A grayscale background image of a multi-lane highway with traffic, including cars and a truck, stretching into the distance under a clear sky.

SR 5/US-1/FEDERAL HIGHWAY FROM SR 869/I-595 TO SR 842/BROWARD BOULEVARD HENRY E. KINNEY TUNNEL REHABILITATION

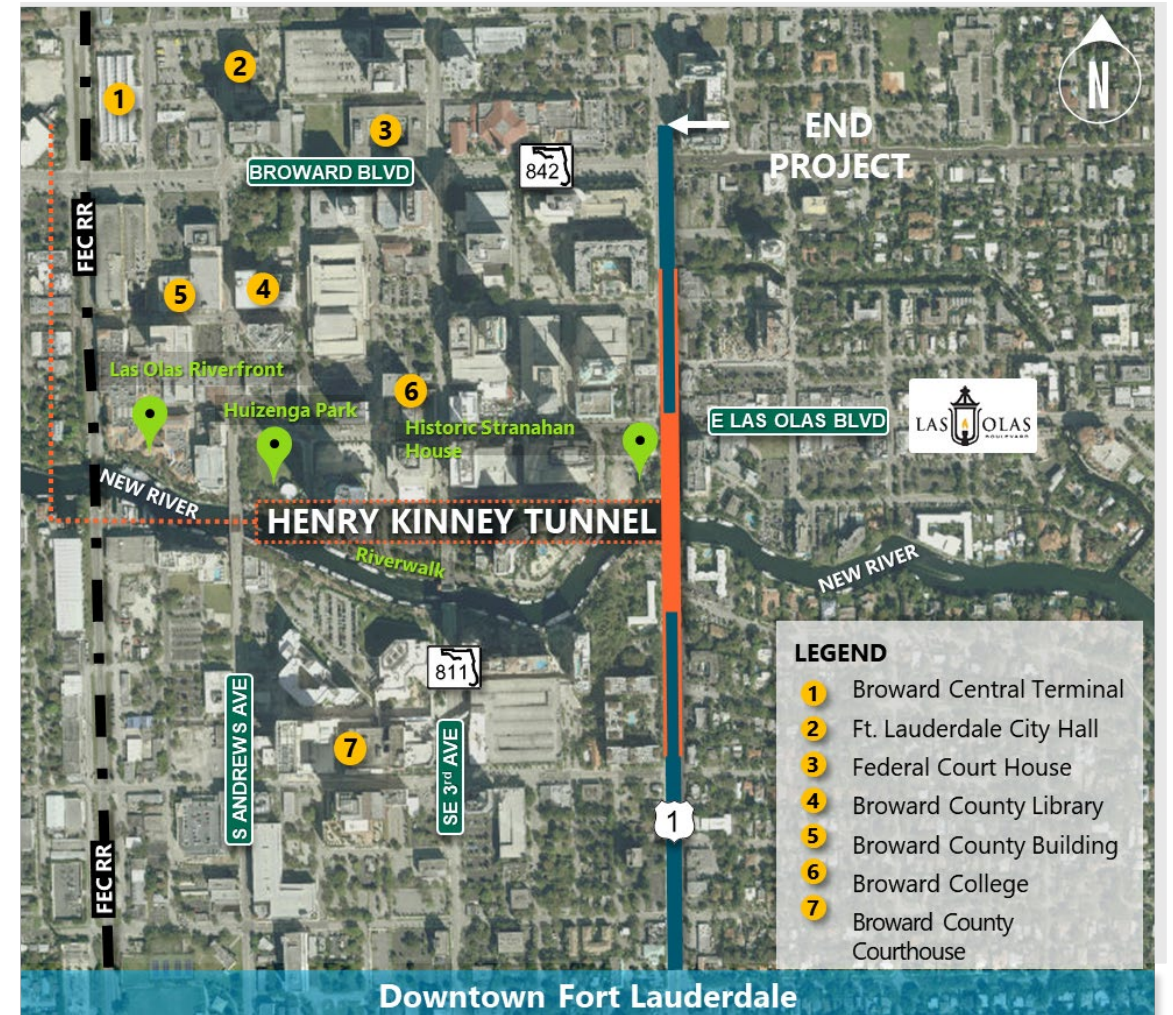
**Project Identification Nos.: 439714-1-52-01/439714-1-52-01
Broward County**

City of Fort Lauderdale Commission Meeting
October 6, 2020

Project Location



SR 5/US-1/Federal Highway
from I-595 to north of Broward Boulevard
in Fort Lauderdale, Florida



Purpose and Objectives

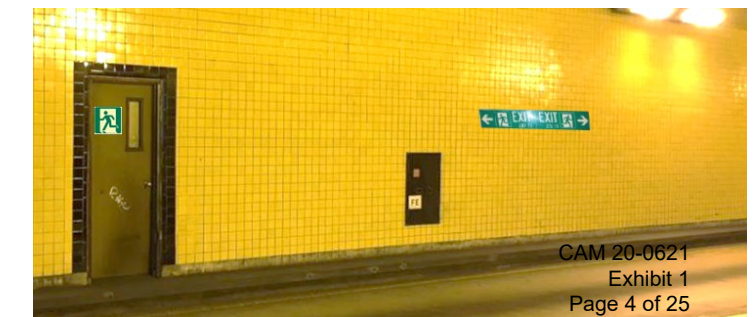
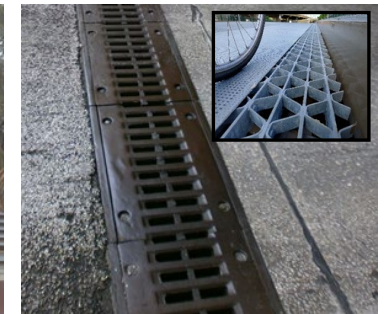
- **Rehabilitate the Henry E. Kinney Tunnel** to meet the latest federal, state, and local standards and guidelines for architecture, structural, mechanical, electrical, and life safety
- **Improve safety and mobility** on US-1
- **Enhance East Las Olas Boulevard** at SE 6th Avenue for a livable community



Proposed Improvements

Tunnel Rehabilitation

- Structural
 - Remove delaminated tiles
 - Repair spalls
- Architecture/Civil
 - Repair South Ventilation Building
 - Install impact attenuators at portals
 - Replace drainage grates (for bicycles)
- Mechanical
 - Replace pumps and ventilation fans
 - Install detectors for hazardous gases
- Electrical
 - Replace lighting with LED
 - Replace control systems and wiring
- Life Safety
 - Install exit signage in tunnel
 - Replace fire detection system and valves



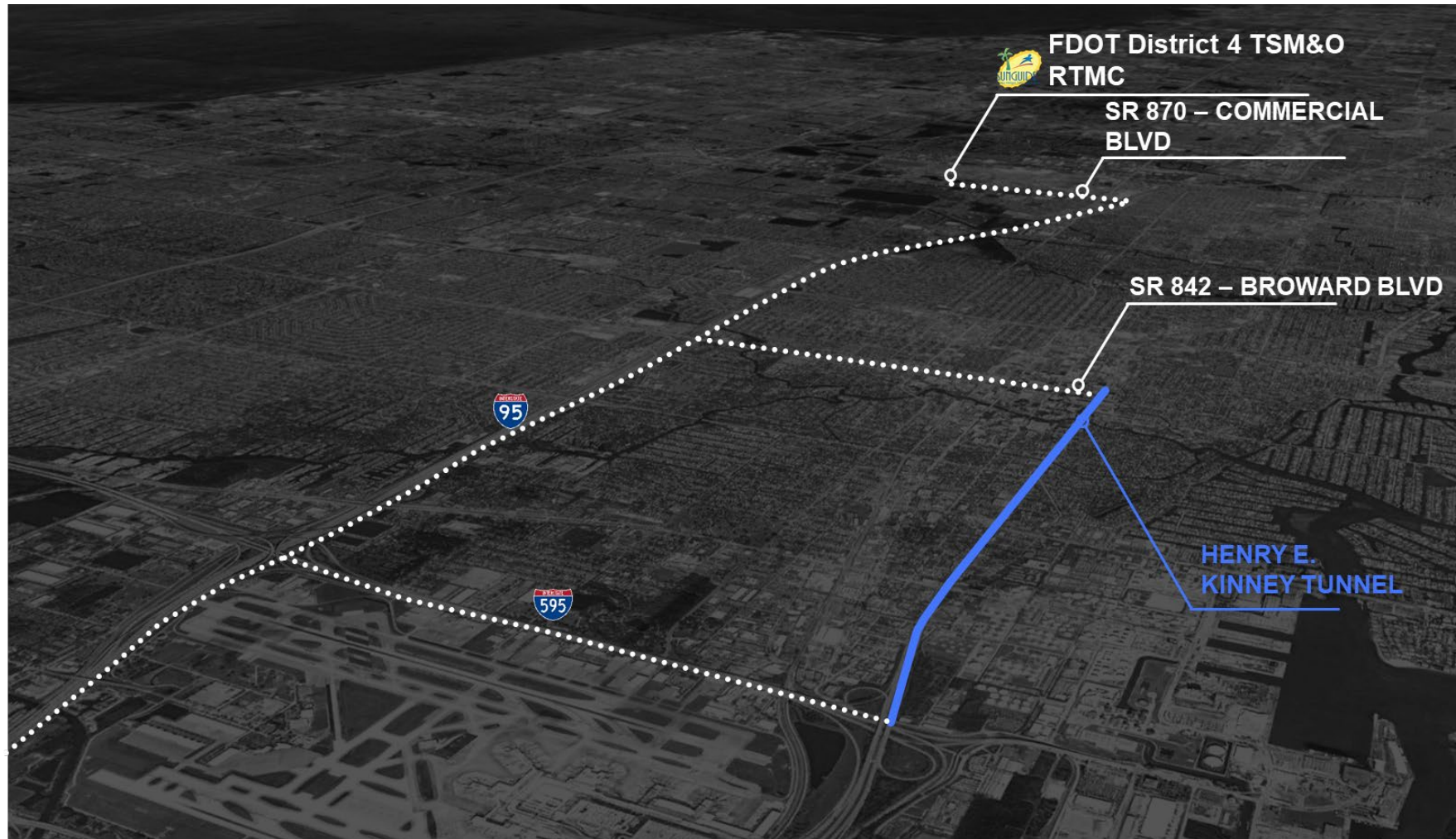
Proposed Improvements

Improve Safety and Mobility

- Adaptive Traffic Signal Control (ATC) System on US-1 at:
 - SE 30th Street
 - SE 28th Street
 - SR 84/Marina Boulevard
 - SE 17th Street
 - Davie Boulevard
 - SE 9th Street
 - SE 7th Street
 - Broward Boulevard



Intelligent Transportation System (ITS)



**CCTV
CAMERA AND TRAFFIC
SENSOR (MDVS)**



WARNING GATE



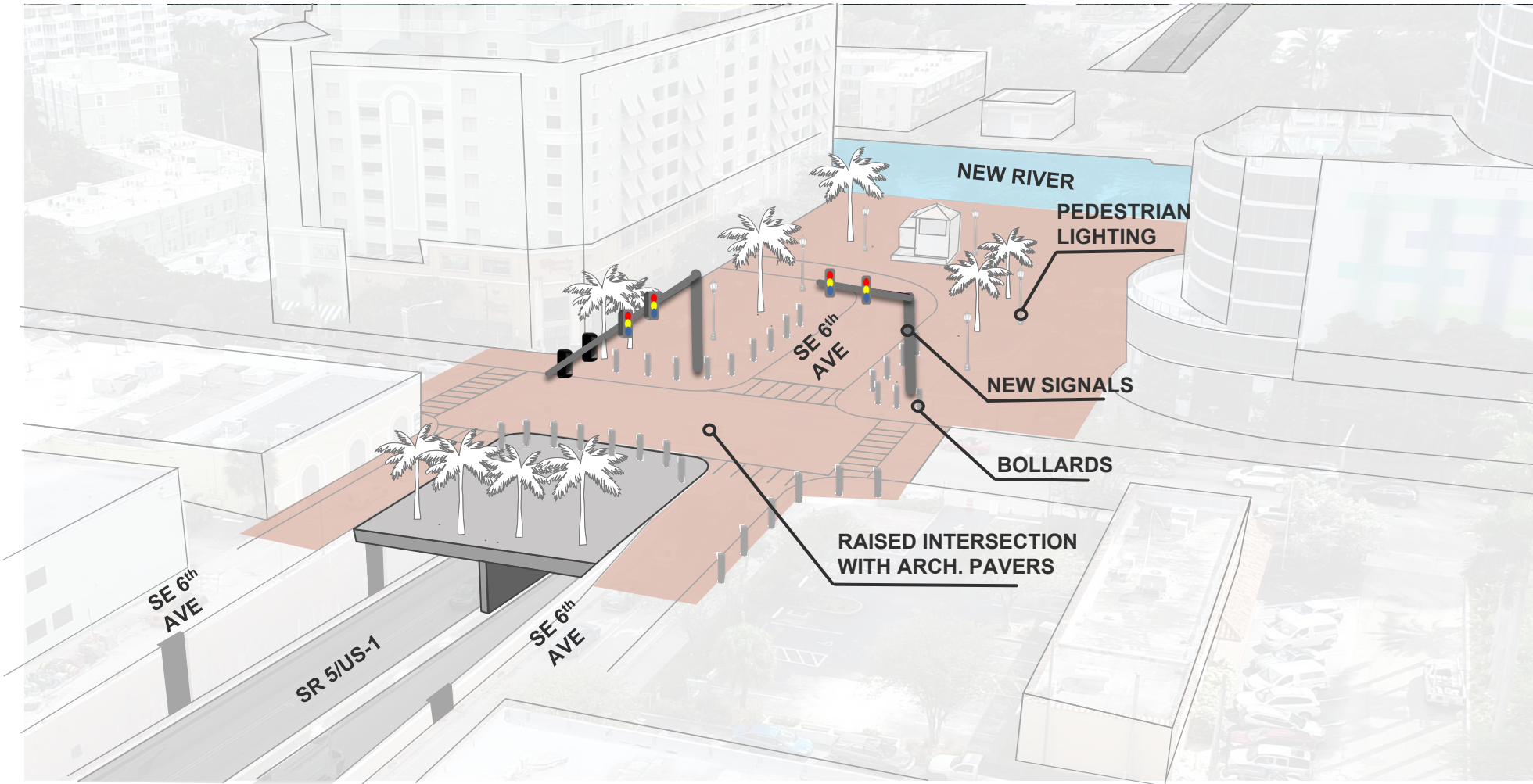
**ARTERIAL DYNAMIC
MESSAGE SIGNS (ADMS)**

Existing Conditions



Proposed Improvements

Tunnel Top Pedestrian Plaza



Conceptual Image

Proposed Improvements

Tunnel Top Pedestrian Plaza

- City of Fort Lauderdale Local Funded Agreement (\$10.6M)
- FP ID 439714-1-52-02
- Funded by City's Park Bonds
- Improves sight distance for SE 6th Avenue Southbound at Las Olas Boulevard
- Enhance Las Olas Boulevard at SE 6th Avenue:
 - Construct New Pedestrian Plaza/Tunnel Extension (117-ft)
 - Raised intersection
 - Reconstruct North ventilation building
 - Reconstruct SE 6th Ave and Laura Ward Riverwalk Plaza
 - Install hardscape and landscape
 - Replace signals with new mast arms



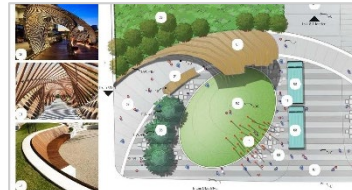
Proposed Improvements

Tunnel Top Pedestrian Plaza – Coordination and Public Outreach

- Previous concepts and public meetings
 - Downtown Development Authority (DDA) 2013 Concept
 - City's Structural Study of North Deck Extension 2015
 - FDOT Locally Funded Agreement (LFA) Concept 2017
 - Presentations and Public Meetings
 - Commission Meetings
 - Public Meeting on April 24, 2019
 - Public Meeting on November 25, 2019
 - Parks, Recreation, & Beaches Advisory Board Meeting on January 22, 2020 approves funding for final design and construction



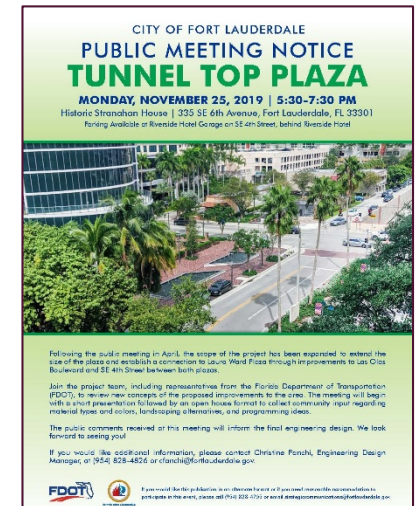
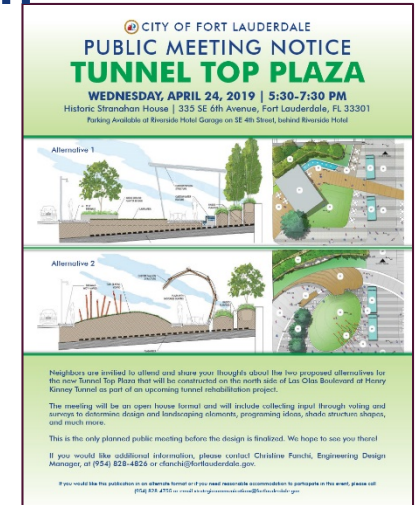
DDA Concept (2013)



Public Meeting Concept
(April 2019)

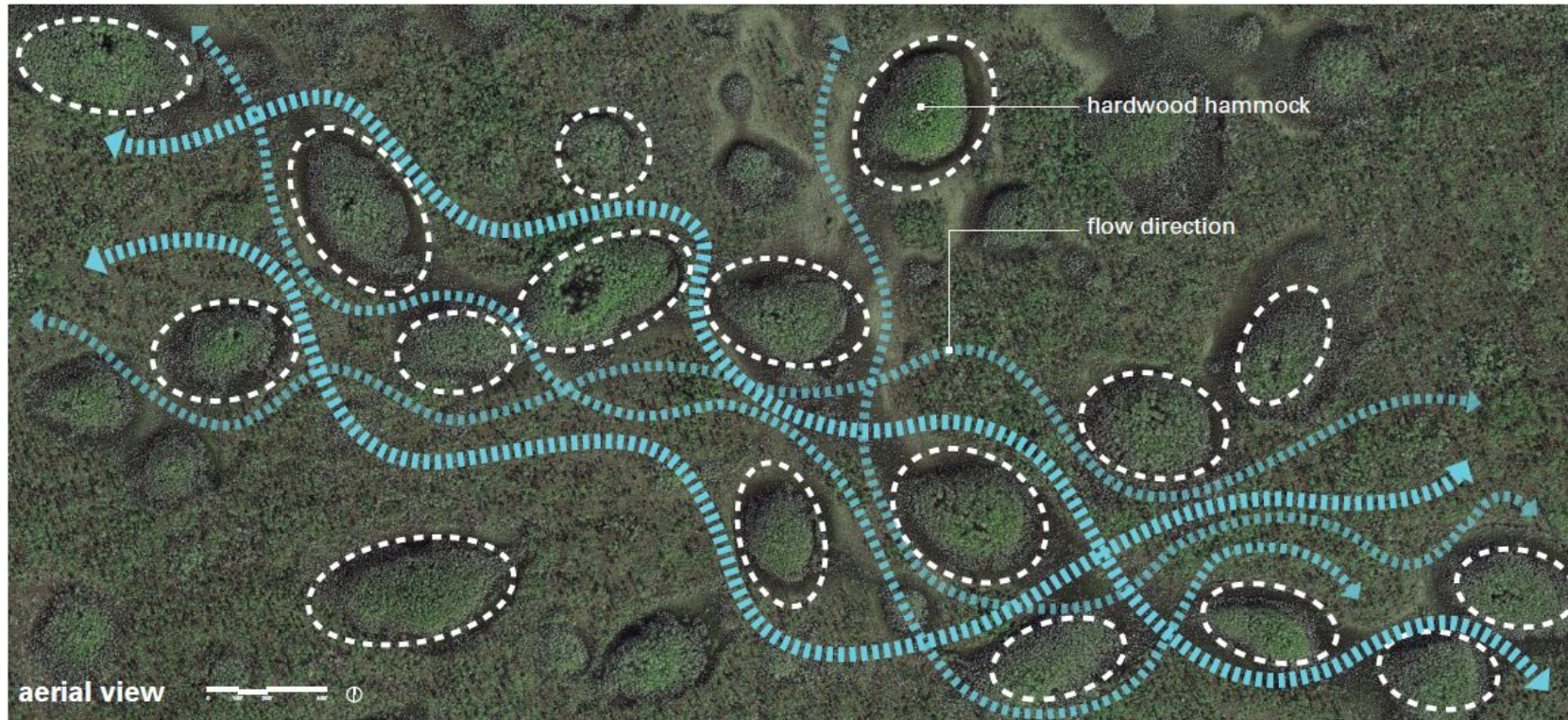


Final Concept (Jan. 2020)



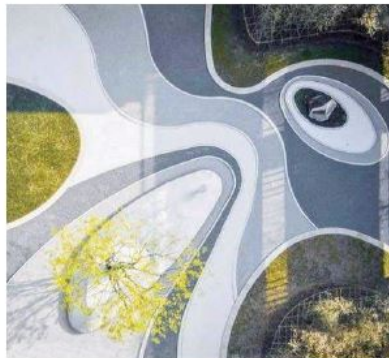
Proposed Improvements

Tunnel Top Pedestrian Plaza



Proposed Improvements

Tunnel Top Pedestrian Plaza



Proposed Improvements

Tunnel Top Pedestrian Plaza



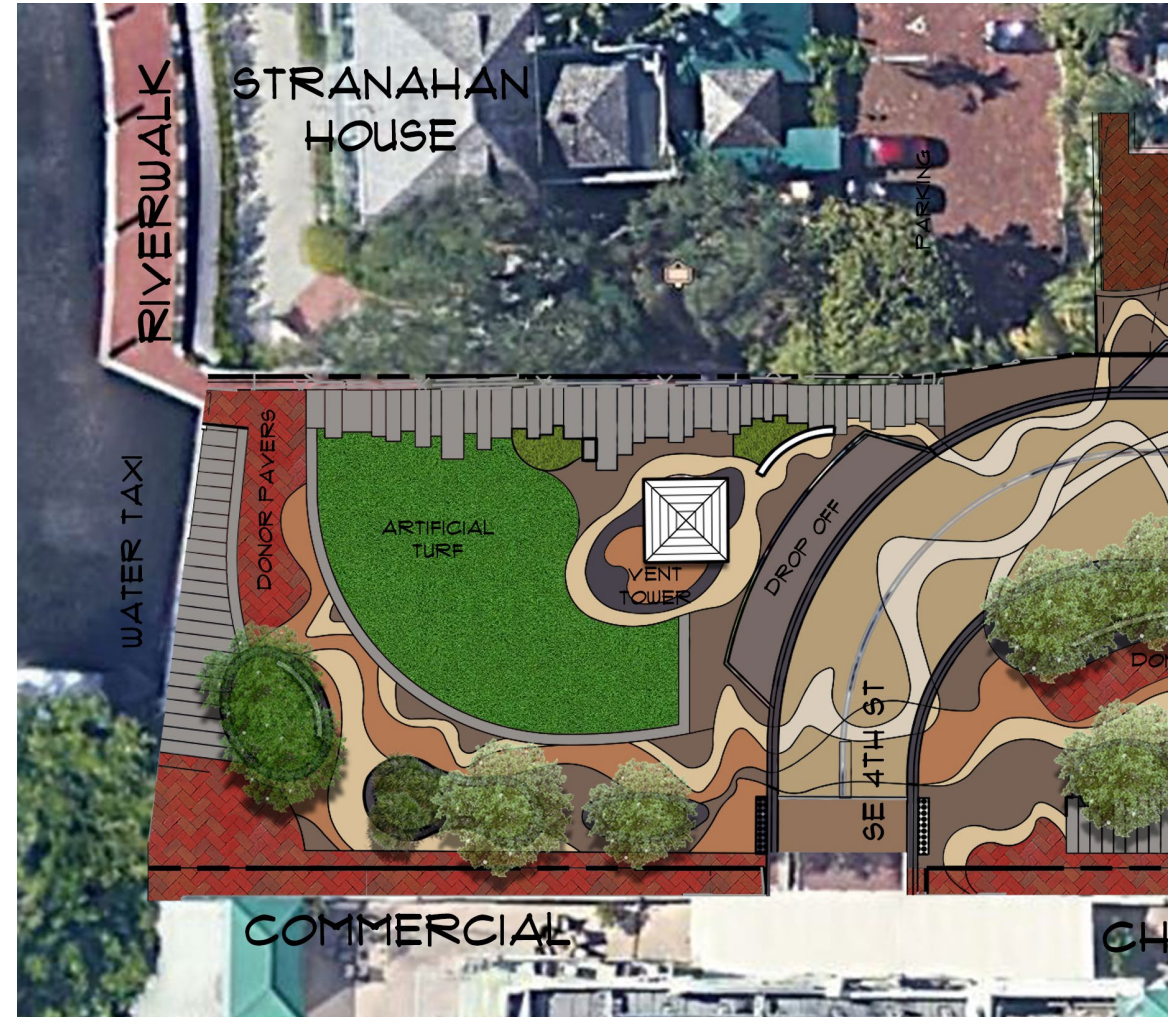
Conceptual Image

Proposed Improvements

Laura Ward Plaza

Key Features:

- Trail head for Riverwalk
 - Connection to Las Olas
- Artificial turf event space
- Water Taxi improvements
 - Defined space
 - Seating
 - Shade
 - Lighting
- Vent Shaft improvements
 - Increase pedestrian space and opportunity for interpretative panels
- Planting focused on native canopy

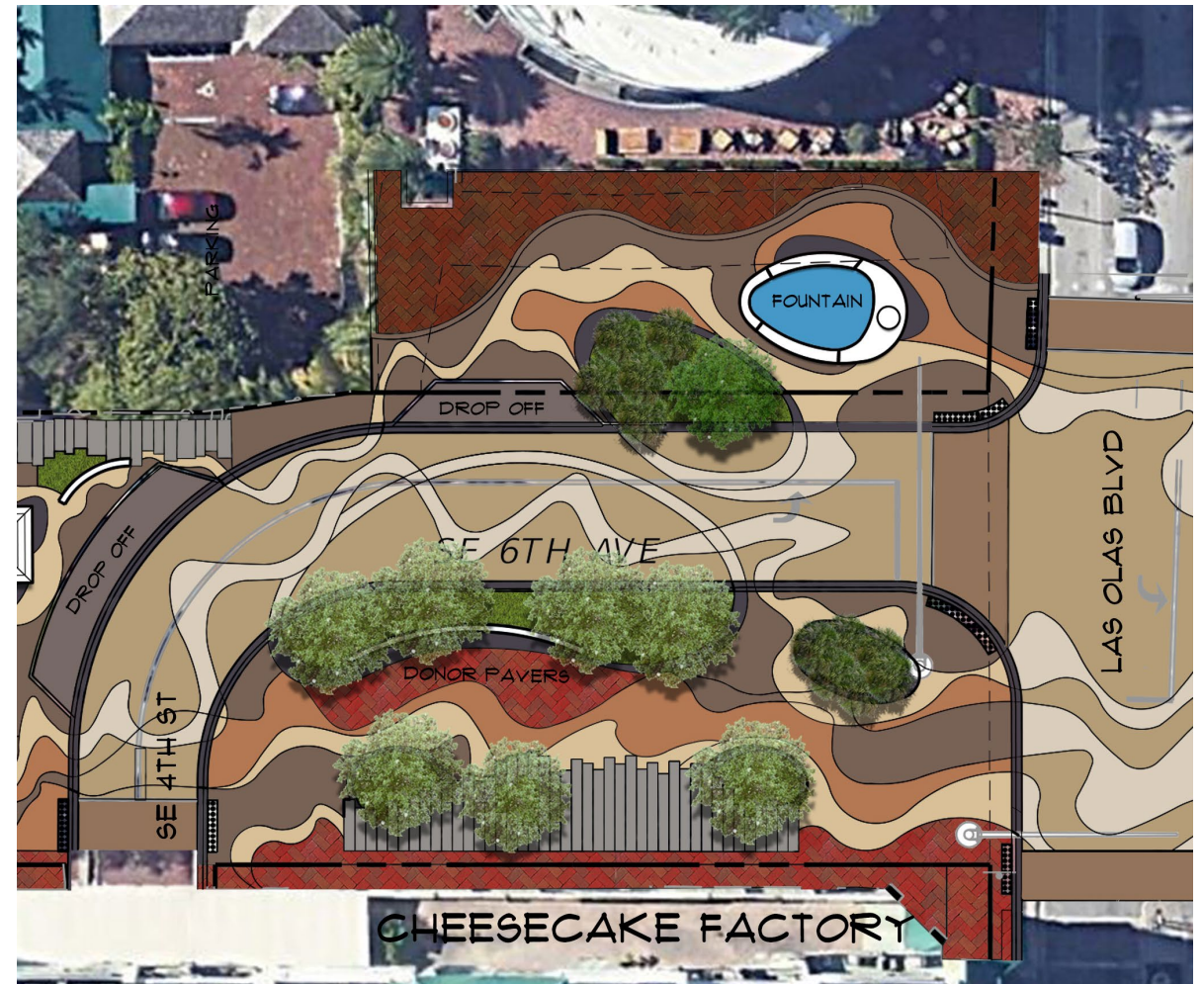


Proposed Improvements

Riverside Hotel & ICON Plazas

Key Features:

- Redefined cohesive patterned pavement to enhance flowing concept
 - Provides transition of "the canvas"
 - Preservation of Riverwalk donor pavers
- Renovation of fountain
- Preservation of access to Stranahan House
- Planting focused on native canopy

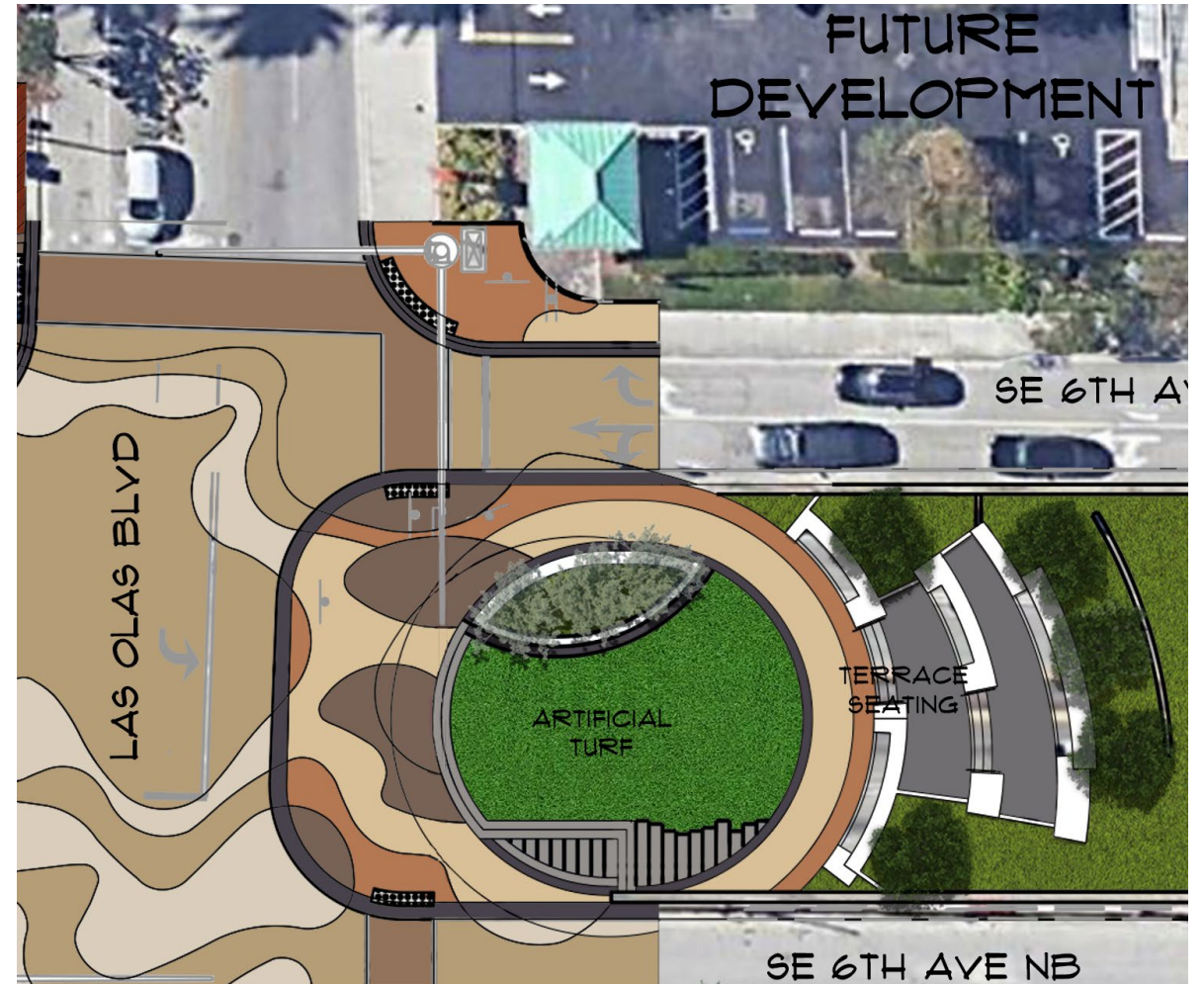


Proposed Improvements

Tunnel Top Plaza

Key Features:

- Terrace seating
 - Elevated view to New River
 - Thematic head spring flowing to New River
- Elevated artificial turf play space
- Planting focused on native canopy



Proposed Improvements

Tunnel Top Pedestrian Plaza



Images from preliminary concept

Proposed Improvements

Tunnel Top Pedestrian Plaza



Images from preliminary concept

Proposed Improvements

Tunnel Top Pedestrian Plaza



Images from preliminary concept

Proposed Improvements

Tunnel Top Pedestrian Plaza

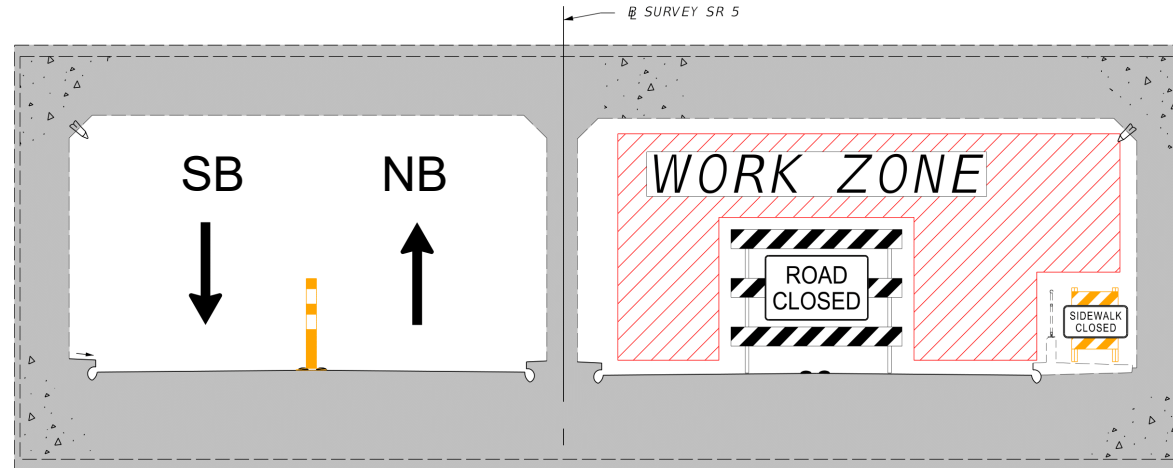


Historic Preservation Consultation

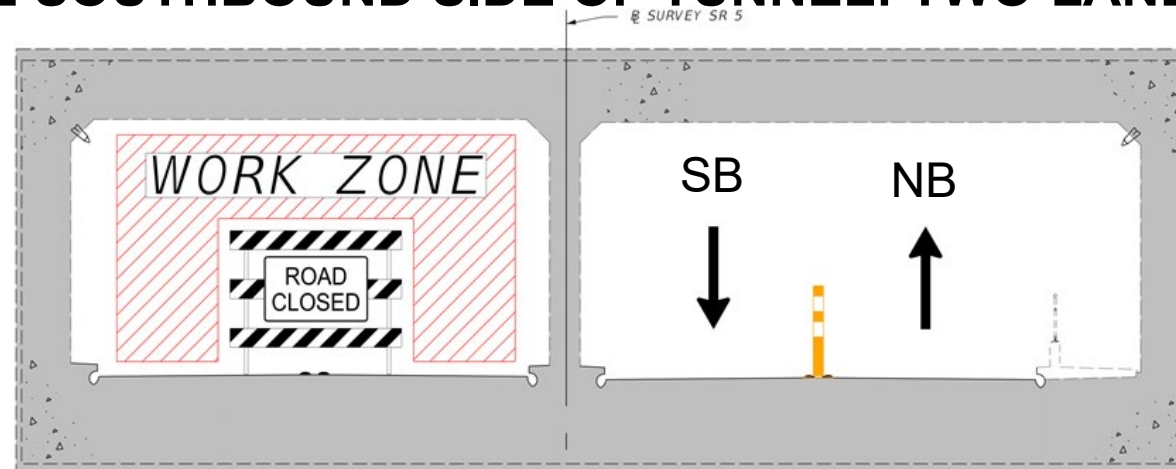


Traffic Control Plan

TCP 1 - CLOSE NORTHBOUND SIDE OF TUNNEL: TWO-LANE TWO-WAY TRAFFIC

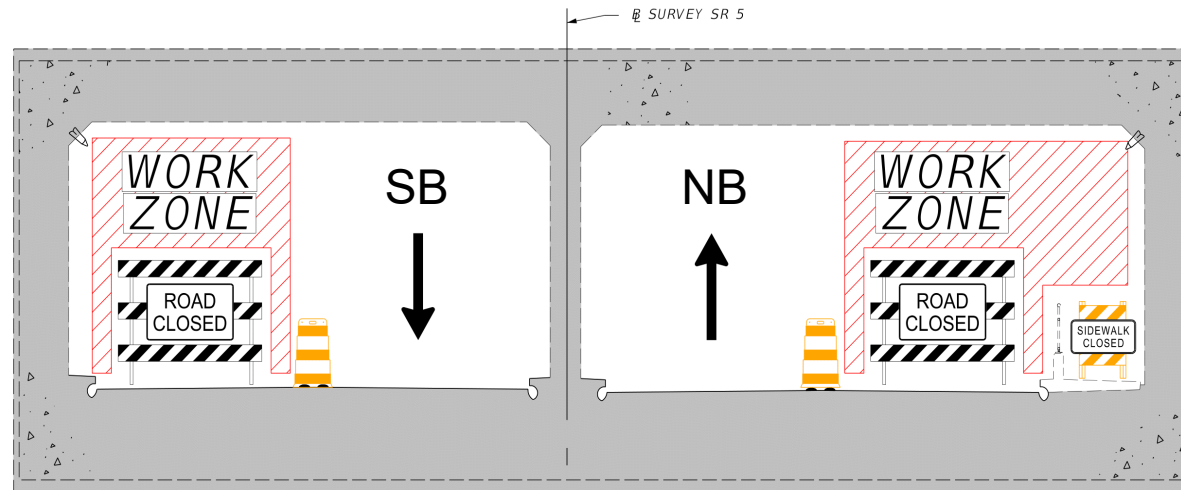


TCP 2 - CLOSE SOUTHBOUND SIDE OF TUNNEL: TWO-LANE TWO-WAY TRAFFIC

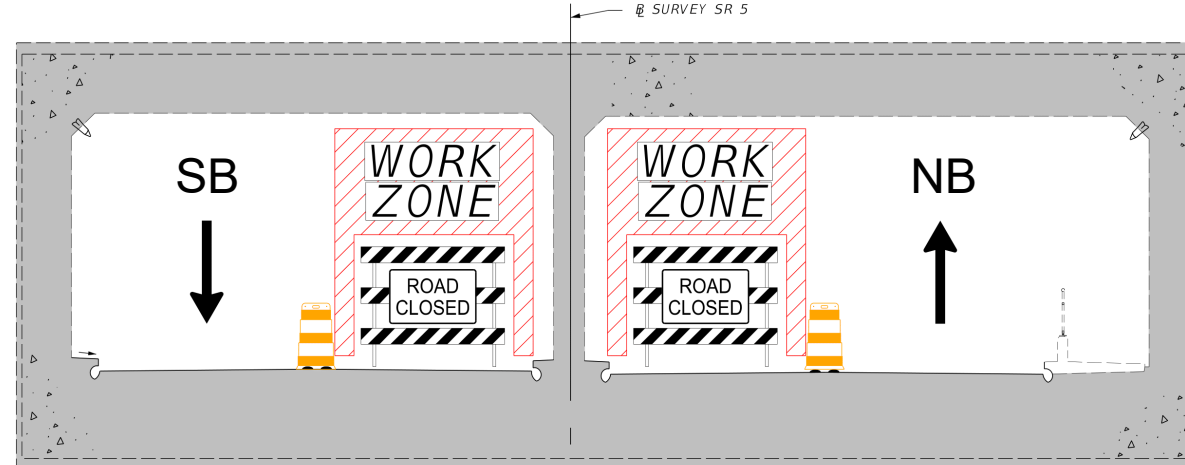


Traffic Control Plan

TCP 3 - CLOSE OUTSIDE LANE IN EACH DIRECTION



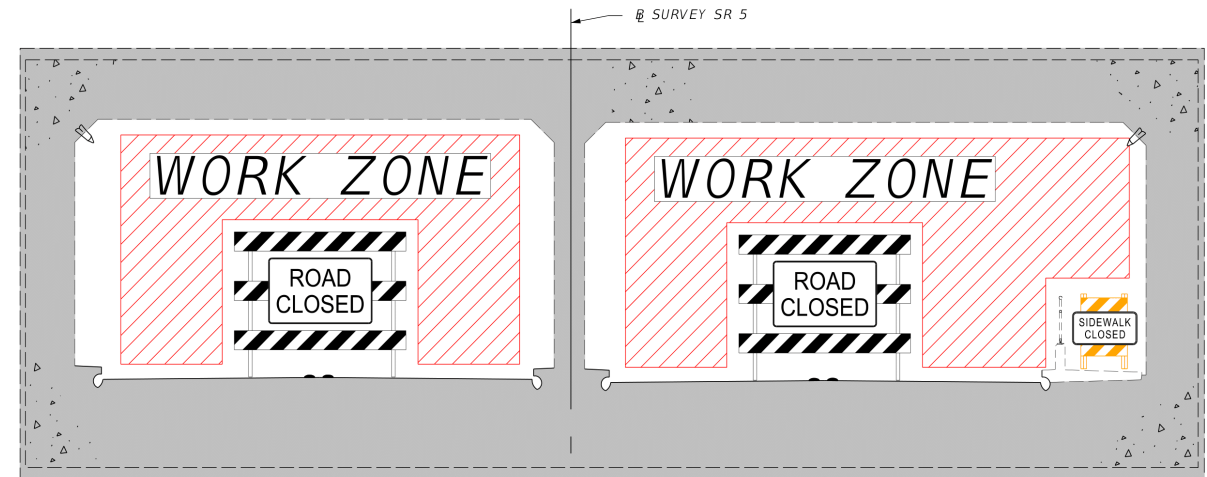
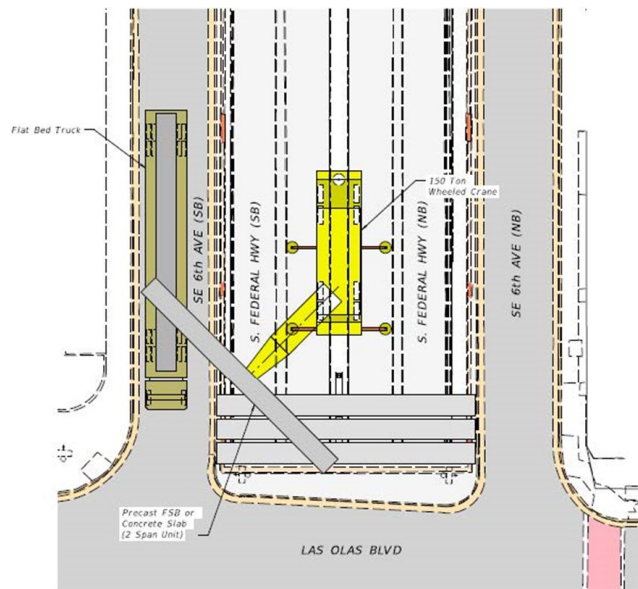
TCP 4 - CLOSE INSIDE LANE IN EACH DIRECTION



Traffic Control Plan

TCP 5 - FULL TUNNEL CLOSURE – DETOUR TRAFFIC

- Install detour for vehicle and pedestrian traffic on US-1 at tunnel
- Close all lanes of US-1 to traffic at tunnel

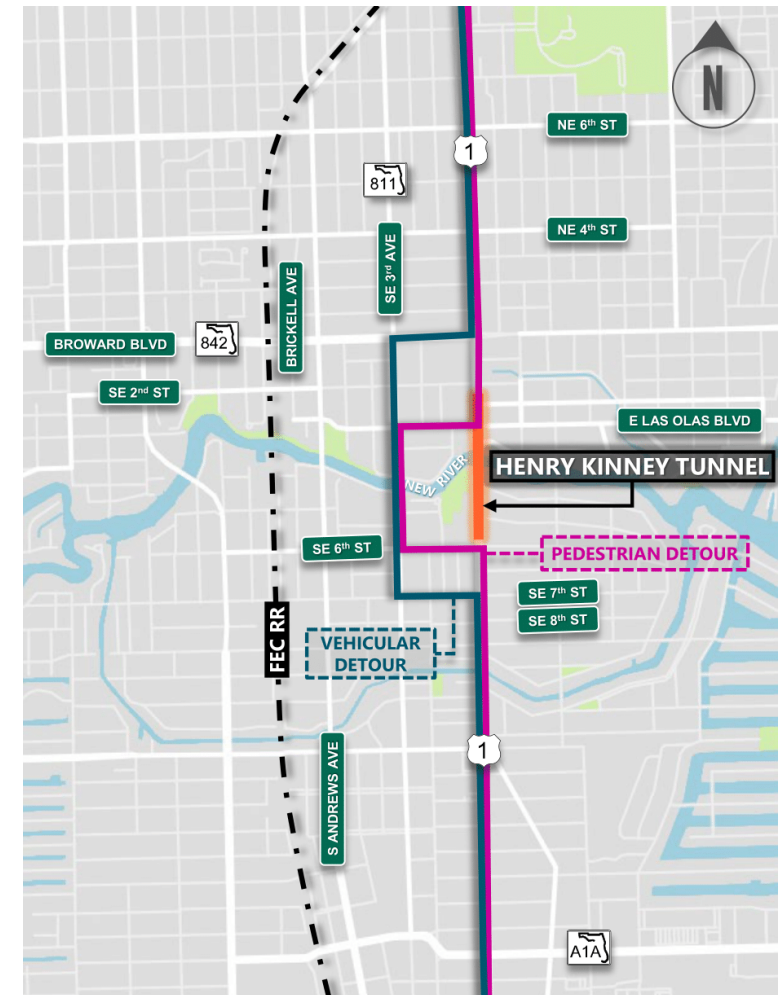


Traffic Control Plan

FULL TUNNEL CLOSURE – DETOUR TRAFFIC (NIGHTTIME OR WEEKENDS)

TCP 5

- Detour traffic on US-1 at the tunnel
- Coordinate with emergency responders, 3rd Avenue bridge, and Broward County Traffic
- Detour of traffic through local streets (SE 7th Street, SE 3rd Avenue and Broward Boulevard
- Pedestrian (sidewalk) traffic shall use SE 6th Street, SE 3rd Avenue, and East Las Olas Boulevard for detours



Project Schedule and Cost

- Total Construction Cost Estimate: **\$26 Million**
 - **\$15.4 Million** from FDOT for Tunnel Rehabilitation (FP ID 439714-1-52-01)
 - **\$10.6 Million** from the City of Fort Lauderdale under the LFA for Las Olas Boulevard Improvements (FP ID 439714-1-52-02)
- Final Design Completion: **December 2020**
- Letting Date (Bid Opening): **May 2021**
- Construction Start: **Summer 2021**