects in instances where one party's drainage design interfaces and influences the other party's drainage design.

#### **4. Air Quality Mitigation**

- a) TxDOT will ensure that air monitors in each segment will begin operating one year in advance of the commencement of construction on the corresponding segment.
- b) TxDOT will provide one air monitor in each segment and will monitor for the same pollutants in Segment 1 as those as described in the FEIS and ROD for air monitors in Segments 2 and 3.
- c) TxDOT will continue to consult with the experts it has retained to assist with air monitoring and air monitor siting on an as needed basis as the air monitoring plan is implemented in each Segment.
- d) TxDOT will include a report on implementation of this paragraph in the Progress Reports required by Article VI of this VRA.

#### **5. Structural Caps**

The NHHIP recommended alternative provides for structural caps in four areas of the project. The structural caps provide an exciting opportunity for third party collaboration with TxDOT on the full integration of transportation infrastructure in an urban environment. Such collaboration allows for the development of partnerships between TxDOT, governmental entities and stakeholders and anticipates the creation of new spaces for community gathering and recreational use.

- a) TxDOT will design and construct a structural cap along the following:
  - i. IH 69 that is located to be centered on and carrying both the METRO light rail Red Line and Fannin Street over the interstate main lanes;
  - ii. IH 69 that is located to be centered on and carrying both Caroline Street and Wheeler Avenue, including their intersection over the interstate main lanes;
  - iii. The parallel alignments of IH 69 and IH 45 that is bounded by Lamar Street and Commerce Street and carrying Lamar Street, McKinney Street, Walker Street, Rusk Street, Capitol Street, METRO's Purple and Green Lines, Texas Avenue, Preston Street, Congress Street, Franklin Street and Commerce Street over the main lanes of both interstates and, New Hamilton Street over the IH 69 southbound main lanes and IH 45 southbound main lanes; and
  - iv. IH 45 that is located to be centered on and carrying North Main Street, the southbound frontage road and the northbound frontage road over the interstate main lanes and managed lanes.
- b) During design, TxDOT will consult with:

- i. METRO to integrate existing and planned transit across and surrounding each cap; and
  - ii. The City for bicycle and pedestrian transportation across each cap.
- c) TxDOT will fund the design, construction, operations and maintenance of the following elements of the structural caps as described in item (a):
- i. Foundations for the structural caps to support the structural capacity needed to carry the roads and light rail facilities;
  - ii. The beams that provide the structural capacity needed to carry the roads and light rail facilities;
  - iii. The drainage elements that meet the applicable drainage criteria to convey stormwater runoff for the roads, light rail facilities, and interstates;
  - iv. The applicable ventilation system for the interstates; and
  - v. The applicable interior lighting and, fire and life safety systems for the interstates.
- d) In instances where a third party proposes to fund the design, construction, operations and maintenance of amenities to be integrated into the structural caps as described in item (a), TxDOT will collaborate with such third party by analyzing and providing the baseline structural loading calculations of the applicable elements in item (c) that could accommodate proposed third-party amenities without modification to the applicable elements in item (c).
- e) In instances where a third party proposes to fund the design, construction, operations and maintenance of amenities to be integrated into the structural caps as described in item (a), TxDOT will collaborate with such third party by analyzing and determining the additional amount of structural load calculations beyond the baseline calculations for the applicable elements in item (c) that would be needed to accommodate proposed third-party amenities.
- f) In instances where a third party proposes to fund the design, construction, operations and maintenance of amenities to be integrated into the structural caps as described in item (a) that exceed the baseline structural load calculations of any element in item (c), TxDOT will collaborate with such third party to determine the design, construction, maintenance and operation cost increase calculations necessary to modify the applicable baseline elements in item (c) to handle the additional amount of structural loads as calculated in item (e). Such design, construction, maintenance and operation cost increases would be third-party funded.

- g) TxDOT will establish a work group with other governmental entities to explore federal funding sources that would be eligible for third party design and construction of amenities to be integrated with the proposed structural caps.
- h) TxDOT will assist in identifying federal funding grant opportunities or other sources and required non-state match funding to design and construct open space amenities to be integrated with the proposed structural caps.
- i) TxDOT will provide engineering assistance for third party development of amenities to be integrated with the proposed structural caps.
- j) Upon mutual agreement, TxDOT will enter into agreements with other governmental entities for TxDOT to incorporate into its construction plans the design of third-party funded amenities that may be integrated into the proposed structural caps either with or after the completion of the accompanying interstate project.
- k) Upon mutual agreement, TxDOT will enter into agreements with other governmental entities for their operations and maintenance of amenities that may be integrated into the proposed structural caps either with or after the completion of the accompanying interstate project.

## **6. Parks, Open Space, Trails, and Pedestrian and Bicycle Facilities**

The NHHIP provides a once in lifetime opportunity to expand facilities for active transportation. Through close coordination with local agencies and stakeholders, the project will add trails and increase space for off-street pedestrian and cyclist paths within the project limits. These project elements improve the safety of active transportation users.

- a) TxDOT will provide design resources to assist third parties in the development of a map of potential new trail links within both the existing right-of-way and proposed right-of-way and connections terminating outside the state's proposed right-of-way.
- b) To the extent feasible, TxDOT will design the NHHIP to accommodate the City of Houston's bike plan ([Implementation – Houston Bikeways \(houstonbikeplan.org\)](https://www.houstonbikeplan.org/)).
- c) TxDOT will fund, design, and construct new trails that are feasible within the state's right-of-way for the NHHIP. Upon mutual agreement, TxDOT will enter into agreements with a third party for the third party to maintain and operate such trails.
- d) TxDOT will work with third parties to identify funding to design and construct trail links outside of the state's right-of-way.



- e) TxDOT will reconnect Andrew Street over the proposed Downtown Connectors in Fourth Ward on the west side of downtown. The Andrew Street reconnection will be a pedestrian-bike only crossing.
- f) TxDOT has determined that maintaining the Cleburne Street connection across I-69 in Third Ward is feasible and will seek stakeholder and public input to retain this connection as part of the NHHIP.
- g) TxDOT will fund, design and construct a combination of a buffer and pedestrian sidewalk and bike path, commonly referred to as the pedestrian-bike realm, on all local streets that cross either over or under a highway facility of the NHHIP.
- h) Upon mutual agreement with the Houston Housing Authority, TxDOT will address the mitigation for the loss of open space resulting from the partial acquisition of Kelly Village. TxDOT commits to a 1:1 replacement of open space area within the remaining Kelly Village property and will replace all recreational facilities and elements located within the open space area that will be impacted by the Project.
- i) In conjunction with its commitment to supporting affordable housing initiatives as described in Article IV.2.f, TxDOT commits to provide \$1.5 million to the City of Houston Parks and Recreation Department for the development or rehabilitation of park facilities and amenities in City parks located in the vicinity of the project. Prior to the City's use of the committed funds, TxDOT will coordinate with the City of Houston to seek public input on how best to allocate and apply the committed funds. After obtaining such public input, the City must request and obtain concurrence from TxDOT before implementing any resulting projects.
- j) TxDOT will evaluate potential alternative pedestrian/bicycle routes to address the loss of the existing North Street bridge crossing over IH 45 between Greater Heights and Near Northside. TxDOT will provide this evaluation to FHWA in the next Progress Report after the evaluation is completed.
- k) The Emancipation National Historic Trail Study Act, sponsored by Congresswoman Sheila Jackson Lee and passed in January 2020, amended the National Trails System Act (16 U.S.C. 1244(c)) by adding the Emancipation National Historic Trail (Emancipation Trail).<sup>2</sup> The proposed Emancipation Trail "extend[s] approximately 51 miles from the Osterman Building and Reedy Chapel in Galveston, Texas, along Texas State Highway 3 and Interstate Highway 45 North, to Freedmen's Town, then to Independence Heights and Emancipation Park in Houston, Texas, following the migration route taken by newly freed slaves and other persons of African descent from the major 19th century seaport

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<sup>2</sup> Emancipation National Historic Trail Study Act, Pub. L. No. 116-111, § 2, 8 Stat. 134 (2020).

town of Galveston to the burgeoning community of Freedmen's Town, located in the 4th Ward of Houston, Texas.”<sup>3</sup>

- i. TxDOT will assist with federal efforts to develop the Emancipation Trail and will evaluate the feasibility of accommodating trail links within the state’s right-of-way within the project limits. The estimated completion date of the study is Fall of 2023.<sup>4</sup> A map showing the draft routes of the Emancipation National Historic Trail is attached to this Agreement as Exhibit B.<sup>5</sup>
- ii. TxDOT will accommodate proposed designated trail links that result from the Emancipation National Historic Trail Study to the extent such proposed trail links are feasible within the state’s right of way for the NHHIP.
- iii. TxDOT will place signage and historical marks within the State’s right of way for the NHHIP for the proposed designated trail links that result from the Emancipation National Trail Study to extent such placement is feasible.
- iv. The reconnection of Andrews Street by the NHHIP over the proposed downtown connectors would accommodate the Emancipation Trail within the project limits. The reconnection of Andrews Street by the NHHIP is proposed to be a pedestrian-cyclist only bridge.
- v. The proposed pedestrian-bike realm on Alabama Street, Elgin Street, Tuam Street, McGowen Street and Cleburne Street as part of the NHHIP will enhance accessibility to Emancipation Park which is outside and one block away from the project boundary.
- vi. TxDOT will participate in the National Park Service’s feasibility study for the Emancipation National Historic Trail Study to share how the NHHIP pedestrian-bike realm can complement the potential study outcomes and any other transportation-related aspects of the Emancipation National Historic Trail.
- vii. Upon mutual understanding with the Descendants of Olivewood Inc., TxDOT will provide assistance with applying and submitting the Olivewood Cemetery for listing in the National Register of Historic Places.

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<sup>3</sup> *Id.* See also *Emancipation National Historic Trail Feasibility Study*, National Park Service, <https://parkplanning.nps.gov/projectHome.cfm?parkID=456&projectID=95793>.

<sup>4</sup> *Emancipation National Historic Trail Feasibility Study Newsletter*, National Park Service, <file:///C:/Users/JGray1/Downloads/Emancipation%20Newsletter%20Final.pdf>.

<sup>5</sup> *Maps – Draft Routes Under Study – Emancipation National Historic Trail Feasibility Study*, National Park Service, <https://parkplanning.nps.gov/document.cfm?parkID=456&projectID=95793&documentID=111157>.

## **7. Access During Construction**

TxDOT is committed to ensuring safe access to schools and reducing impacts to public transit, pedestrian, and bike access within the project area throughout the construction phase. TxDOT will continue to communicate with schools, parents, neighborhood and community stakeholders, and METRO regarding the construction schedule to ensure continued safe pedestrian, bike and transit access during construction of the Project.

### **a) School access during construction:**

- i. In order to ensure that pedestrian and bike access to schools is maintained during construction, during the detailed design phase TxDOT will develop plans for traffic control detours of pedestrian and cyclist movements, as depicted in Exhibit C, showing the locations of schools adjacent to the project footprint, existing routes traveled by children to these schools, routes during construction, and the anticipated finished condition of pedestrian and cyclist routes after construction on the project is completed.
- ii. Where construction of the Project will require pedestrian and bicycle detour routes to maintain access to schools, TxDOT commits to bring such designated detour routes up to current standards prior to beginning the associated construction in order to ensure that students, staff, and the public continue to have safe and accessible pedestrian and bicycle paths of travel to those schools.
- iii. TxDOT will design and direct its contractor to maintain non-circuitous sidewalks to maintain safe pedestrian and cyclist access to schools during and after construction.
- iv. TxDOT will work directly with schools to develop parent and school bus drop-off and pick-up routes, direct TxDOT contractors to maintain the safe operations of these routes during construction, and inform decisions about appropriate detour routes with the goal of safety and minimizing increased commute times.
- v. TxDOT will maintain communication with school officials for the design of access accommodations during the construction phase.
- vi. TxDOT will provide an ombudsman for the schools to communicate concerns that arise during construction to TxDOT in order for timely resolution of concerns.
- vii. During construction, TxDOT will establish and maintain a public website to inform the public about bicycle and pedestrian access. The website will include maps and ways to contact the ombudsman.



- b) Transit access during construction:
  - i. TxDOT will obtain METRO's review and comment of the construction work phasing and sequencing of light rail facilities and operations that are impacted by construction.
  - ii. TxDOT will obtain METRO's review and comment in instances where a bus stop needs to be temporarily relocated during construction.
- c) Traffic management during construction:
  - i. TxDOT has established the Innovative Traffic Steering Committee, consisting of local government representatives and other stakeholders, to gather input in advance of the project on potential traffic phasing and mitigation activities to minimize adverse impacts of construction. TxDOT will coordinate with this Committee to identify and pursue Federal funds to support such activities and will incorporate the input into the construction plan when feasible to effectively manage mobility.
  - ii. TxDOT will provide fourteen (14) calendar days public notices of bus and light rail service disruptions due to construction activities.
  - iii. TxDOT will post notices of bus and light rail service disruptions on the project website.

## **8. Meaningful Access for Persons with Limited English Proficiency (LEP)**

The purpose of this provision is to ensure that TxDOT fully complies with Title VI meaningful access requirements on the Project. TxDOT commits to the specified actions listed in this provision with respect to all individuals with LEP who need or request language assistance services, which include interpretation and translation. Specifically, TxDOT is committed to communicating clearly and thoroughly with all affected individuals about projects from the beginning of scoping through the end of construction. This commitment includes providing ready and accurate language assistance services to those individuals who need or request it at no cost. Additionally, TxDOT commits to ensuring that individuals with LEP are provided with timely language assistance services throughout the right-of-way acquisition and relocation process for the NHHIP. TxDOT further commits to develop or update internal LEP policies, plans, and training for staff and consultants as specified in this provision in order to ensure that language assistance services are adequately provided and documented on future projects. To effectuate these commitments, in addition to the specific required actions below, the Parties will negotiate and finalize an updated TxDOT Language Assistance Plan and Policy, consistent with the U.S. Department of Justice's 2002 LEP guidance on updating recipient LEP plans, within one year of the effective date of this Agreement. TxDOT will first conduct a language access self-assessment to evaluate and improve its current language access program and ensure

that the Language Assistance Plan, Policy, and related procedures are consistent with Title VI.

- a) TxDOT will implement its language access program in accordance with Title VI and DOT regulations and consistent with Title VI guidance issued by DOT, in addition to the actions required by this section.
- b) TxDOT will not rely solely on the use of automatic translation services to translate vital print or digital communications.
- c) TxDOT will document, track, and monitor the LEP needs of anyone still to be displaced, including displaced residential owners, residential tenants, business owners, and business tenants.
- e) TxDOT will make language assistance services available in a timely way for relocation and acquisition activities. If language assistance services are delayed such that individuals with LEP are not receiving the information, benefits, or other aspects of the relocation and acquisition activities on a timeframe consistent with individuals with non-LEP, then TxDOT will document in the Progress Reports as required by Article VI of this VRA instances where the delivery of language assistance services were delayed. Such documentation will also include the circumstance(s) for the delay, when the requested language assistance services were actually provided, and whether the delay resulted in the person with LEP being limited in their access to, or missing, any deadlines, benefits, or other important aspects of the program.
- f) TxDOT will document future interactions between TxDOT's resource providers and relocation contractors and persons with LEP, including, but not limited to: the person's name, the specific language(s) and dialects needed, how spoken and written language needs are identified, date language assistance services are requested, date language assistance services are provided, and how language assistance services were provided to that person.
- g) No later than 45 calendar days after signing this VRA, TxDOT will provide to FHWA for review and comment a Standard Operating Procedure (SOP) for TxDOT resource providers, relocation contractors, and TxDOT staff that describes the roles and responsibilities for each regarding interactions with persons with LEP. The SOP will include procedures for documentation, communication, notice of free language assistance services to persons with LEP, language access complaints, and issue resolution. FHWA shall provide comments within 15 calendar days of receipt of the TxDOT SOP. Within 30 days of receipt of FHWA's comments, TxDOT and FHWA will resolve outstanding comments.
- h) In situations where individuals with LEP prefer to bring interpreters of their choosing, after they are told that TxDOT can provide a competent interpreter at

no cost, TxDOT will have an agency-sponsored interpreter present to ensure accuracy and completeness of the information presented.

- i) TxDOT will ensure that LEP service resources and relocation contractors provide all translated relevant documents and materials, including but not limited to legal documents, in the displacee's preferred language prior to requesting signatures or other legal commitments from the displacee.
- j) Within 120 calendar days of signing this VRA, TxDOT will develop and conduct LEP training for relevant staff, contractors, and anyone providing language assistance services related to the NHHIP on TxDOT's behalf regarding the implementation of the agency's written language assistance plan. The training will include, but not be limited to, language access requirements, the roles and responsibilities of consultants, documentation, and communication. The training will be reviewed and updated when the SOP required under this VRA is completed, and as needed at least every other year. TxDOT will report on the training materials provided and the number of TxDOT staff, contractors, or others trained in the Progress Reports required by VRA Article VI.
- k) Within 120 days of signing this VRA, TxDOT will conduct a survey to identify displaced residents and businesses who have already been relocated under the Project in order to assess the sufficiency of translation, interpretation, and other language assistance services. Based on the results of that survey, TxDOT will notify, both verbally (by phone or in person) and in writing in the respondent's preferred language, those who responded that they did not receive sufficient language assistance services that they have the right to supplemental language assistance services, and TxDOT will provide such supplemental language assistance services to those respondents who request them. Within 60 days of signing this VRA, TxDOT will provide to FHWA a draft survey of displaced residents and businesses. FHWA will provide comments back to TxDOT within 15 days of receipt of the draft survey. Within 15 days after receiving FHWA's comments, TxDOT and FHWA will resolve all comments and finalize the survey. Within 90 days of identifying through the survey those displaced residents and businesses who requested supplemental language assistance services, TxDOT will provide such identified displacees with remedial assistance to reduce the potential for any disparate impacts. Beginning 150 days after signing this VRA, TxDOT will provide a report to FHWA on its efforts detailing its compliance with this provision every 60 days until the provision of supplemental LEP services to all who request them and any additional activities resulting therefrom are completed.
- l) TxDOT shall provide competent language assistance services to any person who had been identified as needing language assistance services or otherwise requesting language assistance services to ensure contemporaneous interpretation during all public engagement opportunities. Language assistance services will be



made available proactively, at no cost, and in a timely manner for that engagement to support the facilitation of meaningful public engagement.

## **V. Section 508 Compliance**

TxDOT will submit all required plans, reports, and other information required by this VRA in a format that complies with the Information and Communication Technology Accessibility Standards under Section 508 of the Rehabilitation Act of 1973 (available at [Revised 508 Standards and 255 Guidelines \(access-board.gov\)](#)).

## **VI. Progress Reports**

Beginning 180 days after signing the VRA and every 180 days thereafter, TxDOT will submit a Progress Report to FHWA detailing the implementation of TxDOT required actions under Article IV of this VRA. Each Progress Report must include an update on all required TxDOT Actions: Reducing the NHHIP Footprint During Detailed Design; Displacements, Relocations, Housing, and Other Community Impacts; Flooding; Air Quality Mitigation; Structural Caps; Parks, Open Space, Trails, Pedestrian and Bicycle Facilities; Access During Construction; and Meaningful Access for Persons with Limited English Proficiency (LEP). The Progress Reports must include any required information specified in this Agreement as outlined in Exhibit D. TxDOT will submit all Progress Reports and any other information required by the VRA to the FHWA Texas Division Office. TxDOT and FHWA will agree on the Progress Report format prior to submission of TxDOT's first required report. FHWA will review and provide timely comments on each progress report to TxDOT.

## **VII. Progress Meetings**

Each year, TxDOT and FHWA shall meet at least once to discuss the progress of the implementation of this VRA.

## **VIII. Abeyance**


The FHWA will hold in abeyance further actions regarding the complaints filed in the matter (described above) during the performance of this Agreement. At any time, should TxDOT not perform, or ensure performance, under this Agreement, FHWA will notify TxDOT as stated in Article IX of this VRA.

## **IX. Enforcement**

TxDOT agrees to implement the provisions of this VRA according to the timelines in this agreement as summarized in Exhibit D. If TxDOT, through its actions or inaction, fails to implement any part of this VRA or fails to cooperate with FHWA documentation and information requests, FHWA may invoke its authority pursuant to 49 C.F.R. § 21.13, et seq., for failure or threatened failure to comply with Title VI of the Civil Rights Act of 1964. If at any time FHWA makes such a determination, then FHWA shall notify TxDOT in writing. The notice shall include a statement of the basis for FHWA's determination and shall allow TxDOT thirty (30) days to either; (a) explain in writing the

reason for the actions and describe the remedial actions that have been or shall be taken to achieve compliance with this Agreement or (b) dispute the accuracy of FHWA's findings. If TxDOT does not respond to the notice, or if, upon review of TxDOT's response, FHWA determines that TxDOT has not complied with the terms of the Agreement, FHWA may pursue remedies authorized by law, including, but not limited to, issuing a Letter of Finding regarding the Title VI complaints described in Article I of this VRA, the withholding of Federal highway funds, and referral to the Department of Justice for enforcement action. 49 C.F.R. § 21.13(a); 28 C.F.R. § 42.413(c).

FEDERAL HIGHWAY ADMINISTRATION



Shailen P. Bhatt

Administrator

Dated: 3-6-2023

TEXAS DEPARTMENT OF TRANSPORTATION



Marc D. Williams, P.E.

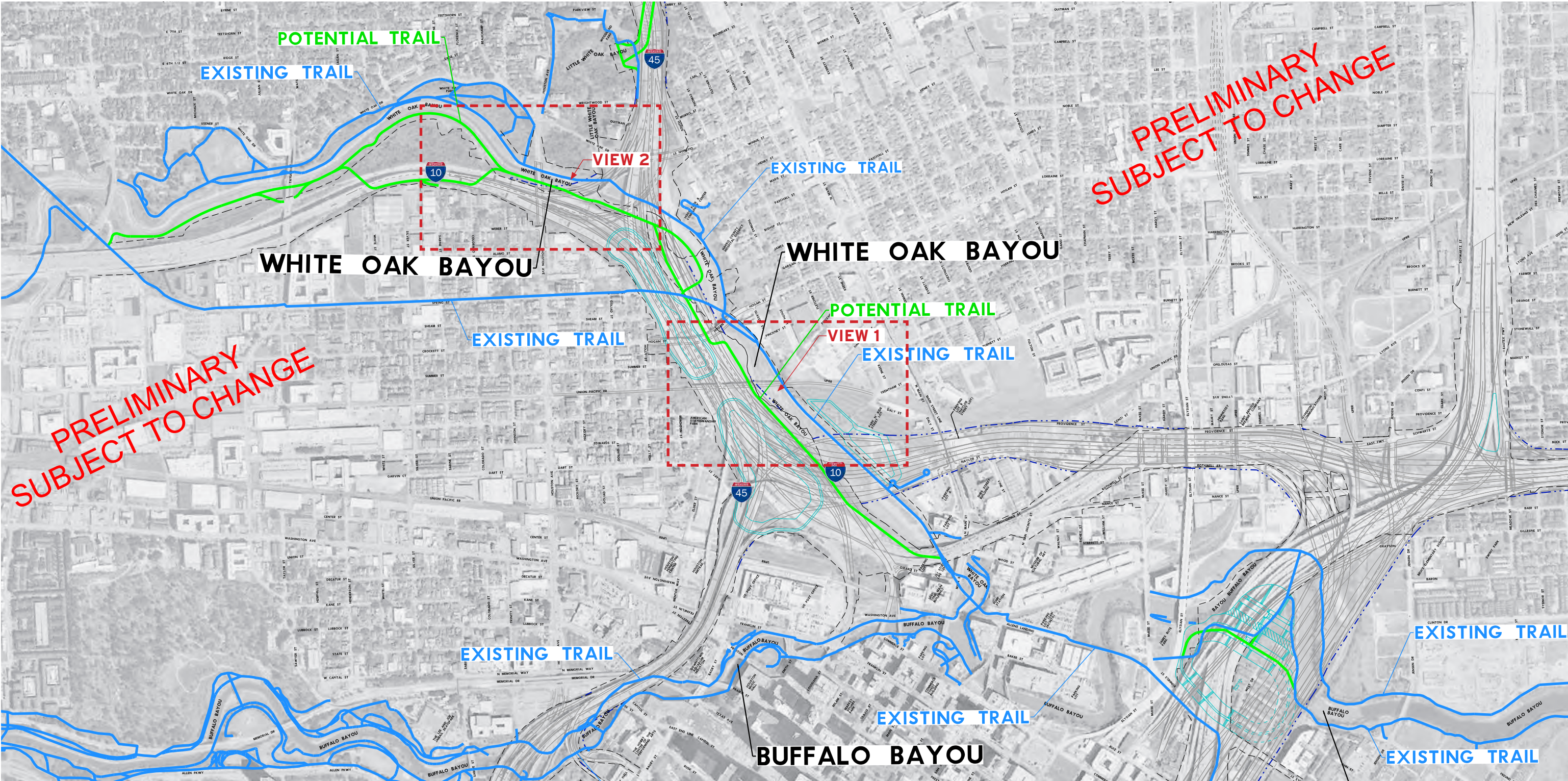
Executive Director

Dated: 3-3-2023

**Exhibit A**  
**Bayou Trail Maps**



# WHITE OAK BAYOU TRAILS



Existing Trail To Remain

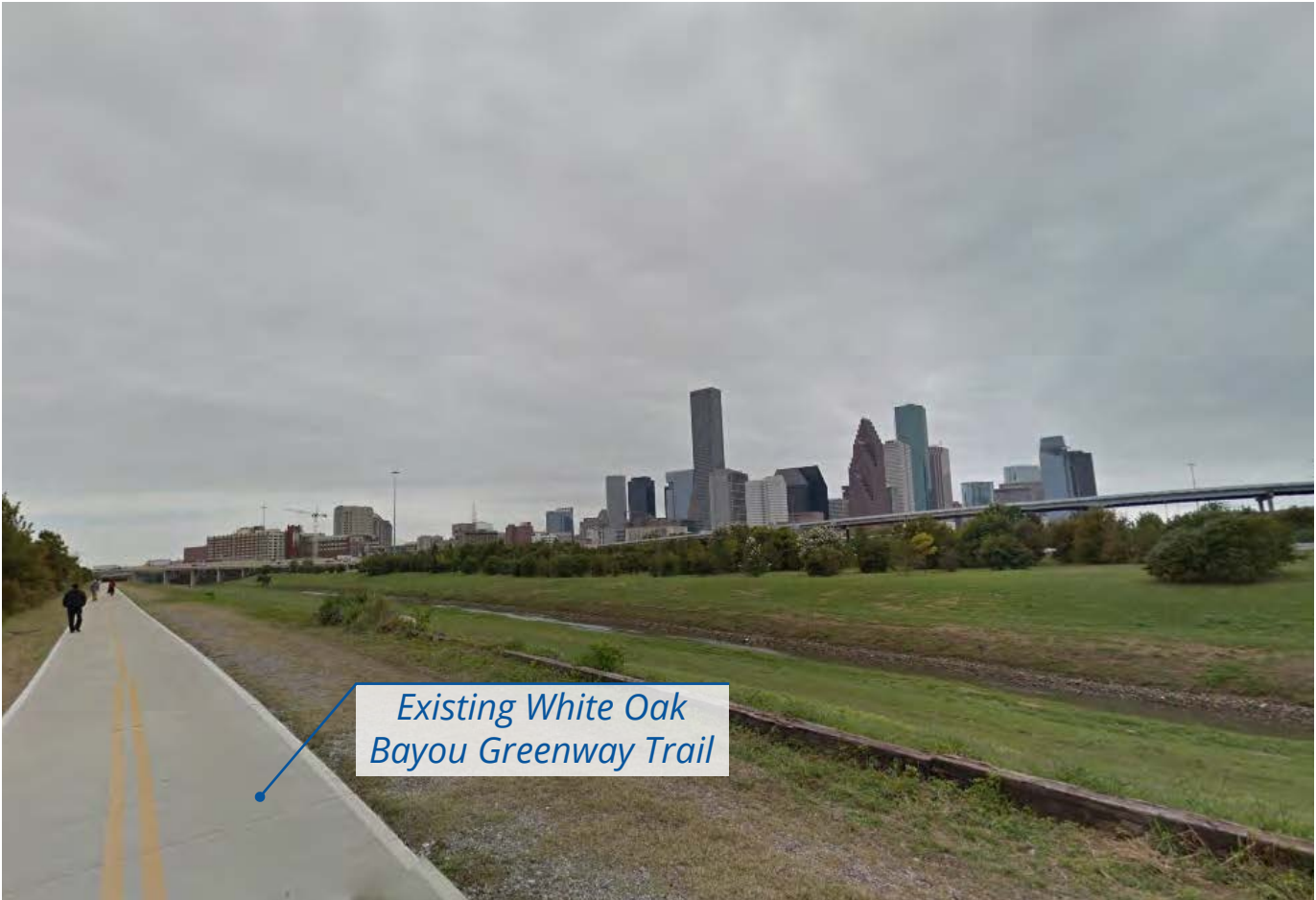
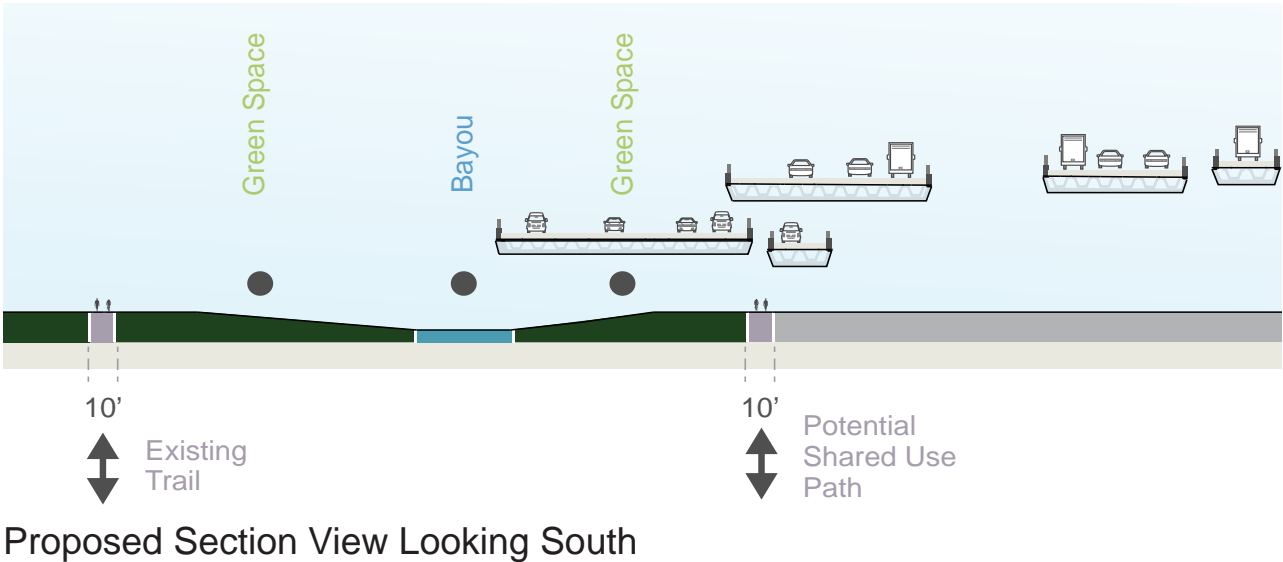
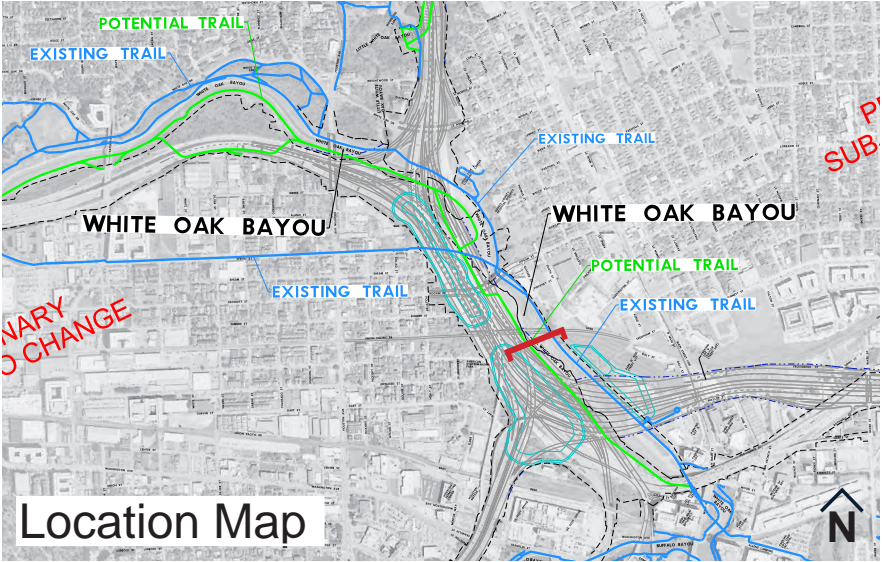
Potential Trail By TxDOT

Potential Pond

NOT TO SCALE



# WHITE OAK BAYOU TRAILS



Existing Condition

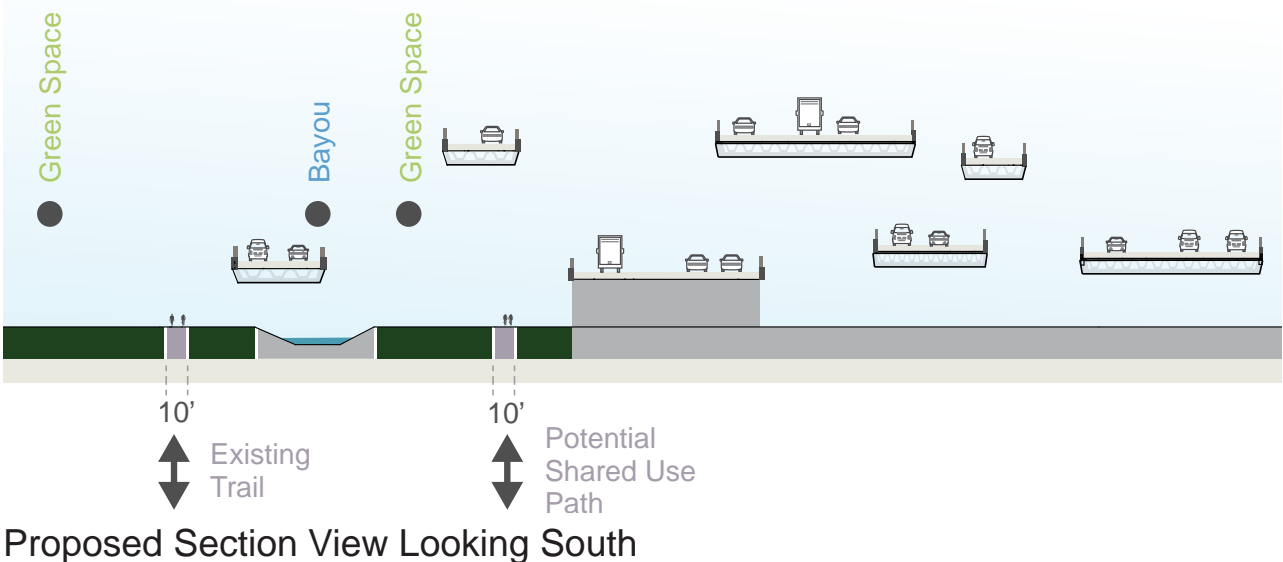
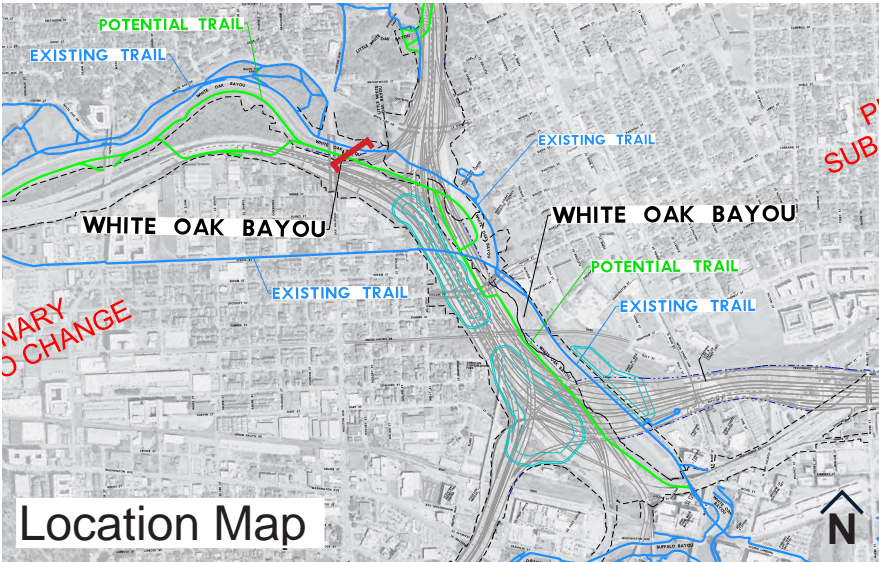


Proposed Condition

NOT TO SCALE



# WHITE OAK BAYOU TRAILS



Existing Condition

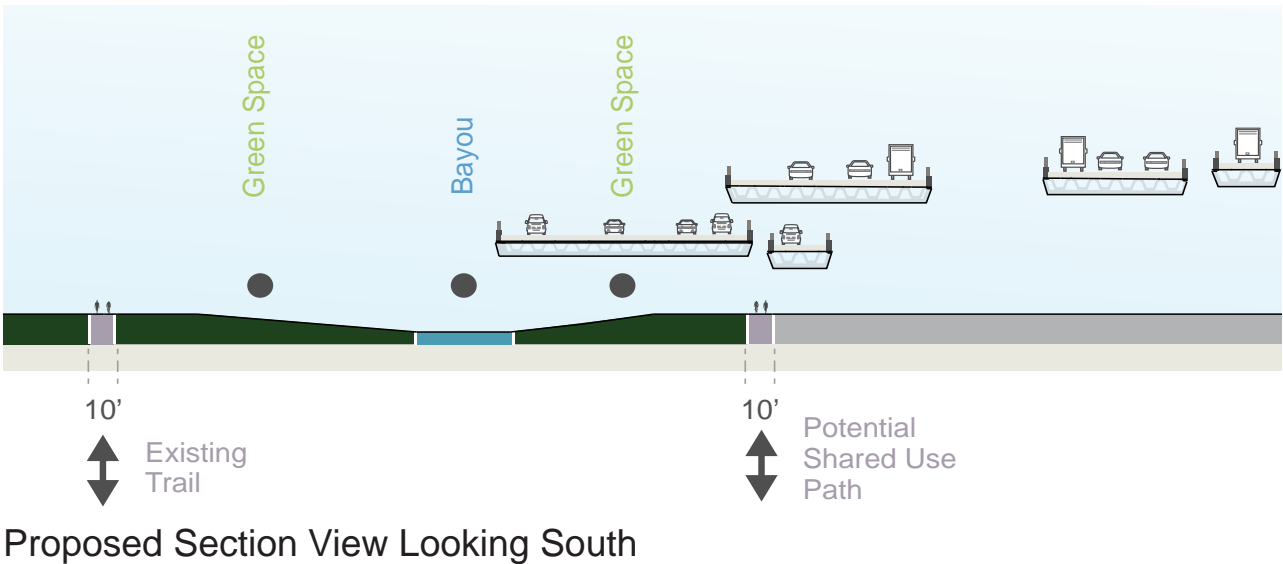
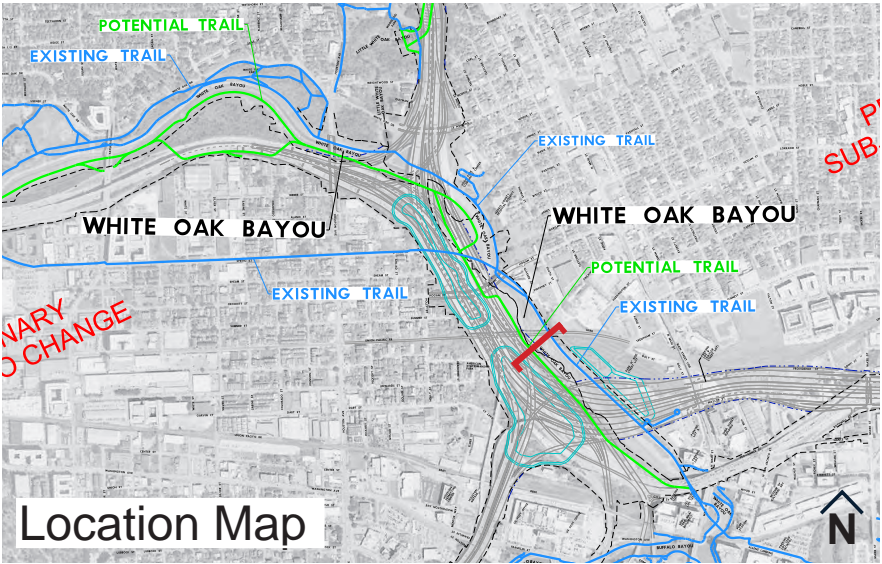


Proposed Condition

NOT TO SCALE



# WHITE OAK BAYOU TRAILS

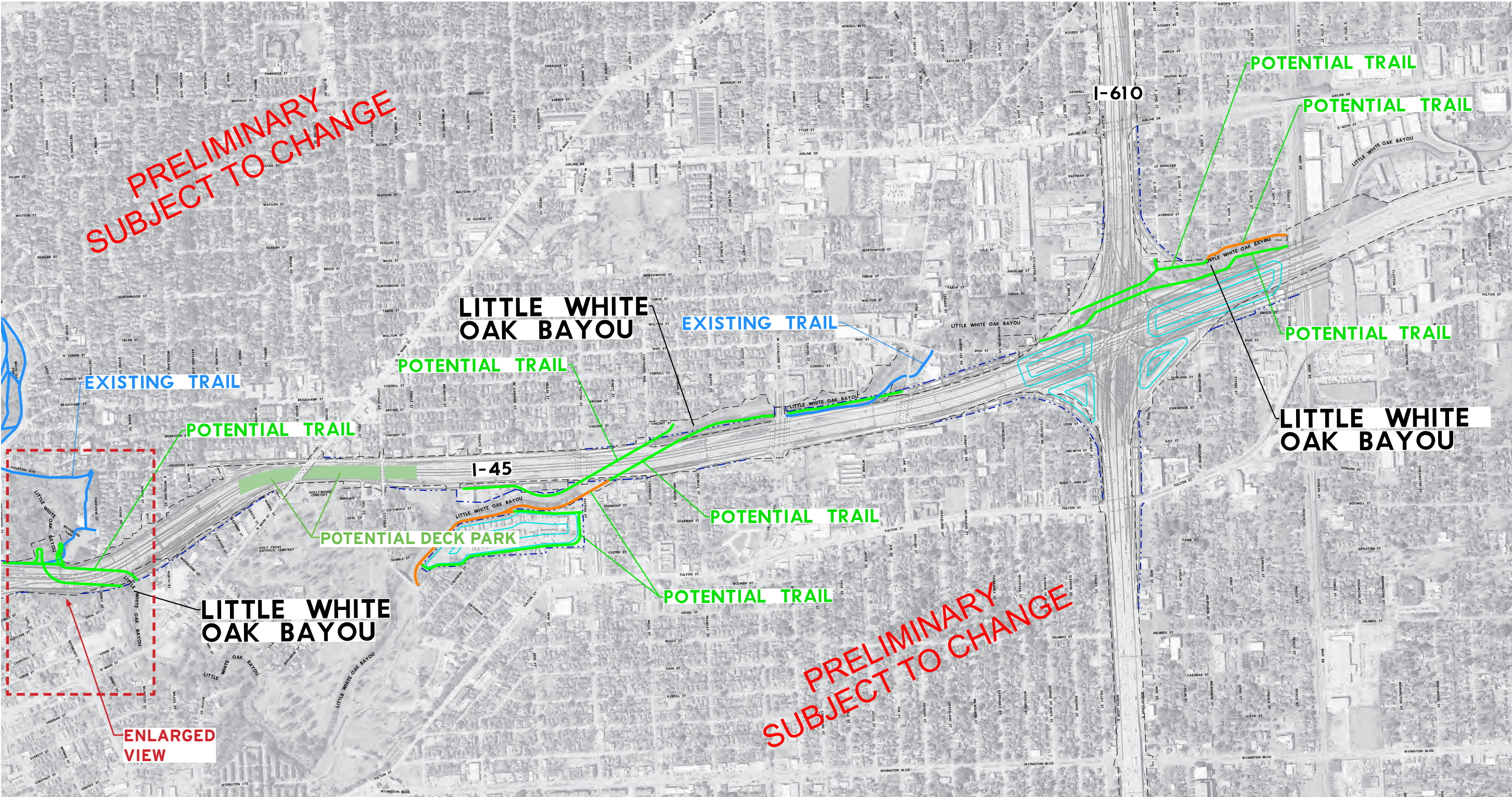


Proposed Condition

NOT TO SCALE



# LITTLE WHITE OAK BAYOU TRAILS



- Existing Trail To Remain
- Potential Trail By TxDOT
- Potential Trail By Others (Outside TxDOT ROW)
- Potential Pond
- NOT TO SCALE



# LITTLE WHITE OAK BAYOU TRAILS

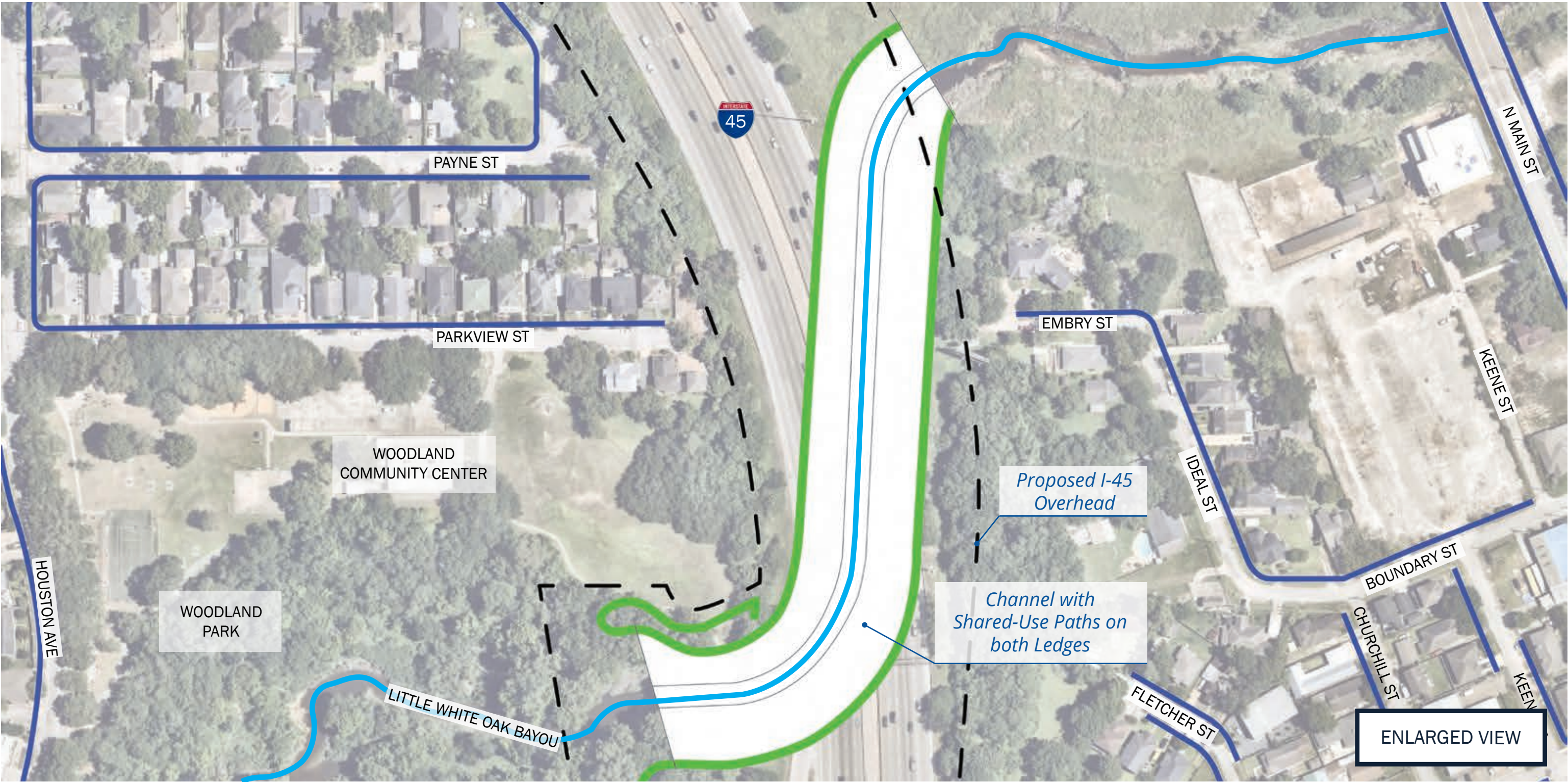


Existing Pedestrian Circulation

↑ NOT TO SCALE



# LITTLE WHITE OAK BAYOU TRAILS

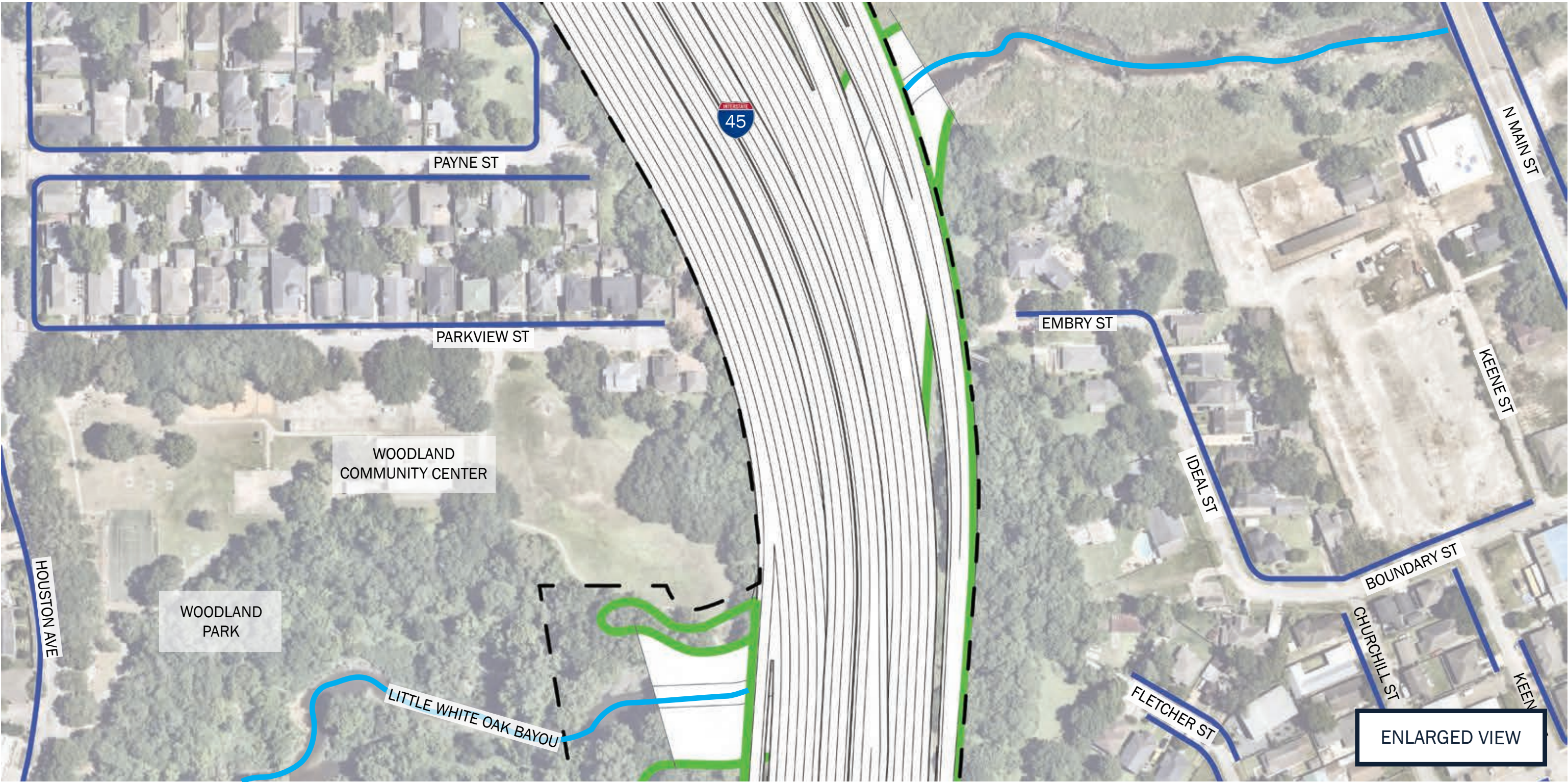


- Existing Pedestrian Circulation
- Proposed Pedestrian Realm

↑ NOT TO SCALE



# LITTLE WHITE OAK BAYOU TRAILS

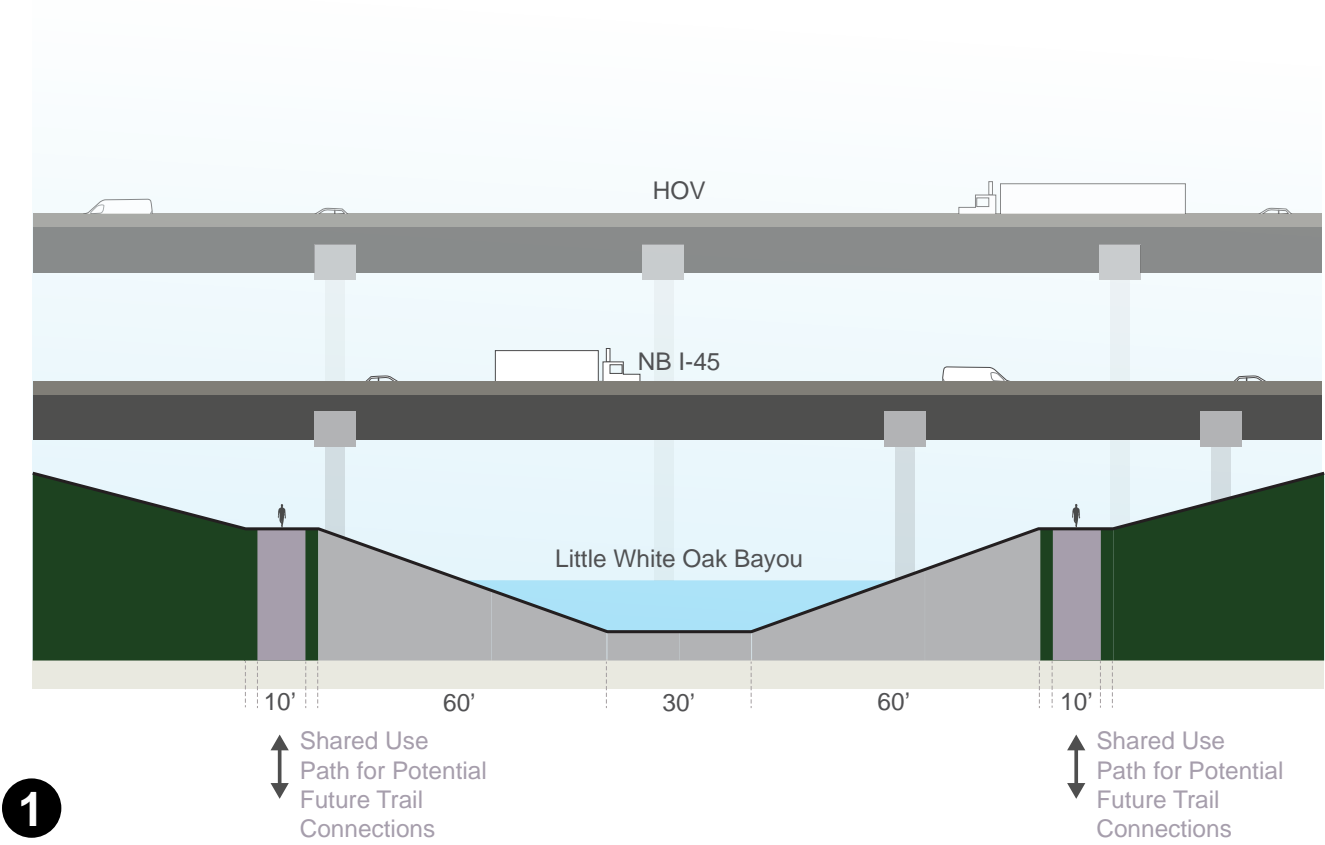
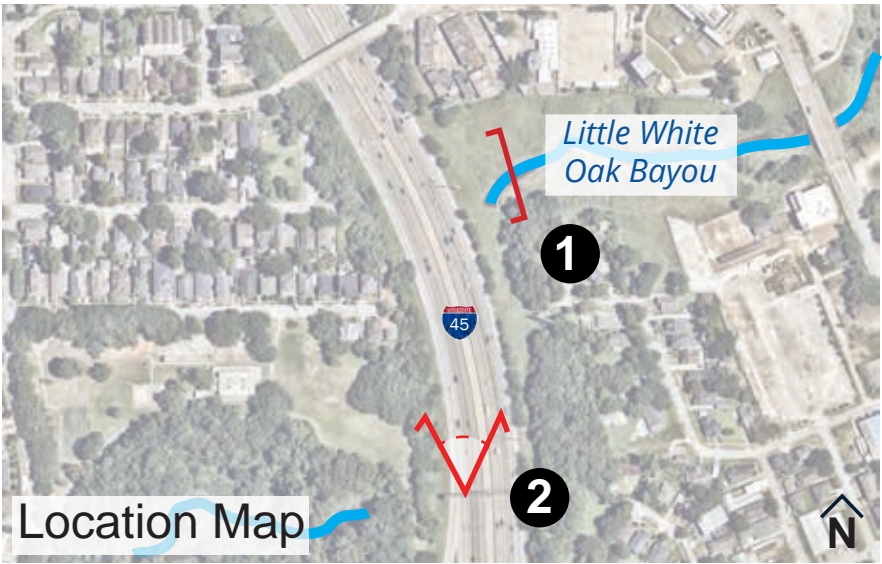


- Existing Pedestrian Circulation
- Proposed Pedestrian Realm

↑ NOT TO SCALE



# LITTLE WHITE OAK BAYOU TRAILS



1  
Proposed Section View at Little White Oak Bayou  
Looking North



2  
Proposed I-45 over Little White Oak Bayou

NOT TO SCALE

**Exhibit B**

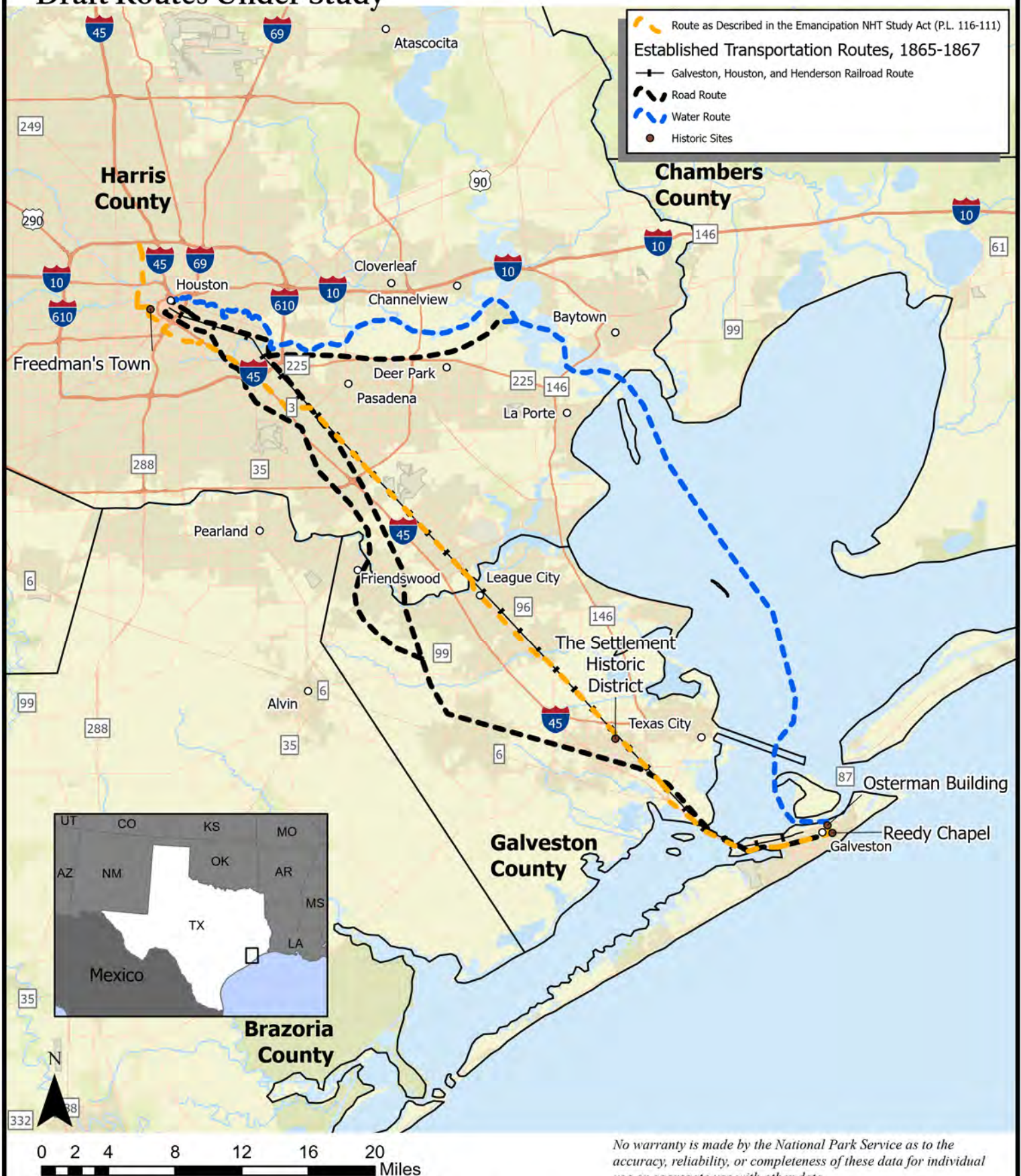
**Emancipation Trail Study Map**





# Emancipation National Historic Trail (NHT) Feasibility Study

## Draft Routes Under Study



Produced by National Trails - National Park Service

12 March 2021

Data Sources: NPS, US Census Bureau, ESRI, Texas Historical Commission  
 Service Layer Credits: World Street Map (with Relief) - no labels: Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

No warranty is made by the National Park Service as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

**Exhibit C**

**Pedestrian/Bicycle Routes to Schools Map**



# ALDINE SCHOOL COMPLEX



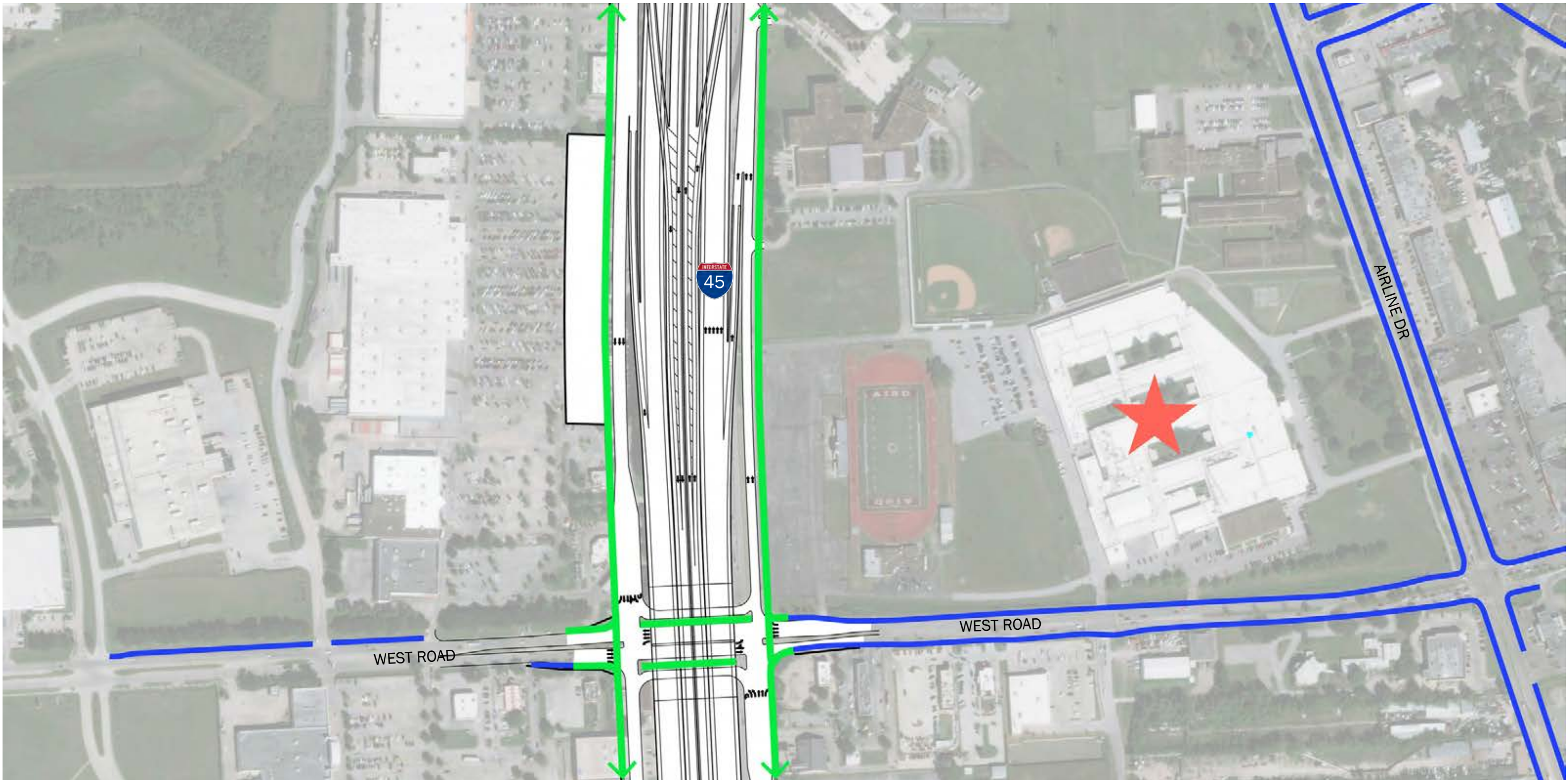
Existing Pedestrian Circulation

Aldine High School

NOT TO SCALE



# ALDINE SCHOOL COMPLEX

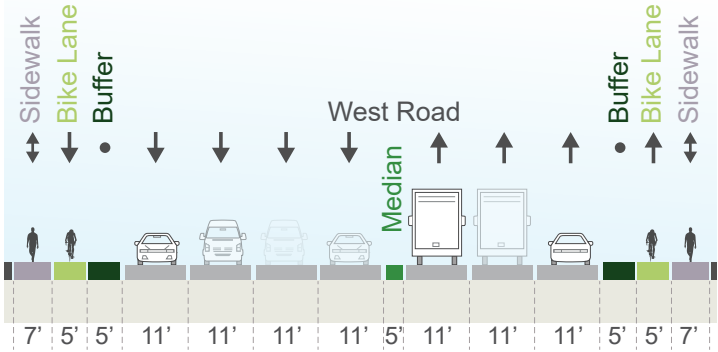


- Existing Pedestrian Circulation
- Proposed Pedestrian Realm
- Aldine High School

↑ NOT TO SCALE



# ALDINE SCHOOL COMPLEX



Proposed Section View at West Road  
Looking East



Existing I-45 and West Road

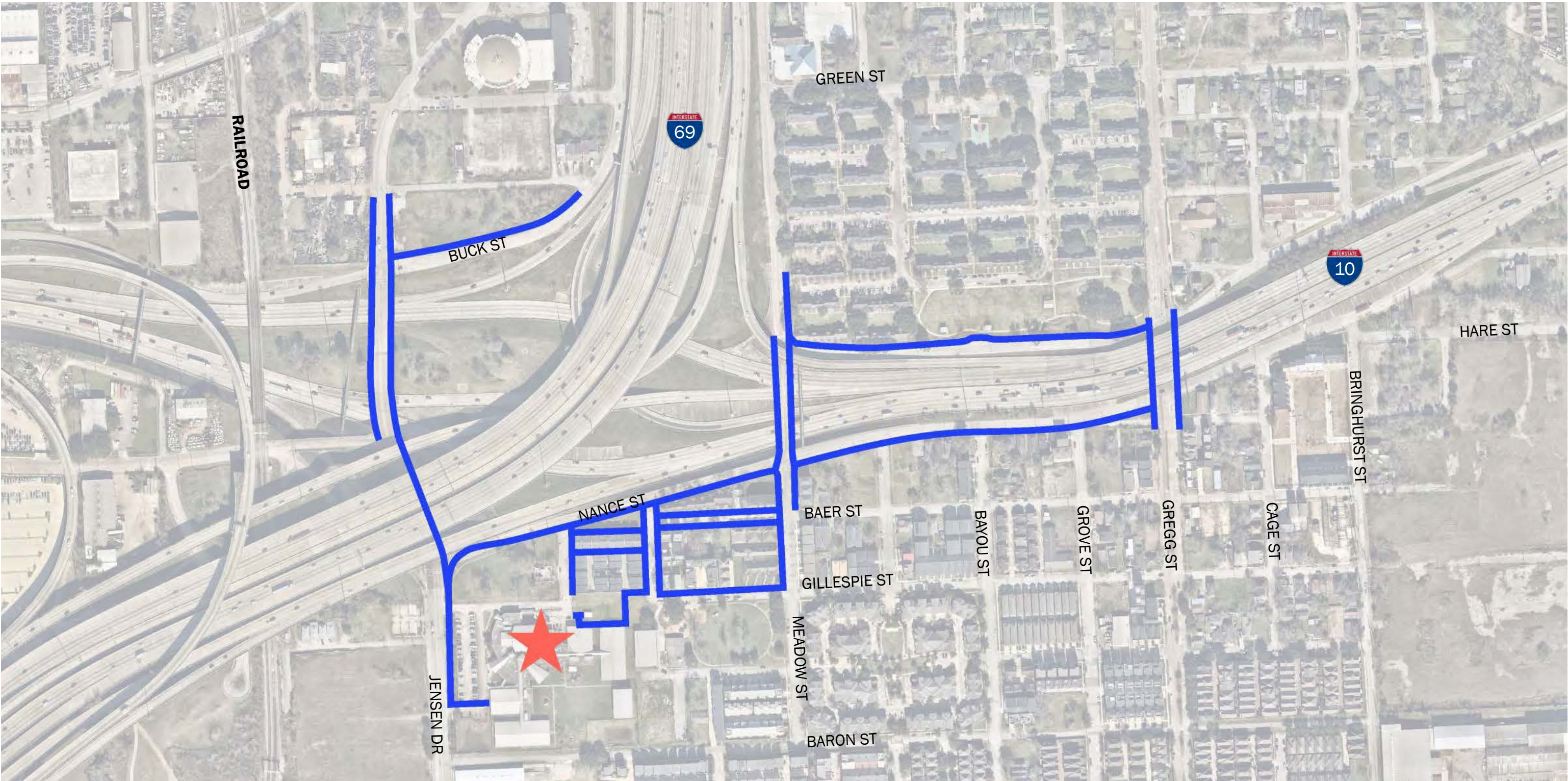


Proposed I-45 and West Road

NOT TO SCALE



# BRUCE ELEMENTARY SCHOOL



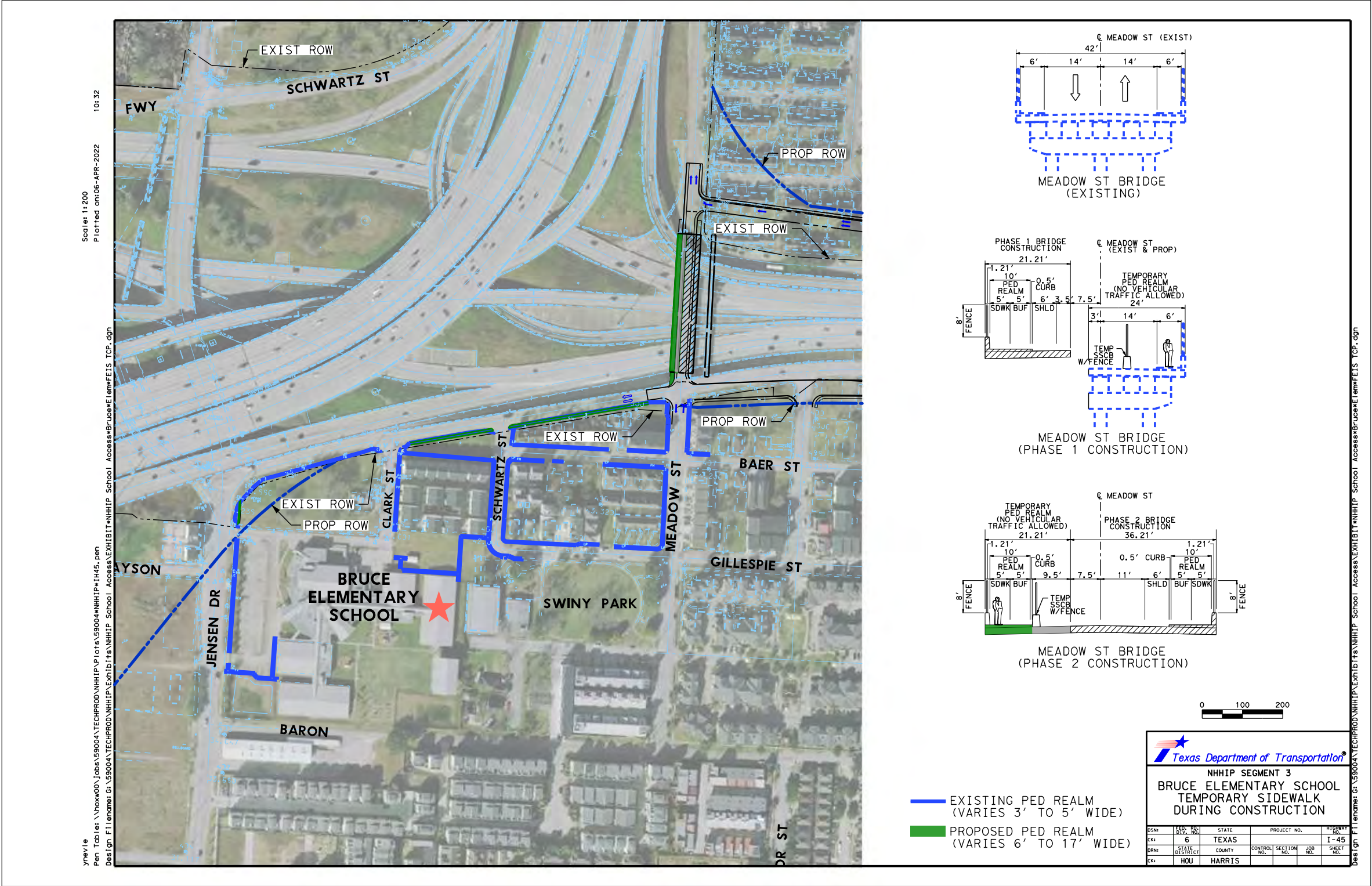
Existing Pedestrian Circulation

★ Bruce Elementary School

↑ NOT TO SCALE



# BRUCE ELEMENTARY SCHOOL

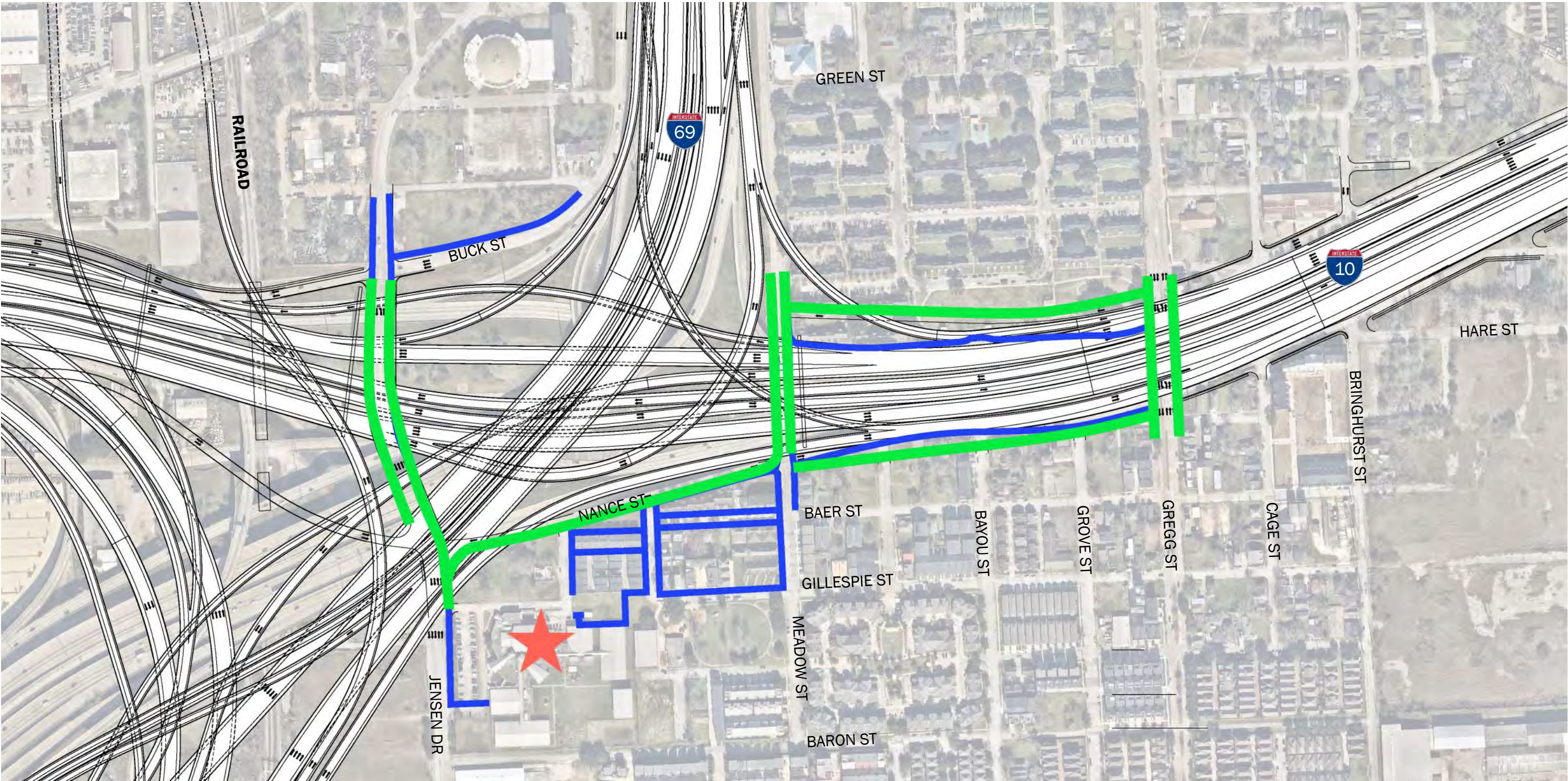


- Existing Pedestrian Circulation
- Bruce Elementary School
- Proposed Pedestrian Realm

NOT TO SCALE



# BRUCE ELEMENTARY SCHOOL

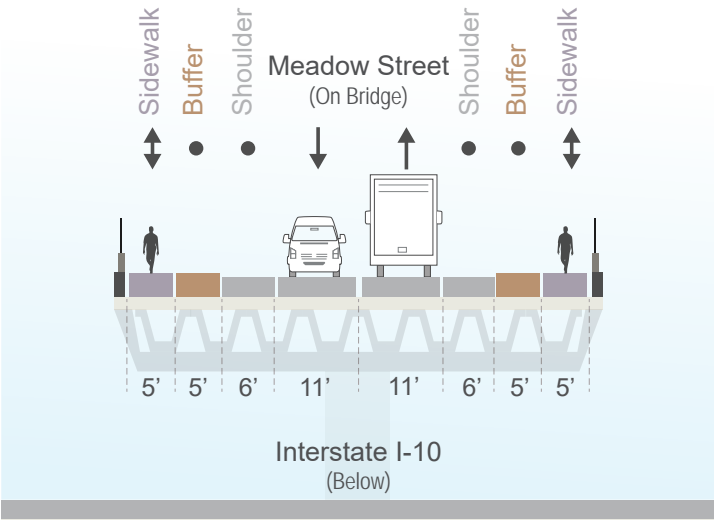


- Existing Pedestrian Circulation
- Proposed Pedestrian Realm
- Bruce Elementary School

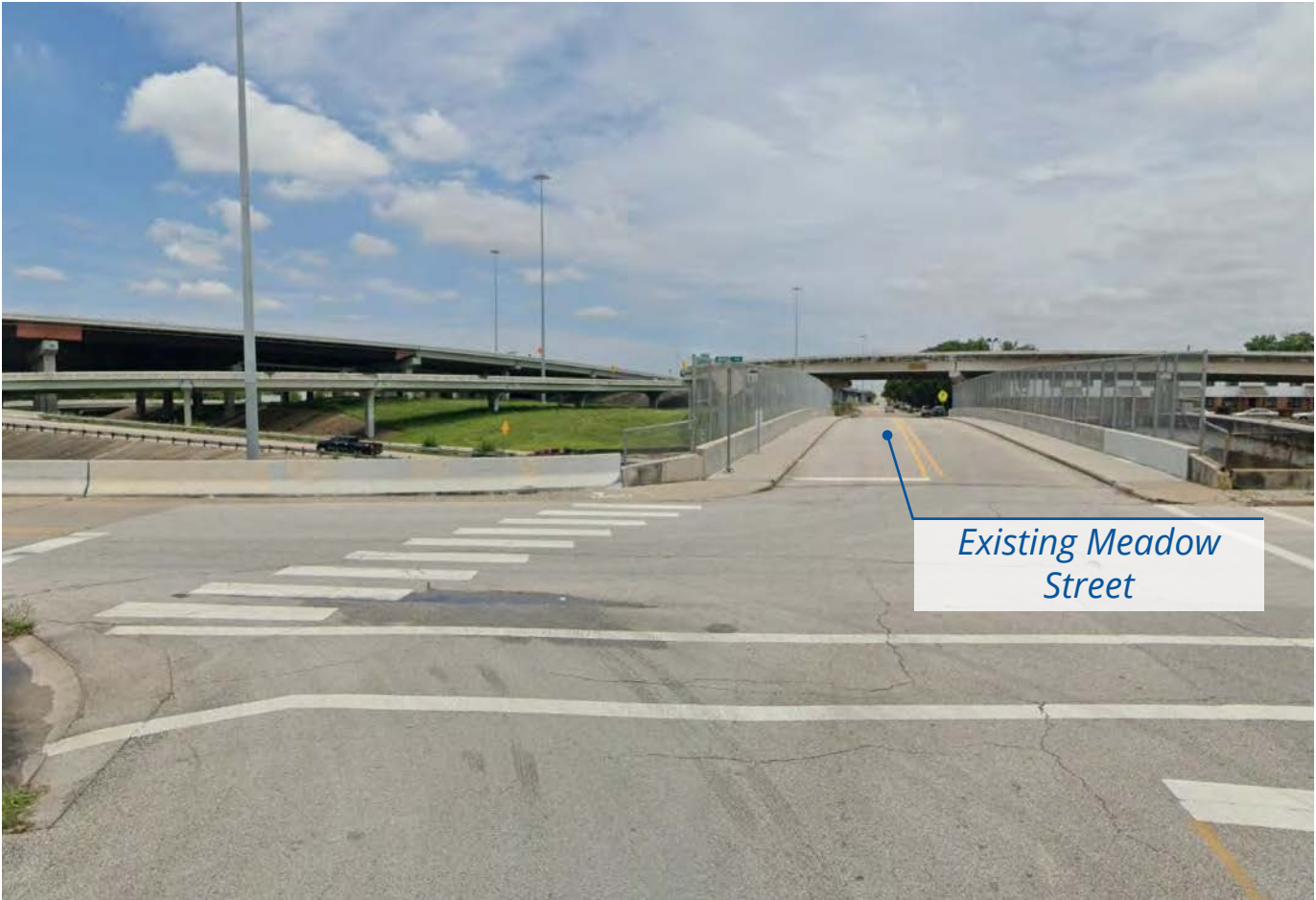
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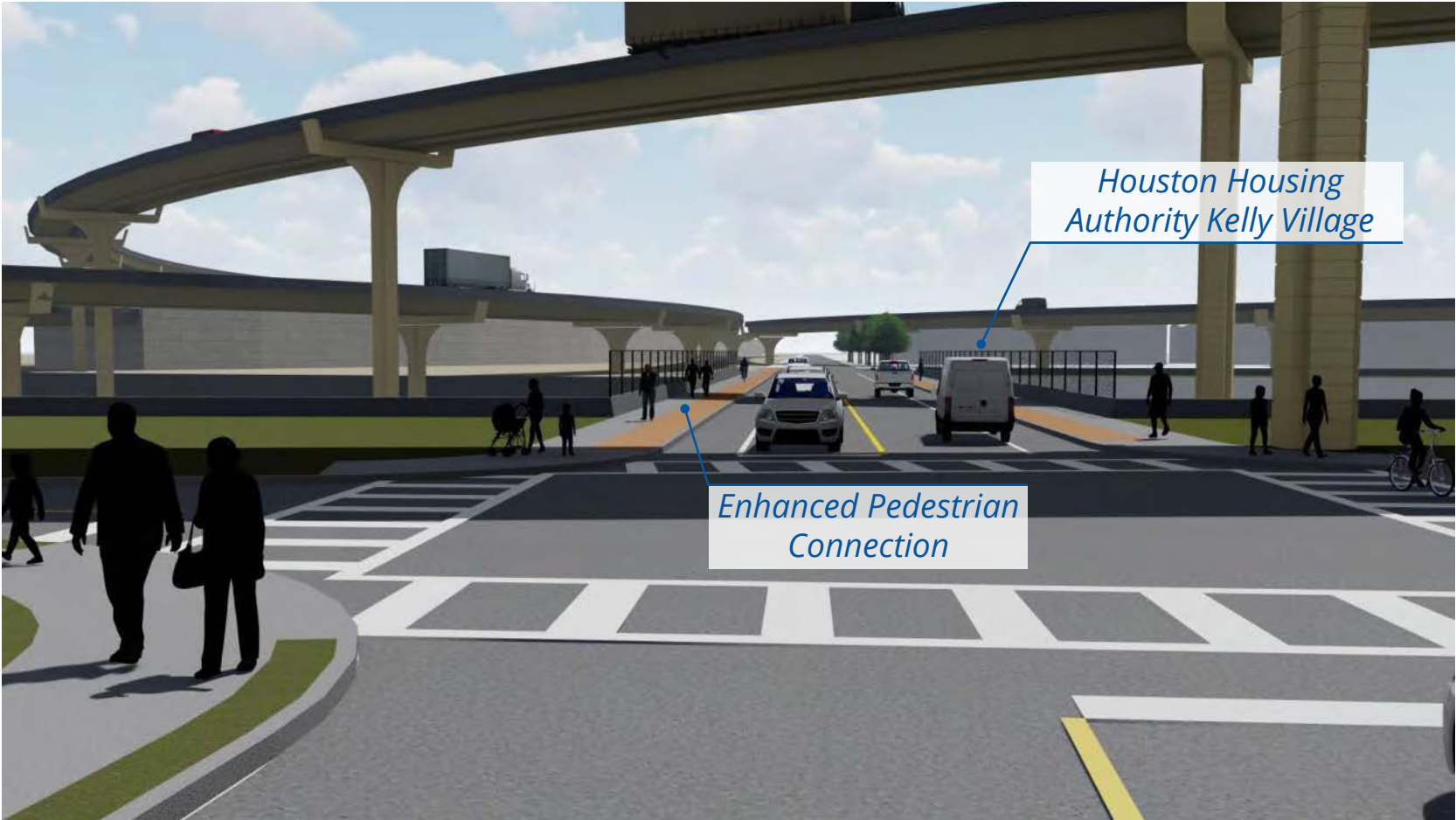
# BRUCE ELEMENTARY SCHOOL



Proposed Section View at Meadow Street



Existing I-10 and Meadow Street

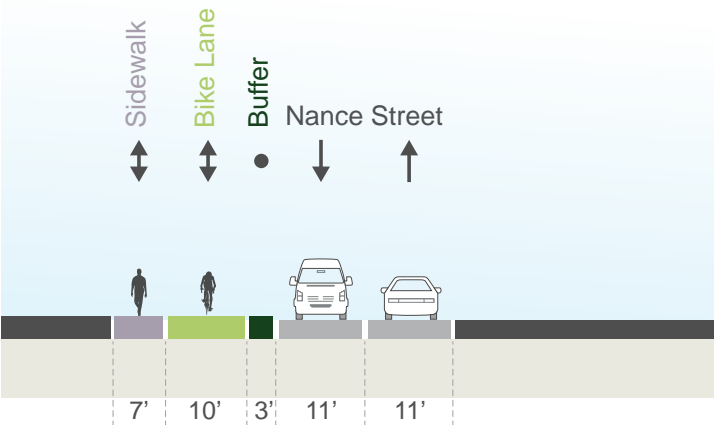
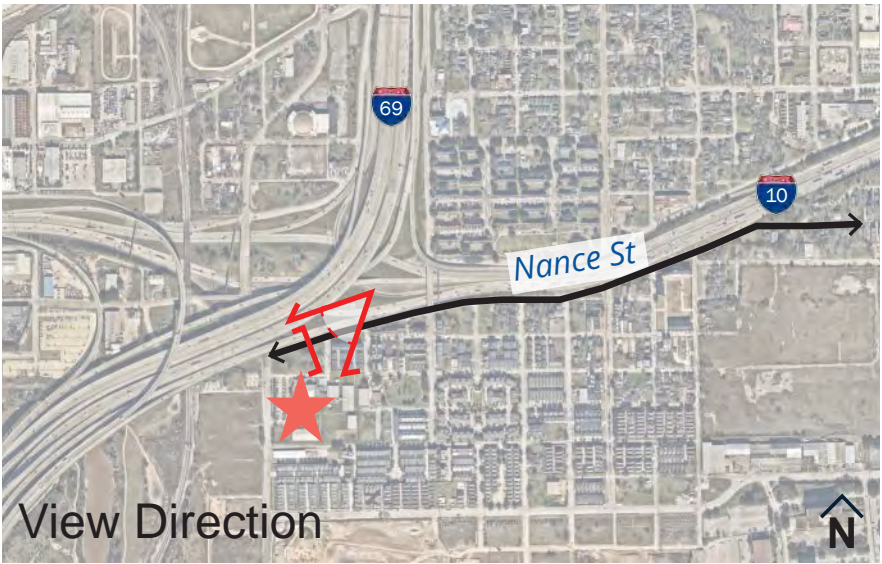


Proposed I-10 and Meadow Street

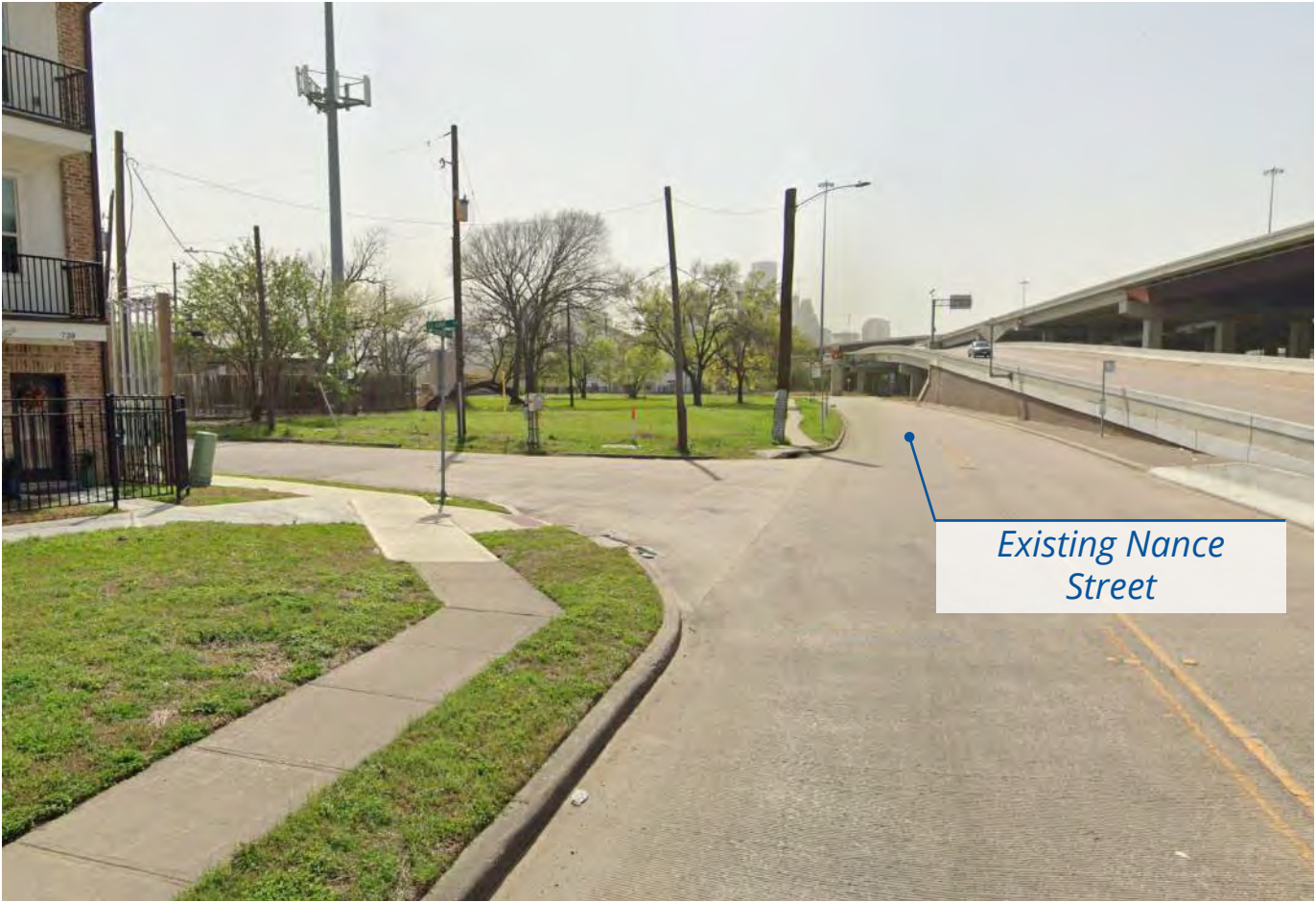
NOT TO SCALE



# BRUCE ELEMENTARY SCHOOL



Proposed Section View at Nance Street



Existing I-10 / I-69 Connector Ramp and Nance Street

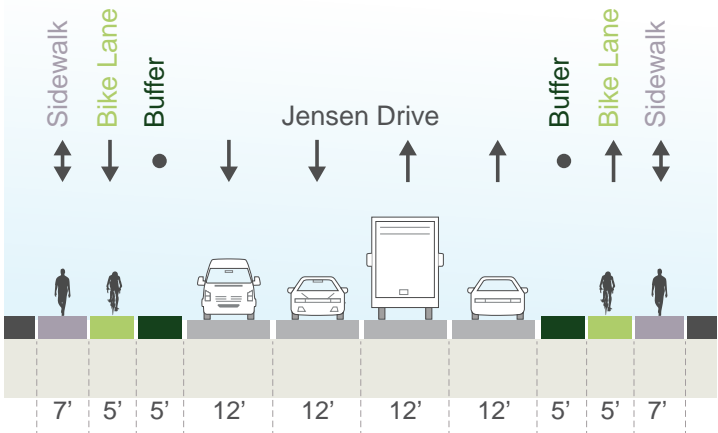


Proposed I-10 / I-69 Connector Ramp and Nance Street

NOT TO SCALE



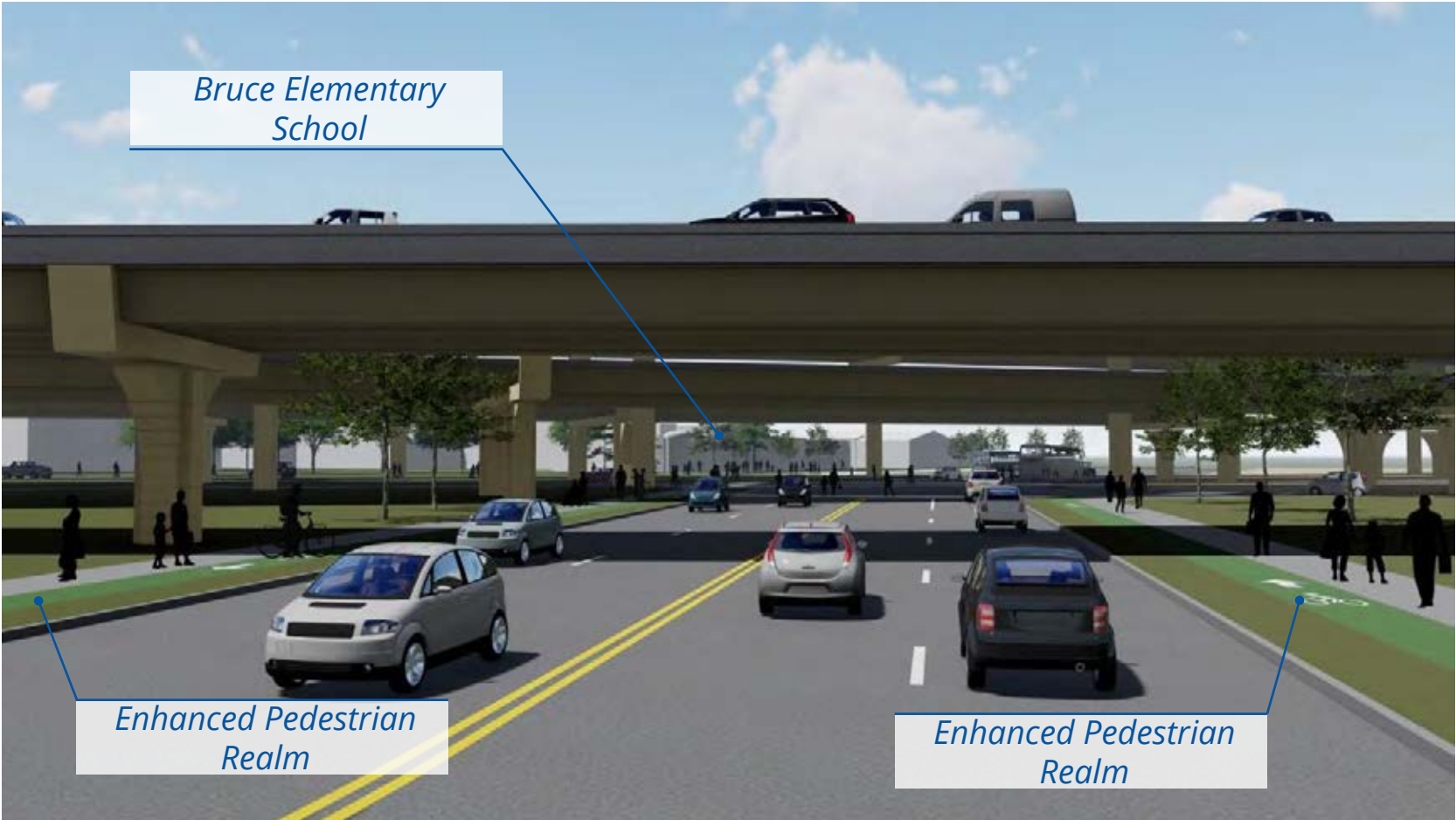
# BRUCE ELEMENTARY SCHOOL



Proposed Section View at Jensen Drive



Existing Jensen Drive

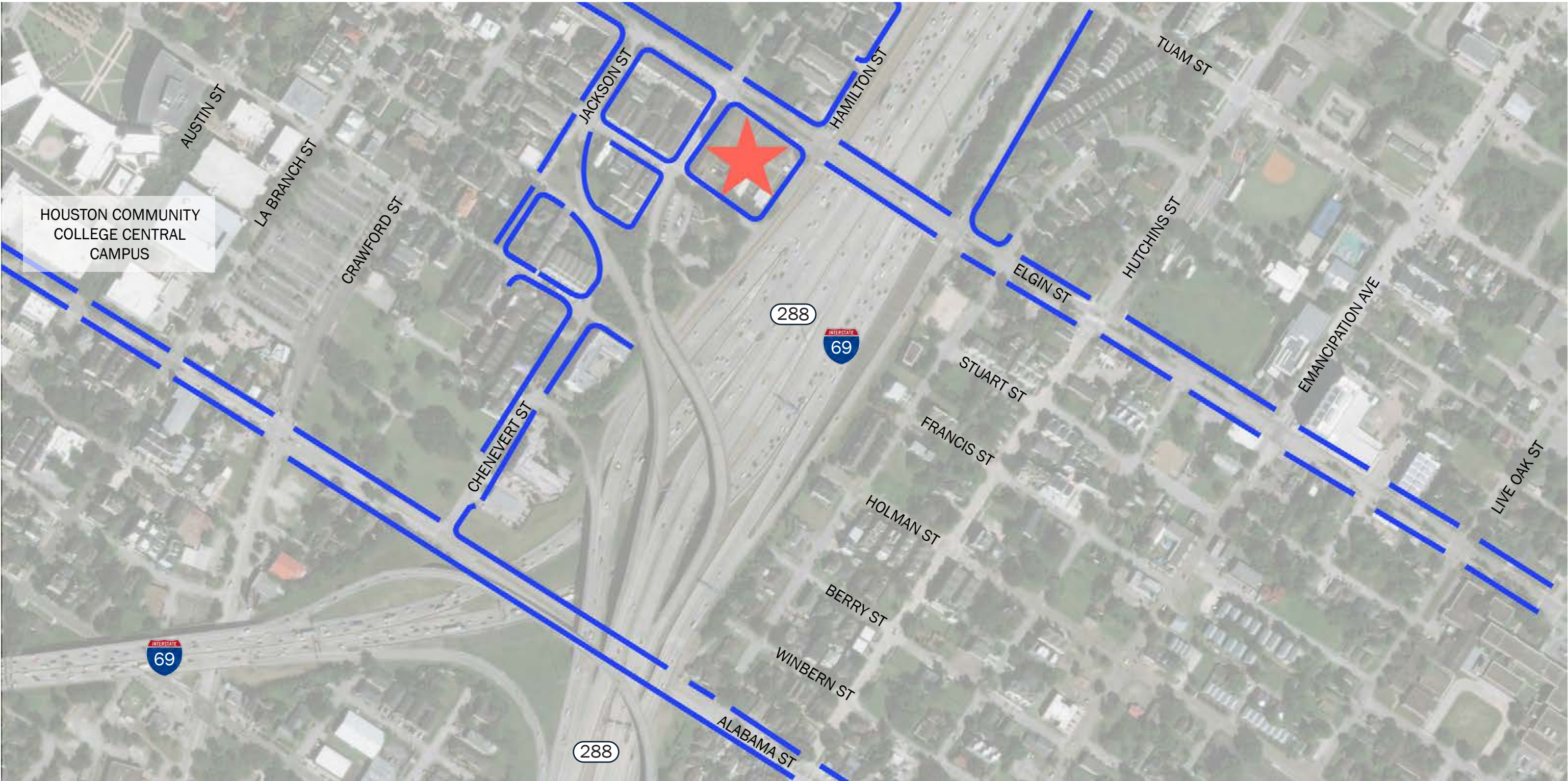


Proposed Jensen Drive

NOT TO SCALE



# HOUSTON ACADEMY FOR INTERNATIONAL STUDIES



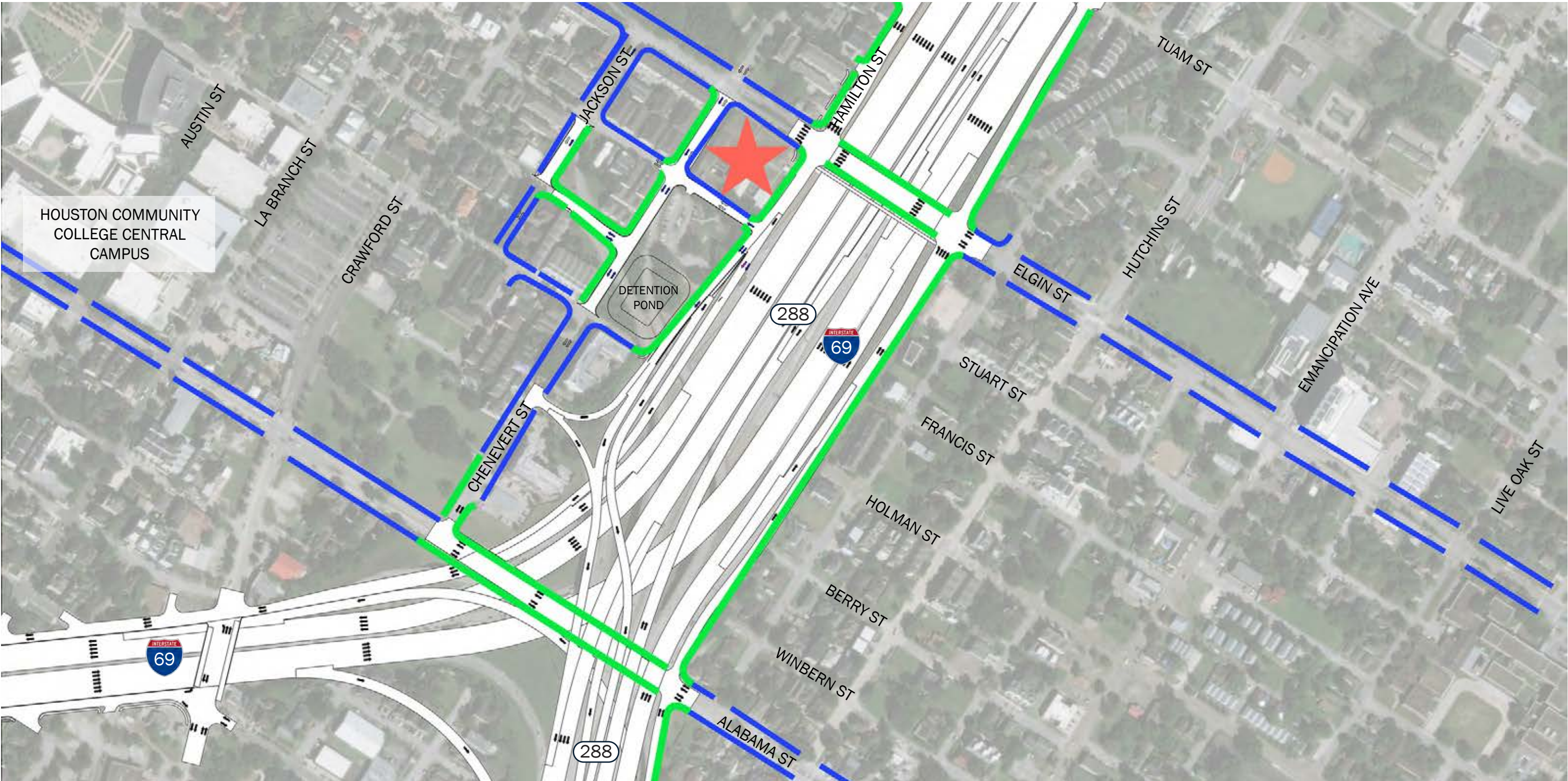
Existing Pedestrian Circulation

Houston Academy for International Studies

NOT TO SCALE



# HOUSTON ACADEMY FOR INTERNATIONAL STUDIES



Existing Pedestrian Circulation

Proposed Pedestrian Realm

Houston Academy for International Studies

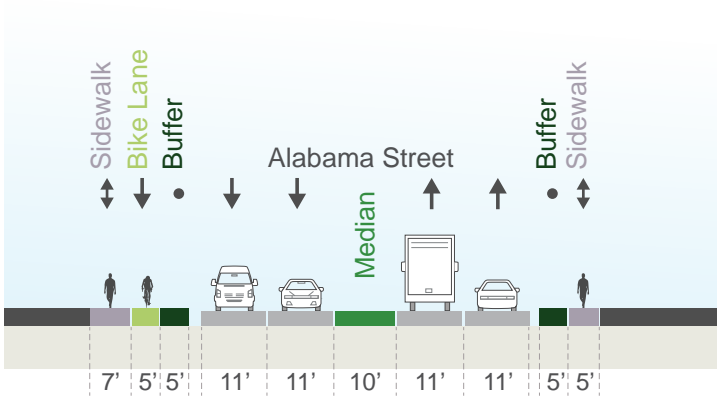
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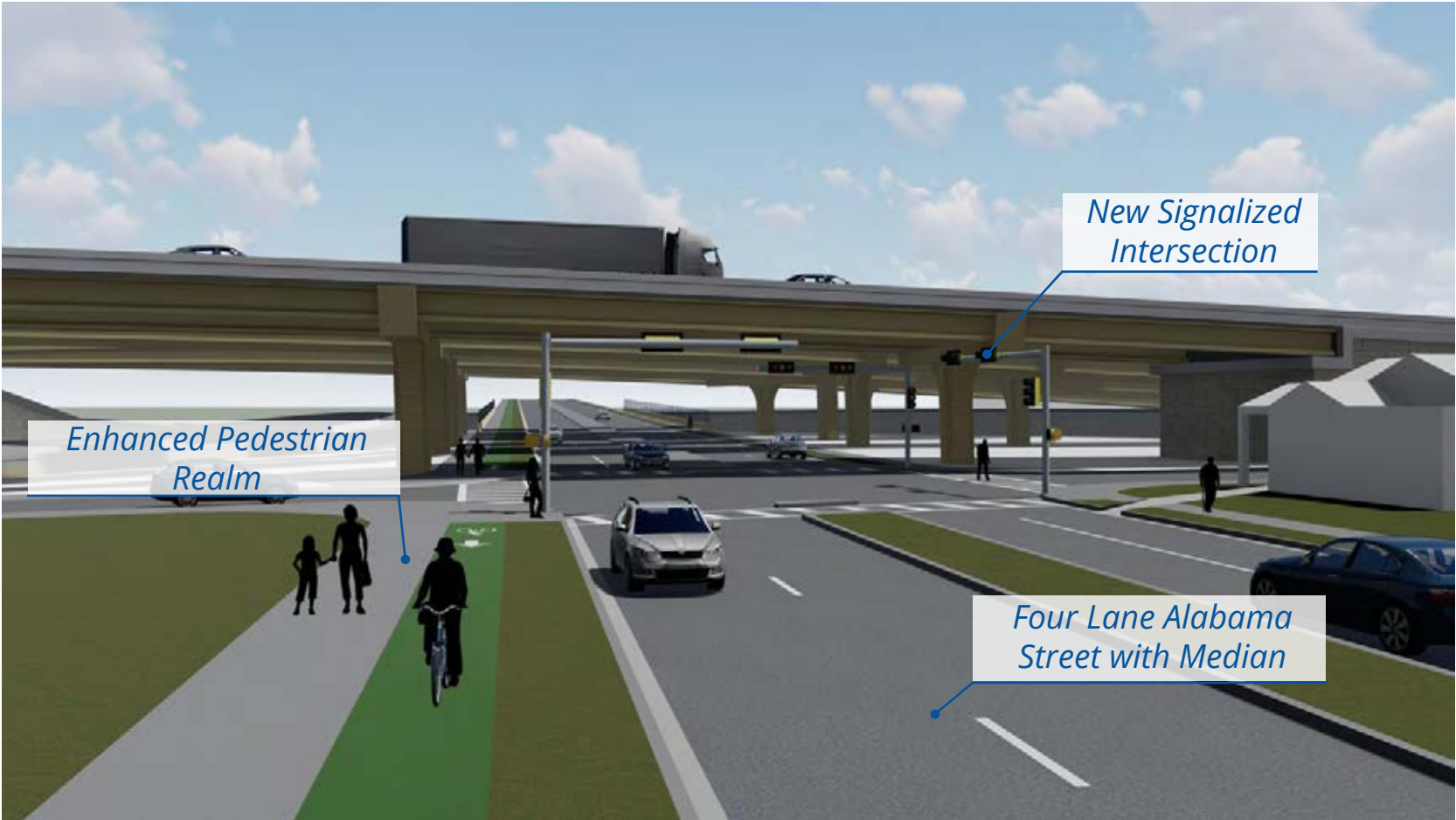
# HOUSTON ACADEMY FOR INTERNATIONAL STUDIES



Existing 288 and Alabama Street



Proposed Section View at Alabama Street  
Looking Northwest

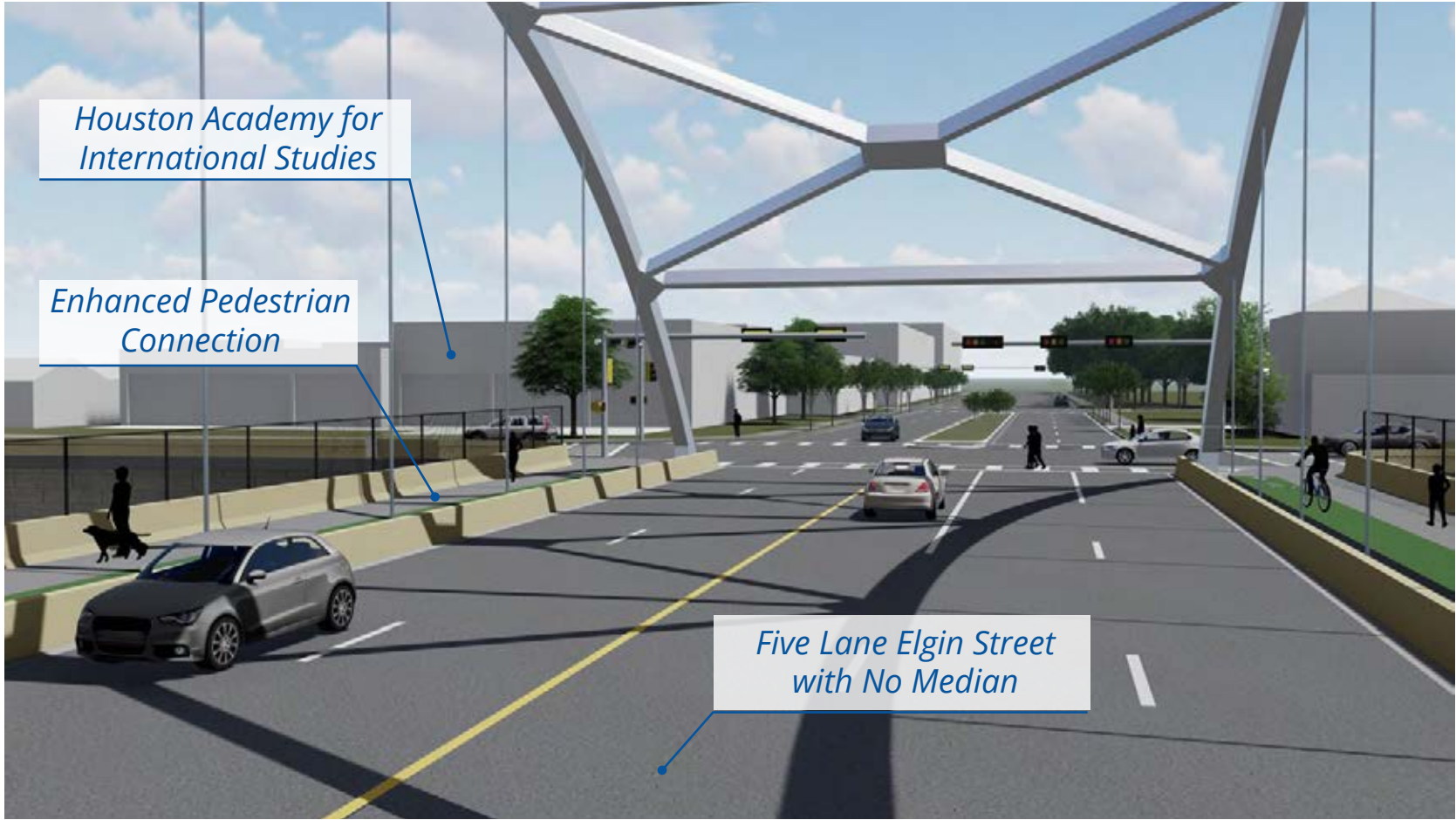
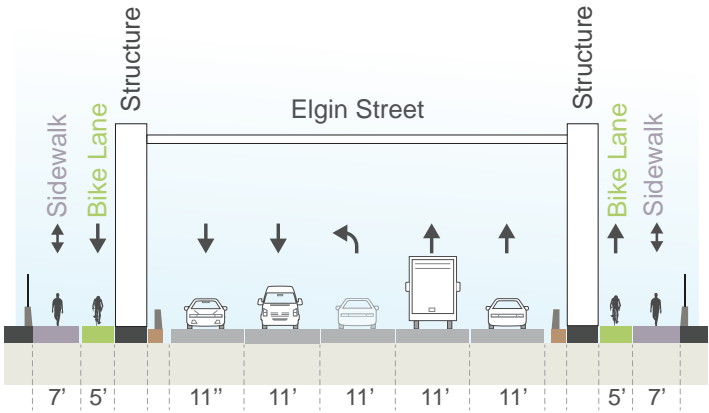


Proposed 288 and Alabama Street

NOT TO SCALE



# HOUSTON ACADEMY FOR INTERNATIONAL STUDIES



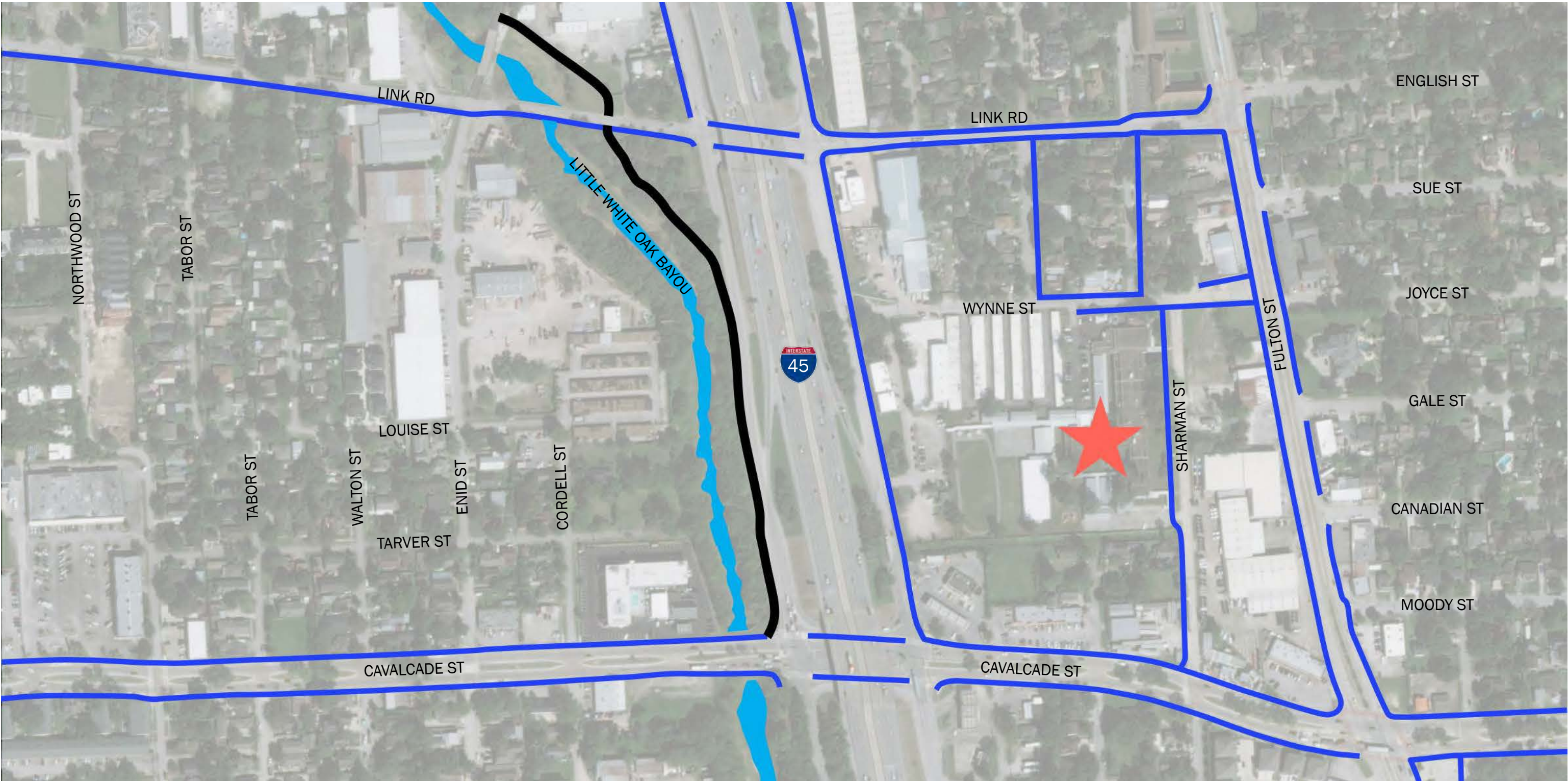
Existing Elgin Street and Hamilton Street Intersection

Proposed Elgin Street and Hamilton Street Intersection

NOT TO SCALE



# JEFFERSON ELEMENTARY SCHOOL CONNECTION



Existing Pedestrian Circulation

Existing Hike/Bike Trail

★

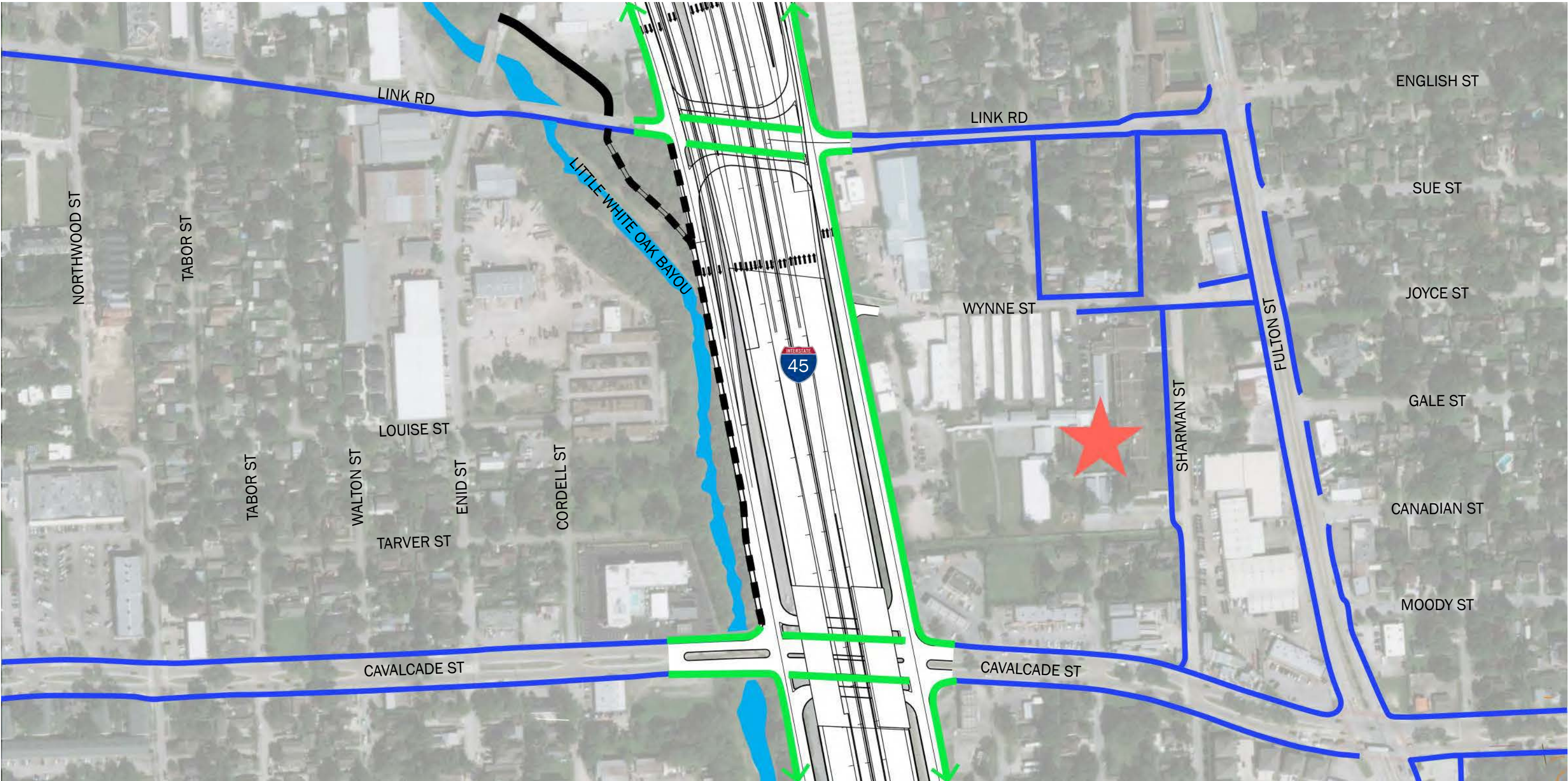
Jefferson Elementary School

↑

NOT TO SCALE



# JEFFERSON ELEMENTARY SCHOOL CONNECTION

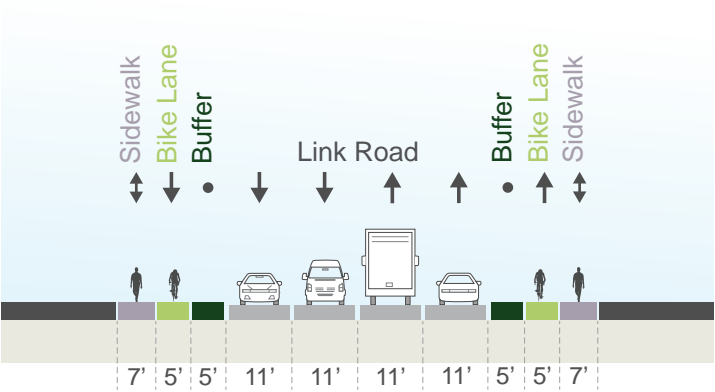


- Existing Pedestrian Circulation
- Proposed Pedestrian Realm
- Proposed Hike/Bike Path
- ★ Jefferson Elementary School

↑ NOT TO SCALE



# JEFFERSON ELEMENTARY SCHOOL CONNECTION



Proposed Section View at Link Road  
Looking East



Existing I-45 and Link Road

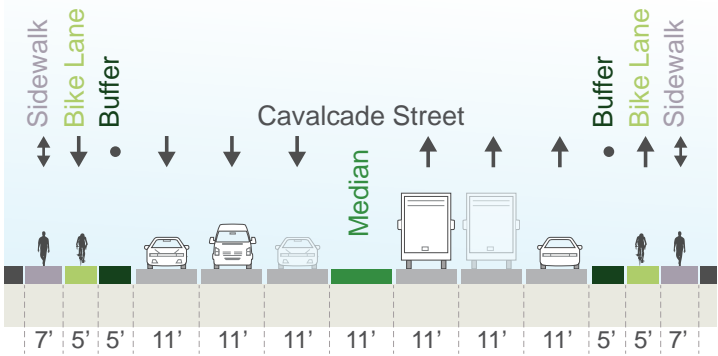


Proposed I-45 and Link Road

NOT TO SCALE



# JEFFERSON ELEMENTARY SCHOOL CONNECTION



Proposed Section View at Cavalcade Street  
Looking East



Existing I-45 and Cavalcade Street

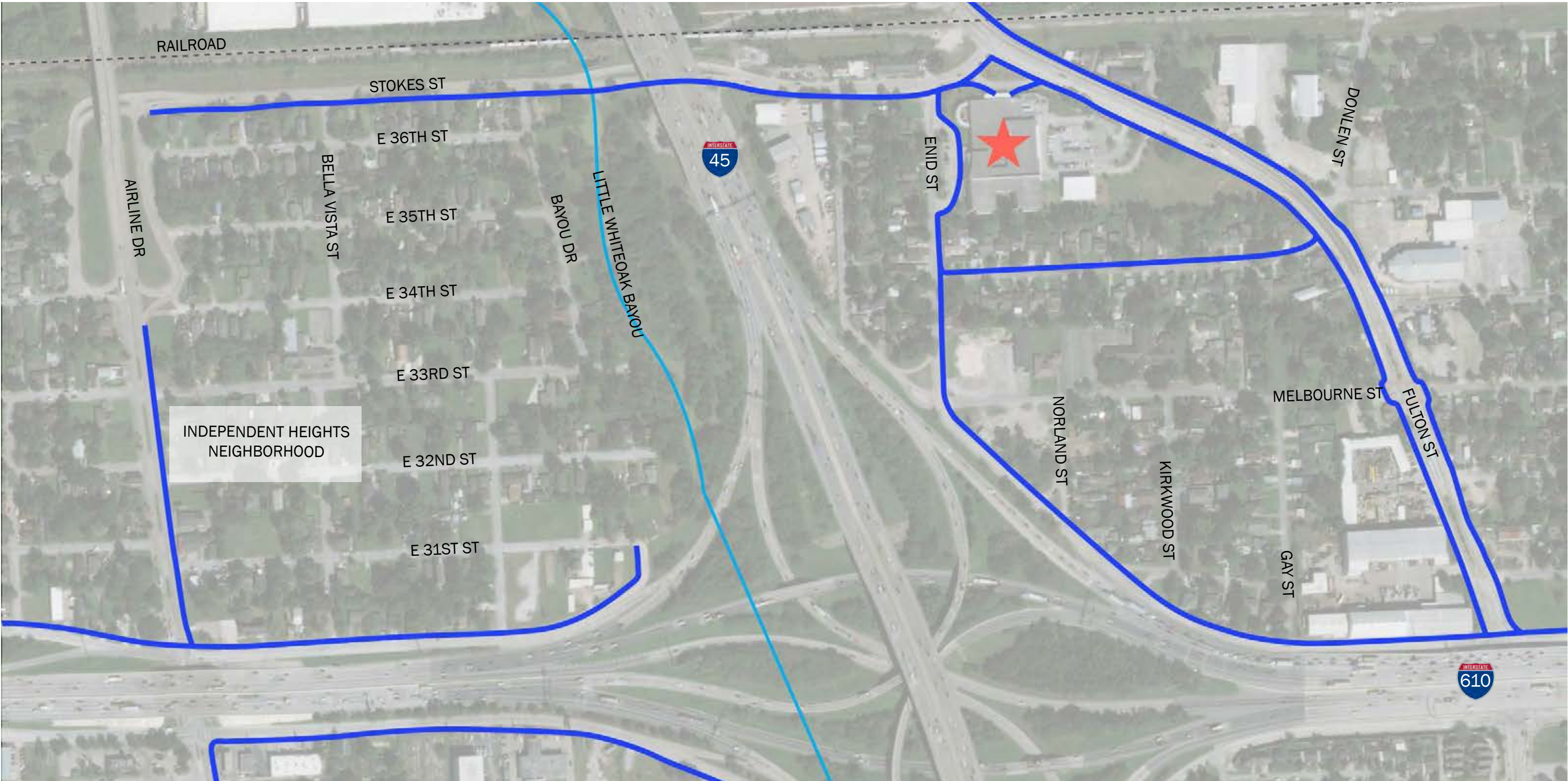


Proposed I-45 and Cavalcade Street

NOT TO SCALE



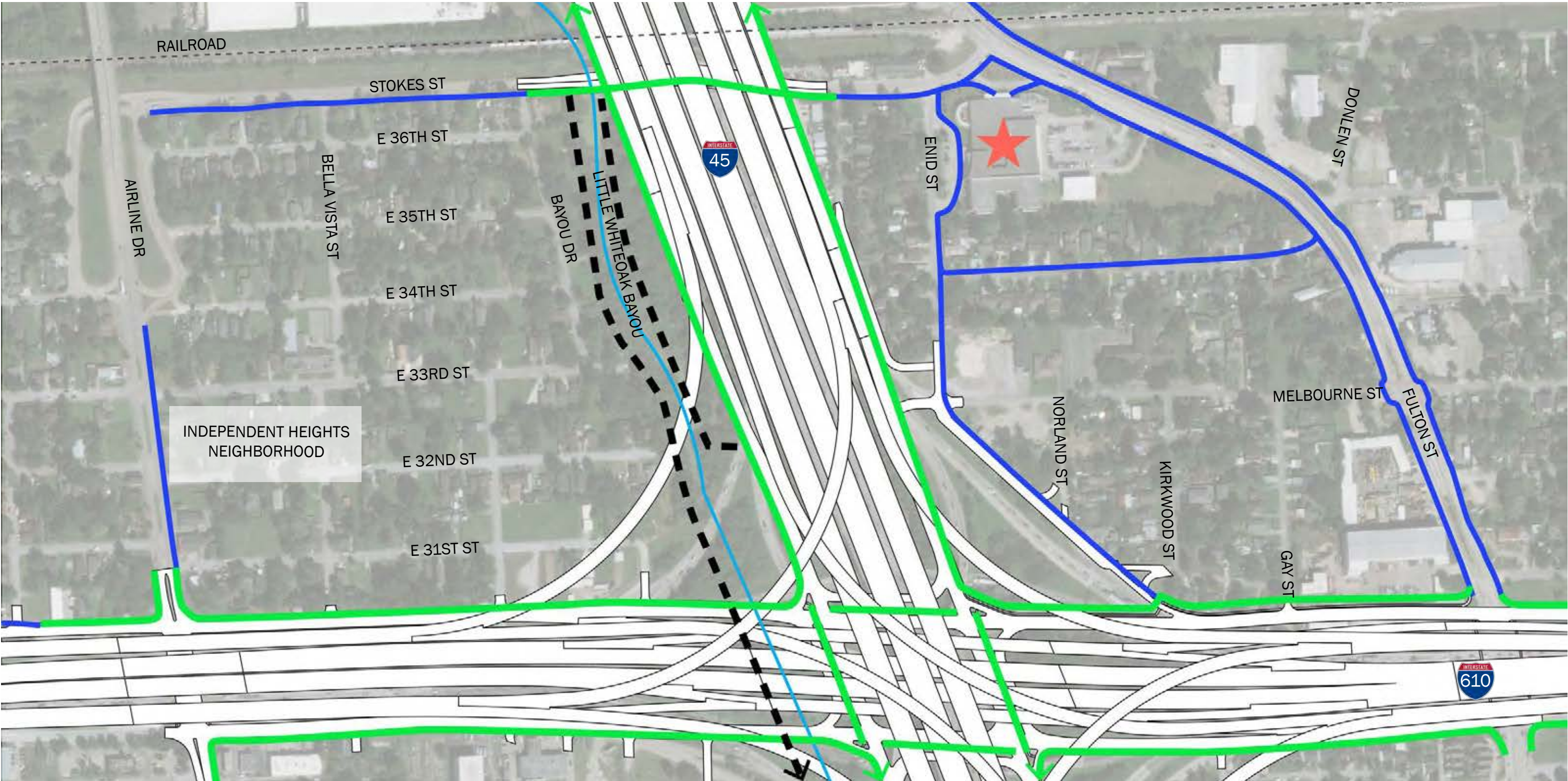
# ROOSEVELT ELEMENTARY SCHOOL



Existing Pedestrian Circulation      ★ Roosevelt Elementary School      ↑ NOT TO SCALE



# ROOSEVELT ELEMENTARY SCHOOL

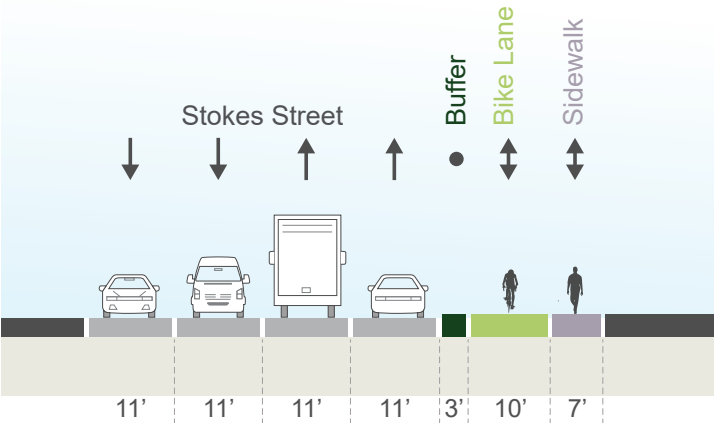


- Existing Pedestrian Circulation
- Proposed Pedestrian Realm
- Proposed Hike/Bike Path
- Roosevelt Elementary School

↑ NOT TO SCALE



# ROOSEVELT ELEMENTARY SCHOOL



Proposed Section View at Stokes Street  
Looking East



Existing I-45 and Stokes Street

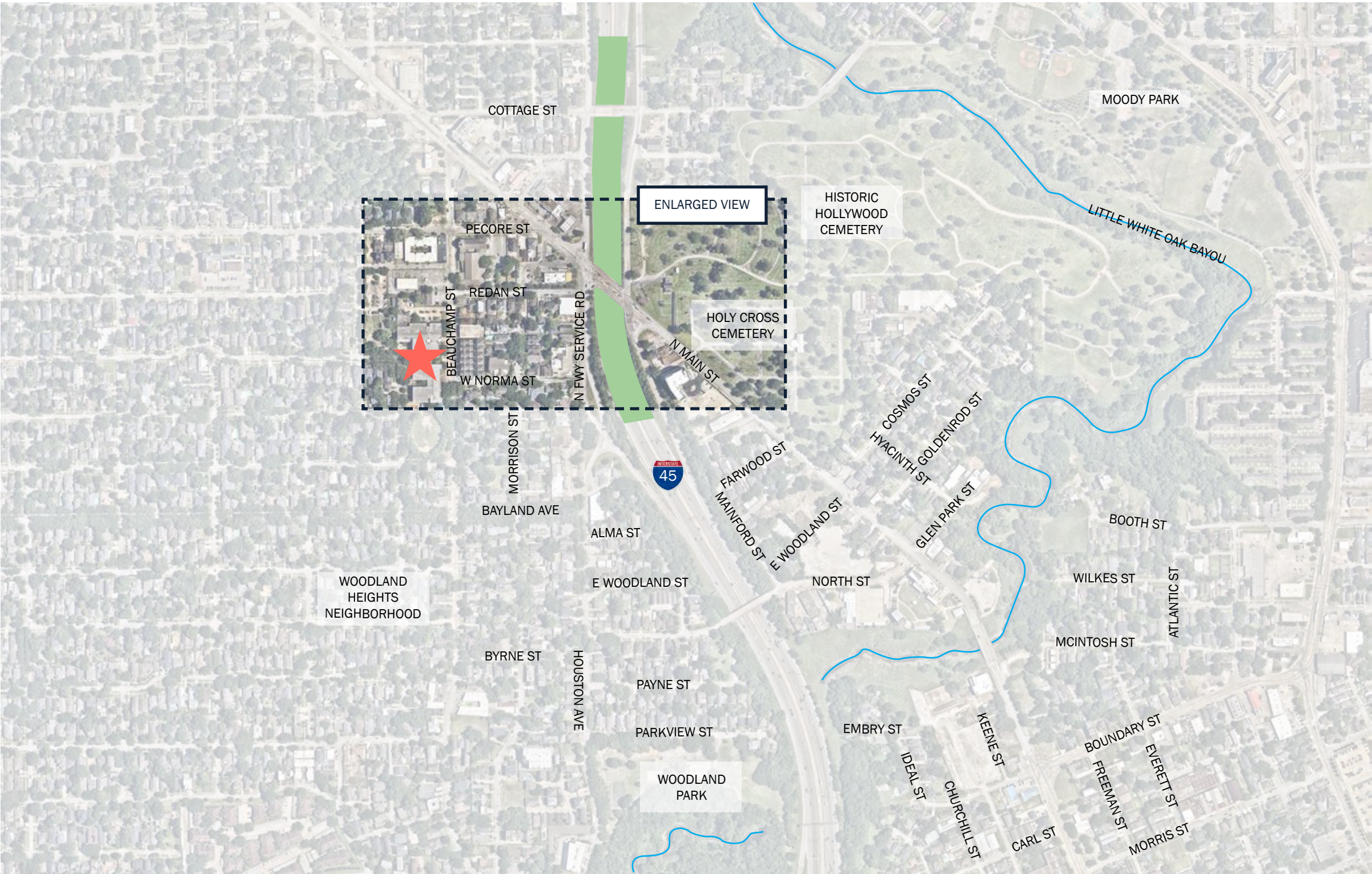


Proposed I-45 and Stokes Street


NOT TO SCALE



# TRAVIS ELEMENTARY SCHOOL

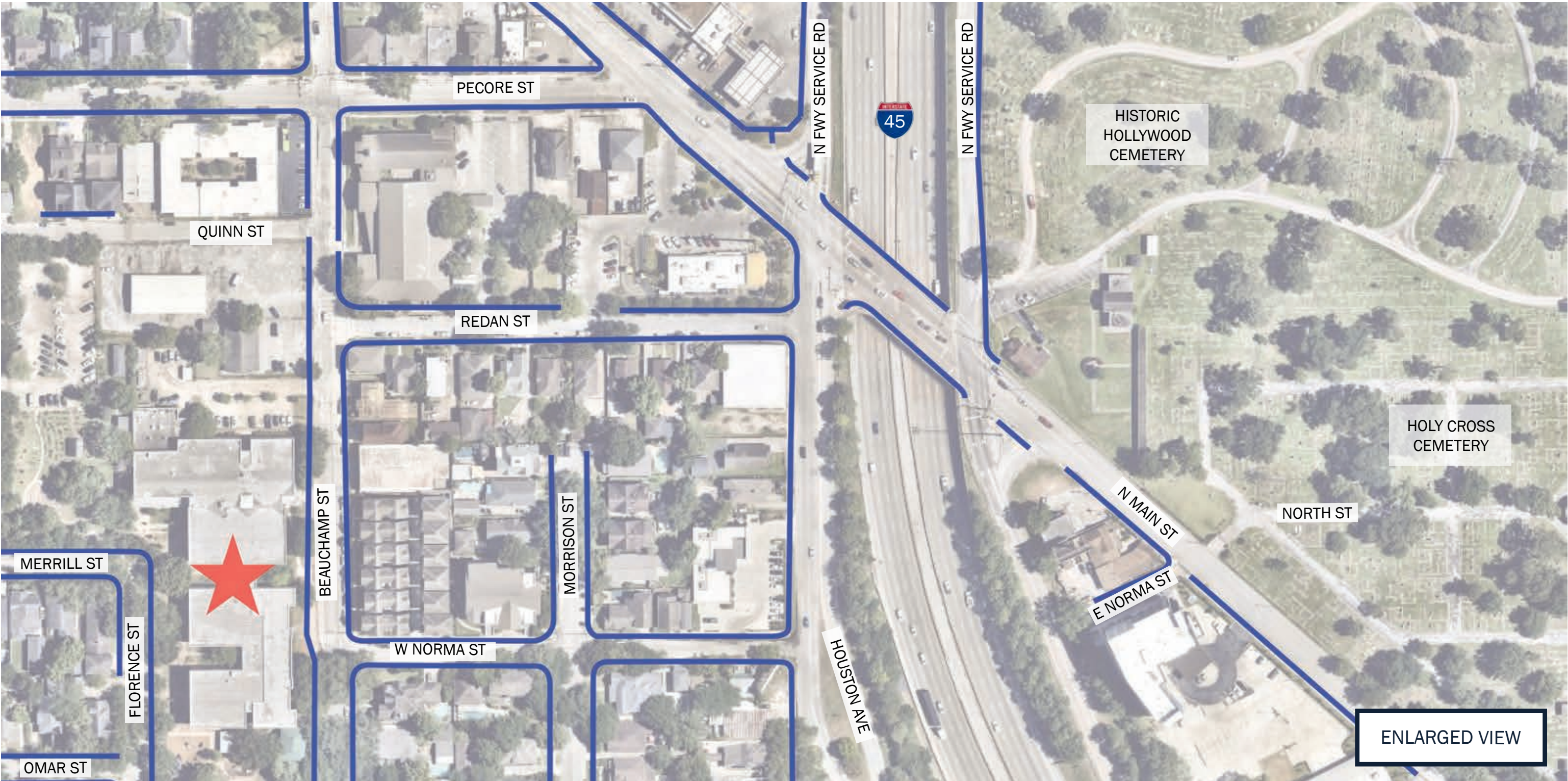


 Potential Deck Park     Travis Elementary School

 NOT TO SCALE



# TRAVIS ELEMENTARY SCHOOL



Existing Pedestrian Circulation

Travis Elementary School

NOT TO SCALE



# TRAVIS ELEMENTARY SCHOOL



Existing Pedestrian Circulation

Proposed Pedestrian Realm

★

 Travis Elementary School

↑

 NOT TO SCALE



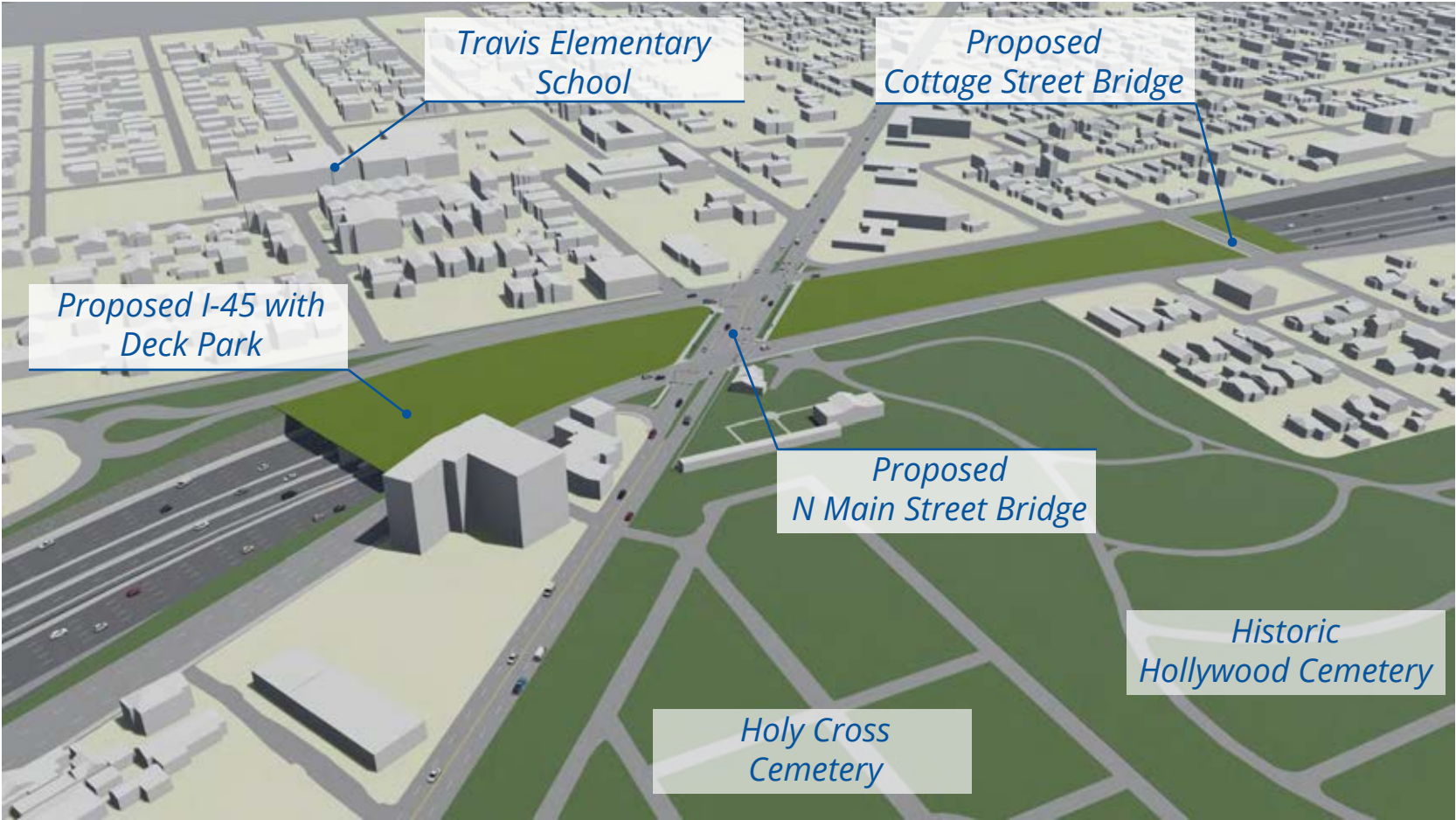
# TRAVIS ELEMENTARY SCHOOL



Location Map



Existing I-45 at Main St and Cottage St  
(Source: Google)

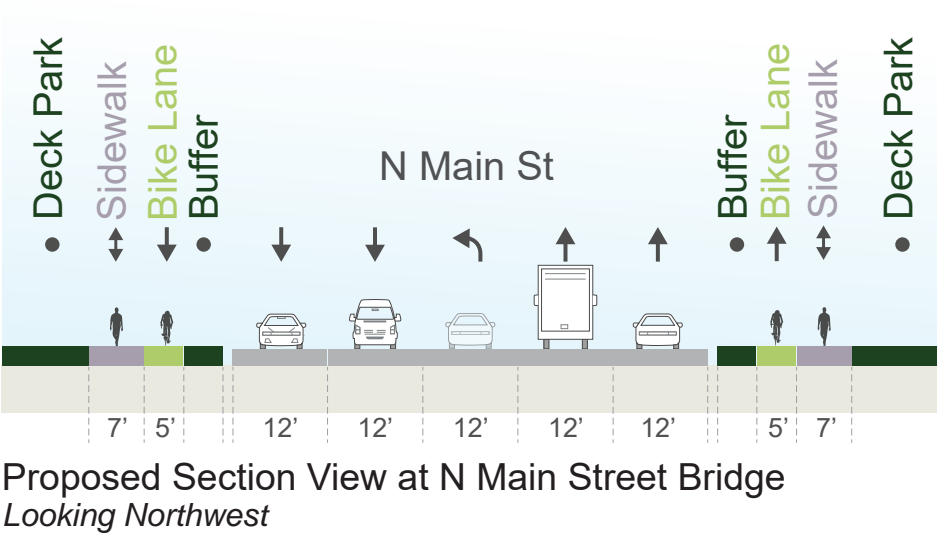


Proposed I-45 at Main St and Cottage St with Deck Park

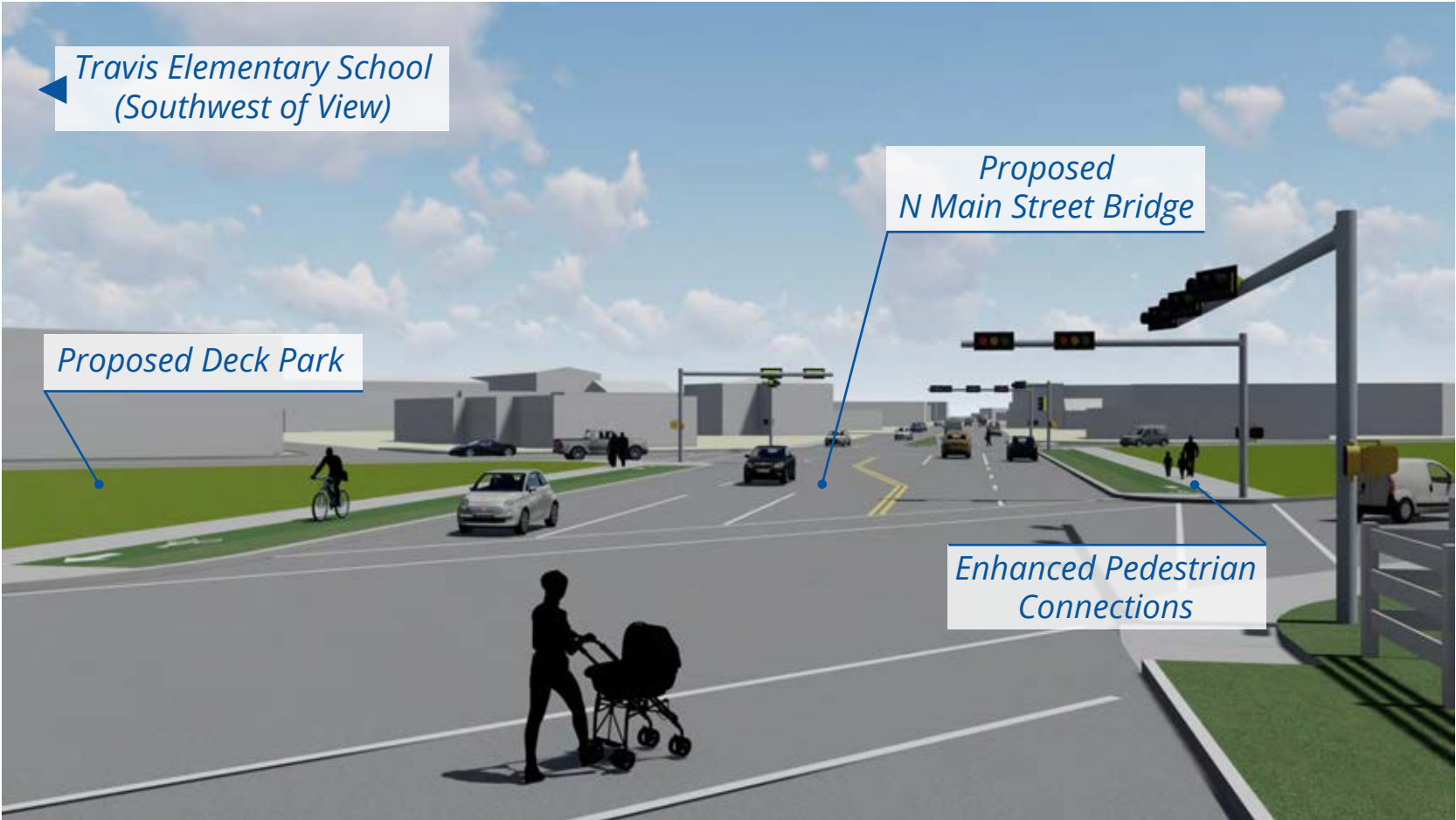
NOT TO SCALE



# TRAVIS ELEMENTARY SCHOOL



Existing N Main St Bridge over I-45  
(Source: Google)



Proposed N Main St Bridge over I-45

NOT TO SCALE



## Exhibit D

### Summary of Required Information

Timeline	Deliverable
Day 0	VRA Signed
Day 30	TxDOT will establish a publicly-available project-specific website (Relocations Article IV.2.1)
Day 45	TxDOT Provides Draft Standard Operating Procedure for LEP Resource Providers to FHWA for Review (LEP Article IV.8.g)
Day 60	<ul style="list-style-type: none"> <li>• TxDOT Provides Draft of Survey of Displaced Individuals to FHWA (LEP Article IV.8.k)</li> <li>• FHWA Provides Comments on TxDOT's Draft Standard Operating Procedure for LEP Resource Providers (LEP Article IV.8.g)</li> </ul>
Day 75	FHWA Provides Comments to TxDOT on Draft Survey of Displaced Individuals (LEP Article IV.8.k)
Day 90	<ul style="list-style-type: none"> <li>• Complete survey on non-residential displaced entities (Article IV.2.b)</li> <li>• TxDOT Finalizes Survey of Displaced Individuals (LEP Article IV.8.k)</li> <li>• TxDOT and FHWA Finalize Standard Operating Procedure for LEP Resource Providers (LEP Article IV.8.g)</li> </ul>
Day 120	<ul style="list-style-type: none"> <li>• TxDOT will develop and provide LEP training to relevant staff, contractors, etc. (LEP Article IV.8.j)</li> <li>• TxDOT will have completed Survey of Displaced Individuals (LEP Article IV.8.k)</li> </ul>
Day 150	<ul style="list-style-type: none"> <li>• TxDOT provides relocation services to non-residential entities requesting such services following survey (Relocations Article IV.2.b)</li> <li>• TxDOT provides first Report on Compliance with LEP Survey of Displaced Individuals (LEP Article IV.8.k) – <i>Note: Additional reports due 60 days after the 150 day report</i></li> </ul>



	<p><i>and every 60 days thereafter until all persons are relocated.</i></p>
Day 180	<p>Progress Report on Overall VRA Implementation of Required TxDOT Actions (Article VI) – <i>Note: Progress reports on overall VRA implementation are due every 180 days (Article VI). TxDOT and FHWA will agree on the Progress Report format prior to submission of TxDOT's first required report (Article VI). Reports must be accessible under Section 508 (Article V). FHWA will review and provide timely comments on each progress report to TxDOT (Article VI). Each Progress Report must include an update on all required TxDOT Actions: Reducing the NHHIP Footprint During Detailed Design; Displacements, Relocations, Housing, and Other Community Impacts; Flooding; Air Quality Mitigation; Structural Caps; Parks, Open Space, Trails, Pedestrian and Bicycle Facilities; Access During Construction; and Meaningful Access for Persons with Limited English Proficiency (LEP) (Article VI).</i></p> <p>-Specific Items to be Submitted with Progress Reports</p> <ul style="list-style-type: none"> <li>• Uniform Act Data for All Residential and Non-Residential Displacements (Relocations Article IV.2.a)</li> <li>• Status of non-residential relocation services (Relocations Article IV.2.b)</li> <li>• Access Plan for Essential Services (Relocations Article IV.2.c)</li> <li>• Report on acquisition or demolition of a parcel that was not included in the FEIS or ROD (Relocations Article IV.2.d)</li> <li>• As final design completed, document reduction in right-of-way leading to fewer displacements (Relocations Article IV.2.e)</li> <li>• Implementation of Affordable Housing Plan and Status of disbursement of \$30 million for</li> </ul>



	<p>affordable housing (Relocations Article IV.2.f) – <i>Note: Reporting to begin with first Progress Report after submission of the Affordable Housing Plan</i></p> <ul style="list-style-type: none"> <li>• Report on discussions with the City of Houston on the use of portions of the Project’s future surplus right-of-way for affordable and workforce housing (Relocations Article IV.2.g)</li> <li>• Report on Any Displacee Denied Benefits (Relocations Article IV.2.h)</li> <li>• Progress in Providing Enhanced Relocation Services (Relocations Article IV.2.i)</li> <li>• Update on residents or non-residential owners or renters cut off by project (Relocations Article IV.2.j)</li> <li>• Report on strategies being used for considering public input through future project development (Relocations Article IV.2.p)</li> <li>• Updates on public engagement meetings during design and construction of the project (Relocations Article IV.2.q)</li> <li>• Air quality mitigation implementation (Air Quality Mitigation Article IV.4.d)</li> <li>• Documentation of Any Delays in Providing Language Assistance Services for Relocations &amp; Acquisitions (LEP Article IV.8.e) – <i>Note: Submitted only as needed</i></li> <li>• LEP Training Reports (LEP Article IV.8.j)</li> </ul>
Day 210	TxDOT will have provided supplemental LEP services to those displaced residents and businesses who requested supplemental LEP services (LEP Article IV.8.k)
Day 365	The Parties will negotiate and finalize an updated TxDOT Language Assistance Plan



	and Policy, consistent with the U.S. Department of Justice's 2002 LEP guidance on updating recipient LEP plans (LEP Article IV.8)
TBD	Plan on schedule and disbursement of \$30 million for affordable housing (Relocations Article IV.2.f) – <i>Note: Report is due 90 days after completion of the Affordable Housing Plan</i>
TBD	Plan for enhanced relocation services (Relocations Article IV.2.i) – <i>Note: Report is due 30 days after completion of the Enhanced Relocations Services Plan</i>
TBD	Plan for Services Needed by People Experiencing Homelessness (Relocations Article IV.2.o) – <i>Note: Report is due 30 days after completion of the Plan for Essential Services for People Experiencing Homelessness</i>
TBD	Segment and Detailed Drainage Study (Flooding Article IV.3.b) – <i>Note: Report is due with the next Progress Report after completion of the study</i>
TBD	Before submittal to the Texas Transportation Commission for consideration, FHWA must review and approve any and all Final Requests for Proposal for Design-Build Contract (Flooding Article IV.3.c)
TBD	Evaluation of potential alternative pedestrian/bicycle routes to address the loss of the existing North Street bridge (Open Space Article IV.6.j) – <i>Note: Report is due in the next Progress Report after the evaluation is completed.</i>



# Neighborhood Access & Equity Grant Application

DOT-NAE-FY23-01

NHHIP  
Connections

Appendix B  
Benefits Cost Analysis  
Technical Memo

September  
**2023**





# North Houston Highway Improvement Program (NHHIP) Connections

## BENEFIT-COST ANALYSIS SUPPLEMENTARY DOCUMENTATION

### *FY2023 NEIGHBORHOOD ACCESS AND EQUITY PROGRAM*

PREPARED FOR: CITY OF HOUSTON  
SEPTEMBER 28, 2023



# EXECUTIVE SUMMARY

A benefit-cost analysis (BCA) was conducted for the **North Houston Highway Improvement Program (NHHIP) Connections** (the Project) for submission to the U.S. Department of Transportation (USDOT) as a requirement of a discretionary grant application for the FY 2023 Neighborhood Access and Equity (NAE) Grants program. The analysis was conducted in accordance with the benefit-cost methodology as outlined by USDOT in the Benefit-Cost Analysis Guidance for Discretionary Grant Programs, released in January 2023. The period of analysis includes 13 years of planning, engineering, and with facilities opening between 2029 and 2037. Each phase includes 30 years of benefits after construction is completed, with a final analysis year of 2058.

The **NHHIP Connections** project enhances a multi-billion-dollar highway improvement project by upgrading street-level facilities for all users and developing caps over highways for community connectivity. The improvements include 24 facilities that are highway caps, garden bridges, or signature bridges. Highway caps are planned above a section of I-69 that presently splits Midtown Houston, the Third Ward, and Museum Park. The existing highways create major gaps between residential communities, social resources, and cultural amenities. Caps will feature green space, walking and biking paths, and other features that will stitch together the neighborhoods north and south of I-69. Signature bridges will be located in three locations across I-69/SH-288 and replace existing auto-dominant overpasses with visually appealing facilities that include designated bike and pedestrian ways. These new bridges will bring prominent connections between Midtown and the Greater Third Ward.

Finally, the project will also develop 18 garden bridges in strategic locations around Downtown Houston to replace auto-dominant or in some cases auto-only bridges with people-forward facilities that include protected bike and pedestrian spaces and greenspace.

## COSTS

In undiscounted 2021 dollars, the capital costs equal \$119.7 million, including \$5.7 million in design/engineering costs and \$114.0 in construction costs until full Project completion in 2037. At a 7% real discount rate, these costs are \$70.8 million. Per Texas Department of Transportation (TxDOT), a partner on the program and lead of the larger NHHIP, no O&M costs are expected to be incurred as part of the Build scenario.

## BENEFITS

In 2021 dollars, the Project is expected to generate \$42.6 million in discounted benefits using a 7% discount rate. These monetized benefits are mainly derived from safety benefits for bicyclists and pedestrians, with some benefits accruing due to health benefits of additional cycling trips, improved bicycle amenities, mode shift, a reduction in vehicle miles traveled, and residual value. Table ES-1 summarizes the benefit quantified.

The project is expected to generate many benefits that have not been quantified for the purposes of this BCA. Cap spaces may generate additional recreational bike and pedestrian trips, visitors and economic value to surrounding real estate, while garden bridges and caps alike will have stormwater mitigation value. The BCA included takes a conservative approach on known benefits, indicating that economic value could be far greater than what the BCR or NPV show.



**Table ES-1: Project Impacts and Benefits Summary, Monetary Values (in Millions) of 2021 Dollars**

Current Baseline & Problem to be Addressed	Change to Baseline/ Alternatives	Impact Type	Monetized Results (at 7% discount rate)	Page Reference in BCA
The No-Build Scenario includes no changes on street-level for bikes or pedestrians, creating major safety and access gaps in neighborhoods around downtown Houston	New caps and bridges will include complete, protected facilities for all users	Mitigation in injury-causing and fatal crashes involving pedestrians and cyclists	\$28.5	9
		Additional bike ridership will provide health benefits for society	\$2.0	10
	New bike and pedestrian connections will generate decreases in vehicle miles traveled as auto trips divert modes to active transportation	Reduced VMT lower vehicle operating costs for drivers who divert to cycling	\$0.1	14
		Reduced VMT lowers emissions from diverted auto use	<\$0.1	13
		Reduced VMT lowers noise pollution from diverted autos	<\$0.1	14
		Reduced VMT decreases external highway use, creating auto safety savings	<\$0.1	10
		Reduced VMT decreases pavement damaged through auto diversion	<\$0.1	15
		Lower VMT generates reductions in congestion through auto diversion	<\$0.1	12
	The Project will provide wider, protected cycle tracks that are an amenity to existing and diverted bike traffic.	Intrinsic value of improved cycling facilities has benefit for existing and diverted cyclists	\$1.8	10
	All of the above	Residual Value	\$6.9	18
Transit amenities improvements at Wheeler Transit Center: adequate seating, weather shelter, and no-step access	The Project will deliver a cap that provides a number of new amenities to the transit center	Facility amenity improvements at a light rail station	\$3.3	12

Source: WSP, 2023





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# 1 INTRODUCTION

A benefit-cost analysis (BCA) was conducted for the **North Houston Highway Improvement Program (NHHIP) Connections** (the Project) for submission to the U.S. Department of Transportation (USDOT) as a requirement of a discretionary grant application for the Neighborhood Access and Equity (NAE) 2023 program. The following section describes the BCA framework, evaluation metrics, and report contents.

## 1.1 BCA FRAMEWORK

A BCA is an evaluation framework to assess the economic advantages (benefits) and disadvantages (costs) of an investment alternative. Benefits and costs are broadly defined and are quantified in monetary terms to the extent possible. The overall goal of a BCA is to assess whether the expected benefits of a project justify the costs from a national perspective. A BCA framework attempts to capture the net welfare change created by a project, including cost savings and increases in welfare (benefits), as well as disbenefits where costs can be identified (e.g., project capital costs), and welfare reductions where some groups are expected to be made worse off as a result of the proposed project.

The BCA framework involves defining a Base Case or “No Build” Case, which is compared to the “Build” Case, where the grant request is awarded, and the project is built as proposed. The BCA assesses the incremental difference between the Base Case and the Build Case, which represents the net change in welfare. BCAs are forward-looking exercises which seek to assess the incremental change in welfare over a project lifecycle. The importance of future welfare changes is determined through discounting, which is meant to reflect both the opportunity cost of capital as well as the societal preference for the present.

The analysis was conducted in accordance with the benefit-cost methodology as recommended by the USDOT in the 2023 Benefit-Cost Analysis Guidance for Discretionary Grant Programs. This methodology includes the following analytical assumptions:

- Defining existing and future conditions under a No Build base case as well as under the Build condition;
- Estimating benefits and costs during project construction and operation, including 30 years of operations beyond the Project completion when benefits accrue;
- Using USDOT recommended monetized values for reduced fatalities, injuries, property damage, travel time savings, and emissions, while relying on best practices for monetization of other benefits;
- Presenting dollar values in real 2021 dollars. In instances where cost estimates and benefits valuations are expressed in historical or future dollar years, using an appropriate inflation rate to adjust the values;
- Discounting future benefits and costs with a real discount rate of 7% (3% for CO<sub>2</sub> emissions) consistent with USDOT guidance.

## 1.2 REPORT CONTENTS

Section 2 of this Appendix contains a description of the **NHHIP Connections** elements, information on the general assumptions made in the analysis, and a description of the base case compared to the build case. Section 3 provides a summary of the anticipated project costs. Section 4 reviews the expected economic benefits the project would generate, including a review of the assumptions and methodology



used to calculate these benefits. Section 5 reports the high-level results of the benefit-cost analysis. Finally, Section 6 details the result of a sensitivity analysis when project inputs and assumptions are modified slightly.

## 2 PROJECT OVERVIEW

### 2.1 DESCRIPTION

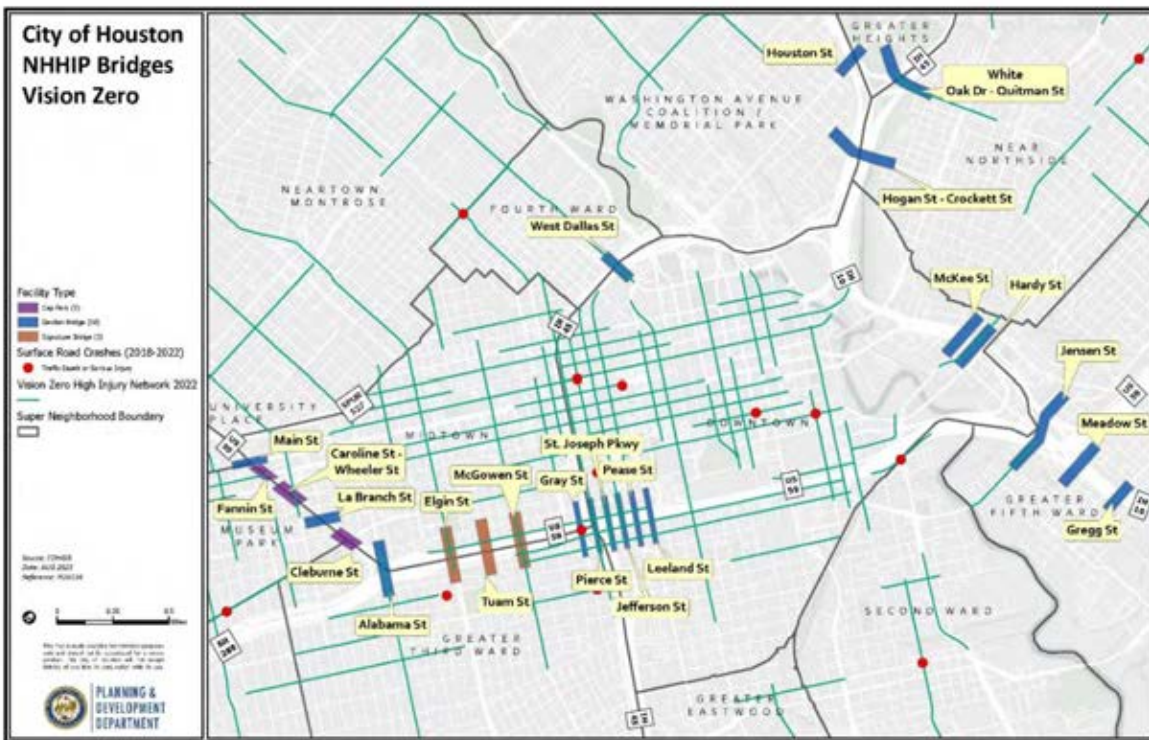
The **NHHIP Connections** project enhances a multi-billion dollar highway improvement project by upgrading street-level facilities for all users and developing caps over highways for recreational use. The improvements include 24 facilities that are highway caps, garden bridges, or signature bridges. Highway caps are planned above a section of I-69 that presently splits Midtown Houston, the Third Ward, and Museum Park. The existing highways create major gaps between residential communities, social resources, and cultural amenities. Caps will feature green space, walking and biking paths, and other features that will stitch together the neighborhoods north and south of I-69. Signature bridges will be located in three locations across I-69/SH-288 and replace existing auto-dominant overpasses with visually appealing facilities that include designated bike and pedestrian ways. These new bridges will bring prominent connections between Midtown and the Greater Third Ward.

Finally, the project will also develop 18 garden bridges in strategic locations around Downtown Houston to replace auto-dominant or in some cases auto-only bridges with people-forward facilities that include protected bike and pedestrian spaces and greenspace. As described below, the NHHIP developed without the Connections project would continue to have highways dividing vibrant neighborhoods east and north of Downtown Houston. Garden Bridges will provide multi-modal access from Disadvantaged neighborhoods including the Third Ward, Fourth Ward, and Greater Fifth Ward. The bridges have been placed in areas where neighborhoods have poor connectivity for non-motorists, in some cases creating pedestrian and bicycle connections in places where there has been no connection for over a mile in either direction, like the garden bridge planned for Crockett-Hogan St.

Figure 1 shows a map of the facilities, while Figures 2-3 provide design concepts and renderings of the cap parks and garden bridges.

## NHHIP Connections City of Houston

Figure 1: Map of Facilities Included in Build Case



Source: City of Houston, 2023

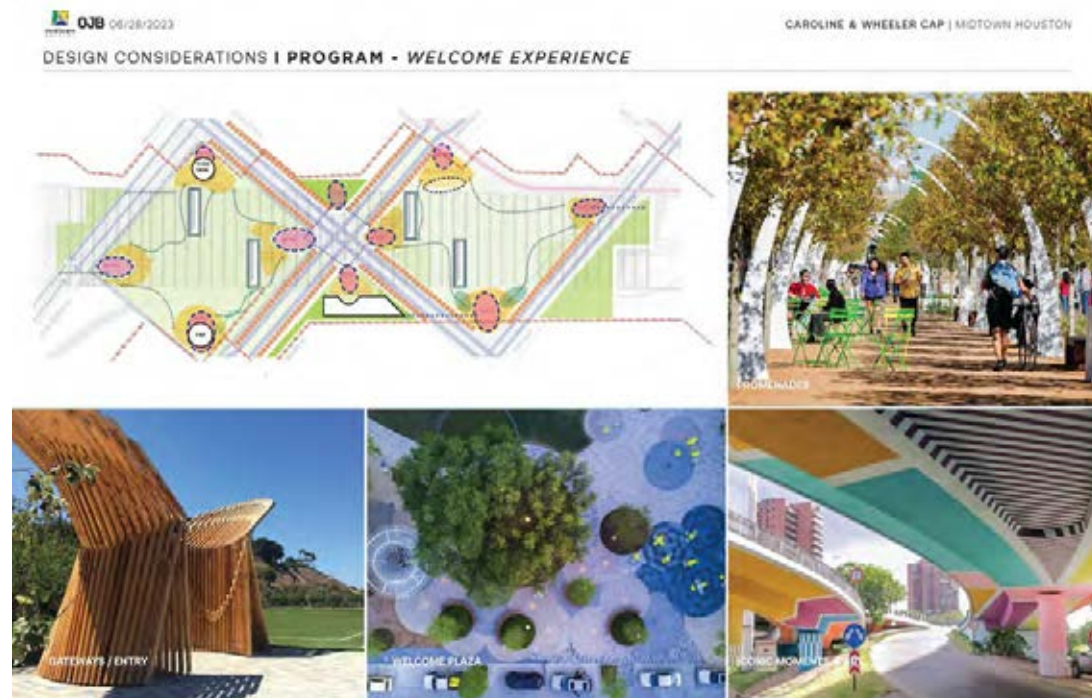
Figure 2: Example of Garden Bridge Facility



Source: City of Houston, 2023



Figure 3: Cap Park Conceptual Design - Caroline and Wheeler



Source: City of Houston, 2023

## 2.2 GENERAL ASSUMPTIONS

For project investments, dollar figures in this analysis are expressed in constant 2021 dollars (2021\$). The real discount rate used for this analysis was 7.0 percent, consistent with USDOT 2023 Benefit-Cost Analysis Guidance for Discretionary Grant Programs.

For the project, the evaluation period includes a staggered construction schedule, with projects generally south of downtown Houston opening first, and projects east/north of downtown Houston opening second. Table 1 shows the project schedule for all 24 facilities. Per consultation with the City of Houston and TxDOT, 2023 is the start of design period for all phases except 3C-1 and 3C-2, and facility openings coincide with the same year as construction end.

**Table 1: NHHIP Connections Project Schedule**

Segment	3A I-69	3B I-69 at SH-288	3C-1 I-10 and I-45 North	3C-2 I-10 and I-45 North	3D I-69
<b>Included Facilities</b>	Fannin St. Main St. Caroline St. at Wheeler Ave. La Branch St. Cleburne St. Almeda St.	Alabama St. Elgin St. Tuam St. McGowen St.	White Oak St. at Quitman St. Hogan St. at Crockett St. McKee St. Hardy St.	Jensen St. Meadow St. Gregg St.	W. Dallas St. Gray St. Pierce St. St. Joseph Pkwy. Jefferson St. Pease St. Leeland St.
30% Plans	1/15/2024	Complete	2025	2026	Complete
60% Plans	7/15/2024	10/13/2023	Not Yet Defined	Not Yet Defined	Complete
90% Plans	1/15/2025	1/17/2024	Not Yet Defined	Not Yet Defined	10/19/2023
100% Plans	6/16/2025	3/27/2024	Not Yet Defined	Not Yet Defined	1/29/2024
Project Letting	June 2026	March 2025	Not Yet Defined	Not Yet Defined	June 2024
Construction Begin	2026	2025	2029	2027	2031
Construction End	2032	2029	2033	2032	2037

Source: TxDOT

All benefits and costs are conservatively assumed to occur at the end of each year for purposes of present value discounting. Benefits accruing from the improvements are assumed to begin in the calendar year following construction's completion.

## 2.3 BASE CASE AND BUILD CASE

For the purposes of this BCA, the no-build/base case assumes that the NHHIP will move forward with bridges and facilities that meet current design, capacity, and safety levels. It also assumes that lids will be put over aspects of the highway, but not to the structural standards needed to support any additional use.

The build case, or the NHHIP Connect project, assumes structural costs for all 24 facilities that would support the additional design features on bridges and the greenery and recreational use of the highway caps over I-69. For caps and garden bridges, all other civil infrastructure and design costs have been included to account for the full costs of development. To align with USDOT BCA guidance, benefits have only been accrued for these facilities for which there are full development costs. In practice, structural costs of signature bridges have been included as part of the scope of the grant, but no benefits were quantified for these facilities.



## 3 PROJECT COSTS

### 3.1 CAPITAL COSTS

Capital costs for this project (Table 2) are associated with design and construction of the new facilities. Projects have been grouped into 5 separate phases, with different construction periods and opening dates between 2029 and 2037. The costs include the structural components needed to support the caps, garden bridges, and signature bridges, as well as standard civil infrastructure and other amenities that were estimated by Texas DOT (TxDOT) and their consultants.

As the scope is limited to amenities that are strictly in existing TxDOT Right-of-way (ROW) or in ROW that will be purchased in the No-build, no ROW costs are associated with the project. Capital costs were provided by the City of Houston and TxDOT in 2023 and are given in 2023 dollars. To adjust to 2021 dollars, the average consumer price index (CPI) was used to deflate costs to 2021 dollars. Because the no-build considers significant planning and design for the NHHIP without the Connections piece, TxDOT estimated preliminary engineering, planning, and design to be 5% of construction costs, which is slightly lower than standard given the economies of scale. In undiscounted 2021 dollars, the capital costs equal \$119.70 million, including \$5.7 million in design/engineering costs and \$114.0 in construction costs.

**Table 2: Project Schedule and Costs (\$2021 Millions)**

Year	Environmental / Prelim Eng	Construction (including contingency)	Total
2023	\$1.8	\$0.0	\$1.79
2024	\$1.8	\$0.0	\$1.79
2025	\$1.4	\$3.3	\$4.63
2026	\$0.8	\$13.8	\$14.58
2027	\$0.0	\$15.7	\$15.69
2028	\$0.0	\$15.7	\$15.69
2029	\$0.0	\$15.4	\$15.42
2030	\$0.0	\$15.4	\$15.42
2031	\$0.0	\$18.1	\$18.13
2032	\$0.0	\$5.7	\$5.71
2033	\$0.0	\$2.7	\$2.71
2034	\$0.0	\$2.7	\$2.71
2035	\$0.0	\$2.7	\$2.71
2036	\$0.0	\$2.7	\$2.71
Total	\$5.7	\$114.0	\$119.7

Source: City of Houston, TxDOT, 2023

### 3.2 OPERATING AND MAINTENANCE COSTS

Per consultation with TxDOT, no additional O&M costs are envisioned in the Build Case that would not already exist in the NHHIP program's No-Build operations and maintenance. As such, no change in O&M or Repair and Rehabilitation costs (R&R) are assumed.

## 4 PROJECT BENEFITS

The benefits of the **NHHIP Connections** project are many when considering the economic potential of the caps and redesigned bridges, equity considerations for city residents, and air quality/stormwater mitigation aspects of the project that are features of the Build Case. For the purposes of the BCA, benefits monetizable under the 2023 USDOT guidance include bike and pedestrian safety improvements, mortality reduction and health benefits for new bike trips, general amenity benefits for pedestrian amenities, and marginal emissions and vehicle O&M benefits. The residual value of the facilities was also monetized and applied at the end of the 30-year analysis period.

The analysis uses standardized factors provided by governmental and industry sources to efficiently determine the monetized value of user and social benefits resulting from the project improvements. Table 3 shows the Project's long-term benefits aligned to the benefit categories.

**Table 3: Project Benefits by Long-Term Outcome Category**

Type of Benefit	Relationship to NAE Goals	Description	Monetized (Discounted 2021\$M)
Safety	Primary Merit Criteria: Safety - Improved safety for bicyclists and pedestrians who are using improved garden bridges	Reduction in fatalities and injuries for cyclists and pedestrians	\$28.5
Health Benefits	Primary Merit Criteria: Quality of Life – Improved cycling facilities will promote cycling as a trip mode	An increase in biking due to the improvement of protected bike lanes on garden bridges increases the daily share of cyclists	\$2.0
Emissions and Vehicle O&M	Primary Merit Criteria: Environmental Sustainability and Economic Competitiveness	Bike increases relate directly to a diversion of short-distance auto trips, slightly lowering VMT	<\$0.1
Congestion, Noise, Pavement Damage, and External Highway Use Costs	Primary Merit Criteria : Quality of Life and Environmental Sustainability	Bike increases relate directly to a diversion of short-distance auto trips, slightly lowering VMT	<\$0.1
Active Transportation	Primary Merit Criteria : Quality of Life	Provision of cycle tracks creates a better amenity for all cyclists, creating inherent activity transportation facility benefits	\$1.9
Transit Facility Amenities	Primary Merit Criteria : Quality of Life	The Fannin-Light Rail cap will provide improved amenities for users of the Wheeler Transit Center	\$3.3
Residual Value	Primary Merit Criteria: State of Good Repair	Value of material after the operations period offsets the initial capital costs at a discounted rate	\$6.9

Source: WSP, 2023

As described in Section 4.4, the project is expected to generate many benefits that have not been quantified for the purposes of this BCA. Cap spaces may generate additional recreational bike and pedestrian trips, visitors and economic value to surrounding real estate, while garden bridges and caps



alike will have stormwater mitigation value. The BCA included takes a conservative approach on known benefits, indicating that economic value could be far greater than what the BCR or NPV show.

## 4.2 SAFETY

The safety benefits assessed in this analysis serve the greatest area of monetized benefit. Safety benefits are derived from the bicycle and pedestrian collisions that will be avoided because of the protected bike and pedestrian facilities that will exist on all garden bridges. As shown in Figure 2, garden bridges will create a wide, strongly protected barrier between vehicular traffic and bike/ped facilities. Intersection improvements will also be made to lower the potential for turning collisions. It is expected that many riders from surrounding roadways would use the new facility, though crashes as part of this analysis were focused on the specific bridges to be improved. These safety improvements are also in line with the City of Houston’s Vision Zero Plan, as well as the bicycle network proposed in the Houston Bike Plan.

Collisions between 2017-2021 were collected from TxDOT’s crash statistics portal and filtered to include injury-causing or fatality-based crashes to cyclists and pedestrians. This filter was the basis for the total potential number of crashes that may be subject to mitigation, as shown in Table 4.

**Table 4: Project Area Collision History, 2017-2021**

<b>Collisions Severity</b>	<b>Total Collisions - Pedestrian</b>	<b>Annual Rate of Collisions - Pedestrian</b>	<b>Total Collisions – Bicyclists</b>	<b>Annual Rate of Collisions – Bicyclists</b>
Possible Injury	5	1	6	1.2
Minor	4	0.8	1	0.2
Major	8	1.6	1	0.2
Fatality	1	0.2	2	0.4

Source: WSP, 2023

To estimate the reduction in bike and pedestrian collisions because of the Project, the BCA uses two Crash Modification Factors (CMF) associated with safety elements of the project: the installation of a cycle track with a median 2 meters away from a roadway, which has an associated CMF of 0.55 for bikes, and a median treatment for ped/bike safety, where pedestrian facilities are fully cordoned off from vehicular traffic, and has an associated CMF of 0.14.<sup>1,2</sup>

**Table 5. Project Lifetime – Reduction in Injuries and Deaths**

	<b>Number of Incidents Reduced</b>
Possible Injury - C	34.1
Non Incapacitating - B	19.1
Incapacitating - A	37.2
Killed - K	8.9

The annual reductions in collisions are monetized using USDOT values for collisions of different types (shown in Table 7). The project lifecycle’s safety benefits are expected to total \$131.8 million in 2021 undiscounted dollars, and \$28.5 million in 2021 dollars at a 7% discounted rate.

<sup>1</sup> <https://www.cmfclearinghouse.org/detail.php?facid=4034>

<sup>2</sup> [https://safety.fhwa.dot.gov/speedmgt/ref\\_mats/eng\\_count/2014/reducing\\_crashes.cfm](https://safety.fhwa.dot.gov/speedmgt/ref_mats/eng_count/2014/reducing_crashes.cfm)

**Table 6: Safety Estimation of Benefits, Millions of 2021 Dollars**

Benefit	Undiscounted	Discounted (7%)
Fatality Reduction	\$105.2	\$22.8
Injury Reduction	\$26.6	\$5.7
Property Damage Reduction	\$0.00	\$0.00
Total Safety Benefits	\$131.8	\$28.5

Source: WSP, 2023

**Table 7: Safety Benefits Assumptions and Sources**

Variable	Unit	Value	Source
No Injury - O	2021\$	\$4,000	USDOT BCA Guidance January 2023
Possible Injury - C		\$78,500	
Non Incapacitating - B		\$153,700	
Incapacitating - A		\$564,300	
Killed - K		\$11,800,000	

## 4.1 QUALITY OF LIFE

The Project's quality of life features are key to its ability to generate community benefits and mitigate the impact of highway traffic on communities. As a key feature, improved bike and pedestrian facilities will be incorporated onto all garden bridges. These facilities are largely replacing existing bridges that have no bike amenities at all, as well as degraded or missing pedestrian facilities. Based on 2023 USDOT guidance, monetized quality of life benefits are focused on these aspects, namely:

- Increased rates of bike ridership
- Improved experience for existing and new bike ridership
- Marginal reductions in VMT based on diversion to biking for local trips

**Table 8: Bike and Pedestrian Assumptions**

Variable	Unit	Value	Source
Existing conditions – Average Daily Traffic	Trips/day	Differs per facility	Replica
Existing conditions - bike and pedestrian share	Percentage	Differs per facility	Replica
Bike ridership increase due to project	Percentage	56%	The minimum value surveyed by various studies, as compiled by People for Bikes <sup>3</sup>
Annual growth of bike trips (build and no-build)	CAGR	0.8%	2000-2020 City of Houston Population annual growth rate, US Census Bureau
VMT reduction diversion – trips 0-0.5 miles in length	Percentage	35%	Conservative estimate of new bike trips that come from trips of this length
VMT reduction diversion – trips 0.5-2 miles in length	Percentage	50%	Conservative estimate of new bike trips that come from trips of this length

<sup>3</sup> People for Bikes, Protected Bike Lane Statistics. <https://www.peopleforbikes.org/statistics/economic-benefits>



Variable	Unit	Value	Source
VTM reduction diversion – trips 2-4 miles in length	Percentage	15%	Conservative estimate of new bike trips that come from trips of this length
Annualization factor	Factor	260	Weekdays per year

As shown in Table 8, data from Replica was used to estimate the existing conditions of traffic, including the share of bikes and pedestrians. Overall, it was estimated there are about 250 bike trips and 802 pedestrian trips on facilities that will be converted to garden bridges in the build case. To estimate the impact of a protected bikeway along these facilities, observed increases in ridership were reviewed from a review of studies produced by People for Bikes, and the minimum increase in ridership was taken as a conservative assumption. This rate, 56%, was applied to ridership across all facilities in the build case, which is in addition to a 0.8% annual growth in bike trips, which is computed based on Houston's population from the last two decades. While the improved facilities may improve pedestrian daily trips, this was not quantified.

**Table 9: Increase in Daily Bike Trips in the Build Scenario, 2037**

	Number of Bike Trips
No Build	282
Build	432

The increase in daily bike trips corresponding to the Build Scenario is assumed to come exclusively from diverted auto trips. Because of the relatively low share of other modes, it is expected that new facilities would most likely capture drivers. To conservatively manage this impact, it is assumed that all diverted auto trips will be from trips less than 4 miles, with 85% from trips less than 2 miles, as shown in Table 8. This limitation is used to realistically assume that the facilities would not change behavior for longer trips, but would have significant impact for local ones. After accounting for a standard vehicle occupancy factor of 1.67, the full project is expected to reduce 90 miles per day, or about 23,500 vehicle miles traveled per year. The total VMT reduced over the analysis horizon is 616, 439 miles.

A reduction in VMT provides a range of environmental and economic benefits that improve quality of life. USDOT BCA guidance provides per-VMT monetized values for benefits such as reduced auto safety costs from external highway use. The addition of separate and protected bike paths dramatically improve upon most of the current facilities available, creating a benefit for every mile biked on the new facility. The increase in bike trips, reduction and VMT, as well an additional per-trip benefit for improved cycle amenities that promote active transportation are monetized using values provided in the USDOT BCA guidance.

**Table 10: Quality of Life - VMT Diversion Assumptions and Sources**

Variable	Unit	Value	Source
Auto Average Safety Cost	2021\$ / VMT	0.0150	derived from USDOT BCA Guidance January 2023 Table A-14
Separated Cycle Track	2021\$ / cycle mile	\$1.77	USDOT BCA Guidance January 2023 Table A-9
Health Benefit – Reduction in Mortality – Cycling	2021 \$ / diverted trip to biking	\$6.42	USDOT BCA Guidance January 2023 Table A-13

Finally, the Fannin cap will be designed over Houston Metro's Red Line and the Wheeler Transit Center station. The Red Line is a light-rail line that runs north-south through central Houston, with major

connections in Downtown Houston, the Texas Medical Center, Hermann Park and Rice University, NRG Stadium and the Astrodome, and more. The cap's facilities will include enhanced amenities that have a monetary benefit per trip. Future aspects of the project will expand transit capacity at the Transit Center with the addition of a third track. Though the costs and benefits of the additional transit capacity are not considered in the scope of this Project, the structural investments in the Cap will be important to the transit expansion. Table 11 summarizes transit facility improvements that are part of the scope of this project. Houston Metro ridership reports<sup>4</sup> were used to estimate the number of transit users at the station. Quarterly reports from 2018, 2019, 2022, and 2023 were used to estimate the daily ridership, relying on pre-Covid and post-Covid trends, as the full impact of Covid-19's mobility shifts are uncertain for transit. Approximately 2,460 riders were averaged per weekday. Given substantial weekend ridership, a higher annualization factor of 322 was used to annualize transit ridership to approximately 790,000 boardings per year. Conservatively no growth in ridership was assumed.

**Table 11: Transit Facility Amenities Assumptions and Sources**

Variable	Unit	Value	Source
Platform/Stop Seating Availability	2021\$ / trip	\$0.13	USDOT BCA Guidance January 2023 Table A-10
Platform/Stop Weather Protection	2021\$ / trip	\$0.16	
Step-free Access to Station/Stop	2021\$ / trip	\$0.32	
Step-free Access to Vehicle	2021\$ / trip	\$0.08	
Estimated Trips	Boardings/day	2,459	Houston Metro Ridership Reports
Estimated Transit Annualization	Factor	322	Houston Metro Ridership Reports, per high weekend utilization

Table 12 describes the monetized benefits for quality of life improvements related to mode shift and its corresponding increase in bike trips and reduction in vehicle miles traveled. Overall, benefits are \$32.1 million dollars in undiscounted 2021 terms, and \$7.2 million in discounted terms.

**Table 12: Quality of Life Estimation of Benefits, Millions of 2021 Dollars**

Benefit	Undiscounted	Discounted (7%)
Safety (External Highway Use Cost)	\$<0.1	\$<0.1
Active Transportation (Cycle Track Amenities)	\$7.9	\$1.9
Health Benefits – Cycling Growth	\$9.4	\$2.0
Facility Amenities - Transit	\$14.7	\$3.3
Total Quality of Life Benefits	\$32.1	\$7.2

## 4.2 ENVIRONMENTAL SUSTAINABILITY

The Project's reduction in VMT has direct emissions benefits that can be quantified. USDOT guidance provides per metric ton values of reduced emissions. As shown in Table 13, emissions from carbon dioxide, nitrous oxide, particulate matter, and sulphur oxide can be calculated based on VMT and speed. Noise pollution is also another area of monetized benefits that can be counted when VMT is reduced.

**Table 13: Environmental Sustainability Sources and Assumptions**

Variable	Unit	Value	Source
Cost of CO2 emissions	2021\$ per metric ton	\$56 (in 2022) - \$88 (in 2050)	US DOT BCA Guidance, January 2023. Discounted at 3%.

<sup>4</sup> Houston Metro, monthly Ridership Reports. <https://www.ridemetro.org/about/records-reports/ridership-reports>



Cost of NOx emissions	2021\$ per metric ton	\$16,600 (in 2022) - \$18,900 (in 2050)	US DOT BCA Guidance, January 2023
Cost of PM2.5 emissions	2021\$ per metric ton	\$796,700 (in 2022) - \$907,600 (in 2050)	
Cost of SOx emissions	2021\$ per metric ton	\$44,300 (in 2022) - \$51,300 (in 2050)	
Emissions per VMT	Grams per VMT	Varies by year, vehicle type, speed, and emission type	California Air Resources Board EMFAC Database, 2021
Auto Average Noise Cost	2021\$ / VMT	0.0018	derived from USDOT BCA Guidance January 2023 Table A-14

As with other VMT-based benefits, the value from trip diversion to bikes is small, and benefits account for less than \$0.1 million in discounted 2021 dollars. However, many unquantified aspects of the project, like greenspaces on caps, stormwater retention, and walking or hiking trails in cap parks may have a positive effect on the sustainability of the project.

## 4.3 ECONOMIC COMPETITIVENESS

Reduced VMT has economic benefits through vehicle operations savings and congestion cost savings. USDOT guidance provides per-mile standards to evaluate the cost of reduced vehicle miles traveled, shown in Table 14.

**Table 14: Economic Competitiveness Assumptions and Sources**

Variable	Unit	Value	Source
Vehicle Operating Costs - Light Duty Vehicles	2021\$ / VMT	\$0.46	USDOT BCA Guidance January 2023 Table A-5
Auto Average Congestion Cost	2021\$ / VMT	0.1300	derived from USDOT BCA Guidance January 2023 Table A-14

These benefits account for about \$0.1 million in discounted 2021 dollars over the course of the project's timeline, with O&M savings accounting for the largest portion of benefits.

In addition, the projects have been evaluated in the past for their economic opportunity for communities around the facilities. A 2017 report<sup>5</sup> quantified the economic impact of caps and green facilities built around the highways. Though this study has different operating facilities than the project as proposed, it gives a sense for the worker and residence attraction, visitor spending, and real estate development potential highway caps and improved connections make. The report found that potential economic benefits could exceed \$1.0 billion in 2017 dollars for individual projects, and greater levels of economic generation if all facilities were completed, including further expansion of caps that may be feasible with the structural design of facilities within this scope. Because of the differences in final design and BCA methodology, no economic impact analysis has been used in the BCA calculations. Still, this study demonstrates the value caps can have in stitching neighborhoods together and expanding the urban footprint above highways.

Of the facilities reviewed, the Midtown Main Cap and Midtown Alameda Cap align most contiguously with the cap parks as part of the NHHIP Connections project. Economic analysis reviewed real estate development opportunities, which ranged from \$5-10 million dollars through the support of density

<sup>5</sup> HR&A, NHHIP Civic Opportunities: Impacts & Benefits

around the cap park and Wheeler Transit Center. The community benefits of both caps are especially strong, and the report mentions the cultural connectivity of connecting diverse neighborhoods like Midtown, the Third Ward, the Museum District, and Hermann Park as significant. Though not quantified, connections to other parks like Peggy Park and Emancipation Park could continue denser, sustainable economic development throughout the project area.

## 4.4 STATE OF GOOD REPAIR & RESIDUAL VALUE

Residual value benefits are derived from the value remaining on each investment's lifecycle value at the end of the analysis period. The design life of the facility was assumed to be 75 years. At the end of the project analysis period, which includes the first 30 years of operations, the facility will have a residual value. Discounted at 7%, the residual value totals \$6.9 million (Table 14). Given the long lead-time for the opening of all phases of the project and the need to cap the operations period at 30 years, the BCA limits the quantifiable safety, quality of life, and health benefits that accrue from later stages of this Project. Residual value is especially important for these facilities, as their useful life is expected to continue well beyond the final year of analyzed operations.

**Table 15: Residual Value Estimation of Benefits, Millions of 2021 Dollars**

Facility	Expected Lifespan	Construction Cost	Value in Final Year	
			Undiscounted	Discounted (7%)
Garden Bridges and Caps	75	\$128.0	\$83.7	\$6.9

Minor state of good repair benefits accrue from the reduction in pavement erosion as well. A value of \$0.0015 per VMT saved can be applied, as derived from FHWA's 2000 Cost allocation study. As with other VMT reduction benefits, the monetized benefit is less than \$0.1m in both undiscounted and discounted terms.



## 5 SUMMARY OF RESULTS

### 5.1 EVALUATION MEASURES

The benefit-cost analysis converts potential gains (benefits) and losses (costs) from the Project into monetary units and compares them. The following common benefit-cost evaluation measures are included in this BCA:

- Net Present Value (NPV): NPV compares the net benefits (benefits minus costs) after being discounted to present values using the real discount rate assumption. The NPV provides a perspective on the overall dollar magnitude of cash flows over time in today's dollar terms.
- Benefit Cost Ratio (BCR): The evaluation also estimates the benefit-cost ratio; the present value of incremental benefits is divided by the present value of incremental costs to yield the benefit-cost ratio. The BCR expresses the relation of discounted benefits to discounted costs as a measure of the extent to which a project's benefits either exceed or fall short of the costs.

### 5.2 BCA RESULTS

The total benefits from the project improvements within the analysis period are calculated to be \$42.6 million dollars in 2021 dollars. The total capital costs, including design and construction, are estimated to be \$70.8 million in 2021 dollars. The difference of the discounted benefits and costs equal a benefit cost ratio (BCR) of 0.6, while the net present value equals -\$28.2 million dollars. These values reflect the benefits that have been reasonably cost, using USDOT guidance and well-established sources to calculate benefits related to safety, health benefits, and a variety of benefits associated with lower VMT. These benefits demonstrate that the project's large potential for economic development and community connectivity are rooted in robust, measurable transportation-based benefits.

**Table 16: BCA Summary, Millions of 2021 Dollars**

BCA Metric	Project Lifecycle	
	Undiscounted	Discounted (7%)
Total Benefits	<b>\$247,998,219</b>	<b>\$42,595,935</b>
Emissions	\$32,406	\$7,097
Safety	\$131,780,300	\$28,470,269
Vehicle O&M	\$283,562	\$62,669
Pavement Damage	\$939	\$208
Congestion	\$80,137	\$17,711
Noise	\$1,110	\$245
Safety (External Highway Use Cost)	\$9,247	\$2,044
Active Transportation	\$7,927,955	\$1,881,268
Health	\$9,408,779	\$1,978,384
Transit Facility Amenities	\$14,735,233	\$3,325,488
Residual Value	\$83,738,551	\$6,850,554
Total Costs	<b>\$119,695,006</b>	<b>\$70,828,314</b>
Net Present Value (NPV)	<b>\$128,303,212</b>	<b>-\$28,232,378</b>
Benefit Cost Ratio (BCR)	<b>2.1</b>	<b>0.6</b>
Internal Rate of Return (IRR)	<b>-3%</b>	

## 6 SENSITIVITY TEST

The NHHIP Connections project benefits heavily from a cost perspective due to already-committed costs to lane widenings and other major highway-based investments that TxDOT is leading. These costs span all aspects of the Project, from environmental review and design to civil engineering. The 24 facilities enhance the heavy investment of the No-Build conditions with a wider array of community-based benefits. In turn, the costs of developing these facilities are considerably less than if it were to be a standalone investment. To account for this, a sensitivity test was formed to understand the impact of the BCR and NPV if capital costs for the structural and civil components of the project were to increase by 25%.

Overall, the BCR is lowered from a 0.6 to a 0.5. However, the impact to the NPV is more punitive, with a loss of over \$16 million for an NPV of -\$45.9 million. While the project's qualitative and non-monetized benefits demonstrate that the project is still worthwhile even with a lower NPV, the sensitivity test shows that the community benefits envisioned in this project are more feasible to develop in conjunction with other major investments- as it is currently proposed in the grant application.

Sensitivity Variable	Sensitivity Value	New BCR	New NPV	% Change in NPV	Source / Notes
Build Alternative	Build (7% Discount Rate)	0.6	-\$28.2m	-	No Change to the Model
Capital Cost Increase	25% increase in structural costs, 100% increase in design fee from 5% to 10% of construction budget	0.5	-45.9m	63%	25 percent increase chosen based on range displayed in the Summary of Cost Estimate.



# Neighborhood Access & Equity Grant Application

DOT-NAE-FY23-01

NHHIP  
Connections

Appendix C  
Letters of Support

September  
**2023**





125 EAST 11TH STREET, AUSTIN, TEXAS 78701-2483 | 512.463.8588 | WWW.TXDOT.GOV

September 25, 2023

The Honorable Pete Buttigieg  
Secretary of Transportation  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

On behalf of the Texas Department of Transportation (TxDOT), I am pleased to support the City of Houston and its partners for the North Houston Highway Improvement Project (NHHIP) application for a Reconnecting Communities Neighborhood Access and Equity - Capital Construction Grant. As part of TxDOT's efforts to mitigate NHHIP's impacts on surrounding communities, we have agreed to construct several garden bridges, cap parks, and signature bridges to foster deeper connections between communities that would otherwise be separated by the highway system. The grant is to fund the construction of additional structural support necessary to allow for future amenities to be constructed on the garden bridges, cap parks, and signature bridges.

Our strategic partner, the City of Houston (City), is requesting funding from FHWA to ensure that we can build the bridge and cap park infrastructure to a specification required to physically support the future development of parks, greenspace, pedestrian, and bicycle amenities in alignment with the City's comprehensive plan, Plan Houston; the Houston Climate Action Plan; the Resilient Houston plan; the Houston Bike Plan; and the Complete Communities program, the City's equitable development initiative.

TxDOT is the owner of the facilities listed in the grant, and this letter is intended to serve as our endorsement of the application and express our commitment to work with the City as its partner to receive and administer the grant funds for the construction of the project.

This grant opportunity will ensure that the City and other partners continue to move forward toward achieving the goal of safer and more connected communities. If you have any questions, please call me at (512) 305-9515 or you or your staff may contact Melanie Alvord, Director, Federal Affairs, at [Melanie.Alvord@txdot.gov](mailto:Melanie.Alvord@txdot.gov) or at (512) 944-5135.

Sincerely,

Marc D. Williams, P.E.  
Executive Director

cc: Eliza C. Paul, P.E., District Engineer, Houston District  
Melanie Alvord, Director, Federal Affairs Section



September 5, 2023

The Honorable Pete Buttigieg  
U.S. Department of  
Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide

for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Should you have any questions, I may be reached through Bronson Elliott Woods, my Deputy Chief of Staff, at 202-225-3816.

Very truly yours,

A handwritten signature in blue ink, reading "Sheila Jackson Lee". The signature is fluid and cursive, with the first name "Sheila" being the most prominent.

**Sheila Jackson Lee**  
**Member of Congress**



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**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-4329**

**September 19, 2023**

**The Honorable Pete Buttigieg**  
**U.S. Department of**  
**Transportation**  
**1200 New Jersey Avenue, SE**  
**Washington, DC 20590**

**Dear Secretary Buttigieg:**

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

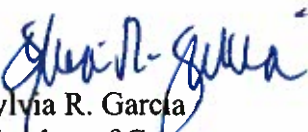
I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim

public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Sincerely,



Sylvia R. Garcia  
Member of Congress





## BORRIS L. MILES

STATE SENATOR • DISTRICT 13

COMMITTEES: CRIMINAL JUSTICE • HEALTH & HUMAN SERVICES • NATURAL RESOURCES & ECONOMIC DEVELOPMENT • NOMINATIONS • TRANSPORTATION

September 8, 2023

The Honorable Secretary Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC. 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP). I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Sincerely,

A stylized, handwritten signature of Borris L. Miles in black ink.

Borris L. Miles  
Senator, District 13

CAPITOL OFFICE:  
P.O. BOX 12068  
AUSTIN, TEXAS 78711  
(512) 463-0113  
FAX: (512) 463-0006  
DIAL 711 FOR RELAY CALLS

CENTRAL HOUSTON OFFICE:  
5302 ALMEDA ROAD, SUITE A  
HOUSTON, TEXAS 77004  
(713) 665-8322  
FAX: (713) 665-0009

NORTHEAST OFFICE:  
3300 LYONS AVENUE, SUITE 301  
HOUSTON, TEXAS 77020  
(713) 223-0387  
FAX: (713) 223-0524

FORT BEND OFFICE:  
2440 TEXAS PARKWAY, SUITE 110  
MISSOURI CITY, TEXAS 77489  
(281) 261-2360  
FAX: (281) 261-4726



**CAROL ALVARADO**  
STATE SENATOR  
DISTRICT 6

September 19, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. These improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day. To do so, we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian and bicycle facilities among other improvements.

DISTRICT OFFICE  
4450 HARRISBURG  
SUITE 400  
HOUSTON, TEXAS 77011  
(713) 926-6257

[carol.alvarado@senate.texas.gov](mailto:carol.alvarado@senate.texas.gov)

CAPITOL OFFICE  
P.O. Box 12068  
AUSTIN, TEXAS 78711  
(512) 463-0106  
FAX: (512) 463-0346





**CAROL ALVARADO**

STATE SENATOR  
DISTRICT 6

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Thank you for your consideration. Please do not hesitate to contact my office should you need any additional information

Sincerely,

A handwritten signature in black ink, appearing to read "Carol Alvarado".

Carol Alvarado  
Texas State Senator, District 6

DISTRICT OFFICE  
4450 HARRISBURG  
SUITE 400  
HOUSTON, TEXAS 77011  
(713) 926-6257

[carol.alvarado@senate.texas.gov](mailto:carol.alvarado@senate.texas.gov)

CAPITOL OFFICE  
P.O. BOX 12068  
AUSTIN, TEXAS 78711  
(512) 463-0106  
FAX: (512) 463-0346



TEXAS HOUSE OF REPRESENTATIVES

ANN JOHNSON

DISTRICT 134

September 6, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access





TEXAS HOUSE OF REPRESENTATIVES

**ANN JOHNSON**

DISTRICT 134

to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Sincerely,

A handwritten signature in blue ink that reads "Ann Johnson".

Representative Ann Johnson  
Texas House District 134



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# Christina Morales

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State Representative • District 145  
Harris County

The Honorable Pete Buttigieg  
U.S. Department of  
Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage



community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Sincerely,

A handwritten signature in black ink, appearing to read "Christina Morales", with a long horizontal flourish extending to the right.

Rep. Christina Morales  
Texas House of Representatives  
House District 145



# Abbie Kamin

Houston City Council Member, District C

September 20, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Re: Support for Neighborhood Access and Equity (RCN NAE) Capital Construction Grant Application

Dear Secretary Buttigieg:

Please allow this letter to serve as my respectful request for support of The City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of our city's communities where the opportunity for transportation facility improvements like pedestrian bridges and cap parks could not only be implemented through the NHHIP project but create a national example of a transformational and resilient greenspace. It was only a few years ago that images of this segment of highway streamed across televisions as Hurricane Harvey's waters took hold.

If built, these proposed improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day. First, however, we must fund the construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

I will be the first to acknowledge that residents have not always seen eye-to-eye with TxDOT, but this particular proposal is one that we can all get behind. The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion.

This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.





# Abbie Kamin

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Houston City Council Member, District C

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments.

My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your careful consideration of this grant and look forward to a greener, more equitable transportation system for all. Thank you for your time and all you do for our nation.

Most respectfully,

A handwritten signature in black ink that reads "Abbie Kamin". The signature is written in a cursive, flowing style.

Abbie Kamin  
Houston City Council Member, District C  
Chair, Public Safety & Homeland Security



September 6, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation 1200 New  
Jersey Avenue, SE Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Sincerely,

Council Member Tarsha Jackson  
City of Houston





The Honorable Pete Buttigieg  
U.S. Department of  
Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way.



These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Sincerely,

Commissioner Rodney Ellis  
Harris County Commissioner Precinct 1





## Commissioner Adrian Garcia

Harris County Precinct 2

1001 Preston, Suite 924 • Houston, TX 77002 • Tel: 713.755.6220 • Fax: 713.755.8810

The Honorable Pete Buttigieg  
U.S. Department of  
Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, the creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in



## Commissioner Adrian Garcia

Harris County Precinct 2

1001 Preston, Suite 924 • Houston, TX 77002 • Tel: 713.755.6220 • Fax: 713.755.8810

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communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Sincerely,

Commissioner Adrian Garcia  
Harris County Precinct Two





## Central Houston

The Honorable Pete Buttigieg  
U.S. Department of Transportation 1200 New  
Jersey Avenue, SE Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP). Central Houston Inc. is the civic leadership 501c6 non-profit that has led the design efforts for the Segment 3 Civic Opportunities in conjunction with our neighboring communities over the past decade.

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Best regards,

Kristopher Larson, AICP, LPM  
President & CEO



## Downtown Redevelopment Authority

The Honorable Pete Buttigieg  
U.S. Department of Transportation 1200 New  
Jersey Avenue, SE Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP). The Downtown Redevelopment Authority manages Tax Increment Reinvestment Zone #3 which is planning to be a significant funding partner towards implementation of the Civic Opportunities associated with the NHHIP.

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Cordially,

Kristopher Larson, AICP, LPM  
President





September 18, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation 1200 New  
Jersey Avenue, SE Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once in a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Thibodeaux".

Matt Thibodeaux  
Executive Director  
Midtown Redevelopment Authority



September 22, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connectivity and continuity across major highways, the creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. My office, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Respectfully,

*Brian G. Smith*

Brian G. Smith  
Board Chair

Cc: Dr. Abdul-Haleem Muhammad  
Transportation and Local Mobility Chair





## Greater Northside Management District

615 North Loop East, Suite 104, Houston, Texas 77022

(713) 229-0900 office (713) 695-6555 fax

September 22, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent the Greater Northside Management District, one of many communities where transportation facility improvements like pedestrian bridges (Houston Ave., White Oak-Quitman, Hogan-Crockett, McKee St., Hardy St, and Jensen Dr.) and cap parks (North Main on Segment 2) could take place through the NHHIP project.

The area we represent touches all three segments and we look forward to much needed improvements on all segments. Innovative designs will enhance the lives of our community members through connection, continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect. We also encourage all partners to apply these joint design efforts occurring in Segment 3 of the NHHIP to Segment 2 and Segment 1. We are supportive of the capital construction that is needed to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways that is a vital step in the process of ensuring that transportation infrastructure in Houston serves all modes of transportation.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston and the Greater Northside Area to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. We hope that these facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

We support this grant because we have a commitment to enhancing connectivity in communities. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments.

The Greater Northside Management District, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

*Rebecca Reyna*

Rebecca Reyna  
Executive Director  
Greater Northside Management District





## OST/Alameda Corridors Redevelopment Authority - TIRZ #7

3131 Emancipation Avenue, Suite 225 • Houston, Texas 77004 • [www.ostalmeda.com](http://www.ostalmeda.com)

Phone: 713-522-5154 • Fax: 713-522-1105 • [tir7@ostalmeda.com](mailto:tir7@ostalmeda.com)

### **Board of Directors:**

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Board Chair

*Lauren Haller Fontaine*  
Vice Chair

*Cathy Evans-Jackson*  
Secretary

*Hexser Holliday II*  
Treasurer

*Zinetta Burney*  
Board Member

*Brian Smith*  
Board Member

*Michael R. Williams*  
Board Member

**Executive Director**  
*Theola Petteway*

September 26, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

On behalf of the OST/Alameda Corridors Redevelopment Authority (OST/Alameda Authority), which administers Reinvestment Zone Number Seven, City of Houston, Texas (TIRZ #7), I, hereby, submit this letter of support for the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

The OST/Alameda Authority represents one of several communities in segment 3 of the NHHIP disconnected by US-59/IH-69 where proposed transportation facility improvements including pedestrian bridges and cap parks will be constructed. The proposed improvements will enhance the lives of our historically underserved community members by providing connection and continuity across these major highways, create greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day. The City of Houston, however, must obtain funding from the U.S. Department of Transportation for the construction of the infrastructure to a standard that will allow for future development of these components. Providing capital construction funding for our state transportation agency, Texas Department of Transportation (TXDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that multimodal transportation infrastructure in the City Houston serves everyone, regardless of how they travel.

The RCN NAE grant for the NHHIP project will support the joint efforts of the City of Houston and TXDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden placed on communities impacted by freeway expansion. The proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TXDOT on March 3, 2023, which reinforces the commitment by TXDOT to provide for mitigation of impacts of the



Highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant application will demonstrate the U.S. Department of Transportation's commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments.

The OST/Alameda Authority, a strategic partner with the City of Houston and the facility owner, TXDOT, requests your approval of the City of Houston's application for funding for a greener, more equitable transportation system.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Theola Petteway', with a long, sweeping horizontal stroke extending to the right.

Theola Petteway  
Executive Director



## Montrose Tax Reinvestment Zone 27

---

3200 Southwest Frwy # 2600

Houston, TX 77027

The Honorable Pete Buttigieg  
U.S. Department of  
Transportation 1200 New  
Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project can see a benefit. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational



opportunities, and ensures that Houston is a city that prioritizes equity in public investments. Our group, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

A handwritten signature in black ink, appearing to read 'Joe Webb', with a stylized flourish at the end.

Joe Douglas Webb, AIA  
Chair, Montrose Redevelopment Authority / TIRZ 27

# Neartown Association

September 18, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**Re: Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity grant application**

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

The Neartown-Montrose Super Neighborhood, which I represent, is immediately adjacent to several communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the quality of life in our communities, not just for the neighborhoods in which they are located, but for surrounding neighborhoods as well. We have learned through prior experience with the rebuilding of parts of US 59/I-69, which directly impacted Neartown-Montrose, the importance of providing connection and continuity across major highways. The bridges now spanning US 59/I-69 that were built with safe paths for pedestrians and bicycles, as well as vehicles, have helped to moderate the disruptive effects of highway infrastructure cutting through our neighborhoods. The addition of pedestrian bridges and cap parks as part of the NHHIP project will provide these important connections and will also enable creation of much needed greenspace offering mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day. But the city must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, with engagement from our community members and stakeholders, and will lessen the financial burden for creating greenspace to mitigate the impacts on our communities of freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary

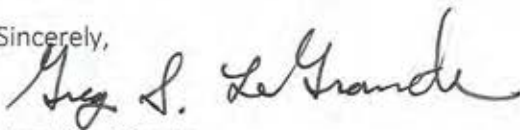


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Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. On behalf of the Neartown-Montrose community, I appreciate your consideration of this grant.

Sincerely,

A handwritten signature in black ink, reading "Greg S. LeGrande". The signature is fluid and cursive, with the first name "Greg" and last name "LeGrande" clearly legible.

Greg S. LeGrande  
Neartown President



# SUPER NEIGHBORHOOD 64 & 88

## GREATER EASTWOOD, LAWDALE, & WAYSIDE

September 20, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation 1200 New  
Jersey Avenue, SE Washington, DC 20590

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application submitted for the North Houston Highway Improvement Project (NHHIP).

I represent one of many communities where transportation facility improvements like pedestrian bridges and cap parks could take place through the NHHIP project. If built, these improvements will enhance the lives of our community members through connection and continuity across major highways, creation of greenspace, and offer mitigation against the urban heat island effect that adds an extra two to five degrees to temperatures experienced on any given day; but we must first fund construction of the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for our state transportation agency, the Texas Department of Transportation (TxDOT), to create the foundation for future pedestrian realm improvements like bridges and cap parks across major highways is a vital step in the process of ensuring that transportation infrastructure in Houston serves everyone, regardless of how they travel.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston and TxDOT to address the barriers posed by high-speed, dangerous highways, allow us to engage community members and stakeholders, and will lessen the financial burden for creating greenspace placed on communities impacted by freeway expansion. This proposed collection of pedestrian and greenspace amenities that span across major highways presents a once-in-a-generation opportunity for the City of Houston to reclaim public space for use by pedestrians in a safe, accessible, and inspiring way. These facility improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, which reinforces the commitment by TxDOT to provide for mitigation of impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

Funding this grant award will demonstrate a commitment to enhancing connectivity in communities that have long dealt with the impacts of highways as a barrier. Safe, multimodal accessibility increases access to economic opportunities, generates newfound recreational opportunities, and ensures that Houston is a city that prioritizes equity in public investments. Super Neighborhood 64 & 88, the City of Houston, and their strategic partner and facility owner, TxDOT, appreciate your consideration of this grant and look forward to a greener, more equitable transportation system.

Amy Catherine Dinn

President Super Neighborhood 65 & 88

[superneighborhood64and88@gmail.com](mailto:superneighborhood64and88@gmail.com)





The Honorable Pete Buttigieg  
U.S. Department of Transportation 1200 New Jersey Avenue, SE  
Washington, DC 20590

September 19, 2023

Dear Secretary Buttigieg:

Museum Park Super Neighborhood strongly supports the City of Houston's capital construction grant application - Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) submitted for the North Houston Highway Improvement Project (NHHIP), and appreciates your consideration.

The project segment that traverses Museum Park is a transit hub connecting to Houston's METRO transit system at Wheeler Station. The immediately adjacent ION District is an incubator hub founded by Rice University, where "Every Better Way Needs a Way to Begin". There is no other collection of art, cultural, faith, opportunity, and educational institutions, with a major park - Hermann Park, in the United States that serves such a wide spectrum of people. The Museum Park segment provides transit to Hermann Park and Miller Outdoor Theater, as well as the 19 surrounding Museums hosting over 8.7 million visitors/year. Visitors are drawn by the Museum of Fine Arts, the Houston Zoo, Buffalo Soldiers Museum, Houston Museum of African American Culture, Houston Children's Museum, the Houston Museum of Natural Science and others. Houston's Miller Outdoor Theatre in Hermann Park is unique in the United States, offering an eight-month season of professional entertainment that is artistically excellent, culturally diverse - the largest "always free" program of its kind in the country. The Museums feature special programs for students of the Houston Independent School District (with an 80% socioeconomically underserved student population) and free days for the public and. One example, the Museum of Natural Science is committed to reaching every student in HISD with a program that captures all 4th graders. The program reached over 17,000 students each year pre- COVID and saw over 14,000 students in the 2022-23 school year. These destinations are heavily used by Houston's economically, culturally, and racially diverse population. The City of Houston and Texas Department of Transportation (TX DoT) are working collaboratively, along with others, to create a system of cap parks consisting of

The caps in the Museum Park segment would also serve many of the 93,000 part-time and fulltime students of the Houston Community College as well as many of the 8,000 students attending nearby Texas Southern University.

We believe that this project in its entirety is critical for Houston's future, and will be transformational in providing educational, economic, and health opportunities that can be difficult to access without transit and connections that serve the wider community. We raise these points to demonstrate that the community is stitched together in the Museum Park segment in a very unique and important way - drawing regional and national visitors who might not otherwise have access to the Museum Park destinations.

Adding pedestrian bridges and cap parks could take place through the NHHIP project, creating gathering places, greenspace and shade to make transit in Houston more useable - to mitigate Houston's sometimes brutal heat, better managing storm water, and enhancing the all-important sense of well-being for walkable communities. To accomplish this, we must first fund the infrastructure to a standard that allows for future development of these components. Providing capital construction funding for the Texas Department of Transportation (TxDOT) to allow future pedestrian realm improvements is key towards transportation in Houston that serves all.

The RCN NAE: NHHIP grant will support the joint efforts of the City of Houston, TxDOT and others to address the barriers posed by high-speed, dangerous highways, a project that would otherwise be financially challenging, providing multi-generational benefit. Community engagement is key, has been ongoing, and we trust that will continue. These improvements serve the spirit of the Voluntary Resolution Agreement signed by FHWA and TxDOT on March 3, 2023, reinforcing the commitment by TxDOT to mitigate impacts of the highway expansion through preservation and creation of parks, open space, trails, pedestrian, and bicycle facilities, among other improvements.

The commitment to enhancing connectivity in communities that have dealt with the impacts of highways as a barrier will be demonstrated by funding this grant for safe, multimodal accessibility increased access to economic opportunities, and enhanced environmental space. We appreciate your consideration of this application, looking forward to a greener, more equitable transportation system.

*Kathleen O'Reilly*

Kathleen O'Reilly, President  
Museum Park Super Neighborhood  
[www.museumparksn.org](http://www.museumparksn.org)

# LINK HOUSTON

September 26, 2023

The Honorable Pete Buttigieg  
U.S. Department of Transportation  
1200 New Jersey Ave., S.E.  
Washington, D.C., 20590-0001

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Jordan Thomas

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Aaron Cano, MPH

Catharina "Dd"  
Budiharto

Aja Edwards-Smith

Gabe Cazares

Dear Secretary Buttigieg:

I am writing to support the City of Houston's Reconnecting Communities and Neighborhoods: Neighborhood Access and Equity (RCN NAE) capital construction grant application to fund improved crossings and connections across the North Houston Highway Improvement Project (NHHIP). LINK Houston believes that the NHHIP, as a whole, is a misguided project that will primarily cause significant harm to historically Black and brown communities within the project footprint. However, this award will improve conditions above the design currently proposed by the Texas Department of Transportation (TxDOT).

For many years, LINK Houston has been working alongside communities that will be negatively impacted by the NHHIP – through displaced homes and businesses, increased noise and pollution, and widened barriers – to advocate for design changes that would minimize these burdens. One outcome of these efforts is the Voluntary Resolution Agreement (VRA) between TxDOT and the Federal Highway Administration, outlining required actions to resolve Civil Rights complaints with the project. As a watchdog of the VRA, we are encouraged by TxDOT's participation in this application pursuant to VRA section #5.

On balance, the NHHIP remains an inequitable project, and many of our concerns with the project remain unaddressed. However, we support this application as the award will improve conditions above the current proposal. LINK Houston will hold TxDOT, the City of Houston, and other public agencies to account to ensure other affected communities in subsequent sections of the NHHIP receive an equitable share of attention and resources.

Sincerely,

DocuSigned by:

  
10C4EA119057487...  
Gabe Cazares

Executive Director







# Resolution

## NO. 2021-11

### **A RESOLUTION RELATING TO THE NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT**

**WHEREAS**, the North Houston Highway Improvement Project (NHHIP) was initiated to update the I-45 North Corridor from Beltway 8 North to and around Downtown Houston and enhance safety and travel for residents, businesses, and visitors to the Houston-Galveston region.

**WHEREAS**, the Transportation Policy Council has continuously included the North Houston Highway Improvement Project in the Regional Transportation Plan since 2005 as a project of regional significance and an important element of the region's transportation future.

**WHEREAS**, multiple public engagement activities conducted by TxDOT and by the City of Houston, Harris County, and other stakeholders during the environmental review process have generated substantial public comment, robust discussion at the Transportation Policy Council, and resulted in a series of community and local government proposed refinements to the project.

**WHEREAS**, the Texas Department of Transportation issued a Record of Decision (ROD) on February 1, 2021 identifying the Preferred Alternative for the North Houston Highway Improvement Project.

**WHEREAS**, in the Record of Decision announcement, the Texas Department of Transportation committed to mitigate and offset adverse impacts of the project as part of its further planning and development, and has subsequently reinforced that commitment in other settings.

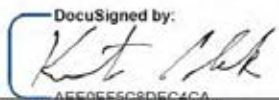
**NOW, THEREFORE, BE IT RESOLVED BY THE TRANSPORTATION POLICY COUNCIL** that the Transportation Policy Council supports continued development and refinement of the North Houston Highway Improvement Project and the Texas Department of Transportation's commitment to refine the project to minimize and mitigate adverse community impacts from the project as it moves towards eventual construction and completion.

**BE IT FURTHER RESOLVED** that the Transportation Policy Council commits the Metropolitan Planning Organization to help facilitate and support a cooperative approach between the Texas Department of Transportation and local agencies during the next steps of planning and design of the North Houston Highway Improvement Project, and with any other efforts to collaborate on project design that can address stakeholder and community concerns and environmental impacts.

**PASSED AND APPROVED** this 26<sup>th</sup> day of March 2021, by the Transportation Policy Council.

APPROVED:

ATTEST:

DocuSigned by:  
  
AEE0EF5C8DEC4CA...

Hon. Kenneth Clark, Chairman  
Transportation Policy Council

DocuSigned by:  
  
5225D1724D6C944D

Hon. Grady Prestage, Secretary  
Transportation Policy Council



# Neighborhood Access & Equity Grant Application

DOT-NAE-FY23-01

NHHIP  
Connections

Appendix D  
Budget

September  
**2023**



NAE Grant Application  
NHHIP Connections  
City of Houston

## Budget

The overall programmed budget for Segment 3 of the NHHIP project as listed in the region's Transportation Improvement Program (TIP), including the NHHIP Connections, is \$828,940,000. That gross amount is a combination of \$594,752,000 from the metropolitan planning organization, Houston-Galveston Area Council, and \$234,188,000 from TxDOT. The ask of \$50,803,566.40 in this grant application for structural support required to support future amenity development on the included facilities represents roughly 5% of the overall project cost. Design, environmental, and other costs are covered by the broader NHHIP project, of which the NHHIP Connections are one part.

Figure 3 presents the capital construction budget of the facilities within the scope of the NHHIP Connections grant application, categorized by which funding requests are in Disadvantaged areas and which are in Non-Disadvantaged areas.

Figure 1: Facilities included in the NAE Grant Application.

	Disadvantaged	Non-Disadvantaged	Grand Total
<b>Cap Parks</b>		\$38,107,518	\$38,107,518
Caroline St. - Wheeler Ave. Cap Park		\$15,297,004	\$15,297,004
Cleburne St. - Almeda St. Cap Park		\$9,854,232	\$9,854,232
Fannin St. Cap Park		\$12,956,282	\$12,956,282
<b>Garden Bridges</b>	\$6,961,100	\$3,324,190	\$10,285,290
Alabama St.	\$566,200		\$566,200
Gray St.	\$573,650		\$573,650
Gregg St.	\$447,000		\$447,000
Hardy St.	\$488,720		\$488,720
Hogan St. - Crockett St.	\$514,050		\$514,050
Houston St.	\$387,400		\$387,400
Jefferson St.		\$636,230	\$636,230
Jensen St.	\$1,564,500		\$1,564,500
La Branch St.		\$369,520	\$369,520
Leeland St.		\$709,240	\$709,240
Main St.		\$335,250	\$335,250
McKee St.	\$506,600		\$506,600
Meadow St.	\$436,390		\$436,390
Pease St.		\$688,380	\$688,380
Pierce St.	\$573,650		\$573,650
St. Joseph Pkwy.		\$585,570	\$585,570
West Dallas St.	\$500,640		\$500,640
White Oak Dr. - Quitman St.	\$402,300		\$402,300
<b>Signature Bridges</b>	\$10,697,100		\$10,697,100
Elgin St.	\$3,529,500		\$3,529,500
McGowen St.	\$3,773,850		\$3,773,850
Tuam St.	\$3,393,750		\$3,393,750
<b>Grand Total</b>	\$17,658,200	\$41,431,708	\$59,089,908
<b>20% Local Match</b>	N/A	\$8,286,341.60	\$8,286,341.60
<b>Total Grant Funding Request</b>	\$17,658,200	\$33,145,366.40	\$50,803,566.40



# Neighborhood Access & Equity Grant Application

DOT-NAE-FY23-01

NHHIP  
Connections

Appendix E  
Project Location Map

September  
**2023**





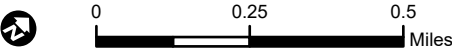
# City of Houston NHHIP Bridges CEJST Tracts: Disadvantaged

- Facility Type
- Cap Park (3)
  - Garden Bridge (18)
  - Signature Bridge (3)

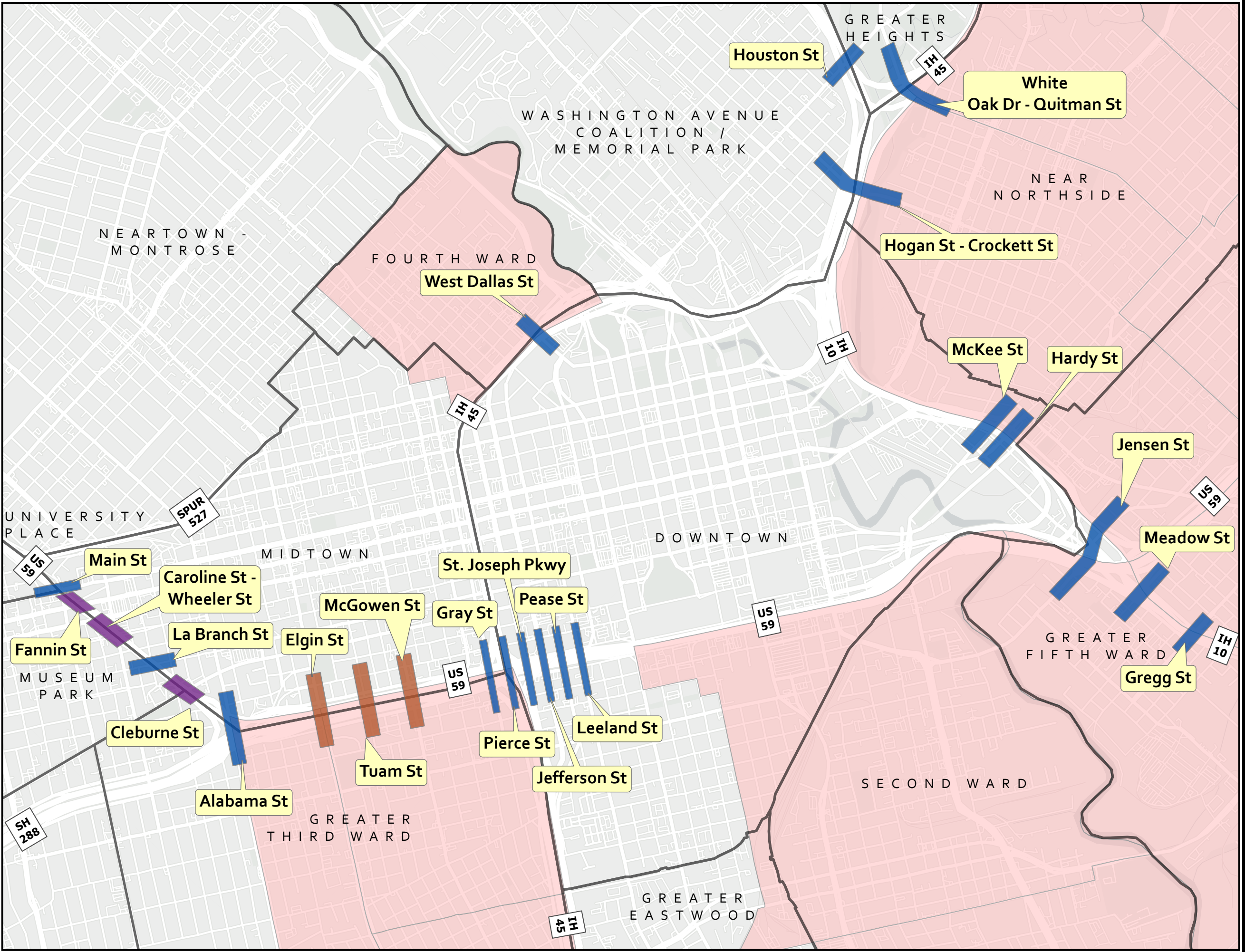
CEJST Disadvantaged

Super Neighborhood Boundary

Source: COHGIS  
Date: AUG 2023  
Reference: PJ26134



This map is made available for reference purposes only and should not be substituted for a survey product. The City of Houston will not accept liability of any kind in conjunction with its use.





**Application for Federal Assistance SF-424**

\* 1. Type of Submission:

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

\* 2. Type of Application:

- ☒ New  
☐ Continuation  
☐ Revision

\* If Revision, select appropriate letter(s):

\* Other (Specify):

\* 3. Date Received:

09/27/2023

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

**State Use Only:**

6. Date Received by State:

7. State Application Identifier:

**8. APPLICANT INFORMATION:**

\* a. Legal Name:

City of Houston

\* b. Employer/Taxpayer Identification Number (EIN/TIN):

74-6001164

\* c. UEI:

YAEESL5VL8V9

**d. Address:**

\* Street1:

611 Walker Street

Street2:

25th Floor

\* City:

Houston

County/Parish:

\* State:

TX: Texas

Province:

\* Country:

USA: UNITED STATES

\* Zip / Postal Code:

77002-1543

**e. Organizational Unit:**

Department Name:

Houston Public Works

Division Name:

**f. Name and contact information of person to be contacted on matters involving this application:**

Prefix:

\* First Name:

Luci

Middle Name:

\* Last Name:

Correa

Suffix:

Title:

Deputy Assistant Director - Grants Management

Organizational Affiliation:

\* Telephone Number:

832-395-2677

Fax Number:

\* Email:

Luci.Correa@houstontx.gov

Application for Federal Assistance SF-424

\* 9. Type of Applicant 1: Select Applicant Type:

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

\* 10. Name of Federal Agency:

Department of Transportation

11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

\* 12. Funding Opportunity Number:

DOT-NAE-FY23-01

\* Title:

Neighborhood Access and Equity (NAE) Program

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

\* 15. Descriptive Title of Applicant's Project:

North Houston Highway Improvement Project (NHHIP) Connections

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments



**Application for Federal Assistance SF-424****16. Congressional Districts Of:**

\* a. Applicant TX-018

\* b. Program/Project TX-018

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

**17. Proposed Project:**

\* a. Start Date: 10/28/2024

\* b. End Date: 12/31/2035

**18. Estimated Funding (\$):**

* a. Federal	50,803,566.40
* b. Applicant	
* c. State	
* d. Local	8,286,341.60
* e. Other	
* f. Program Income	
* g. TOTAL	59,089,908.00

**\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

**\* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

**21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)**

☒ \*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix:  \* First Name: Carol

Middle Name: Ellinger

\* Last Name: Haddock

Suffix:

\* Title: Director, Houston Public Works

\* Telephone Number: 832-395-2500 Fax Number: 

\* Email: carol.haddock@houstontx.gov

\* Signature of Authorized Representative:

DocuSigned by:

Carol Haddock

\* Date Signed: 9/27/2023

**BUDGET INFORMATION - Construction Programs***NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case, you will be notified.*

COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Columns a-b)
1. Administrative and legal expenses	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
2. Land, structures, rights-of-way, appraisals, etc.	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
3. Relocation expenses and payments	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
4. Architectural and engineering fees	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
5. Other architectural and engineering fees	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
6. Project inspection fees	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
7. Site work	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
8. Demolition and removal	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
9. Construction	\$ <input type="text" value="59,089,908.00"/>	\$ <input type="text"/>	\$ <input type="text" value="59,089,908.00"/>
10. Equipment	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
11. Miscellaneous	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
12. SUBTOTAL (sum of lines 1-11)	\$ <input type="text" value="59,089,908.00"/>	\$ <input type="text"/>	\$ <input type="text" value="59,089,908.00"/>
13. Contingencies	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
14. SUBTOTAL	\$ <input type="text" value="59,089,908.00"/>	\$ <input type="text"/>	\$ <input type="text" value="59,089,908.00"/>
15. Project (program) income	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$ <input type="text" value="59,089,908.00"/>	\$ <input type="text"/>	\$ <input type="text" value="59,089,908.00"/>
<b>FEDERAL FUNDING</b>			
17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter eligible costs from line 16c Multiply X <input type="text" value="85.976723"/> % Enter the resulting Federal share.			\$ <input type="text" value="50,803,566.40"/>



## ASSURANCES - CONSTRUCTION PROGRAMS

OMB Number: 4040-0009  
Expiration Date: 02/28/2025

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503.


**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant:, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards of merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
20. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 	TITLE Director, Houston Public Works
APPLICANT ORGANIZATION City of Houston	DATE SUBMITTED 09/27/2023