



WELCOME!

Why Am I Here?

- Learn about the recommendations
- Ask questions and provide comments on the recommendations

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

La revisión ambiental, consultas y otras acciones requeridas por las leyes ambientales federales aplicables para este proyecto están siendo o han sido, llevado a cabo por TxDOT - en virtud de 23 USC 327 y un Memorando de Entendimiento fechado el 16 de diciembre del 2014, y ejecutado por la FHWA y TxDOT.



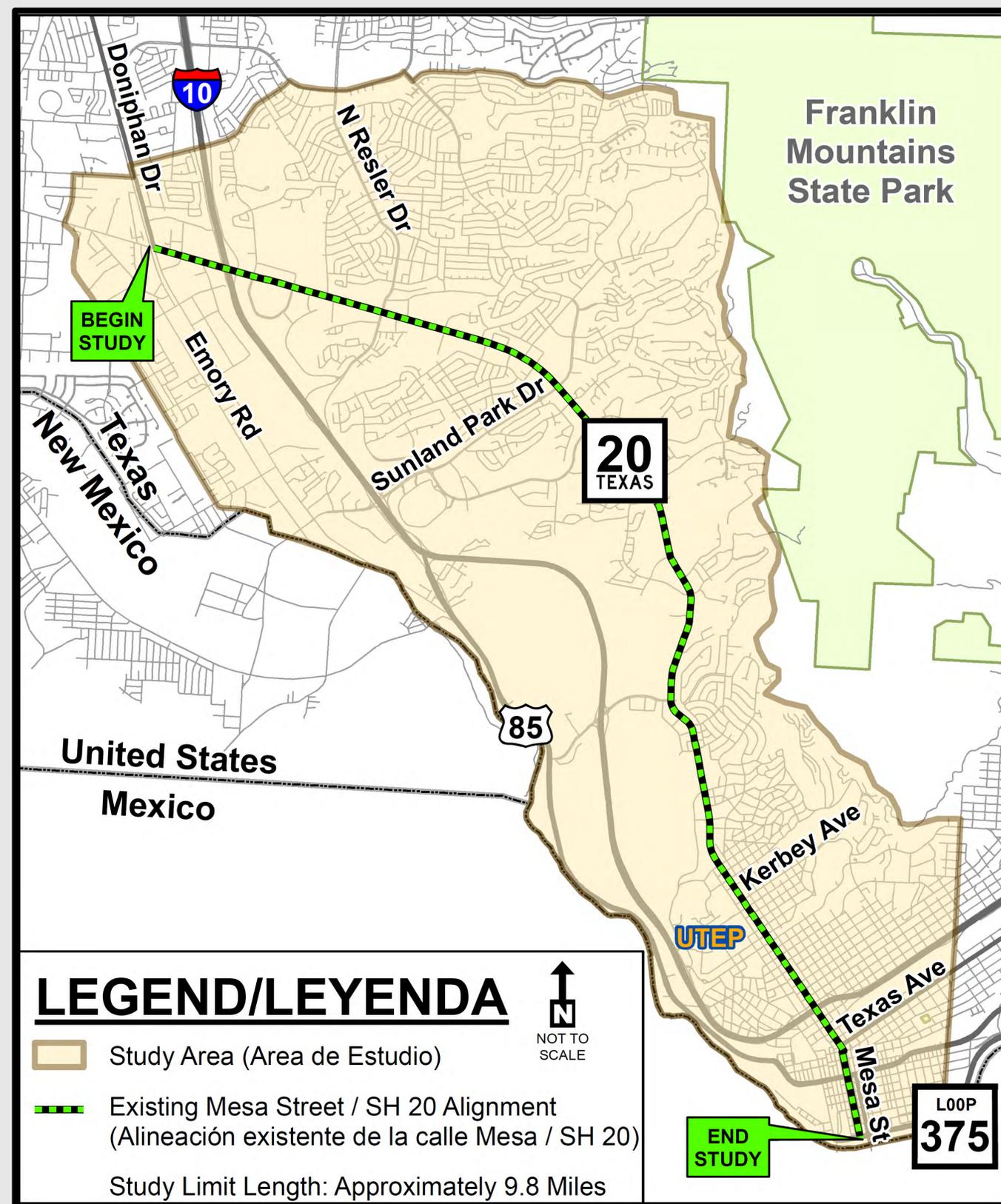
Study Location Map

Study Limits:

Doniphan Drive (SH 20)

to

Cesar Chavez Border Highway (Loop 375)





Study Purpose

This **Traffic Engineering and Planning Corridor Study** is being conducted to support TxDOT's primary goals and objectives:

- **Safety**
- **Congestion relief**
- **Transportation reliability**

This TxDOT study will develop a **Master Plan** of recommended Short-, Mid-, and Long-Term transportation solutions to upgrade and improve the Mesa Street corridor from Doniphan Drive to Cesar Chavez Border Highway.



Study Goals

- All-inclusive public, agency, and stakeholder input
- Safe, cost-effective, and reliable transportation solution concepts that consider all travel modes within the Mesa Street corridor
- Short-, Mid-, and Long-Term solution concepts that address the future travel demands forecasted to occur on Mesa Street between the years 2020 and 2040



General Study Information

Study Limits: Doniphan Drive to Cesar Chavez Border Highway

Study Length: Approximately 9.8 miles

City / County: El Paso / El Paso

Study Elements and Aspects include:

- ▶ Access management
- ▶ Bicyclist and pedestrian accommodations
- ▶ Crash analyses
- ▶ Design solution alternatives
- ▶ Forecast travel demand on Mesa Street through Year 2040
- ▶ Mass transit accommodation
- ▶ Public, agency, and stakeholder involvement
- ▶ Sidewalk and crosswalk connectivity
- ▶ Signage, illumination and pavement markings
- ▶ Traffic signalization



Study Phases

Evaluate Existing Travel Conditions & Identify Corridor Issues

Develop Study Goals & Objectives

Determine & Evaluate Travel Demand Forecasts

Produce Conceptual Alternative Solutions

Evaluate & Screen Conceptual Alternative Solutions

Produce Viable Alternative Solutions

Current Phase

Current Phase

Master Plan of Final Recommended Solutions

Public & Agency Involvement

Public & Agency Involvement



Public Feedback from the August 2016 Public Meetings

➤ Major Mesa Street issues?

(in alphabetical order)

- ▶ Bike and Pedestrian-related elements
- ▶ City Street Connectivity / Alternatives Routes to alleviate Mesa Street
- ▶ Crashes / Safety
- ▶ Travel Lanes / Turning Lanes

➤ Normal travel mode along Mesa Street?

(in order of popularity)

1. Car
2. I avoid Mesa Street due to its congestion
3. Bike
4. Walk
5. Bus

➤ Mesa Street priorities?

(in order of popularity)

1. Vehicular Congestion
2. Safety
3. Bikeability
4. Walkability
5. Transit
6. Aesthetics / Landscaping
7. Access Control

➤ Primary purpose in traveling Mesa Street?

(in order of popularity)

1. Work
2. Personal
3. Shopping
4. Business
5. School
6. Other





Study Results Summary

- Mesa Street **travel times** and **traffic flow** are governed by the major Mesa Street intersections and not by the number of lanes between the intersections. Therefore, **more efficient intersections** will increase Mesa Street's Operation and Efficiency.
- Between 2010 & 2016, **2,981 crashes** & **18 fatalities** have occurred on Mesa Street.
- The Mesa Street study recommends the following study goal-oriented improvements:

Safety

- ▶ Horizontal & Vertical roadway curvature modifications
- ▶ Signalization, sidewalk, and crosswalk upgrades
- ▶ Separation of pedestrian and vehicular modes at high traffic, crash-prone intersections
- ▶ Shared Use Paths (for bike & pedestrians) that link the City of El Paso *Bike Plan* routes

Congestion Relief

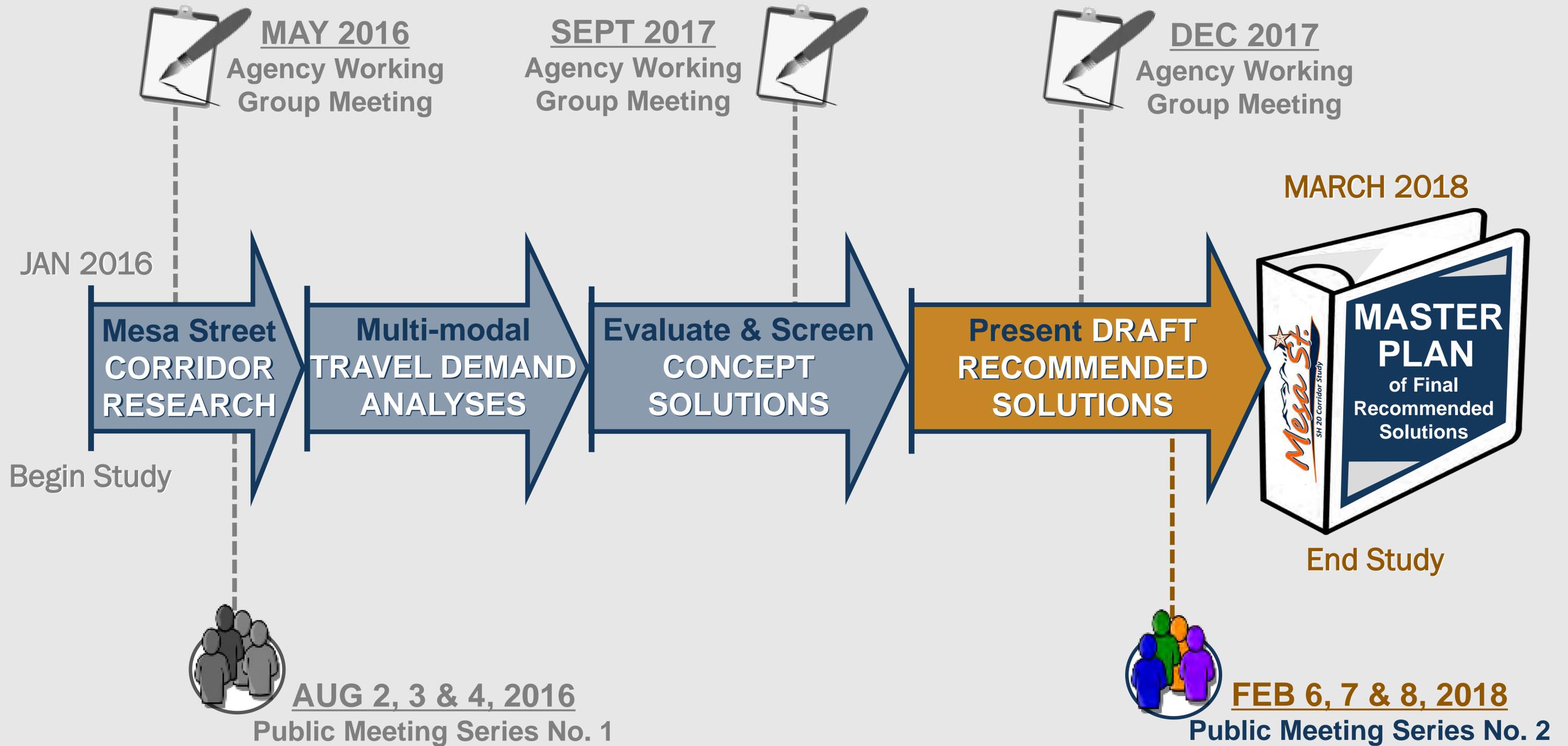
- ▶ Optimized traffic signal timing and phasing
- ▶ Congestion relief at major intersections (added turn lanes, alternate routes & bypass lanes)
- ▶ Solution that cater bus / transit movements at intersections
- ▶ Achieving acceptable Levels of Service (improved travel flow) through year 2040

Transportation Reliability

- ▶ Signal Bypass Lanes that avoid 21 total northbound and southbound Mesa Street traffic signals
- ▶ Travel Time Savings -- a one-way trip on the corridor in year 2040 is reduced by 7 to 23 minutes



Study Timeline





Short-Term Recommendations

Mesa Street

- ▶ Street lighting & pavement marking upgrades

Mesa Street Intersections

- ▶ Optimized signal timing & phasing
- ▶ Near-side signal heads within identified Mesa St horizontal curves
- ▶ Right-turn lanes at identified intersections

Pedestrian / Bicycle

- ▶ ADA sidewalk & crosswalk upgrades throughout corridor
- ▶ Mesa St median safety rail at Champions Place (Coronado High School)
- ▶ Mesa St at Montecillo Blvd sidewalk & crosswalk upgrades
- ▶ Mesa St raised median w/ safety rail between Glory Rd and Cincinnati Ave
- ▶ Mesa St at University Ave “Pedestrian Scramble” signal timing

Transit

- ▶ Right-turn signal heads at identified Mesa St intersections

Intelligent Transportation System (ITS)

- ▶ Bluetooth camera surveillance; Speed Feedback Signs; and Video Imaging Vehicle Detection System (VIVDS)



Mid-Term Recommendations

Mesa Street

- ▶ Horizontal & vertical roadway curvature modifications
- ▶ Access Management (redundant driveway removals & median opening closures)
- ▶ Hooded left-turn (median) lanes at identified locations
- ▶ Mesa St at 9th St Mini-Roundabout

Mesa Street Intersections

- ▶ Lengthen right- & left-turn lane storage bays
- ▶ Relocate eastbound I-10 exit ramp (to Mesa St) westward to access McClintock Dr
- ▶ Extend Desert Pass St eastward to Mesa St at Belvidere St
- ▶ Extend Mesa Park Dr westward to I-10 and link southward to Executive Center Blvd

Pedestrian / Bicycle

- ▶ Mesa St Shared Use Path from Doniphan Dr to Resler Dr and Sun Bowl Dr to Glory Rd
- ▶ Sidewalk expansion with safety rails between Glory Rd and Cincinnati Ave

Transit

- ▶ Bus Queue Jump (right turn) Lanes at identified intersections

Intelligent Transportation System (ITS)

- ▶ Dynamic Message Signs; CCTVs and cellular modem/wireless links to TxDOT TransVista



Long-Term Recommendations

Mesa Street

- ▶ “Smart Corridor” or Connected Vehicle / Automated Vehicle (CV/AV) Corridor

Mesa Street Intersections

- ▶ Doniphan Dr at Mesa St intersection expansion
- ▶ I-10 (Mesa St North) Single Point Urban Interchange (SPUI) with Mesa St (Signal Bypass) Lanes between Crossroads Dr and Belvidere St
- ▶ Resler Dr SPUI w/ underpassing Mesa St lanes
- ▶ Sunland Park Dr SPUI w/ underpassing Mesa St lanes
- ▶ Executive Center Blvd Continuous Green T intersection at Mesa St

Pedestrian / Bicycle

- ▶ Mesa St Shared Use Path from Executive Center Blvd to Sun Bowl Dr
- ▶ Mesa St Bypass Lanes beneath Glory Rd, Cincinnati Ave, and Robinson Ave

Intelligent Transportation System (ITS)

- ▶ Optimize and complete the Mesa St fiberoptic communications from Doniphan Dr to Loop 375 by linking the City and TxDOT camera systems



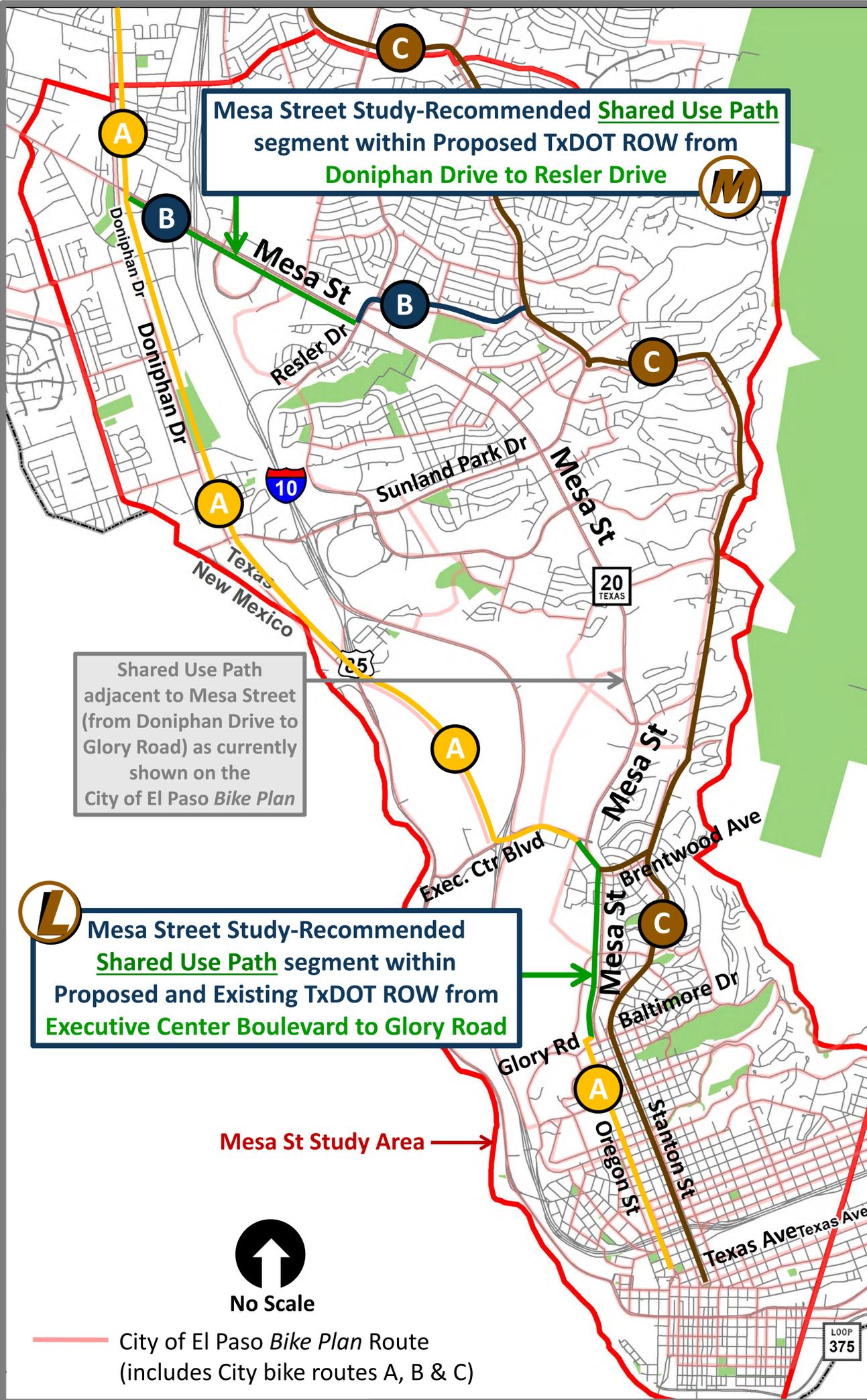
Recommended Shared Use Paths

This concept map displays the Mesa Street Study-recommended 10-foot wide **Shared Use Path** segments located adjacent to southbound Mesa Street.

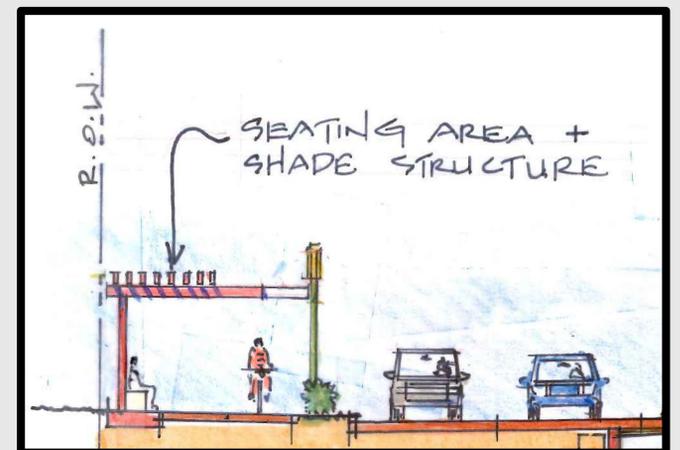
These select path locations are based on Mesa Street corridor constraints, available right-of-way (ROW), and connectivity links to currently planned local bike routes.

The paths are intended to provide safer A-B-C bike route options in the Mesa Street study area, as opposed to biking directly on Mesa Street alongside the high speed / volume traffic and traversing the many cross-streets, turn lanes, driveways, and Mesa Street inclines.

Due to the necessary ROW acquisition and construction costs, these conceptual paths are **Mid- and Long-Term** recommendations.



- Bike Route Options | From Doniphan Drive to Downtown El Paso**
- A** Doniphan Dr > Paisano Cycle Track > Executive Ctr Blvd > **Mesa St** > Oregon St
 - B** **Mesa St** > Resler Dr > Cloudview Dr > Northwind Dr > Westwind Dr > Stanton St
 - C** Redd Rd > Westwind Dr - Stanton Trail > Stanton St



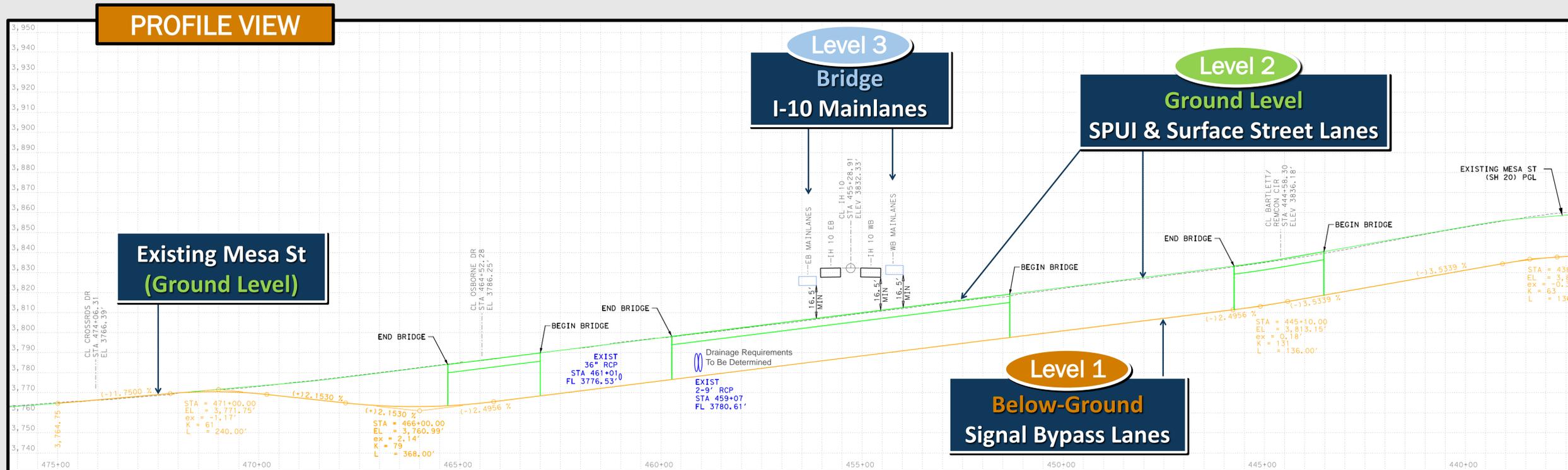
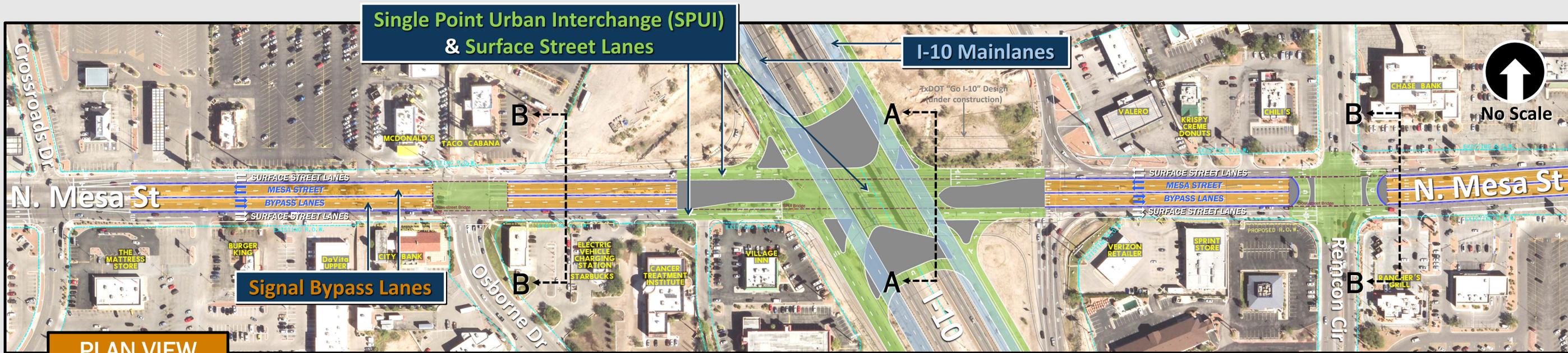
Shared Use Path Concept



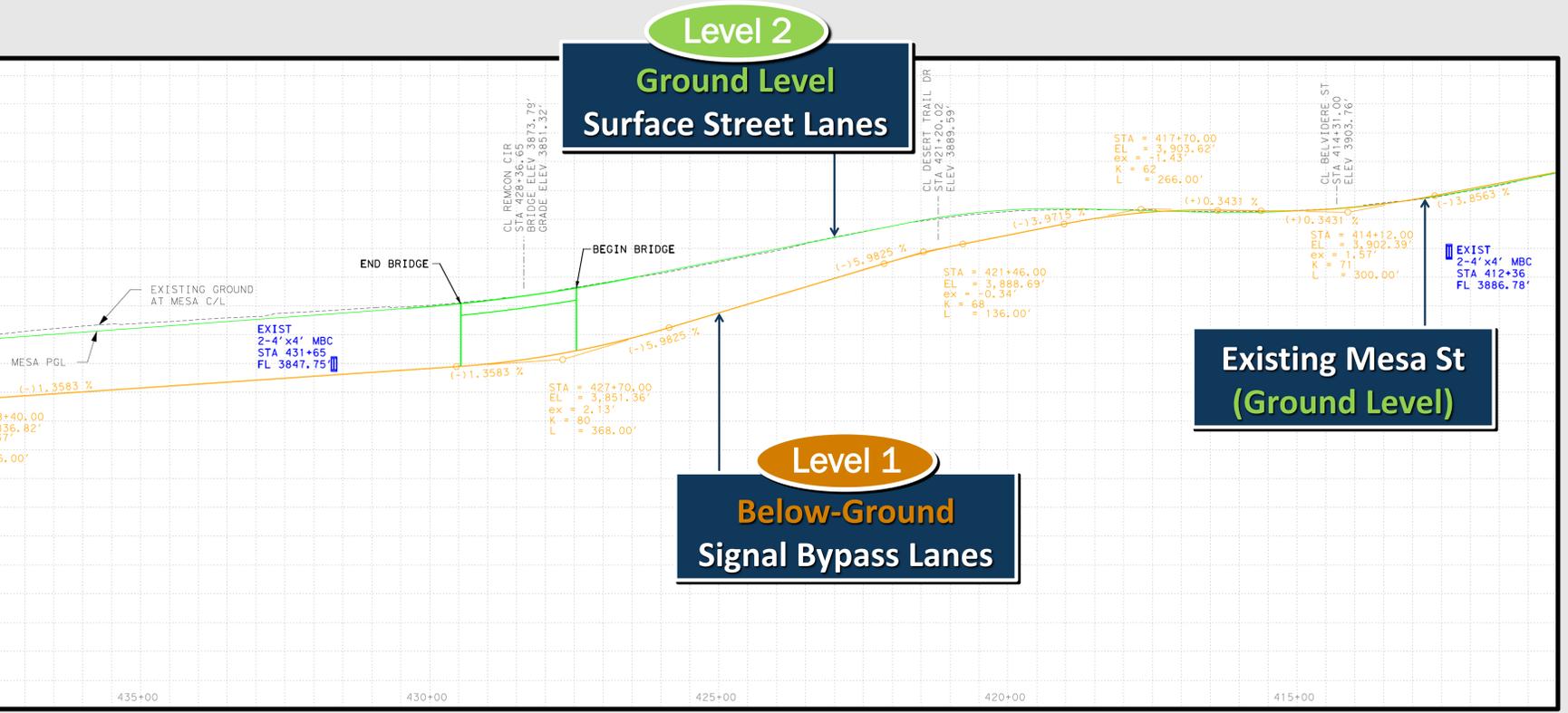
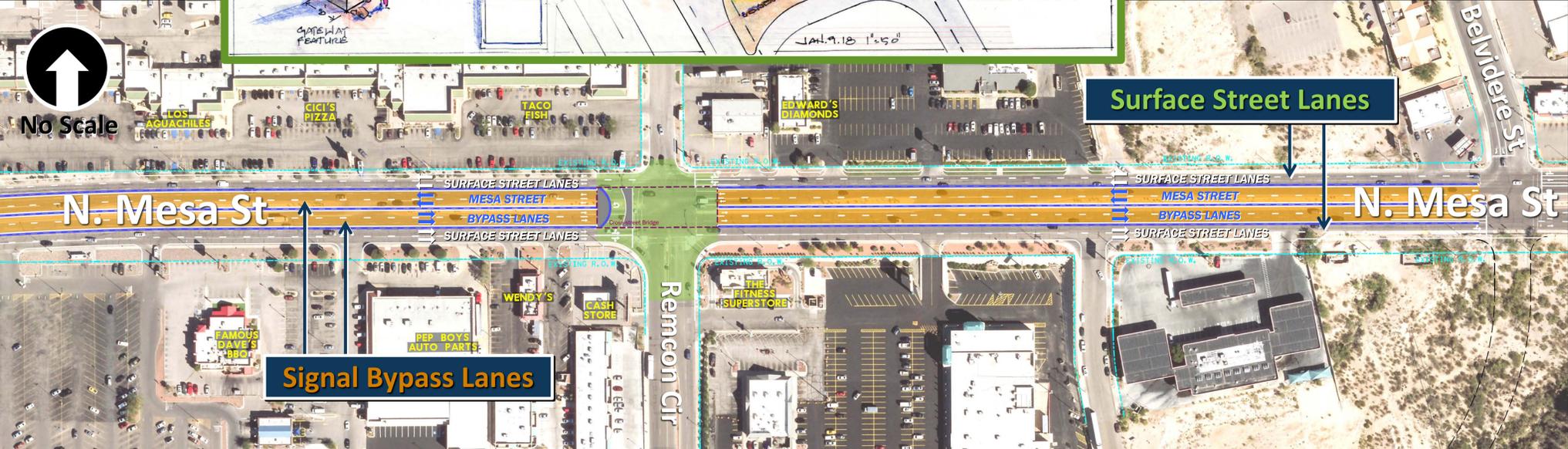
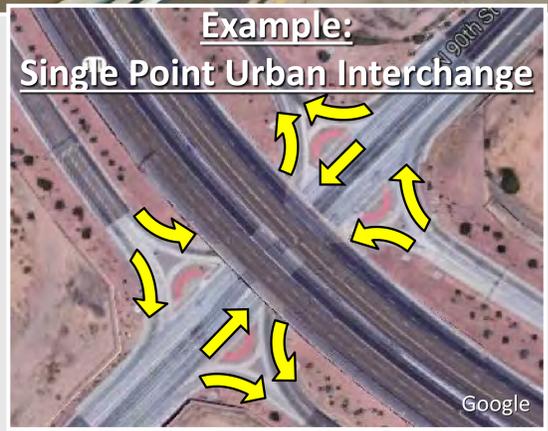
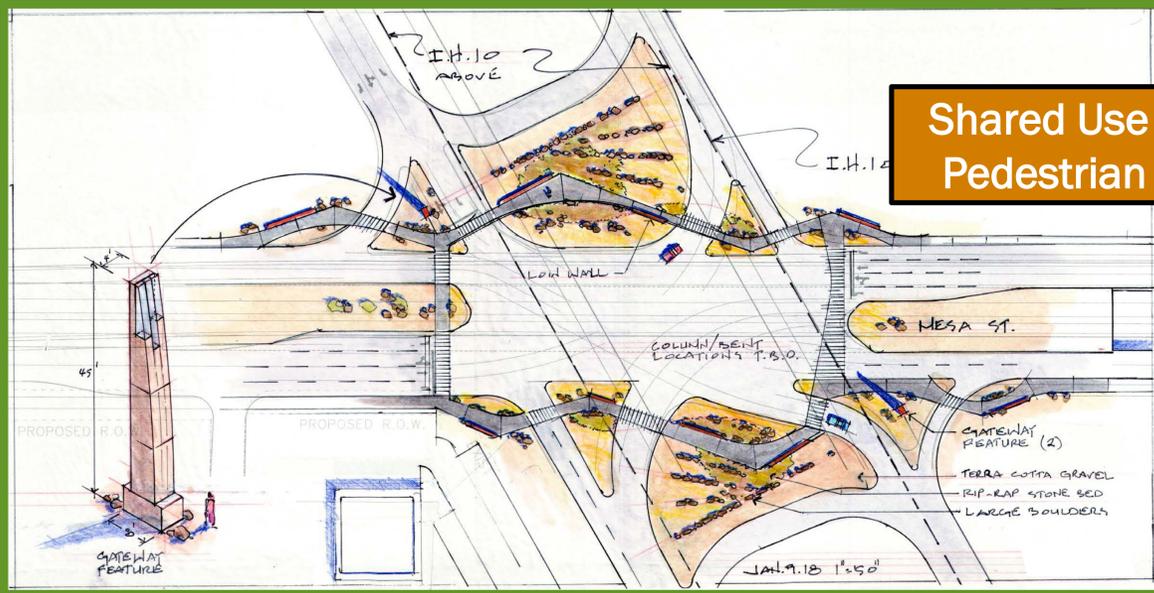
North Mesa St @ I-10

L

3-level Interchange with Below-Ground Mesa St (Signal Bypass) Lanes



Shared Use Path / Pedestrian Mode



-- MESA STREET TRAFFIC CONDITIONS --

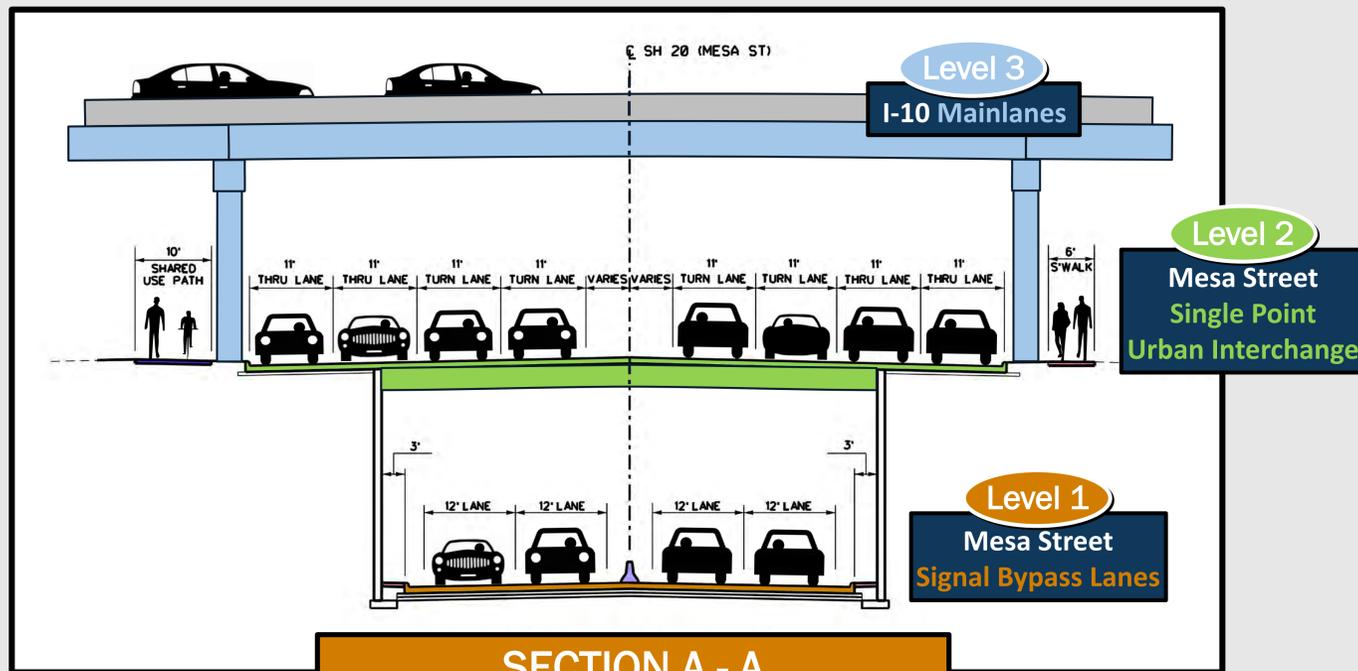
Level of Service:
AM Peak Hour (PM Peak Hour)
 2016 Existing: **E (C)**
 2040 No-Build: **F (F)**
 2040 Recommended Build: **C (C)**
 2040 Build w/o Bypass Lns: **D (D)**

- LOS A (free flow)
- LOS B (reasonably free flow)
- LOS C (stable flow)
- LOS D (approaching unstable flow)
- LOS E (unstable flow)
- LOS F (forced or breakdown flow)



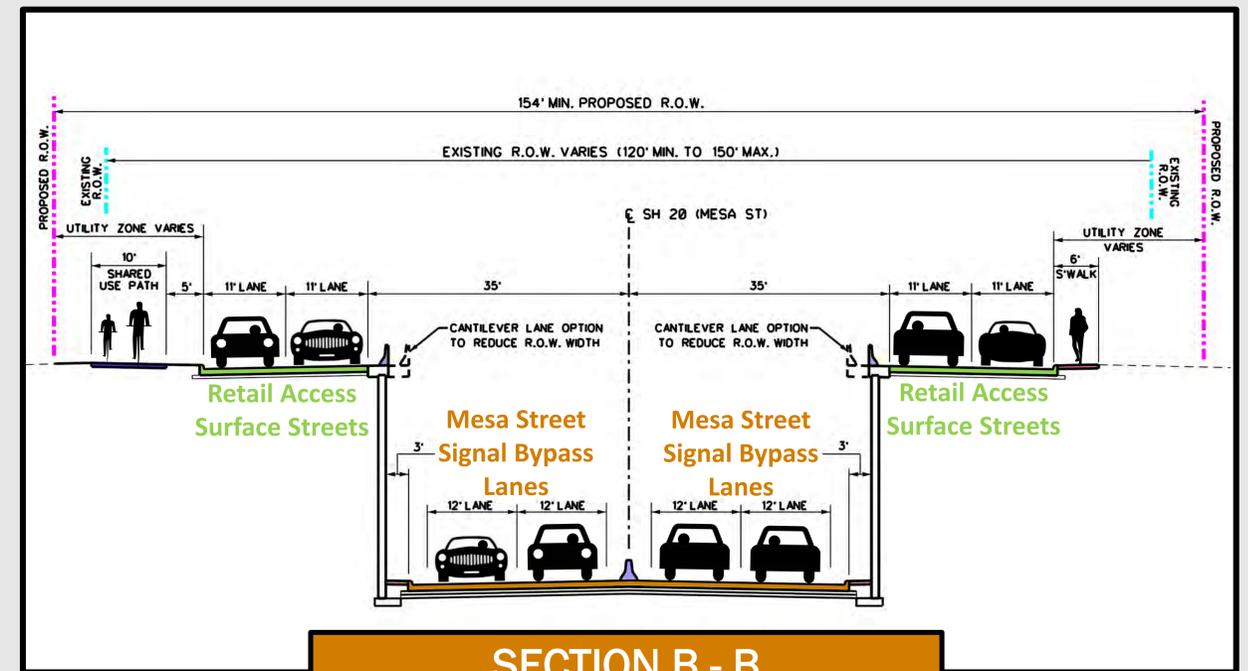
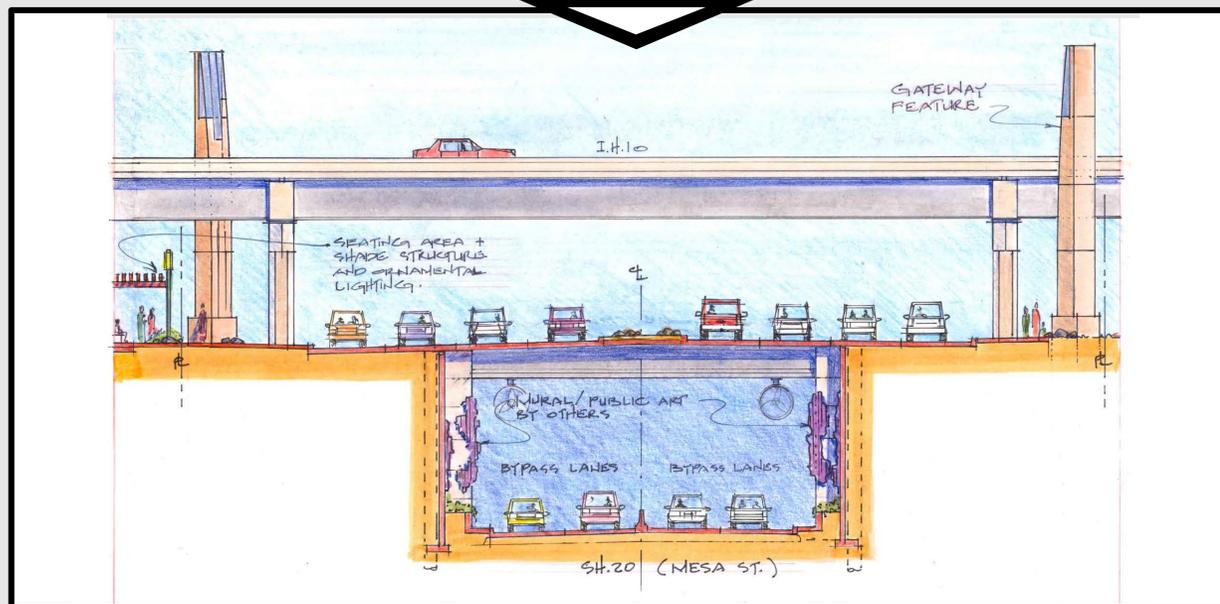
North Mesa St @ I-10

L 3-level Interchange with Below-Ground Mesa St (Signal Bypass) Lanes



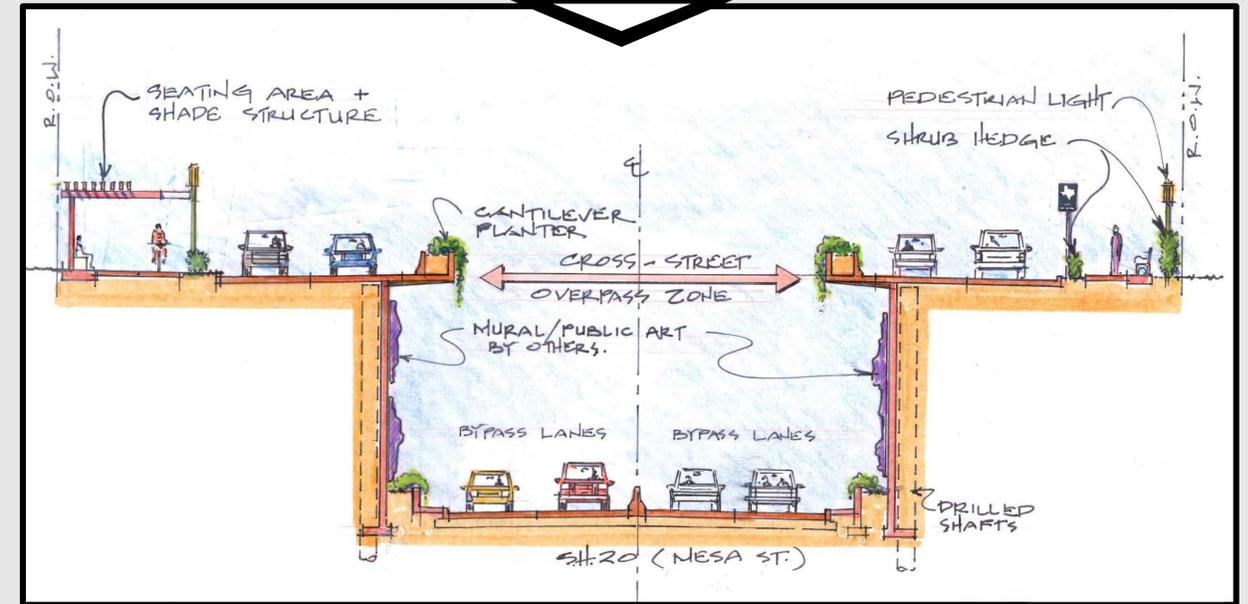
**SECTION A - A
NORTH MESA STREET (AT I-10)**

RENDERING



**SECTION B - B
NORTH MESA STREET**

RENDERING

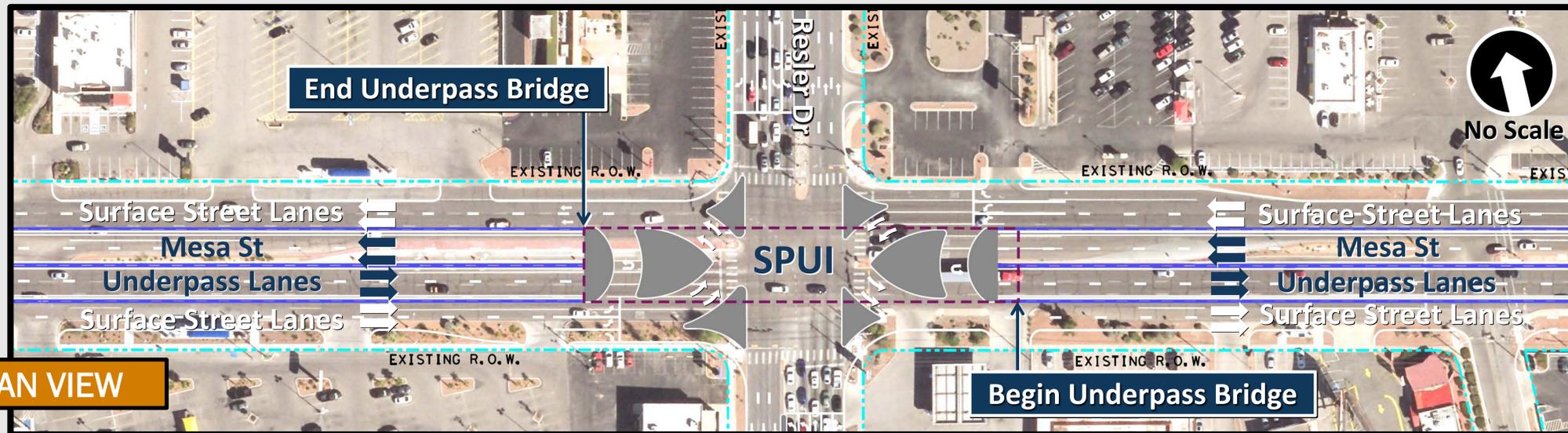




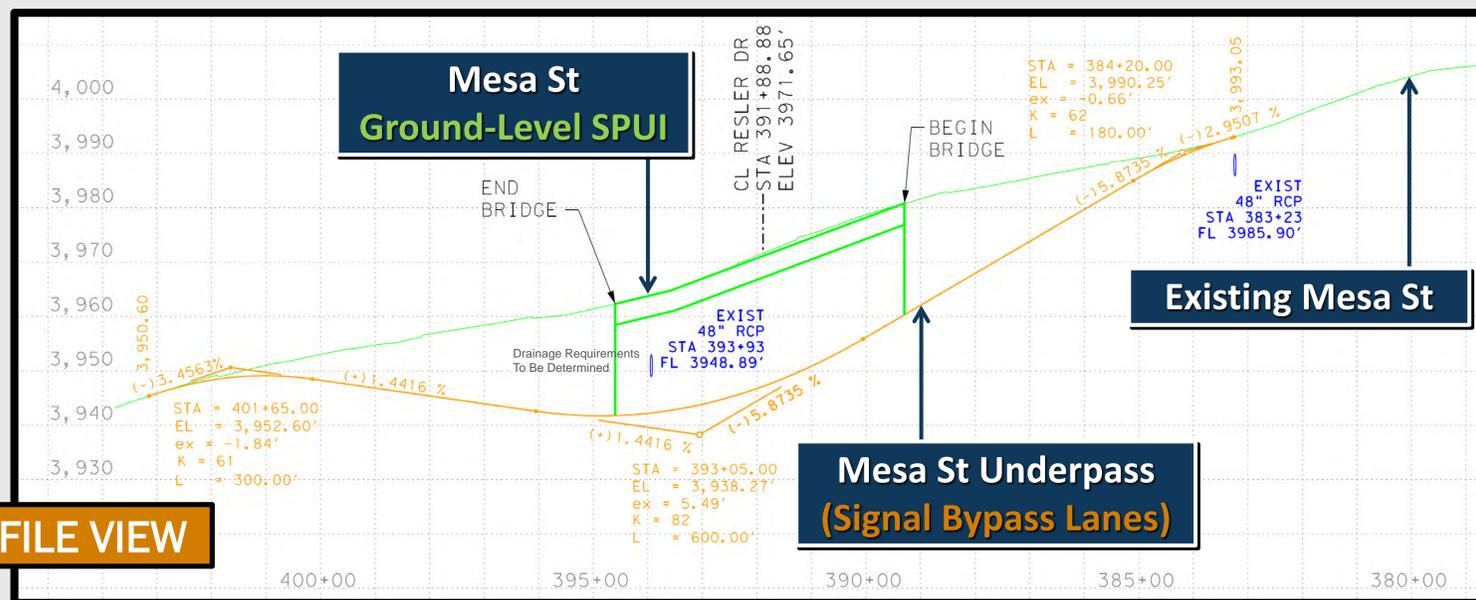
Mesa St @ Resler Dr

L

Single Point Urban Interchange (SPUI) with Underpassing Mesa St Lanes



PLAN VIEW



PROFILE VIEW



Shared Use Path / Pedestrian Modes

-- MESA STREET TRAFFIC CONDITIONS --

Level of Service:
AM Peak Hour (PM Peak Hour)

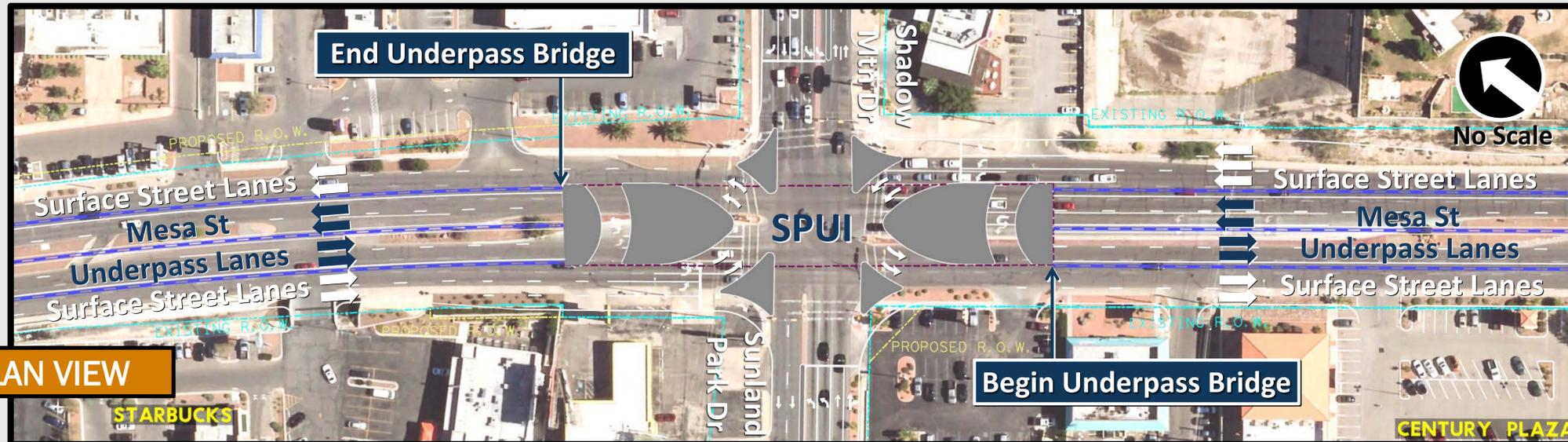
2016 Existing: **C (D)**
 2040 No-Build: **D (F)**
 2040 Recommended Build: **D (D)**

- LOS A (free flow)
- LOS B (reasonably free flow)
- LOS C (stable flow)
- LOS D (approaching unstable flow)
- LOS E (unstable flow)
- LOS F (forced or breakdown flow)

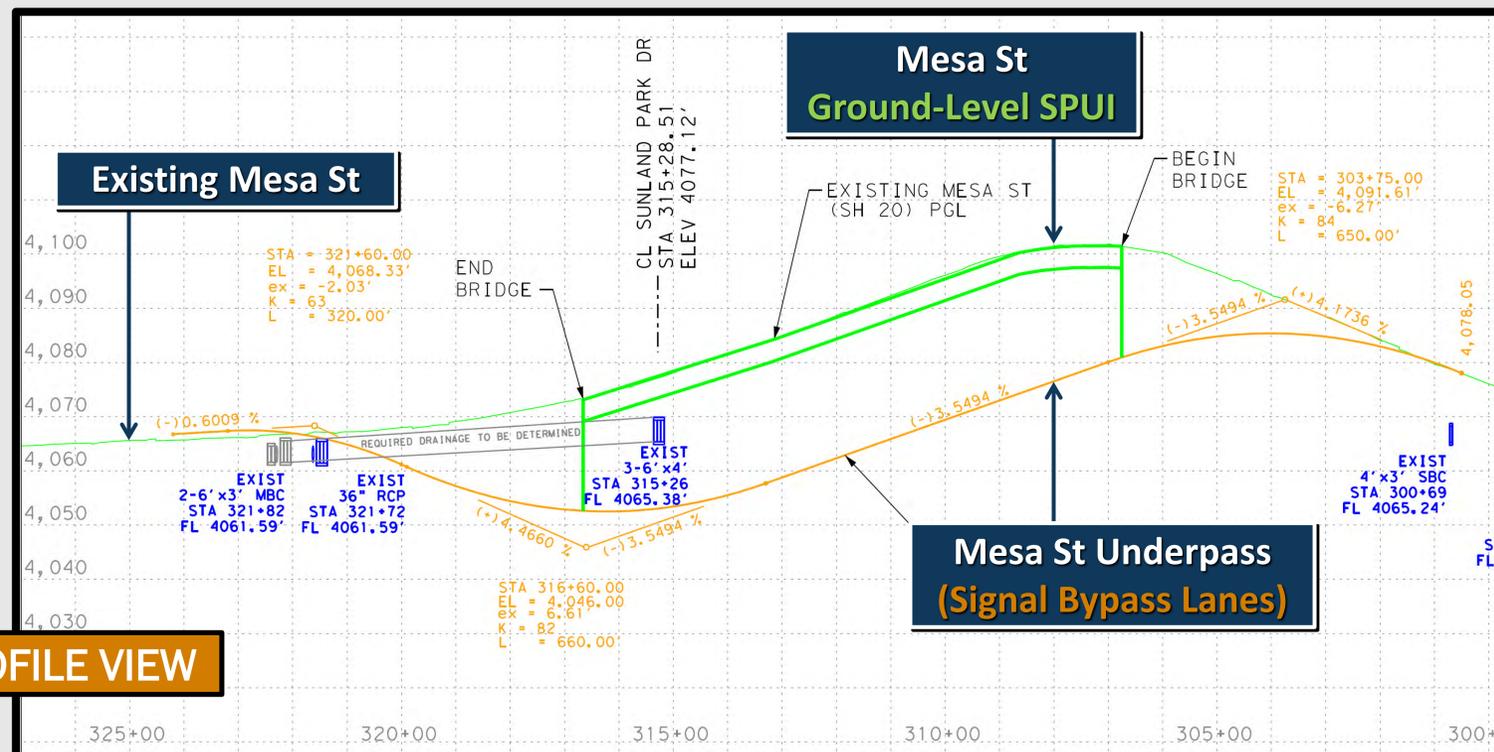


Mesa St @ Sunland Park Dr

L Single Point Urban Interchange (SPUI) with Underpassing Mesa St Lanes



PLAN VIEW



PROFILE VIEW

MESA STREET TRAFFIC CONDITIONS --

Level of Service:
AM Peak Hour (PM Peak Hour)
2016 Existing: D (E)
2040 No-Build: F (F)
2040 Recommended Build: C (D)

RECOMMENDED DRAFT CONCEPT



VIEW THE VIDEO SIMULATION FOR THIS CONCEPT AT [STATION 6](#)

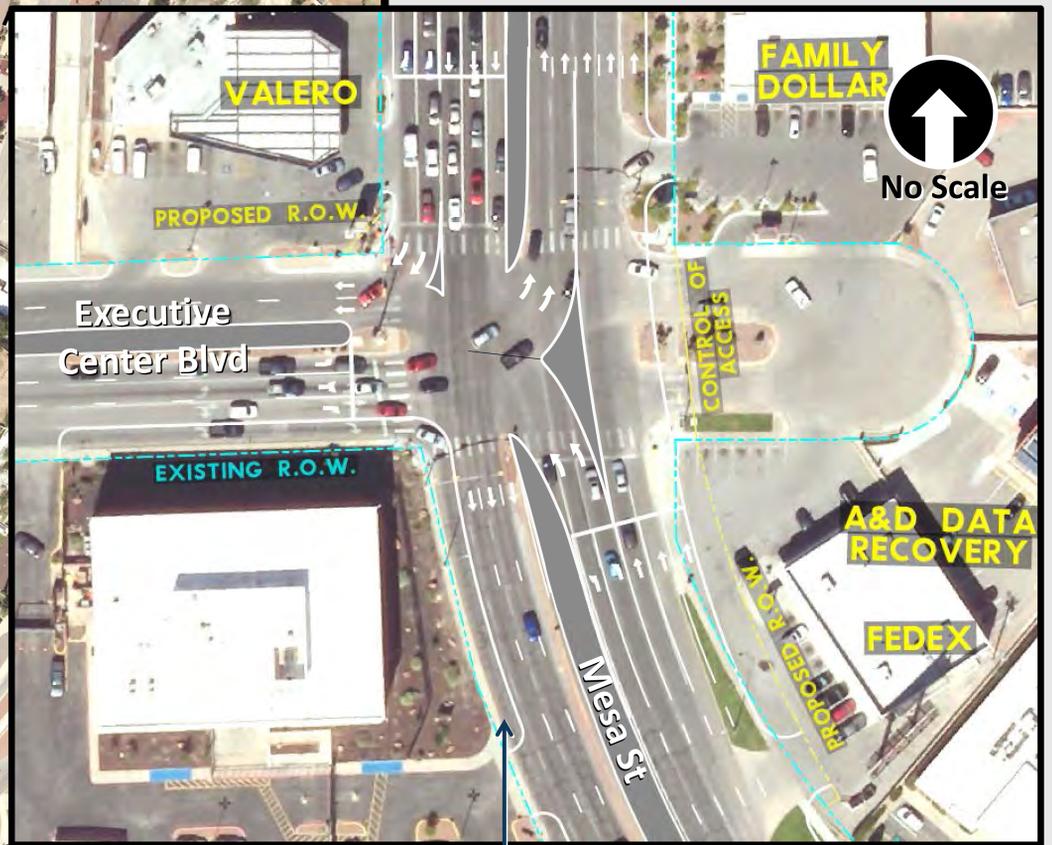
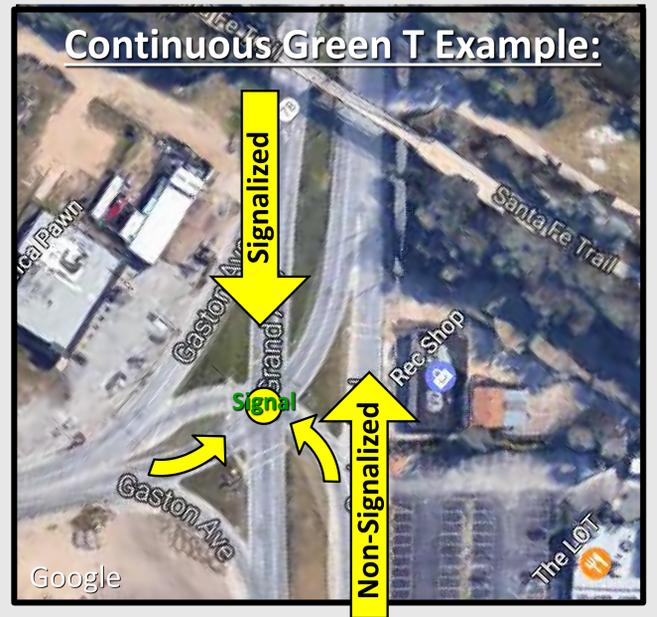
LOS A (free flow) LOS D (approaching unstable flow)
 LOS B (reasonably free flow) LOS E (unstable flow)
 LOS C (stable flow) LOS F (forced or breakdown flow)



Mesa St @ Executive Center Blvd



Continuous Green T Intersection



Horizontal Curve shift improves safety and creates space for a 10 ft-wide Shared Use Path adjacent to southbound Mesa Street that links the planned City of El Paso *Bike Plan* routes along Executive Center Blvd and Brentwood Ave

-- MESA STREET TRAFFIC CONDITIONS --

Level of Service:
AM Peak Hour (PM Peak Hour)

2016 Existing: **C (C)**
2040 No-Build: **D (F)**
2040 Recommended Build: **D (C)**

- LOS A (free flow)
- LOS B (reasonably free flow)
- LOS C (stable flow)
- LOS D (approaching unstable flow)
- LOS E (unstable flow)
- LOS F (forced or breakdown flow)

PLAN VIEW

RECOMMENDED DRAFT CONCEPT



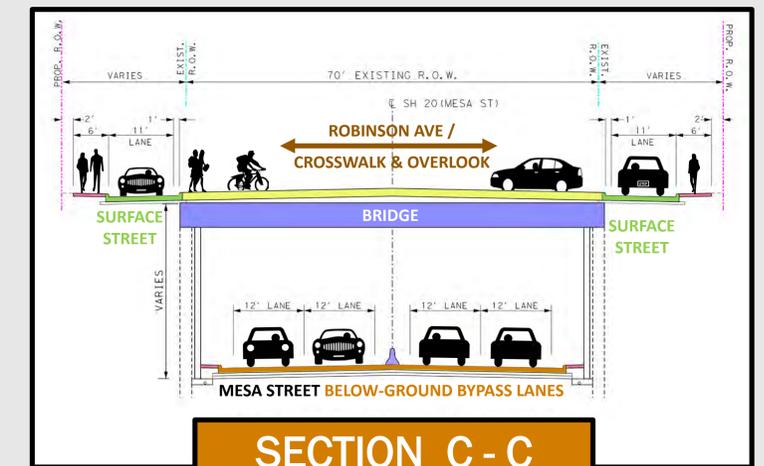
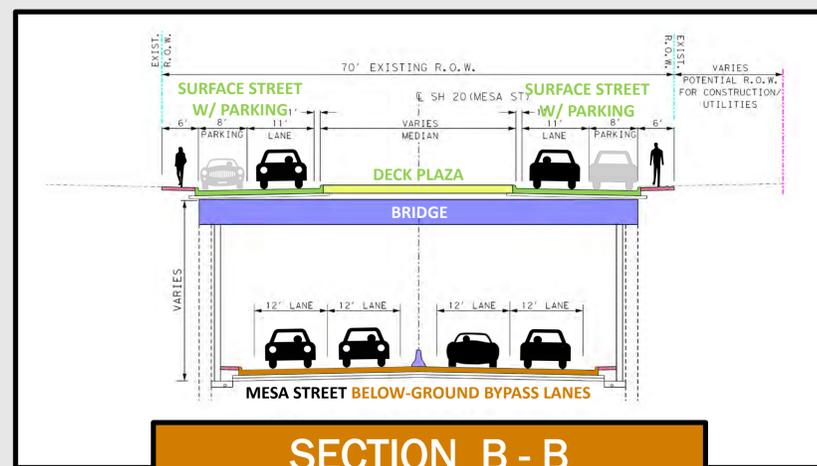
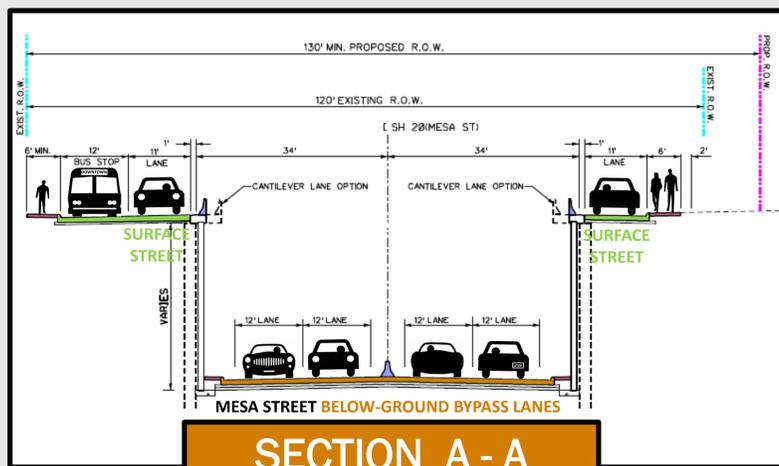
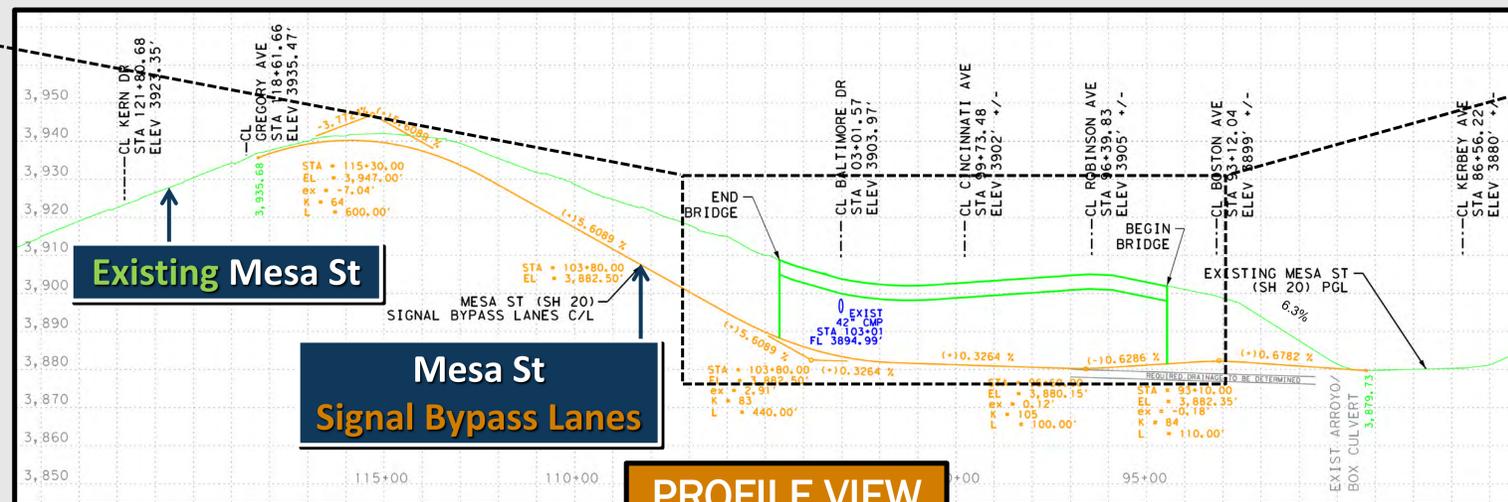
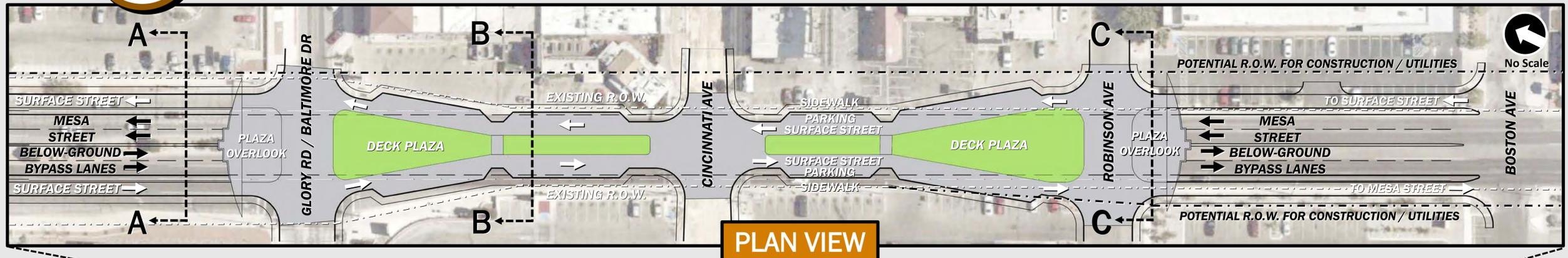
VIEW THE VIDEO SIMULATION FOR THIS CONCEPT AT **STATION 6**



Mesa St @ Glory Rd / Baltimore Dr

L

Below-Ground Mesa St (Signal Bypass) Lanes & Pedestrian Deck Plaza



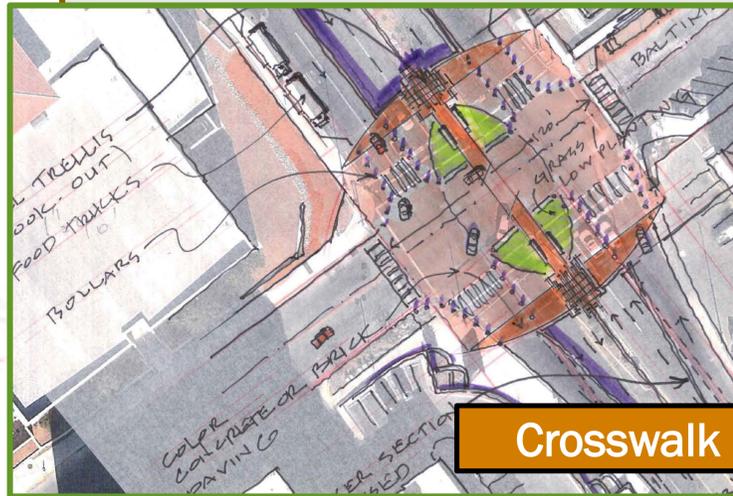
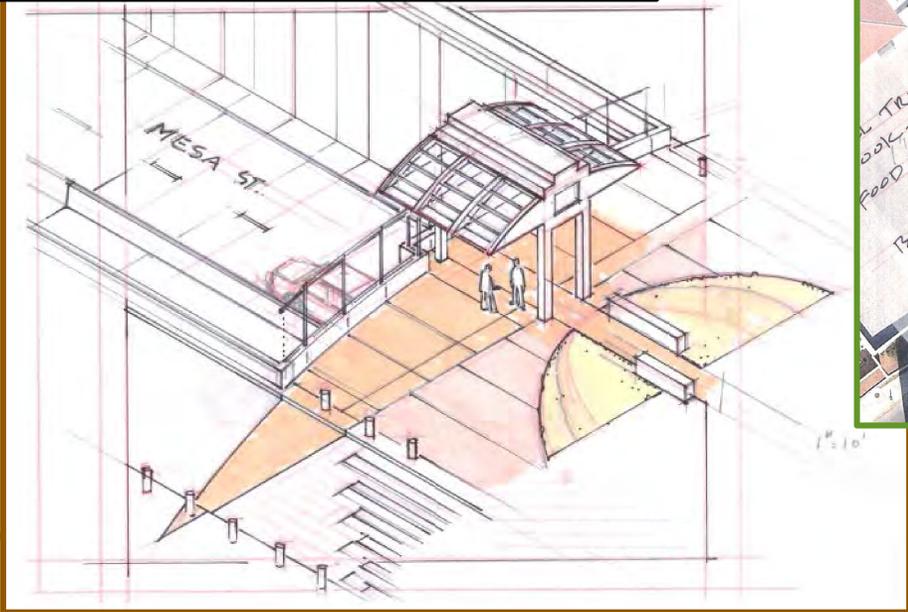


Mesa St @ Glory Rd / Baltimore Dr



Pedestrian Deck Plaza & Gateway Overlook

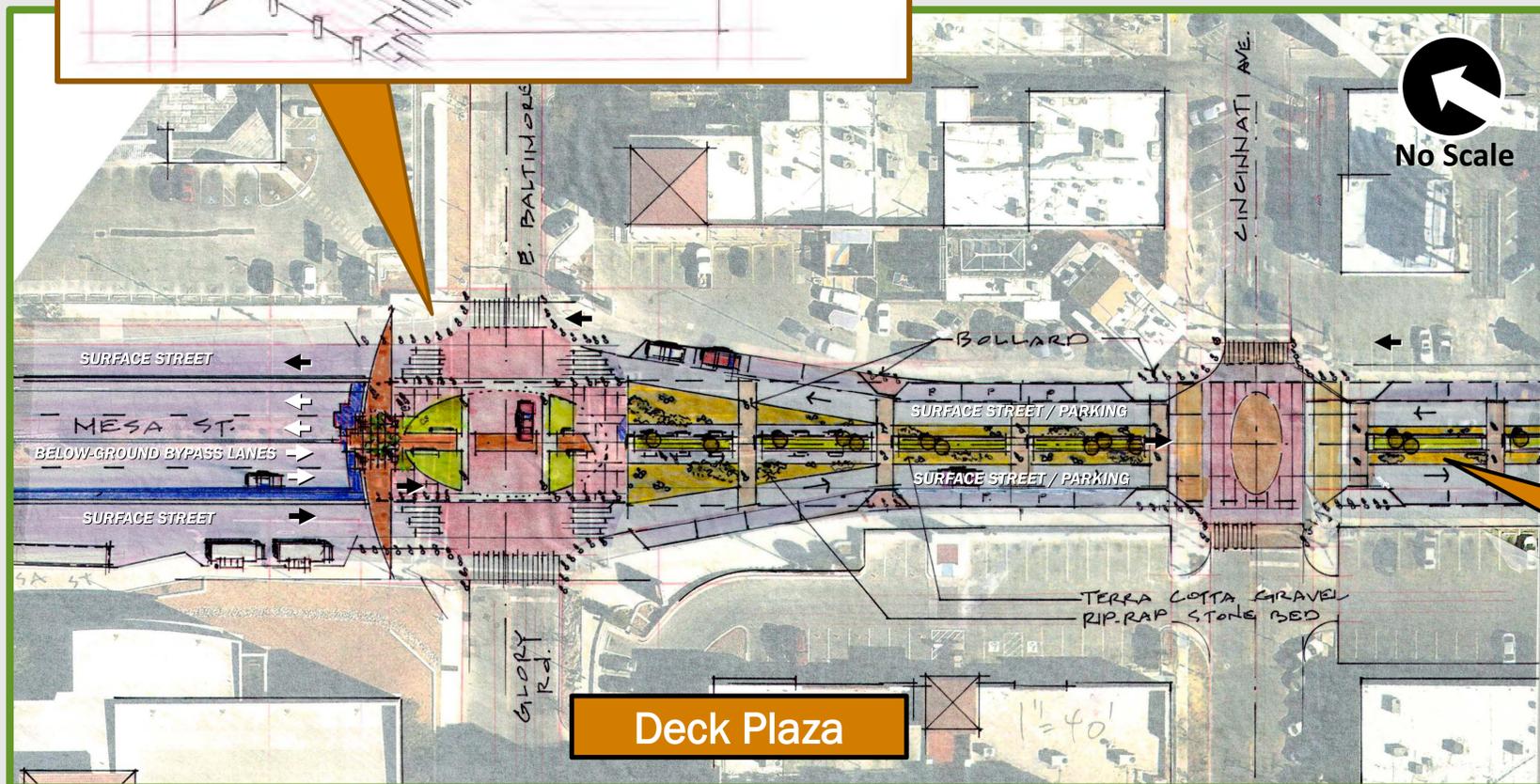
Gateway Overlook at Glory Rd



Crosswalk



Pickaxe Accent Theme



Deck Plaza





Interactive Survey

Survey Options:

- Complete the survey at this meeting using our laptop computers
- Complete the survey online at www.txdot.gov, keyword "Mesa Street" and [click on the survey link](#)



- Complete the survey from your smart phone using the QR code above and [click on the survey link](#)

[Deadline for comments is Friday, February 23, 2018](#)



Provide Comments

Submit a Comment after this Public Meeting:

Email: mesastreet@civilassociates.com

Phone: (915) 790-4233

Mail: Gus Sanchez
Project Manager
Re: Mesa Street
TxDOT El Paso District
13301 Gateway Blvd. West
El Paso, TX 79928-5410

*Comments must be received or postmarked on or before **Friday, February 23, 2018** to be included in the Public Meeting Summary.*





Thank you for attending!

- Please remember to submit your comment form and complete our survey
- For any further questions and information, please ask a study team member