Padre/Mustang Island Mobility Plan

PUBLIC REVIEW DRAFT April 28, 2025

[Inside Cover]

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1. Introduction

The 2021 Padre/Mustang Island Area Development Plan established the Policy Initiative to "Accommodate Safe, Efficient Movement of Pedestrians, Bikes, and Golf Carts Throughout the Island" and includes strategies such as "*Promote tourist-oriented development east of State Highway 361/Park Road 22 and between Zahn Road and Whitecap Boulevard by providing public and private amenities to make the area more attractive and 'people-friendly'. These amenities should support a multimodal transportation system (pedestrian, bicycle, vehicular, golf cart, and watercraft) and uniquely attractive developments, both public and private, with facilities using the highest quality design and materials.*"

The **Padre/Mustang Island Mobility Plan** furthers that initiative by assessing the current conditions of Padre/Mustang Island (Study Area), evaluating recommendations from existing plans, gathering feedback on desired enhancements, and creating recommendations for a comprehensive multimodal network for the area.

The Padre/Mustang Island Mobility Plan creates a comprehensive transportation network that connects residential neighborhoods to activity centers by identifying critical routes for walking, bicycling, watercraft, and golf carts on local roadways.

This Mobility Plan sets the foundation for future projects to reference for design criteria and recommended multimodal elements for inclusion, where feasible for transportation projects. These projects focus on collector and arterial streets throughout the Island. The Plan also recommends project implementation timeframes.

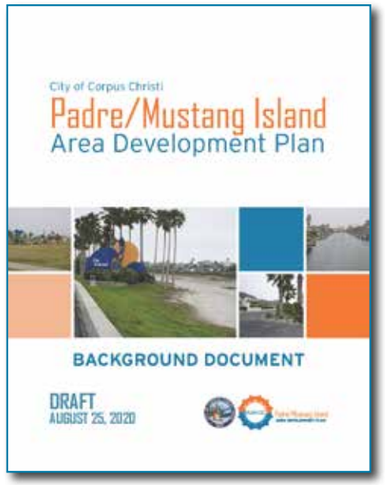


Figure 1: Padre/Mustang Island Study Area

This Mobility Plan evaluates the current conditions of publicly owned roadways and rights-of-way and presents recommendations for active-transportation related improvements at a planning-level of design. This means that the recommendations do not provide an engineered design that include detailed proposals for drainage, utilities, and intersection operations.

Roadway alignments	Addressed in this Mobility Plan
Surface level cross-section design	
Energy	Addressed during the feasibility and preliminary engineering phases of project development; OR Developed during the project development phases of the project.
Utilities	
Water	
Sewer/Wastewater	
Drainage/Stormwater	
Signal operations	
Right-of-way purchase	
Cost Estimates	

1.1 Plan Organization

This Mobility Plan for Padre/Mustang Island is organized into four chapters to offer insight regarding the impetus for the plan, the engagement efforts, analysis process, and recommendations. The following provides a brief description of the key elements of each chapter.

- **Chapter 1**: This initial chapter introduces the project and provides an overview of the document. It describes a Mobility Plan and why it is important, provides a background on the project including the impetus for creating the plan, its vision, goals, and the project timeline as well as highlights the public and stakeholder engagement efforts that took place over the course of this planning project.
- **Chapter 2**: Map of the Mobility Plan, with subsequent map exhibits that highlight network connections for individual modes (i.e., sidewalks for pedestrians)
- **Chapter 3**: Provides more detailed information regarding recommendations for key corridors within the Study Area.
- **Chapter 4:** Details implementation timeline recommendations for the Mobility Plan.

1.2 What is a Mobility Plan?

A Mobility Plan sets a vision for the transportation network as it relates to different modes of transportation. The Plan provides a set of recommendations to achieve the desired network that can be referenced for further study and developing new or reconstruction projects. A Mobility Plan identifies the priorities of the transportation network within a designated area so that should circumstances change, (i.e., new policy, new technology) implementation of transportation projects can focus on prioritizing improvements that fit within the established vision.

Shifts in Mobility Planning

These changes can be brought on by a variety of factors including development, demographic shifts, new technology, or major changes in policy and requirements. Mobility Plans will maintain an element of flexibility to account for potential shifts by showing the desired vision for a corridor, but not the detailed requirements to achieve it.

Demographics

Data collected from the ESRI Tapestry data which pulls from the American Community Survey from 2017 to 2021 indicates that the median population age on the Island is 49.4 with the population split of 30% Baby Boomer, 20.5% Generation X, and 22% Millennial. The average household size is 2.32, and all the households within the area have at least one vehicle.

As the current population ages, considerations should be made to provide an environment where residents can age in place and use other modes of transportation to make shorter trips to restaurants, retail, and other activity centers.

Technology and Sustainability

Changes in technology also have a major influence on the transportation network. As companies in certain sectors have been able to shift to more online and remote work, some have been able to reduce their number of weekly commuter trips.

Other changes in technology, such as electrifying bikes and scooters, now move these previously human-powered vehicles with assistance to allow users to travel farther with less exertion. These shifts help to enhance the attractiveness of these more active modes of transportation for short trips such as from residences to neighborhood restaurants or retail in the Study Area. Nationwide, there is a measurable increased popularity of active modes of transportation.

Community Connection

Recognition that streets act as a gateway, experience, and gathering place in different instances, in addition to moving traffic, has also influenced a paradigm shift in design. The relationship between land uses and the design of roadways can have an impact on how the street is used and improve health and economic activity in the area. Designing streets to create a sense of place through comfortable design and pedestrian-scaled infrastructure (i.e., lighting, landscaping) has a strong impact on utilization.

New developments, especially those at a larger scale, are focusing on integrating spaces for connections with pedestrians and active modes of transportation into residential, commercial, and retail uses. As these internal networks are established, connecting to the larger transportation network is essential.

1.3 Project Background

The Study Area is comprised of a tight-knit community within the city limits of Corpus Christi. Padre/Mustang Island (the Island) includes well-established neighborhoods, commercial development, and miles of beaches and natural areas. Development on the Island continues to grow in both residential and commercial areas as the Island maintains its draw as both a great place to live and work, as well as a premier tourist destination.

Additional information regarding the existing conditions of the Study Area can be found in the Padre/Mustang Island Mobility Plan Existing Conditions Technical Memorandum.

Why Do We Need a Plan?

The current transportation network within the Study Area is car-centric, with limited facilities for pedestrians and bicyclists. In recent years, the utilization of golf carts or neighborhood electric vehicles (NEV) has increased for both residents and visitors. Recognizing that vehicular travel and parking at destinations is a growing concern, the community indicated that they would want to enhance the network for the active modes of transportation, especially for those shorter, local trips. In the Padre/Mustang Island Area Development Plan (ADP), 29% of survey responses indicated that the inability to walk or ride a bike to places, or the lack of golf cart/off-highway vehicle/neighborhood electric vehicle paths were the greatest infrastructure issue facing the Island.

Additionally, the community has expressed concerns about the future of the Island, especially as it relates to the safety of residents and access to commercial areas and other activity centers. Emphasizing the priority of these modes of transportation for vulnerable users adjacent to or within the roadway is vital to creating a sustainable transportation network on the Island.

Adopting a mobility plan for the area establishes priorities for incorporation in the designs of road reconstruction projects and new transportation connections for the Island.

Goals and Objectives

Safely connecting residents and visitors to activity centers such as the Oak Motte Sanctuary, Aquarius Park, Seashore Learning Academy, and the beach/bay or other water access points is a priority for the Island. Through these previous engagement activities, many transportation-related goals were developed. After a review of these goals and initial outreach efforts regarding this Mobility Plan, the following goal was established:

GOAL:

To accommodate safe, efficient movement of pedestrians, bikes, golf carts, and access to watercraft throughout Padre/Mustang Island.

Four objectives were identified to help meet this goal and guide the decision-making processes for recommendations:

SAFETY

Accommodate safe, efficient movement of pedestrians, bicyclists, and other means of active transportation as well as golf cart/NEV users throughout the Island.

VIABLE OPTIONS

Introduce low-cost interim designs that do not require complete street reconstruction, allowing for faster and financially feasible implementation timelines.

CONNECTED NETWORK

Plan and develop a comprehensive and convenient active transportation network that ensures residents and visitors of all ages and abilities can walk, bicycle, or use other low-mass vehicles to meet their daily transportation needs with connections to schools, parks, beaches, and other activity centers.

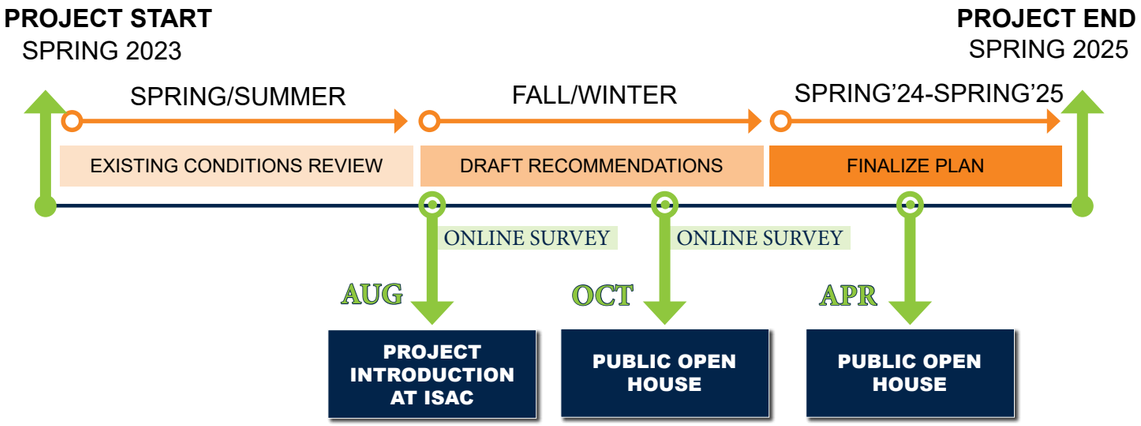
NATURAL LANDSCAPES

Incorporate landscaping practices in transportation system design that celebrate the unique ecosystem of Padre Island and also provide natural shade and stormwater solutions that can supplement and enhance the performance of underground infrastructure.

Project Timeline

The Plan was developed over two years and completed in three phases: 1) Existing Conditions Review; 2) Draft Recommendations; and 3) the Final Plan. Figure 2 depicts these phases with the Plan timeline.

Figure 2: Project Timeline



1.4 Public & Stakeholder Engagement

As part of this planning effort, the City encouraged engagement with the community and stakeholders at milestones throughout the project. The City met with other agencies to make them aware of this planning effort and the intended outcomes, while learning any new plans under consideration by TxDOT, the Corpus Christi Metropolitan Planning Organization (CCMPO), Nueces County Parks, and Corpus Christi Regional Transit Authority (CCRTA). These discussions were essential to confirm recommendations would adhere to the needs of stakeholders as well as established standards and requirements. The following represents the timeline of outreach and engagement activities held throughout the project.

AUG 8th, 2023

PROJECT INTRODUCTION AT ISAC

At this meeting, an overview of the purpose and intent of the Plan was given to the committee.

AUG 7th - 25th, 2023

Online Survey #1

Understanding usage of active transportation and the associated challenges and opportunities.

Stakeholder Meetings

Various small group and individual meetings were held with local and regional stakeholders.

OCT 25th, 2023

PUBLIC OPEN HOUSE #1

At this meeting, the public was presented information regarding the existing conditions identified on the Island. They were then asked to participate in exercises to help identify their priorities for different modes within the right-of-way of example corridors. Attendees were also able to provide general comments regarding transportation on the Island.

OCT 30th - NOV 24th, 2023

Online Survey #2

Provide input on draft example cross-sections and the roadways they could be applied to.

Stakeholder Meetings

Various small group and individual meetings were held with local and regional stakeholders.

APR 15, 2024

PUBLIC OPEN HOUSE #2

This meeting provided the public the opportunity to review the recommendations from the Mobility Plan before it was finalized and presented to City Council.

May-June 2025

Presentation to Council

The plan is presented to the Island Strategic Action Committee, Planning Commission, Reinvestment Zone No. 2 Board, and Corpus Christi City Council.

Figure 3: Timeline of Outreach and Engagement Activities

Feedback gathered through the public meetings and online surveys revealed the following sentiments from the community. Additional information regarding the outreach events and engagement activities for this Plan can be found in the **Padre/Mustang Island Mobility Plan Outreach Summary Technical Memorandum.**

Do you feel safe/comfortable walking from the neighborhoods to commercial around the Island?

Response	*Count*	*Percentage*
Yes	149	26%
No	294	52%
I don't walk around the Island	122	21%
No response	7	1%
Total	**572**	**100%**

Do you feel safe/comfortable sharing the road with vehicles when you ride a bike on the Island?

Response	*Count*	*Percentage*
Yes	75	13%
No	287	50%
I rarely ride a bike on the Island	199	35%
No response	11	2%
Total	**572**	**100%**

Do you feel safe/comfortable sharing the road with vehicles when you use a golf cart to make trips on the Island?

Response	*Count*	*Percentage*
Yes	190	33%
No	130	23%
I don't use a golf cart to make trips on the Island	245	43%
No response	7	1%
Total	**572**	**100%**

"Not enough room on the street and the bike. With parked cars and moving vehicles, there is no room for a safe bike ride."

"I wish we had more sidewalks for walking. Overall feel safe outside. Not as many sidewalks in neighborhoods and no crosswalks along Whitecap."

"Lots of residential roads without sidewalks to get to commercial property."

"Would prefer to have my own road for golf cart use."

"Competing with cars on the road. Would prefer my own travel lane."

"I would like to be able to get to the following areas via golf cart: Under the JFK Bridge (i.e. Docs/Snoopys/ Marker 37), Scuttlebutts shopping center, The businesses west of Park Rd 22 between Commodores and Whitecap (i.e. Rock and Roll Sushi)."

2. MOBILITY PLAN

2. Mobility Plan

Planning for infrastructure needs requires consideration of multiple components including:

1. Understanding the needs of the community,
2. Developing a flexible plan that responds to development trends,
3. Examining the current utilization of the roadway corridor,
4. Establishing the priority users for specific corridors,
5. Identifying gaps and missing connections within the network, and
6. Creating or updating transportation policies as needed.

Pursuing the goals from previous planning efforts to create a connected multimodal transportation network that prioritized the active transportation network, the city has developed the following Mobility Plan for the Island Study Area.

2.1 Mobility Plan Map

The the Island Mobility Plan map associates each publicly owned street with a recommended design as displayed in the associated cross sections. More detailed information for these recommendations is provided in Section 3: Roadway Design Recommendations.

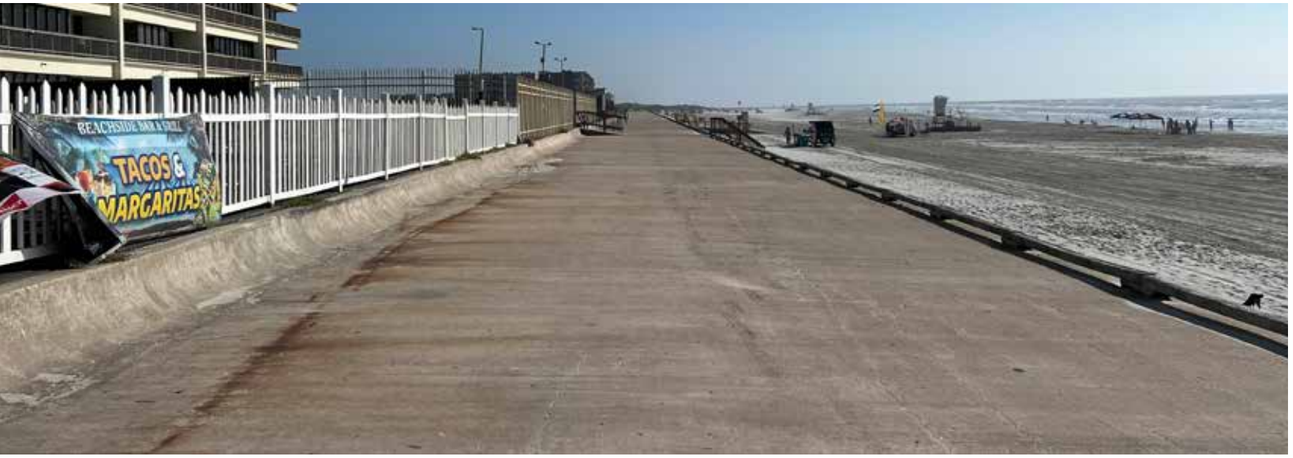


Figure 4: Padre/Mustang Island Mobility Plan

2.2 Pedestrian

Every trip you take starts and ends with you as a pedestrian. The term pedestrian includes more than walkers when we discuss the network. In this case, pedestrian also encapsulates those using wheeled assist services such as wheelchairs/motorized chairs, as well as users of more human-powered, low mass devices such as skateboarders and rollerbladers. Pedestrians are the most vulnerable user of the transportation network and providing for their safe travel is a top priority.

Sidewalks are generally recommended to be between six (6) and eight (8) feet wide, with eight feet preferred in commercial districts, based on the *2022 TxDOT Roadway Design Manual*.

Enhanced landscape buffers are incorporated where space permits in order to increase pedestrian sense of safety, provide natural shade with native drought-tolerant trees, and create opportunities for green-infrastructure to assist with stormwater retention after heavy rain events.

Figure 5 (on the following page) displays the pedestrian network where dedicated facilities are proposed based on this plan's recommendations.

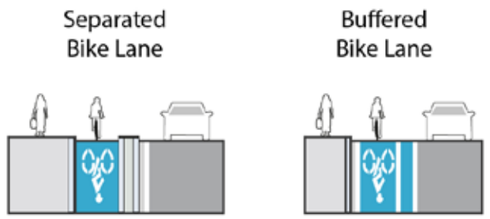
Figure 5: Padre/Mustang Island Recommended Pedestrian Network

2.3 Bicycle

Bicycling is used for commuting and recreation by both residents and visitors. User experience and comfort on a bicycle can range drastically from those that are very comfortable riding in traffic during any conditions, to those requiring more separation from vehicles to feel safe. Creating a bicycle network that appeals to both ends of this user spectrum can be difficult. For the purposes of this plan for the Island Study Area, recommendations were directed more toward the users that would classify themselves as interested in bicycling but concerned about their ability and safety. Targeting this population will lend toward creating a network that users of all ages and abilities are more likely to utilize. Recommended bike facilities in the proposed network favor separated 7 to 10-foot lanes shared by bicycle and golf cart users where feasible. Where space is more limited, and automobile use and/or speed is high, wider sidewalks that are at least 8-feet wide to allow pedestrians and bicycles users to share the path are recommended. And within slower and less-traveled neighborhood streets, bicycles are recommended to share the travel lanes with automobiles. The following images are from the TxDOT Roadway Design Manual.

Bike Lanes: Dedicated space for bicycles by using pavement markings to identify a lane.

Separated Bike Lanes: Dedicated space for bicycles using pavement markings to identify a lane and a separation from vehicular traffic through a variety of methods. These include a painted buffer or physical buffer such as a candlestick.



Shared Use Paths: Dedicated space separate from vehicular traffic that the bicycle will share with either a pedestrian or a golf cart depending on the facility.

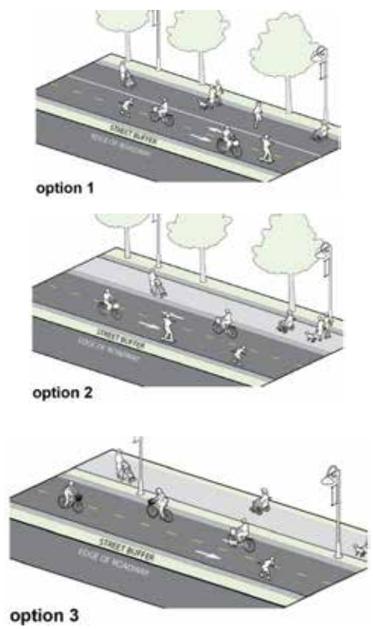


Figure 6 (on the following page) displays the bicycle network where dedicated facilities are proposed based on this plan's recommendations.

Figure 6: Padre/Mustang Island Recommended Bicycle Network

2.4 Golf Cart/Neighborhood Electric Vehicle

The use of golf carts and neighborhood electric vehicles (NEV) has become common on the Island as they are able to operate on roads with a posted speed limit of 35 mph or less (which is the case for a majority of the roads on the Island). Golf cart rental businesses are located in the Study Areas as well. As a compact vehicle for short trips, more and more residents and tourist have been utilizing this mode of transportation.

Where space permits within public right-of-way, separated 15 mile-per-hour travel lanes are recommended for golf cart/NEV and bicycle users. Where space is more limited within slower neighborhood streets, the recommendation is for golf carts/NEV users to share travel lanes with automobiles.

Figure 7 (on the following page) displays the golf cart/NEV network where dedicated facilities and sharrows are proposed based on this plan's recommendations.

Figure 7: Padre/Mustang Island Recommended Golf Cart/NEV Network

2.5 Watercraft

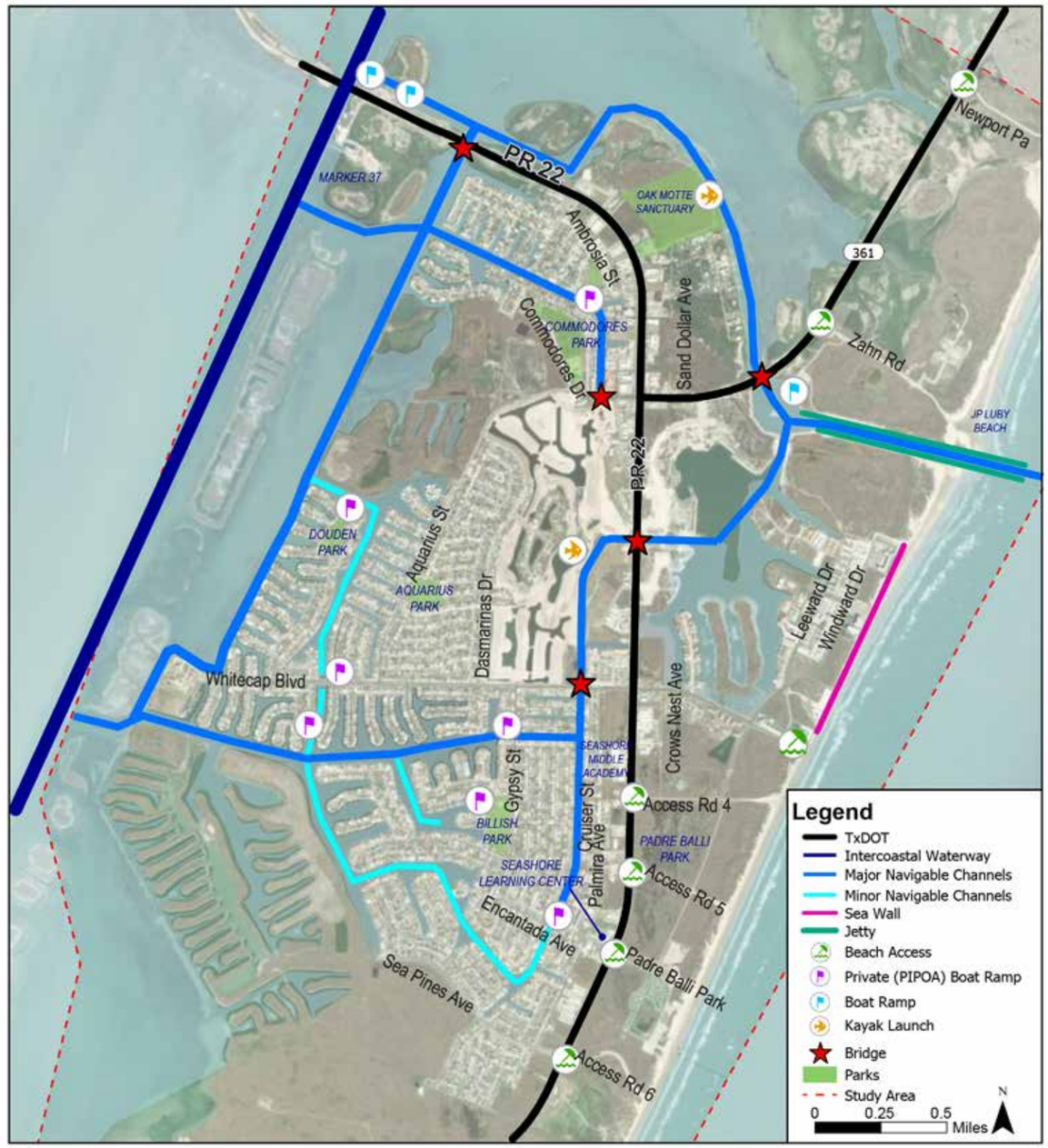
A large appeal of the Island is the access to water through existing beaches/waterfronts and the waterways/canal system. Integrating connections to these resources in the transportation network is imperative to creating an active transportation network that connects users to activity centers.

Recently completed projects such as the Park Road 22 Bridge in conjunction with the upcoming development projects (e.g., Lake Padre and Whitecap NPI) are transformative for the Study Area as they connect the Laguna Madre to the Gulf of Mexico via new navigable canals. These developments will also help connect residents on the southern portion of the Island to the northern area where there are commercial areas with boat docks.

Figure 8 (on the following page) displays the waterway networks and access points throughout the Study Area based on this plan's recommendations. The watercraft "arterials" (shown in blue) show the main routes of watercraft and their proximity to boat ramps and kayak launching spots. The new Lake Padre and Whitecap NPI are expected to bring additional water access points but have not been finalized at the time of this Plan.

Special consideration will need to be given to any road new or reconstruction at locations of water crossing bridges to ensure their clearance is appropriate for watercraft to pass safely under. As a comparison, the recently competed Park Road 22 Bridge raised the road profile by approximately 12 feet while the Commodores bridge currently under construction allows for 14-feet air draft clearance underneath for boat traffic.

Figure 8: Padre/Mustang Island Waterway and Access Points Network



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3. ROADWAY DESIGN RECOMMENDATIONS

3. Roadway Design Recommendations

The roadway network on the Island can be divided into three categories: TxDOT thoroughfares, collector streets, and local streets. An assessment of their current design and recommendations are discussed in this section. The recommendations of this project are focused on publicly-owned facilities, including TxDOT thoroughfares.

3.1 Active Transportation Corridors

The cross-sections depicted in this chapter are representative of the recommendations for sharing the right-of-way between the different modes of transportation. Once selected as a project for engineering design and construction, the representative cross-sections will need to be further refined as they do not currently illustrate how to accommodate drainage and other engineering constraints (i.e., utilities). The Padre/Mustang Island Area Development Plan states that any new projects should place utility lines underground when practical.

The remainder of this section provides the following information for the collector streets that are integral to creating a connected active transportation network. Each corridor page contains the following:

- **Existing Conditions:** describes the current configuration of each collector street.
- **Interim Recommendations:** identifies recommended interim improvements that could be implemented within the existing pavement (in most cases).
- **Future Vision:** identifies the proposed improvements for the desired configuration acknowledging the identified corridor right-of-way (ROW).

Cross-sections were developed using existing geometric design criteria from the City's Infrastructure Design Manual (IDM) that states a minimum of 10 feet is needed for a travel lane with a preferred width of 11 feet, as well as a preferred width of 12 feet for turn lanes.

In addition, the fire department was consulted on minimum pavement widths to accommodate fire engine apparatus. According to the City Fire Marshal, current standards require a minimum pavement width of 38 feet if there is parking on both sides of the street, 28 feet if parking is only permitted on one side of the street, and 20 feet will accommodate the required pavement clear zone if parking is not permitted on the street.

Recommendations also include reducing speed limits along local collectors to the State of Texas "prima facie," or default, of 30 MPH for urban roadways. Proposed cross-sections support the reduced speed limits and enhance safety and comfort for non-automobile users.

3.2 Map of Districts

The following map displays the districts for each cross-section proposed as part of this Mobility Plan.

Figure 9: Map of Corridor Districts

3.3 TxDOT Facilities

This section includes:

Highway 361

Limits: PR 22 to Lake Padre entrance

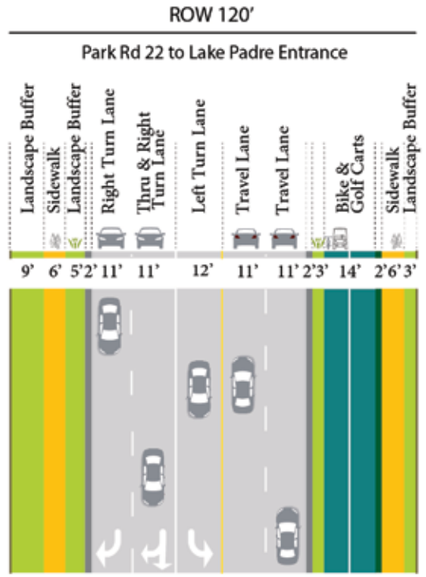
EXISTING CONDITIONS

SH 361 provides a connection from Port Aransas down to Padre/Mustang Island where it intersects with PR22. The segment between PR22 and just west of the future Lake Padre Development entrance currently operates as a five lane roadway and then transitions to two lanes with shoulders.

FUTURE VISION

- Crossing for ped/bike/golf carts necessary at PR 22 intersection and possibly at Lake Padre entrance as well.
- After the Lake Padre entrance, a 15-foot shared multi-use path from the Lake Padre development entrance to Zahn Rd. is recommended.
- A concrete barrier is recommended to be installed on the bridge to separate the 15' of shoulder on the south side of the bridge for the shared multi-use path.
- Plan recommendations could be impacted by ongoing TxDOT study of Hwy 361, including a possible bridge replacement project.

FUTURE



Park Road 22

Limits: Aquarius to Sea Pines

EXISTING CONDITIONS

PR 22 is a TxDOT facility that acts as the spine of the transportation network within the Padre/ Mustang Island study area. Ultimately, jurisdiction for this roadway falls to TxDOT which has other active and upcoming projects that will be focused on this corridor. The plan development process included coordination with TxDOT and communication of community priorities that were gathered as part of the public outreach efforts. The Island community is interested in having dedicated facilities for active transportation along this corridor.

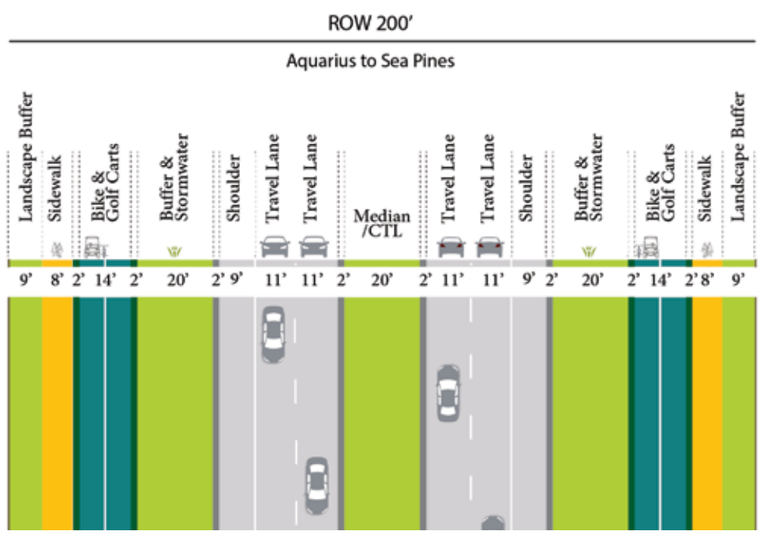
FUTURE VISION

- Proposed reducing speed limit to 45 MPH from current 55 MPH
- Phasing implementation of this cross-section is likely and can correspond with planned TxDOT facility upgrades.
- Currently, the 10-year Corpus Christi Metropolitan Planning Organization Transportation Improvement Program includes a project to upgrade the Park Road 22 corridor from Aquarius Street to Whitecap Boulevard for pedestrian and access management improvements without adding capacity.
- Intersection upgrades are also indicated to allow all users safe crossings at PR 22 and Aquarius St., Commodores Dr./Highway 361, Whitecap Blvd., Encantada Ave./Padre Balli Park Rd., Sea Pines/Beach Access Rd. 6, and possibly Verdemar Dr./Jackfish Ave.
- A cross-section recommendation for the Don Patricio Water Exchange Bridge is included in Appendix A.

FUTURE

ROW 200'

Aquarius to Sea Pines



TxDOT - JFK Causeway Sidepath Bridge

Limits: Aquarius St. to Padre Island Access Rd.

Recommendations:

- Recommended 20-foot minimum width to accommodate two-way golf cart/NEV, bicycle, and pedestrian traffic.
- An engineering feasibility study analysis will be necessary to determine the most practical alignment of the bridge, either north or south of the JFK Memorial Causeway.
- A pedestrian ferry service could be explored to provide an interim connectivity solution.

3.4 North Loop Streets

This section includes:

Ambrosia Street

Limits: Jackfish to Aquarius

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
60’	24’	Corpus Christi	30 MPH	0.4 Miles

EXISTING CONDITIONS

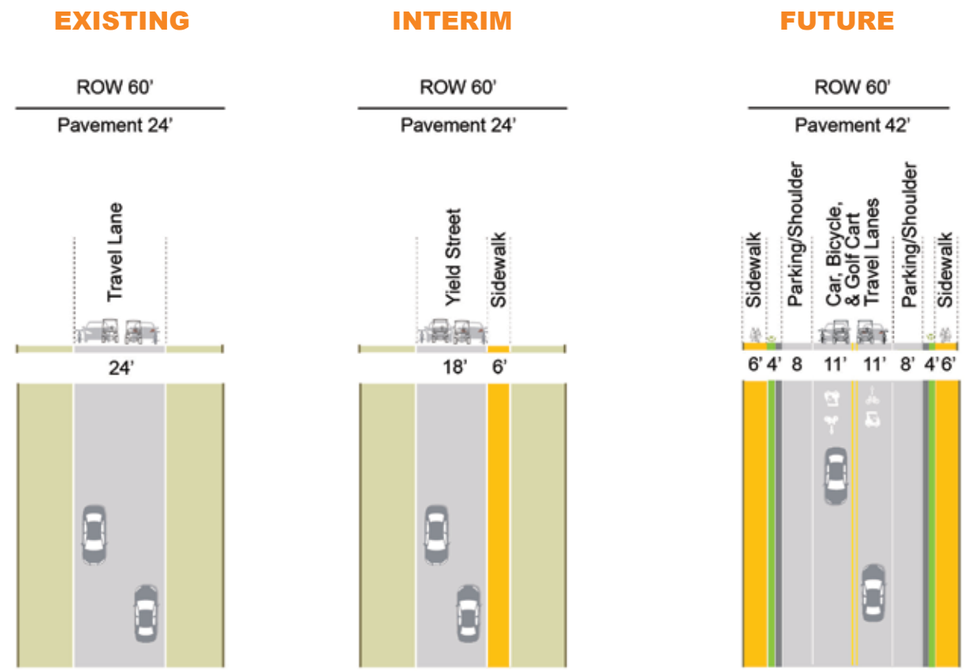
- North/South corridor providing a parallel connection to PR 22. Connects with Aquarius Street and Jackfish Avenue.
- Two-way travel with unmarked lanes providing access to residences and retail. There are no pedestrian or bicycle facilities.

INTERIM RECOMMENDATION

As the corridor is currently used by all modes, recommend continuing to operate as a yield street, while dedicating 6’ of the pavement to a sidewalk. Recommend positioning the sidewalk on the north/east side of the street. Sidewalk may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

The ultimate vision for the corridor would include using more of the ROW to expand the pavement. This would then provide space for dedicated facilities for pedestrians, and given the slow speed on the corridor, a shared lane for vehicles, bicycles, and golf carts/NEVs.



Aquarius Street

Limits: Ambrosia St to PR 22

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
70’	37’	Corpus Christi	30 MPH	0.09 miles

EXISTING CONDITIONS

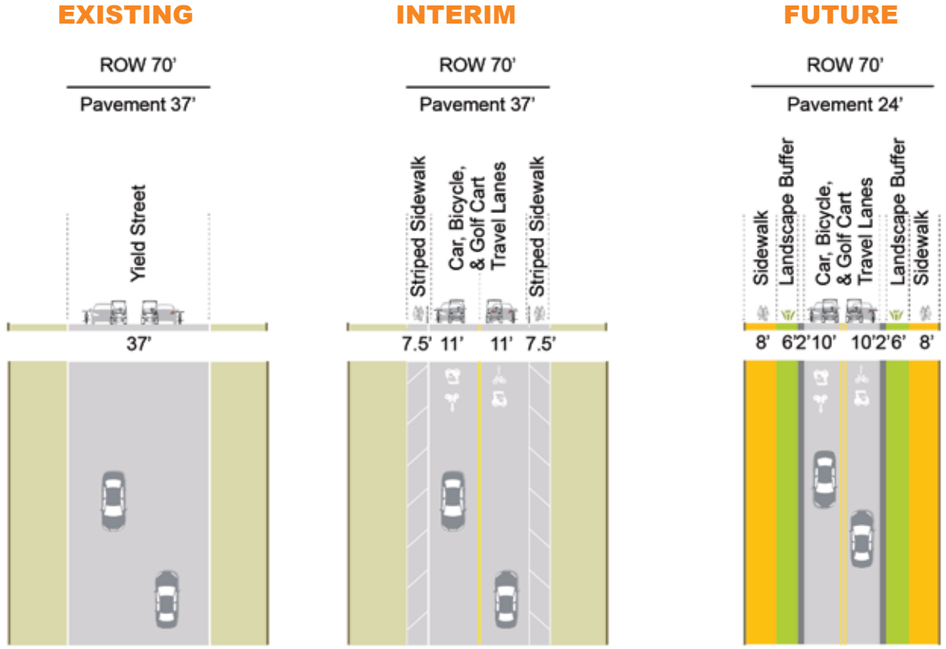
- North/South corridor that provides access to residences from PR22.
- Two-lane unstriped corridor.

INTERIM RECOMMENDATION

As the corridor is currently used by all modes, recommend striping the existing shoulder to be used as a sidewalk with necessary signage; install signage and pavement markings for sharing the travel lane with bicycles and golf carts/NEVs. Sidewalks may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

The ultimate vision for the corridor would include using more of the ROW to expand the pavement. This would then provide space for dedicated facilities for pedestrians, and given the slow speed on the corridor, markings for a shared lane for vehicles, golf carts/NEVs, and bicycles.



Jackfish Avenue

Limits: Ambrosia St to PR 22

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
60’	24’	Corpus Christi	30 MPH	0.1 Miles

EXISTING CONDITIONS

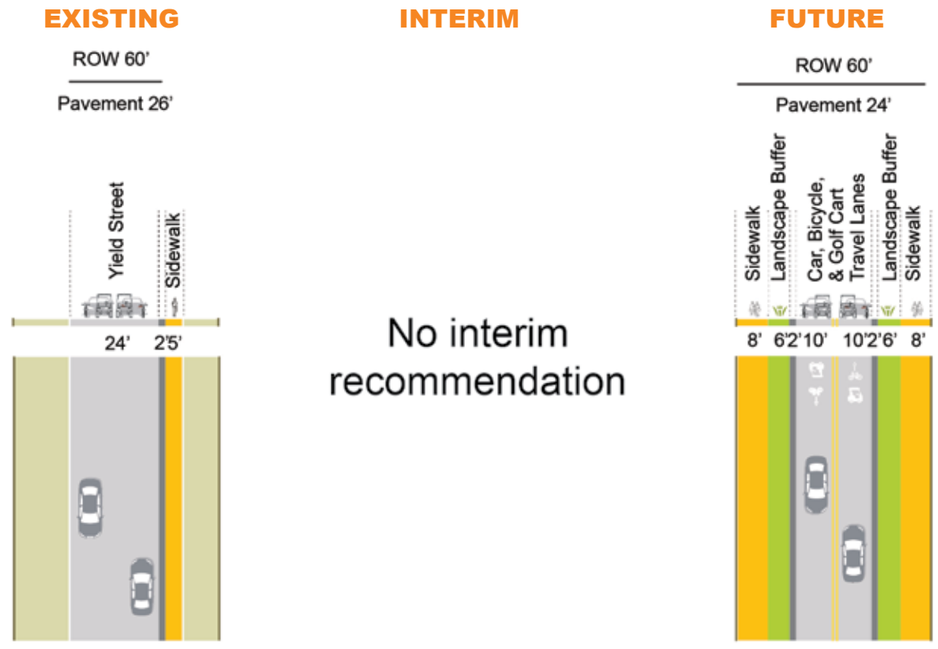
- This is focus on the portion of the roadway from PR 22 to Ambrosia Street.
- East/West corridor providing a connection from residences to PR 22.
- Two-way traffic with no pavement markings, curbed. There are no bicycle facilities on the road.
- A 5-ft sidewalk is located on the north side of the street.

INTERIM RECOMMENDATION

As the corridor recently underwent construction, no interim recommendation identified.

FUTURE VISION

The ultimate vision for the corridor in the future would be to dedicate space for sidewalks and add pavement markings for bicycles and golf carts to share the roadway with vehicles.



Marina Park Boulevard

Limits: PR 22 to north of Packery Pointe

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
60’	36’	Corpus Christi	30 MPH	0.09 Miles

EXISTING CONDITIONS

- Existing two lane undivided road with 6’ sidewalks on both sides.
- Connects PR 22 to Packery Pointe/Aquarius Cove.
- Dead-ends north of Packery Point.

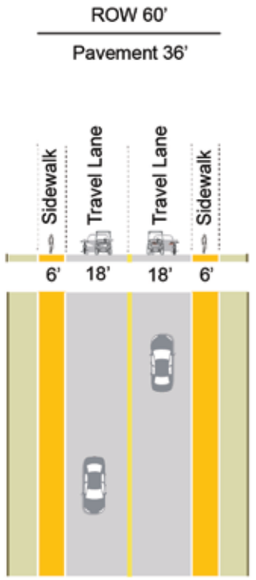
INTERIM RECOMMENDATION

No interim recommendation for this corridor.

FUTURE VISION

The ultimate vision for the corridor in the future would be to dedicate additional space for sidewalks, reduce travel lane widths, and add pavement markings for bicycles and golf carts to share the travel lanes with vehicles.

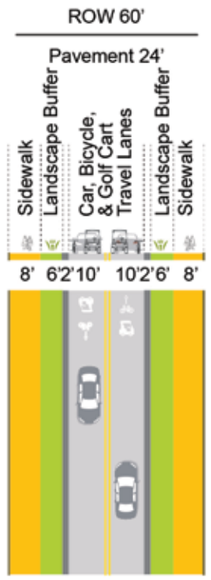
EXISTING



INTERIM

No interim recommendation

FUTURE



Packery Pointe Dr

Limits: PR 22 to Marina Park Blvd

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
60’	36’	Corpus Christi	30 MPH	0.2 miles

EXISTING CONDITIONS

- Short, east/west corridor that provides access to restaurants on the north side of PR 22.
- Connects to unfinished segment, Marina Park Blvd.
- The corridor is observed to have a large queue of vehicles accessing the Starbucks.
- A portion of this segments is called Aquarius Cove.

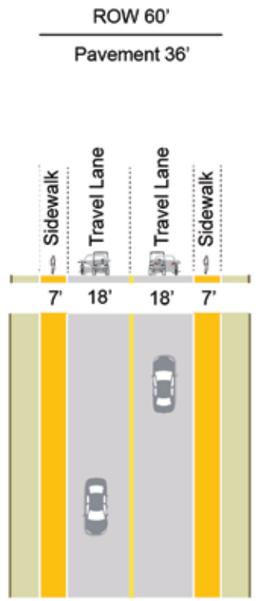
INTERIM RECOMMENDATION

No interim recommendation for this corridor.

FUTURE VISION

The ultimate vision for the corridor in the future would be to dedicate additional space for sidewalks, reduce travel lane widths, and add pavement markings for bicycles and golf carts to share the travel lanes with vehicles.

EXISTING



INTERIM

No interim recommendation

FUTURE

Sand Dollar Avenue

Limits: Packery Channel Park Rd to Hwy 361

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
50’	22’	Corpus Christi	30 MPH	0.5 mile

EXISTING CONDITIONS

Two separate segments discussed for this corridor.

- The existing segment from Packery Channel Park Rd to Verdemar Dr.
- The second would be new construction from Verdemar Dr to SH 361.
- Sand Dollar is a paper street between Verdemar Dr. And Hwy 361.
- Currently there is TIRZ #2 Funding for paper streets and the engineering design is underway.

INTERIM RECOMMENDATION

No interim recommendations for either segment.

FUTURE VISION

The future vision uses the full ROW to design and construct the corridor to include sidewalks and pavement markings for bicycles and golf carts/ NEVs to share the travel lanes with vehicles. The intersection at HWY 361 needs to be studied including a recommended pedestrian/bicycle/ golf cart crossing of Hwy 361 at the Lake Padre Entrance that then connects to Sand Dollar Ave.

Verdemar Drive

Limit: Sand Dollar Ave to PR 22

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
50’	24’	Corpus Christi	30 MPH	0.1 Miles

EXISTING CONDITIONS

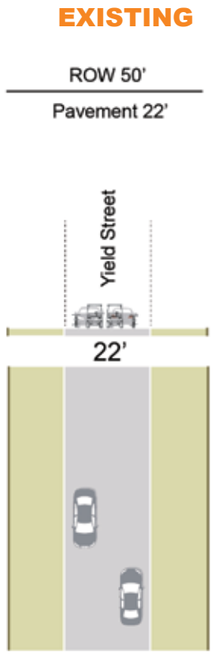
- This focuses on a small portion of Verdemar Drive from PR 22 to Sand Dollar Avenue.
- East/West corridor providing access to residences to the east.

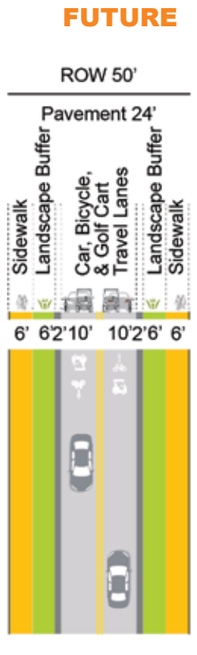
INTERIM RECOMMENDATION

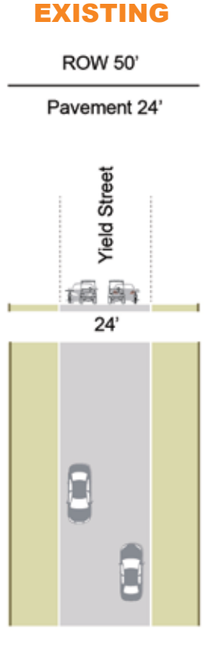
As the corridor is currently used by all modes, recommend continuing to operate as a yield street, while dedicating 6’ of the pavement to a sidewalk through striping in the interim. Recommend positioning the sidewalk on the south/west side of the street. Sidewalks may be painted and/or delineators installed to facilitate implementation.

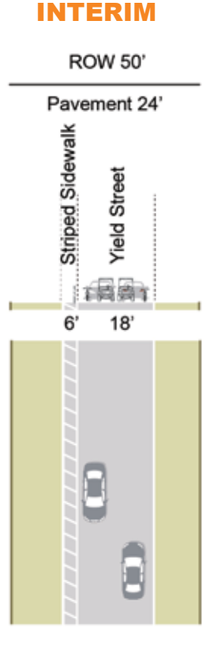
FUTURE VISION

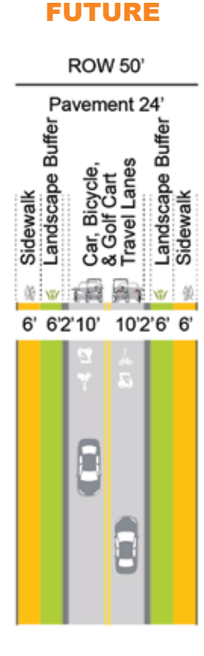
The ultimate vision for the corridor would include using the full ROW to have dedicated facilities for pedestrians. The street is envisioned to function at slower speeds that would permit travel lanes to be shared with golf carts/NEVs and bicycle users. The intersection at PR 22 may require signalized crossing to Jackfish.











3.5 City Beach Connectors

This section includes:

1. Beach Access Rd. 3A (p. 39)
2. Crowsnest Ave. (p. 40)
3. Leeward Dr. (p. 41)
4. Robla Dr. (p. 42)
5. St. Augustine Dr (p. 43).
6. St. Bartholomew Dr. (p. 44)
7. Whitecap Blvd. (east) (p. 45)
8. Windward Dr. (p. 46)
9. Zahn Rd. (p. 48)

Beach Access Rd. 3A

Limits: St. Bartholomew Ave to Beach

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	29’	Corpus Christi	15 MPH	0.13 Miles

EXISTING CONDITIONS

- 12-foot travel lanes, one in each direction
- Separated 5-foot sidewalk with candlestick delineators

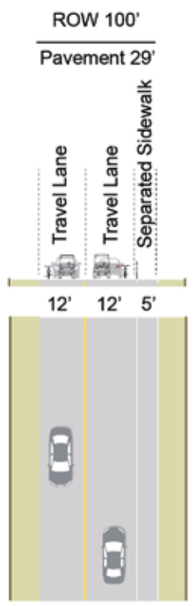
INTERIM RECOMMENDATION

No interim recommendation for this corridor.

FUTURE VISION

Add bicycle and golf cart sharrow marking in the travel lanes.

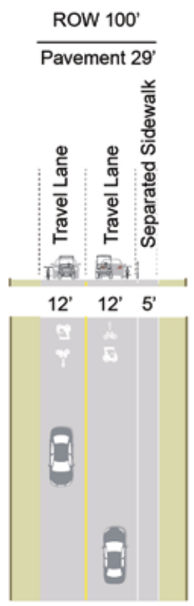
EXISTING



INTERIM

No interim recommendation

FUTURE



Crows Nest Avenue

Limits: Beach Access Rd 4 to PR 22

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
50’	N/A	Corpus Christi	N/A	0.7 Miles

EXISTING CONDITIONS

- Crows Nest is a paper street between Beach Access 4 that crosses Whitecap Blvd and extends north until curving west and terminating at Park Road 22.
- The area is currently used by golf carts in a makeshift path.
- Currently there is TIRZ #2 Funding for paper streets and the engineering design is underway.

INTERIM RECOMMENDATION

No interim recommendations.

FUTURE VISION

Recommend using the full ROW to design and construct the corridor to include dedicated facilities for pedestrians and pavement markings for bicycles and golf carts/NEVs to share the travel lanes with vehicles. The intersection at Whitecap Blvd. needs to be studied for a possible pedestrian/bicycle/golf cart crossing.

EXISTING

No existing roadway

INTERIM

No interim recommendation

FUTURE

Leeward Drive

Limits: St Bartholomew to Windward Dr

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	55’	Corpus Christi	30 MPH	0.6 mile

EXISTING CONDITIONS

- North/South corridor that provides access to a predominantly tourist and residential area and connects St. Bartholomew Avenue to Windward Drive.
- There is a half-build portion of the roadway to the north. Generally, the corridor has pavement markings for two 27.5’ travel lanes. On-street parking is typical. There are no pedestrian or bicycle facilities on the road.

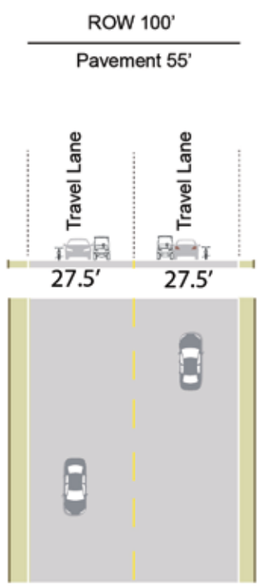
INTERIM RECOMMENDATION

As an interim improvement, recommend painting / Restriping 55’ existing pavement all at grade. Install 12’ pedestrian and bicycle SUP on both sides. SUP may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

As the area continues to develop in a more tourist-driven environment, the recommendation for the corridor includes dedicated facilities for pedestrians, on-street parking and a shared bike and golf cart facility.

EXISTING



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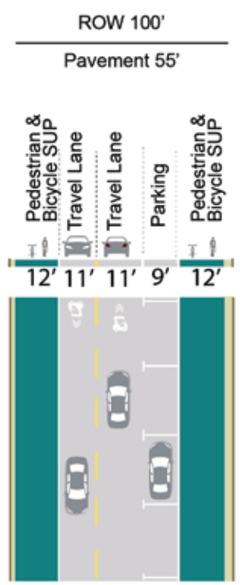
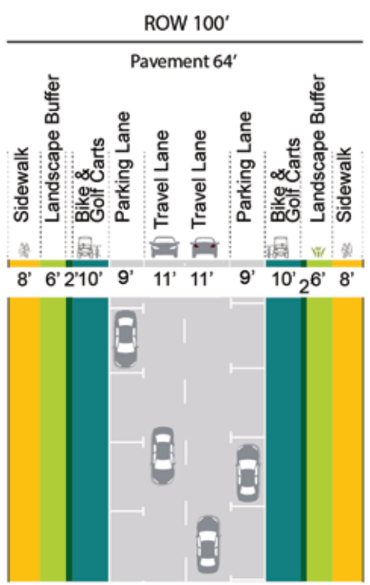


FUTURE



Robla Drive

Limits: Leeward Dr. to Windward Dr.

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	55’	Corpus Christi	30 MPH	0.1 Miles

EXISTING CONDITIONS

- Short, East/West corridor connecting Leeward Drive to Windward Drive.
- The corridor has pavement markings for two 27.5’ travel lanes. On-street parking is typical. There are no pedestrian or bicycle facilities on the road.

INTERIM RECOMMENDATION

As an interim improvement, recommend painting / Restriping 55’ existing pavement all at grade. Install 12’ pedestrian and bicycle SUP on both sides. SUP may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

As the area continues to develop in a more tourist-driven environment, the recommendation for the corridor includes dedicated facilities for pedestrians, on-street parking and a shared bike and golf cart facility.

St. Augustine Drive

Limits: Leeward Dr. to Windward Dr.

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	55’	Corpus Christi	30 MPH	0.1 Miles

EXISTING CONDITIONS

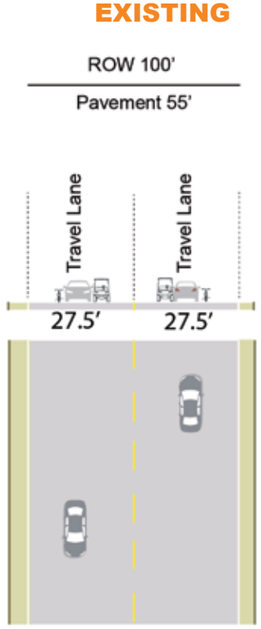
- Short East/West corridor connecting Leeward Drive to Windward Drive.
- The corridor has pavement markings for two 27.5’ travel lanes. On-street parking is typical. There are no pedestrian or bicycle facilities on the road.

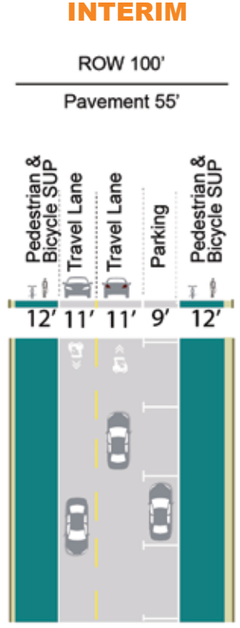
INTERIM RECOMMENDATION

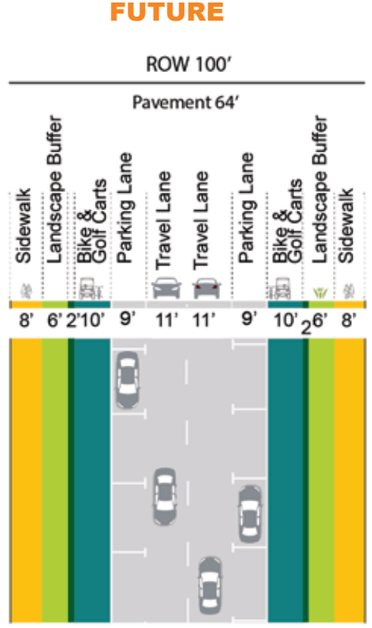
As an interim improvement, recommend painting / Restriping 55’ existing pavement all at grade. Install 12’ pedestrian and bicycle SUP on both sides. SUP may be painted and/or delineators installed to facilitate implementation.

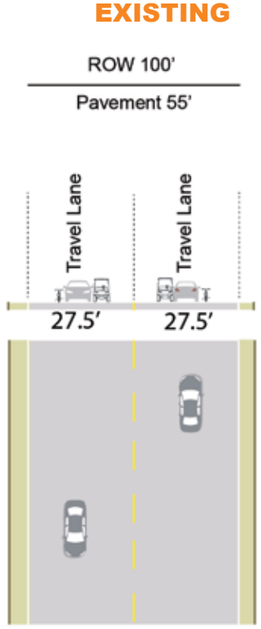
FUTURE VISION

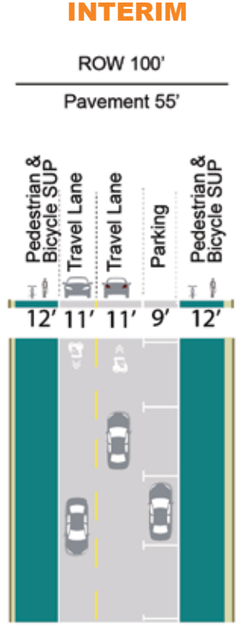
As the area continues to develop in a more tourist-driven environment, the recommendation for the corridor includes dedicated facilities for pedestrians, on-street parking and a shared bike and golf cart facility.

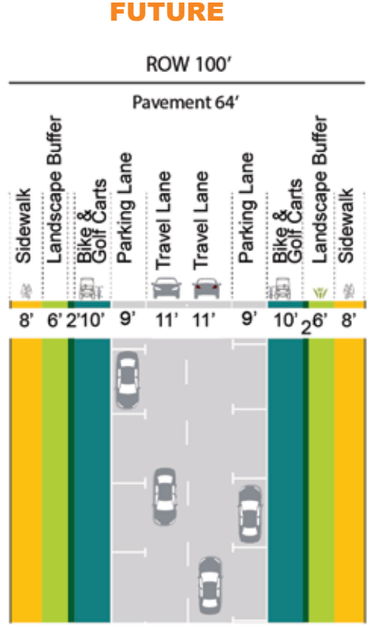












St. Bartholomew Ave

Limits: Leeward Dr. to Windward Dr.

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	24’	Corpus Christi	30 MPH	0.10 mile

EXISTING CONDITIONS

- East/West connection between Leeward Drive, Windward Drive, and Beach Access Road 3a.
- Striped with 12’ travel lane without dedicated pedestrian or bicycle facilities.
- This street acts as a way for users to loop around the area.

INTERIM RECOMMENDATION

As the corridor is currently used by all modes, recommend continuing to operate as a yield street while dedicating 6’ of the pavement to a sidewalk through striping in the interim. Recommend positioning the sidewalk on the south/west side of the street. Sidewalk may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

As the area continues to develop in a more tourist-driven environment, the recommendation for the corridor includes dedicated facilities for pedestrians, on-street parking and a shared bike and golf cart facility.

Whitecap Boulevard (East)

Limits: PR 22 to Beach access

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’ - 120’	60’	Corpus Christi	15-40 MPH	0.66 miles

EXISTING CONDITIONS

- East/West corridor providing access to the Beach.
- ROW reduces to 60 ft east of Windward for Beach Access.
- The corridor has 11’ travel lanes and a 14’ center turn lane with 8’ pavers for sidewalks.
- Currently 40 mph per city ordinance (PR 22 to Windward).

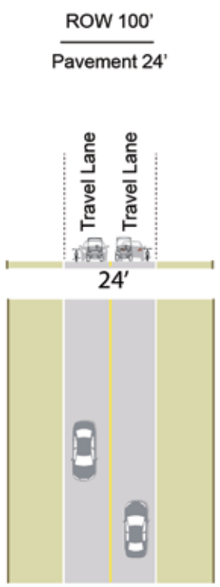
INTERIM RECOMMENDATION

Recommend adding golf cart sharrow to the travel lanes, allow bicycles to share the existing 8’ side paths, and add a crosswalk at Windward. Lower speed limit to 30 mph from PR 22 to Windward Dr., and maintain 15 mph east of Windward to the beach access. Add pedestrian connection to the Seawall.

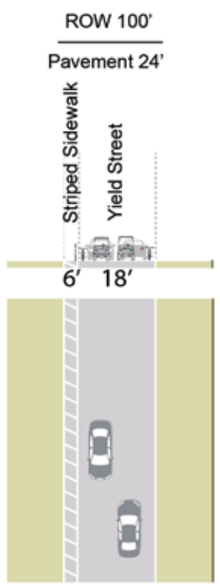
FUTURE VISION

The ultimate recommendation is that this corridor is developed as an aesthetically inviting beach gateway with enhanced landscaping and signage with better use of the center lane and buffer areas.

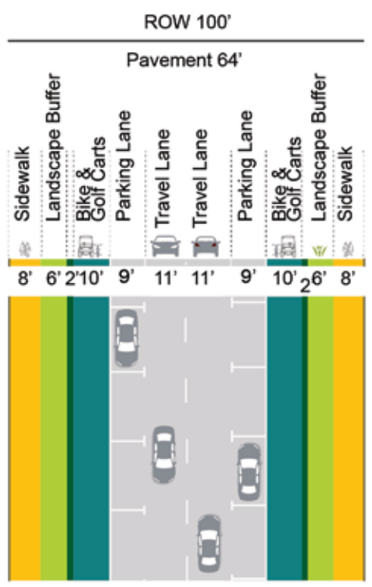
EXISTING



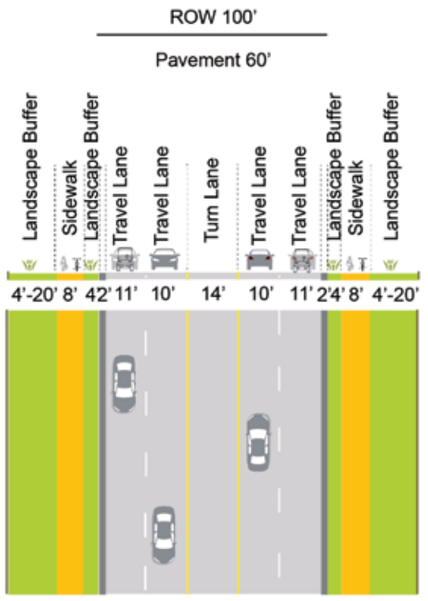
INTERIM



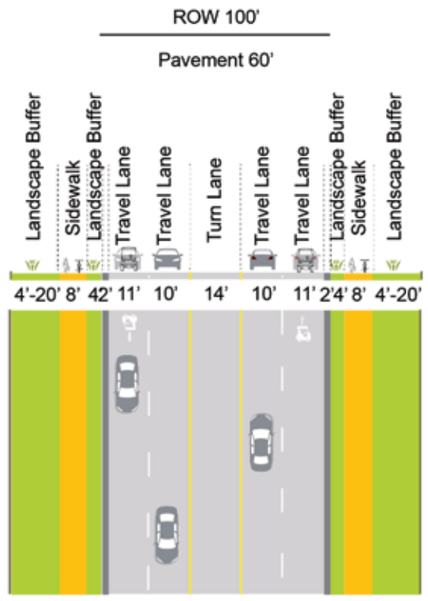
FUTURE



EXISTING



INTERIM / FUTURE



Windward Drive

Limits: Access Rd. 4 to Robla Dr

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’-120’	50’-61’	Corpus Christi	30-35 MPH	1.1 miles

EXISTING CONDITIONS

- North/South corridor that provides access to a predominantly tourist and residential area from Whitecap Boulevard to St. Bartholomew Avenue and to the south almost to Access Road 4.
- The road is five lanes with a center turn lane.
- There is an evident pedestrian made path from Leeward Drive to Whitecap Boulevard due to repeated use.

INTERIM RECOMMENDATION

In the interim, recommend adding candlestick or other buffer for pedestrians and bicycle SUP and add golf cart pavement markings to travel lanes. Extend Windward Dr. south to connect to Elliff Rd. Recommend reducing speed limit to prima facie spped of 30 MPH for entire segment.

FUTURE VISION

As the area continues to develop in a more tourist-driven environment, the recommendation for the corridor would have dedicated facilities for pedestrians, bicyclists, and golf carts.

Windward Drive

Limits: Robla Dr to St Bartholomew

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’-120’	50’-61’	Corpus Christi	35 MPH	1.1 miles

EXISTING CONDITIONS

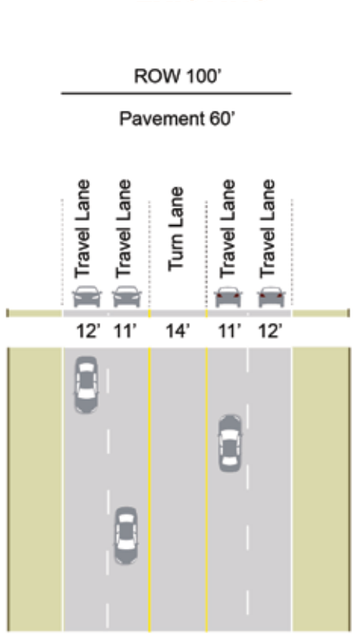
- North/South corridor that provides access to a predominantly tourist and residential area from Whitecap Boulevard to St. Bartholomew Avenue.
- Where there is 50’ of pavement, the road is divided with 10’ travel lanes in either direction, 5’ bike lanes, and on-street parking. One side has 8’ parallel parking and the other maintains 12’ reverse angled parking.

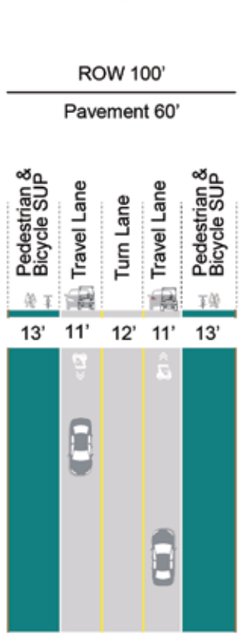
INTERIM RECOMMENDATION

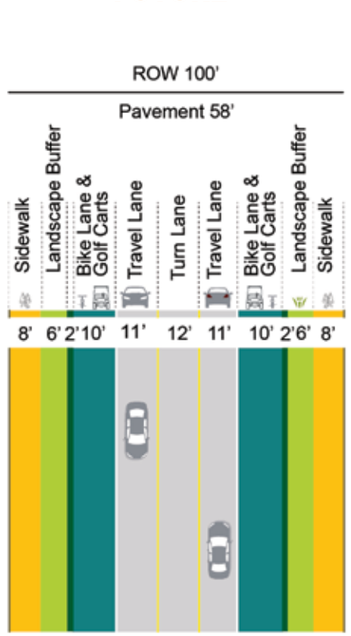
As an interim improvement, recommend painting / Restriping 55’ existing pavement all at grade. Install 12’ pedestrian and bicycle SUP on both sides. SUP may be painted and/or delineators installed to facilitate implementation. Add golf cart pavement markings to travel lanes. Reduce speed limit to prima facie speed of 30 MPH.

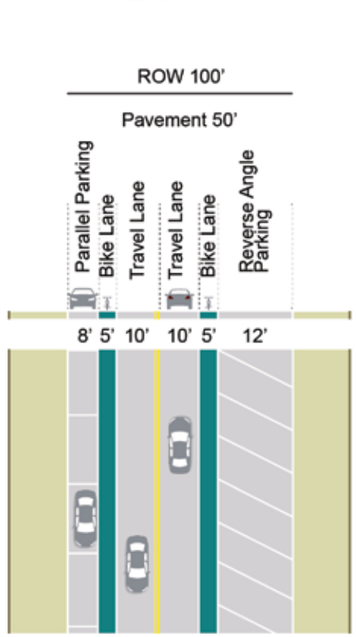
FUTURE VISION

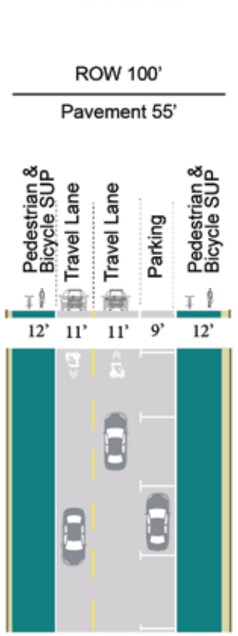
As the area continues to develop in a more tourist-driven environment, the recommendation for the corridor includes dedicated facilities for pedestrians, on-street parking and a shared bike and golf cart facility.

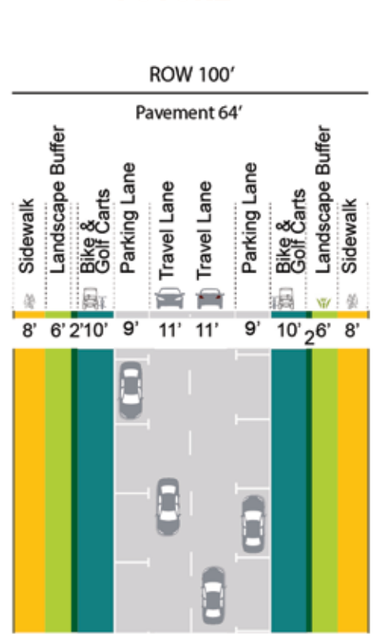












Zahn Road

Limits: Hwy 361 to Tortuga Dunes Rd.

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
N/A	34’	Corpus Christi	15 – 35 MPH	0.6 mile

EXISTING CONDITIONS

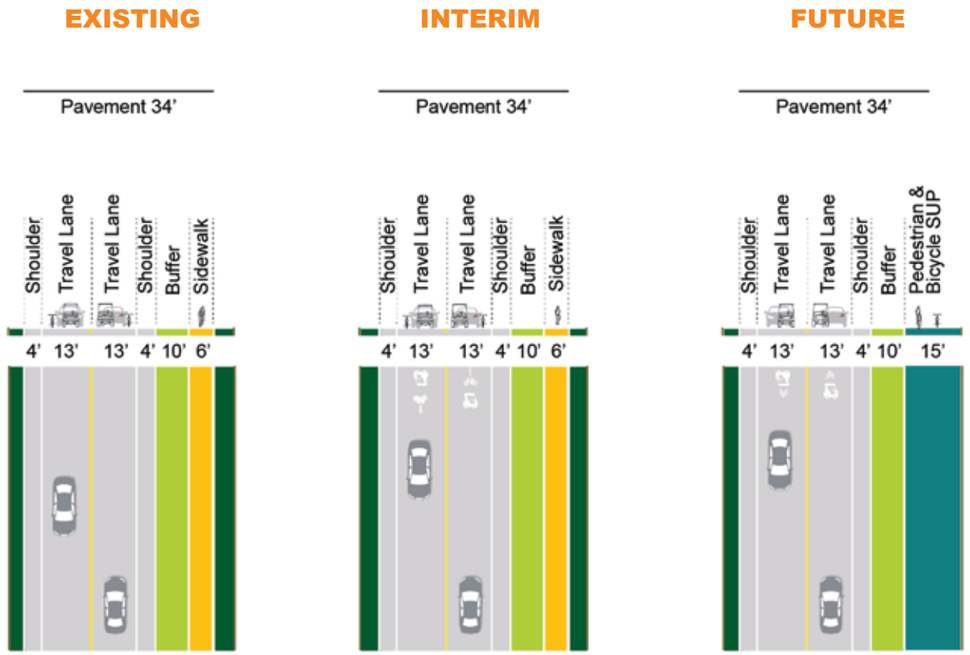
- East/West corridor that provides access from SH 361 to an up-and-coming residential area and the beach. It also provides access to the boat launch at the Packery Channel and corresponding parking area.
- The corridor is striped with two 13’ travels lanes and 4’ shoulders that transition to natural area. There is a 10’ landscape buffer with a 6’ sidewalk on the northern side of the road.

INTERIM RECOMMENDATION

Complete existing pedestrian side path from Hwy 361 to public boat launch access road. Add bicycle and golf cart sharrows to the existing car travel lanes. Recommend prima facie speed limit of 30 MPH between Hwy 361 and Tortuga Dunes Blvd. After Tortuga Dunes Blvd., recommend maintaining current speed limit of 15 mph and adding a separated pedestrian path that is buffered with candlestick delineators.

FUTURE VISION

As this area continues to develop, creating connections between Packery Channel, the residential area, and the beach will be important. The recommendation for this area is to convert pedestrian side path to a 15-foot bicycle and pedestrian shared-use side path on one side of the street. Evaluate pedestrian and bicycle access needs to Packery Channel Park amenities.



3.6 County Beach Connectors

This section includes:

Access Road 4

Limits: PR 22 to the beach

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
N/A	24’	Nueces County	15 MPH	0.48 mile

EXISTING CONDITIONS

- East/West corridor that provides access to the beach from PR 22. The road intersects with a user-made path (Crows Nest) that runs parallel to PR 22 and with Elliff Road to the south. Based on the current UTP, there is potential for the road to intersect with Windward Drive to the north should the proposed extension occur.
- The road allows for two-way travel with unmarked lanes and no designated shoulders that transition to natural area. There are no pedestrian or bicycle facilities on the road.

INTERIM RECOMMENDATION

Recommend continuing to operate as a yield street, while dedicating 6’ of the pavement to a sidewalk on the north side of the road to connect to the future paper street, Crows Nest. Sidewalk may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

The ultimate vision for the corridor would add a 15’ shared pedestrian and bicycle path to one side of the road with candlestick delineators. Golf cart sharrow markers added to travel lanes.

Beach Access Rd. 5

Limits: PR 22 to the beach

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
N/A	24’	Nueces County	15 MPH	0.39 mile

EXISTING CONDITIONS

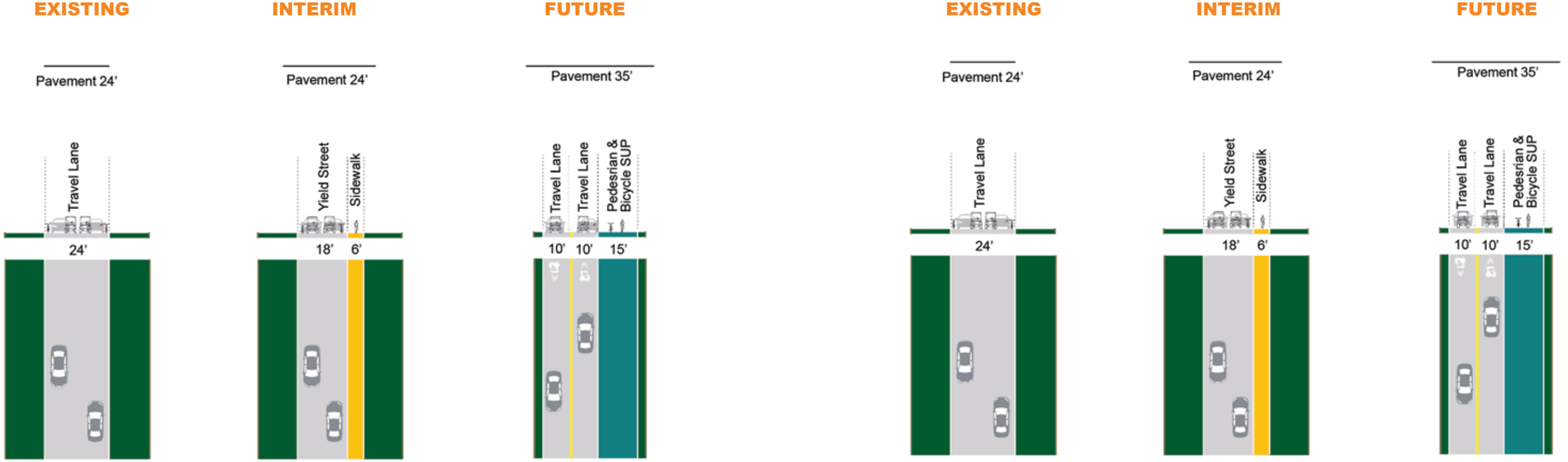
- Provides access from PR 22 to beach where cars can park and drive along the beach.
- Two-way travel with unmarked lanes and ditch. There are no pedestrian or bicycle facilities on the road.

INTERIM RECOMMENDATION

Recommend continuing to operate as a yield street, while dedicating 6’ of the pavement to a sidewalk. Sidewalk may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

The ultimate vision for the corridor would add a 15’ shared pedestrian and bicycle path to one side of the road with candlestick delineators. Golf cart sharrow markers added to travel lanes.



Access Road 6

Limits: PR 22 to the beach

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
N/A	22’	Nueces County	15 MPH	0.38 mile

EXISTING CONDITIONS

- Provides access to beach where cars can park and drive along the beach.
- Two-way travel with unmarked lanes and ditch. There are no pedestrian or bicycle facilities on the road.
- Connects to PR 22. The other intersecting roadway at this four-way intersection is Sea Pines Drive, a collector to residential streets.

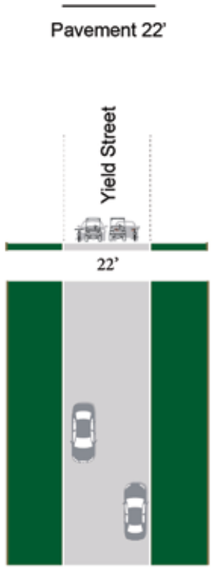
INTERIM RECOMMENDATION

The current pavement width is too narrow to recommend dedicating space to other modes with an interim recommendation.

FUTURE VISION

The ultimate vision for the corridor would add a 15’ shared pedestrian and bicycle path to one side of the road with candlestick delineators. Golf cart sharrow markers added to travel lanes.

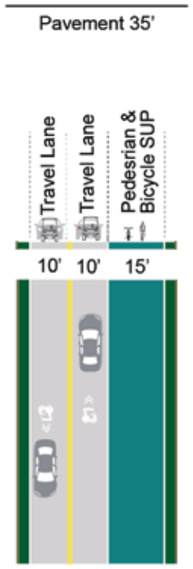
EXISTING



INTERIM

No interim recommendation

FUTURE



Elliff Road

Limits: Access Rd 4 to Padre Balli Park

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
N/A	22’	Nueces County	15 MPH	1 mile

EXISTING CONDITIONS

- North/South corridor that provides access from Access Road 4 to Padre Balli Park and the RV park Briscoe King Pavilion. Potential connection to the north to Windward Drive should the proposed extension of that corridor occur.
- Two-way traffic with no pavement markings on 22’ of pavement that transitions to natural area. There are no pedestrian or bicycle facilities on the road.

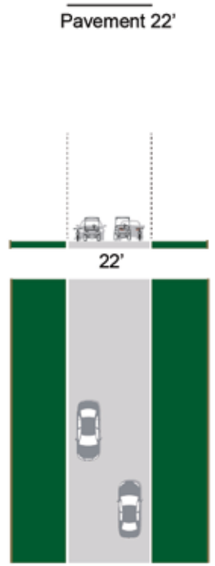
INTERIM RECOMMENDATION

The current pavement width is too narrow to recommend dedicating space to other modes with an interim recommendation.

FUTURE VISION

The ultimate vision for the corridor would add a 15’ shared pedestrian and bicycle path to one side of the road with candlestick delineators. Golf cart sharrow markers added to travel lanes.

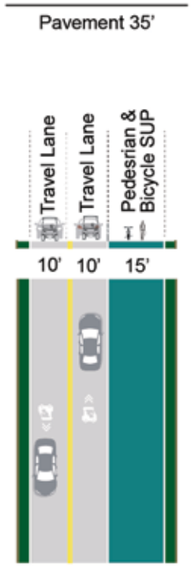
EXISTING



INTERIM

No interim recommendation

FUTURE



RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
N/A	24’	Nueces County	15 MPH	0.5 mile

Padre Balli Park Road

Limits: PR 22 to the Beach

EXISTING CONDITIONS

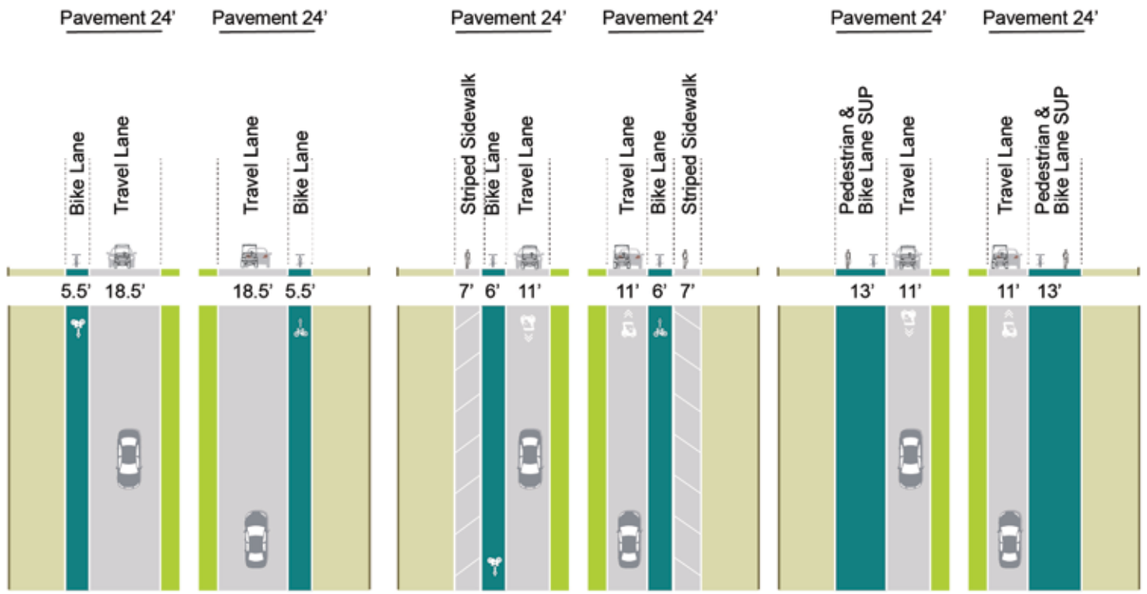
- East/West corridor provide access to Nueces County Costal parks, the beach, Briscoe King Pavilion, and the RV park. To the west, it connects with Encantada Avenue.
- The eastbound and westbound travel are separated by a wide median of 150’. Each has a single travel lane of 18.5’ with a 5.5’ bike lane. There are no sidewalks along either facility.

INTERIM RECOMMENDATION

Recommend restriping the roadway to include a striped 7’ sidewalk, separated from the 11’ travel lane by a 6’ bike lane. Sidewalks may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

The ultimate design for the corridor would be to create permanent infrastructure based on the interim recommendations with a 13’ shared use path on both sides.



3.7 West Island Connectors

This section includes:

Aquarius Street

Limits: Whitecap to Commodores

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
60’	37’ – 50’	Corpus Christi	30 MPH	1.4 miles

EXISTING CONDITIONS

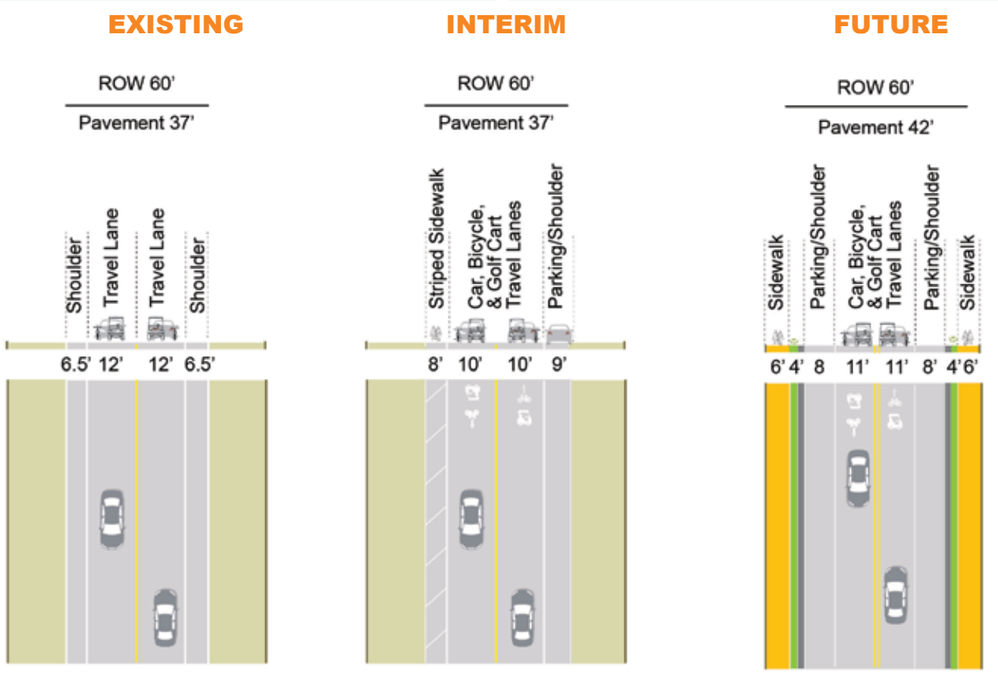
- North/South corridor that provides access to a residences and Aquarius Park from Commodores Drive and Whitecap Boulevard.
- Two distinct road configurations, which change just north of Dasmarinas Drive.
- Northern section: 7’ sidewalk, 12’ travel lanes, and a 21’ median, curbed.
- Southern section: 12’ travel lanes and 6.5’ shoulders on each side, with speed humps, curbed.

INTERIM RECOMMENDATION

As the corridor is currently used by all modes, recommend striping an 8’ sidewalk on one side with necessary signage; install signage and pavement markings for sharing the travel lanes with bicycles and golf carts/NEVs. Interim can be at-grade with paint / restriping and delineators as appropriate.

FUTURE VISION

The ultimate vision would provide space for dedicated facilities for all modes. In addition to the existing 8-foot side path between Commodores and Dasmarinas, the Whitecap Preserve developer is currently constructing a parallel path on their property. Therefore, the mobility plan does not include recommendations for the segment of Aquarius between Commodores and Dasmarinas beyond adding golf cart sharrow markings and permitting bicycle users to share the side paths with pedestrians.



Commodores Drive

Limits: PR 22 to Aquarius St.

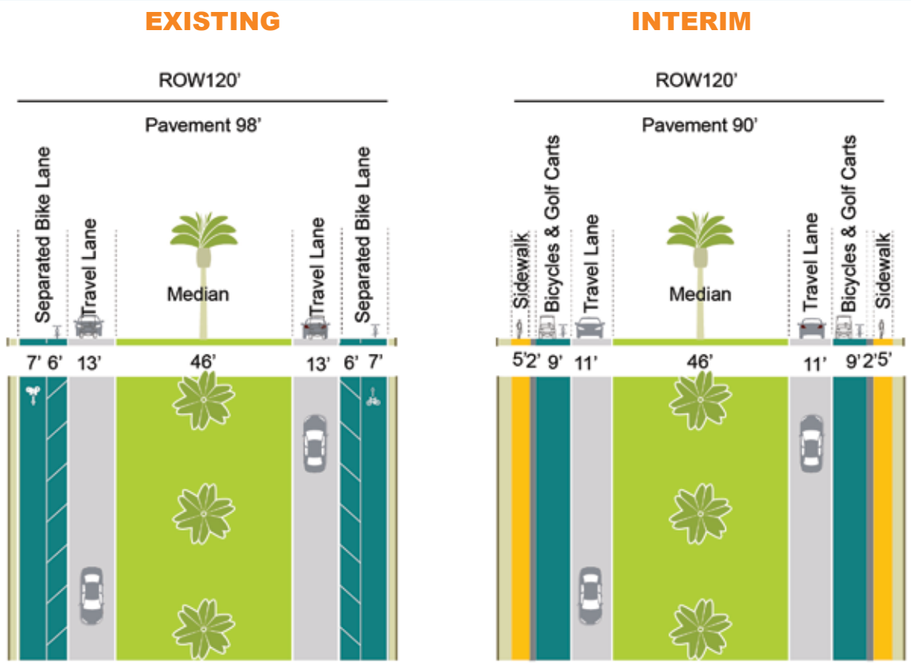
RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
120’	98’	Corpus Christi	35 MPH	0.65 miles

EXISTING CONDITIONS

- East/West corridor that provides access to residences, Commodore Park, and retail from PR 22. The corridor intersects with Aquarius Street.
- Recently reconstructed to with two 13’ travel lanes, buffered bike lanes with a 6’ buffer and 7’ bike lane, and an approximately 46’ median, curbed.
- There is a small segment of existing sidewalk from Compass Street to Waves Drive on the southern side of the corridor.
- Commodores Bridge is currently under construction and though this section will have a more limited 85 feet of pavement, the median width is significantly reduced as well.

INTERIM RECOMMENDATION

Reduce travel lane widths and create a shared bicycle and golf cart lane with separated sidewalk facilities. Recommend reducing speed limit to prima facie speed of 30 MPH.

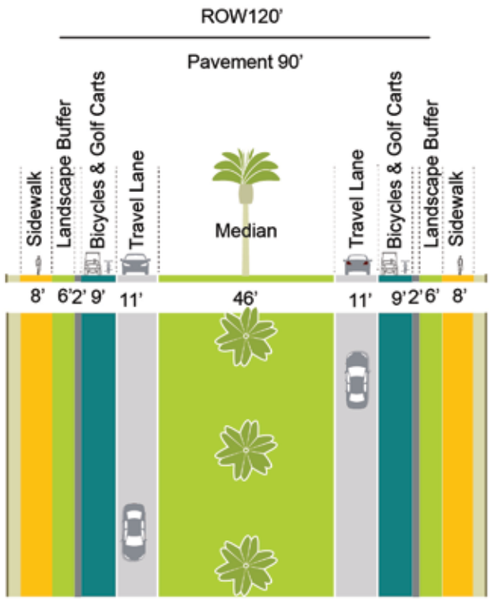


Commodores Drive Continued

FUTURE VISION

Build from the interim recommendations, and separate wider sidewalk using a landscape buffer.

FUTURE



Dasmarinas Drive

Limits: Aquarius St. to Whitecap Dr.

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
60'	40'	Corpus Christi	30 MPH	1.4 miles

EXISTING CONDITIONS

- North/South corridor that provides access to residences from Aquarius Street to Whitecap Boulevard, somewhat parallel to PR 22.
- Local street with no pavement markings, multiple speed humps, with curb and gutters. There are no pedestrian or bicycle facilities on the road.

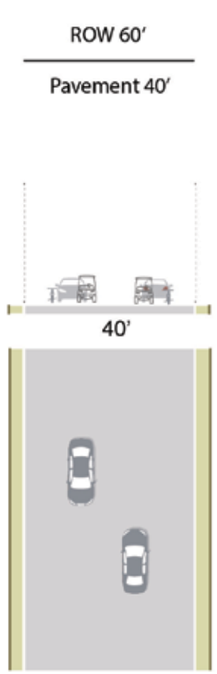
INTERIM RECOMMENDATION

Currently operates at a higher speed than a typical residential street. Recommend dedicating pavement space through striping to have two 11' travel lanes, a parking lane on one side and a 9' striped sidewalk on the other. Sidewalk may be painted and/or delineators installed to facilitate implementation.

FUTURE VISION

The ultimate design for the corridor maintains the neighborhood character for residents that both live on and use this street, while also providing connectivity on the west side of the Island.

EXISTING



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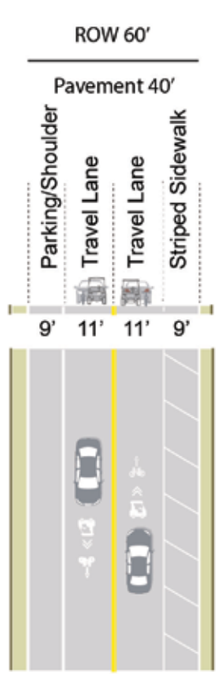
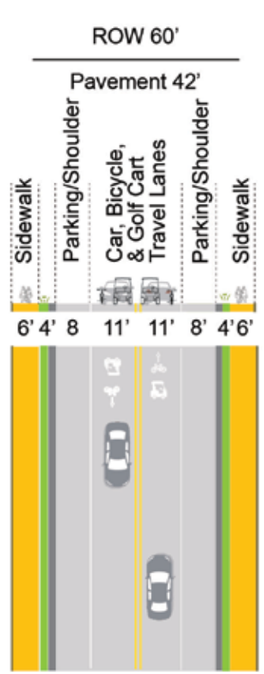


FUTURE



Encantada Avenue

Limits: Gypsy St. to PR 22

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	40’	Corpus Christi	15 – 30 MPH	0.5 mile

EXISTING CONDITIONS

- East/West corridor that provides a connection to schools, churches, and residences from PR 22. Intersects with Gypsy Street, Cruiser Street, Palmira Avenue, and several local streets.
- Designed with 12’ lanes and 6’ bike lanes, curbed. There are no pedestrian or bicycle facilities on the road.
- Mid-block crosswalk at the learning center as well as crosswalk striped at the intersection with Palmira Avenue.

INTERIM RECOMMENDATION

As an interim recommendation, reduce travel lanes to 11’ with 7’ bike lanes. These alterations can be at-grade with paint / restriping and/or delineators. There is a current project underway to add 5’ sidewalks tied to the curbs on both sides of Encantada between Gypsy and PR22. (Funded by Transportation Block Grant Set-Aside funds).

FUTURE VISION

The ultimate vision for the corridor would include wider sidewalk facilities with landscaped buffers to enhance pedestrian comfort along this corridor, while maintaining the interim pavement recommendation with separate bike lanes on both sides of the street.

Gypsy Street

Limits: Whitecap Dr. to Encantada Ave.

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	36’	Corpus Christi	30 MPH	1 mile

EXISTING CONDITIONS

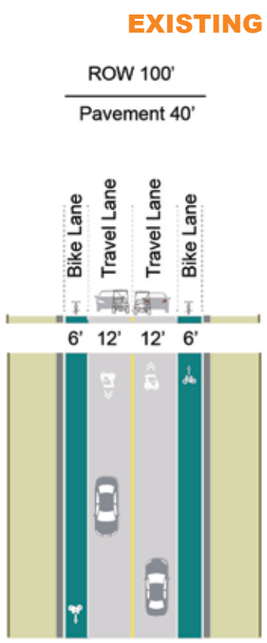
- North/South corridor that provides access to residences and Billish Park from Encantada Avenue to Whitecap Boulevard.
- The road is divided into two 18’ travel lanes with several speed humps, and is curbed. There are no pedestrian or bicycle facilities on the road.
- In the northern segment, there is a constrained bridge approximately 31’ wide.

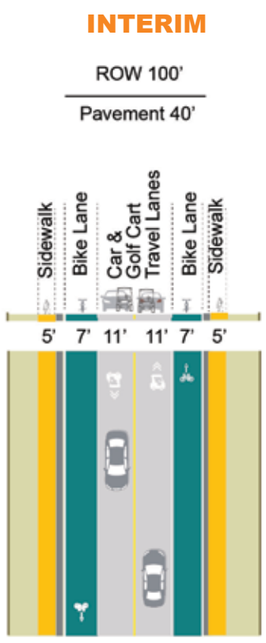
INTERIM RECOMMENDATION

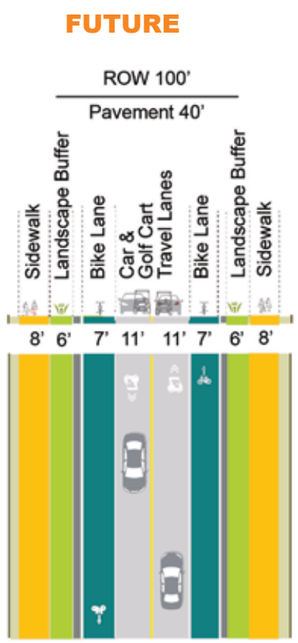
In the interim, recommend narrowing the roadway through striping to have two 10’ travel lanes, an 8’ parking lane, and an 8’ sidewalk that can be accomplished with at-grade paint / restriping and/or delineators and additional signage to indicate sharing the travel lane with bicycles and golf carts/NEVs.

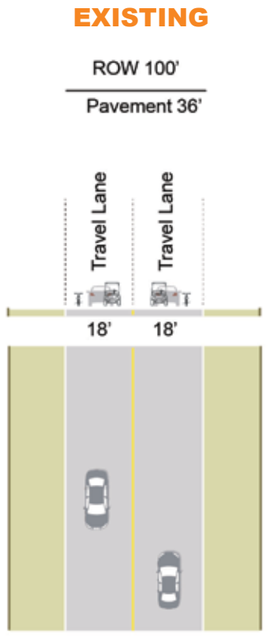
FUTURE VISION

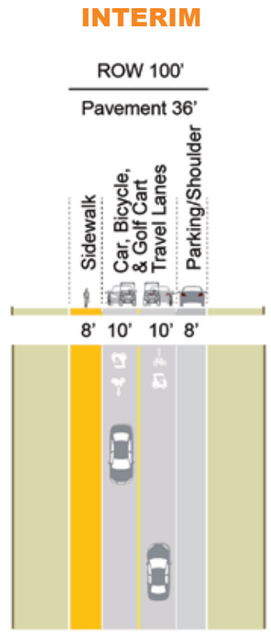
To provide safer access to Billish Park, the ultimate vision for the corridor includes dedicated facilities for pedestrians on both sides of the street, and given the slow speed on the corridor, markings for shared travel lanes for vehicles, golf carts/NEVs, and bicycles.

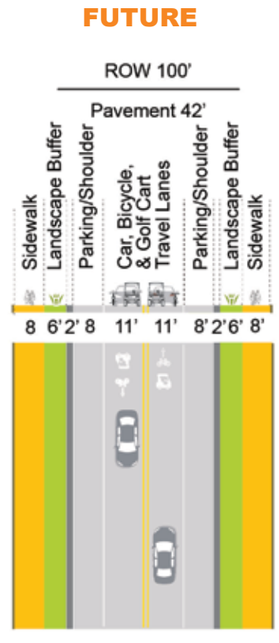












Palmira Avenue

Limits: Whitecap Dr to Sea Pines Dr.

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
50’	26’	Corpus Christi	30 MPH	1.2 miles

EXISTING CONDITIONS

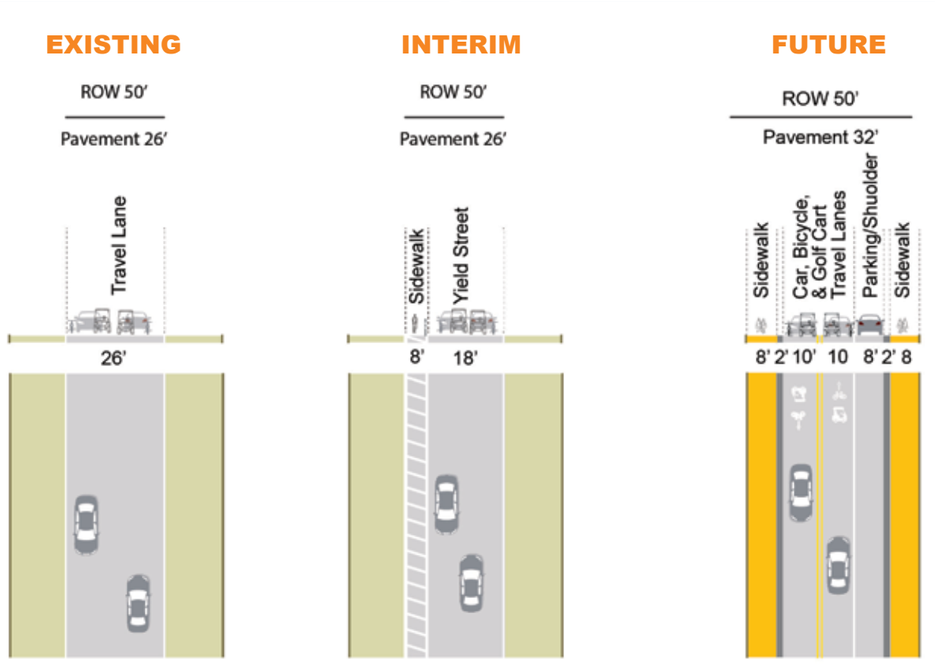
- North/South corridor running parallel to PR 22 from Las Tunas Drive to Sea Pines Drive. The corridor provides access to residences, schools, as well as the back side of commercial and retail businesses that front PR 22.
- Approximately 26’ of pavement without pavement markings or pedestrian or bicycle facilities.
- While sidewalks are present in some segments, they are inconsistent and disconnected.

INTERIM RECOMMENDATION

Recommend continuing to operate as a yield street while dedicating 8’ of the pavement to a sidewalk through striping and/or delineators in the interim. No recommendation on which side of the road to place the sidewalk. Since no pavement is currently in place north of Las Tunas, recommend utilizing Las Tunas and Cruiser Street for connectivity to Whitecap Blvd. Prioritize segment by school that has some sidewalks.

FUTURE VISION

The ultimate vision for the corridor would include using more of the ROW to provide space for dedicated facilities for pedestrians, and given the design for slower speeds on the corridor, add pavement markings for vehicles, golf carts/ NEVs, and bicycles to share the travel lanes.



Sea Pines Avenue

Limits: PR 22 to West Terminus

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	78’	Corpus Christi	35 MPH	0.85 mile

EXISTING CONDITIONS

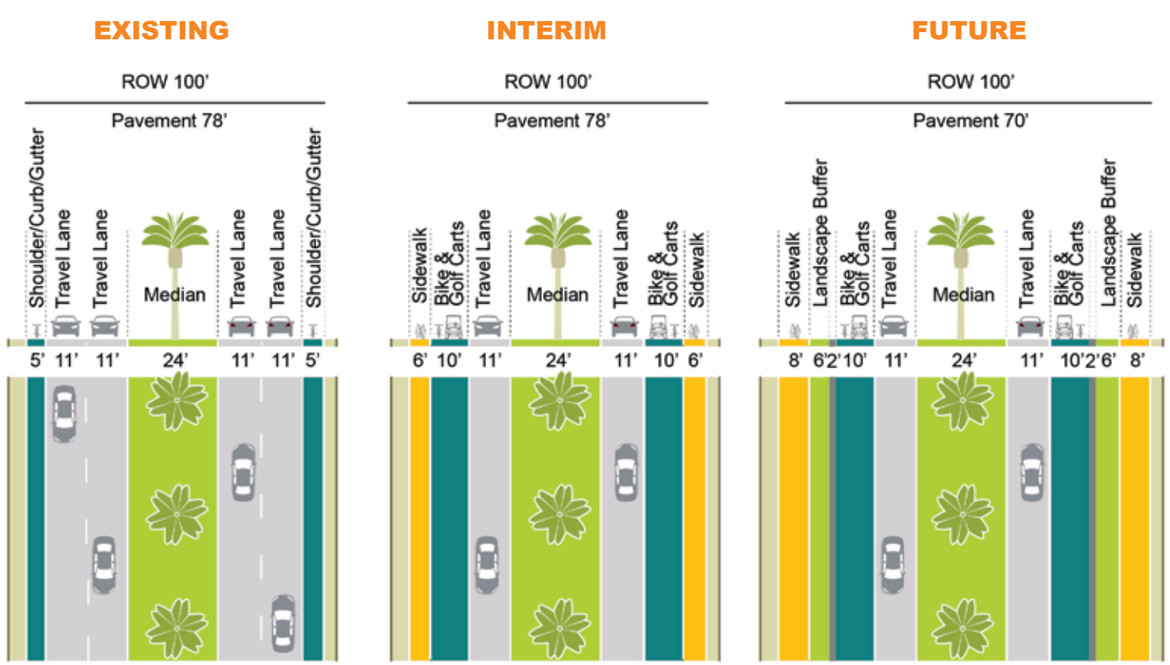
- East/West corridor that provides access to residences from PR 22 and connects to Beach Access Road 6. The corridor intersects with Palmira Avenue and many local streets.
- The roadway is currently designed with 11’ travel lanes, a 24’ median 5’ bike lanes, and is guttered. There are no pedestrian facilities along this corridor. Speed limit is 35 MPH.

INTERIM RECOMMENDATION

Restripe / paint and/or use delineators on each side of 24’ median: 11’ travel lane, 10’ bike and golf cart SUP, 6’ sidewalk. Recommend reducing speed limit to prima facie speed of 30 MPH.

FUTURE VISION

The ultimate design for the corridor would be to reduce travel lanes and create a shared bicycle and golf cart lane with separated sidewalk facilities.



Whitecap Blvd (West)

Limits: PR 22 to WWTP

RIGHT-OF-WAY	EXISTING PAVEMENT	OWNER	SPEED LIMIT	LENGTH
100’	85’	Corpus Christi	35 MPH	1.6 Miles

Whitecap Blvd (West) Continued

EXISTING CONDITIONS

- This corridor primarily serves to connect neighborhoods on the west side of the Island with Park Road 22 as well as a connection to area parks and the Whitecap Wastewater Plant.
- This segment includes a median, two travel lanes, 5-foot shoulders on both sides and a single 7-foot sidewalk on the north side of the street.

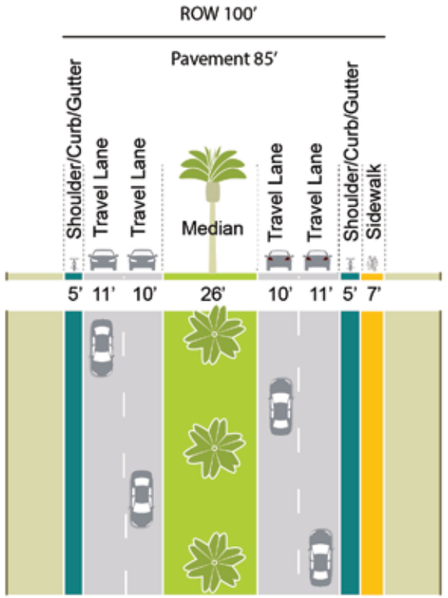
FUTURE VISION

The ultimate design for the corridor would be to reduce travel lanes and create a shared bicycle and golf cart lane with separated sidewalk facilities. The median would also allow for turn lanes.

INTERIM RECOMMENDATION

Recommend reducing speed limit to the prima facie speed of 30 MPH. Paint / restripe existing pavement and/or use delineators to address concerns of local residents using golf carts to travel around the Island.

EXISTING



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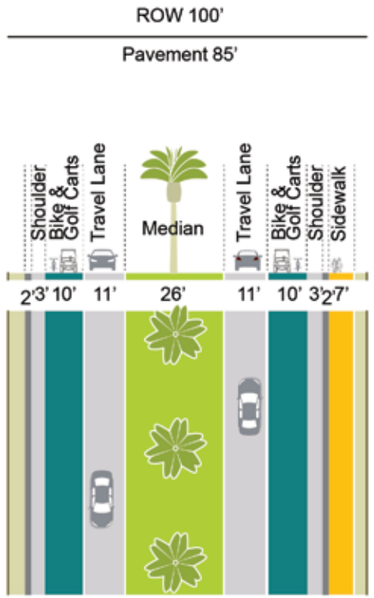
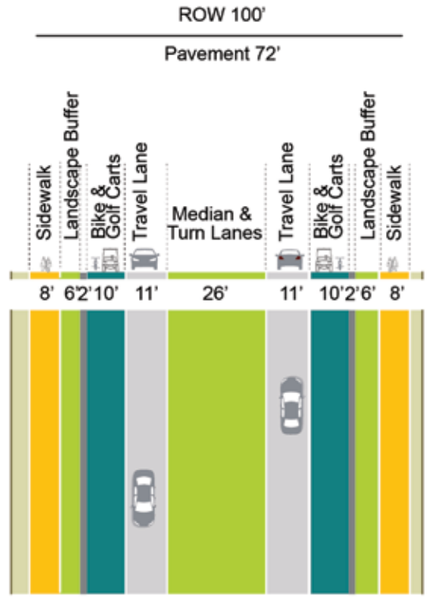


FUTURE



4. IMPLEMENTATION PLAN

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4. Implementation Plan

4.1 Projects

Table 1 through Table 3 in this section present implementation phasing recommendations. However, implementation may occur sooner if a street in this plan is identified for the City's Rapid Pavement Program, Preventative Maintenance, Reconstruction, or other street improvement program, as the proposed improvements to that segment would occur at that time.

Table 1: Short-Term Projects (Next 5 Years)

Page #	Corridor	Limits	Design
28	Park Road 22 (TxDOT)	Aquarius St. to Whitecap Blvd.	Future Design
36	Sand Dollar Ave. (In Design*)	Hwy 361 to Verdemar Dr.	Future Design
39	Beach Access Rd. 3A	Windward Dr. to beach	Pavement Markings
40	Crows Nest Ave. (In Design*)	Beach Access Rd. 4 to Whitecap Blvd.	Future Design
46	Windward Dr.	Beach Access Rd. 4 to Robla	Interim Design
47	Windward Dr.	Robla to St. Bartholomew Ave.	Interim Design
56	Aquarius St.	Commodores Dr. to Whitecap Blvd.	Interim Design
57	Commodores Dr.	PR 22 to Aquarius St.	Interim Design
59	Dasmarinas Dr.	Aquarius St. to Whitecap Blvd.	Interim Design
60	Encantada Ave.	PR 22 to Gypsy St.	Interim Design
61	Gypsy St.	Whitecap Blvd. to Encantada Ave.	Interim Design
64	Whitecap Blvd. (west)	PR 22 to west terminus	Interim Design

*Note: TIRZ 2 Allocated Paper Streets Project Funding of $7.2M for design, permitting, and construction of Sand Dollar and Crows Nest Avenues.

Table 2: Mid-Term Projects (6 - 10 Years)

Page #	Corridor	Limits	Design
27	Hwy 361 (TxDOT)	PR 22 to Lake Padre Entrance	Future Design
29	JFK Causeway Side Path Bridge	Aquarius St. to Padre Island Access Rd.	Future Design
31	Ambrosia St.	Aquarius St. to Jackfish Ave.	Interim Design
32	Aquarius St.	PR 22 to Ambrosia St.	Interim Design
41	Leeward Dr.	Robla Dr. to St. Bartholomew Ave.	Interim Design
42	Robla Drive	Leeward Dr. to Windward Dr.	Interim Design
43	St. Augustine Dr.	Leeward Dr. to Windward Dr.	Interim Design
44	St. Bartholomew Ave.	Leeward Dr. to Windward Dr.	Interim Design
48	Zahn Rd.	Hwy 361 to beach	Interim Design
50	Beach Access Rd. 4	PR 22 to beach	Interim Design
54	Padre Balli Park Rd.	PR 22 to beach	Interim Design
62	Palmira Ave.	Encantada Ave. to Sea Pines Dr.	Final Design
63	Sea Pines Dr.	PR 22 to west terminus	Interim Design

Table 3: Long-Term Projects (Over 10 years)

Page #	Corridor	Limits	Design
28	Park Road 22	Whitecap Blvd. to Sea Pines Dr.	Future Design
33	Jackfish Ave.	PR 22 to Ambrosia St.	Future Design
34	Marina Park Blvd.	PR 22 to Packery Point Dr.	Future Design
35	Packery Point Drive	PR 22 to Marina Park Blvd.	Future Design
36	Sand Dollar	Verdemar Dr. to Packery Channel Park Rd.	Future Design
37	Verdemar Dr.	PR 22 to Sand Dollar Ave.	Future Design
40	Crows Nest	Whitecap Blvd. to PR 22	Future Design
45	Whitecap Blvd.(east)	PR 22 to Beach access	Future Design
51	Beach Access Rd. 5	PR 22 to beach	Interim Design
52	Beach Access Rd. 6	PR 22 to beach	Future Design
53	Elliff Rd.	Beach Access Rd. 4 to Padre Balli Park Rd.	Future Design
N/A	Plan Update	Review and assess plan implementation and street design functionality to inform future design amendments and project prioritization.	N/A

4.2 Next Steps

The City should consider the following next steps to implement the recommended projects listed in this Plan. These steps are integral to project planning and delivery.

- **Adopt Mobility Plan and Associated Policies and Design Standards** – Plan and policy adoption establishes the path to move forward with planning, design, and available funding opportunities. Coordination with the City's Traffic Engineering Department may be required for additional design standard updates to the Infrastructure Design Manual and ammendments to the City's Municipal Code for speed limit adjustments.
- **Identify CIP Projects** – Based on the project prioritization and available funding sources, identify projects to incorporate in the short-term and long-term Capital Improvement Program.
- **Agency Coordination** – Communicate with Nueces County and TxDOT to align Mobility Plan projects with future agency projects and initiatives.
- **Identify Funding Sources** – There are outside funding mechanisms that will fund pedestrian safety and active transportation projects. Securing outside funding will require the City to be "grant ready". Overall, a project that is "shovel-ready" and/or already included in the CIP have a higher success rate of being funded.

APPENDIX A

Don Patricio Water Exchange Bridge Mobility Recommendations

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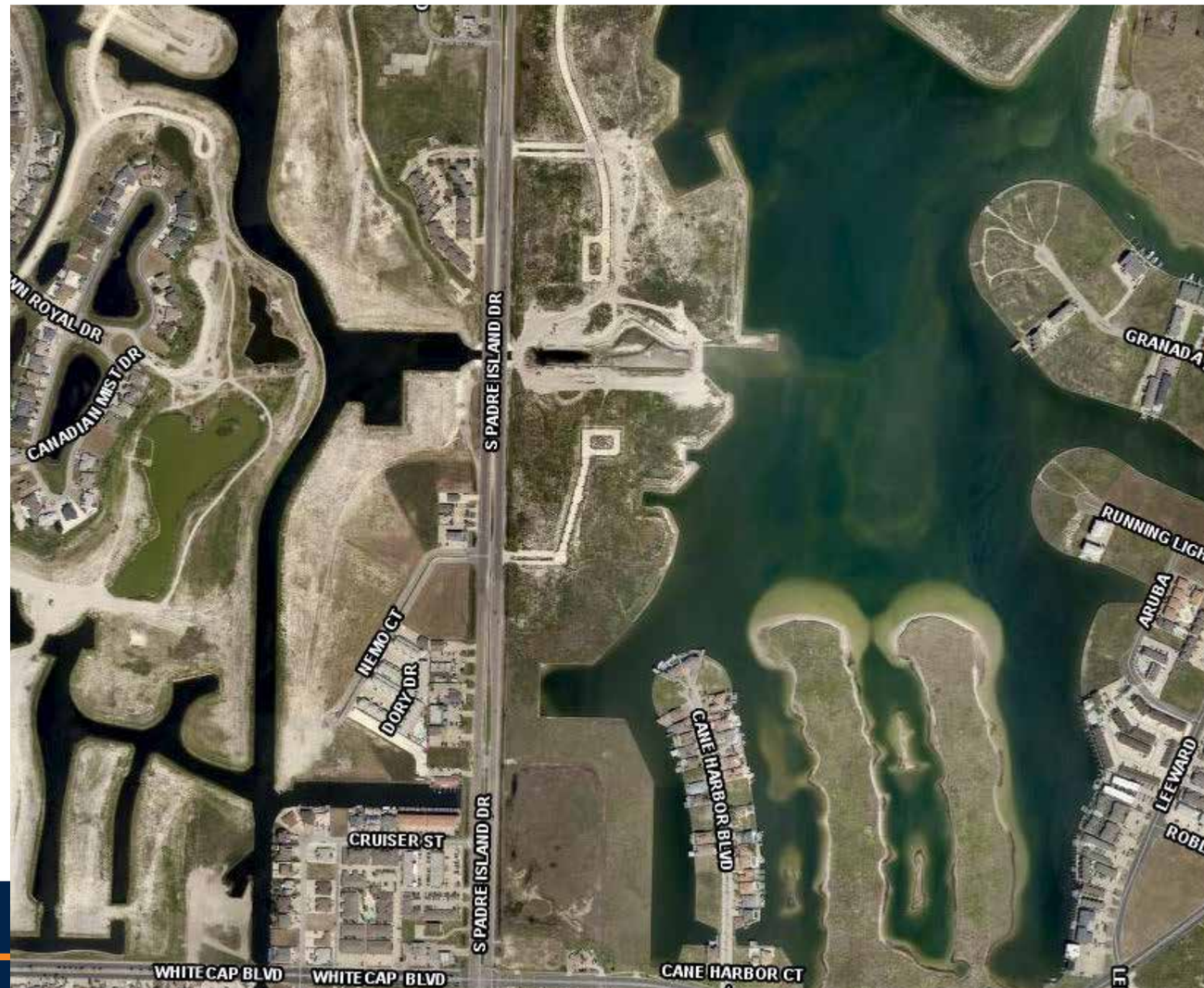
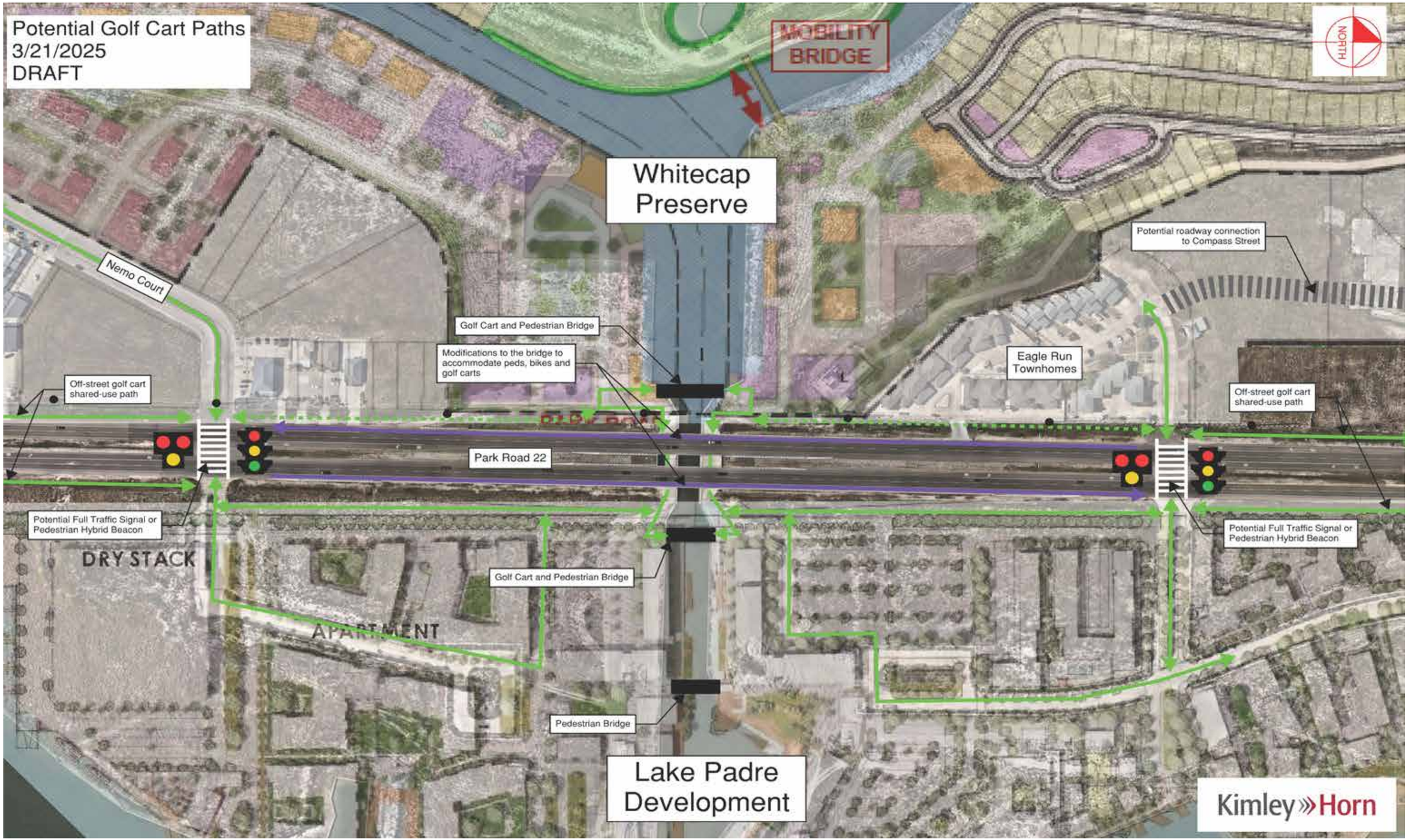
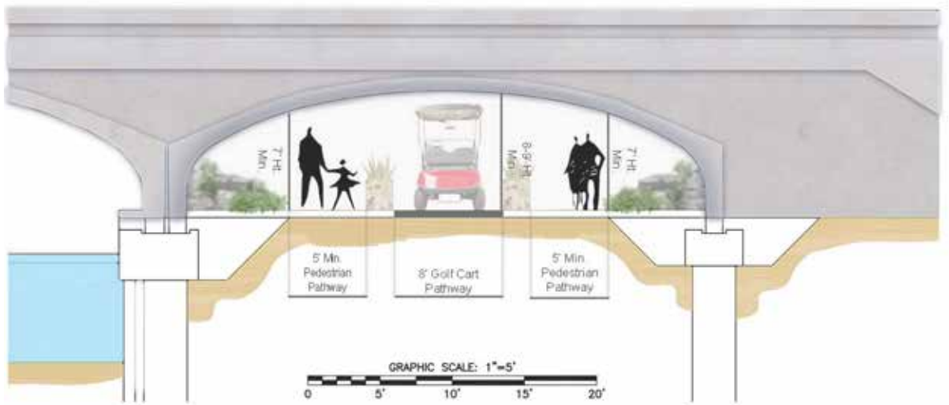



Potential Golf Cart Paths
3/21/2025
DRAFT
MOBILITY BRIDGE
NORTH
Whitecap Preserve
Nemo Court
Golf Cart and Pedestrian Bridge
Modifications to the bridge to accommodate peds, bikes and golf carts
Potential roadway connection to Compass Street
Eagle Run Townhomes
Off-street golf cart shared-use path
Off-street golf cart shared-use path
Park Road 22
Potential Full Traffic Signal or Pedestrian Hybrid Beacon
Potential Full Traffic Signal or Pedestrian Hybrid Beacon
DRY STACK
APARTMENT
Golf Cart and Pedestrian Bridge
Pedestrian Bridge
Lake Padre Development
Kimley»Horn

Kimley»Horn

Kimley»Horn



March 21, 2025

Ms. Keren Costanzo
Planning Manager
1201 Leopard St.
Corpus Christi, TX 78401
KerenC@cctexas.com
361-826-3573

RE: ***Corpus Christi – Park Road 22 Bridge – Preliminary Load Analysis and Golf Cart Paths***
Park Road 22
Corpus Christi, TX

Ms. Costanzo,

As requested, Kimley-Horn reviewed the existing bridges (separate bridges for northbound and southbound) located at Park Road 22 for support of the newly proposed lane reconfiguration, which is part of a city improvements project. Our review is limited to reviewing the change in loading that will be applied to the bridge due to the new lane reconfiguration using the information provided by the TxDOT drawings prepared by Urban Engineering (UE). Information provided to date includes bridge geometry, design loads, and record structural drawings prepared by UE sealed on 12/08/2016. Kimley-Horn also reviewed potential golf cart paths on each development as well as along Park Road 22.

EXISTING STRUCTURE

The existing bridge consists of three precast arches with 36'-0", 48'-0", and 36'-0" spans, with a roadway width of 44'-0" and an overall bridge width of 46'-7". The three prefabricated arches are supported on continuous caps with eight (8) 36" diameter drilled shafts. Figure 1 shows the typical bridge profile. Figure 2 shows the existing typical section of the bridges.

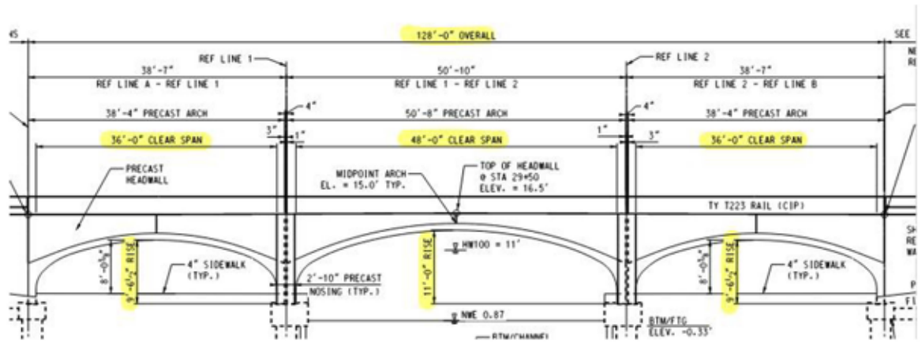


Figure 1: Typical Existing Bridge Profile

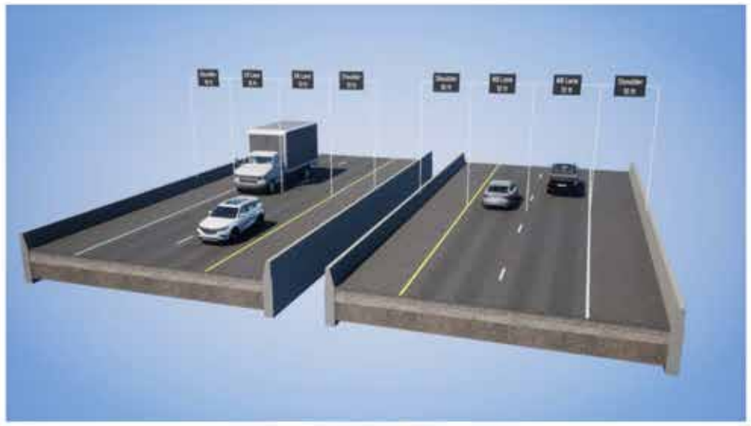


Figure 2: Existing Bridge Typical Section

PROPOSED LANE RECONFIGURATION

The proposed lane reconfiguration will limit the vehicular loading to a "roadway width" of 29'-0", while the remaining width will be utilized for pedestrian, bicycle, and golf cart loading. An interior traffic railing will separate the roadway section from the pedestrian and bicycle/golf cart section. Pedestrian and H-10 truck loading will apply to a width of 14'-0". A low-profile physical buffer will be provided between the pedestrian and bicycle/golf cart lanes. Exterior T223 rails will be converted to C223 rails suitable for adjacent pedestrian traffic. A speed limit of 15 mph will be signed and enforced on the shared bicycle/golf cart lane to allow safe, concurrent use by both modes. *Figure 3* shows the proposed typical lane reconfiguration.

Figure 3: Proposed Bridge Typical Section

BRIDGE LOADING ANALYSIS

The extent of our analysis was limited to assessing the change in applied loading. Dead and live loads for the proposed lane reconfiguration were compared against the original design (existing).

As shown in the attached calculations (Appendix A), the total effective dead load on the precast arch culverts is increased by less than 3% due to the additional traffic railings. The design live load for the proposed section is substantially less than the existing one, resulting in lower theoretical stresses in the structure.

The record structural drawings indicate that the existing bridge was designed in accordance with 6th edition AASHTO LRFD Bridge Specifications for HL-93 live load. Our load analysis in Appendix A compares HL-93 loading in one lane against the pedestrian and H10 live load to show the reduction in live load in the pedestrian and golf cart sections.

GOLF CART PATHS AND BRIDGE UNDERPASS RENDERINGS

Kimley-Horn reviewed potential golf cart paths along Park Road 22 and potential routes between the two developments (White Cap and Lake Padre). The exhibits attached show the potential routes as well as three crossing either at grade (intersection crossings) or under the Park Road 22 bridge. The two intersection roadway crossings should be studied further in conjunction with the developments for signalization whether this is a full traffic signal or a pedestrian hybrid beacon system. Kimley-Horn also developed renders of what the crossing under the Park Road 22 bridge may look like in both the daytime and nighttime. The use of landscape rocks and low-light landscaping can be utilized to beautify the crossing. There should also be a separate pedestrian zone from the single-lane golf cart path. As there is only enough room for a single golf cart path, it is recommended to have a passing area in the middle of the crossing in case there are golf carts traveling in both directions. The golf cart path exhibit and renderings can be found in the **Appendix** of this memo.

SUMMARY

Based on the limited information provided it is our opinion that the proposed section reconfiguration of the existing bridge will not produce substantial negative load effects in the superstructure or substructure of the bridge in terms of vertical loading. Initial live load analysis for downward vertical forces showed that the proposed lane reconfiguration is expected to decrease live load over a 14 ft wide portion of the bridge.

A full load rating of the existing bridge can be prepared if additional information on the condition and fabrication details of the precast arches is provided to support a full analysis. However, based on the qualitative load analysis, the proposed typical section will not substantially increase the demands on the existing bridge in any AASHTO LRFD load combination.

Please contact me should you have any questions.

Sincerely,

Thomas P. Grant, P.E., PTOE
Marco I. Perez, P.E.
March 21, 2025

PRELIMINARY
FOR REVIEW ONLY
Not for construction or permit purposes.
Kimley»Horn
Engineer MARCO I. PEREZ
P.E. No. 152470 Date OCTOBER 2024

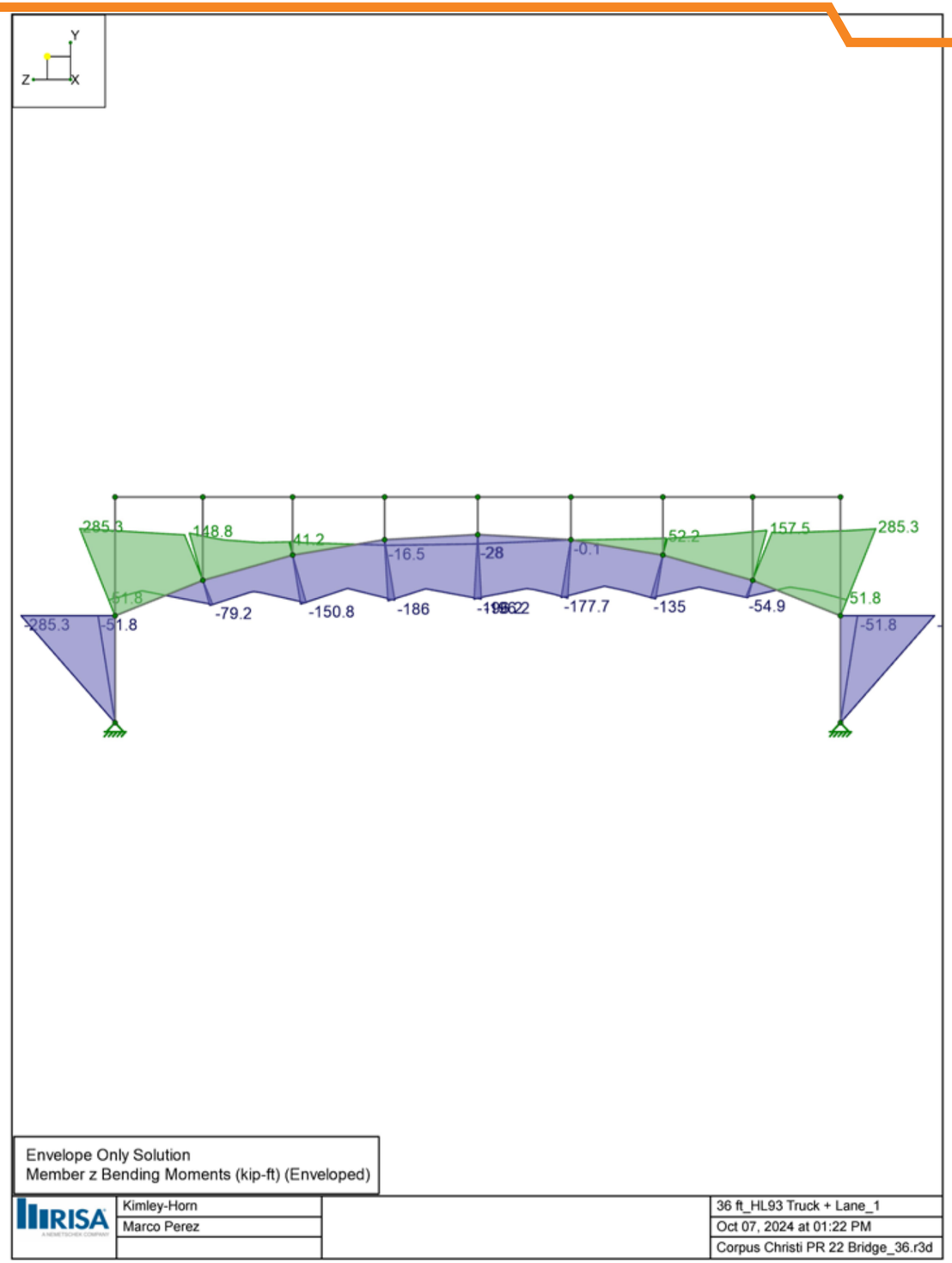
PRELIMINARY
FOR REVIEW ONLY
Not for construction or permit purposes.
Kimley»Horn
Engineer THOMAS P. GRANT
P.E. No. 100876 Date 03/21/2025

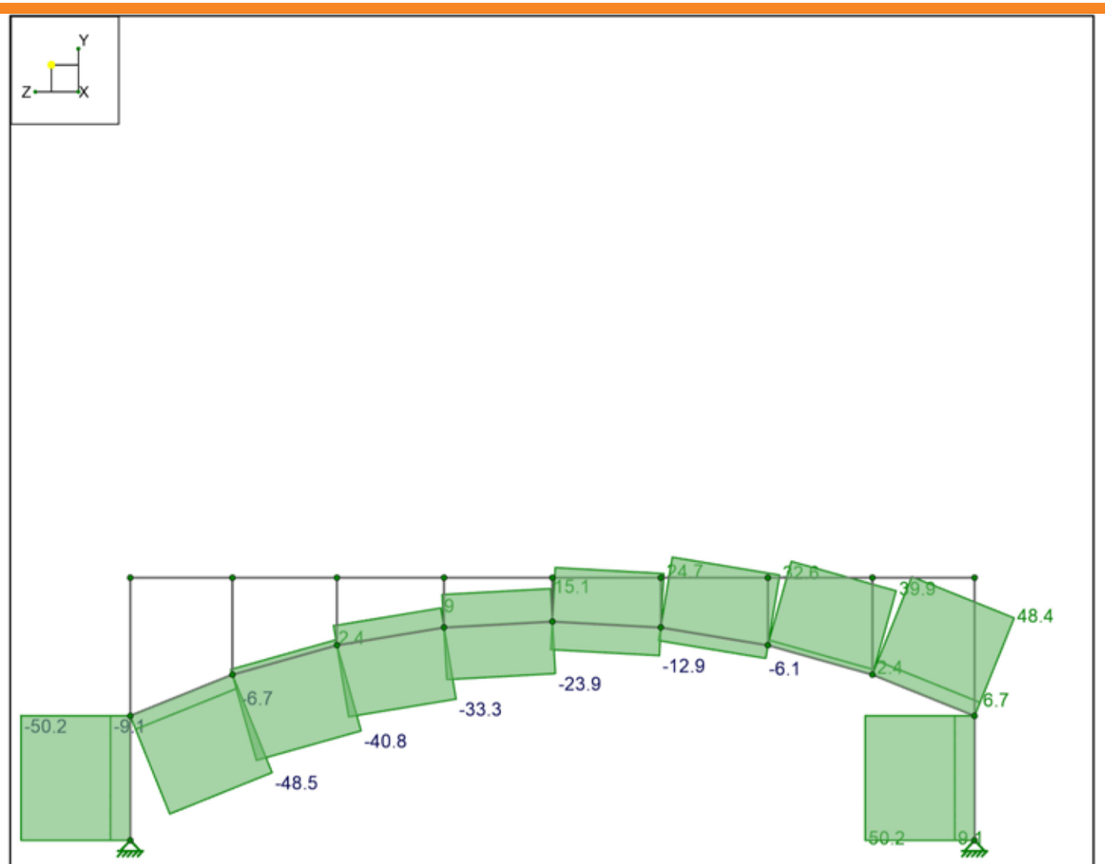
For structural analysis only

Appendix

Appendix "A": Preliminary Bridge Load Analysis
Appendix "B": Golf Cart Path Exhibit and Bridge Underpass Renderings

kimley-horn.com | 225 E. John W. Carpenter Freeway, Suite 1100, Irving, TX 75062 | 214 420 5600





Envelope Only Solution
Member y Shear Forces (kips) (Enveloped)

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	Marco Perez	Oct 07, 2024 at 01:24 PM
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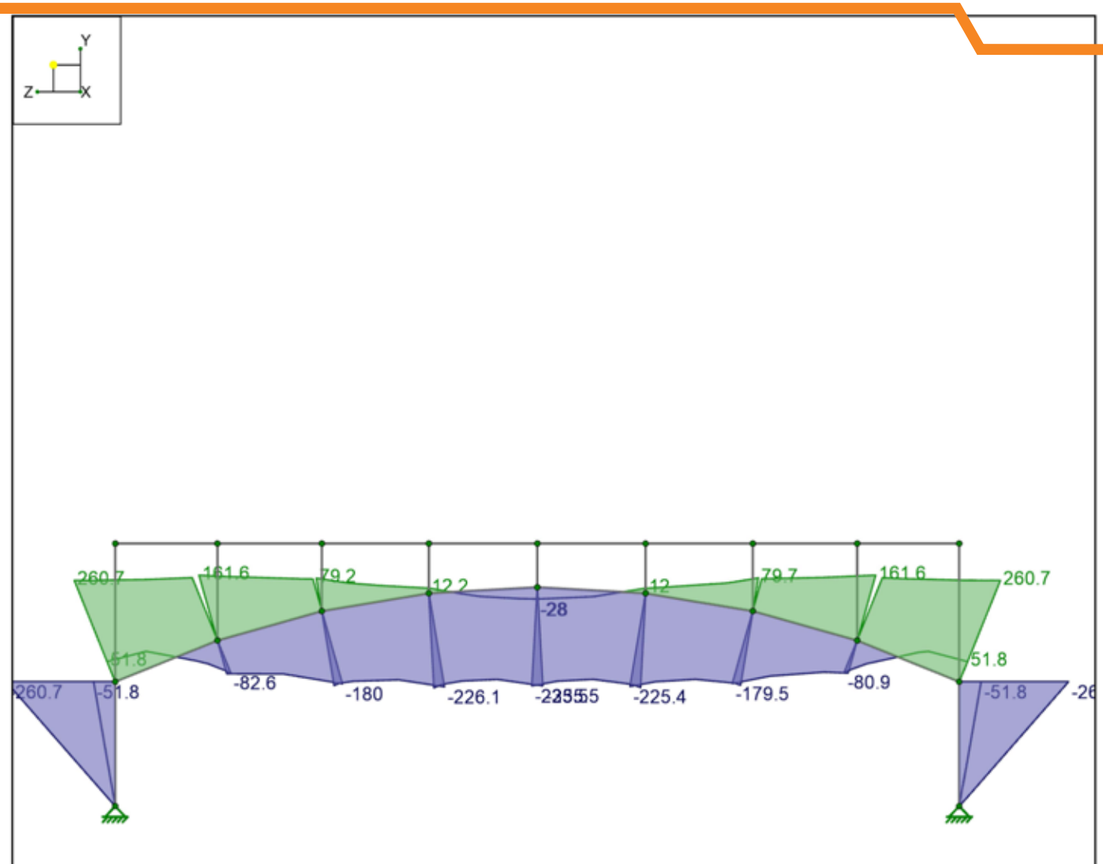

Envelope Only Solution
Member z Bending Moments (kip-ft) (Enveloped)

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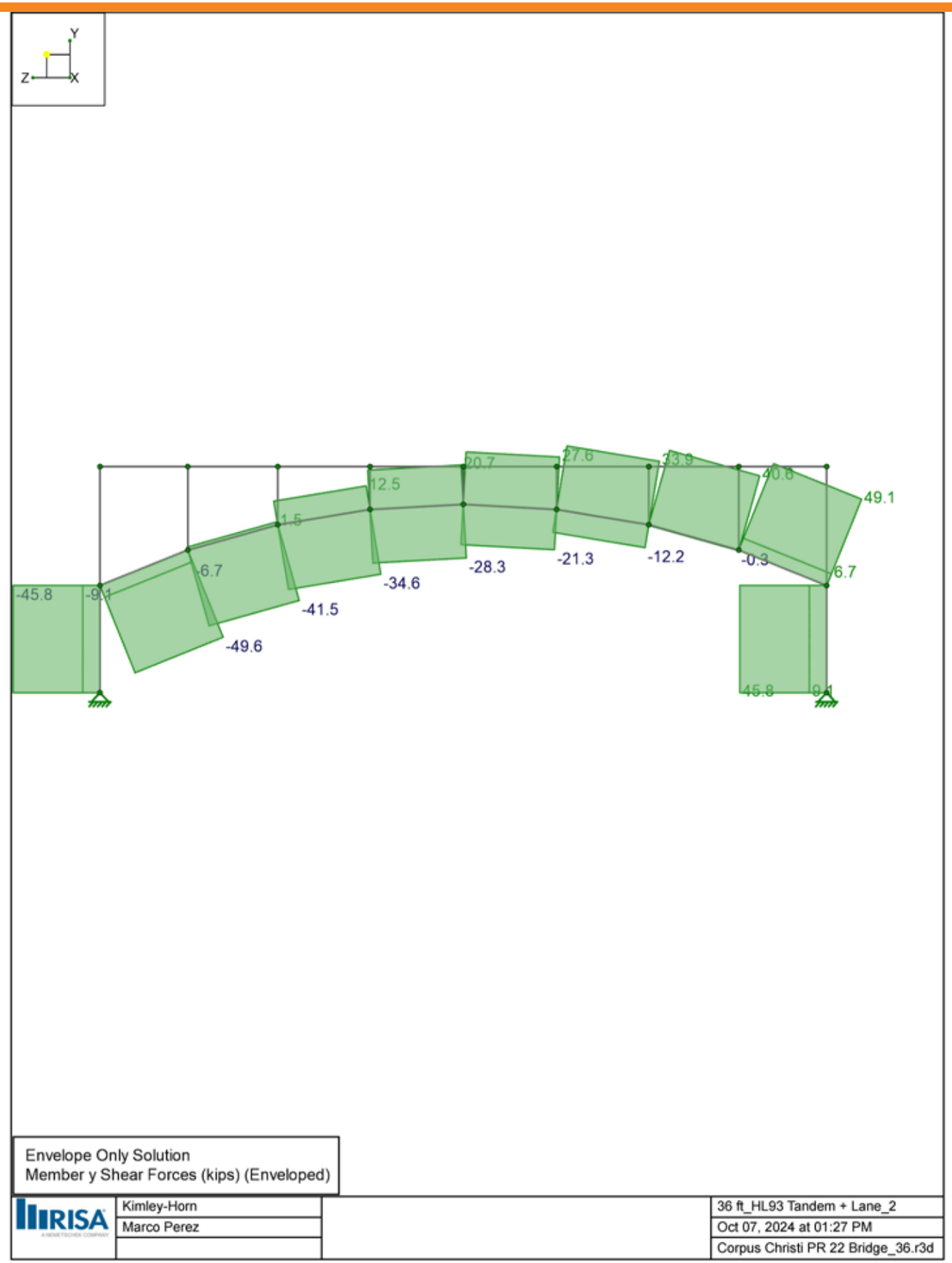

Envelope Only Solution
Member y Shear Forces (kips) (Enveloped)

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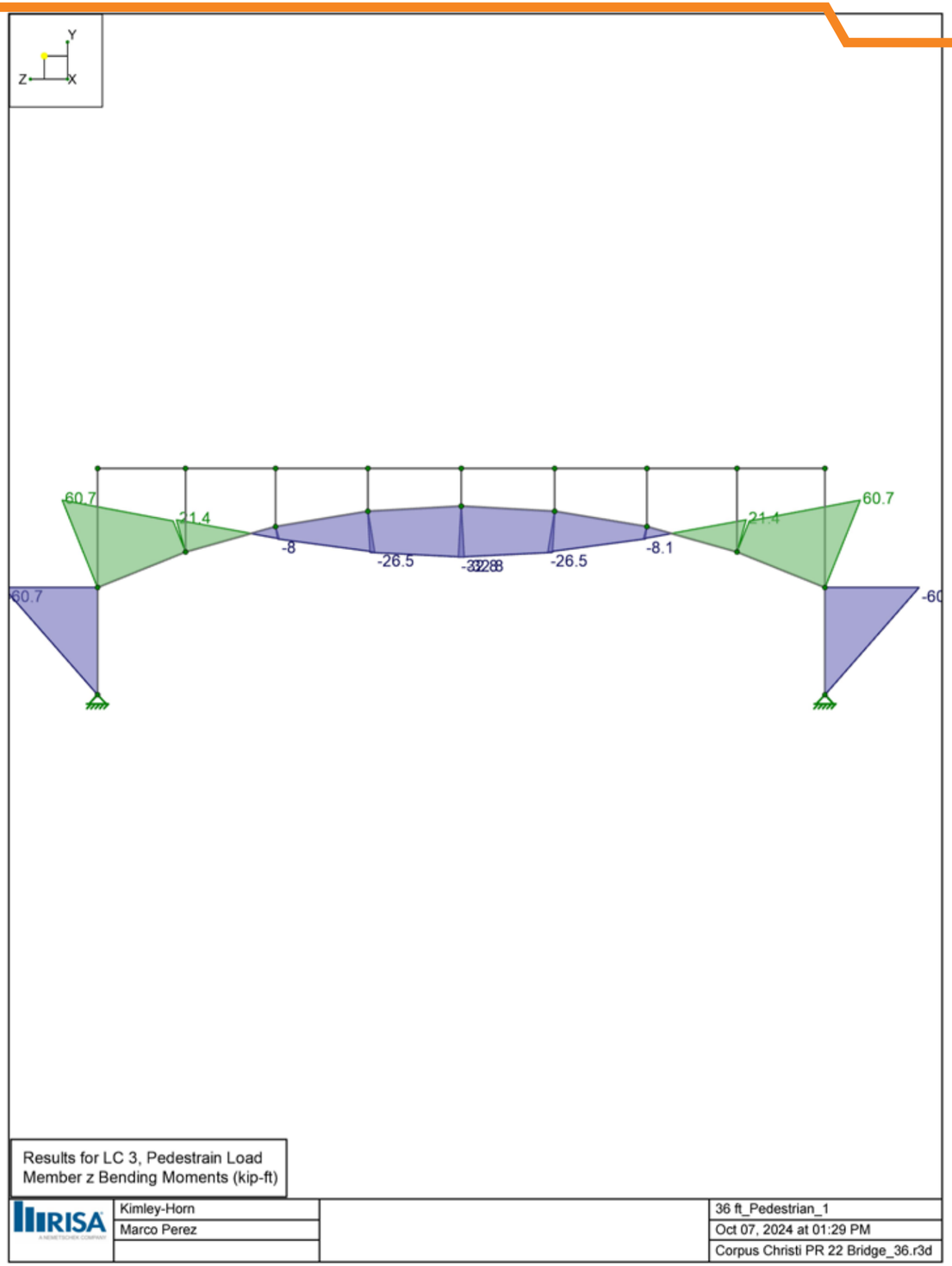

Results for LC 3, Pedestrain Load
Member z Bending Moments (kip-ft)

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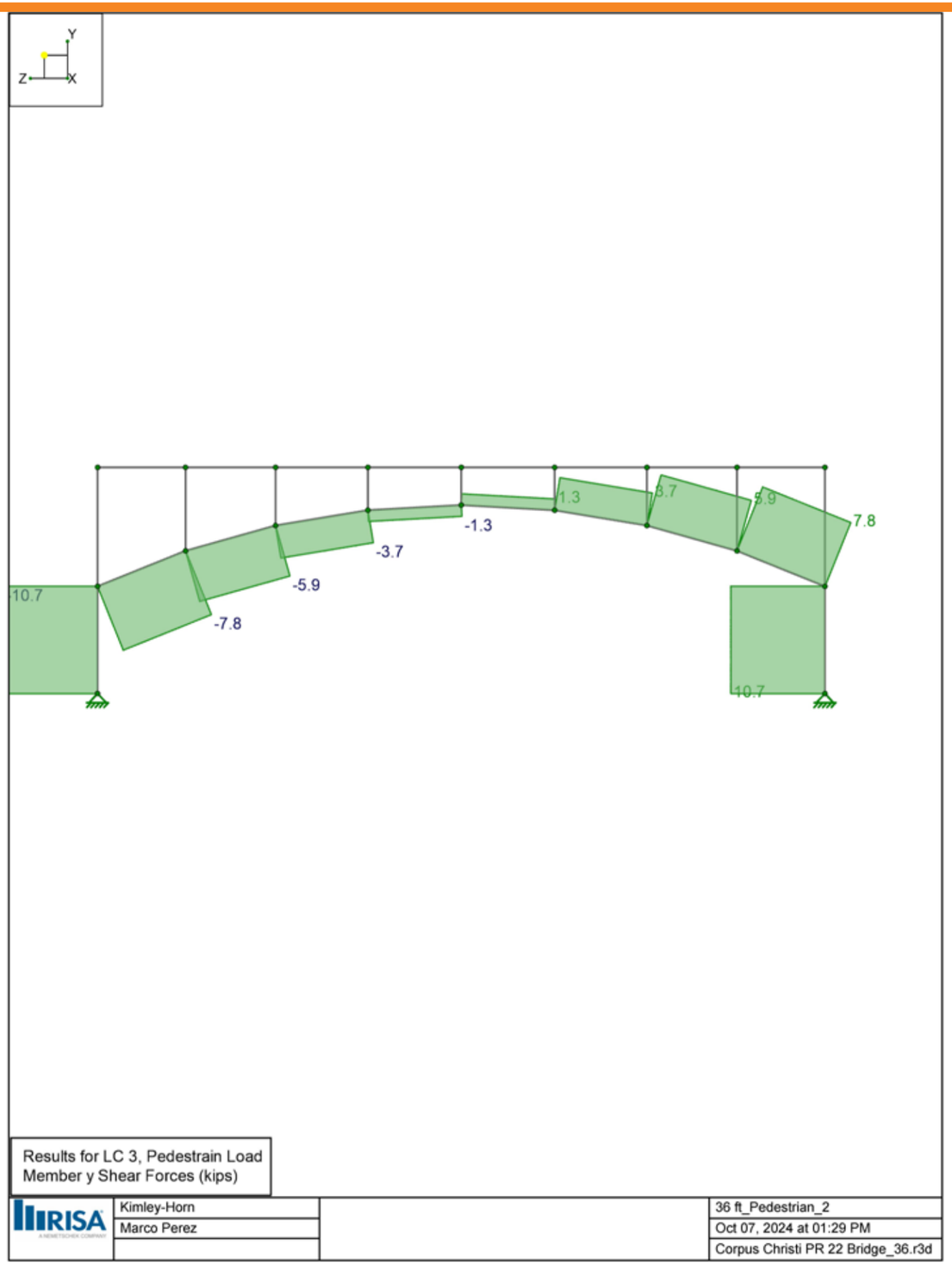

Results for LC 3, Pedestrain Load
Member y Shear Forces (kips)

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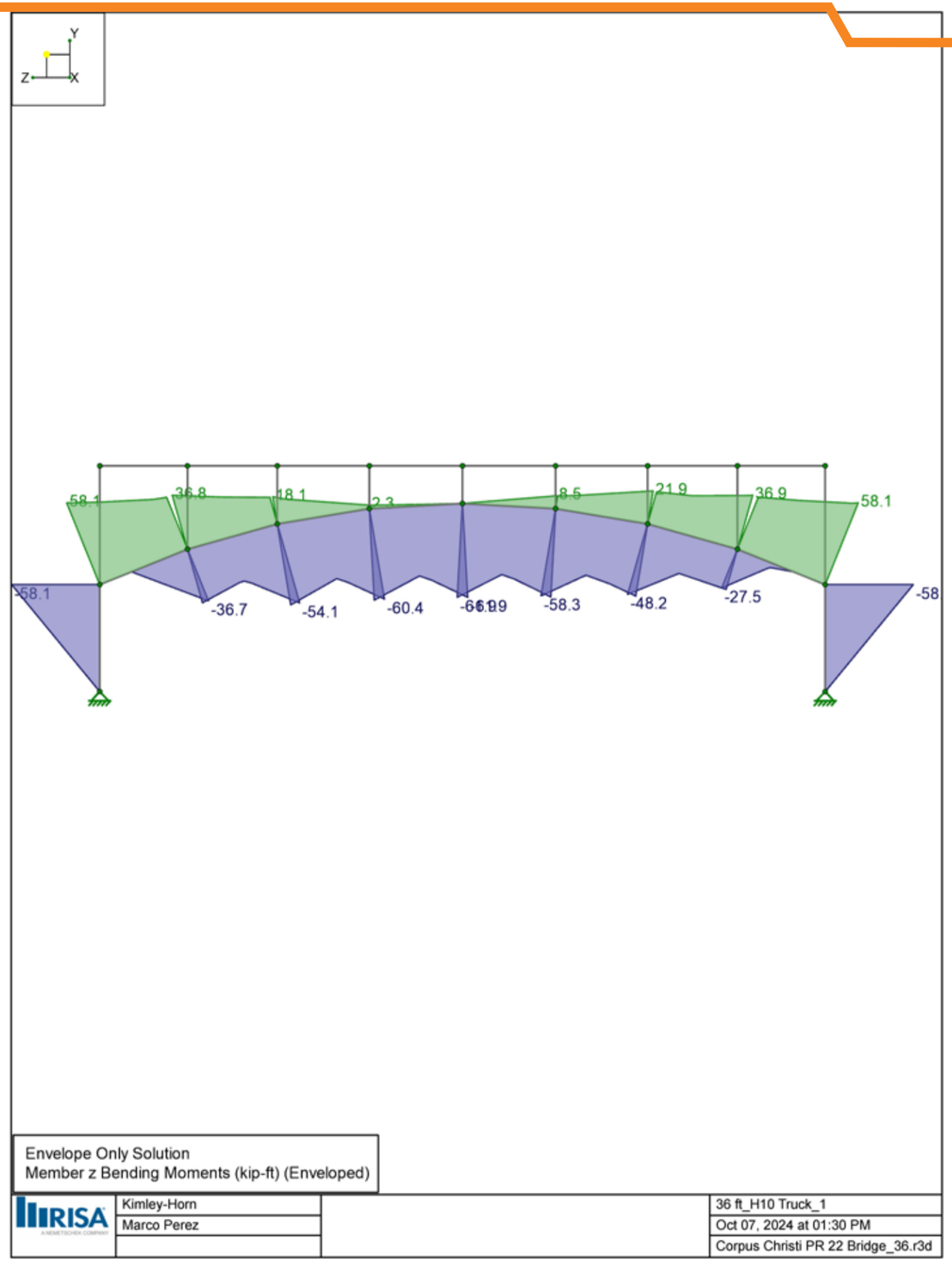

Envelope Only Solution
Member z Bending Moments (kip-ft) (Enveloped)

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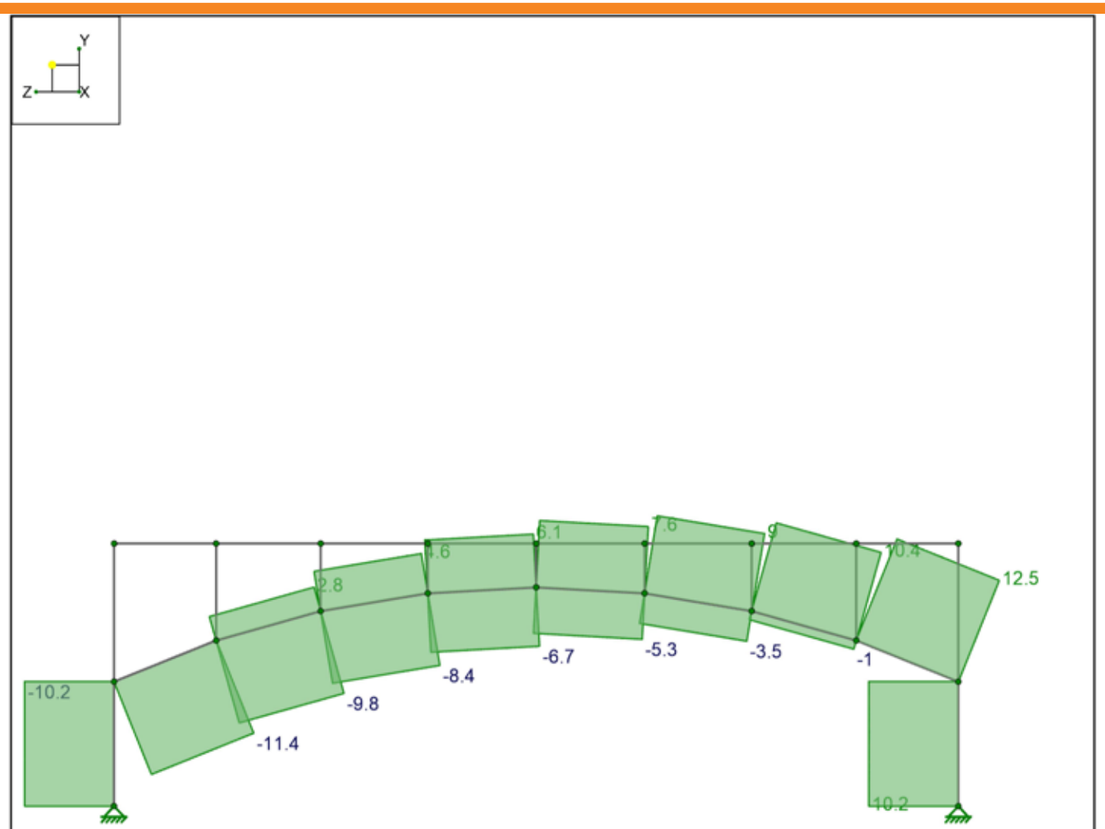

Envelope Only Solution
Member y Shear Forces (kips) (Enveloped)

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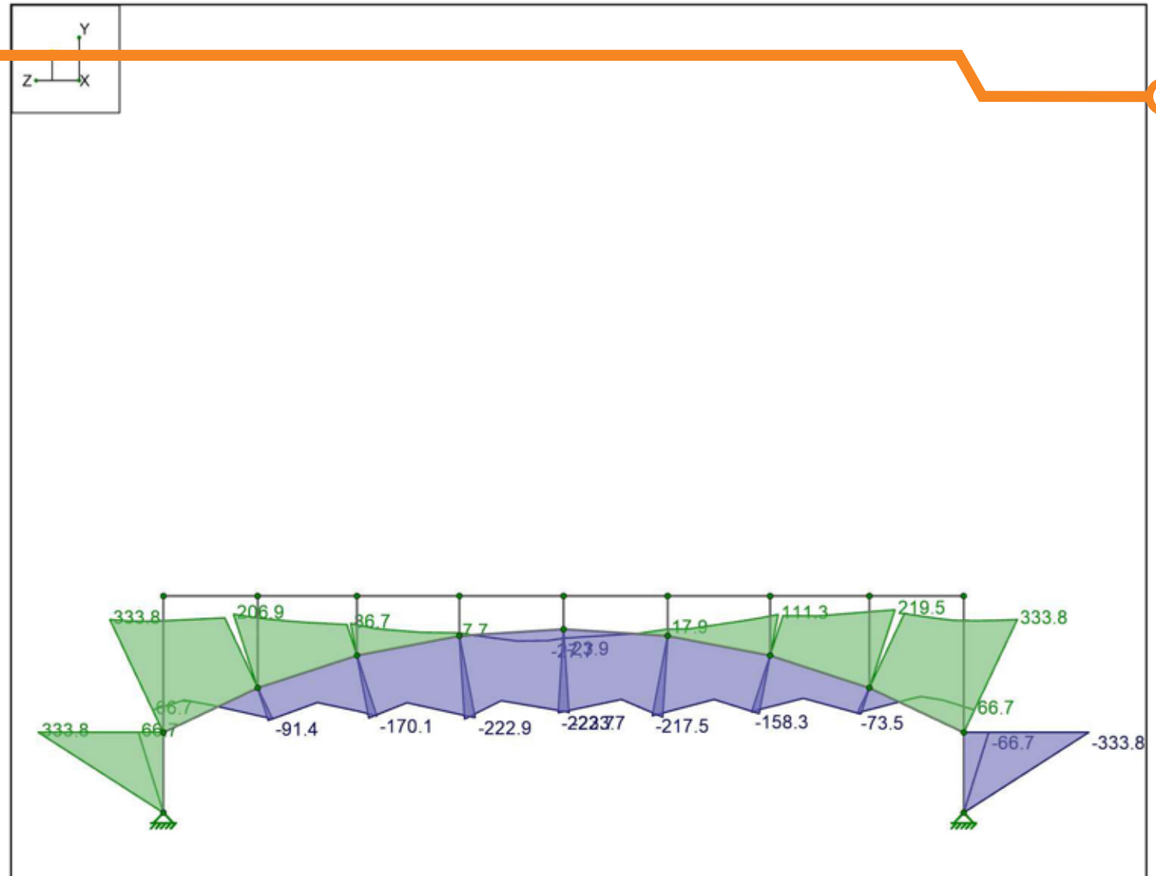

Envelope Only Solution
Member z Bending Moments (kip-ft) (Enveloped)

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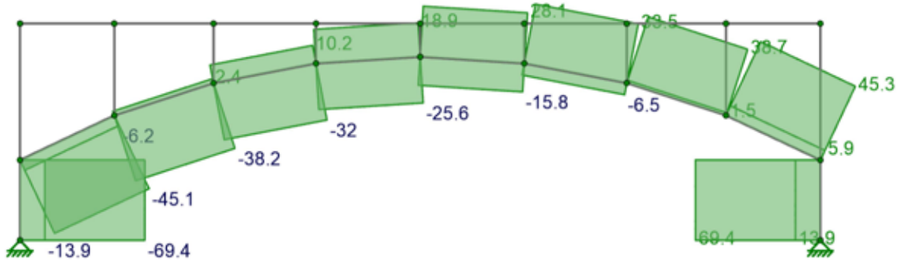

Envelope Only Solution
Member y Shear Forces (kips) (Enveloped)

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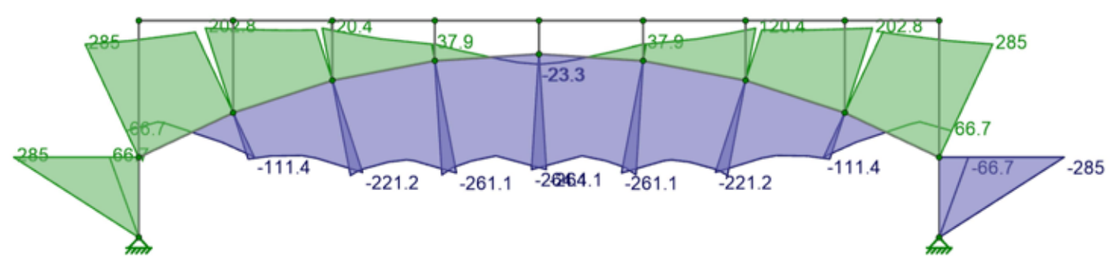

Envelope Only Solution
Member z Bending Moments (kip-ft) (Enveloped)

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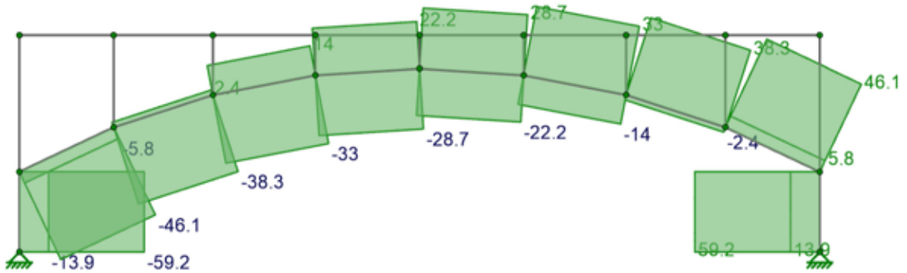

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Member y Shear Forces (kips) (Enveloped)

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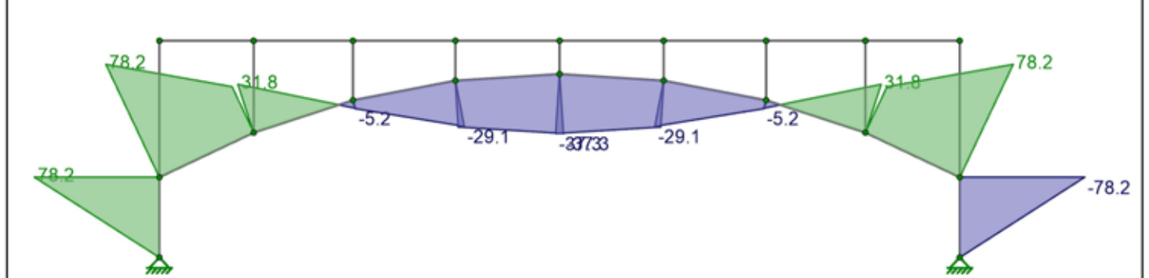

Results for LC 3, Pedestrain Load
Member z Bending Moments (kip-ft)

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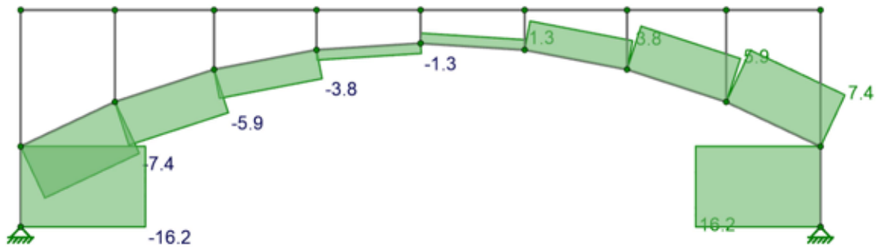

Results for LC 3, Pedestrain Load
Member y Shear Forces (kips)

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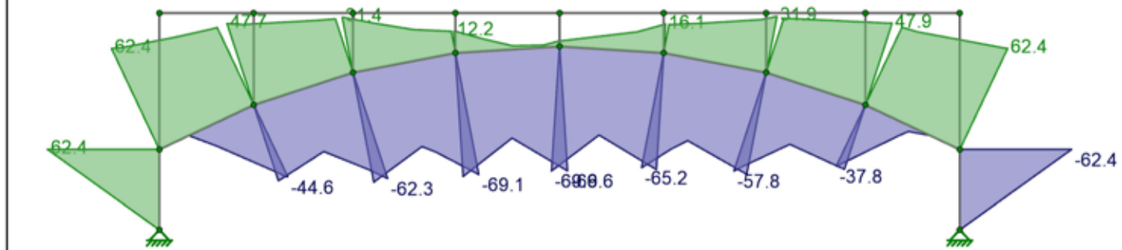
			Corpus Christi PR 22 Bridge_48.r3d



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RISA	Kimley-Horn		48 ft_H10 Truck_1
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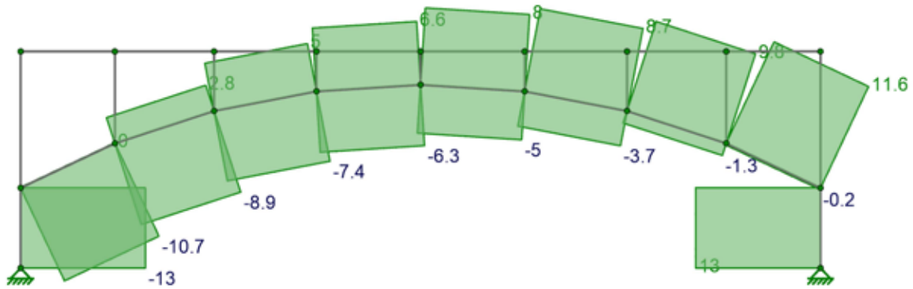

Envelope Only Solution
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