

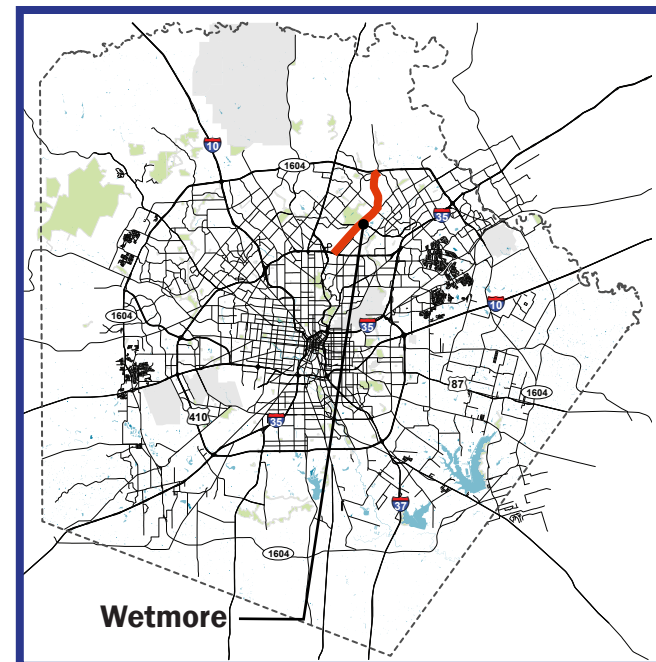
Context

Wetmore is a north-south arterial that travels through the regional center around the airport and also provides connections to regional centers north of Loop 1604. North of Stahl road, the corridor continues as Bulverde Road. Wetmore also provides access to McAllister Park and the Salado Creek trail system.

From its southern terminus at Loop 410 to Stahl Road, Wetmore's alignment is parallel and adjacent to the UPRR track. South of Wurzbach Parkway, the corridor also runs along the eastern edge of San Antonio International Airport. Because of the proximity to the rail line and airport, land uses are primarily industrial. The

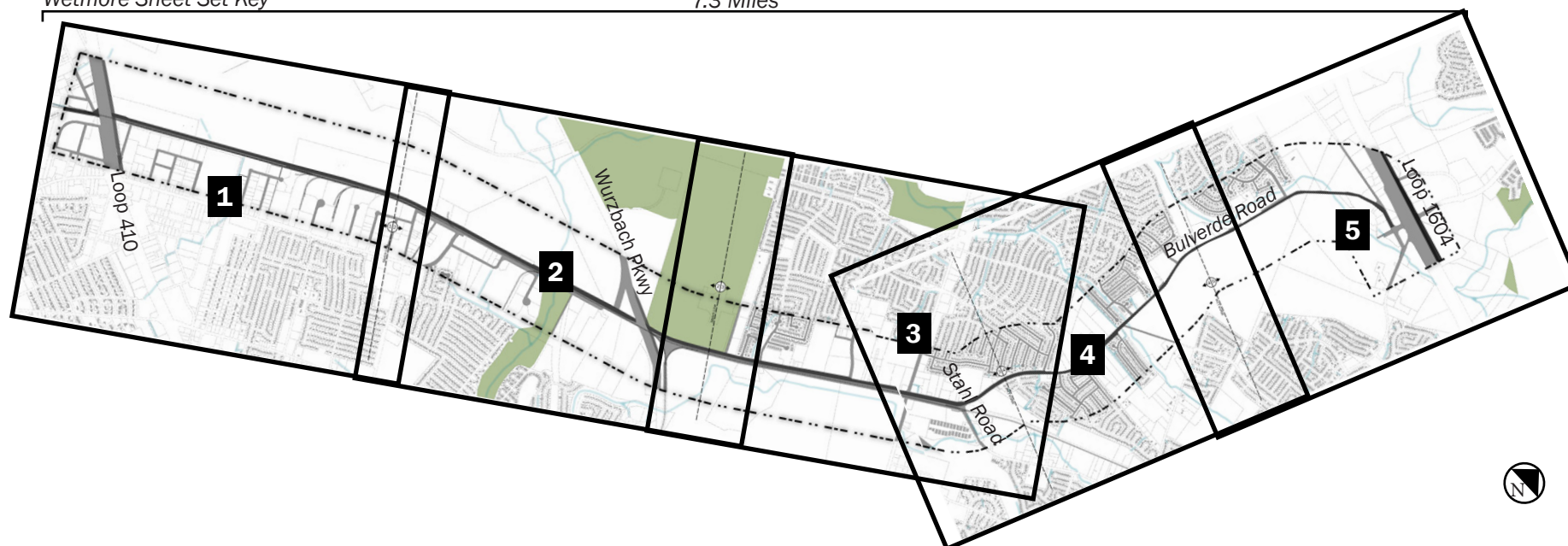
airport also creates a barrier by restricting connections to the west. North of Wurzbach Parkway, the adjacent land uses are primarily residential with some commercial parcels.

Wetmore is identified as having bike facilities in the Bike Master Plan, but there are currently no accommodations for bikes. The rail line is also identified as a potential alignment for the Lone Star Rail. There are no continuous sidewalks along the corridor.



Wetmore Sheet Set Key

7.3 Miles



Vision

Utilize the street and rail right of way to provide bike facilities that connect McAllister Park and the Salado Creek Greenway trail system. Leverage the Lonestar Rail station near the airport to spur redevelopment of the corridor to more transit and pedestrian oriented development.

Future

- 2040 Volumes - The daily traffic volumes along Wetmore Road will increase by 40% from 2015 to 2040.
- Growth Rate - the annual growth rate along Wetmore Road is projected to be about 1.5% per year based on data in the Alamo Area MPO model.
- Future LOS - The results of the traffic analysis performed along Wetmore from Wurzbach Parkway to Loop 410 shows that all of the intersections will function at LOS F during both peak hours in year 2040 due to congestion in the corridor.

Policy & Guidance

Bike Path Along Rail – Work with UPRR to investigate potential options for using some of rail ROW for bike trail.

Speed Limits – As the corridor transitions away from being a commuter route, a lower speed limit may be more compatible with the new multimodal corridor.

Land Use – Develop a station area plan for the Lone Star Station area in order to encourage transit-friendly redevelopment. Consider uses that augment the extensive recreational amenities of the corridor.

Issues

Roadway – Wetmore has high traffic volumes and serves as a relief route to US 281. Many of the major intersections experience congestion during the peak periods. There are very limited connections south of Wurzbach Parkway due to the rail line and airport.

Transit – There are no bus routes along Wetmore, and the land uses and lack of sidewalk do not support transit use.

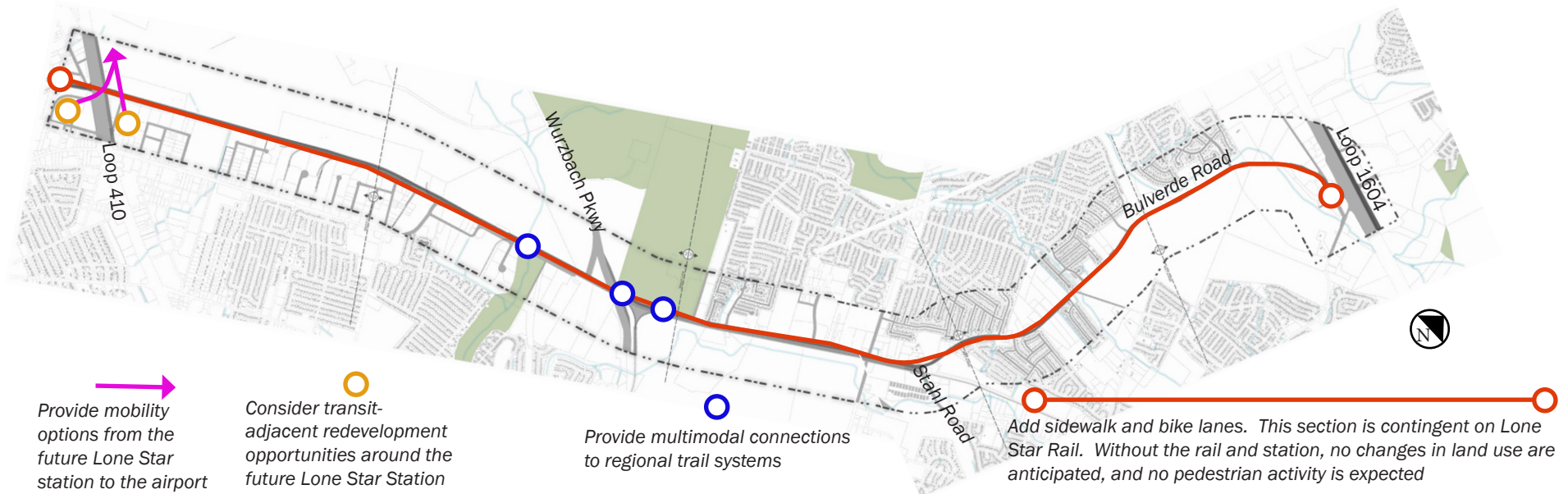
Bicycles – There are no bike facilities along Wetmore. However, the corridor is an ideal route for bikes due to connections to McAllister Park and the Salad Creek trail system. A potential path parallel to the rail line could also connect to Brackenridge Park.

Pedestrian – There are some isolated sections of sidewalk north of Stahl Road, but sidewalks along the corridor are virtually non-existent. The current land uses, especially in the south, do not encourage pedestrian activity.

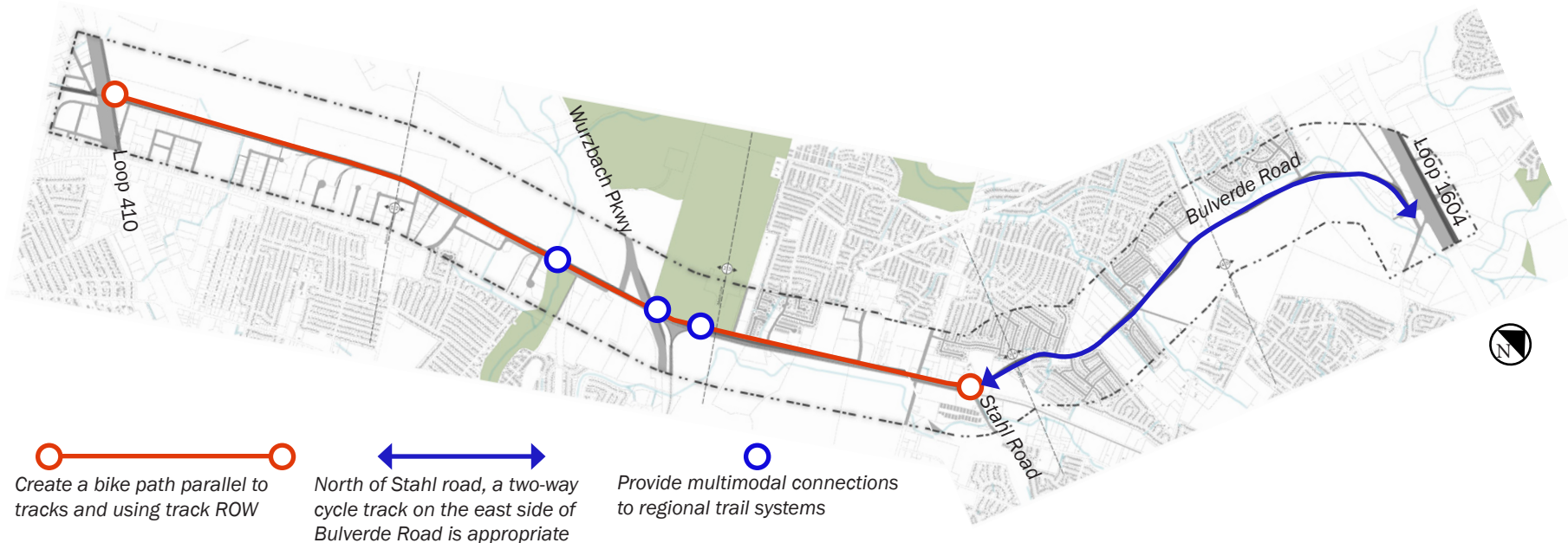
Land Use – In the southern portion of the corridor, the airport and rail line limit the potential for redevelopment. A catalyst such as Lone Star rail would likely be required to see any land use changes. Lone Star rail is currently showing two locations, one on each side of Loop 410 at the southern terminus of the corridor.

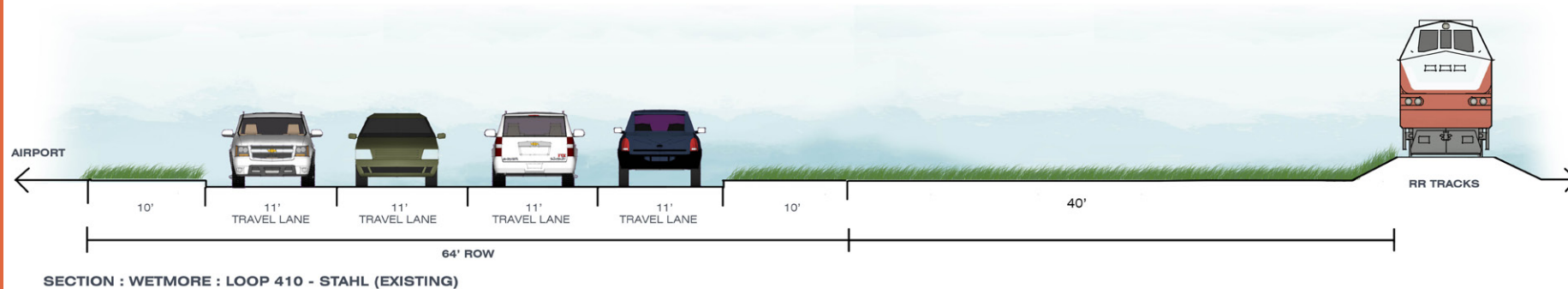


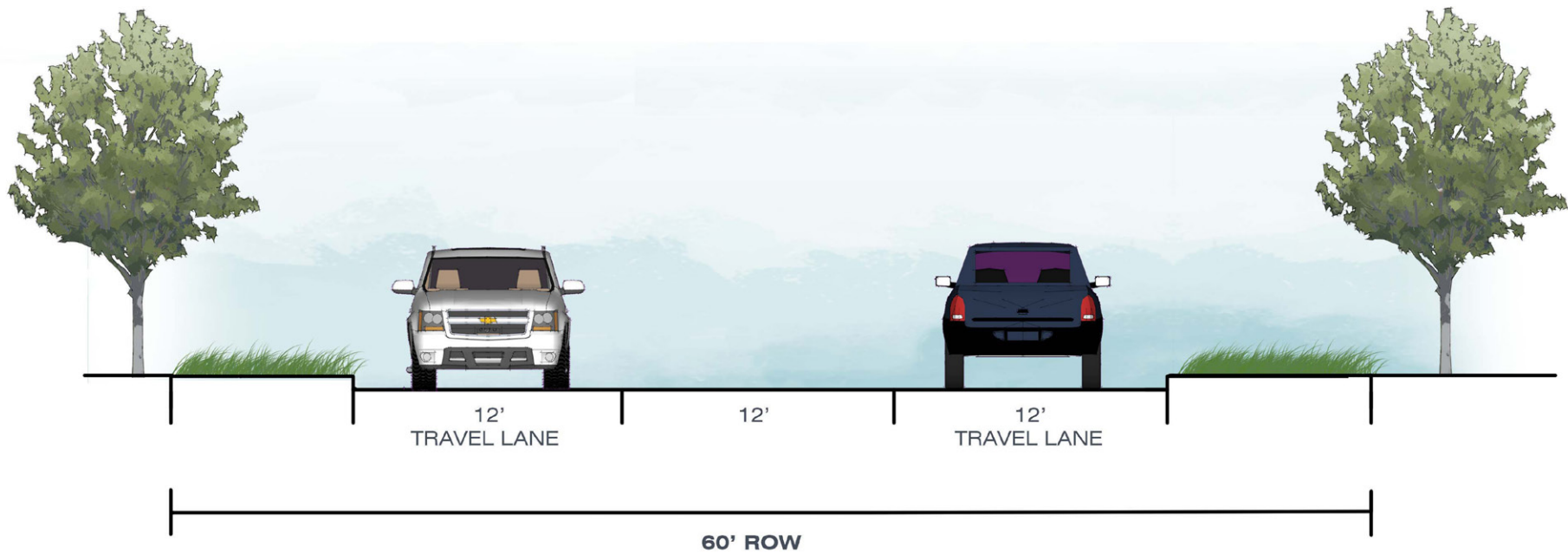
Future Option 1: Multimodal Improvements + Transit Oriented Development



Future Option 2: Cycle Track + Recreational Opportunities





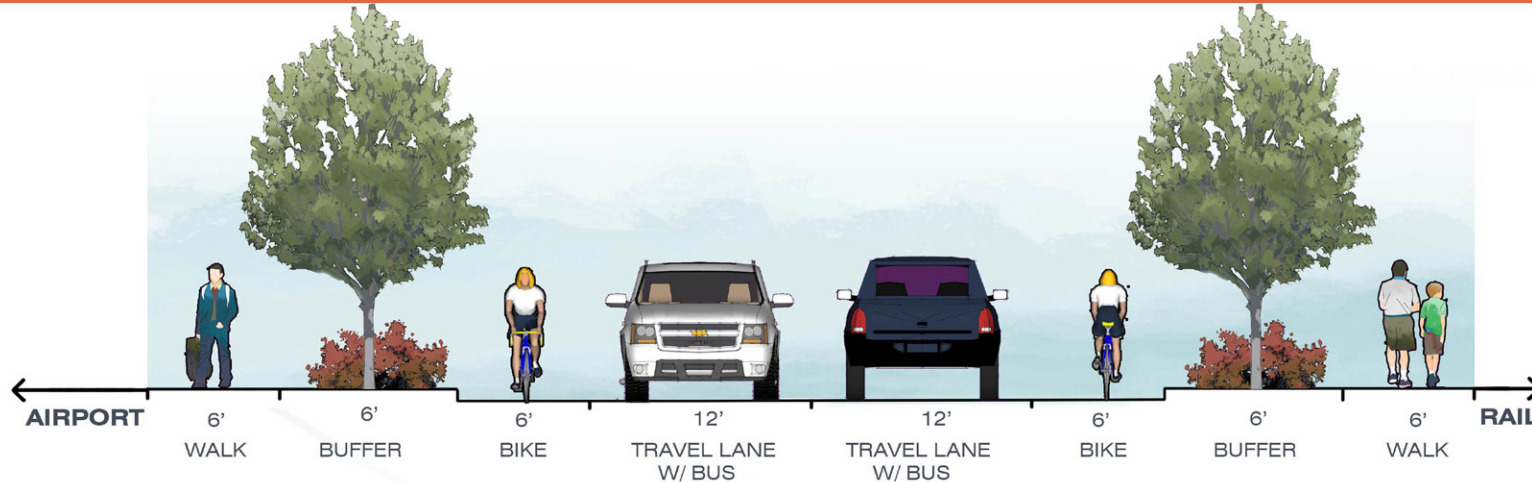


SECTION : WETMORE : STAHL TO LOOP 1604 (EXISTING)

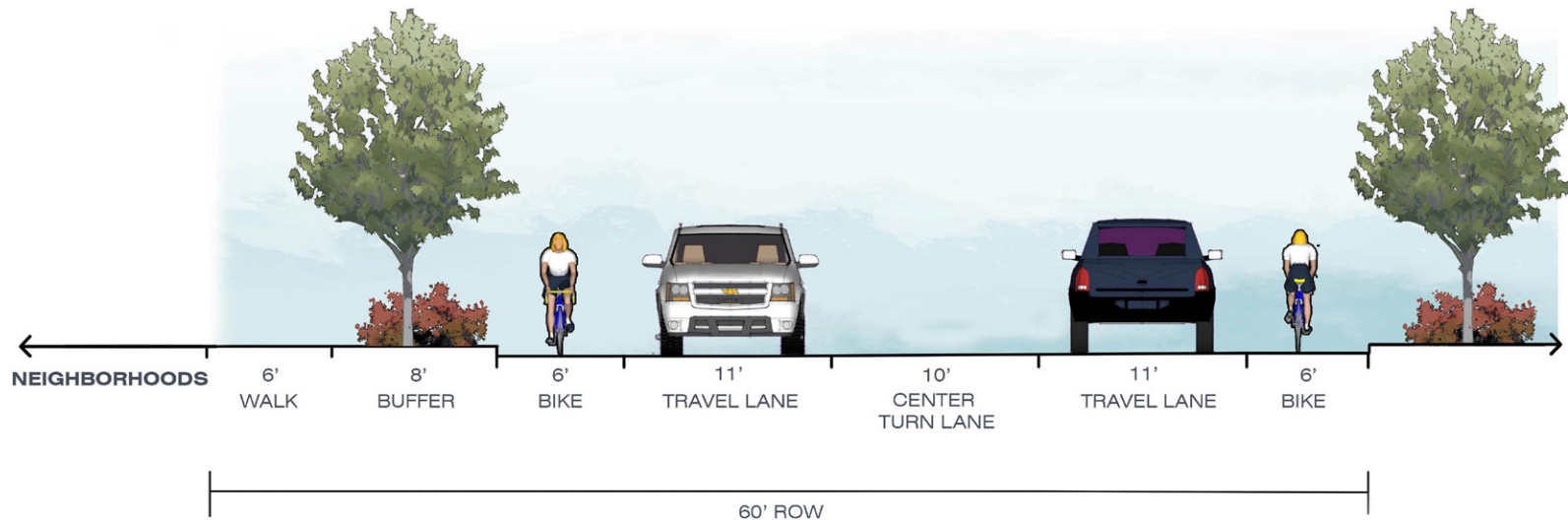
Multimodal Opportunities

Wetmore provides connections to bike attractions such as the Salado Creek trail system and McAllister Park. While there is limited right of way to accommodate bikes on Wetmore, part of the adjacent rail could be utilized to implement a cycle track. This would require agreements with the railroad and new design standards for safely accommodating a bike path along a rail line. Use of the rail right of way could potentially create a bike path that directly connects McAllister Park and Brackenridge Park. If the rail line is eventually repurposed for passenger rail, it may facilitate the implementation of the bike path. Implementation will face many hurdles, but the concept merits consideration due to its ability to greatly enhance bicycle connectivity

Future Option 1: Multimodal Improvements + Transit Oriented Development



SECTION : WETMORE : LOOP 410 - STAHL (OPTION 1)



SECTION: WETMORE : STAHL TO 1604 (OPTION 1)

Future Option 1: Multimodal Improvements + Transit Oriented Development

Description:

Wetmore's proximity to the UPRR rail line currently limits options for development on the corridor, but if the rail line is re-purposed from freight to passenger rail, it could become a catalyst for high density, mixed use developments supportive of multiple modes of transportation. Option 1 relies on the presence of commuter rail, such as Lone Star, with connections to the airport, to spur redevelopment and create a transformation of the appearance, use and character of the surrounding area. Given the current land uses and character of the road, it is unlikely that there will be any redevelopment of the corridor that will be compatible with other modes besides automobiles and trucks.

By themselves, constructing sidewalks and pedestrian paths or adding bus routes will probably not be a sufficient driver to spur land use changes. However, commuter rail such as Lone Star Rail with a station located near the corridor could become the catalyst. The shift away from an automobile-centric corridor with commercial land and industrial uses to one that is more rail and transit oriented would need to be identified and planned before Option 1 becomes feasible. This concept can serve as a template for other corridors where rapid transit or rail becomes a catalyst for redevelopment on a primarily commercial or industrial corridor.

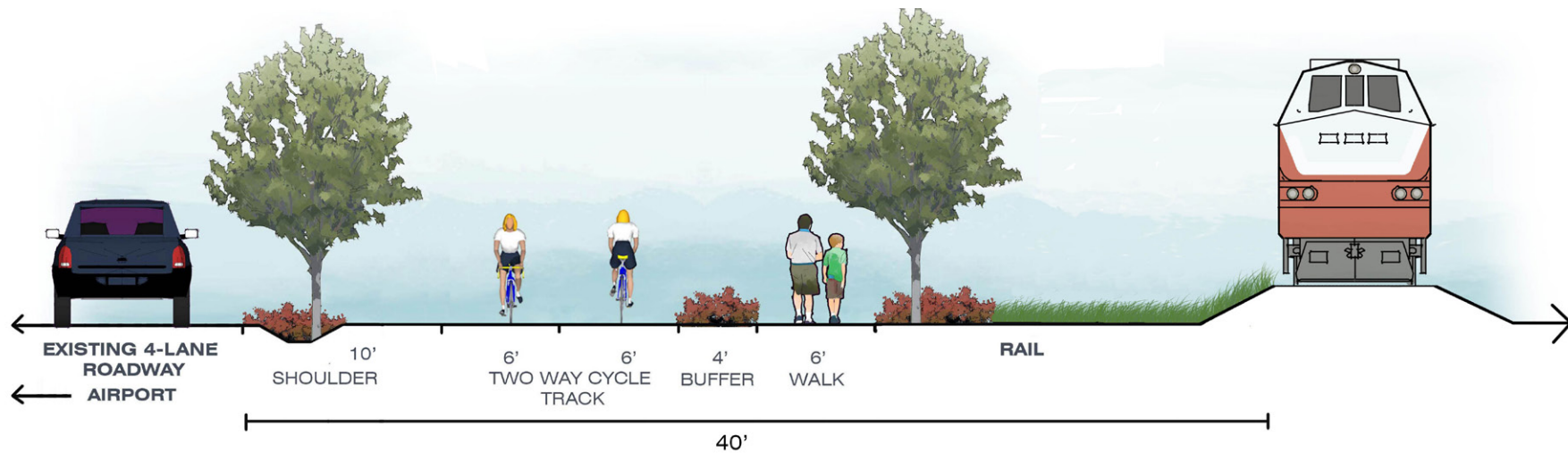
Opportunities:

- Wetmore Road is uniquely sandwiched between an existing rail line on one side and the San Antonio International Airport on the other. The rail line is being proposed for use by Lone Star Rail and a station would be located near the airport. Improvements to Wetmore could support access to the airport, access to Lone Star Rail and redevelopment around the station.
- Wetmore provides connections to nearby attractive recreational sites (Salado Creek Trail system and McAllister Park).
- Surrounding land uses are related to the airport and consist mostly of industrial and warehouse. These types of uses may provide an opportunity for redevelopment if Wetmore Road is transformed as a multimodal corridor.

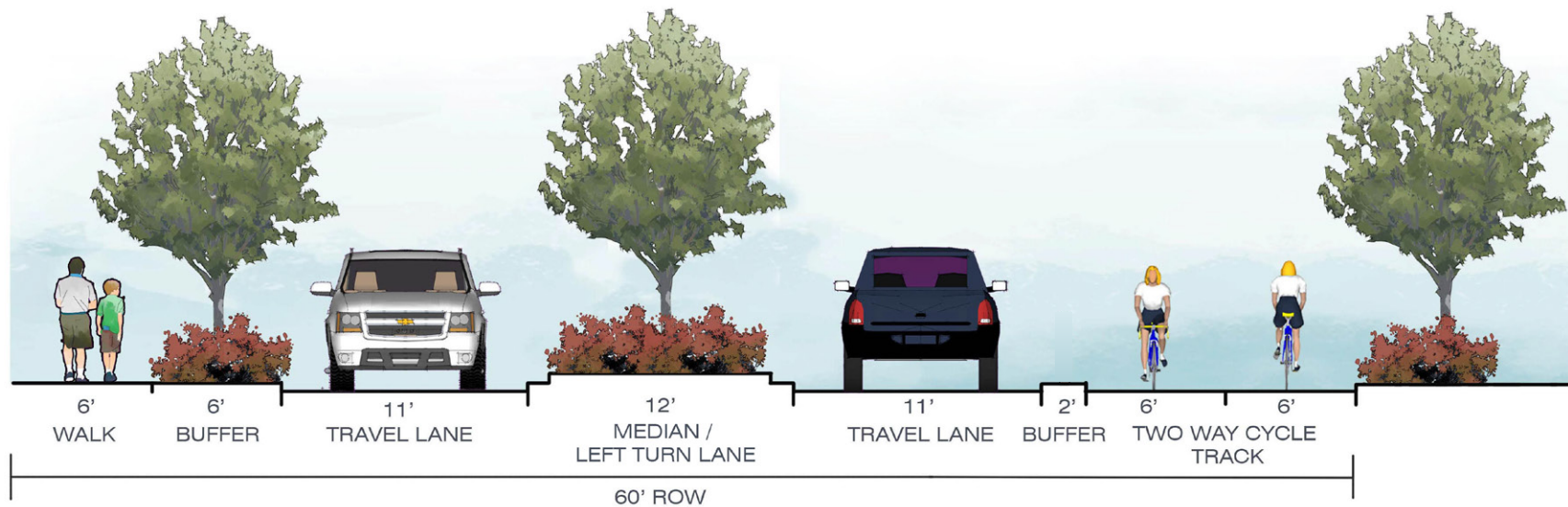
Challenges:

- The proposed walkways, south of Stahl Road, would not be needed unless the area undergoes redevelopment which greatly relies on the presence of Lone Star Rail and the proposed station.
- Wetmore Road currently serves as a relief route for US Highway 281. Reducing the road from 4 lanes to 2 lanes will result in increased congestion but will provide space for bike facilities.
- Future expansion plans for the airport may include using Wetmore Road for access and/or the ROW for airport expansion.

Future Option 2: Cycle Track + Recreational Opportunities



SECTION: WETMORE : LOOP 410 - STAHL (OPTION 2)



SECTION : WETMORE : STAHL - LOOP 1604 (OPTION 2)

Future Option 2: Cycle Track + Recreational Opportunities

Description:

With or without passenger rail service on the rail line, Wetmore provides connections to bike attractions such as the Salado Creek trail system and McAllister Park. While there is limited right of way to accommodate bikes on Wetmore, Option 2 proposes to use part of the adjacent rail ROW incorporate a cycle track and walkway. This would require agreements with the railroad and the ability to meet design standards for safely accommodating a multi-use facility along a rail line.

Use of the rail ROW could potentially create a bike path that directly connects McAllister Park to Brackenridge Park, just north of downtown. If the rail line is eventually repurposed for passenger rail, it may facilitate the implementation of the bike path. The bike facility will continue north as a cycle track along the east side of Bulverde Road. Option 2 does not propose to change the number of lanes on Wetmore Road, but suggests a landscaped median be installed along the portion between Stahl Road and Loop 1604 (including Bulverde Road). The median would be converted to a left turn lane where needed.

Challenges:

- Future expansion plans for the airport may include using Wetmore Road for access and/or the ROW for airport expansion.
- Introducing pedestrian and bicycle facilities within the rail ROW could be challenging to meet safety guidelines and design standards recognized and applied by UPRR.

Opportunities:

- Wetmore Road is uniquely sandwiched between an existing rail line on one side and the San Antonio International Airport on the other. As a result, there are no driveways along either side of Wetmore Road in this section which is conducive for bicyclists and pedestrians.
- Wetmore provides connections to nearby attractive recreational sites (Salado Creek Trail system and McAllister Park).
- Use of the rail ROW for a bike facility could result in extending the facility further south along the ROW to connect with Brackenridge Park, just north of downtown.

Future Option 2: Wetmore Road Visualization






Before



After



Description: Option 2 shows a reuse of the existing rail ROW to create a two way bike facility and a pedestrian walkway with landscaping and a buffer separating both from the traffic lanes on Wetmore Road. This proposed improvement would take advantage of the proximity of the Salado Creek Trail system and McAllister Park and would provide connections to both. It could eventually lead to the extension of the bike facility south along the rail ROW to Brackenridge Park, north of downtown. Bike and pedestrian facilities located in rail ROW have the added benefit of mostly uninterrupted flow.

					Recommendations	Benefits
					Create cycle Track parallel to rail line	Creating a “bike highway” will assist in alleviating future vehicular congestion and allow people to connect to regional bike facilities founds along the corridor.
					Install continuous sidewalk north of Wurzbach Parkway	Improved sidewalks will make pedestrian travel safe and accessible, it will also improve access and encourage the use of future mobility investments along the corridor.
					Create pedestrian path on the East side of the road between 410 and Wurzbach Pkwy	Development of a dedicated pedestrian path in conjunction with a cycle track will encourage multiple modes of travel and serve as a recreation amenity for area residents.
					Improve pedestrian facilities by completing the sidewalk network from residential neighborhoods to Wetmore	Providing connections from surrounding neighborhoods to Wetmore will provide more options for mobility for area residents.
					Explore new street connections to Wetmore from surrounding neighborhoods near the future Lone Star Stations to encourage redevelopment.	Providing a finer-grain street network around and to the future transit station will encourage transit adjacent development at these future multimodal centers.



Transit
Improvements



Pedestrian
Improvements



Bicycle
Improvements



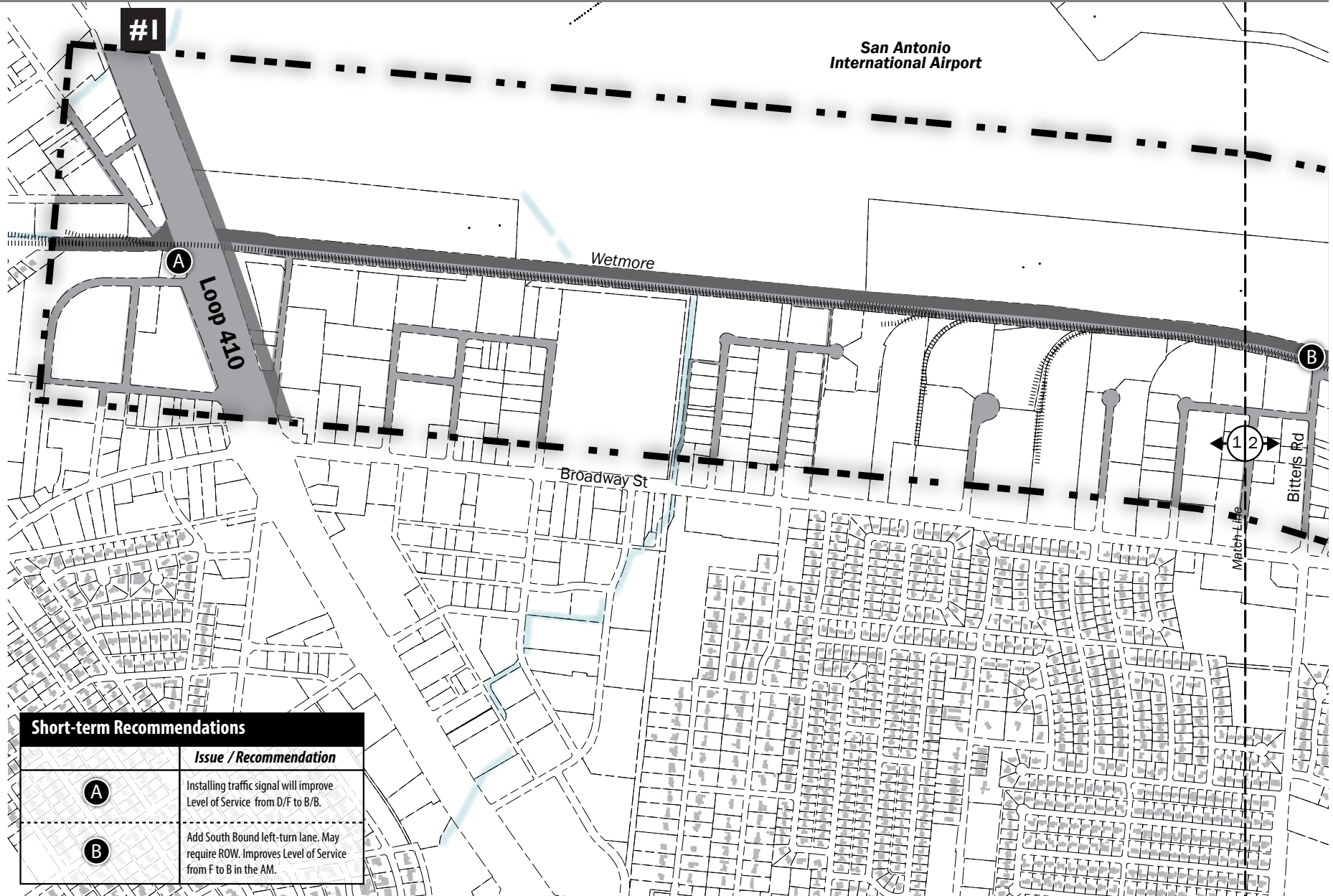
Vehicular
Improvements



Land Use
Improvements

SUBURBAN

San Antonio
International Airport



Wetmore Corridor Analysis: Sheet 1 Short Term Recommendations

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04.12.2016

Open Space
Study Area

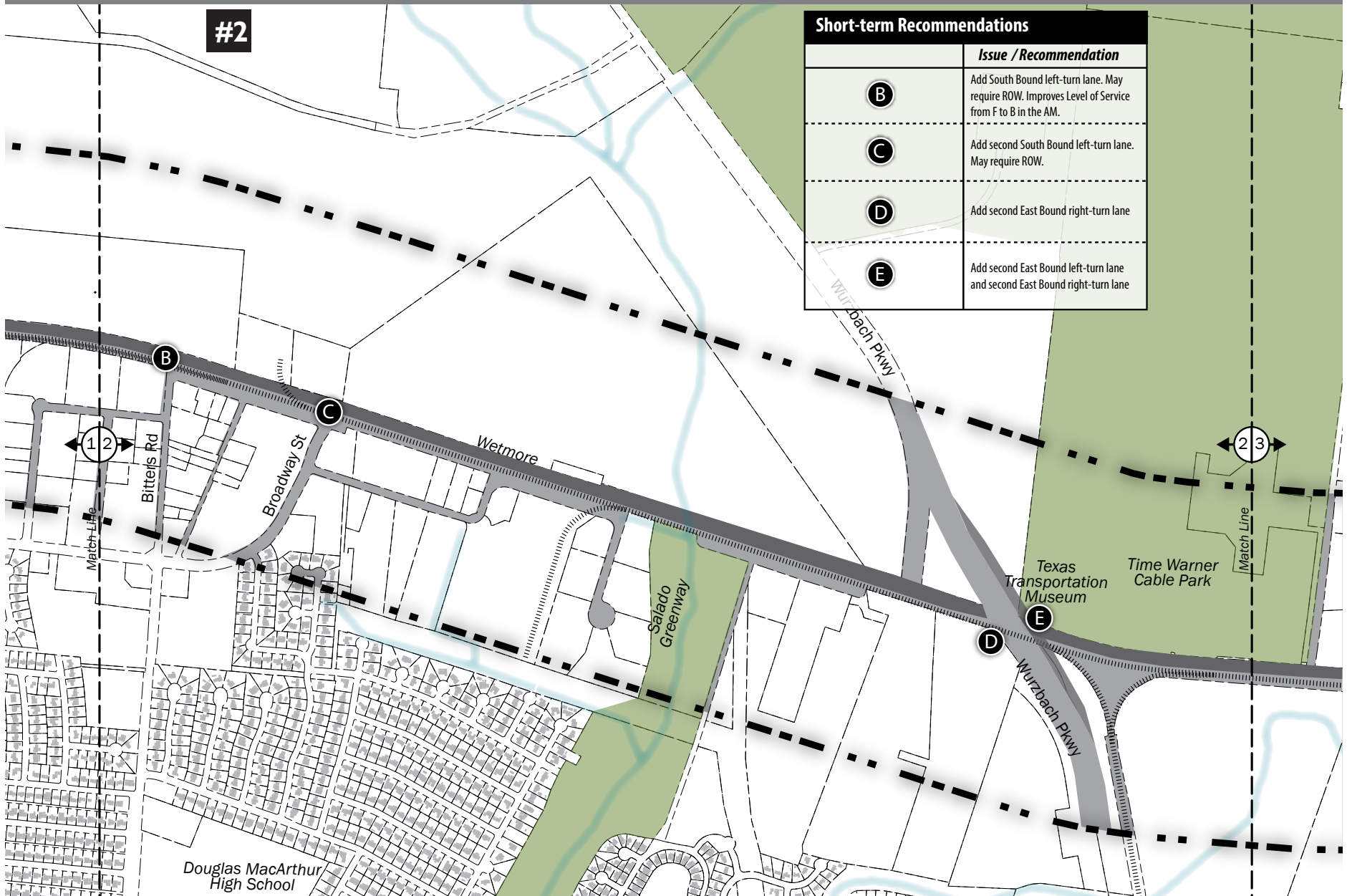
0' 400' 800'

SUBURBAN

#2

Short-term Recommendations

	Issue / Recommendation
(B)	Add South Bound left-turn lane. May require ROW. Improves Level of Service from F to B in the AM.
(C)	Add second South Bound left-turn lane. May require ROW.
(D)	Add second East Bound right-turn lane
(E)	Add second East Bound left-turn lane and second East Bound right-turn lane



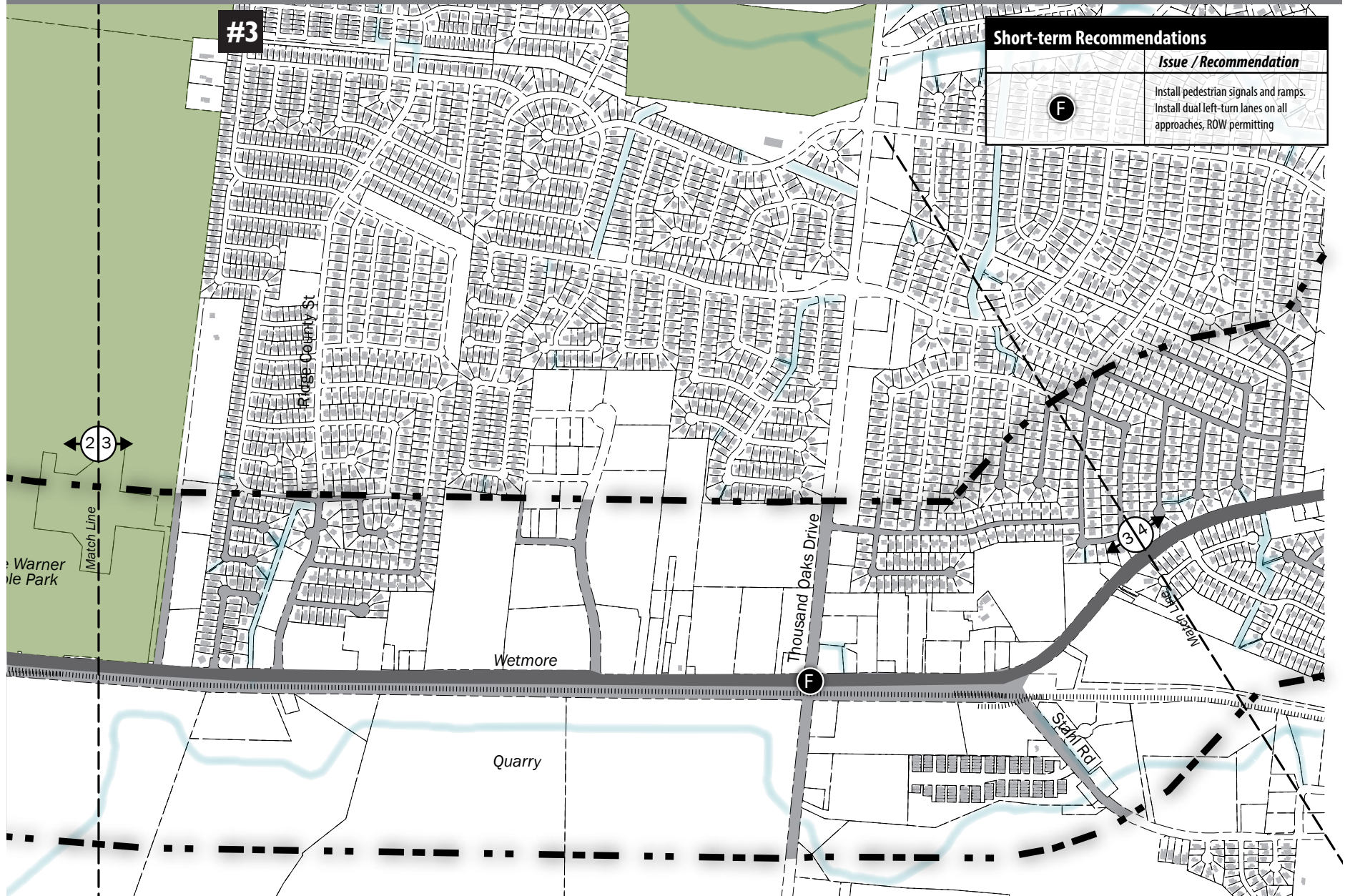
Wetmore Corridor Analysis: Sheet 2 Short Term Recommendations **DRAFT IN-PROGRESS** 04.12.2016

Open Space
Study Area



0' 400' 800'

SUBURBAN



Short-term Recommendations

Issue / Recommendation

F

Install pedestrian signals and ramps.
Install dual left-turn lanes on all approaches, ROW permitting

Wetmore Corridor Analysis: Sheet 3 Short Term Recommendations

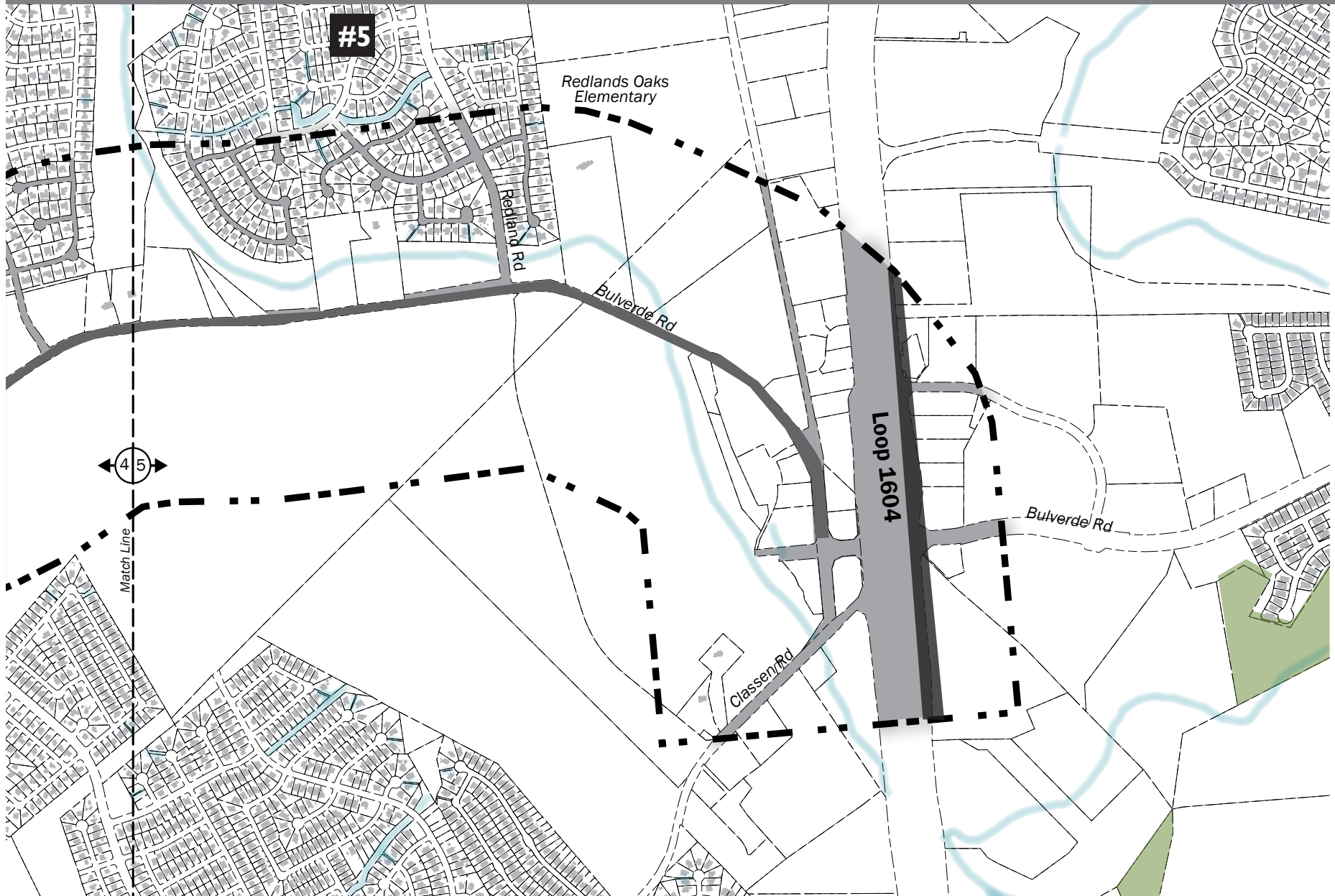
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Open Space
Study Area

SR TOMORROW

0' 400' 800'



Wetmore Corridor Analysis: Sheet 5 Short Term Recommendations

DRAFT IN-PROGRESS 04.12.2016

Open Space

Study Area

SA TOMORROW

0' 400' 800'

Context

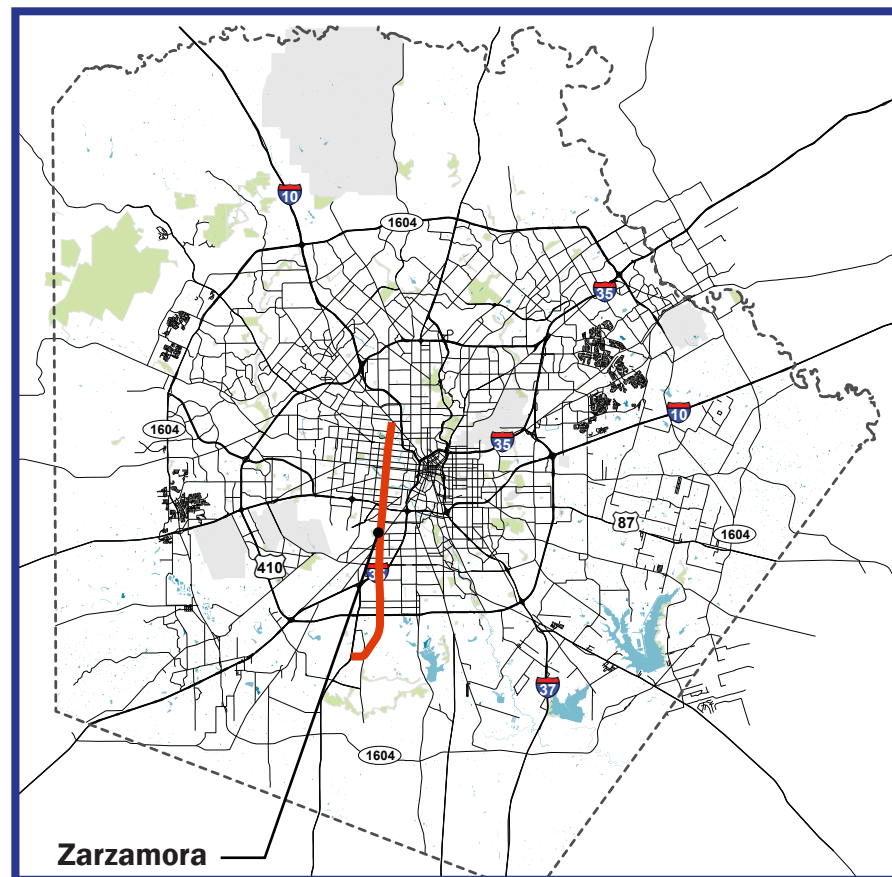
The Zarzamora Corridor varies greatly from one end to the other. At the south end, it is nearly rural with little access. As it moves northward, it becomes increasingly urban and narrows from a wide right-of-way with four and six-lane divided cross-sections to a very narrow 50 foot four-lane undivided cross-section north of US 90. In the narrow rights-of-way, the undivided sections of the road require confining through movements to a single lane at intersections to accommodate left turns. Most of the frontage is commercial though there are residential sections where houses occupy parcels along the road. With some exceptions, most of those take their access from a cross-street, but are within close proximity to the activity on Zarzamora.

The character of the development along the road changes from small business operations in the north to larger “big box” type businesses and office complexes as the road moves south. Much of the Zarzamora land use in the north is mature residential development that has transitioned to service commercial uses along the road over time. The southerly portions of the corridor are newer and reflect a suburban character. The integrity of the established neighborhoods is strong.

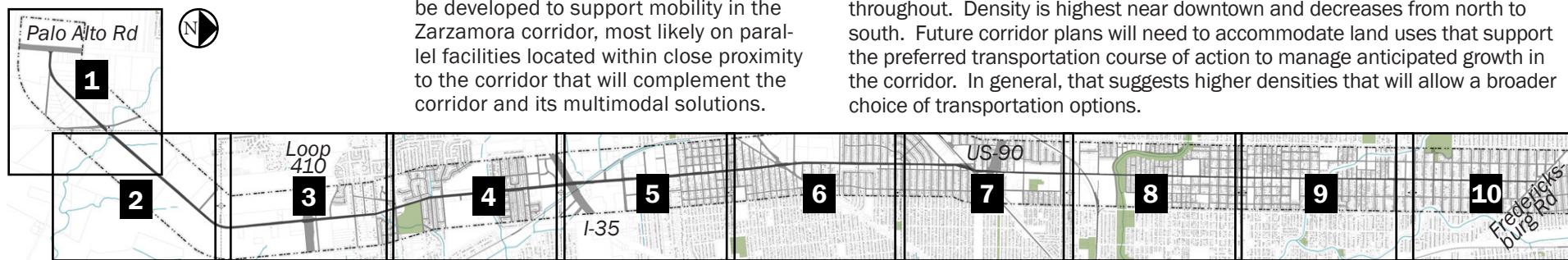
Growing demand will exceed the already strained capacity of the corridor unless actions are taken to widen the road with the associated effects on adjacent properties or provide additional capacity through alternative modes. Actions could include improved transit services or restructured traffic control practices. Access management, including the consolidation of driveways and closing left turns into driveways and some streets during peak times will be needed as both a stopgap and long term measure.

Save a few gaps, most of the corridor has paved sidewalks or a solid walking surface for pedestrians, but the treatment is inconsistent. There are numerous driveways and curb cuts and narrow 4-foot strips adjacent to travel lanes, while others sections are set back from the roadway separated by a wide parkway. Many of these are not ADA compliant. The the southerly end of the corridor has no sidewalks, but can readily accommodate them.

In general, much of the corridor does not lend itself to bicycle usage because of limited rights-of-way. Bicycle use on Zarzamora is not advisable under current conditions. High traffic volumes discourage bicycle use throughout the day. An active transportation network that offers users a choice of travel options must be developed to support mobility in the Zarzamora corridor, most likely on parallel facilities located within close proximity to the corridor that will complement the corridor and its multimodal solutions.



Land use in the corridor is urban to suburban, but of relatively low density throughout. Density is highest near downtown and decreases from north to south. Future corridor plans will need to accommodate land uses that support the preferred transportation course of action to manage anticipated growth in the corridor. In general, that suggests higher densities that will allow a broader choice of transportation options.



Vision

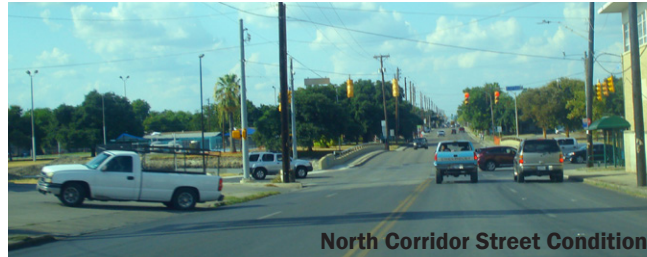
Zarzamora will continue to be a primary north-south link on the west side of downtown that offers a broad range of travel options and encourages transit supportive land use changes as the area grows and reinvents itself. The future Zarzamora will serve travelers effectively by eliminating existing physical and geometric issues and introducing creative multimodal options that activate the corridor.

Future

- As the region grows, projected traffic volumes will exceed the capacity of the existing roadway by a substantial margin. The options to mitigate some of the anticipated congestion are to carry more people in fewer vehicles or to acquire property to accommodate additional roadway capacity.
- Forecasts rise to over 40,000 vehicles a day throughout the corridor by 2040. The available practices to expedite traffic flow at such high volumes will be insufficient to address the challenges of the additional demand within the existing right-of-way.
- VIA plans a mixed flow Primo service on Zarzamora beginning in 2018
- The corridor will need to investigate the effect of changing technologies on the solutions proposed to address growing travel demand
- Land uses in the corridor will also need to shift from a car-oriented focus to an emphasis on regional activity centers and more compact character that can shorten trips or reduce demand for trips
- In the absence of more right-of-way, bicycle facilities will need to be evaluated on parallel facilities that can continue to serve the needs of the Zarzamora corridor and community

Policy & Guidance

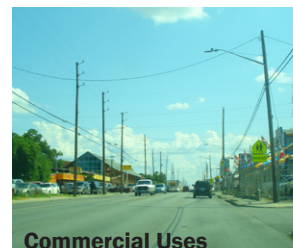
Dynamic Access Management – Develop a management strategy that closes duplicative driveways and some intersection left turns during critical times to allow more fluid traffic flow.



North Corridor Street Condition



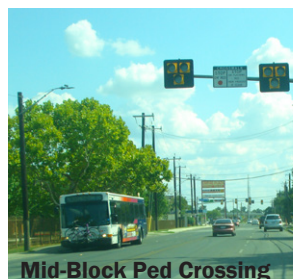
North Corridor Street Condition



Commercial Uses



Residential Uses



Mid-Block Ped Crossing



Businesses Along the Corridor



Mid-Corridor Street Condition



North-Corridor Street Condition

Policy & Guidance Continued

Pedestrian Service – Establish a plan to provide ADA compatible and attractive sidewalks to encourage improved pedestrian mobility within the corridor.

Zoning – Create an overlay district with land use and supporting regulations that allocate and guide growth in ways that minimize development contributions to congestion and encourage the use of alternative modes

Land Use Planning – Encourage redevelopment of underused land uses to accommodate growth and create a multimodal supportive character within the corridor.

Analysis/Issues

Roadway – The variation in the roadway cross-section is a major characteristic of Zarzamora. The character of the adjacent land uses is defined by the dense grid of streets that borders Zarzamora and determines the way the roadway is used. Access management will be an important factor in preserving the corridor's ability to carry the anticipated demand.

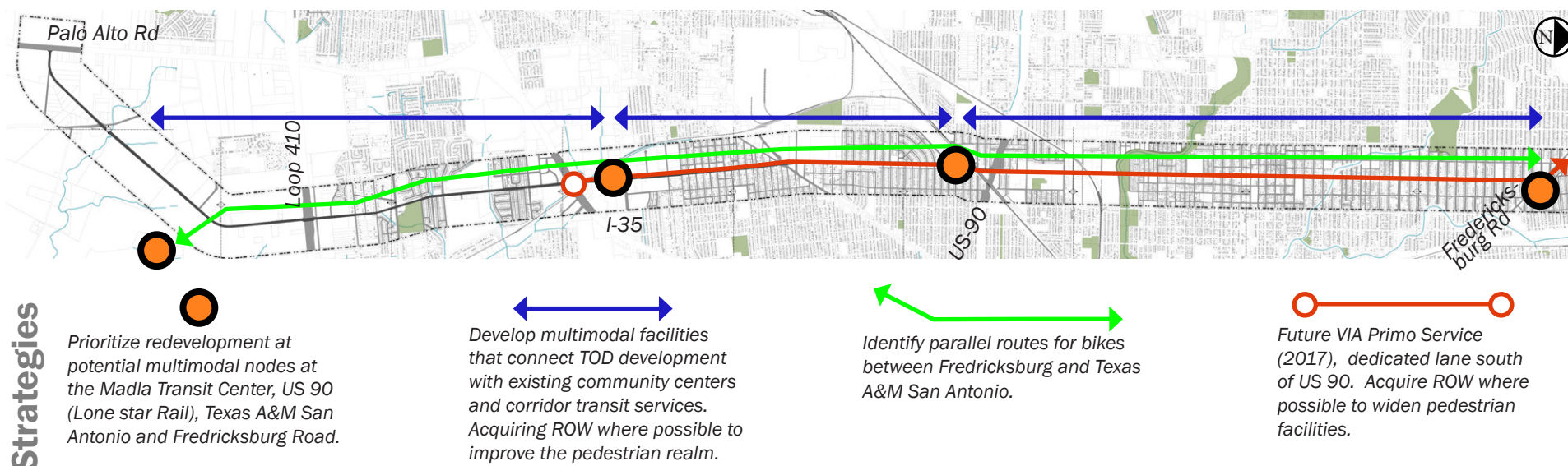
Transit – Zarzamora carries VIA route 520 at 15 minute headways along its entire length. It serves both end-to-end and short distance trips. The high ridership levels have prompted VIA to deploy a new Primo route starting in 2018 along Zarzamora. The new service will benefit from transit signal priority and limits stops to expedite longer trips. VIA's proposed Primo route will be an improvement, but cannot achieve its full potential without significant physical improvements to the corridor. It will also depend on updating land use plans and developing a more complementary relationship between transit and bike and ped networks.

Bicycles – There is a short segment of Zarzamora south of US 90 that has a bike lane, but it is not connected to the rest of the network. Corridor bicycle use will need to be moved to a parallel street such as Calaveras north of Highway 90. The lack of bicycle facilities along the corridor is an impediment to multimodal options.

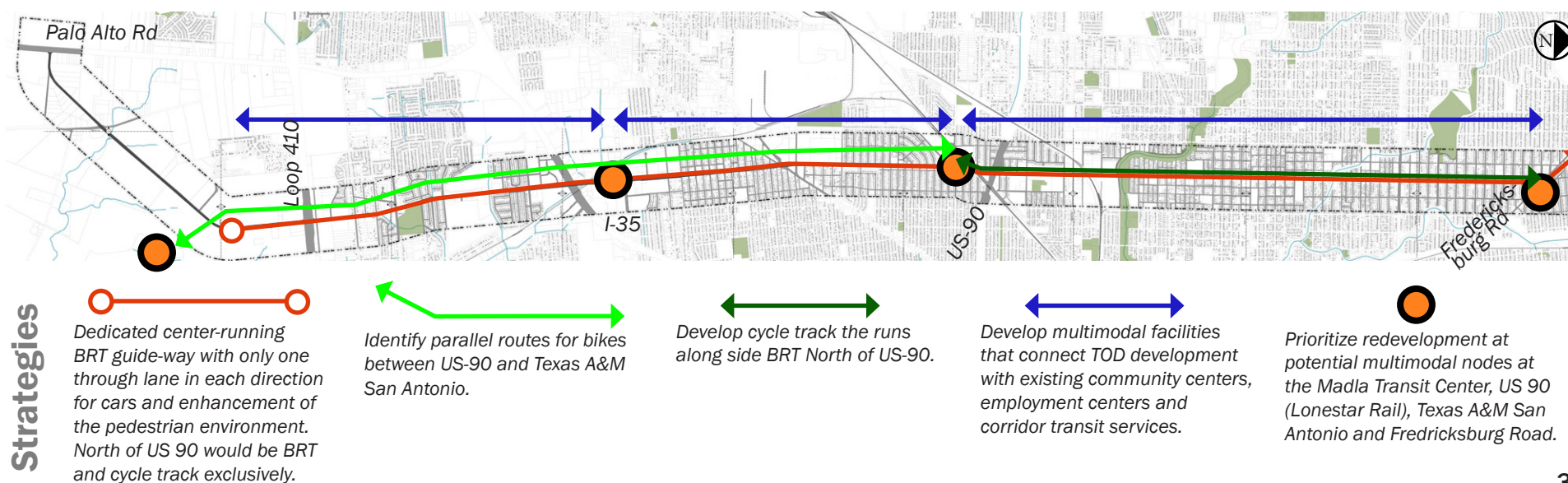
Pedestrian – In addition to being a significant amenity for the local community, the success of a multimodal plan depends on a strong pedestrian network. The incomplete and inadequate facilities along Zarzamora will require substantial investment to address the corridor needs.

Land Use – Many of the parcels along the roadway would benefit from repurposing to prevent neighborhood decline and set a more favorable business environment while enhancing multimodal access. Over time, decisions about the corridor must accommodate growth and support modes that can minimize the impact of growth.

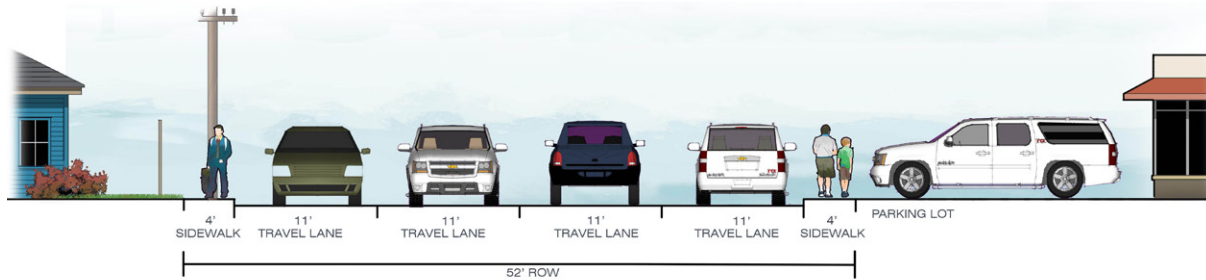
Future Option 1: VIA Primo Service + Multi-Modal Investment



Future Option 2: Dedicated BRT + Multi-Modal Investment

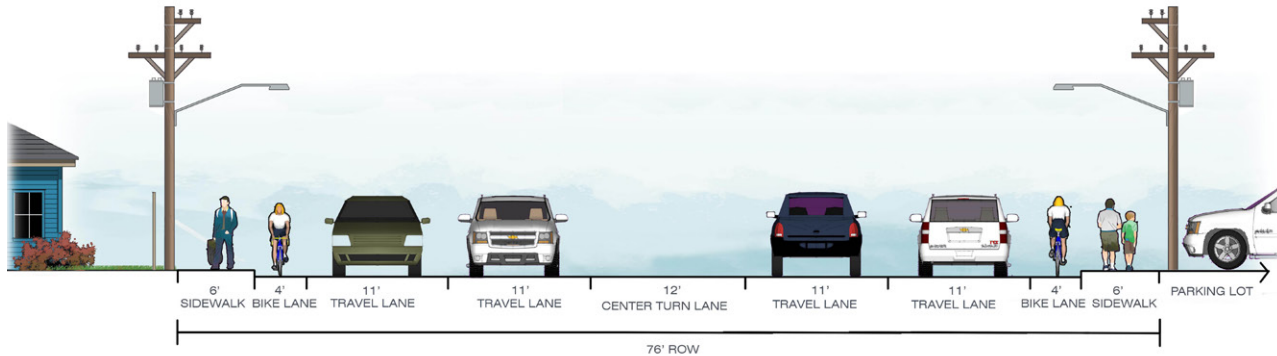


Existing Section



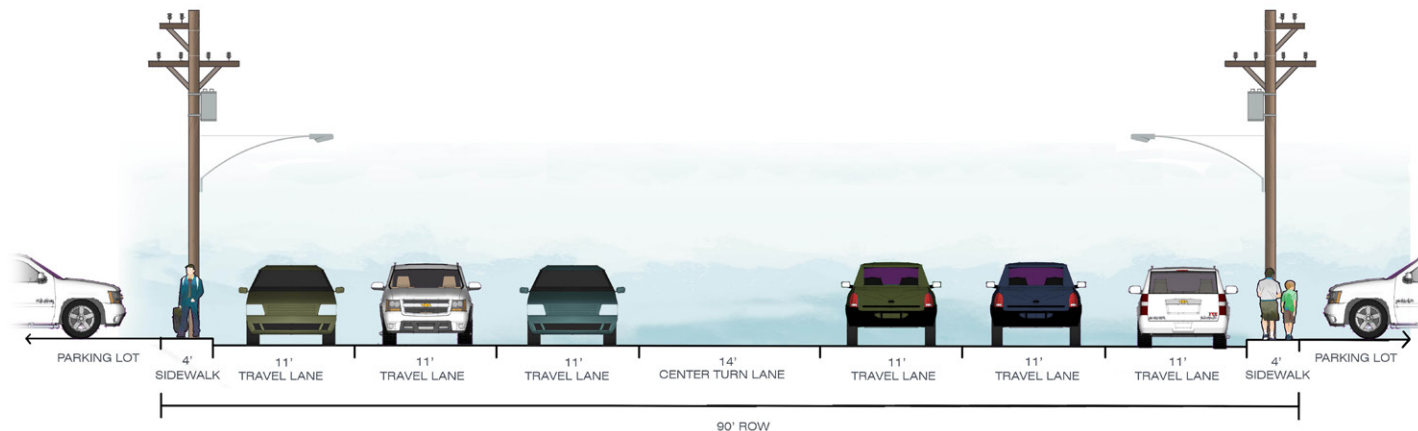
EXISTING SECTION: ZARZAMORA: FREDRICKSBURG TO US 90

Typical Section



EXISTING SECTION: ZARZAMORA: US 90 TO NOGALITOS

Typical Section

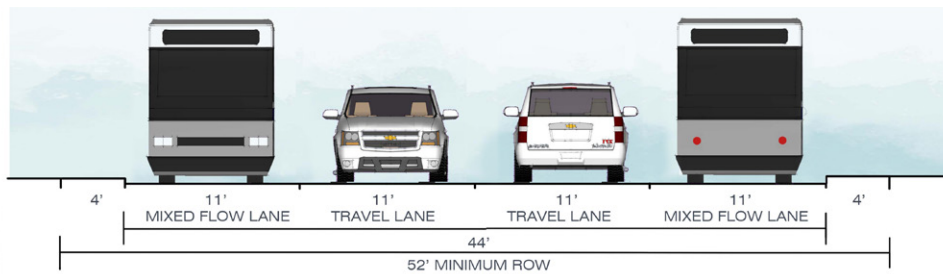


EXISTING SECTION: NOGALITOS TO APPLEWHITE

Multimodal Opportunities

Zarzamora is a corridor that currently has high ridership, and with connections to other high capacity transit routes on SW Military Dr and Fredericksburg, it will be a key link in the City's transit network. North of US 90, the right of way on Zarzamora is extremely narrow. With four narrow travel lanes and narrow sidewalks (often with poles obstructing the pedestrian pathway), major corridor-wide improvements would either require a reduction in travel lanes or additional right of way. The presence of houses, apartments, and churches adjacent to Zarzamora makes the acquisition of a sufficient amount of right of way throughout the corridor unlikely. Removing a travel lane could provide for improved sidewalks or bike facilities. However, an analysis of the projected traffic volumes show a three lane section would greatly increase delay and more than double travel times. With buses required to be in mixed flow, this increase in congestion would limit the performance of transit service.

Future Option 1: VIA Primo Service + Multi-Modal Investment



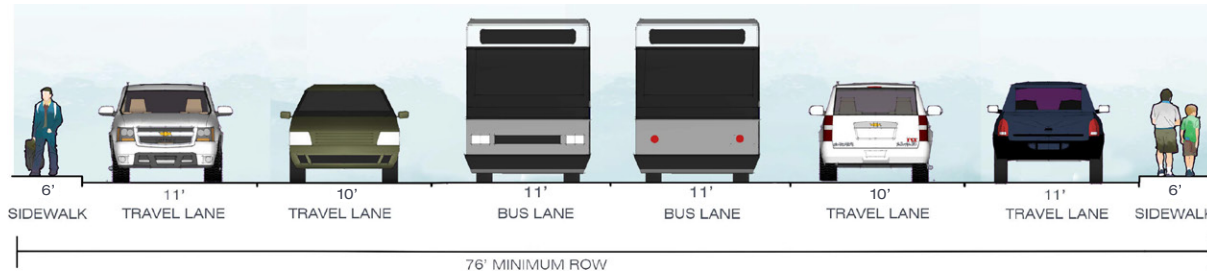
ZARZAMORA: FREDRICKSBURG TO US 90

Opportunities: Proposed VIA Primo service will encourage transit ridership and set the stage for more robust service going forward. Land use plans that support transit can help bring a sense of renewal and place to the corridor that can help maintain and strengthen neighborhood integrity.

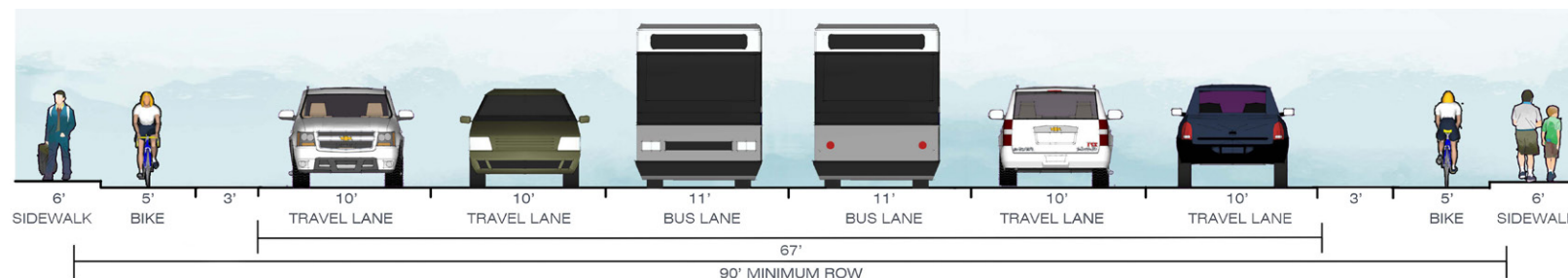
Note: The only difference between Option 1 and Option 2 is the northernmost segment. The southern portions are the same and there is only one version.

Description: The northerly segment of Zarzamora is narrow and a new Primo route will need to be accommodated within the limited right-of-way. It will operate in mixed flow with other vehicles in the outside lane.

Challenges: The narrow right-of-way in the northerly segment limits how the roadway can be used. Mixed flow buses will continue to impact other traffic flow. Bicycle and pedestrian activity will continue to rely on incomplete or underdeveloped networks.

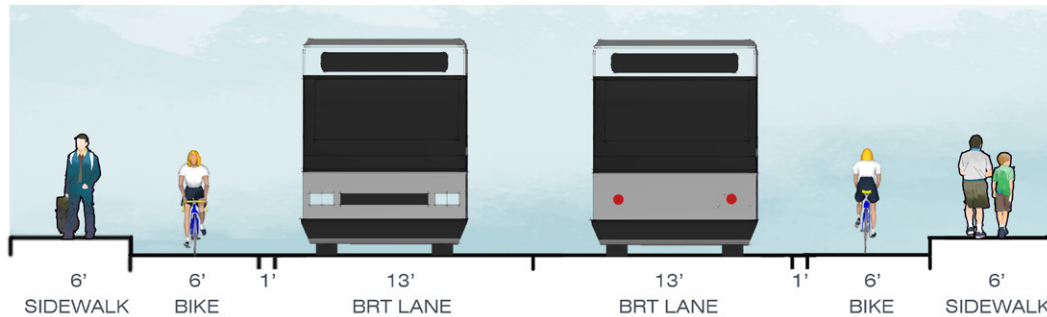


ZARZAMORA: US 90 TO NOGALITOS (76' ALTERNATIVE)



ZARZAMORA: US 90 TO APPLEWHITE (90' SECTION)

Future Option 2: Dedicated BRT + Multi-Modal Investment








ZARZAMORA: FREDRICKSBURG TO US 90

Opportunities: Providing priority treatment to transit vehicles throughout the corridor will establish Zarzamora as a major transit corridor that will draw economic development opportunities. Land uses in the corridor will evolve to support the transportation options available. Improved pedestrian and bicycle systems will improve safety of users and provide better access to transit

Note: The only difference between Option 1 and Option 2 is the northernmost segment. The southern portions are the same and there is only one version.

Description: The second option is to establish Zarzamora as a key north-south dedicated transit corridor. By removing other vehicles from the corridor, transit can flourish and be complemented effectively by both bike and pedestrian facilities within the same facility.

Challenges: Elimination of single occupant vehicles from even a portion of the corridor is difficult. Performance of all modes will depend on improvement or elimination of critical conflict points in the corridor.

					Recommendations	Benefits
					Prohibit left turns during peak hours at locations that can't support protected left turning movements	Prohibiting left turns during peak hours will benefit the functionality of the corridor during congested periods.
					Reduce driveway density	Consolidating driveways will concentrate turning movements to appropriate areas. This will reduce the number of conflict points between cyclists, pedestrians, and vehicles.
					Identify and designate parallel bike routes	If a dedicated bike route on Zarzamora cannot be accommodated, consider an adjacent route that can serve as a viable alternative. Careful creation of a direct route will be essential to promoting bicycle movements within suburban-contexts of the corridor.
					Establish high capacity transit on the corridor	Establishing high capacity transit facilities on Zarzamora will help to direct future growth to appropriate locations on the corridor, allowing for the avoidance of future vehicular congestion.
					Improve pedestrian facilities by completing the sidewalks network	The addition of improved sidewalks will not only make pedestrian travel safe and accessible, it will also improve access and encourage the use of transit.
					Introduce corridor-wide traffic signal coordination with transit priority	Development of transit - friendly signalization will aid in moving transit services efficiency within the congested corridor, encouraging transit use.
					Prioritize redevelopment at potential multimodal nodes such as the Madla Transit Center and Fredricksburg	Combining transit with new development allows growth to be directed to locations that are positioned to take full advantage of mobility options. The availability of multiple transportation options can help to alleviate vehicular pressure on streets.



Transit
Improvements



Pedestrian
Improvements



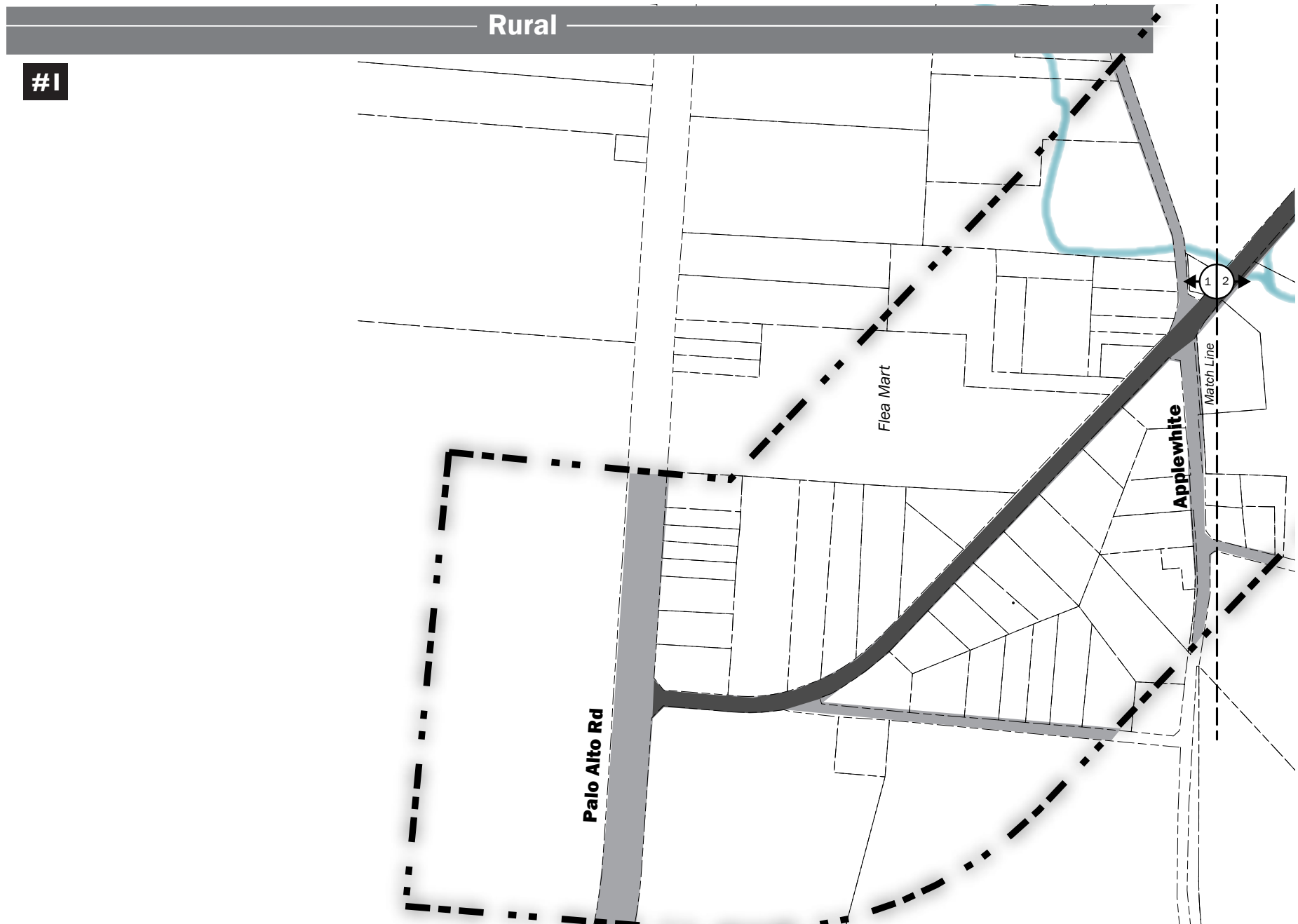
Bicycle
Improvements



Vehicular
Improvements



Land Use
Improvements



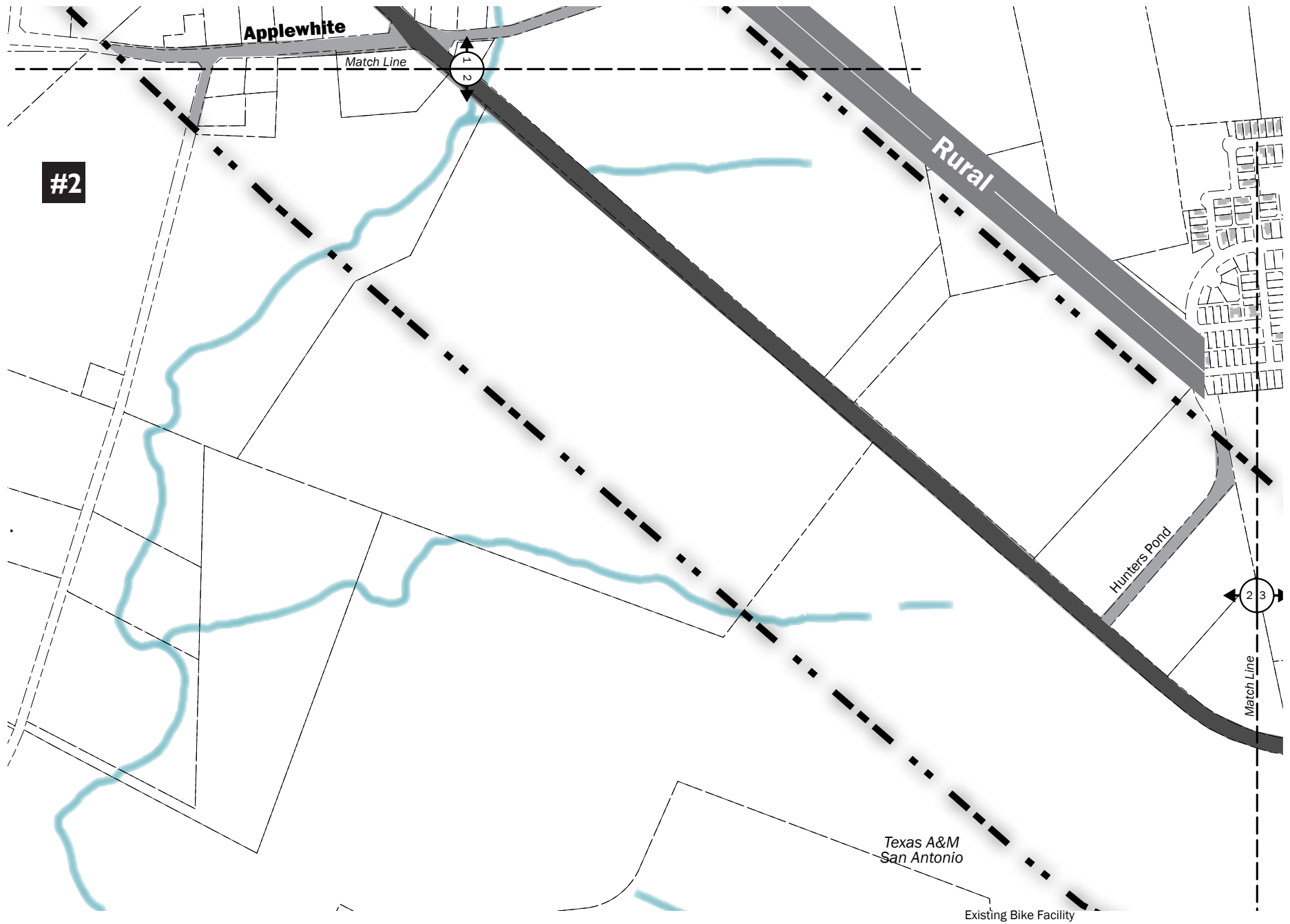
Zarzamora Corridor Analysis: Sheet 1 Short Term Recommendations **DRAFT IN-PROGRESS** 04.12.2016

Open Space
Study Area

Future VIA Primo Service

0' 300' 600'

SA TOMORROW



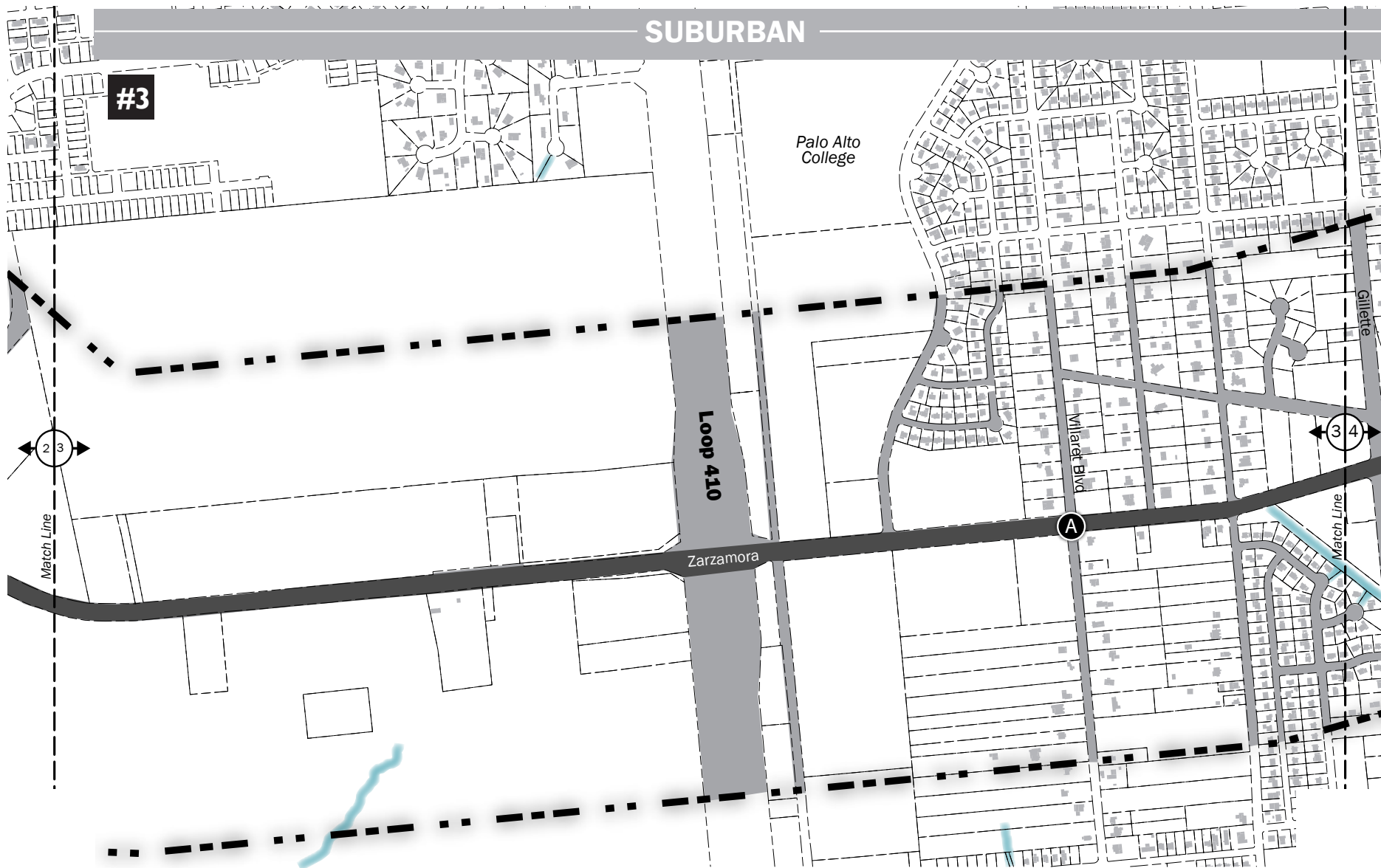
Zarzamora Corridor Analysis: Sheet 2 Short Term Recommendations **DRAFT IN-PROGRESS**

04.12.2016

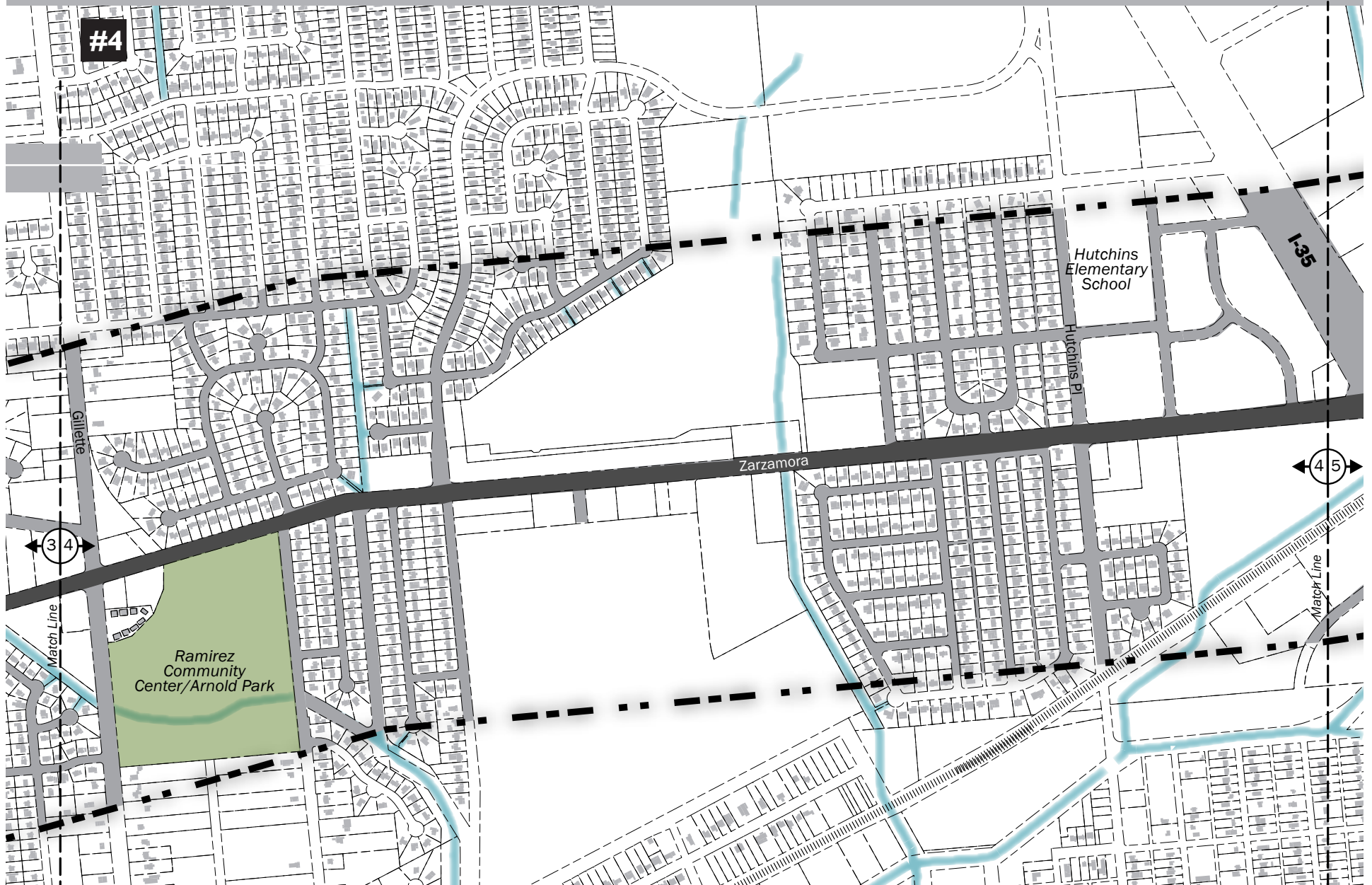
- Open Space
- Study Area

0' 300' 600'





Short-term Recommendations	
	Issue / Recommendation
A	Provide higher visibility beacons and advanced signs.



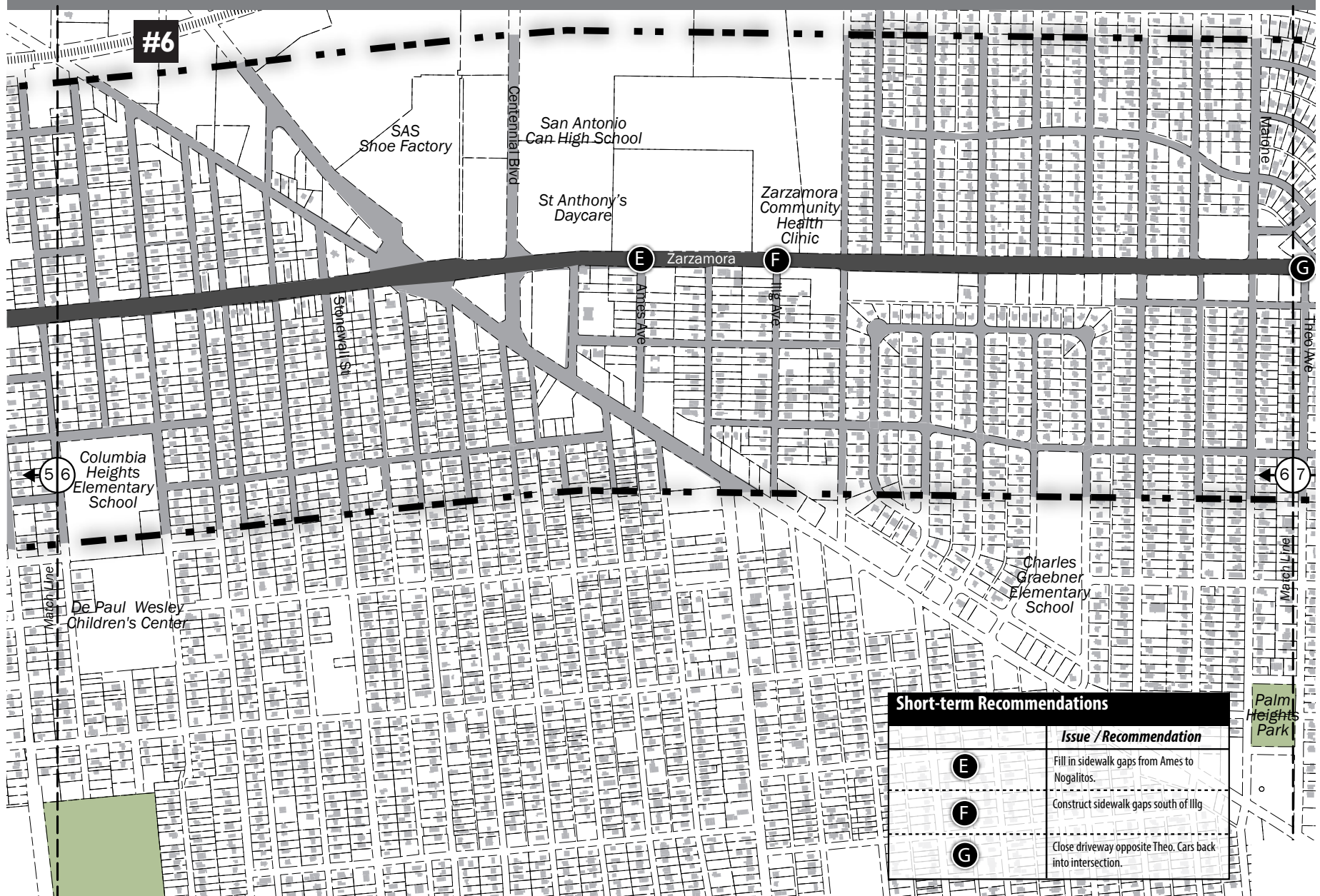
Zarzamora Corridor Analysis: Sheet 4 Short Term Recommendations

DRAFT IN-PROGRESS 04.12.2016

Open Space
Study Area

0' 300' 600' SR TOMORROW

URBAN / SUBURBAN TRANSITION



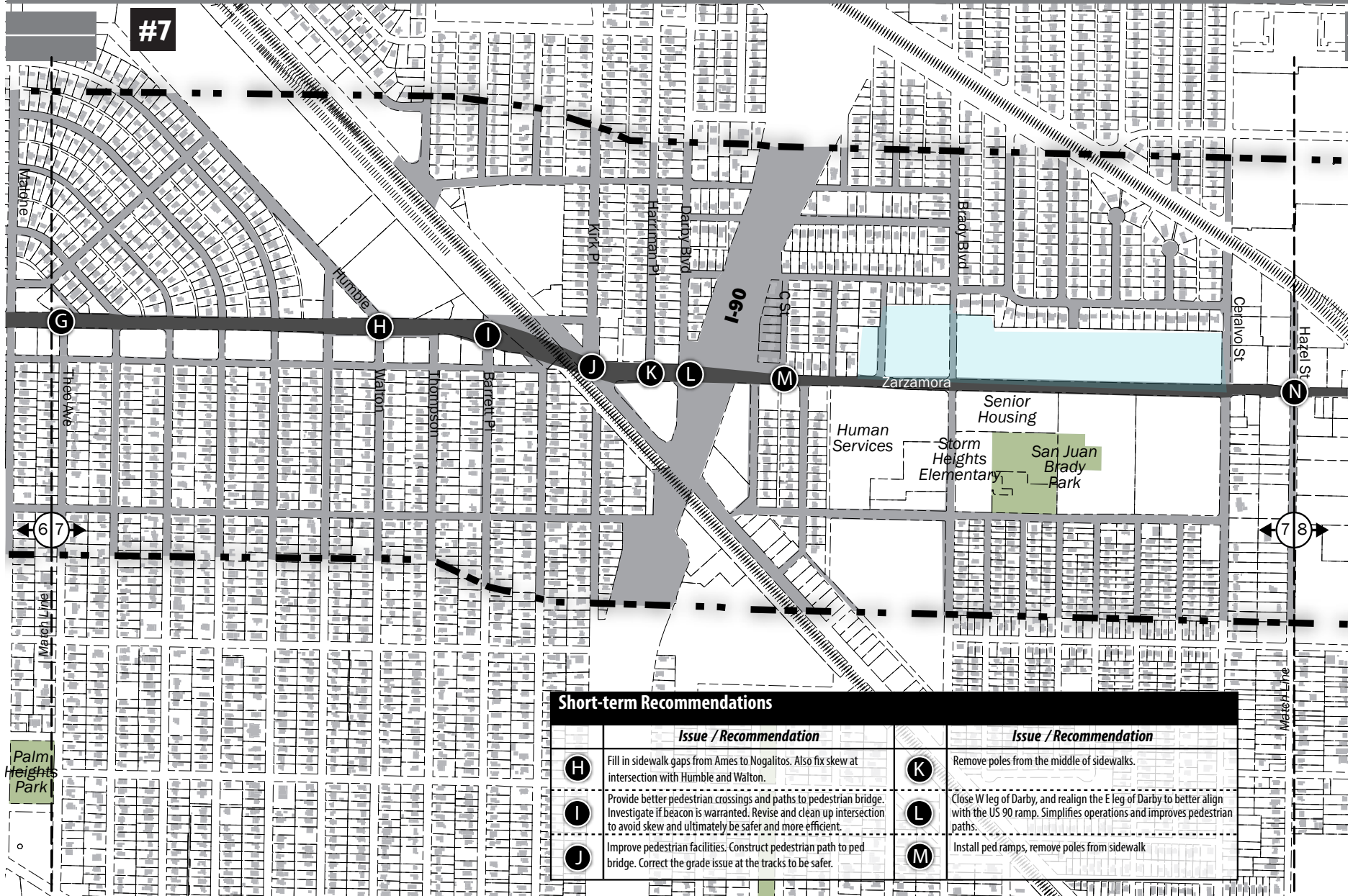
Zarzamora Corridor Analysis: Sheet 6 Short Term Recommendations

DRAFT IN-PROGRESS 04.12.2016

Open Space
Study Area

0' 300' 600' SA TOMORROW

URBAN / SUBURBAN TRANSITION

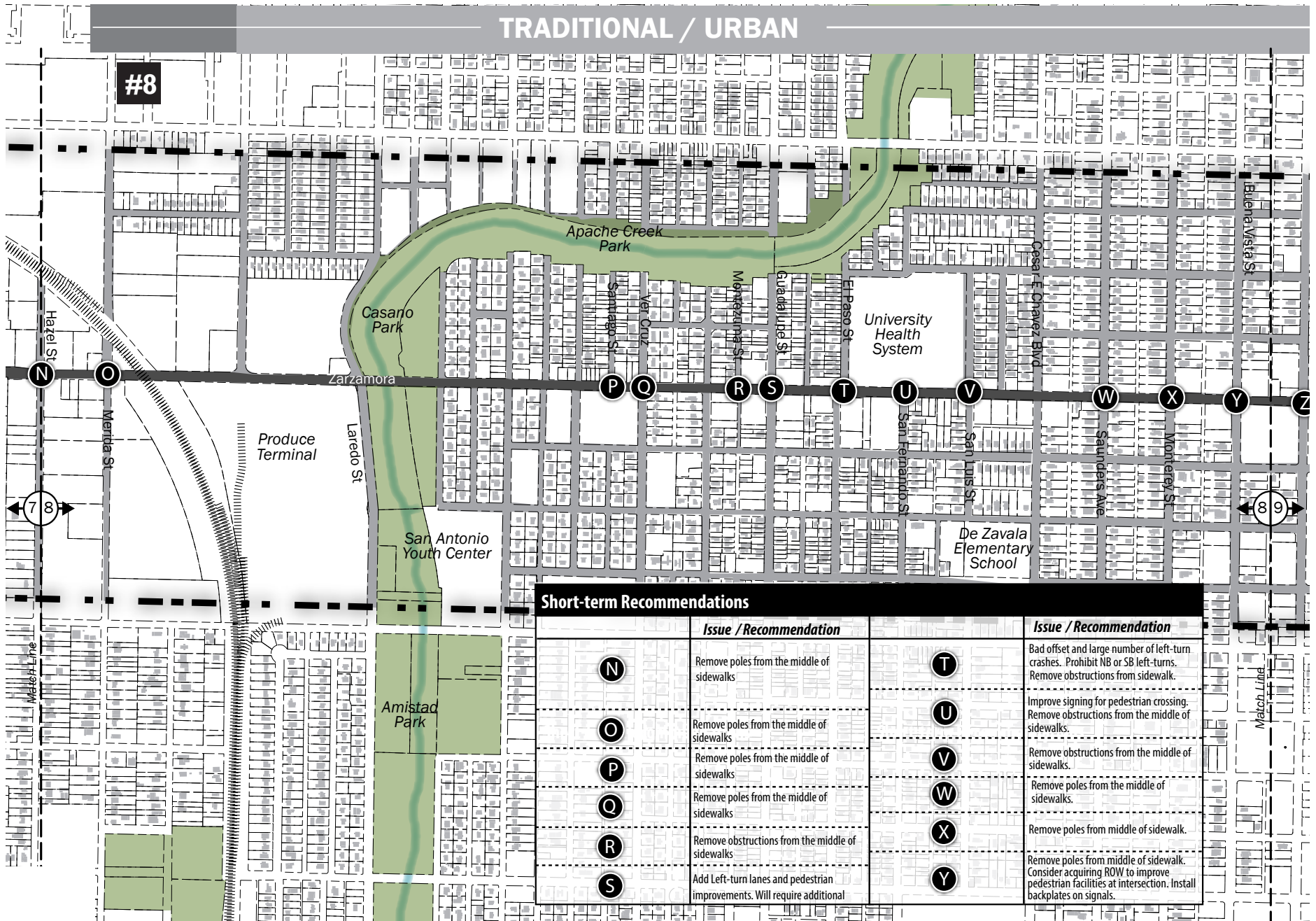


Zarzamora Corridor Analysis: Sheet 7 Short Term Recommendations **DRAFT IN-PROGRESS** 04.12.2016

Open Space
Study Area

0' 300' 600' SR TOMORROW

TRADITIONAL / URBAN

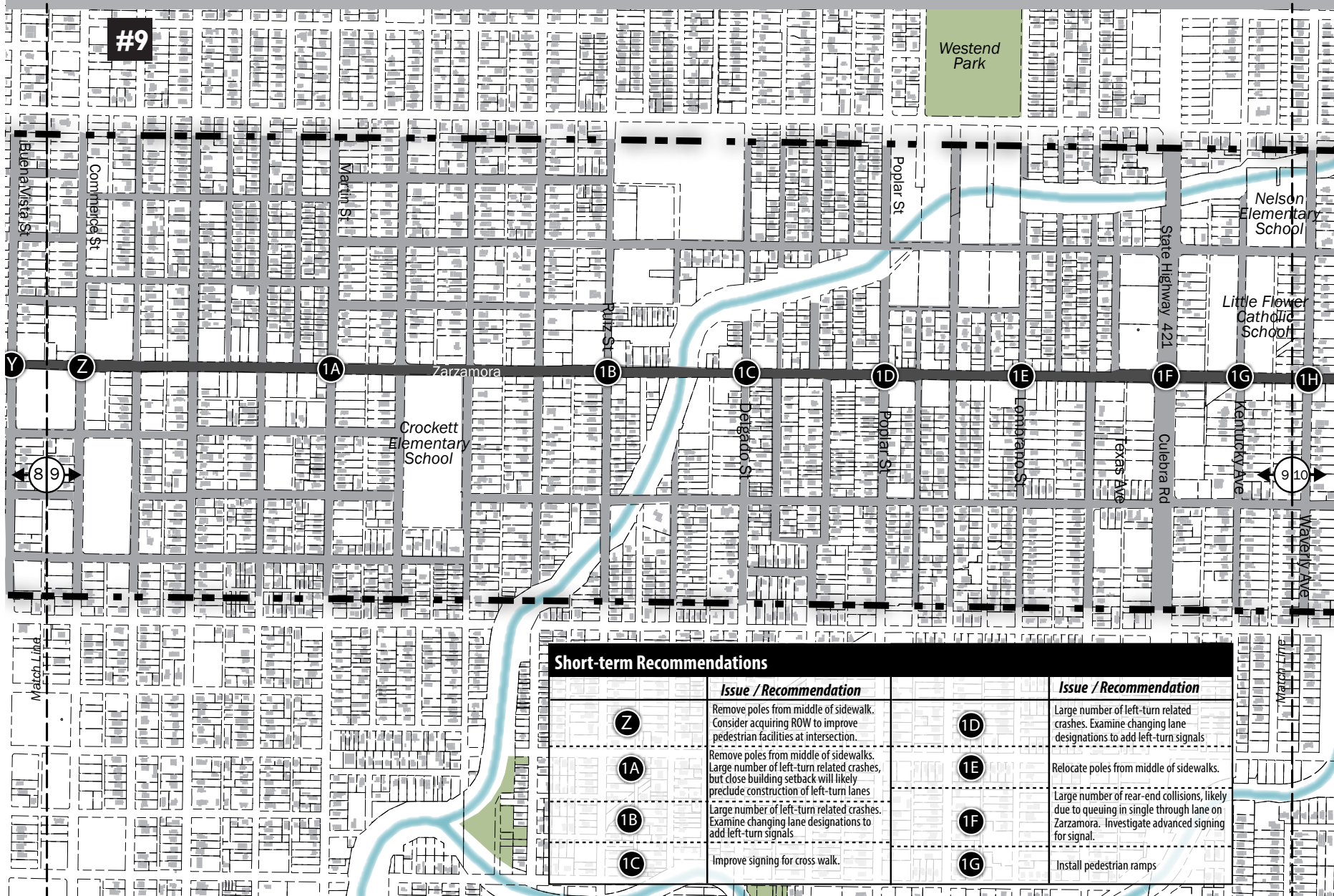


Zarzamora Corridor Analysis: Sheet 8 Short Term Recommendations **DRAFT IN-PROGRESS** 04.12.2016

Open Space
Study Area

0' 300' 600'

SA TOMORROW



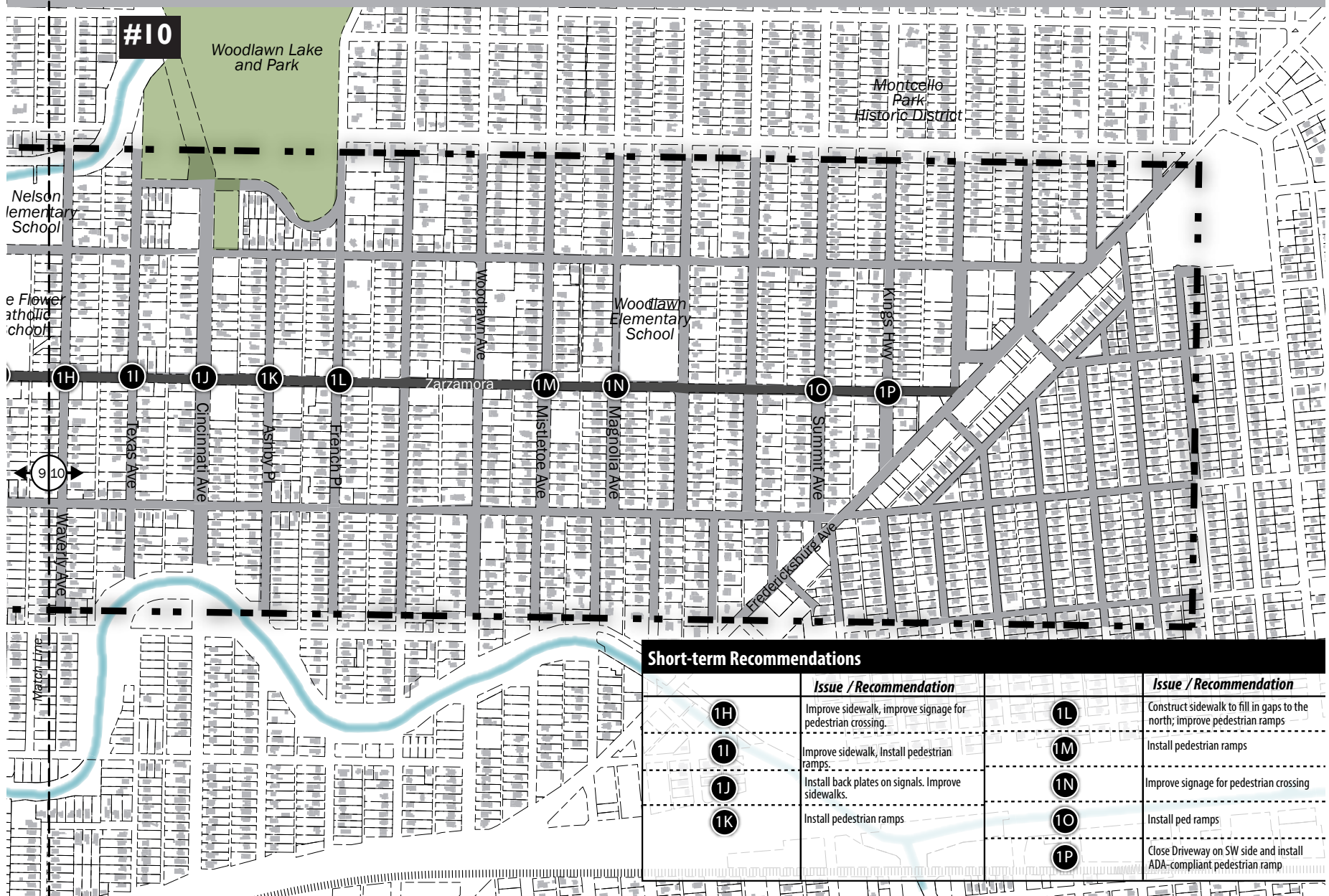
Zarzamora Corridor Analysis: Sheet 9 Short Term Recommendations **DRAFT IN-PROGRESS** 04.12.2016

Open Space
Study Area

0' 300' 600'

SR TOMORROW

TRADITIONAL / URBAN



Zarzamora Corridor Analysis: Sheet 10 Short Term Recommendations

DRAFT IN-PROGRESS

04.12.2016

Open Space
Study Area

SA TOMORROW

0' 300' 600'