



**SH 48 Raised Median – Safety Project**

Virtual Pre-recorded Public Meeting  
October 12- October 27, 2020  
Cameron County, Texas  
TxDOT Pharr District  
CSJ: 0220-05-080

October 12 – October 27, 2020

Welcome to the Virtual pre-recorded Public Meeting for the SH 48 Raised Median – Safety Project. The Texas Department of Transportation (or TxDOT) is proposing to improve safety and mobility by adding raised medians from SH 4, or Boca Chica Boulevard, to FM 511, or North Indiana Avenue.

We would like to welcome and thank you for taking the time to view this virtual presentation available online from **October 12, 2020** through **October 27, 2020**. The purpose of this virtual public meeting is to encourage and maintain effective communication with the public and to describe the proposed project. Public involvement is an ongoing aspect of the project development process to encourage and solicit public input and provide an opportunity for the public to become fully informed and engaged about the proposed project. Contact information for questions or comments is noted at the end of this presentation.

## Memorandum of Understanding



### National Environmental Policy Act (NEPA) Assignment to the Texas Department of Transportation

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 9, 2019, and executed by FHWA and TxDOT.

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## Introduction



### **KCI Technologies:**

- Carlos Juarez, P.E. – Project Manager
- Oscar Garza, P.E. – Design Engineer

### **TxDOT:**

- Samantha Lozano, P.E. – Project Manager
- Octavio Saenz – Public Information Officer
- Robin Gelston – Environmental Coordinator

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TxDOT has contracted the services of KCI Technologies to provide engineering support on this project. Samantha Lozano is the TxDOT Project Manager for this project. Octavio Saenz is the Public Information Officer for TxDOT and will be doing the voiceover for this presentation.

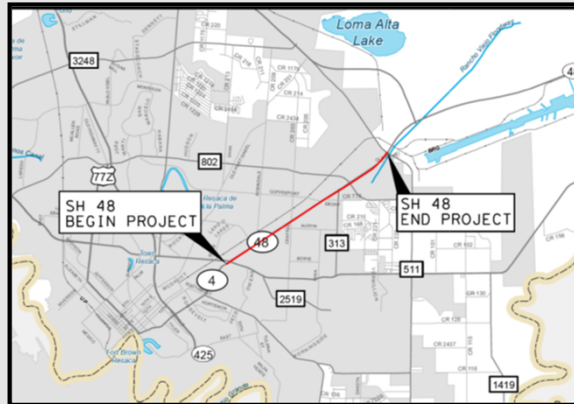


Let's look at an overview of the project.

## Project Overview

### SH 48

- From SH 4 to FM 511
- Project Location Map:



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The Texas Department of Transportation is designing improvements to SH 48 to enhance safety and mobility. The project location map on the screen depicts the general vicinity of the project within the city of Brownsville. The project begins at SH 4 and extends northeast towards FM 511 for approximately 3.8 miles.

**Project Overview**


**SH 48**

- From SH 4 to FM 511

**Project Details:**  
Construct a raised median

**Project Length:**  
Approximately 3.8 miles

**Project Manager:**  
Samantha Lozano  
956-702-6334 or  
Samantha.Lozano@txdot.gov



The map displays a red line representing the project route from SH 4 to FM 511. The route starts at SH 4 on the left and extends northeast to FM 511 on the right. The map includes various street names such as M. Torres Blvd, Johnnie J. Zapata Ave, and Reid Hope King. A north arrow is located in the bottom right corner of the map area.

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The scope of the proposed project includes the addition of raised medians and left turn lanes at signalized intersections.

If you have questions about this project that are not answered in our virtual meeting, you may contact the project manager, Samantha Lozano, for additional information.

# Existing Roadway

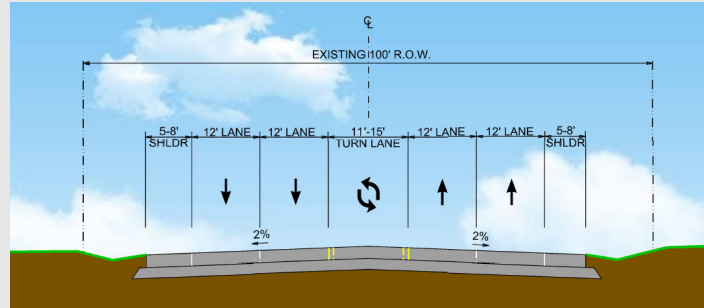
SH 48 Virtual Public Meeting

Let's look at the existing roadway.

## SH 48 Existing Roadway



### Existing Roadway Configuration



Average Daily Traffic (2018)

**26,466**

vehicles per day

Projected Daily Traffic (2038)

**37,052**

vehicles per day

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The existing roadway consists of two travel lanes in each direction, separated by a two-way left turn lane, within a 100-foot right of way. There is currently an average of over 26,000 vehicles traveling through parts of this corridor daily, and that number is expected to increase to 37,000 in the next 20 years.

# Project Need and Purpose

SH 48 Virtual Public Meeting

Let's look at the project need and purpose.

**Project Need and Purpose** 

<b>Project Need:</b>	<b>Project Purpose:</b>
 High crash rate	 Improve safety
 Increase in traffic volumes, (Congested traffic)	 Reduce congestion
 Decreased mobility	 Improve mobility

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As this area continues to grow, there has been an increase in traffic along SH 48 that has contributed to decreased mobility and a high crash rate. The traffic has become slow and congested, and 2019 had the highest number of crashes in the past ten years. This project is being developed to provide solutions to improve mobility, reduce congestion and enhance safety.

## SH 48 Crash Data from SH 4 to FM 511



- Texas A&M Transportation Institute (TTI) completed a detailed safety evaluation of this section of SH 48 this year\*
- The study examined near and longer-term safety conditions within the corridor. Key findings included:
  - The corridor has a high rate of overall crashes
  - A large number of crashes were centerline crashes

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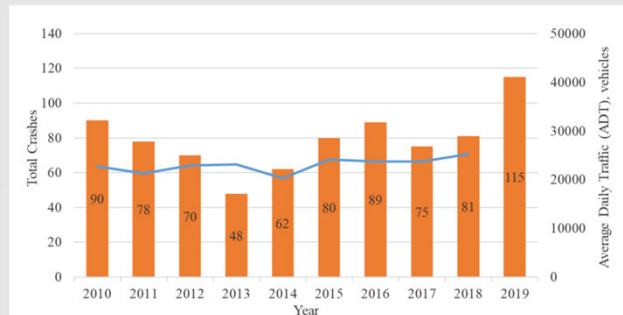
As part of the preliminary analysis of the surrounding area, The Texas A&M Transportation Institute completed a traffic safety evaluation earlier this year. The purpose of this study was to assess the existing and long-term safety conditions within the corridor.

## SH 48 Crash Data from SH 4 to FM 511



### Overall Crashes

- 799 crashes between 2010 and 2019
- 115 crashes in 2019, the highest number of yearly crashes in the 10-year period



\*Using data from TTI study

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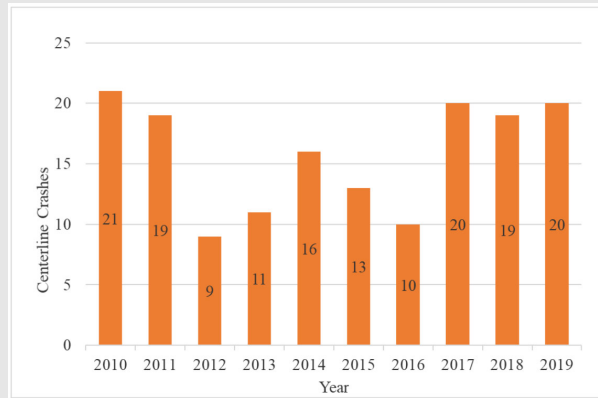
The results of the study are summarized in the chart shown. During the ten-year period between 2010 through 2019 there has been a total of 799 crashes within the project limits. The total number of crashes each year shows a sharp increase during the year 2019. Centerline crashes make up a significant portion of the overall crashes.

## SH 48 Crash Data from SH 4 to FM 511



### Centerline Crashes

- Twenty percent of all crashes in the SH 48 corridor; 2010-2019
- Preventable with the installation of a raised median



\*Using data from TTI study

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This chart shows the total number of centerline crashes for each of the years 2010 through 2019. These crashes account for 20 percent of all crashes and are preventable with the installation of a raised median.

# Proposed Improvements

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Let's look at the proposed improvements.

## Proposed Improvements



To improve the safety and mobility along SH 48 TxDOT is proposing to:

Construct a raised median

Provide extended left-turn lanes

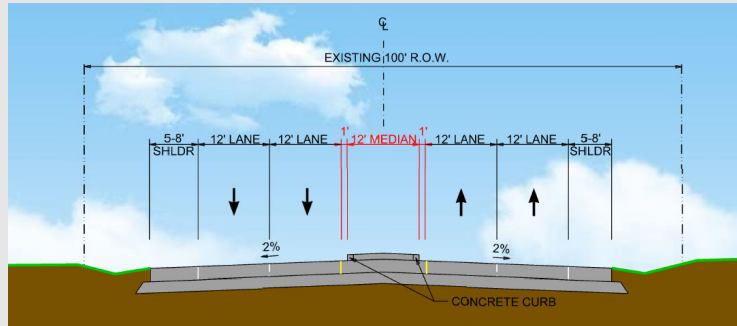
Provide mid-block turns to allow additional U-turns

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To improve the safety and mobility along SH 48, TxDOT is proposing to construct a raised concrete median down the center of SH 48, and add left-turn lanes and mid-block U-turns.



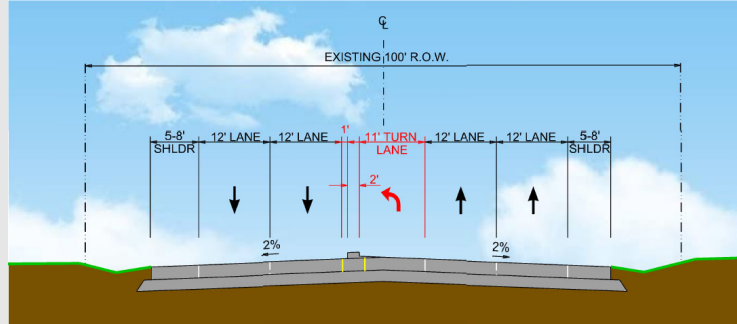
Roadway Configuration with Median



The proposed traffic configuration with raised medians include two 12-foot travel lanes in each direction with a 12-foot raised concrete median.



Roadway Configuration with Left Turn Lane



Extended left turn lanes will be provided at signalized intersections, and the traffic configuration will have an 11-foot left turn lane with a 2-foot raised median. Additional pavement will be added to some of the intersections to accommodate vehicles making U-turns. Dual left turn lanes will be provided at the intersection with SH 4.

## SH 48 Proposed Improvements



### Medians Enhance Safety and Mobility

The TxDOT *Roadway Design Manual* recommends medians where the Average Daily Traffic exceeds 20,000 vehicles per day.

#### Average Daily Traffic (2018)

**26,466**

vehicles per day

#### Projected Daily Traffic (2038)

**37,052**

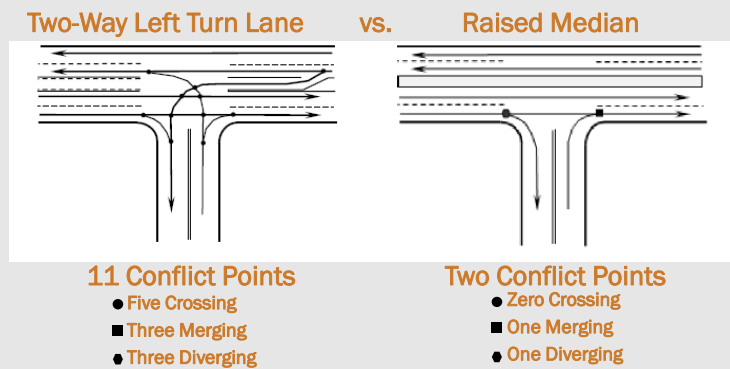
vehicles per day

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This raised median project along SH 48 will address safety concerns due to the increasing number of vehicles using the road and the large number of driveways and side streets where cars are turning. Medians are recommended where the traffic exceeds 20,000 vehicles per day. Current traffic volumes already exceed that number and are expected to significantly grow larger in the next 20 years.



Medians Reduce Conflict Points:



So, how will a raised median help?

Medians reduce turning conflicts. Vehicles turning left are at risk due to incoming through traffic.

Medians also reduce the number of crashes by creating a barrier for opposing directions of traffic, preventing head-on traffic and crossing traffic. This allows for a safer movement of traffic.

Medians allow for protected left turn lanes and help avoid congestion by removing traffic from through lanes. The left turn lanes are designed to accommodate deceleration and a waiting space, allowing those vehicles to turn without stopping through traffic.

## SH 48 Proposed Improvements



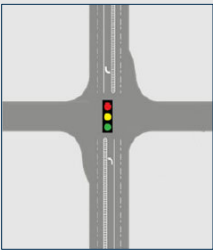
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This video taken of SH 48 demonstrates an example of conflict points that present on a corridor with two-way left turn lanes. Throughout the duration of the video, there are multiple times when vehicles have near collisions maneuvering through several lanes. Towards the end of the video, there is a truck turning left out of a driveway and creates potential conflict points for several lanes of traffic. With the implementation of a raised median, these conflict points would be reduced. Left turns would only be made at signalized intersections, or at mid-block turns with full deceleration lanes.

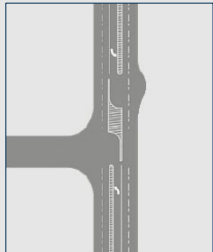
## SH 48 Proposed Improvements

**Median Breaks**

- Located at all signalized intersections along the project
- Spaced to allow for adequate left turn lane storage
- Two types of median breaks are proposed:
  - Intersections
  - Mid-block turns
- Some intersections will accommodate U-turns
- Additional mid-block turnarounds are proposed



Intersection



Mid-block turnaround

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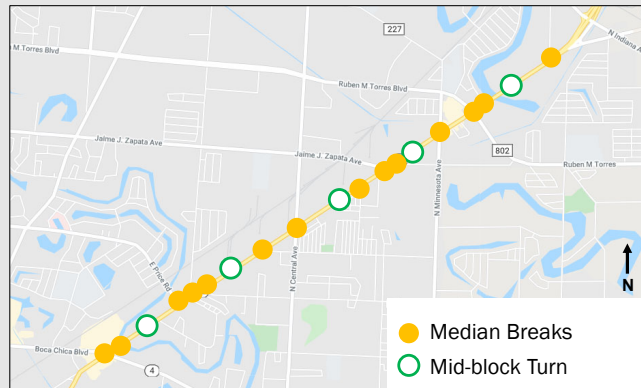
Median breaks are proposed at all signalized intersections. In addition, there are other locations with median breaks to allow traffic to access properties on the other side of the street and to turn and drive in the opposite direction. The median breaks must be spaced far enough apart to allow for left turns lanes to store the cars waiting to turn left. This space will also allow vehicles to safely decelerate prior to making a turn. To allow sufficient space for deceleration not all intersections will have median breaks.

We have included two types of median breaks for this project: intersections and mid-block U-turns. Mid-block U-turns will allow vehicles to turn around and access the opposite side of the street.

## SH 48 Proposed Improvements

### Intersection median breaks are proposed for:

- SH 4
- Home Depot
- E Price Rd
- Robindale/Fruitdale Dr
- McKenzie Rd
- Austin Rd
- N Central Ave
- Zena Dr
- Jamie Zapata Ave
- Coffee Port Rd
- N Minnesota Ave
- Ruben M Torres Blvd
- Former Walmart
- Nafta Pkwy



### Mid-block U-turns are proposed at 5 additional locations

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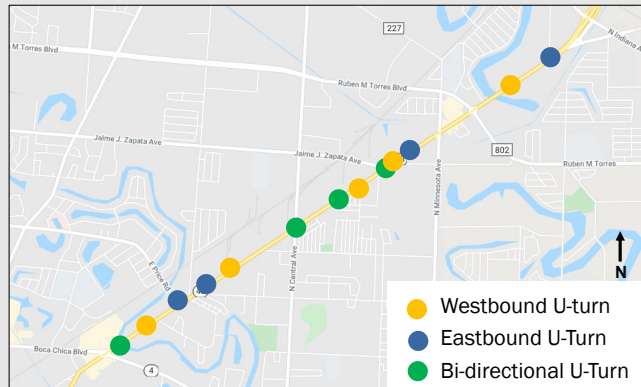
Median breaks are proposed for the following: SH 4, the Home Depot intersection, E Price Rd, Robindale Rd/Fruitdale Dr, McKenzie Rd, Austin Rd, N Central Ave, Zena Dr, Jamie Zapata Ave, Coffee Port Rd, N Minnesota Ave, Ruben M Torres Blvd, the former Walmart intersection, and Nafta Pkwy. Additional mid-block U-turns are provided at five locations along the project.

## SH 48 Proposed Improvements



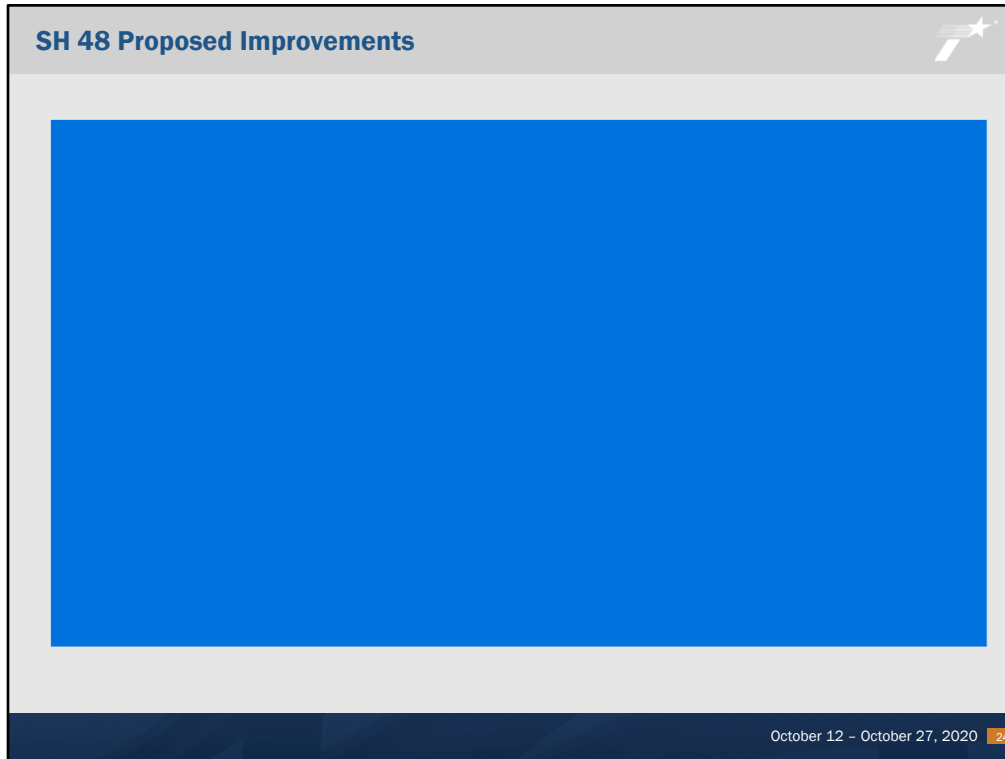
### U-turns

- Allow travel in the opposite direction
- Provide access to properties on the other side of the street



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The map on the screen displays where U-turns will be accommodated. These locations will allow traffic to turn and travel in the opposite direction, as well as reach properties on the opposite side of the street.



Here is a brief video that demonstrates the traffic flow through the dual left turn lanes at the SH 4 and SH 48 intersection. There is also a link to this video on the TxDOT SH 48 webpage.

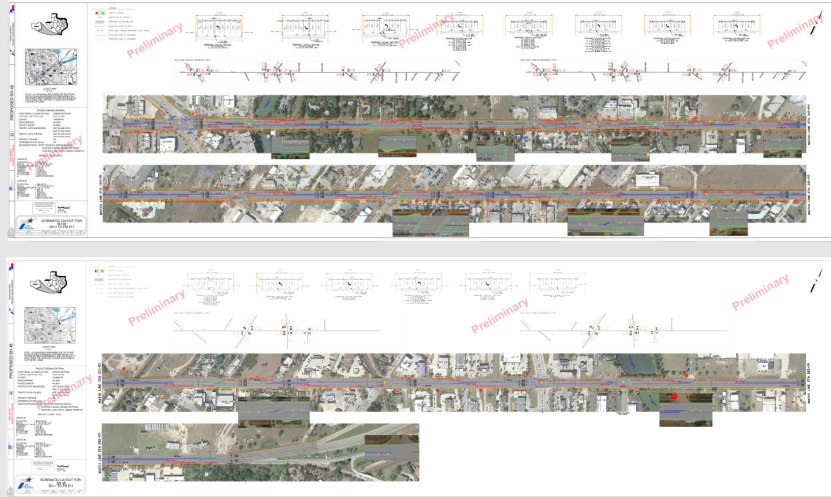
**(LONG PAUSE)**

This is the proposed intersection at SH 48 and SH 4. The raised median will be added to SH48 to the northeast. The proposed design will also add dual left turn lanes to the other SH 48 and SH 4 approaches. These dual movements will address the left turn storage needs at this intersection.

## SH 48 Proposed Improvements



### Project Schematic



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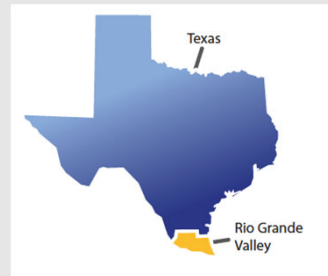
The preliminary project schematic is available on the TxDOT SH 48 public meeting webpage. It is available for download as a PDF document. The schematic provides a more in depth look at details such as lane widths, turn lane dimensions, and where U-turns will be accommodated.

## SH 48 Proposed Improvements



### Economic Effects Related to Raised Medians

- Texas A&M Transportation Institute (TTI) developed and prepared studies on economic impacts of raised median implementation. These show overall economic activity is not negatively impacted by raised medians.
- *Economics Impacts of Raised Median Implementation (2016)* focused on the Texas Lower Rio Grande Valley region. Four corridors were analyzed using tax receipts collected from businesses along the corridor. The change in tax receipts compared to the surrounding area shows there were no negative economic effects from these projects.



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Texas A&M Transportation Institute has developed and prepared several studies on the economic impacts of raised medians throughout the State of Texas. These studies showed no negative impact to businesses due to the implementation of raised medians.

One of these studies was specific to corridors in the Texas Lower Rio Grande Valley region. Tax receipts were analyzed to determine if the implementation of raised median affected the businesses along the corridor. In three of these four studies, the change in the amount of tax receipts were found to increase more than other businesses in the surrounding area.

## Estimated Project Schedule and Funding

- **Project Schedule:**
  - Ongoing Public Involvement
  - Funded for construction starting in 2023\*\*

Complete Schematic	Environmental Decision	Finalize Design	Begin Construction
Spring 2021	Spring 2021	2022	Fall 2023

\*\* Project schedule is preliminary and subject to change

- **Project Funding:**
  - \$4.8 Million

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For Fiscal year 2023, the project has approximately 4.8 million dollars assigned for construction. The next step in project development is to review and evaluate all the comments received during the comment period and finalize the schematic design for approval. Project development will continue by finalizing the design and obtaining the necessary environmental clearance. We are anticipating an environmental decision on the project by Spring 2021. Once the design is complete and environmental clearance is issued, the project would receive bids for construction in late 2023.

# Tell Us What You Think

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Tell us what you think.

**How To Submit Your Comments** 

**All comments must be received or postmarked by October 27, 2020 to be included in the official meeting documentation**

- **Online:** [www.txdot.gov](http://www.txdot.gov)
  - Keyword search “SH 48 Virtual Public Meeting”
- **Email:** [Robin.Gelston@txdot.gov](mailto:Robin.Gelston@txdot.gov)
- **Voicemail:** (512) 806-0677
- **Mail:**
  - TxDOT Pharr District
  - Attn: Robin Gelston
  - 600 West Interstate 2
  - Pharr, Texas 78577

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We are very interested in hearing your feedback on this information presented and the proposed project plans. We understand that the comment process is slightly different for this virtual public meeting; therefore, we will take a moment to discuss how comments can be submitted. TxDOT is asking the public to make comments online, through email, mail, or voicemail.

A comment form can be downloaded or printed from the TxDOT website at [www dot txdot dot gov](http://www.dot.txdot.gov), keyword “**SH 48 Virtual Public Meeting**”  
Comments can also be emailed to Robin dot Gelston at [TxDOT dot gov](mailto:Robin.Gelston@txdot.gov)t.  
Additionally comments can also be mailed to : TXDOT Pharr District office  
attention Robin Gelston at 600 west interstate 2, Pharr, Texas 78577  
or you can leave a voicemail by dialing **512-806-0677**.

Be sure to submit your comments by **October 27th** . Responses to comments received will be included in the online public meeting summary report. This report will be posted on the TxDOT website in the next few months. We appreciate your understanding of this comment process.

## How To Submit Your Comments



### Additional Questions?

While comments need to be received or postmarked by **October 27, 2020** to be included in the official meeting documentations, any questions regarding this project may be made at anytime during the project development process.

Please contact:

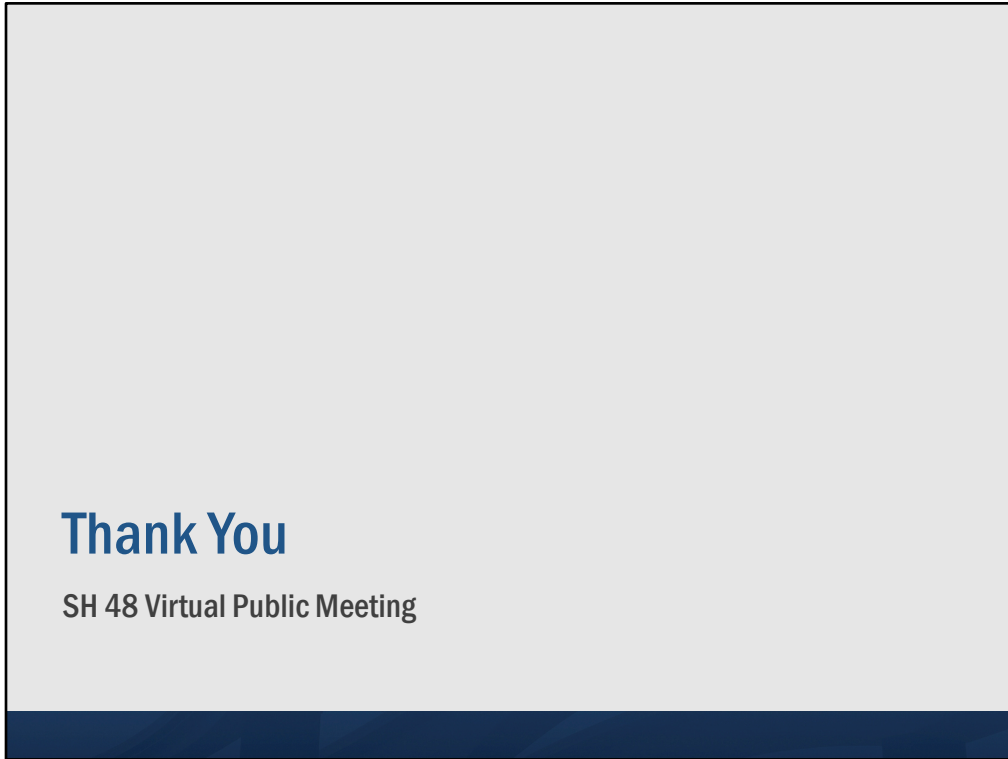
- Project Manager: Samantha Lozano
- Phone: 956-702-6334
- Email: [Samantha.Lozano@txdot.gov](mailto:Samantha.Lozano@txdot.gov)

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While all comments must be received or postmarked by **October 27<sup>th</sup>** to be included in the official meeting documentation, any questions about this project may be made anytime during the project development process. Please contact the Project Manager, Samantha Lozano, with any additional questions regarding this project. Questions can be sent through email ([Samantha.Lozano@txdot.gov](mailto:Samantha.Lozano@txdot.gov)) or made through phone (956-702-6334).

We encourage you to stay informed. Schematic layouts and presentation materials, including graphics, will be available on the TxDOT Website. This concludes the virtual public meeting.

Thank you.



Thank You.