Vineyard Road
Pedestrian Safety Study

Contract No. 157225
Project No. ST87100174-1

July 2025

Streets PHX
STREET TRANSPORTATION DEPARTMENT

Vineyard Road Pedestrian Safety Study

Technical Memorandum #2
Recommendations Report

July 2025

Prepared for:
City of Phoenix
Street Transportation Department
Design and Construction Management Division
1034 E. Madison Street
Phoenix, AZ 85034

Prepared by:
Michael Baker International
2929 N Central Avenue, Suite 800
Phoenix, AZ 85012

Your Project M.O.
3350 N Central Avenue, Suite 1290
Phoenix, AZ 85012

TABLE OF CONTENTS

Appendices

- Appendix A – Technical Advisory Committee (TAC) Kick-off Meeting Summary
- Appendix B – Stakeholder Focus Group Round #2 Engagement Summary
- Appendix C – Vineyard Road Study Corridor Alternatives15% Design Plans

LIST OF FIGURES

LIST OF TABLES

1.0 Introduction

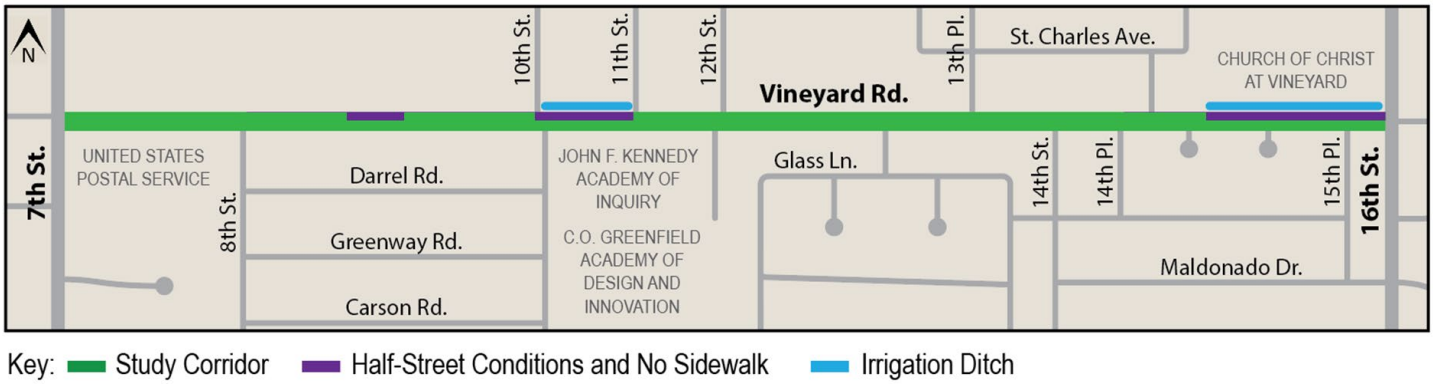
1.1 Study Purpose and Objectives

The goal of the Vineyard Road Pedestrian Safety Study (VRPSS) is to assess Vineyard Road corridor conditions and characteristics to identify multimodal challenges with an emphasis on pedestrian mobility. Ultimately, the objective of the study is to evaluate alternatives and recommend enhanced mobility solutions for Vineyard Road from 7th Street to 16th Street. Recommendations will focus on improving the safety, accessibility, and connectivity of people walking, but also will evaluate the potential for additional multimodal improvements, for people riding bicycles, and safety features to improve the mobility and comfort of all roadway users.

1.2 Study Corridor Overview

Vineyard Road between 7th Street and 16th Street is a two-lane collector road with a single lane in each direction. The corridor has a varying roadway width of 20 feet to 38 feet that results in different cross sections across the corridor. As shown in **Figure 1-1**, the corridor presents a variety of conditions that impact pedestrian safety. This segment of Vineyard Road includes several critical areas that require attention.

Figure 1-1: Vineyard Road Pedestrian Safety Study Corridor Map



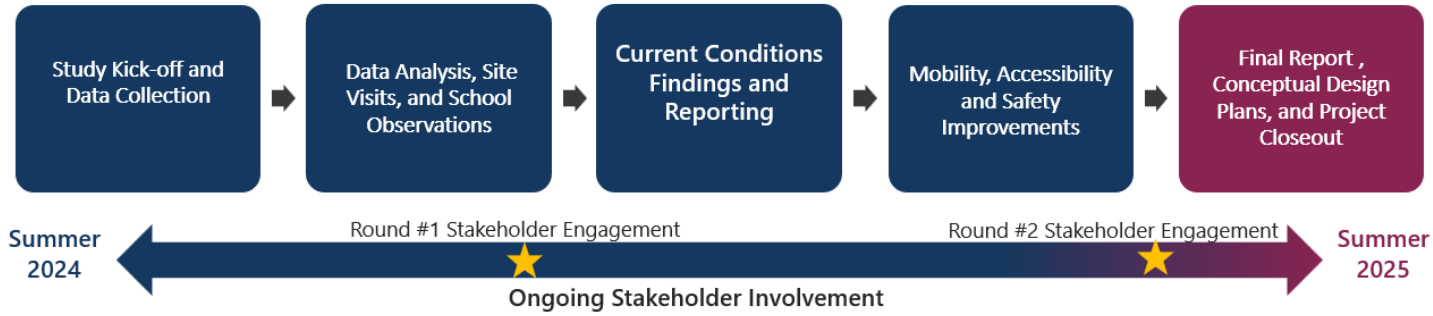
1.3 Planning Process and Methodology

As illustrated in **Figure 1-2**, the VRPSS is comprised of six tasks that will incorporate comprehensive and collaborative stakeholder outreach.

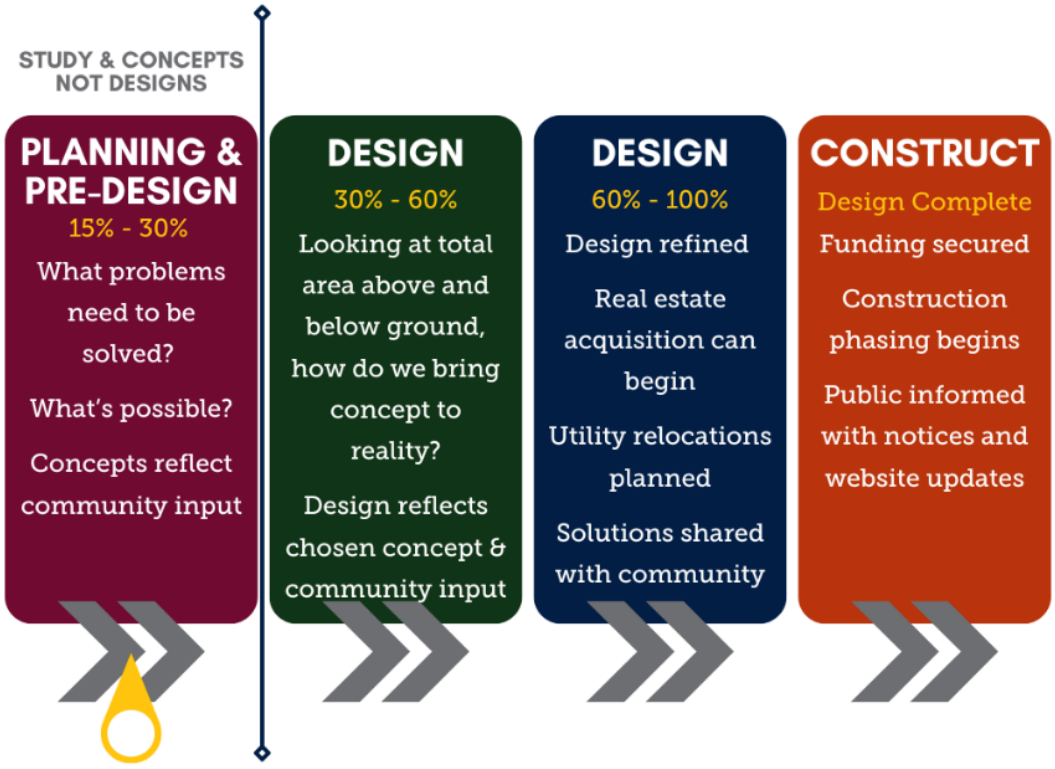
The entire planning process is being supported by invaluable contributions from stakeholders that will be garnered during Technical Advisory Committee (TAC) meetings and selected stakeholder meetings at key milestones during development of the Study.

Technical Memorandum (Tech Memo) #2 – Recommendation Report is a compilation of the effort within the mobility, accessibility, and safety improvements task under the representation of three recommended design alternatives to address the issues and observations described in the *Tech Memo #1 – Current Conditions Report*. Tech Memo #1 can be sourced from the Project Website.

Figure 1-2: Vineyard Road Pedestrian Safety Study Planning Process Flow Chart



As previously stated, the objective of the study is to evaluate design alternatives that include pedestrian mobility solutions supported by data and stakeholder and public input. As articulated in **Figure 1-3**, the VRPSS is a planning and pre-design study that includes 15 percent conceptual design plans as part of the final report. **It is important to note that there is currently no funding available for any solutions or projects recommended as part of the VRPSS. However, this planning and pre-design study will set a foundation for the City to explore the potential inclusion of projects/design recommended in the VRPSS into the Phoenix Street Transportation Department Capital Improvement Program (CIP) and/or implemented using the City's Job Order Contract (JOC) mechanism.** In addition, alternative local, state, and/or federal funding opportunities will be identified as part of this study that may help support implementation through formal design and construction phases.



1.4 Public and Stakeholder Outreach

The VRPSS includes a comprehensive and collaborative stakeholder outreach effort at key milestones throughout the entire planning process. The outreach efforts are intended to provide invaluable contributions from the stakeholders and members of the public during TAC meetings, public open house meetings and a survey at key milestones of plan development.

As of the publication of Tech Memo #2, a TAC Kick-off Meeting was conducted, engagement with identified stakeholders occurred, digital public and stakeholder survey has been developed but not disseminated, and no public engagement activities have occurred based on guidance from the City of Phoenix.

1.4.1 Technical Advisory Committee (TAC)

The TAC has been created to oversee the study and offer guidance to ensure that the VRPSS is consistent with City's general goals and vision for the corridor. Members consist of representatives from a variety of department within the City of Phoenix who have knowledge and experience with the City and the VRPSS corridor. The VRPSS TAC will meet a total of two times over the duration of the study.

A study Kick-off Meeting was held virtually on July 19, 2024 to discuss the purpose and goals of the study, provide an overview and understanding of the corridor, communicate TAC roles and responsibilities, and have an open dialogue about the issues, concerns, and objectives of the corridor – refer to **Appendix A** for a summary of the VRPSS TAC Kick-off Meeting.

A second TAC Meeting was held on February 11, 2025 to discuss and review findings from *Tech Memo #1 – Current Conditions Report* during the formal two-week TAC review period from February 7 to February 21, 2025. Feedback received at the TAC meeting and formal comments from the TAC review period were incorporated into the final version of Tech Memo #1 on Project Website.

A final TAC Meeting was held on May 22, 2025 to review and discuss the draft design alternatives and the contents of Technical Memorandum #2. During this meeting, TAC members provided comments and feedback, which were incorporated into the final version of Tech Memo #2. Additionally, Tech Memo #2 was distributed to the TAC for a formal three-week review period from May 16 to June 6, 2025.

1.5 Stakeholder Focus Groups (SFG)

Helping ensure project success necessitates coordination, cooperation, and commitment to the study among stakeholders with a vested interest in the VRPSS study corridor. In addition to internal City of Phoenix staff members represented on the TAC, stakeholders for the study include schools, places of worship, and employers along the corridor along with citizen advocacy groups in proximity to the corridor. Stakeholder input and collaboration is especially important to establishing a shared vision of potential mobility solutions that may shape the Vineyard Road study corridor. There are a total of six stakeholders identified which include:

- John F. Kennedy (JFK) Academy of Inquiry
- C.O. Greenfield Academy of Design and Innovation
- Church of Christ at the Vineyard
- U.S. Postal Service (USPS)

- South Phoenix Concerned Citizens
- South Central Collaborative

The SFG will be engaged with at two junctions of the VRPSS process – once upfront to introduce the project goals, objectives, tasks and schedule as well as discuss each stakeholders' mobility and safety issues, concerns and objectives; and a second time to present draft mobility solutions, rationale and benefit of each and obtain feedback and/or consensus.

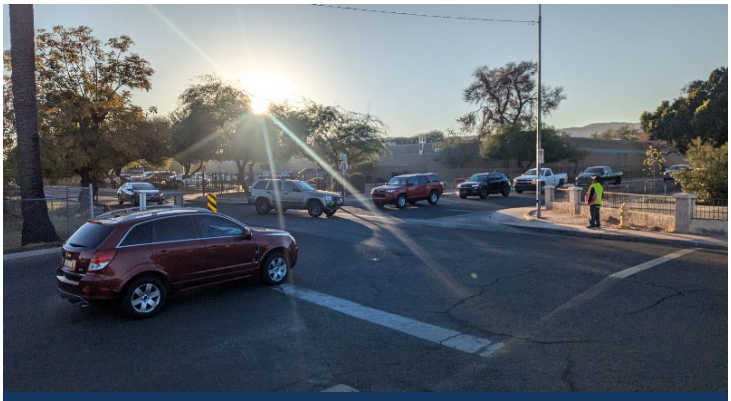
In the first round of SFG engagement, representatives from the JFK Academy, C.O. Greenfield Academy, and the South Phoenix Concerned Citizens were met with during an in-person meeting held on September 12, 2024. The results and key trackways ways from SFG Round #1 Engagement ultimately informed the development of the alternatives and are outlined in *Tech Memo #1 – Current Conditions Report* (Tech Memo #1 can be sourced from the Project Website).

In the second round of SFG engagement, the project team conducted a total of seven virtual meetings with representatives from the identified stakeholder groups to review and discuss the draft mobility alternatives. These meetings took place between May 13 and June 4, providing opportunities for stakeholders to offer input, raise questions, and share perspectives on the proposed solutions. The collective feedback and insights gathered during these sessions are summarized in Appendix B, which captures the key themes and recommendations from each stakeholder group.

1.5.1 School Drop-off/Pick-up Observations

Coupled with the SFG engagement with JFK Academy and C.O. Greenfield Academy, school pick-up and drop-off site observations were conducted on November 20, 2024. During the school pick-up and drop-off site observations, project team staff completed observations on vehicular ingress/egress, pedestrians, bicycles, and crossing guard operations along Vineyard Road particularly at the intersection of 10th Street and 12th Street. This day included typical drop-off and early dismissal (12:40-1:20 pm). Observations made during the school drop-off and pick-up site visit ultimately informed the development of the alternatives and are outlined in *Tech Memo #1 – Current Conditions Report* (Tech Memo #1 can be sourced from the Project Website).

Students crossing Vineyard Road at 10th Street during AM drop-off period.



Traffic congestions at the intersection of Vineyard Road and 10th Street during AM drop-off period.

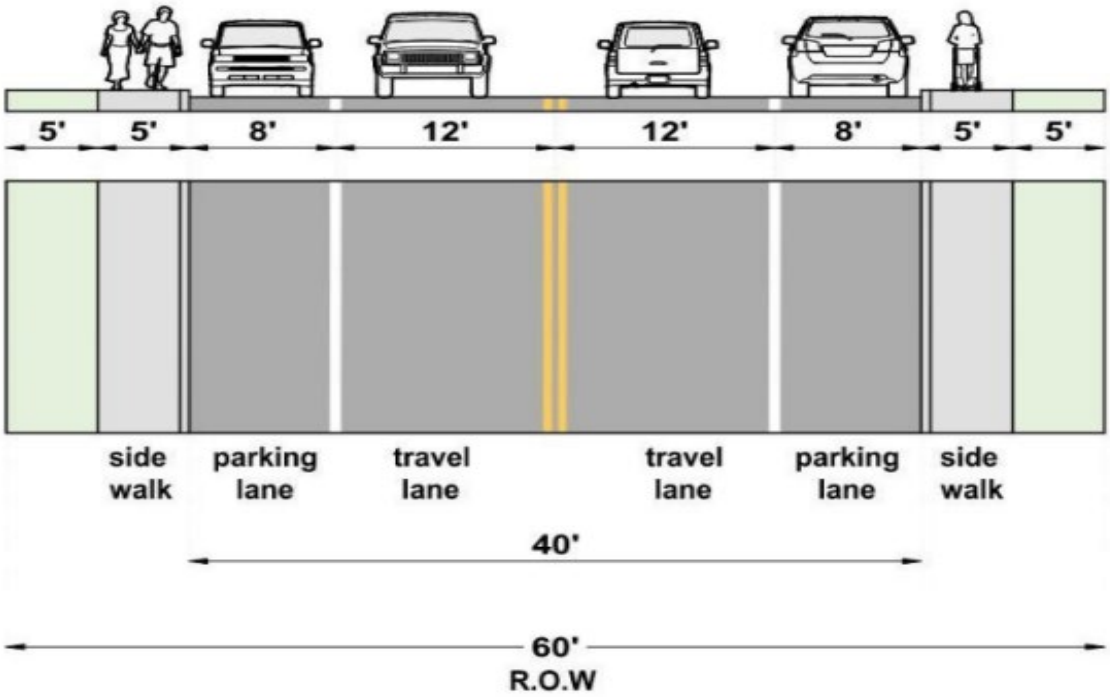
2.0 Current Corridor Conditions Report Summary

The current conditions of the Vineyard Road Study Corridor are comprehensively documented in *Tech Memo #1 – Current Conditions Report*. This section provides a summary of the current conditions of the corridor; However, please refer to Project Website for a detailed report on the current conditions reporting.

In addition, the existing conditions of the Vineyard Road Study Corridor can be explored and navigated through an interactive map (the three alternatives referenced in *Section 3.0 - Recommended Corridor Alternatives* are also available for viewing) developed specifically for the VRPSS.

Vineyard Road is functionally classified as a minor collector, which are designed to connect local streets to arterial roads and accommodate moderate traffic volumes while ensuring accessibility for pedestrians, cyclists, and transit users. The City of Phoenix 2023 Street Planning and Design Guideline Manual (SPDGM) describes Vineyard Road as a Collector with a designated F Cross Section. As shown in **Figure 2-1**, Cross Section F illustrates the desired roadway with two 12-foot travel lanes and two 8-foot parking lanes for a total pavement width of 40 feet. The cross section also has 5-foot sidewalks along with an additional 5-foot landscaping on both sides of the roadway. The total right-of-way for this cross section is 60 feet. This cross section represents the ultimate right-of-way and desired roadway elements for Vineyard Road within the study area, ensuring it meets the functional and contextual needs of the area.

Figure 2-1: Cross Section "F," Minor Collector with Parking



Vineyard Road has an average annual daily traffic of 2,356. The three other roadways near the study area are 7th Street, 10th Street, and 16th Street with an average annual daily traffic of 17,085, 1,499, and 26,415 vehicles per day (vpd), respectively.

There are currently 2.06 miles of existing sidewalks along the study corridor with a width ranging between five and eight feet. Conversely, there are three sections of Vineyard Rd. without sidewalks, located on the north side of the corridor that total to 0.26 miles. The three segments are located between 405 feet east of 8th Street and 411 feet west of 10th Street, between 10th Street and 11th Street, and between 250 feet east of 14th Way and 16th Street.

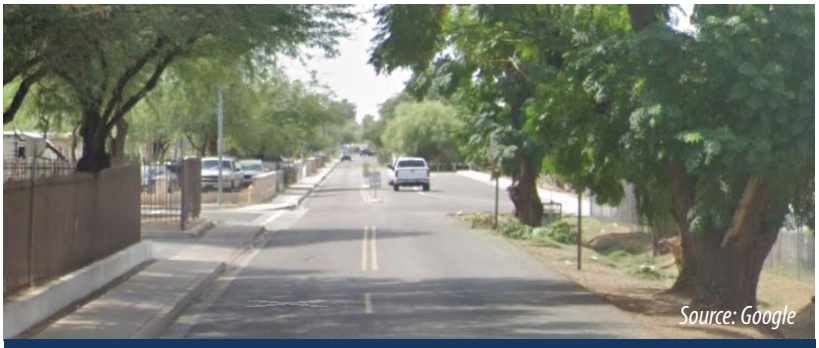
Vineyard Road between 7th Street and 16th Street is a two-lane road with a single lane in each direction. The corridor has a varying pavement width of 20 feet to 40 feet. There are three locations along the corridor that present half-street conditions which act as barriers of pedestrian and bicyclist mobility and pose safety risks. Historically, Vineyard Road has served agricultural uses, and as the corridor developed over time, these half-street conditions have been created as part of the evolution of the corridor where development on one side of the street includes modern infrastructure while the other half remains unimproved or undeveloped.

The portions of the corridor that have half-street conditions include:

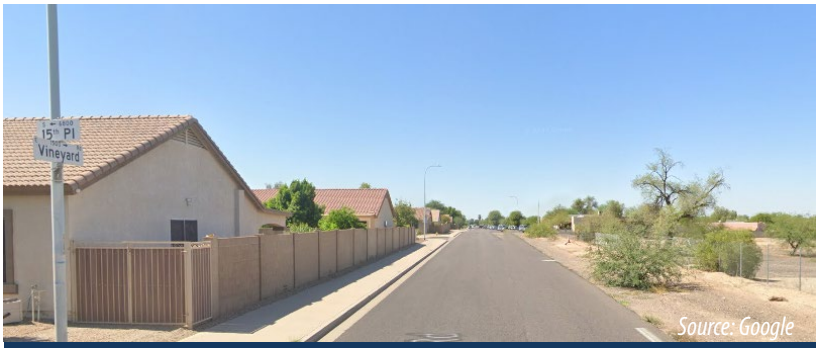
- 405 feet east of 8th Street to 411 feet west of 10th Street;
- 10th Street to 11th Street; and
- 265 feet west of 14th Way to 16th Street.

These segments lack sidewalks, forcing pedestrians to either navigate undesirable conditions outside of the street such as uneven surfaces, obstructed paths, native dirt, unlit environments; or even share the roadway with vehicular traffic, which increases the risk of accidents and injuries. As pictured, all three segments of half-street condition lack sidewalks on the north side of the street (roughly 13 percent of the corridor), and one of the fundamental objectives of this study is to establish continuous sidewalk conditions throughout the entire corridor. In addition to

Half-street condition on Vineyard Road between 405 feet east of 8th Street to 411 feet west of 10th Street, looking west towards 8th Street.



Half-street condition on Vineyard Road between 10th Street 11th Street, looking west towards 10th Street.



Half-street condition on Vineyard Road between 265 feet west of 14th Way to 16th Street looking west towards 16th Street.

the induced pedestrian safety risks, these half-street conditions also have adverse impacts on vehicular traffic operations as well. The absence of on-street parking results in illegal parking. In addition, lane widths are also narrower, which causes turning challenges for larger vehicles or vehicles towing trailers.

Over a five-year analysis period, there was a total of 47 collisions reported on Vineyard Road along the study corridor, 12 of those collisions were located at the intersection of 7th Street and Vineyard Road, 16 collisions between 7th Street and 16th Street, and 19 collisions at the 16th Street and Vineyard Road intersection. Of the 47 collisions, 45 were vehicle-to-vehicle while two were recorded as vehicle-to-pedestrian.

Adding to the complexity, the John F. Kennedy Academy of Inquiry is located along Vineyard Road between 10th Street and 12th Street. The school's pick-up and drop-off zone generates high pedestrian activity, particularly during the start and end of the school day, especially since the students attending the C.O. Greenfield Academy located directly to the south also cross Vineyard Road at this same location. As a result, this area requires careful consideration to ensure the safety of students and their families.

Another notable feature within this corridor is the skewed intersection at Vineyard Road and 10th Street. The irregular geometric configuration of this intersection complicates visibility and navigation for both drivers and pedestrians, creating a hazardous crossing point, particularly during drop-off and pick-up times during school hours when vehicular and pedestrian activity is at its highest. The 10th Street intersection includes one, faded, yellow crosswalk to which a crossing guard is assigned during school drop-off/pick-up. Other intersections of concern include 13th Street, 15th Place, 11th Street and 16th Street.

Intersection of Vineyard Road and 10th Street – a designated school crossing.

In addition to the constraints created by the half-street conditions, there are a number of existing utilities that may create constraints and may impact potential solutions. These include underground/overhead electric lines, transformers, and junction boxes, irrigation infrastructure, water pipes and valves, sewer lines and manholes, storm drain pipes and inlets, gas lines and valves, street lighting, and underground/overhead communication lines. In fact, unused and/or decommissioned irrigation ditches run along the north side of Vineyard Road between 10th Street and 11th Street, as well as between 14th Way and 16th Street. These ditches not only limit the available space for potential pedestrian access routes (sidewalks), but also pose additional safety hazards.

Overall, the combination of half-street conditions, skewed intersections, school-related pedestrian and vehicular traffic, and irrigation ditches makes Vineyard Road a critical area for a pedestrian safety study. Addressing these issues is essential to enhance the safety and accessibility of this corridor for all users.

3.0 Recommended Corridor Alternatives

There are three recommended design alternatives to address the issues and observations described in the current conditions reporting and they each successively include improvements to enhance pedestrian mobility and safety along the Vineyard Road Study Corridor. This section provides a summary and comparison of the three alternatives while the subsequent subsections provide more detail of each alternative.

In addition to this comprehensive overview in the tech memo, the three alternatives can be viewed and explored through an interactive map developed specifically for the VRPSS. The conceptual layouts of the alternatives referenced in the interactive map are for display purposes only and are not intended to be used for design - Please reference the 15% design plans included in Appendix C. Furthermore, there is also a video available for viewing on the Project Website that adequately describes all three alternatives, navigating viewers through conceptual layouts and 3D simulations to help illustrate the proposed improvements along the corridor for each alternative. The three recommended design alternatives include:

- **Alternative 1: Cross Section F** provides a consistent roadway cross section for the entire study corridor including the widening of Vineyard Road in the three locations where half-street conditions currently are present. Alternative 1 maintains a 40-foot pavement section consisting of two 12-foot travel lanes, two eight-foot on-street parking lanes, and widening sidewalks to five feet where they currently are four feet wide.
- **Alternative 2: Modified Cross Section F with Enhanced Sidewalk and Traffic Calming** ensures the Vineyard Road Corridor meets the standard for Cross Section F, while also incorporating enhanced features beyond the standard in certain locations, such as traffic calming applications and widened sidewalks.
- **Alternative 3: Modified Cross Section F with Enhanced Sidewalk, Traffic Calming and Roundabout** ensures the Vineyard Road Corridor meets the standard for Cross Section F, while also incorporating the same enhanced features as Alternative 2 with the addition of a roundabout at the intersection of 10th Street and Vineyard Road.

Table 3-1 displays a high-level summary of the improvement elements of the three alternatives summarizes the main similarities and differences between the advantages and disadvantages of three proposed Vineyard Road alternatives. All three alternatives remove the half-street portions of Vineyard Road and construct new sidewalks, ADA ramps, and streetlights. Above and beyond this, only alternatives two and three also widen some of the existing sidewalks, add traffic calming measures to slow down vehicle traffic, green stormwater infrastructure to reduce water ponding in the street, and plant trees. These two alternatives also would construct sidewalks near 16th Street that are set back from the street to better cars separate people who walk and create a safer walking condition. Alternative 3 is the only alternative that includes constructing a roundabout at the intersection of Vineyard Road and 10th Street.

Upon completion of the VRPSS, City of Phoenix staff requested a planning-level cost estimate and design files for a low-cost solution that exclusively filled sidewalk gaps along the study corridor – refer to **Appendix D** for more information on Alternative 4: Low-Cost Sidewalk Improvements.

Table 3-1: Alternatives Improvements Summary

Advantages and Disadvantages	Alternative 1	Alternative 2	Alternative 3
Completes "Half Street" Conditions with City Standards	●	●	●
Wider sidewalks than the 5' City Standard		●	●
Updated ADA-Compliant Curb Ramps Throughout	●	●	●
Additional Traffic Calming		●	●
New and Updated Cross Walks		●	●
Improved Street Lighting	●	●	●
New Trees with Green Stormwater Infrastructure		●	●
Removes Some of the Existing Trees	●		●
Set-back Sidewalk near 16th Street		●	●
11th Street Intersection Improvements	●	●	●
11th Street Intersection Roundabout			●
Paralell Parking Adjacent to JFK Academy	●		
Impacts some properties and/or house	●	●	●
Some impact to properties and one house	●		●
Lowest Planning-Level Cost Estimate		●	

As reported and outlined in *Tech Memo #1: Current Conditions Report* (sourced from the Project Website), the Pedestrian Environmental Quality Index (PEQI) was used to describe and summarize the environmental factors of the Vineyard Road Study Corridor that influence the experience of people who walk through it. The objective of this PEQI analysis is to create a defensible and data-driven approach that identifies locations along Vineyard Road that are in need of improved pedestrian infrastructure and the justification of recommendations. These ultimately informed the development of the three recommended alternatives.

The PEQI was used to score segments and intersections along the Vineyard Road Study Corridor, creating a baseline that highlighted areas needing pedestrian improvements. This initial evaluation identified where upgrades were necessary to enhance safety and walkability.

After recommended changes were implemented — such as street design modifications and traffic calming measures — a second PEQI assessment showed notable improvements in pedestrian safety and environmental quality. Comparing scores before and after the enhancements confirmed their effectiveness and pinpointed remaining areas for improvement.

Table 3-2 and **Table 3-3** and provide the results of the PEQI segment and intersection analysis and scoring for all three alternatives compared to the existing condition. There were 11 intersections and a total of nine segments evaluated that included an assessment of both the north (N) and south side (S) of Vineyard Road for each segment, resulting in a total of 18 segment results.

As shown in **Table 3-2**, all three alternatives generally provide an improved pedestrian environment for nearly all the Vineyard Road segments. However, there are some exceptions with Alternative 1 resulting in no improvement in Segment 1S (southside of 7th Street to 405 feet east of 8th Street), Segment 6N (north side of 12th Street to 13th Street), and Segment 7N (13th Street to 14th Street) and Intersection B (8th Street and Vineyard Road).

All three of the Alternatives eliminate the poor pedestrian conditions on all segments. Alternative 1 includes eight segments with reasonable pedestrian conditions and while Alternative 2 and Alternative 3 provide eleven segments with responsible pedestrian conditions. The three segments that are improved most significantly by the recommended alternatives are Segment 2N, Segment 4N, and Segment 9N, which are the three portions of the corridor with half street conditions.

Each of the three alternatives enhances the pedestrian experience along the Vineyard Road corridor and results in better conditions at every intersection except for Alternative 1 at Intersection B (8th Street and Vineyard Road), which resulted in no improvement.

Even though the alternatives improve the vast majority of the eleven intersections in the corridor, three of them remain with poor pedestrian conditions. These include Intersection F (13th Street and Vineyard Road), Intersection J (15th Place and Vineyard Road) and Intersection K (16th Street and Vineyard Road). Each of these three intersections experience an improved PEQI score but the score does not increase enough to cross over the threshold into basic pedestrian conditions.

Table 3-2: Segment PEQI Results Summary of Alternatives

Segments		PEQI Results			
ID	Limits	Existing	Alternative 1	Alternative 2	Alternative 3
1N	7th St to 405' east of 8th St	53	53	59	59
1S		43	43	48	48
2N	405' east of 8th St to 411' west of 10th St	25	63	66	66
2S		37	44	49	49
3N	411' west of 10th St to 10th St	57	61	61	64
3S		47	61	61	64
4N	10th St to 11th St	30	64	73	76
4S		41	63	74	78
5N	11th St to 12th St	50	61	61	61
5S		40	56	61	61
6N	12th St to 13th St	52	52	61	61
6S		59	63	71	71
7N	13th St to 14th St	50	50	54	54
7S		57	61	69	69
8N	14th St to 680' west of 16th St	41	54	51	51
8S		50	57	65	65
9N	680' west of 16th St to 16th St	22	59	71	71
9S		47	57	65	65

PEQI Results Key

- PEQI Score 100-81: Ideal Pedestrian Conditions
- PEQI Score 80-61: Reasonable Pedestrian Conditions
- PEQI Score 60-41: Basic Pedestrian Conditions
- PEQI Score 40-21: Poor Pedestrian Conditions
- PEQI Score 20-0: Environment not Suitable for Pedestrians

Table 3-3: Intersection PEQI Results Summary of Alternatives

Intersection		PEQI Results			
ID	Location	Existing	Alternative 1	Alternative 2	Alternative 3
A	7th St and Vineyard Rd	45	51	51	51
B	8th St and Vineyard Rd	51	51	55	55
C	10th St and Vineyard Rd	39	51	61	75
D	11th St and Vineyard Rd	29	55	68	68
E	12th St and Vineyard Rd	55	68	71	71
F	13th St and Vineyard Rd	27	36	39	39
G	13th Pl and Vineyard Rd	34	43	43	43
H	14th St and Vineyard Rd	41	51	55	55
I	14th Wy and Vineyard Rd	33	43	43	43
J	15th Pl and Vineyard Rd	28	39	39	39
K	16th St and Vineyard Rd	23	31	31	31

PEQI Results Key

- PEQI Score 100-81: Ideal Pedestrian Conditions
- PEQI Score 80-61: Reasonable Pedestrian Conditions
- PEQI Score 60-41: Basic Pedestrian Conditions
- PEQI Score 40-21: Poor Pedestrian Conditions
- PEQI Score 20-0: Environment not Suitable for Pedestrians

3.1 Planning-Level Cost Estimates Comparison of Alternatives

Conceptual planning-level costs for the three Vineyard Road alternatives were developed as part of this recommendations report.

A planning-level cost estimate is a preliminary financial assessment used to forecast the potential costs associated with a construction project. This estimate typically is developed during the planning stages and is based on a set of assumptions and allowances to account for various aspects of the project. The goal is to provide a rough approximation of the total project cost, which can be refined as more detailed information becomes available during the design stage.

The planning-level cost estimates were developed utilizing unit costs, assumptions, and allowances provided by the City of Phoenix and for Fiscal Year (FY) 2024/2025 costs and percentages. In addition, the planning-level cost estimates include a total construction cost over seven years using a 4% annual inflation rate. For purposes of this study, the alternatives are assumed to be constructed in FY 2030/2031.

More detailed and itemized cost estimates, including all seven years, are provided for each of the alternatives in the subsequent sections. However, to compare the three alternatives to each other, **Table 3-4** shows the total planning-level cost estimate of the three alternatives.

Table 3-4: Total Construction Planning-Level Cost Estimate of the Three Alternatives

Alternative	FY 2030/2031 Planning-Level Cost Estimate
Alternative 1	$21,311,547.73
Alternative 2	$19,606,542.34
Alternative 3	$23,154,082.72

Alternative 3 is the most expensive of the three alternatives estimate with a FY2030/2031 total construction cost of $23,154,082.72; Alternative 2 is the least expensive option with a FY2030/2031 total construction cost of $19,606,542.34; and, Alternative 1 has a FY2030/2031 total construction cost of $21,409,591.03.

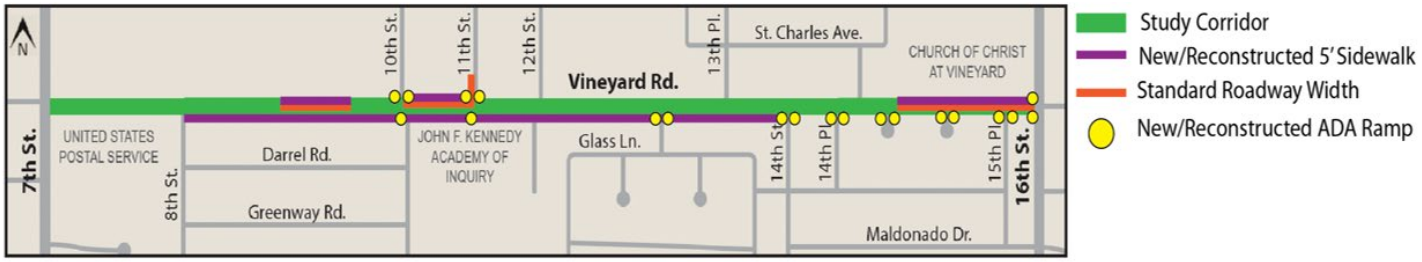
3.2 Recommended Preferred Alternative

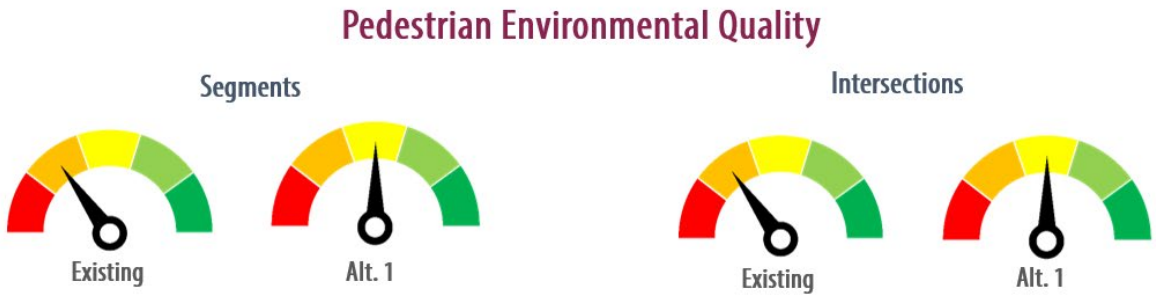
Based on the magnitude of improvement of the three alternatives reported in the PEQI analysis, Alternative 2 appears to provide the most optimal improved pedestrian conditions at the lowest cost. As such, Alternative 2 should be considered as the preferred alternative. However, the TAC agreed to leave all three alternatives for consideration as the city explores further design and funding opportunities.

3.3 Alternative 1: Cross Section F

As previously mentioned, the Vineyard Road Corridor is classified as a minor collector with on-street parking per the City of Phoenix SPDGM. As shown in **Figure 2-1**, Alternative 1 ensures the Vineyard Road Corridor meets the standard for Cross Section F per the City's SPDGM from 7th Street to 16th Street.

Alternative 1 provides a consistent roadway cross section for the entire study corridor including the widening of Vineyard Road in the three locations where half-street conditions are present today. Alternative 1 maintains a 40-foot pavement section with two 12-foot travel lanes and two eight-foot, on-street parking lanes, as well as sidewalks widened to five feet where they currently are four feet wide.





To adequately display Alternative 1: Cross Section F, conceptual design exhibits were developed that include roadway improvement elements, right-of-way, ownership information, sidewalks, streeting lighting, and utilities. This section will reference the three base map sheets listed below:

- **Figure 3-1**: Vineyard Road Alternative 1: Cross Section F – 7th Street to 140 feet west of 10th Street
- **Figure 3-2:** Vineyard Road Alternative 1: Cross Section F – 140 feet west of 10th Street to 13th Street
- **Figure 3-3:** Vineyard Road Alternative 1: Cross Section F – 13th Street to 16th Street

Figure 3-1: Vineyard Road Alternative 1: Cross Section F – 7th Street to 140 feet west of 10th Street

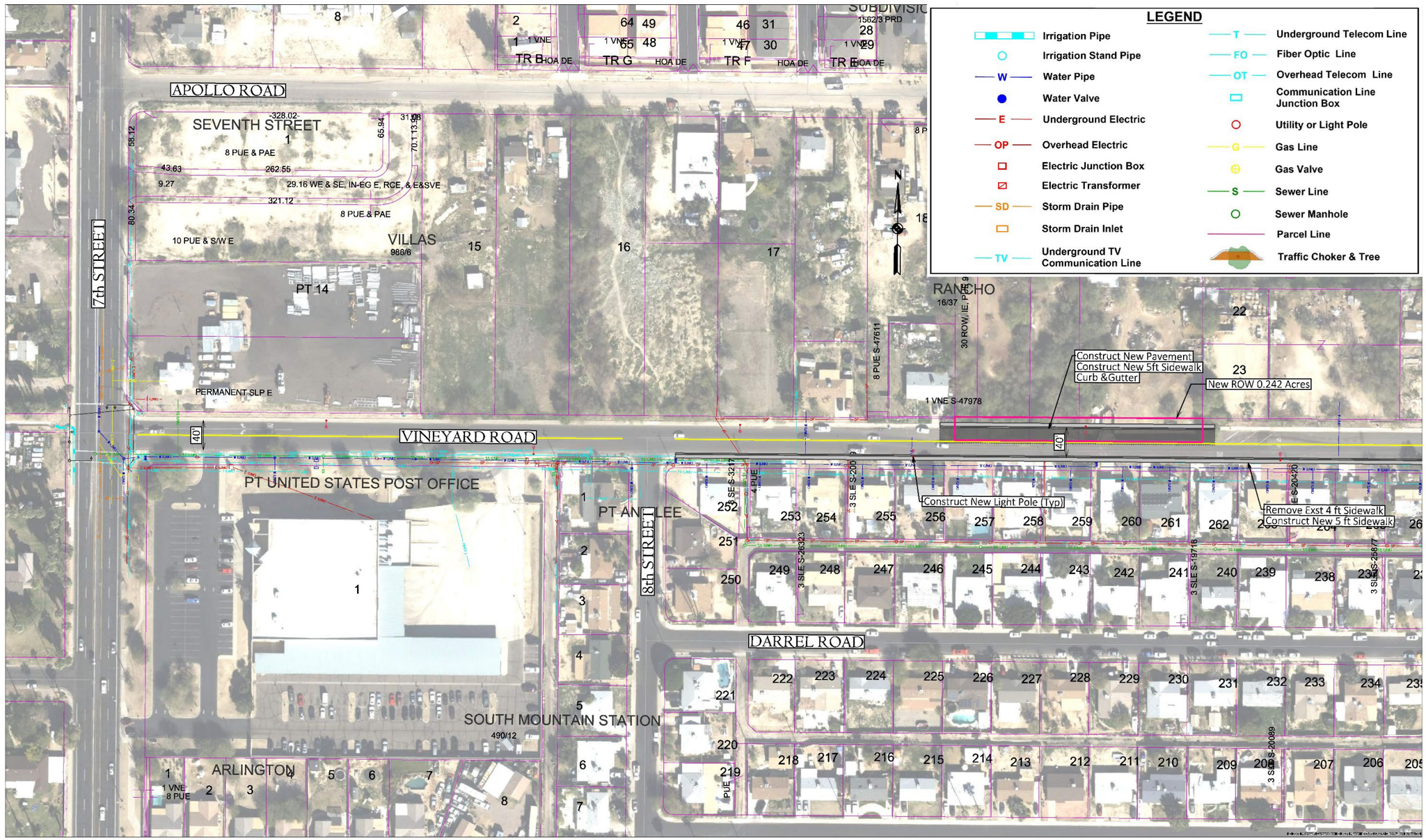


Figure 3-2: Vineyard Road Alternative 1: Cross Section F – 140 feet west of 10th Street to 13th Street

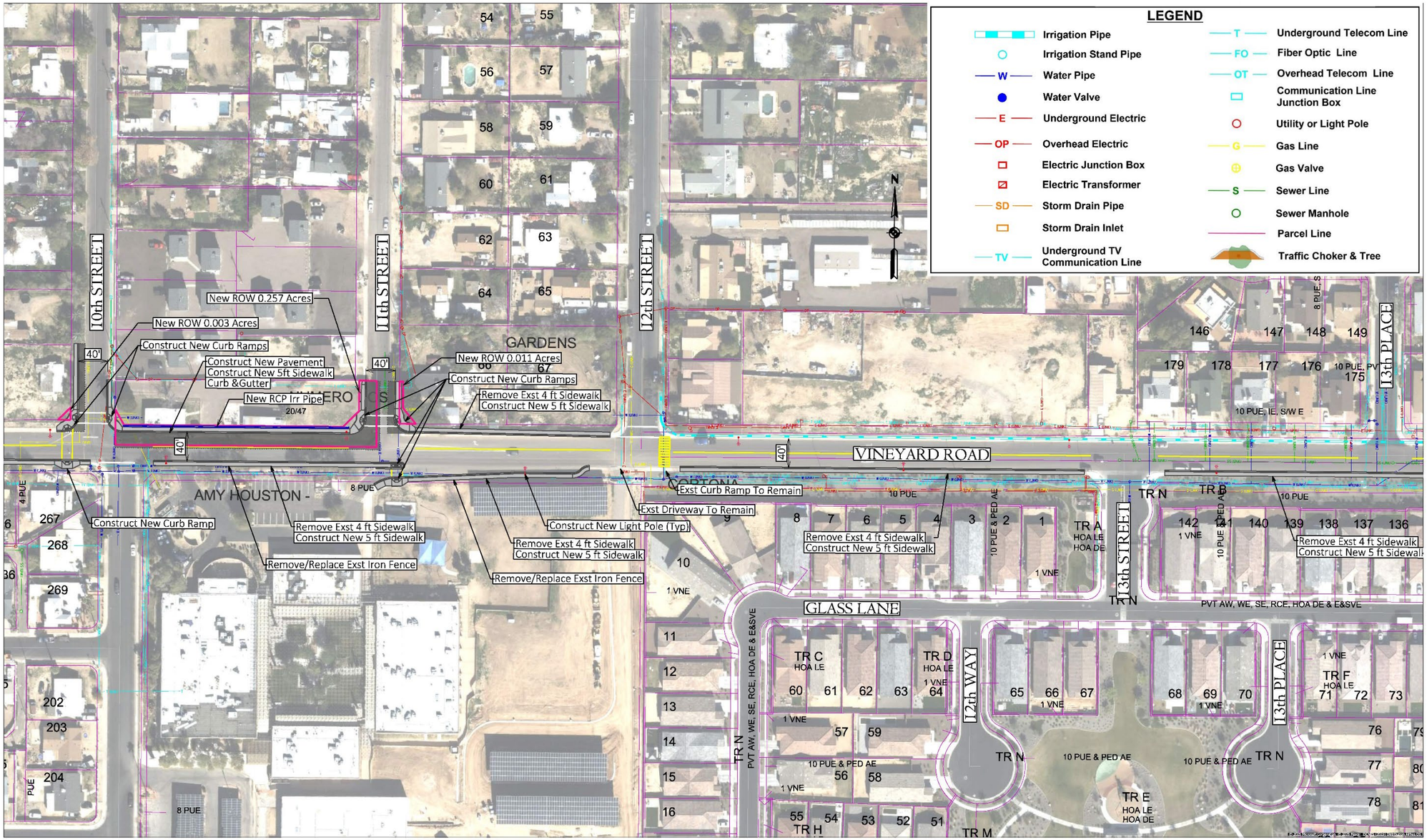
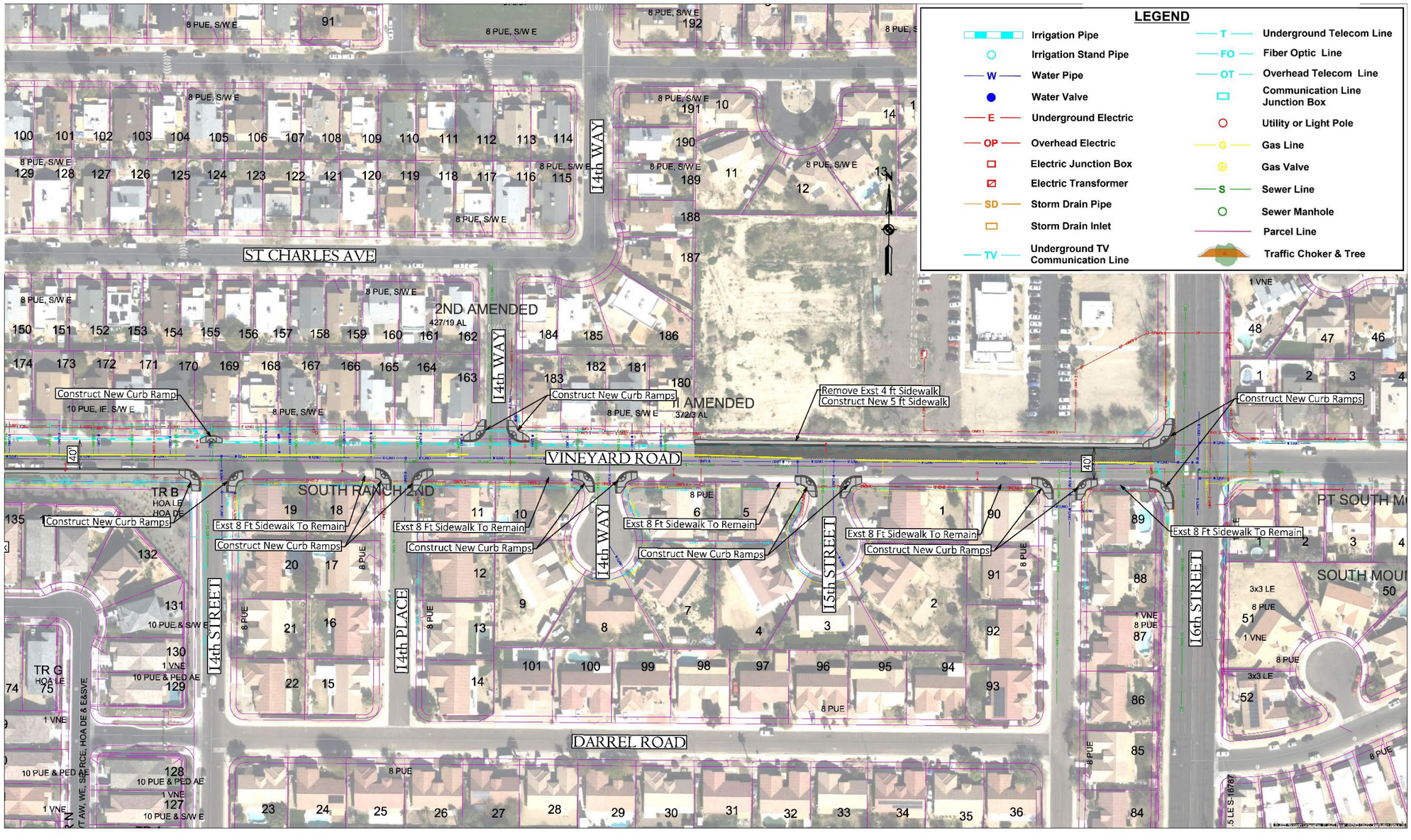


Figure 3-3: Vineyard Road Alternative 1: Cross Section F – 13th Street to 16th Street



3.3.1 Sidewalks Improvements

Alternative 1 encompasses a strategic integration of enhanced and newly constructed sidewalks across various segments of the corridor. The newly constructed sidewalks address existing gaps in connectivity, ensuring continuous pedestrian access throughout the corridor. Concurrently, the enhanced sidewalks are upgraded to meet the 5-foot width standard, as specified in the SPDGM Cross Section F. This alternative includes a total of five sidewalk improvement projects, which consist of:

- A new 5-foot-wide sidewalk on the north side of Vineyard Road from 680 feet west of 16th Street to16th Street.
- A new 5-foot-wide sidewalk on the north side of Vineyard Road between 10th Street and 11th Street.
- A new 5-foot-wide sidewalk on the north side of Vineyard Road from 411 feet west of 10th Street to 10th Street.
- Removal of an existing 4-foot-wide sidewalk and replaced with a 5-foot sidewalk on the north side of Vineyard Road from 11th Street to 12th Street.
- Removal of an existing 4-foot-wide sidewalk and replaced with a 5-foot sidewalk on the south side from 8th Street to 14th Street.

3.3.2 Curb Ramp Improvements

Alternative 1 involves the implementation of both new and upgraded curb ramps throughout the corridor. This alternative ensures that all existing curb ramps that do not comply with ADA standards are reconstructed to meet these requirements. In total, Alternative 1 includes the installation or improvement of 21 curb ramps, detailed as follows:

- The 10th Street intersection includes five new or reconstructed curb ramps.
    - Two new curb ramps at the northwest corner one improved curb ramp at the southwest corner, and two new curb ramps at the northeast corner.
- The 11th Street intersection includes four new or reconstructed curb ramps.
    - One new curb ramp at the northwest corner, one new curb ramp at the northeast corner, and two reconstructed curb ramps at the south corner of the three-leg intersection near the school driveway.
- The 14th Street intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 14th Place intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 14th Place intersection includes three reconstructed curb ramps, one at each of the southwest, southeast, and northeast corners.
- The 15th Street intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 15th Place intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.

- The 16th Street intersection includes two improved curb ramps, one at each of the northwest and southwest corners.

As shown in the City of Phoenix Supplemental Standard Details for Public Works Construction (2021), the standard details for curb ramps include P1236, P1237, P1239, P1240/P1240-1, and P1241-1/P1241-4.

3.3.3 Roadway Improvements

Alternative 1 encompasses three specific roadway enhancements at locations where Vineyard Road is recommended to be widened to conform to the Cross Section F standard. These enhancements eliminate the existing half-street conditions and are located at the following segments:

- From 405 feet east of 8th Street to 411 feet west of 10th Street
- From 10th Street to 11th Street
  - This segment includes the widening of 11th Street to achieve a 40-foot pavement section.
- From 265 feet west of 14th Way to 16th Street
  - This improvement conforms with Cross Section F including the construction of a curb/gutter and additional Asphaltic Concrete (AC) to ensure two 12-foot travel lanes and two eight-foot on-street parking lanes within a 40-foot-wide pavement section.

Each location includes the construction of a curb/gutter and additional Asphaltic Concrete (AC) pavement to ensure two 12-foot travel lanes and two eight-foot on-street parking lanes. The roadway improvements equate to approximately 29,190 square feet of new AC pavement and 4,846 linear feet of new curb.

These improvements are designed to ensure that Vineyard Road meets the required cross-sectional standards, thereby enhancing traffic flow and pedestrian safety.

3.3.4 Right-of-Way Requirements

Right-of-way acquisition is needed in two locations within Alternative 1 requiring a total of 0.51 acres (22,215.6 square feet) of new right-of-way. The two locations where right-of-way acquisition is required are between 10th Street and 11th Street, and from 405 feet east of 8th Street to 411 feet west of 10th Street – both on the north side of the Vineyard Road. There are a total of six properties impacted, and the Assessor's Parcel Number (APN) for the impacted properties, from west to east, include:

- 114-25-042A
- 114-25-051
- 114-25-052
- 114-24-013A
- 114-24-016A
- 114-24-055

3.3.5 Planning-Level-Cost Estimate

Itemized planning-level cost estimate for Alternative 1 was developed utilizing unit costs, assumptions, and allowances provided by the City of Phoenix and for FY 2024/2025 costs and percentages. As shown in **Table 3-5**, the planning-level cost estimate for seven years from FY 2024/2025 through FY 2030/2031 utilizing a four percent inflation factor. The planning-level cost estimate for Alternative 1 is $16,842,825.74 in FY 2024/205, and $21,311,547.73 in FY 2030/2031, the assumed timeframe for potential implementation.

Table 3-5: Alternative 1 Itemized Planning-Level Cost Estimate

Vineyard Road Pedestrian Safety Study - Alternative 1											
Construction	**Qty**	**Unit**	**Unit Cost**	**Total Cost 24/25**	**Total Cost 25/26**	**Total Cost 26/27**	**Total Cost 27/28**	**Total Cost 28/29**	**Total Cost 29/30**	**Total Cost 30/31**
Reg Corner ADA Ramp	20	EA	$ 7,500.00	$ 150,000						
Pavement Section 2: 5" AC over 6" ABC	29,190	SF	$ 184.41	$ 5,382,928						
Roll Curb & Gutter	5,103	LF	$ 18.56	$ 94,712						
Streetlight - (Poles, Luminaires, Wiring) ESTIMATED	22	EA	$ 8,000.00	$ 176,000						
Streetlight Trenching/Power/J-Box	10,635	LF	$ 40.00	$ 425,400						
Directional boring (assumes 100' per street light)	2,200	LF	$ 60.00	$ 132,000						
Landscape Wall	417	LF	$ 130.00	$ 54,210						
Remove Landscape Wall	417	LF	$ 30.00	$ 12,510						
Pavement Marking - Yellow (4,285 LF 4" stripe + 552 LF 12" stripe)	5941	LF	$ 0.40	$ 2,376						
Remove Chain Link Fence (Iron fence)	741	LF	$ 21.00	$ 15,561						
Remove Concrete D/W, S/W, Vg, Slab, Etc. (15,791 SF SW + 11,799 SF AC)	27590	SF	$ 5.00	$ 137,950						
Remove Roll Curb	3997	LF	$ 5.00	$ 19,985						
Sidewalk 5Ft Local Street (<1000Sf $16) [Both Sides]	22626	SF	$ 10.00	$ 226,260						
Surface Treatment (Micro/Slurry)	90,000	SY	$ 7.59	$ 683,100						
Survey/Utility & Row Mapping/Const Docs 30% Roll Plot	1	EA	$ 9,600.00	$ 9,600						
Tree Removal	3	LS	$ 1,500.00	$ 4,500						
Wrought Iron Fence and Sliding Gate	741	LF	$ 50.00	$ 37,050						
Construction				**$ 7,564,141.98**	**$ 7,866,707.66**	**$ 8,181,375.97**	**$ 8,508,631.00**	**$ 8,848,976.24**	**$ 9,202,935.29**	**$ 9,571,052.71**
SWPP Allowance (.75%)			0.75%	$ 56,731.06	$ 59,000.31	$ 61,360.32	$ 63,814.73	$ 66,367.32	$ 69,022.01	$ 71,782.90
Misc Removal and other work (2%)			2%	$ 151,282.84	$ 157,334.15	$ 163,627.52	$ 170,172.62	$ 176,979.52	$ 184,058.71	$ 191,421.05
SURVEY/UTILITY & ROW MAPPING/CONST DOCS 30% ROLL PLOT			2%	$ 151,282.84	$ 157,334.15	$ 163,627.52	$ 170,172.62	$ 176,979.52	$ 184,058.71	$ 191,421.05
Mobilization			2%	$ 151,282.84	$ 157,334.15	$ 163,627.52	$ 170,172.62	$ 176,979.52	$ 184,058.71	$ 191,421.05
Traffic Control/Police Officer			6%	$ 453,848.52	$ 472,002.46	$ 490,882.56	$ 510,517.86	$ 530,938.57	$ 552,176.12	$ 574,263.16
Allowance for Extra Work (0-10% of subtotal depending on site conditions)			10%	$ 756,414.20	$ 786,670.77	$ 818,137.60	$ 850,863.10	$ 884,897.62	$ 920,293.53	$ 957,105.27
Contingency (20%)			20%	$ 1,512,828.40	$ 1,573,341.53	$ 1,636,275.19	$ 1,701,726.20	$ 1,769,795.25	$ 1,840,587.06	$ 1,914,210.54
Total Project Construction Cost				**$ 10,797,812.68**	**$ 11,229,725.18**	**$ 11,678,914.19**	**$ 12,146,070.76**	**$ 12,631,913.59**	**$ 13,137,190.13**	**$ 13,662,677.74**
Pre-Design/Study			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Design ($50K minimum Major)			Min(50K/15% of Const)	$ 1,619,671.90	$ 1,684,458.78	$ 1,751,837.13	$ 1,821,910.61	$ 1,894,787.04	$ 1,970,578.52	$ 2,049,401.66
Design Admin			25% of Design	$ 404,917.98	$ 421,114.69	$ 437,959.28	$ 455,477.65	$ 473,696.76	$ 492,644.63	$ 512,350.42
Public Information Office (PIO)	1	EA	$ 30,000.00	$ 30,000.00	$ 31,200.00	$ 32,448.00	$ 33,745.92	$ 35,095.76	$ 36,499.59	$ 37,959.57
APS/SRP Design Fee	0	EA	$ 10,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
T2050 Streetlighting Fee (T2050 projects only)	2%		2% of Construction	$ 215,956.25	$ 224,594.50	$ 233,578.28	$ 242,921.42	$ 252,638.27	$ 262,743.80	$ 273,253.55
State Land Acquisition	0	SF	$ 10.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
State Land Admin per property of State Land	0	EA	$ 17,250.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW Acquisition per square foot of land	22215.6	SF	$ 7.55	$ 167,727.78	$ 174,436.89	$ 181,414.37	$ 188,670.94	$ 196,217.78	$ 204,066.49	$ 212,229.15
Appraisal per property	6	EA	$ 2,500.00	$ 15,000.00	$ 15,600.00	$ 16,224.00	$ 16,872.96	$ 17,547.88	$ 18,249.79	$ 18,979.79
Appraisal Admin per property	6	EA	$ 327.00	$ 1,962.00	$ 2,040.48	$ 2,122.10	$ 2,206.98	$ 2,295.26	$ 2,387.07	$ 2,482.56
Phase 1 Environmental per property	6	EA	$ 3,000.00	$ 18,000.00	$ 18,720.00	$ 19,468.80	$ 20,247.55	$ 21,057.45	$ 21,899.75	$ 22,775.74
Title Service Reports per property	6	EA	$ 650.00	$ 3,900.00	$ 4,056.00	$ 4,218.24	$ 4,386.97	$ 4,562.45	$ 4,744.95	$ 4,934.74
Title Service Legals/Deeds per property	6	EA	$ 327.00	$ 1,962.00	$ 2,040.48	$ 2,122.10	$ 2,206.98	$ 2,295.26	$ 2,387.07	$ 2,482.56
Real Estate Admin per property (Collector, Major)	6	EA	$ 8,000.00	$ 48,000.00	$ 49,920.00	$ 51,916.80	$ 53,993.47	$ 56,153.21	$ 58,399.34	$ 60,735.31
Real Estate TCE Charge for Federal Aid projects	0	EA	$ 10,800.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW Fee Title	22215.6	SF	$ 21.00	$ 466,527.60	$ 485,188.70	$ 504,596.25	$ 524,780.10	$ 545,771.31	$ 567,602.16	$ 590,306.24
Temporary Construction Easement	0	SF	$ 1.50	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Environmental Monitoring/Archeology ($100K Major) Use unless the Environmental section submits an estimate	1	Job	$ 20,000.00	$ 20,000.00	$ 20,800.00	$ 21,632.00	$ 22,497.28	$ 23,397.17	$ 24,333.06	$ 25,306.38
DCM Construction Administration Fee (See list below)	Proj Type	1	20%	$ 2,159,562.54	$ 2,245,945.04	$ 2,335,782.84	$ 2,429,214.15	$ 2,526,382.72	$ 2,627,438.03	$ 2,732,535.55
Procurement - Construction	1	EA	$ 8,000.00	$ 8,000.00	$ 8,320.00	$ 8,652.80	$ 8,998.91	$ 9,358.87	$ 9,733.22	$ 10,122.55
Testing & Materials (1%)		EA	1% of Construction	$ 107,978.13	$ 112,297.25	$ 116,789.14	$ 121,460.71	$ 126,319.14	$ 131,371.90	$ 136,626.78
Utilities Adjustment (5%)		6	5% of Construction	$ 647,868.76	$ 673,783.51	$ 700,734.85	$ 728,764.25	$ 757,914.82	$ 788,231.41	$ 819,760.66
Utility Inspection			1% of Construction	$ 107,978.13	$ 112,297.25	$ 116,789.14	$ 121,460.71	$ 126,319.14	$ 131,371.90	$ 136,626.78
Inflation Increase per Year				0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Project Grand Total				**$ 16,842,825.74**	**$ 17,516,538.77**	**$ 18,217,200.32**	**$ 18,945,888.33**	**$ 19,703,723.86**	**$ 20,491,872.82**	**$ 21,311,547.73**

3.4 Alternative 2: Modified Cross Section F with Enhanced Sidewalk and Traffic Calming

As previously mentioned, the Vineyard Road Corridor is classified as a minor collector with on-street parking per the City of Phoenix SPDGM. As shown in **Figure 2-1**, Alternative 2 ensures the Vineyard Road Corridor meets the standard for Cross Section F per the City's SPDGM. However, Alternative 2 includes some modifications to the standard cross section.

The pavement section is reduced from 40 feet to 30 feet between 10th Street and 11th Street to minimize right-of-way impacts and eliminate on-street parking on the south side of the road, while accommodating the construction of a new five-foot sidewalk on the north side. Additionally, the existing four-foot sidewalk on the south side is replaced with an eight-foot-wide sidewalk. This eight-foot sidewalk improvement extends to 14th Street, connecting to an existing eight-foot-wide sidewalk, thereby ensuring a consistent sidewalk width from 16th Street to 10th Street.

Another modification occurs from 680 feet west of 16th Street to 16th Street on the north side of Vineyard Road, involving the construction of a five-foot-wide landscape buffer between the curb and the sidewalk. This landscape buffer enhances pedestrian safety by providing additional separation from vehicular traffic, supplementing the protection offered by the curb and adjacent on-street parking.

Alternative 2 incorporates traffic calming measures strategically distributed along the corridor. These measures include mid-block neckdowns or "pinch-points," which are mid-block bulb-outs designed to physically and visually constrict the roadway, commonly referred to as chokers according to the City of Phoenix SPDGM. Chokers are mid-block curb extensions placed opposite each other to physically narrow the roadway, forcing motorists to reduce speed and yield to oncoming traffic to pass before proceeding. They can add also public space to the sidewalk realm by allowing for additional landscaping/streetscaping.

In all other locations, Alternative 2 preserves 40-foot pavement sections, comprising two 12-foot travel lanes and two eight-foot on-street parking lanes. Additionally, sidewalks are widened from four feet to five feet where applicable.

To adequately display Alternative 2: Cross Section F with Enhanced Sidewalk and Traffic Calming, conceptual design exhibits were developed that include roadway improvement elements, right-of-way, ownership information, sidewalks, streeting lighting, and utilities. This section will reference the three base map sheets listed below:

- **Figure 3-4:** Vineyard Road Alternative 2: Modified Cross Section F with Enhanced Sidewalk and Traffic Calming – 7th Street to 140 feet west of 10th Street
- **Figure 3-5:** Vineyard Road Alternative 2: Modified Cross Section F with Enhanced Sidewalk and Traffic Calming – 140 feet west of 10th Street to 13th Street
- **Figure 3-6**: Vineyard Road Alternative 2: Modified Cross Section F with Enhanced Sidewalk and Traffic Calming – 13th Street to 16th Street

Figure 3-4: Vineyard Road Alternative 2: Modified Cross Section F with Enhanced Sidewalk and Traffic Calming – 7th Street to 140 feet west of 10th Street

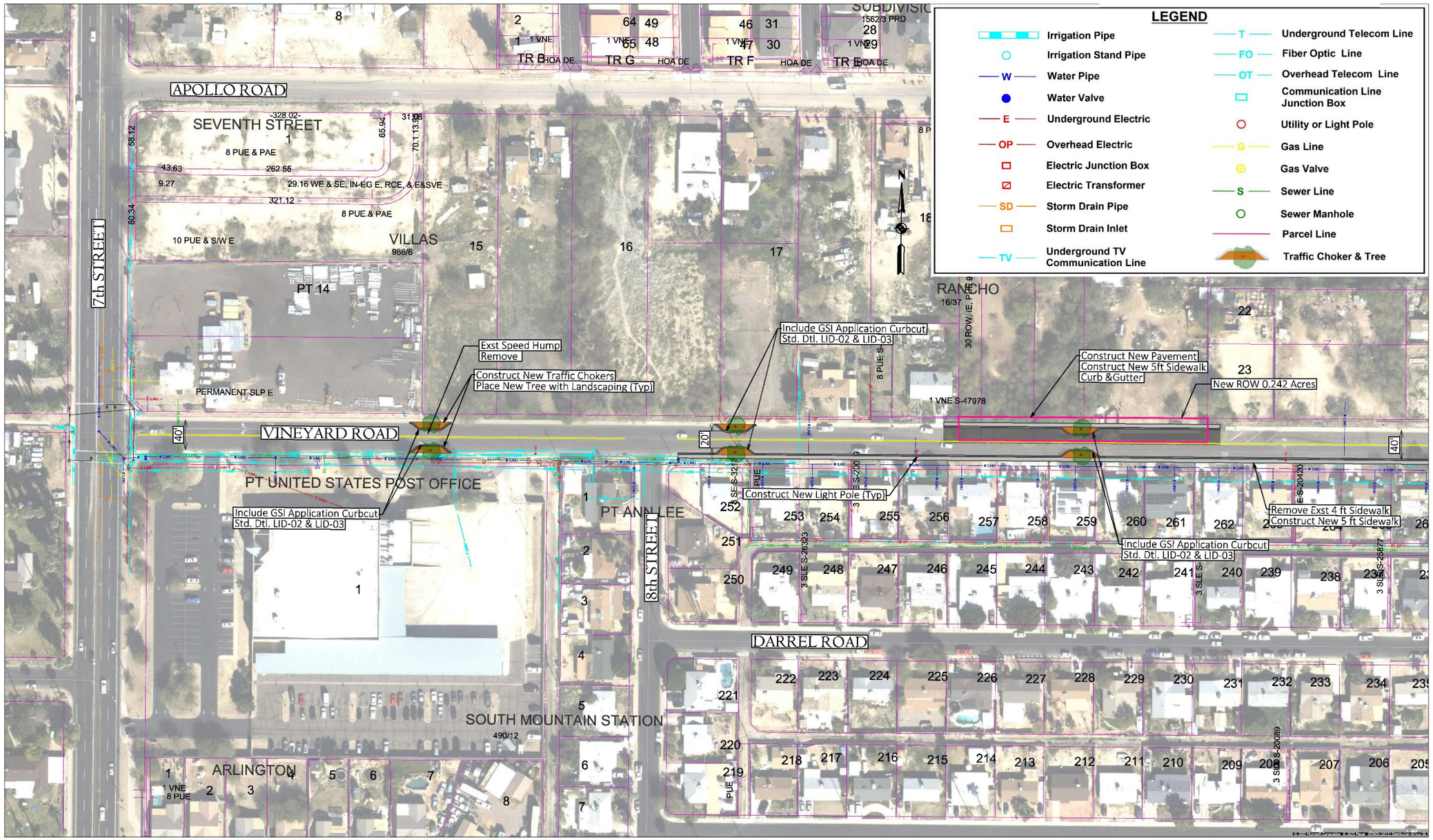


Figure 3-5: Alternative 2: Modified Cross Section F with Enhanced Sidewalk and Traffic Calming – 140 feet west of 10th Street to 13th Street

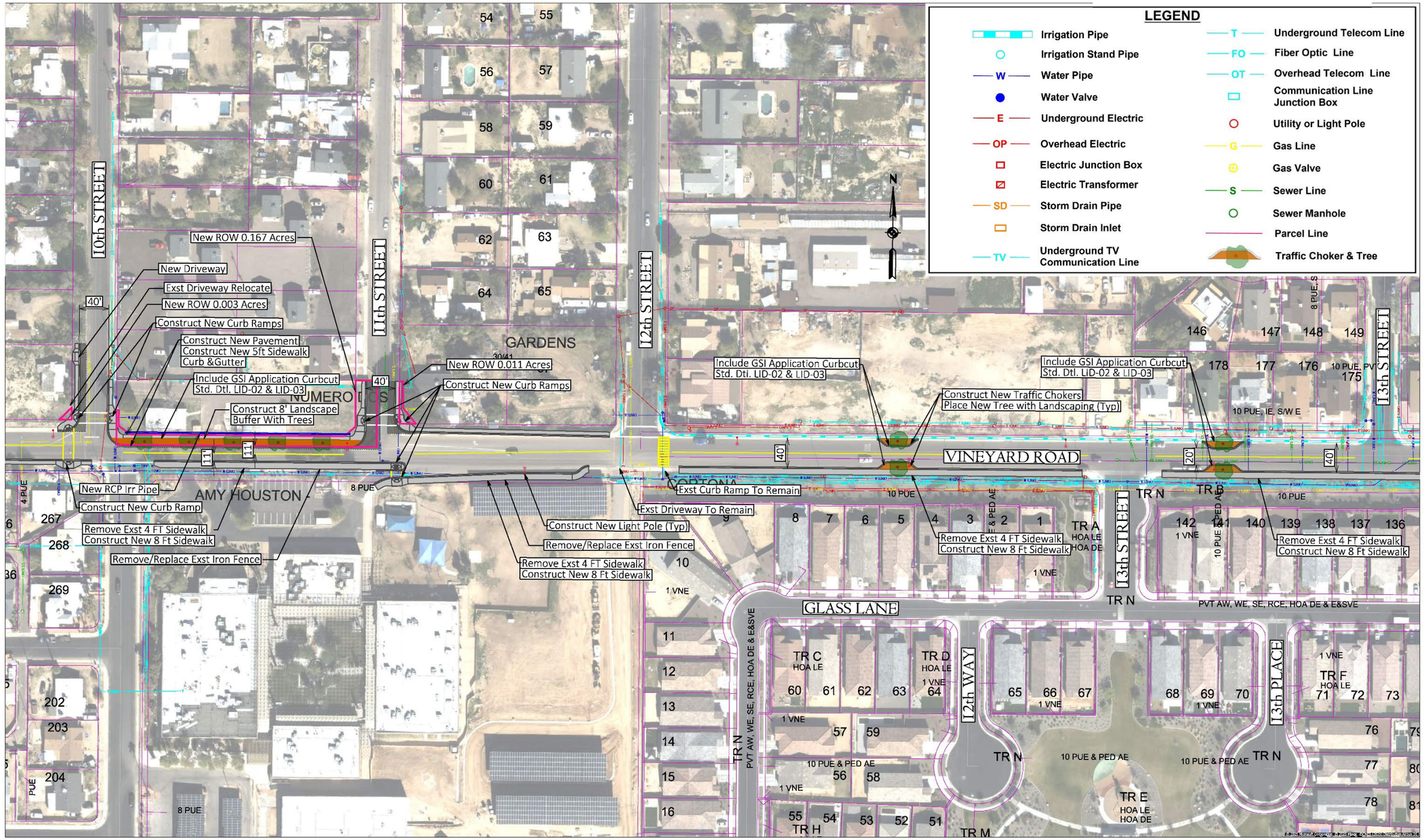
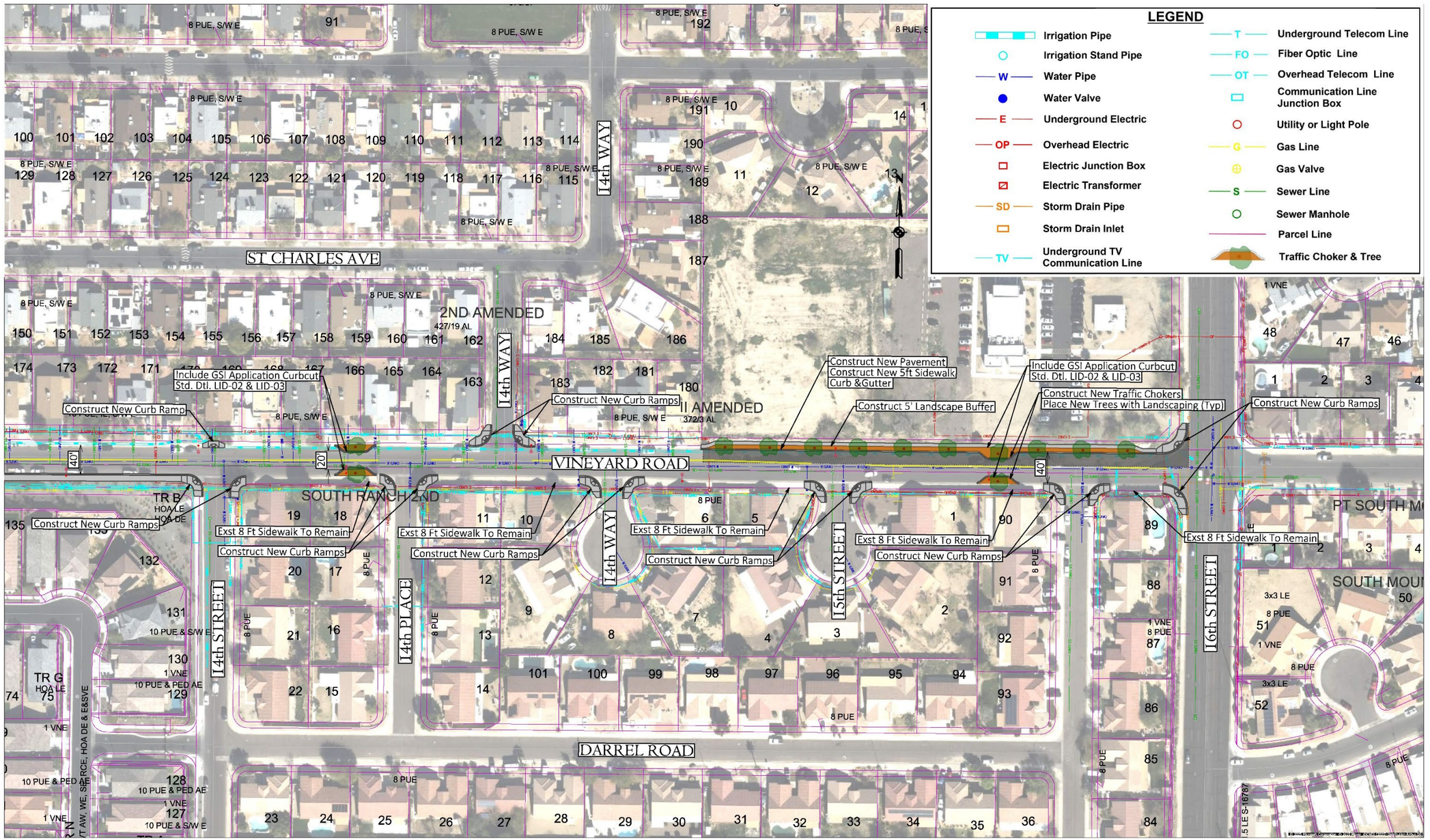


Figure 3-6: Alternative 2: Modified Cross Section F with Enhanced Sidewalk and Traffic Calming – 13th Street to 16th Street



3.4.1 Sidewalks Improvements

Alternative 2 involves a comprehensive approach to sidewalk enhancements and new constructions across multiple sections of the corridor. The newly built sidewalks eliminate existing connectivity gaps, providing uninterrupted pedestrian pathways throughout the area. Simultaneously, the upgraded sidewalks are brought up to the 5-foot width standard, as outlined in the SPDGM Cross Section F. In addition, Alternative 2 includes an extension of an 8-foot-wide sidewalk on the south side of the road. This alternative comprises five distinct sidewalk improvement initiatives, including:

- A new 5-foot-wide sidewalk on the north side of Vineyard Road from 680 feet west of 16th Street to16th Street. This sidewalk improvement is further enhanced with the introduction of a 5-foot-wide landscape buffer from the back-of-curb to the edge of the sidewalk.
- A new 5-foot-wide sidewalk on the north side of Vineyard Road between 10th Street and 11th Street.
- A new 5-foot-wide sidewalk on the north side of Vineyard Road from 411 feet west of 10th Street to 10th Street.
- Removal of an existing 4-foot-wide sidewalk and replaced with a 5-foot sidewalk on the north side of Vineyard Road from 11th Street to 12th Street.
- Removal of an existing 4-foot-wide sidewalk and replaced with an 8-foot sidewalk from 14th Street to 10th Street.
- Removal of an existing 4-foot-wide sidewalk and replaced with a 5-foot sidewalk from 8th Street to 10th Street.

3.4.2 Curb Ramp Improvements

Alternative 2 focuses on the installation of new curb ramps and the enhancement of existing ones along the corridor. This approach guarantees that all non-ADA-compliant curb ramps are reconstructed to adhere to ADA standards. Overall, Alternative 2 encompasses the construction or upgrade of 21 curb ramps, as outlined below:

- The 10th Street intersection includes five new or reconstructed curb ramps.
    - Two new curb ramps at the northwest corner, one reconstructed curb ramp at the southwest corner, and two new curb ramps at the northeast corner.
- The 11th Street intersection includes four new or reconstructed curb ramps.
    - One new curb ramp at the northwest corner, one new curb ramp at the northeast corner, and two reconstructed curb ramps at the south corner of the three-leg intersection near the school driveway.
- The 14th Street intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 14th Place intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 14th Place intersection includes three reconstructed curb ramps, one at each of the southwest, southeast, and northeast corners.

- The 15th Street intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 15th Place intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 16th Street intersection includes two reconstructed curb ramps, one at each of the northwest and southwest corners.

As shown in the City of Phoenix Supplemental Standard Details for Public Works Construction (2021), the standard details for curb ramps include P1236, P1237, P1239, P1240/P1240-1, and P1241-1/P1241-4.

3.4.3 Roadway Improvements

Alternative 2 encompasses three specific roadway enhancements at locations where Vineyard Road is recommended to be widened to address existing half-street conditions, and are located at the following segments:

- From 405 feet east of 8th Street to 411 feet west of 10th Street.
  - This improvement conforms with Cross Section F including the construction of a curb/gutter and additional Asphaltic Concrete (AC) to ensure two 12-foot travel lanes and two eight-foot on-street parking lanes within a 40-foot-wide pavement section.
- From 10th Street to 11th Street.
  - This improvement is a modification from Cross Section F with a reduced pavement section from 40 feet to 30 feet. This segment eliminates on-street parking on the south side of the road, while accommodating the construction of a new five-foot sidewalk on the north side and incorporating on-street parking on the north side of the road. The on-street parking on the north side of the road is separated by three mid-block bulb-outs that physically and visually narrow the roadway while also enhancing the pedestrian environment by allowing for additional landscaping/streetscaping.
  - This segment includes the widening of 11th Street to achieve a 40-foot pavement section.
- From 265 feet west of 14th Way to 16th Street.
  - This improvement conforms with Cross Section F including the construction of a curb/gutter and additional Asphaltic Concrete (AC) to ensure two 12-foot travel lanes and two eight-foot on-street parking lanes within a 40-foot-wide pavement section.

In addition, Alternative 2 includes seven sets of chokers strategically placed along the corridor, as well as new and improved crosswalks at 10th Street, 11th Street and 12th Street. These improvements include new landscaping/tress, construction of a curb/gutter, and/or additional AC pavement, which equates to approximately 24,936 square feet of new AC pavement and 4,902 linear feet of new curb, 3,223 square feet of landscaping, and 15 trees.

Alternative 2 presents opportunities for green stormwater infrastructure (GSI)/low-impact development (LID) applications opportunities with the use of curb openings to allow stormwater to flow into chokers and landscape buffers noted in the City of Phoenix Supplemental Standard Details for Public Works Construction, LID-02 and LID-03 can be used to accomplish these applications of GSI/LID within Alternative 2.

These improvements are designed to ensure that Vineyard Road meets the required cross-sectional standards, while also incorporating modifications to further enhance traffic flow and pedestrian safety.

3.4.4 Right-of-Way Requirements

Right-of-way acquisition is needed in two locations within Alternative 2 requiring a total of 0.42 acres (18,295.2 square feet) of new right-of-way. The two locations where right-of-way acquisition is required are between 10th Street and 11th Street, and from 405 feet east of 8th Street to 411 feet west of 10th Street – both on the north side of the Vineyard Road. There are a total of six properties impacted, and the APN for the impacted properties, from west to east, include:

- 114-25-042A
- 114-25-051
- 114-25-052
- 114-24-013A
- 114-24-016A
- 114-24-055

3.4.5 Planning-Level-Cost Estimate

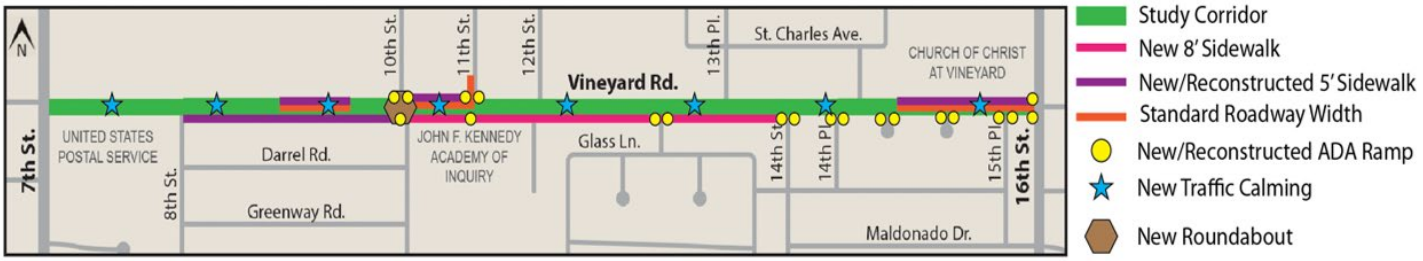
Itemized planning-level cost estimate for Alternative 2 was developed utilizing unit costs, assumptions, and allowances provided by the City of Phoenix and for FY 2024/2025 costs and percentages. As shown in **Table 3-6**, the planning-level cost estimate for seven years from FY 2024/2025 through FY 2030/2031 utilizing a four percent inflation factor. The planning-level cost estimate for Alternative 2 is $15,495,335.21 in FY 2024/205, and $19,606,542.34 in FY 2030/2031, the assumed timeframe for potential implementation.

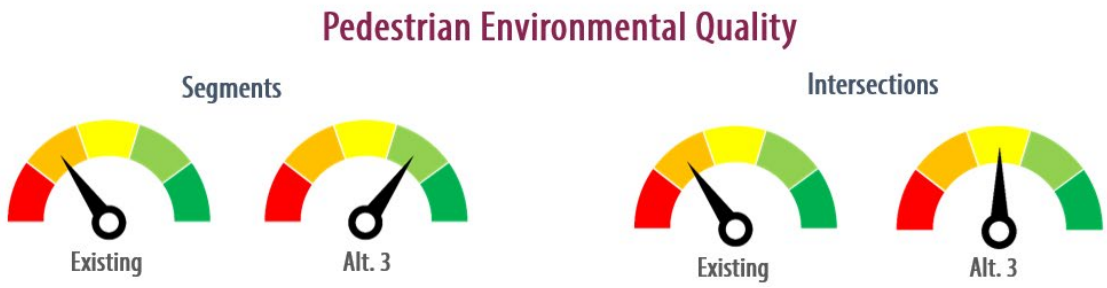
Table 3-6: Alternative 2 Itemized Planning-Level Cost Estimate

Vineyard Road Pedestrian Safety Study - Alternative 2										
Construction	**Qty**	**Unit**	**Unit Cost**	**Total Cost 24/25**	**Total Cost 25/26**	**Total Cost 26/27**	**Total Cost 27/28**	**Total Cost 28/29**	**Total Cost 29/30**	**Total Cost 30/31**
Reg Corner ADA Ramp	21	EA	$ 7,500.00	$ 157,500						
Pavement Section 2: 5" AC over 6" ABC	25,143	SF	$ 184.41	$ 4,636,621						
Roll Curb & Gutter	5,233	LF	$ 18.56	$ 97,124						
Streetlight - (Poles, Luminaires, Wiring) ESTIMATED	21	EA	$ 8,000.00	$ 168,000						
Streetlight Trenching/Power/J-Box	10,635	LF	$ 40.00	$ 425,400						
Directional boring (assumes 100' per street light)	2,200	LF	$ 60.00	$ 132,000						
Box Tree 24"	15	EA	$ 600.00	$ 9,000						
Irrigation Pipe	1050	LF	$ 3.00	$ 3,150						
Landscaping (Incl Plants, Irrig, Granite, etc.)	3223	SF	$ 4.00	$ 12,892						
Landscape Controller and Remote Control	14	EA	$ 500.00	$ 7,000						
Landscape Wall	417	LF	$ 130.00	$ 54,210						
Remove Landscape Wall	417	LF	$ 30.00	$ 12,510						
Pavement Marking - Yellow (4,295 LF 4" stripe + 540 LF 12" stripe)	5915	LF	$ 0.40	$ 2,366						
Remove Chain Link Fence (Iron fence)	741	LF	$ 21.00	$ 15,561						
Remove Concrete D/W, S/W, Vg, Slab, Etc. (18,200 SF SW + 12,777 SF AC)	30977	SF	$ 5.00	$ 154,885						
Sidewalk 5Ft Local Street (<1000Sf $16) [Both Sides]	30582	SF	$ 10.00	$ 305,820						
Surface Treatment (Micro/Slurry)	90,000	SY	$ 7.59	$ 683,100						
Survey/Utility & Row Mapping/Const Docs 30% Roll Plot	1	EA	$ 9,600.00	$ 9,600						
Tree Removal	3	LS	$ 1,500.00	$ 4,500						
Valve Box - Water/Irrigation	14	EA	$ 2,200.00	$ 30,800						
Wrought Iron Fence and Sliding Gate	741	LF	$ 50.00	$ 37,050						
Construction				**$ 6,982,264.11**	**$ 7,261,554.67**	**$ 7,552,016.86**	**$ 7,854,097.54**	**$ 8,168,261.44**	**$ 8,494,991.89**	**$ 8,834,791.57**
SWPP Allowance (.75%)			0.75%	$ 52,366.98	$ 54,461.66	$ 56,640.13	$ 58,905.73	$ 61,261.96	$ 63,712.44	$ 66,260.94
Misc Removal and other work (2%)			2%	$ 139,645.28	$ 145,231.09	$ 151,040.34	$ 157,081.95	$ 163,365.23	$ 169,899.84	$ 176,695.83
SURVEY/UTILITY & ROW MAPPING/CONST DOCS 30% ROLL PLOT			2%	$ 139,645.28	$ 145,231.09	$ 151,040.34	$ 157,081.95	$ 163,365.23	$ 169,899.84	$ 176,695.83
Mobilization			2%	$ 139,645.28	$ 145,231.09	$ 151,040.34	$ 157,081.95	$ 163,365.23	$ 169,899.84	$ 176,695.83
Traffic Control/Police Officer			6%	$ 418,935.85	$ 435,693.28	$ 453,121.01	$ 471,245.85	$ 490,095.69	$ 509,699.51	$ 530,087.49
Allowance for Extra Work (0-10% of subtotal depending on site conditions)			10%	$ 698,226.41	$ 726,155.47	$ 755,201.69	$ 785,409.75	$ 816,826.14	$ 849,499.19	$ 883,479.16
Contingency (20%)			20%	$ 1,396,452.82	$ 1,452,310.93	$ 1,510,403.37	$ 1,570,819.51	$ 1,633,652.29	$ 1,698,998.38	$ 1,766,958.31
Total Project Construction Cost				**$ 9,967,182.02**	**$ 10,365,869.30**	**$ 10,780,504.07**	**$ 11,211,724.23**	**$ 11,660,193.20**	**$ 12,126,600.93**	**$ 12,611,664.97**
Pre-Design/Study			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Design ($50K minimum Major)			Min(50K/15% of Const)	$ 1,495,077.30	$ 1,554,880.39	$ 1,617,075.61	$ 1,681,758.63	$ 1,749,028.98	$ 1,818,990.14	$ 1,891,749.75
Design Admin			25% of Design	$ 373,769.33	$ 388,720.10	$ 404,268.90	$ 420,439.66	$ 437,257.25	$ 454,747.53	$ 472,937.44
Public Information Office (PIO)	1	EA	$ 30,000.00	$ 30,000.00	$ 31,200.00	$ 32,448.00	$ 33,745.92	$ 35,095.76	$ 36,499.59	$ 37,959.57
APS/SRP Design Fee	0	EA	$ 10,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
T2050 Streetlighting Fee (T2050 projects only)	2%		2% of Construction	$ 199,343.64	$ 207,317.39	$ 215,610.08	$ 224,234.48	$ 233,203.86	$ 242,532.02	$ 252,233.30
State Land Acquisition	0	SF	$ 10.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
State Land Admin per property of State Land	0	EA	$ 17,250.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW Acquisition per square foot of land	18295.2	SF	$ 7.55	$ 138,128.76	$ 143,653.91	$ 149,400.07	$ 155,376.07	$ 161,591.11	$ 168,054.76	$ 174,776.95
Appraisal per property	6	EA	$ 2,500.00	$ 15,000.00	$ 15,600.00	$ 16,224.00	$ 16,872.96	$ 17,547.88	$ 18,249.79	$ 18,979.79
Appraisal Admin per property	6	EA	$ 327.00	$ 1,962.00	$ 2,040.48	$ 2,122.10	$ 2,206.98	$ 2,295.26	$ 2,387.07	$ 2,482.56
Phase 1 Environmental per property	6	EA	$ 3,000.00	$ 18,000.00	$ 18,720.00	$ 19,468.80	$ 20,247.55	$ 21,057.45	$ 21,899.75	$ 22,775.74
Title Service Reports per property	6	EA	$ 650.00	$ 3,900.00	$ 4,056.00	$ 4,218.24	$ 4,386.97	$ 4,562.45	$ 4,744.95	$ 4,934.74
Title Service Legals/Deeds per property	6	EA	$ 327.00	$ 1,962.00	$ 2,040.48	$ 2,122.10	$ 2,206.98	$ 2,295.26	$ 2,387.07	$ 2,482.56
Real Estate Admin per property (Collector, Major)	6	EA	$ 8,000.00	$ 48,000.00	$ 49,920.00	$ 51,916.80	$ 53,993.47	$ 56,153.21	$ 58,399.34	$ 60,735.31
Real Estate TCE Charge for Federal Aid projects	0	EA	$ 10,800.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW Fee Title	18295.2	SF	$ 21.00	$ 384,199.20	$ 399,567.17	$ 415,549.85	$ 432,171.85	$ 449,458.72	$ 467,437.07	$ 486,134.55
Temporary Construction Easement	0	SF	$ 1.50	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Environmental Monitoring/Archeology ($100K Major) Use unless the Environmental section submits an estimate	1	Job	$ 20,000.00	$ 20,000.00	$ 20,800.00	$ 21,632.00	$ 22,497.28	$ 23,397.17	$ 24,333.06	$ 25,306.38
DCM Construction Administration Fee (See list below)	Proj Type	1	20%	$ 1,993,436.40	$ 2,073,173.86	$ 2,156,100.81	$ 2,242,344.85	$ 2,332,038.64	$ 2,425,320.19	$ 2,522,332.99
Procurement - Construction	1	EA	$ 8,000.00	$ 8,000.00	$ 8,320.00	$ 8,652.80	$ 8,998.91	$ 9,358.87	$ 9,733.22	$ 10,122.55
Testing & Materials (1%)		EA	1% of Construction	$ 99,671.82	$ 103,658.69	$ 107,805.04	$ 112,117.24	$ 116,601.93	$ 121,266.01	$ 126,116.65
Utilities Adjustment (5%)		6	5% of Construction	$ 598,030.92	$ 621,952.16	$ 646,830.24	$ 672,703.45	$ 699,611.59	$ 727,596.06	$ 756,699.90
Utility Inspection			1% of Construction	$ 99,671.82	$ 103,658.69	$ 107,805.04	$ 112,117.24	$ 116,601.93	$ 121,266.01	$ 126,116.65
Inflation Increase per Year				0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Project Grand Total				**$ 15,495,335.21**	**$ 16,115,148.62**	**$ 16,759,754.56**	**$ 17,430,144.75**	**$ 18,127,350.54**	**$ 18,852,444.56**	**$ 19,606,542.34**

3.5 Alternative 3: Modified Cross Section F with Enhanced Sidewalk, Traffic Calming and Roundabout

As previously mentioned, the Vineyard Road Corridor is classified as a minor collector with on-street parking per the City of Phoenix SPDGM. As shown in **Figure 2-1**, Alternative 3 ensures the Vineyard Road Corridor meets the standard for Cross Section F per the City's SPDGM. However, Alternative 3 includes some modifications to the standard cross section.





The pavement section is reduced from 40 feet to 30 feet between 10th Street and 11th Street to minimize right-of-way impacts and eliminate on-street parking on the south side of the road, while accommodating the construction of a new five-foot sidewalk on the north side. Additionally, the existing four-foot sidewalk on the south side is replaced with an eight-foot-wide sidewalk. This eight-foot sidewalk improvement extends to 14th Street, connecting to an existing eight-foot-wide sidewalk, thereby ensuring a consistent sidewalk width from 16th Street to 10th Street.

Another modification occurs from 680 feet west of 16th Street to 16th Street on the north side of Vineyard Road, involving the construction of a five-foot-wide landscape buffer between the curb and the sidewalk. This landscape buffer enhances pedestrian safety by providing additional separation from vehicular traffic, supplementing the protection offered by the curb and adjacent on-street parking.

Alternative 3 incorporates traffic calming measures strategically distributed along the corridor. These chokers are mid-block curb extensions placed opposite each other to physically narrow the roadway, forcing motorists to reduce speed and yield to oncoming traffic to pass before proceeding.

The primary difference between Alternative 3 and Alternative 2 is a proposed roundabout at the intersection of 10th Street and Vineyard Road. The design of the roundabout aims to accommodate school buses and reduce vehicular delays observed at this intersection. Additionally, it addresses the challenges posed by the intersection's unusual geometry.

In all other locations, Alternative 3 preserves 40-foot pavement sections, comprising two 12-foot travel lanes and two eight-foot on-street parking lanes. Additionally, sidewalks are widened from four feet to five feet where applicable.

To adequately display Alternative 3: Cross Section F with Enhanced Sidewalk, Traffic Calming, and Roundabout, conceptual design exhibits were developed that include roadway improvement elements, right-of-way, ownership information, sidewalks, streeting lighting, and utilities. This section will reference the three base map sheets listed below:

- **Figure 3-7:** Vineyard Road Alternative 3: Modified Cross Section F with Enhanced Sidewalk, Traffic Calming and Roundabout – 7th Street to 140 feet west of 10th Street
- **Figure 3-8:** Vineyard Road Alternative 3: Modified Cross Section F with Enhanced Sidewalk, Traffic Calming and Roundabout – 140 feet west of 10th Street to 13th Street
- **Figure 3-9:** Vineyard Road Alternative 3: Modified Cross Section F with Enhanced Sidewalk, Traffic Calming and Roundabout – 13th Street to 16th Street

Figure 3-7: Alternative 3: Modified Cross Section F with Enhanced Sidewalk, Traffic Calming and Roundabout – 7th Street to 140 feet west of 10th Street

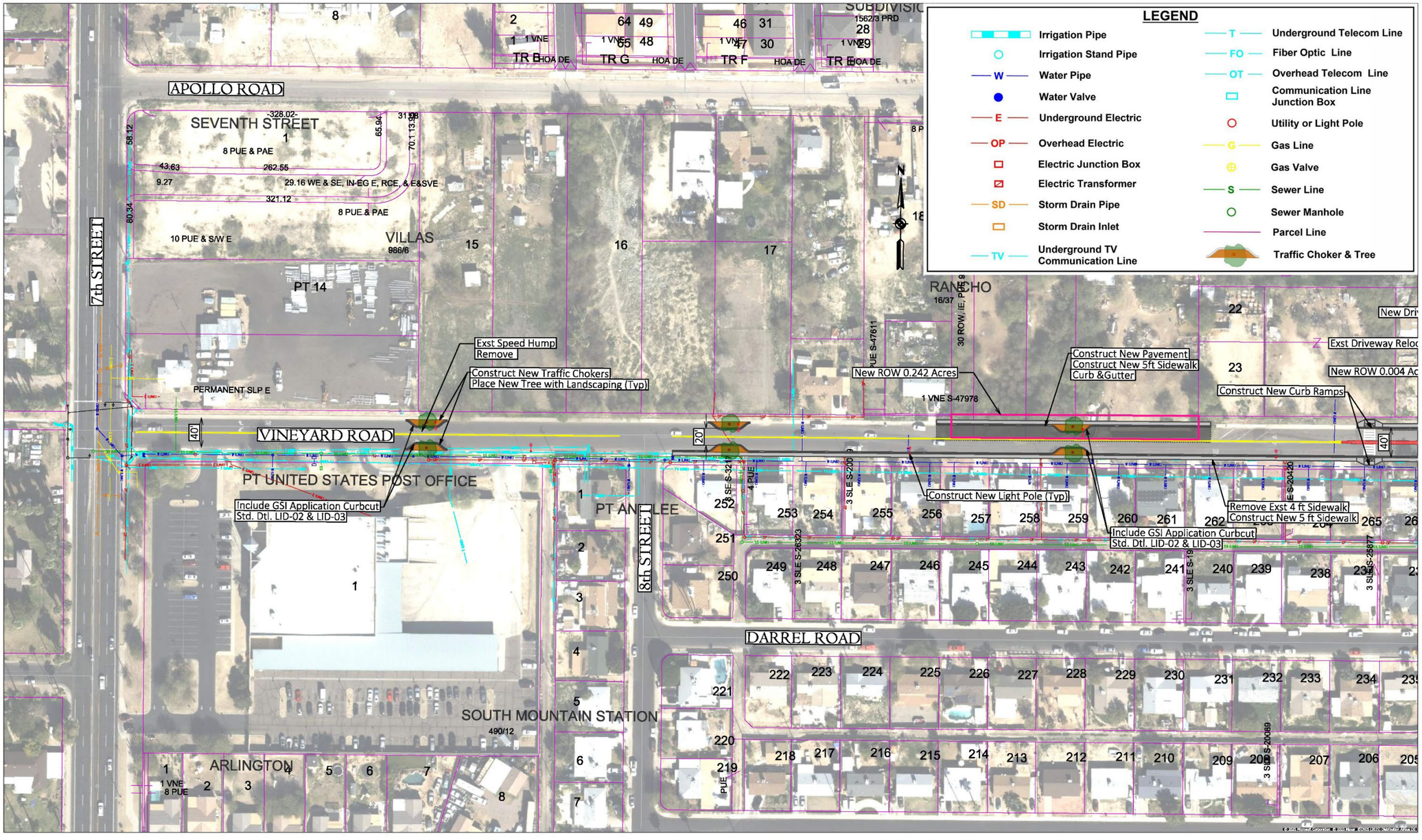


Figure 3-8: Alternative 3: Modified Cross Section F with Enhanced Sidewalk, Traffic Calming and Roundabout – 140 feet west of 10th Street to 13th Street

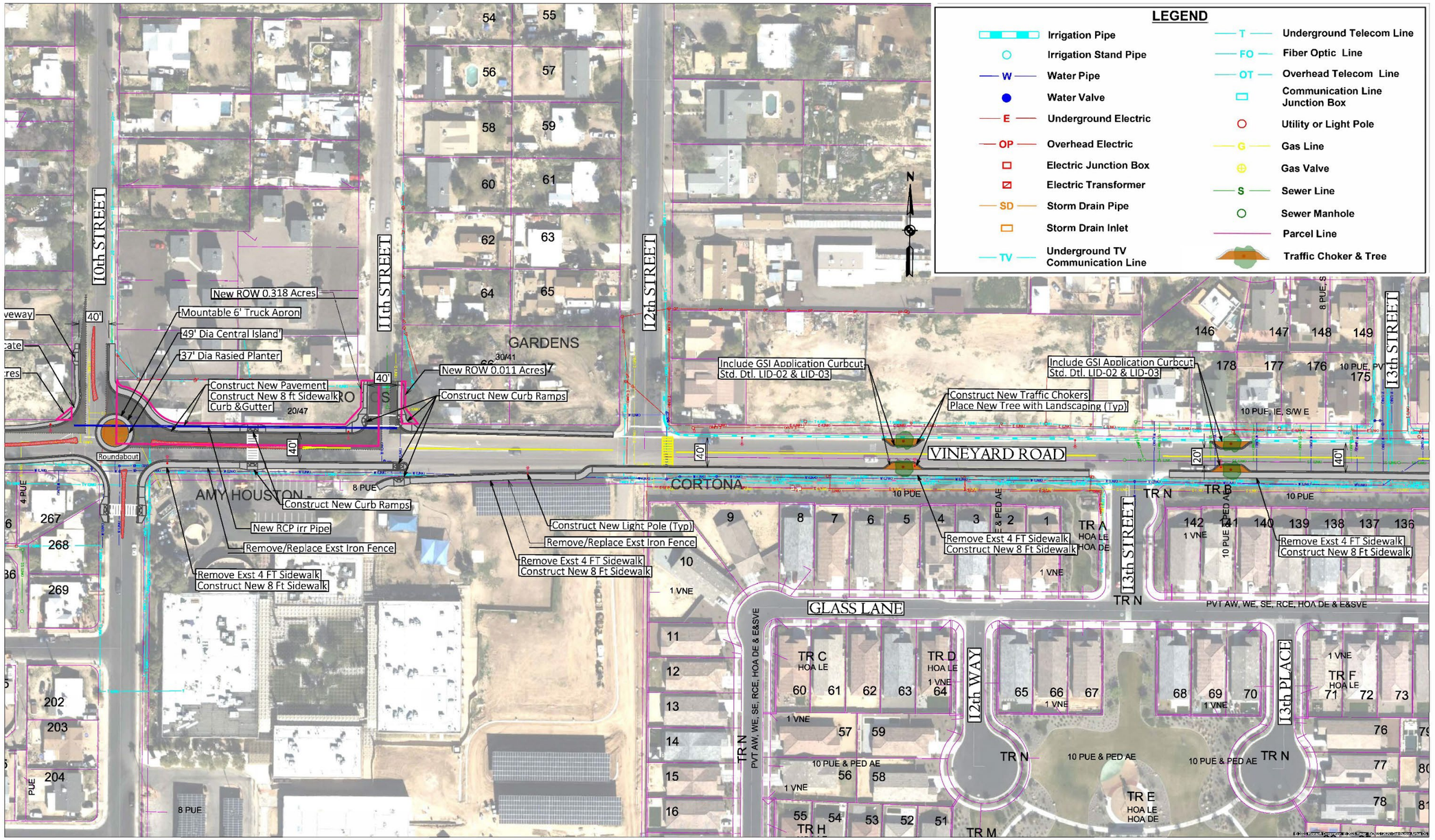
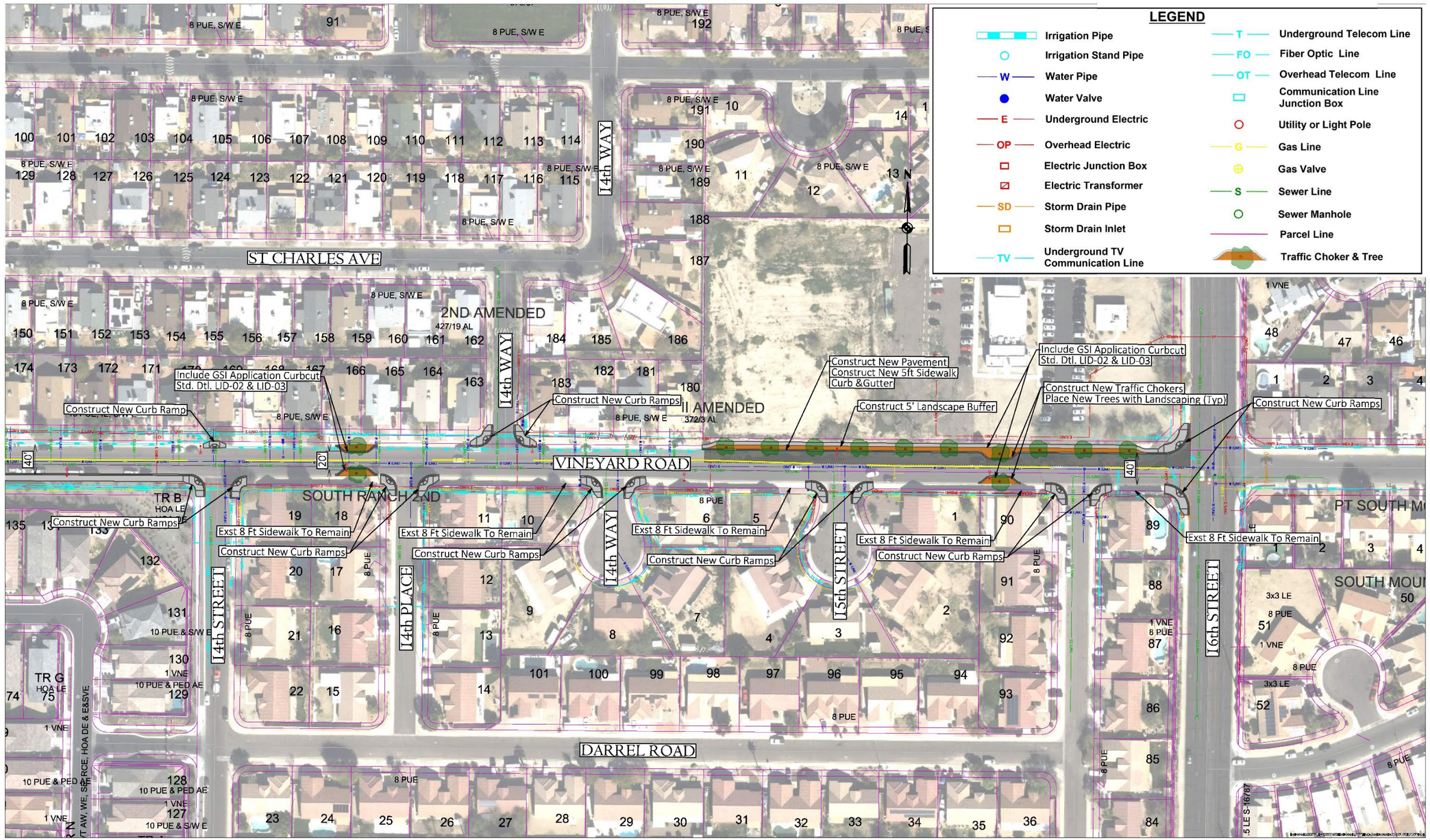


Figure 3-9: Alternative 3: Modified Cross Section F with Enhanced Sidewalk, Traffic Calming and Roundabout – 13th Street to 16th Street



3.5.1 Sidewalk Improvements

Alternative 3 involves a comprehensive approach to sidewalk enhancements and new constructions across multiple sections of the corridor. The newly built sidewalks eliminate existing connectivity gaps, providing uninterrupted pedestrian pathways throughout the area. Simultaneously, the upgraded sidewalks are brought up to the five-foot width standard, as outlined in the SPDGM Cross Section F. In addition, Alternative 3 includes an extension of an eight-foot-wide sidewalk on the south side of the road. This alternative comprises five distinct sidewalk improvement initiatives, including:

- A new five-foot-wide sidewalk on the north side of Vineyard Road from 680 feet west of 16th Street to16th Street. This sidewalk improvement is further enhanced with the introduction of a 5-foot-wide landscape buffer from the back-of-curb to the edge of the sidewalk.
- A new five-foot-wide sidewalk on the north side of Vineyard Road between 10th Street and 11th Street.
- A new five-foot-wide sidewalk on the north side of Vineyard Road from 411 feet west of 10th Street to 10th Street.
- Removal of an existing four-foot-wide sidewalk and replaced with a five-foot sidewalk on the north side of Vineyard Road from 11th Street to 12th Street.
- Removal of an existing four-foot-wide sidewalk and replaced with an eight-foot sidewalk from 14th Street to 10th Street.
- Removal of an existing four-foot-wide sidewalk and replaced with a 5-foot sidewalk from 8th Street to 10th Street.

3.5.2 Curb Ramp Improvements

Alternative 3 focuses on the installation of new curb ramps and the enhancement of existing ones along the corridor. This approach guarantees that all non-ADA-compliant curb ramps are reconstructed to adhere to ADA standards. Overall, Alternative 3 encompasses the construction or upgrade of 25 curb ramps, as outlined below:

- The 10th Street intersection includes eight new or relocated curb ramps as a result of the roundabout.
- The 11th Street intersection includes four new or reconstructed curb ramps.
    - One new curb ramp at the northwest corner, one new curb ramp at the northeast corner, and two reconstructed curb ramps at the south corner of the three-leg intersection near the school driveway.
- The 14th Street intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 14th Place intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 14th Place intersection includes three reconstructed curb ramps, one at each of the southwest, southeast, and northeast corners.
- The 15th Street intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.

- The 15th Place intersection includes two reconstructed curb ramps, one at each of the southwest and southeast corners.
- The 16th Street intersection includes two reconstructed curb ramps, one at each of the northwest and southwest corners.

3.5.3 Roadway Improvements

Alternative 3 encompasses three specific roadway enhancements at locations where Vineyard Road is recommended to be widened to address existing half-street conditions, and are located at the following segments:

- From 405 feet east of 8th Street to 411 feet west of 10th Street.
    - This improvement conforms with Cross Section F including the construction of a curb/gutter and additional Asphaltic Concrete (AC) to ensure two 12-foot travel lanes and two eight-foot on-street parking lanes within a 40-foot-wide pavement section.
- From 10th Street to 11th Street.
    - This improvement is a modification from Cross Section F with a reduced pavement section from 40 feet to 30 feet. This segment eliminates on-street parking on the south side of the road, while accommodating the construction of a new five-foot sidewalk on the north side and incorporating on-street parking on the north side of the road. The on-street parking on the north side of the road is separated by two mid-block bulb-outs that physically and visually narrow the roadway while also enhancing the pedestrian environment by allowing for additional landscaping/streetscaping.
    - This segment includes the widening of 11th Street to achieve a 40-foot pavement section.
    - This segment also includes a proposed roundabout at the intersection of 10th Street and Vineyard Road. The proposed roundabout is designed to accommodate school buses and address vehicular delay observed at this intersection while mitigate intersections with unusual geometry of the intersection.
        - A "conceptual" roundabout was recommended which accommodates the turning movements of a 40 ft, single axel bus with an inscribed diameter of 101 feet and a truck apron of 49 feet. A circular traffic circle was deemed functionally unsuitable based on limited turning movements (right turn encroachments into opposing lanes, or traffic island conflict with turning design vehicle). There may be driver perception issues as well due to the offset of the north and south legs of the intersection. The plan sheets call out a roundabout.
        - The roundabout n
- From 265 feet west of 14th Way to 16th Street.
    - This improvement conforms with Cross Section F including the construction of a curb/gutter and additional Asphaltic Concrete (AC) to ensure two 12-foot travel lanes and two eight-foot on-street parking lanes within a 40-foot-wide pavement section.

In addition, Alternative 3 includes seven sets of chokers strategically placed along the corridor, as well as new and improved crosswalks at 10th Street, 11th Street and 12th Street. These improvements include new

landscaping/tress, construction of a curb/gutter, and/or additional AC pavement, which equates to approximately 29,9975 square feet of new AC pavement and 5,897 linear feet of new curb, 3,223 square feet of landscaping, and 14 trees.

Alternative 3 presents opportunities for GSI/LID applications with the use of curb openings to allow stormwater to flow into chokers and landscape buffers. As noted in the City of Phoenix Supplemental Standard Details for Public Works Construction, LID-02 and LID-03 can be used to accomplish these applications of GSI/LID within Alternative 3.

These improvements are designed to ensure that Vineyard Road meets the required cross-sectional standards, while also incorporating modifications to further enhance traffic flow and pedestrian safety.

3.5.4 Right-of-Way Requirements

Right-of-way acquisition is needed in two locations within Alternative 3 requiring a total of 0.67 acres (29,185.2 square feet) of new right-of-way. The two locations where right-of-way acquisition is required are between 10th Street and 11th Street, and from 405 feet east of 8th Street to 411 feet west of 10th Street – both on the north side of the Vineyard Road. There are a total of six properties impacted, and the APN for the impacted properties, from west to east, include:

- 114-25-042A
- 114-25-051
- 114-25-052
- 114-24-013A
- 114-24-016A
- 114-24-055

3.5.5 Planning-Level-Cost Estimate

Itemized planning-level cost estimate for Alternative 3 was developed utilizing unit costs, assumptions, and allowances provided by the City of Phoenix and for FY 2024/2025 costs and percentages. As shown **Table 3-7**, the planning-level cost estimate for seven years from FY 2024/2025 through FY 2030/2031 utilizing a four percent inflation factor. The planning-level cost estimate for Alternative 3 is $18,299,007.90 in FY 2024/205, and $23,154,062.72 in FY 2030/2031, the assumed timeframe for potential implementation.

Table 3-7: Alternative 3 Itemized Planning-Level Cost Estimate

Vineyard Road Pedestrian Safety Study - Alternative 3											
Construction	**Qty**	**Unit**	**Unit Cost**	**Total Cost 24/25**	**Total Cost 25/26**	**Total Cost 26/27**	**Total Cost 27/28**	**Total Cost 28/29**	**Total Cost 29/30**	**Total Cost 30/31**
Reg Corner ADA Ramp	25	EA	$ 7,500.00	$ 187,500						
Pavement Section 2: 5" AC over 6" ABC	31,104	SF	$ 184.41	$ 5,735,889						
Roll Curb & Gutter	6,766	LF	$ 18.56	$ 125,577						
Streetlight - (Poles, Luminaires, Wiring) ESTIMATED	22	EA	$ 8,000.00	$ 176,000						
Streetlight Trenching/Power/J-Box	10,635	LF	$ 40.00	$ 425,400						
Directional boring (assumes 100' per street light)	2,200	LF	$ 60.00	$ 132,000						
Box Tree 24"	14	EA	$ 600.00	$ 8,400						
Concrete Aprons	489	SF	$ 10.00	$ 4,890						
Irrigation Pipe	1,023	LF	$ 3.00	$ 3,069						
Landscaping (Incl Plants, Irrig, Granite, etc.)	3,223	SF	$ 4.00	$ 12,892						
Landscape Controller and Remote Control	14	EA	$ 500.00	$ 7,000						
Landscape Wall	417	LF	$ 130.00	$ 54,210						
Remove Landscape Wall	417	LF	$ 30.00	$ 12,510						
Pavement Marking - Yellow (4,031 LF 4" stripe + 533 LF 12" stripe)	5,630	LF	$ 0.40	$ 2,252						
Remove Chain Link Fence (Iron fence)	741	LF	$ 21.00	$ 15,561						
Remove Concrete D/W, S/W, Vg, Slab, Etc. (17,333 SF SW + 12,544 SF AC)	29,877	SF	$ 5.00	$ 149,385						
Remove Roll Curb	4,419	LF	$ 5.00	$ 22,095						
Sidewalk 5Ft Local Street (<1000Sf $16) [Both Sides]	31,653	SF	$ 10.00	$ 316,530						
Surface Treatment (Micro/Slurry)	90,000	SY	$ 7.59	$ 683,100						
Survey/Utility & Row Mapping/Const Docs 30% Roll Plot	1	EA	$ 9,600.00	$ 9,600						
Tree Removal	3	LS	$ 1,500.00	$ 4,500						
Valve Box - Water/Irrigation	14	EA	$ 2,200.00	$ 30,800						
Wrought Iron Fence and Sliding Gate	741	LF	$ 50.00	$ 37,050						
Construction				**$ 8,156,209.60**	**$ 8,482,457.98**	**$ 8,821,756.30**	**$ 9,174,626.56**	**$ 9,541,611.62**	**$ 9,923,276.08**	**$ 10,320,207.13**
SWPP Allowance (.75%)			0.75%	$ 61,171.57	$ 63,618.43	$ 66,163.17	$ 68,809.70	$ 71,562.09	$ 74,424.57	$ 77,401.55
Misc Removal and other work (2%)			2%	$ 163,124.19	$ 169,649.16	$ 176,435.13	$ 183,492.53	$ 190,832.23	$ 198,465.52	$ 206,404.14
SURVEY/UTILITY & ROW MAPPING/CONST DOCS 30% ROLL PLOT			2%	$ 163,124.19	$ 169,649.16	$ 176,435.13	$ 183,492.53	$ 190,832.23	$ 198,465.52	$ 206,404.14
Mobilization			2%	$ 163,124.19	$ 169,649.16	$ 176,435.13	$ 183,492.53	$ 190,832.23	$ 198,465.52	$ 206,404.14
Traffic Control/Police Officer			6%	$ 489,372.58	$ 508,947.48	$ 529,305.38	$ 550,477.59	$ 572,496.70	$ 595,396.56	$ 619,212.43
Allowance for Extra Work (0-10% of subtotal depending on site conditions)			10%	$ 815,620.96	$ 848,245.80	$ 882,175.63	$ 917,462.66	$ 954,161.16	$ 992,327.61	$ 1,032,020.71
Contingency (20%)			20%	$ 1,631,241.92	$ 1,696,491.60	$ 1,764,351.26	$ 1,834,925.31	$ 1,908,322.32	$ 1,984,655.22	$ 2,064,041.43
Total Project Construction Cost				**$ 11,642,989.20**	**$ 12,108,708.77**	**$ 12,593,057.12**	**$ 13,096,779.41**	**$ 13,620,650.58**	**$ 14,165,476.61**	**$ 14,732,095.67**
Pre-Design/Study			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Design ($50K minimum Major)			Min(50K/15% of Const)	$ 1,746,448.38	$ 1,816,306.32	$ 1,888,958.57	$ 1,964,516.91	$ 2,043,097.59	$ 2,124,821.49	$ 2,209,814.35
Design Admin			25% of Design	$ 436,612.10	$ 454,076.58	$ 472,239.64	$ 491,129.23	$ 510,774.40	$ 531,205.37	$ 552,453.59
Public Information Office (PIO)	1	EA	$ 30,000.00	$ 30,000.00	$ 31,200.00	$ 32,448.00	$ 33,745.92	$ 35,095.76	$ 36,499.59	$ 37,959.57
APS/SRP Design Fee	0	EA	$ 10,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
T2050 Streetlighting Fee (T2050 projects only)	2%		2% of Construction	$ 232,859.78	$ 242,174.18	$ 251,861.14	$ 261,935.59	$ 272,413.01	$ 283,309.53	$ 294,641.91
State Land Acquisition	0	SF	$ 10.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
State Land Admin per property of State Land	0	EA	$ 17,250.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW Acquisition per square foot of land	29185.2	SF	$ 7.55	$ 220,348.26	$ 229,162.19	$ 238,328.68	$ 247,861.83	$ 257,776.30	$ 268,087.35	$ 278,810.84
Appraisal per property	6	EA	$ 2,500.00	$ 15,000.00	$ 15,600.00	$ 16,224.00	$ 16,872.96	$ 17,547.88	$ 18,249.79	$ 18,979.79
Appraisal Admin per property	6	EA	$ 327.00	$ 1,962.00	$ 2,040.48	$ 2,122.10	$ 2,206.98	$ 2,295.26	$ 2,387.07	$ 2,482.56
Phase 1 Environmental per property	6	EA	$ 3,000.00	$ 18,000.00	$ 18,720.00	$ 19,468.80	$ 20,247.55	$ 21,057.45	$ 21,899.75	$ 22,775.74
Title Service Reports per property	6	EA	$ 650.00	$ 3,900.00	$ 4,056.00	$ 4,218.24	$ 4,386.97	$ 4,562.45	$ 4,744.95	$ 4,934.74
Title Service Legals/Deeds per property	6	EA	$ 327.00	$ 1,962.00	$ 2,040.48	$ 2,122.10	$ 2,206.98	$ 2,295.26	$ 2,387.07	$ 2,482.56
Real Estate Admin per property (Collector, Major)	6	EA	$ 8,000.00	$ 48,000.00	$ 49,920.00	$ 51,916.80	$ 53,993.47	$ 56,153.21	$ 58,399.34	$ 60,735.31
Real Estate TCE Charge for Federal Aid projects	0	EA	$ 10,800.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW Fee Title	29185.2	SF	$ 21.00	$ 612,889.20	$ 637,404.77	$ 662,900.96	$ 689,417.00	$ 716,993.68	$ 745,673.42	$ 775,500.36
Temporary Construction Easement	0	SF	$ 1.50	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Environmental Monitoring/Archeology ($100K Major) Use unless the Environmental section submits an estimate	1	Job	$ 20,000.00	$ 20,000.00	$ 20,800.00	$ 21,632.00	$ 22,497.28	$ 23,397.17	$ 24,333.06	$ 25,306.38
DCM Construction Administration Fee (See list below)	Proj Type	1	20%	$ 2,328,597.84	$ 2,421,741.75	$ 2,518,611.42	$ 2,619,355.88	$ 2,724,130.12	$ 2,833,095.32	$ 2,946,419.13
Procurement - Construction	1	EA	$ 8,000.00	$ 8,000.00	$ 8,320.00	$ 8,652.80	$ 8,998.91	$ 9,358.87	$ 9,733.22	$ 10,122.55
Testing & Materials (1%)		EA	1% of Construction	$ 116,429.89	$ 121,087.09	$ 125,930.57	$ 130,967.79	$ 136,206.51	$ 141,654.77	$ 147,320.96
Utilities Adjustment (5%)		6	5% of Construction	$ 698,579.35	$ 726,522.53	$ 755,583.43	$ 785,806.76	$ 817,239.04	$ 849,928.60	$ 883,925.74
Utility Inspection			1% of Construction	$ 116,429.89	$ 121,087.09	$ 125,930.57	$ 130,967.79	$ 136,206.51	$ 141,654.77	$ 147,320.96
Inflation Increase per Year				0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Project Grand Total				**$ 18,299,007.90**	**$ 19,030,968.22**	**$ 19,792,206.95**	**$ 20,583,895.22**	**$ 21,407,251.03**	**$ 22,263,541.07**	**$ 23,154,082.72**

4.0 Implementation Considerations

Various project development topics require consideration during final design of any of the three Vineyard Road alternatives.

4.1 Design Principles Incorporated from City of Phoenix Street Planning and Design Guidelines Manual (SPDGM)

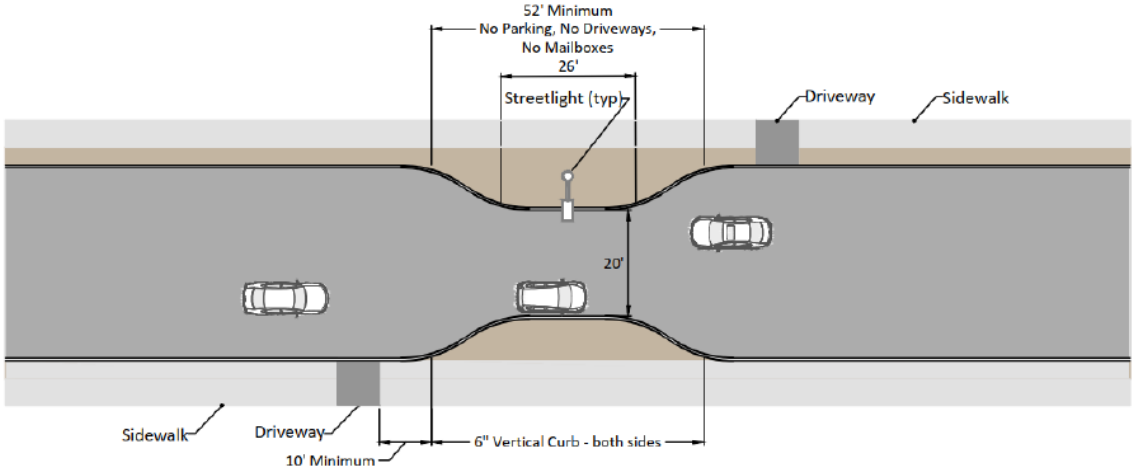
The three alternatives are in conformity with and incorporate many design principles from the City of Phoenix SPDGM (2023). Noteworthy principles related to Alternative 2 and Alternative 3 include chokers and roundabouts.

Chokers

Vineyard Road has been reported to experience excessive speeding. Traffic speeds can be reduced through mid-block chokers. As Shown in **Figure 4-1**, chokers are mid-block curb extensions placed opposite each other to physically narrow the roadway, forcing motorists to reduce speed and yield to oncoming traffic to pass before proceeding. Per the SPDGM, the following considerations should be included during design:

- Device is permissible on streets with posted speed of 30 mph or less.
- Device requires curb and gutter and must accommodate drainage.
- Location shall be installed in coordination with the City Street Light Policy.
- Should not be placed within driveways or near community mailboxes (at least 10' from the transition); chokers should be placed in open space areas.
- Device must be at least 500 feet from any other traffic calming device.
- Device must be placed at least 200 feet from a traffic control device.
- No parking shall be allowed within the limits of the choker.
- Bike lanes shall be accommodated in the design when built on a collector street; choker must be directly adjacent to the travel lane.

Figure 4-1: Choker Concept



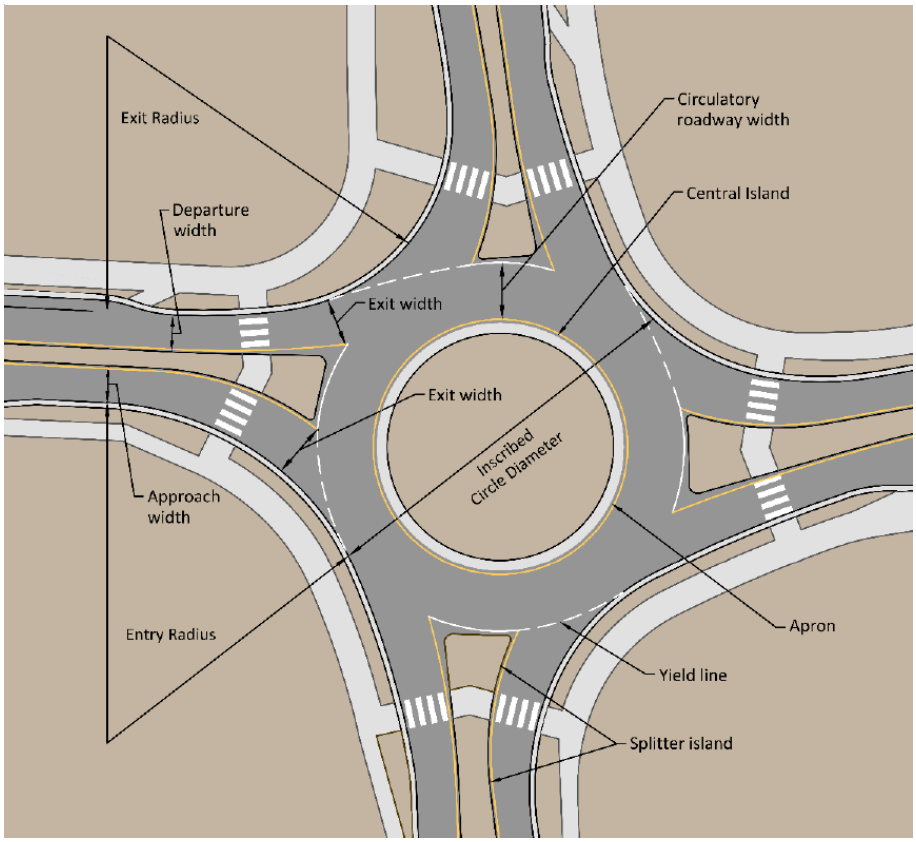
Roundabouts

Per the SPDGM, of roundabouts within the City of Phoenix should be at intersections of local/local, local/collector or collector/collector streets, which is in conformity with Alternative 3 roundabout at the intersection of Vineyard Road and 10th Street. Furthermore, the location of the proposed roundabout at 10th Street and Vineyard Road fall within many of the evaluation criteria as listed in the SPDGM, which include:

- At intersections where stop-control causes unnecessary delay
- At intersections with a high left-turn percentage from one or more intersection approaches
- Where a disproportionately high number of crashes involve crossing or turning traffic, resulting in head-on and right-angle crashes
- Where it is not desirable to give priority to either roadway
- At intersections with unusual geometry

However, the intersection of 10th Street and Vineyard Road does experience high pedestrian activity, which is a condition where SPDGM states roundabouts are not typically recommended but MAY be considered with City approval.

Figure 4-2: Key Roundabout Dimensions



For operational and design purposes, roundabouts have several unique features and dimensions that must be considered. City of Phoenix Street Transportation Department recommends following *Roundabouts: An Informational Guide*, U.S. Department of Transportation, Federal Highway Administration (FHWA), for development and design of roundabouts, as shown in **Figure 4-2**. FHWA describes the inscribed circle diameter as the basic parameter in roundabout design.

The inscribed circle diameter is the distance across the circle inscribed by the outer curb (or edge) of the circulatory roadway. It is the sum of the central island diameter (which includes the apron) and twice the circulatory roadway. The inscribed circle diameter is determined by multiple design objectives, which must be optimized for a given location. At single-lane round abouts, the size of the inscribed circle is largely dependent upon the turning requirements of the design vehicle. The design vehicle for the 10th Street and Vineyard Road roundabout is a school bus.

4.2 Design Principles Incorporated from City of Phoenix Supplemental Standard Details for Public Works Construction

The three alternatives are in conformity with and incorporate many design principles from the City of Phoenix Supplemental Standard Details for Public Works Construction (2021). Notable principles include curb ramps and Green Stormwater Infrastructure (GSI)/ low-impact development (LID)

4.2.1 Curb Ramps

As shown in the City of Phoenix Supplemental Standard Details for Public Works Construction (2021), the standard details for curb ramps as part of the three alternatives include P1236, P1237, P1239, P1240/P1240-1, and P1241-1/P1241-4.

4.2.2 Green Stormwater Infrastructure (GSI)/Low-Impact Development (LID)

As noted in Tech Memo #1, the Vineyard Road Corridor presents opportunities for green GSI/LID applications. GSI/LID opportunities are presented in Alternative 2 and Alternative 3 by inserting them into curb extensions and/or openings, modifying curbs to allow stormwater to flow into bioretention planters, landscape buffers, chokers, and curb bulb outs.

As noted in the City of Phoenix Supplemental Standard Details for Public Works Construction, LID-02 and LID-03 can be used to accomplish these applications of GSI/LID of the landscape buffers, chokers, and curb bulb outs within Alternative 2 and Alternative 3.

4.3 Drainage Requirements/Recommendations

No level of drainage report has been completed for the direct application of the improvements described in any of the three alternatives. The goal is to provide no adverse impacts by maintaining existing stormwater runoff flows and patterns. The GSI/LID opportunities included in Alternative 2 and Alternative 3 may require drainage analysis for potential impacts to the current drainage system should these physical enhancements to the corridor be implemented.

4.4 Seasonal Consideration for New Trees

Seasonal timing will need to be considered for the planting of the proposed new trees and landscaping along the roadway corridor. The project plan should develop a construction schedule that allows for the planting of these new trees in the fall. This means that the majority of construction will have been completed prior to planting these trees in the fall months. Due to the hot desert climate of Phoenix, it is recommended that new trees be planted in late October to early December. Planting new trees during this time of the year allows for the roots of the new trees to establish over the winter, strengthening the overall tree for the intense heat of summer in Phoenix.

Additionally, it is recommended that "tall pot" trees be planted. These trees, grown in tall containers, promote deep root growth and are well-suited for the desert environment. The Flood Control District of Maricopa County (FCDMC) has an agreement to sell these tall pot trees to other municipalities when they are available. This provides a reliable source for acquiring high-quality trees that can thrive in the local climate.

4.5 Construction and Contract Method

This project will be constructed using a combination of two contracting methods. The first method will be a Job Order Contract (JOC). Benefits of a JOC include minimal administration time to deliver improvements requiring minimal design effort. The second method will be a Design Bid Build (DBB) approach that will accommodate delivery of all recommendations that require design. This approach is typical for projects with the scale and complexity of the VRPSS alternatives.

The preferred alternative should categorize improvement elements into Tier 1, Tier 2, and Tier 3 based on the following criteria:

- Tier 1 Projects: Basic JOC/No or Minimal Design required. Includes ADA ramp projects to install new ADA curb ramps where none currently exist, existing ramps that require only truncated domes, easily constructed sidewalk projects with little to no obstructions ($0-$20K construction cost for obstructions), and bike lane striping projects.
- Tier 2 Projects: Sidewalk projects with some obstructions ($20-$50K construction cost for obstructions), such as trees, water meters, light poles, mailboxes, but currently has curb and gutter. Also includes street light projects to install new street lights to fill gaps between existing ones.
- Tier 3 Projects: Street modernization or major work required. Includes sidewalk, bike lane, road widening, and/or traffic calming projects needing paving, curb, and gutter, sidewalk, and have a large number of obstructions or right-of-way issues ($50K+ construction cost for obstructions). ADA curb ramp projects at traffic signalized intersections.

4.5.1 Funding

Funding will likely come from a combination of sources, including:

- City Budget Allocations: The City of Phoenix may allocate funds from its annual budget specifically for transportation and infrastructure improvements.
- Federal and State Grants: Various grants are available for pedestrian and cyclist safety projects, such as those from the FHWA and state transportation departments.
- Local Bonds: The city may issue bonds to raise funds for large-scale infrastructure projects.
- Private and Community Contributions: Local businesses, community organizations, and residents may contribute to funding through donations or partnerships.
- Job Order Contracts (JOC): The City's JOC mechanism allows for efficient implementation of smaller projects, which can be funded through existing city contracts.

These funding sources will be combined to ensure the successful implementation of the recommended mobility improvement along Vineyard Road.

Appendices

- Appendix A – Technical Advisory Committee (TAC) Kick-off Meeting Summary
- Appendix B – Stakeholder Focus Group Round #2 Engagement Summary
- Appendix C – Vineyard Road Study Corridor Alternatives15% Design Plans

Appendix A – Technical Advisory Committee (TAC) Kick-off Meeting Summary

Page intentionally left blank

Vineyard Road Pedestrian Safety Study

Kick-off Meeting

Date: Friday, July 19, 2024
Time: 10:30 am – 11:30 am
Location: Virtual – Microsoft Teams
Meeting ID: 278 073 859 229
Passcode: MATokm

Streets PHX
STREET TRANSPORTATION DEPARTMENT

Agenda

1) **Welcome and Introductions** — **10 min**
2) **Planning Process Overview** — **25 min**
   a) Purpose and Goals
   b) Study Corridor Overview
   c) Review Scope of Work (Attachment 1) and Project Schedule (Attachment 2)
3) **Technical Advisory Committee (TAC)** — **5 min**
   a) Members and Roles
      i) Discuss Deliverable Review Protocol
4) **Group Discussion** — **15 min**
   a) Issues, Concerns, and Objectives
5) **Next Steps** — **5 min**

Attendance

- Brian Fellows, Street Transportation Department, DCM
- Brian Snider, Michael Baker International
- Anne Thompson, Your Project Marketing and Outreach
- Rubben Lolly, deputy director, Streets, DCM
- Marielle Brown, Streets, DCM
- Tariq Momika, Streets, DCM
- Heather Murphy, Streets, CPET
- Nazar Nabaty, Streets, Floodplain Management Group
- Ryan Bentz, Streets, Floodplain Management Group
- Carl Langford, Streets, Traffic Services Division
- Heather Finden, Planning & Development Department
- Samuel Rogers, Planning & Development Department
- Kevin Weight, Historic Preservation Office
- David Penberthy, Public Works Department
- Marc Colombo, Public Works Department
- Patty Dunlap, Arts and Culture Office
- Rick Rojas, Public Works Department
- Steve Hidalgo, Public Works Department
- Kevin Teng, Public Transit Department
- Aaron Boydston, Water Services Department
- Smith Kundur, Michael Baker International
- Russell Moore, Michael Baker International

Meeting Summary

1) **Introduction**

   Brian Fellows facilitated TAC member introductions, provided an introduction to the study and some historical background.

2) **Planning Process Overview**

   Brian Snider presented the overall planning process of the study by reviewing the tasks within the scope of work, schedule, and an elaborate study corridor overview utilizing aerial mapping and Google Streetview.

3) **Group Discussion**

   Major takeaways from the presentation, the corridor overview, and the group discussion are as follows:

- Interested Stakeholders
  - The study team will meet with a variety of groups and individuals who represent the neighborhoods and institutions in the study area.
  - The team will attempt to identify who "adopted" the street and invite them to participate.
  - Heather Finden suggested the study references the planning committee docs including the character plan. The spirit of South Mountain Village is embodied in its abundant diversity. Its social fabric is marked by a rich variety of ethnicities, languages, cultures, mixed-income communities, and lifestyles.
    (1) 060818 SM Character Plan.indd (phoenix.gov)
    (2) South Mountain Village Planning Committee (phoenix.gov)
- Public Engagement
  - The team will work with CPET to create a survey, which will be distributed throughout the study area. The results will help inform the team's recommendations.
  - Brian Fellows is working with CPET to create the study web page on which the above survey link and additional project information and documents will be posted.
  - Public meeting 1: A pre-recorded virtual meeting will be held in fall 2024.
  - Public meeting 2: The study team will coordinate with the two neighborhood schools and attempt to dovetail with a school event in spring 2025. This meeting will focus on showing the team's findings and recommendations.
- City of Phoenix Public Works Department
  - It was noted that there have been issues with recycle collection in the area due to the narrow street. Trash pick-up is in the alley (on Fridays). Bulk Trash pick-up is transitioning to an appointment-based collection system and will be picked up curbside starting Sept 30, 2024.
  - Carl Langford: With respect to the narrow ROW sections between 10th St and 12th Street, the city receives complaints about trash pickup in this area in particular, due to the narrow street section. Standard trash cans and pick up are conducted in the alley. Recycling can and pick up occur on the front curb. Because the recycling cans can block this narrow section of roadway, the COP has residents put their recycling cans out early for pick up and COP returns the empty cans onto residents' driveways so the roadway is not obstructed during school morning peak traffic.
- Bicycle Infrastructure
  - It was stated that the team should consider bike lanes on Vineyard Road.
  - There may be an opportunity to continue a bike path through T-intersection at 7th Street. It was unknown if there is a city easement from 7th Street to Central Avenue.

- Marielle Brown noted that there is a geographical connection with the Streets Active Transportation Program's PhxCAN effort; depending on the status of the area's irrigation canals, SRP Aesthetics funds possibly could be used for bicycle infrastructure.
- Sam Rodgers stated that there is a planned multiuse path along the west side of 16th Street. (Sam shared his screen to display a map). He was not sure if any segments were constructed or not, but it is, at a minimum, planned. He believes some of the design spec's for this planned multiuse path consist of a 10-foot wide path within a 30-foot wide easement. Brian Snider noted that we hope to receive this information in the data collection effort. He provided:
  (1) The Multi-Use Trails are shown on the General Plan Trail Map https://www.phoenix.gov/pddsite/Documents/PlanPHX_City_Trail_System.pdf
  (2) City of Phoenix Standard Details for shared-use paths / multi-use trails are found in City of Phoenix Supplement to MAG Uniform Standard Specifications, section 429 and details P1130 and P1131: https://www.phoenix.gov/streetssite/Documents/2015%20City%20of%20Phoenix%20Supplement%20to%20the%202015%20MAG%20Specifications.pdf

- City of Phoenix Streets Floodplain Management Group
  - Nazar Nabaty stated that there may be potential to incorporate storm drain into the design plans. GIS can be reviewed by design firm. He also Suggested that the Hohokam ADMP be used to reference and understand local area stormwater characteristics and or floodplains. He noted that there is a COP storm drain in 7th Street.
    (1) Brian Fellows responded that there may be possible GSI applications for Vineyard Rd., but its uncertain right now. He also noted that if the existing irrigation lateral could convert to a GSI type improvement, this improvement could possibly incorporate some form of public art.
- City of Phoenix's Historic Preservation Office
  - Initially, there appears to be no historic sites within the study area. The team will continue to identify any other historic buildings, homes, or infrastructure.
  - Kevin Wright informed the group that the canals/acequias/community ditches within the study corridor are not historic - There was a comprehensive study done by SRP and US Bureau of Reclamation several years ago that identified irrigation laterals still remaining with historic significance and integrity. SRP, BoR, and the State Historic Preservation Office signed a Memorandum of Agreement to preserve the best remaining examples. This was not one of them (although there is on one Vineyard east of 24th St.).
    (1) Heather Murphy stated that acequias, or community ditches, are recognized under New Mexico law as political subdivisions of the state. Many of the state's acequia associations have been in existence since the Spanish colonization period of the 17th and 18th centuries.
- City of Phoenix Arts and Culture Office
  - There is potential to incorporate art into the canal improvements.
- Streetlights, Power Lines and Utilities
  - Tariq Momika stated that if lights should be improved, there should be streetlights 300 feet from intersection; and a potential to relocate above ground to underground power lines.
  - Sam Rodgers states that the canal did not appear on SRP's Open Lateral Canal Inventory
    (1) HP Programmatic Agreement (1).pdf

Attachment 1 – Scope of Work

Vineyard Road-School Pedestrian Safety Pre-Design Study

Scope of Work

Project Goals:

The goal of the Vineyard Road-School Pedestrian Safety Pre-Design Study (Study) is to evaluate alternatives and recommend enhanced mobility design solutions for Vineyard Road from 7th Street to 16th Street. Enhanced mobility alternatives and solutions that will improve the safety, accessibility, and multimodal connectivity of the area's residents, schools and the U.S. Post Office along Vineyard Road. The Study will primarily focus on constructing a sidewalk on the north side of the roadway, but will also evaluate additional multimodal facilities and safety infrastructure to improve the mobility and comfort of all roadway users.

Mobility, accessibility, and safety considerations for Vineyard Road should, at a minimum, include:

- Develop an inventory of study area needs and a phased approach to address identified needs;
- Consider installing new sidewalk(s) or modification to existing sidewalks to improve pedestrian and bicycle movements and safety;
- Consider integration of bicycle lanes and other improvements that will increase bicycling mobility;
- Address street lighting and possible shade and/or landscape improvements that could improve the safety and comfort of pedestrians and bicyclists;
- Recommend locations for installing wayfinding signage and pavement markings for safely and efficiently guiding pedestrians and bicyclists to key destinations;
- Consider use of High-Intensity Activated crosswalk (HAWK) beacons and/or Rectangular Rapid Flashing Beacons (RRFBs) to improve the safety of pedestrians and bicyclists as they cross arterial, collector, or otherwise high-volume or high-speed streets;
- Evaluate the roadway to identify opportunities for feasible traffic-calming applications;
- Improve road user safety and alleviate high-crash locations by identifying high-priority intersection and vehicular turning movement needs, using innovative and traditional methods;
- Accommodate enhanced accessibility to nearby transit services on 7th Street and 16th Street by identifying existing and future transit needs and incorporating transit needs into design recommendations for Vineyard Road.
- Identify, evaluate and coordinate with City of Phoenix Real Estate Department for the acquisition of properties that currently encroach into the Vineyard Road right-of-way in order to create a full width collector roadway;

- Identify any potentially effective transportation-related school or public safety roadway design or operational procedures in proximity to the John F. Kennedy Academy and CO Greenfield Academy facilities accessing Vineyard Road; and
- Engage and collaborate with key project stakeholders such as adjacent schools, citizen/community groups and present a project briefing to the South Mountain Village Planning Committee.

Project Administration:

Brian Fellows, Principal Planner, will serve as the City of Phoenix (COP) Project Manager for the Vineyard Road-School Pedestrian Safety Pre-Design Study. The Technical Consultant will confer with the Project Manager regularly to review Plan progress, present working papers and findings, and solicit direction.

The primary role of the project manager will be general project management for adherence to cost and schedule constraints. The project manager will provide key datasets throughout the study process and will provide City policy guidance and outlines of key deliverable processes in addition to review of key deliverables. The Technical Consultant will be responsible for compiling data and developing key reports, public involvement summaries, and assistance to the city's CPET public engagement consultant with public involvement surveys, display boards, and outreach materials.

The City will establish a Technical Advisory Committee (TAC) to closely coordinate and oversee the Technical Consultant's efforts for this study. The TAC will be comprised of technical experts from various City departments, who will be responsible for guidance of data collection and analysis, transportation planning, and technical review of key deliverables. Regularly-scheduled meetings with the TAC will allow the Technical Consultant to build and maintain the close working relationship essential for the project's success. The Technical Consultant will deliver to the Project Manager Technical Memorandum's developed during the Study at least one week prior to each TAC meeting with the intention of circulating to the TAC for review and comment. Relevant comments and requests will be incorporated into the working papers and final documents based on approval by the Project Manager.

Scope of Work:

Technical Consultant will perform the following tasks in conjunction with the City Project Manager:

Task 1. Project Kick–Off Meeting and Preliminary Site Visit

Participate in Kick-off Meeting with City Staff and/or TAC. The purpose of the kick-off meeting is as follows:

- Review project scope and schedule;
- Review/refine the project study area;
- Discuss internal project team communication and deliverables review protocol;

- Introduce and discuss public/stakeholder engagement protocol and collaborative methods with the City's CPET consultant for this project;
- Review the key deliverables outline provided by the technical consultant.
- Clarify the membership and role of the Technical Advisory Committee (TAC) and key stakeholders (Kennedy Elementary School and C.O. Greenfield school staff, South Phoenix Concerned Citizens and South Central Collaborative neighborhood organizations, US Postal Service, Church of Christ at Vineyard and police, fire, etc.).

Upon completion of the kick-off meeting, a project area field review/site visit with the project manager and technical consultant staff will be conducted to observe and document study area characteristics, and begin to understand the unique needs of the Vineyard Road study corridor.

Task 1 Deliverables: *Kick off Meeting Agenda*
Kick off Meeting Summary

Task 2. Data Collection

The Technical Consultant will request from the COP all available pertinent information related to the project study area. COP and city Project Manager will assist the Technical Consultant request to provide data shall include, to the extent available: approved site plans; utility plans; quarter section maps and base maps (topo, survey, ROW, easements, traffic interconnect data including traffic counts, signal operations data, striping plans, improvement plans) existing aerial photos; and other information identifying the location of streets, public rights of way (ROW), existing utilities, and existing and planned transportation facilities for all modes of transportation including public transit, bicycles, pedestrians, and automobiles. Inventories of existing general land uses within a 1/2-mile radius shall also be provided, as well as information about planned street or utility modifications in the project area.

The Technical Consultant shall work with COP Data and Mapping Services to obtain the following: as-built drawings, GIS data, and aerial base mapping. The Technical Consultant will collect available relevant data pertinent to on- and off-site conditions and regulations or procedures, which may influence the design concepts. General data pertaining to grades, hydrology, visual character, existing mature, character trees within/adjacent to the right-of-way, land use, easements, and utility information will be identified. In addition to these site factors, information pertaining to utilities, engineering constraints, site visibility, design, street light locations, maintenance concerns and COP design guidelines will be considered.

2.1 Obtain Existing Data: The Technical Consultant will obtain available site data and coordinate with COP staff to develop base mapping data. The focus will be on obtaining ROW and adjacent property base data that will serve as the basis for this design evaluation.

2.1.1 The Technical Consultant will create a photo inventory of the site to document existing conditions. Existing elements and features will be noted and incorporated as part of the conceptual design phase plans.

2.1.2 The Technical Consultant will maintain a data collection log for the COP documenting the data collected and its relevance to the study area as a deliverable.

2.1.3 The Technical Consultant will identify and compile local and regional planning documents applicable to the project including existing policies, regulations, zoning requirements, engineering, and planning documents, etc.

2.2 Review Existing Data: The Technical Consultant will coordinate with the COP to identify information included in previous documentation pertinent to the project.

2.2.1 Review existing ROW and survey data: The Technical Consultant will coordinate with the COP to identify where existing data is available with a focus on the evaluation and any past documentation/correspondence relating to the potential acquisition of ROW for adjacent properties, which will be the basis for project design.

2.2.2 Ownership /Identify Right of Way and Easements: The Technical Consultant will Identify existing ROW and easements, to whom the tracts are dedicated and for what purpose in addition to identifying adjacent landowners and creating an ownership document or map. Existing ROW delineation will be developed by Technical Consultant based on linework from Maricopa County Assessor Map GIS data and/or COP GIS data. Technical Consultant will conduct additional meetings and investigations with the COP Real Estate Division pertaining to documentation and communications to obtain rights-of-way necessary to provide a full collector road ROW to incorporate mobility and safety recommendations along Vineyard Road.

2.3 Coordinate Base Sheets: The Technical Consultant will coordinate with the COP to confirm the best means for developing a cost-effective base map for the project area. It is anticipated the COP will provide quarter section maps and digital ROW, utility, aerial, street lighting and traffic signal plan data. The Technical Consultant will identify utility providers located within the project area by filing a ticket with Arizona 811. Utility provider mapping (SRP irrigation) will be obtained from utility providers as part of this task by the Technical Consultant. Technical Consultant shall submit a public records request for said information from the COP. Technical Consultant shall utilize existing COP resources such as the COP Open Data Portal to access provided GIS layers. A preliminary utility base map will be prepared as part of this task.

Information incorporated into base sheets may include, but not be limited to:

- COP Right-of-Way Maps
- Maricopa County Assessor Maps (ownership information)
- As-builts for Vineyard Rd and intersections/roadways of all adjoining streets in the study area, where available.

2.4 Review Adjacent Land Use: The Technical Consultant will review existing land use for areas adjacent to Vineyard Road. The COP's knowledge of proposed and adjacent land uses will be discussed.

2.5 Review Existing and COP proposed multimodal travel routes: The Technical Consultant will obtain, and review information related to existing and proposed bicycle and pedestrian travel routes which may link to the project corridor. These should include roadway sidewalks, bus routes, light rail, bike lanes, pedestrian links, etc.

2.6 Applicable Design Standards: The Technical Consultant will complete a review of available design standards for the scope of this project. Applicable design standards will be compiled and assessed for applicable design criteria to guide the preliminary design.

Task 2 Deliverables: Data Collection Log
Vineyard Road Base Map

Task 3. Project Stakeholder Focus Group Series Round #1

The city Project Manager and the Technical Consultant will conduct one-on-one, virtual interviews with up to six (6) key project stakeholder groups, including representatives from JFK Academy, CO Greenfield Academy, Church of Christ at the Vineyard, US Postal Service, South Phoenix Concerned Citizens and South Central Collaborative.

The purpose of these stakeholder interviews is to introduce the project goals, objectives, tasks and schedule as well as discuss each stakeholder's mobility and safety issues, concerns and objectives for this project.

The Technical Consultant will schedule one-hour stakeholder interviews virtually with each stakeholder identified at the kick-off meeting and subsequently; the technical consultant, under the direction of the Project Manager, will conduct the interviews, as well as soliciting additional input.

Task 3 Deliverables: *Draft Stakeholder Interview Questions (x6)*
Coordination Meeting with COP Project Manager
Stakeholder Meeting Interview Summary (x6)

Task 4. Field Review

The Technical Consultant shall conduct a field review of the project study area to inventory and assess existing conditions including the following:

a. Existing transit stops /bus stations and access deficiencies
b. ADA compliance/non-compliance (high level review for presence, not PROWAG inventory and measurements)
c. Existing bicycle facilities
d. Existing ROW
e. Existing irrigations facilities and their designation as active or inactive
f. Existing mature trees within or adjacent to the existing Vineyard Road ROW
g. Existing sidewalks, sidewalk widths, condition and gaps
h. Location of HAWKs, RRFBs, and mid-block crossing treatments
i. Street lighting (location only)
j. Speed limits
k. Roadway pavement width and lane configurations
l. Existing traffic calming applications
m. Existing traffic signals at 7th Street and 16th Street
n. Existing intersection ramps, push buttons and overall mobility considerations for the intersections of Vineyard Road/7th Street and Vineyard Road/16th Street.
o. Existing driveways onto Vineyard Road
p. Key employment, school, community service destinations along Vineyard Rd.
q. Opportunities to leverage the bundling of project types
r. Opportunities to construct Green Stormwater Infrastructure (GSI) solutions to minimize any local ponding/flooding and/or to plant shade trees.

Task 4 Deliverables: Attendance by up to three (3) members of Technical Consultant team
Field Review Mapping
Field Review Notes
Field Review Observations (to be included in Technical Memorandum #1)

Task 5. School Pick-up and Drop-off Site Observations

As part of Task 4, Field Review, the Technical Consultant will also assess the safety function in terms of the interaction and behaviors of the driver, pedestrian, and bicyclist, both on the JFK Academy site and CO Greenfield Academy at 10th Street and driveways accessing the Vineyard Road ROW, specifically during the afternoon pick-up and morning drop-off events. At least one month prior, the Technical Consultant will coordinate and schedule observations with the school(s) to be conducted during one regular pick-up and one regular drop-off event for each school site, scheduled on separate days. The pick-up and drop-off observations will be conducted

by members of the Technical Consultant team and staff from the City. Technical Consultant will obtain from the school(s) photographic releases and/or other required documentation to allow them to make photographs of the observations.

One week and one day prior to conducting the observations, the Technical Consultant will remind the school official(s). On the day of the observation, the Technical Consultant and all other team members will sign-in at the administration office. The Technical Consultant will complete observations in the public ROW (not on school property) including vehicular ingress/egress, pedestrians, bicycles, crossing guard operations, etc., as appropriate.

Task 5 Deliverables: School Drop off/pick up mapping
School Drop off/pick up notes
School Drop off/pick up Observations (to be included in Technical Memorandum #1)

Task 6. Prepare and Coordinate Stakeholder/Resident Survey

Technical Consultant will assist COP CPET consultant with the preparation of a brief survey to receive area resident/stakeholder feedback on mobility and safety considerations along Vineyard Road. Technical Consultant will collaboratively prepare up to 10 survey questions with COP CPET consultant. City of Phoenix CPET consultant will be responsible for the distribution (likely through citizen/stakeholder group forums/social media platforms) and collection and reporting of summary of results identifying trends and themes in the feedback received.

Task 6 Deliverables: Draft and Final Survey Questions
Coordination/collaboration with CPET consultant

Task 7. Coordination with City of Phoenix Real Estate Division

Technical Consultant will coordinate a virtual meeting(s) with the City Project Manager and appropriate member from the City's Real Estate Division. The purpose of the meetings will be to confirm ROW linework on the base maps from Task 2, evaluate properties that currently encroach into the Vineyard Road ROW, discuss ROW acquisition timelines and processes, survey needs (if any) and determine square foot cost estimates for potentially impacted parcels. The City Project Manager will be responsible for scheduling the meetings. The Technical Consultant will be responsible for facilitating the meetings, preparing an agenda and meeting summaries, and at a minimum, have two team members participate in each meeting.

Task 7 Deliverables: Meeting Agenda (up to 3)
Meeting Summary (up to 3)

Task 8. Technical Memorandum #1: Current Conditions Report

Technical Consultant will document data collected, field review and stakeholder meeting observations conducted in Tasks 2-7 and document and illustrate through appropriate aerial view mapping of existing roadway characteristics and physical opportunities and constraints findings into Technical Memorandum #1, that will include:

- Briefly summarize stakeholder and school district staff input
- Existing sidewalk inventory and gaps;
- Existing bike lane/facility inventory and gaps;
- Existing traffic calming applications;
- School drop-off and pick-up observations;
- Existing transit routes and facilities on or within proximity to Vineyard Road;
- Inventory and analysis on crash data, including pedestrian- and bicycle-related vehicle crashes;
- Preliminary observations of locations along Vineyard Road that may be suitable for the potential application of green stormwater infrastructure (GSI) design solutions to mitigate known ponding/flooding on Vineyard Road;
- Plans for land development and redevelopment in the vicinity, identifying the future land use of the owner/tenant;
- Existing Vineyard Road ROW mapping and description, including known/identified ROW constraints;
- Existing utilities and potential conflicts;
- Existing SRP and/or other public or private irrigation district delivery facilities, including frequency of use and operational status as active or inactive;
- Presence of street lighting;
- Tree count/canopy;
- Evaluate existing COP-provided traffic data on Vineyard Road and at the intersections of 16th Street and 7th Street;
- City of Phoenix flooding complaints;
- Crime/ police calls, and type;
- City of Phoenix Neighborhood Services Division public comments and complaints;
- Sidewalk petition requests;
- Identify any project constraints.

Task *8 Deliverables:* Draft Technical Memorandum #1
Final Technical Memorandum #1

Task 9. TAC Meeting #1: Review Key Findings in the Current Conditions Report

An in person or virtual meeting will be held with all TAC members that were identified at the project kick-off meeting.

A brief presentation of key Current Conditions Report findings will be presented by Technical Consultant. The meeting will include an open discussion with maps and datasets facilitated by the project manager in conjunction with the Technical Consultant. The City Project Manager will be responsible for scheduling the meeting. The Technical Consultant will prepare an agenda, PowerPoint presentation, and meeting summary. Feasible comments and revisions noted by the TAC will be integrated into the Current Conditions Report by the Technical Consultant.

Task 9 Deliverables: Meeting Agenda
Meeting PowerPoint Presentation
Meeting Summary

Task 10. Mobility & Safety Improvements Locations Walkabout

Upon delivery and review of Technical Memorandum #1, the Technical Consultant and the Project Manager will perform a field review to identify and document physical opportunities and constraints associated with potential mobility, accessibility and safety improvement characteristics including documentation of road user behaviors and barriers, school drop off and pick up, safe walking and bicycling, right-of-way opportunities and constraints and areas that may be suitable for GSI applications.

The Technical Consultant and the project manager will collaborate to compile a summary of the site visit, including photographs. All photos will be shared between the Technical Consultant and Project Manager.

Task 10 Deliverables: Attendance by up to three (3) members of Technical Consultant team
Field Review Mapping
Field Review Notes
Field Review Observations (to be included in Technical Memorandum #2)

Task 11. Technical Memorandum #2: Recommended Mobility, Accessibility and Safety Improvements

- Technical Consultant will compile draft recommended mobility projects, score them using scoring criteria and values/weights created in conjunction with the Street Transportation Department staff. Stakeholder feedback also will play a role in this process.
- Technical Consultant will prioritize the recommended projects into Tier 1, Tier 2, and Tier 3 categories using the following criteria:

    - Tier 1 projects – Basic JOC/No or Minimal Design required. ADA ramp projects to install new ADA curb ramps where currently none exist, existing ramps that

require only truncated domes, easily constructed sidewalk projects with little to no obstructions ($0-$20K construction cost for obstructions), bike lane striping projects,

- Tier 2 projects – Sidewalk projects with some obstructions ($20-$50K construction cost for obstructions), trees, water meters, light poles, mailboxes but currently has curb and gutter, street light projects to install new street lights to fill gaps between existing,
- Tier 3 projects – Street Modernization or major work required. Sidewalk, bike lane, road widening and/or traffic calming projects: projects needing paving, curb, and gutter, sidewalk and have a large number of obstruction or right of way issues ($50K+ construction cost for obstructions). ADA curb ramp projects at traffic signalized intersections.

- Technical Consultant will create a color-coded map of the Vineyard Road study corridor indicating the locations of all Tier 1, Tier 2, and Tier 3 projects.
- Technical consultant will define what constitutes a mobility 'project,' including locations, termini, and features.
- Recommendations will adhere, but not be limited, to proposal of the following facilities and use of the following guiding documents:

    - Areas of needed right-of-way acquisition
    - Irrigation district facility treatment/modification;
    - Conceptual landscape feature areas/preservation of existing mature tree(s)
    - Minimum 6-foot wide bike lanes;
    - High-visibility crosswalk markings (MAG Standard);
    - Areas suitable for potential GSI applications
    - Pedestrian Hybrid Beacons (HAWKs);
    - Rectangular Rapid Flashing Beacons (RRFBs);
    - Circular Flashing Beacons (CFBs);
    - Minimum 5-foot wide sidewalks (MAG Standard);
    - Traffic calming applications as described in the City's Street Planning and Design Guidelines Manual (2022);
    - Intersection improvements for efficient and safe vehicular, pedestrian, and bicyclist mobility;
    - ADA Curb Ramp Standards;
    - National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide;
    - NACTO Urban Street Design Guide;
    - NACTO Urban Street Stormwater Guide.

- Technical Consultant will create 'project summary sheets' for all projects (maximum of 3) that the consultant and City deem can be implemented using the City's Job Order Contract (JOC) mechanism.

- Technical Consultant will provide a list of the recommended projects in a spreadsheet using a format to be provided by the City.
- Technical Consultant will provide a proposed improvements aerial map with call out features depicting above-described recommended roadway, mobility and safety features information.
- Technical Consultant will provide physical constraints mapping of recommended improvements, including; areas where right-of-way purchases will be required; areas where utilities will need to be modified, relocated, or associated constraints addressed; areas where drainage/GSI improvements will be needed.
- For use in TAC and public meetings, Technical Consultant will create high-quality before-after renderings of the proposed solutions that might not be clear to the public.
- Create a 3D simulation video that clearly explains the recommended solutions and their benefits.

Task 11 Deliverables: Draft Technical Memorandum #2
Final Technical Memorandum #2

Task 12: TAC Meeting #2: Review Key Findings of Technical Memorandum #2

A meeting will be held with all TAC members that were identified at the project kick-off meeting. A brief presentation of Tech Memo #2 findings will be presented by Technical Consultant. The meeting will include an open discussion with maps and datasets facilitated by the Project Manager in conjunction with the Technical Consultant. The City Project Manager will be responsible for scheduling the meeting. The Technical Consultant will prepare an agenda, PowerPoint presentation, and meeting summary. Feasible comments and revisions noted by the TAC will be integrated into the Proposed Conditions Report by the Technical Consultant.

Task 12 Deliverables: Meeting Agenda
Meeting PowerPoint Presentation
Meeting Summary

Task 13. Project Stakeholder Focus Group Series Round #2

The city Project Manager and the Technical Consultant will conduct a second series of one-on-one, virtual focus group meetings with up to six (6) key project stakeholder groups, including representatives from JFK Academy, CO Greenfield Academy, Church of Christ at the Vineyard, US Postal Service, South Phoenix Concerned Citizens and South Central Collaborative.

The purpose of the second stakeholder focus group series is to present draft project recommendations, rationale and benefit of each proposed project type and obtain feedback and/or consensus from each stakeholder group for this project.

Task 13 Deliverables: *Stakeholder Meetings (x6)*
Coordination Meeting with COP Project Manager
Stakeholder Meeting Summary (x6)

Task 14: South Mountain Village Planning Committee Project Briefing

In collaboration with the COP CPET team and CPET consultant, the Technical Consultant will prepare a PowerPoint presentation summarizing the study process, key issues and considerations and project recommendations. The Technical Consultant will meet with and rehearse the COP CPET team prior to the formal presentation. The City project Manager will schedule the item on the South Mountain Village Planning Committee agenda.

Task 14 Deliverables: *Preparation of Draft and Final PPT*
Attendance at three (3) CPET prep meetings by two (2) Technical Consultant team members

Task 15: Preparation of 15 percent design plans

Technical Consultant will prepare 15% design plans for projects that the Technical Consultant and City deem can be implemented as Tier I, II or II. Said projects could vary in type, size and complexity.

As such, to the extent the selected Tier 1 projects for 15% design contain elements that are replicable (such as curb ramping), Technical Consultant may provide 15% design on up to eight (8) projects. If project stakeholders select Tier I, II or III projects that are unique, different and generally do not have design elements that are replicated, Technical Consultant may provide 15% design plans on as many as (3) projects. Preceding language merely attempts to portray a likely realm of choices at this stage of the project. City and Technical Consultant will mutually determine the preferred application of 15% design plans that meets the needs of the project types and stakeholder needs utilizing prescribed task budget.

Plans will include preliminary quantities and cost estimates for design, and construction phases of project development. This task excludes the following tasks or services: 1) survey and/or legal description preparation/ review; 2) preparation of special plan details and/or specifications, 3) Identification or description of rights-of-way or TCE's that may be needed; 4) drainage computations, analysis or design.

Task 15 Deliverables: Conceptual, pre-design 15% plan set for up to three (3) unique project types.

Task 16. Project Management

The Technical Consultant shall regularly coordinate via email and telephone with the City Project Manager regarding project status/updates and also submit monthly progress reports together with the payment invoices. In the format provided by the City and will generally include the following:

a. A description of the work accomplished by the task during the payment invoice.
b. Percent (%) completed and percent (%) cumulative completed for each task.
c. A brief description of upcoming work to be accomplished.
d. A description of any problems encountered.

Task 16 Deliverables: Monthly Project Invoices
Continuous email and telephone correspondence over course of project

Task 17. Project Close-out, Documentation, GIS/data package.

Technical Consultant will provide all project native files and documentation to the Project Manager at the conclusion of the project.

Task 17 Deliverables: GIS Map Package
Native Word, Excel 3d video simulation and other graphics files

Attachment 2 – Project Schedule

Vineyard Road Pedestrian Safety Study

City of Phoenix

Project Schedule

Notice to Proceed (NTP) received June 5, 2024, and project schedule assumes 12 months (365 days)

Tasks	2024							2025					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Task 1: Project Kick-Off Meeting and Preliminary Site Visit													
Task 2: Data Collection													
2.1: Obtain Existing Data													
2.2: Review Existing Data													
2.3: Coordinate Base Sheets													
2.4: Review Adjacent Land Use													
2.5: Review Existing and COP proposed multimodal travel routes													
2.6: Applicable Design Standards													
Task 3: Project Stakeholder Focus Group Series Round #1 Progress and Prepare Status Report													
Task 4: Field Review													
Task 5: School Pick-up and Drop-off Site Observations													
Task 6: Prepare and Coordinate Stakeholder/Resident Survey													
Task 7: Coordination with City of Phoenix Real Estate Division													
Task 8: Technical Memorandum #1: Current Conditions Report													
Task 9: TAC Meeting #1: Review Key Findings in the Current Conditions Report													
Task 10: Mobility & Safety Improvements Locations Walkabout													
Task 11: Technical Memorandum #2: Recommended Mobility, Accessibility and Safety Improvements													
Task 12: TAC Meeting #2: Review Key Findings of Technical Memorandum #2													
Task 13: Project Stakeholder Focus Group Series Round #2													
Task 14: South Mountain Village Planning Committee Project Briefing													
Task 15: Preparation of 15 percent design plans													
Task 16: Project Management													
Task 17: Project Close-out, documentation, GIS/data package													

LEGEND

- Review Period
- Meetings
- Draft Deliverable
- Final Deliverable
- Site Visit/Observations
- Final Project Deliverable

Appendix B – Stakeholder Focus Group Round #2 Engagement Summary

Page intentionally left blank

Streets PHX
STREET TRANSPORTATION DEPARTMENT

CITY OF PHOENIX
Street Transportation Department
Preliminary Design Study Phase
Vineyard Road Pedestrian Safety Study
Vineyard Road: 7th Street to 16th Street

STAKEHOLDER ENGAGEMENT #2 REPORT
6/5/2025

Project Number: ST87110163
Stakeholder Meetings: May 13 - June 4, 2025

PREPARED BY:

YourProject M.O.
Marketing and Outreach

3550 N. Central Avenue, SUITE 1290, PHOENIX, AZ 85012 I Tel: (602) 795-1515

TABLE OF CONTENTS

1. Engagement #2 Outreach

1.1 STAKEHOLDER MEETINGS SCHEDULE AND ATTENDANCE

Stakeholder meetings and attendance included:

Tuesday, 5/13/25
10 a.m.: 1 attendee, John F. Kennedy (JFK) Academy of Inquiry
11 a.m.: 1 attendee, South Central Collaborative

Wednesday, 5/14/25
2:30 p.m.: 3 attendees, South Phoenix Concerned Citizens

Friday, 5/16/25
10 a.m.: 0 attendees, C.O. Greenfield Academy of Design and Innovation

Wednesday, 5/21/25
1:30 p.m.: 0 attendees, C.O. Greenfield Academy of Design and Innovation

Tuesday, 5/27/25
1:30 p.m.: 0 attendees, Promise AZ, SoPho Convening, and Raza Development Fund

Wednesday, 5/28/25
10 a.m.: 1 attendee, C.O. Greenfield Academy of Design and Innovation

Wednesday, 6/4/25
10 a.m.: 3 attendees, Promise AZ, SoPho Convening, and Raza Development Fund

1.2 STAKEHOLDER ENGAGEMENT FEEDBACK

Summary of discussions from stakeholder meetings with attendees present:

Tuesday, 5/13/25

1. John F. Kennedy (JFK) Academy of Inquiry

Britné Hart, principal of John F. Kennedy (JFK) Academy of Inquiry, met with the project team on Tuesday, 5/13/25. Ms. Hart was present for the first round of stakeholder engagement that took place in 2024.

Current Conditions Comments and Questions

- Agrees that the 10th Street/Vineyard Rd intersection is hard to navigate.
- Understands budget/funding and length of time before construction starts.

Alternatives Comments and Questions

- **Alternative 1:** No comments/questions.
- **Alternative 2:** Preferred alternative. Likes the idea of beautifying the street with use of Green Stormwater Infrastructure (GSI) in traffic calming solutions (chokers/bulb outs). Proponent of widening the sidewalks for the area near the Church and 16th Street, as a lot of high schoolers use that route, too.
- **Alternative 3:** Does not like the roundabout. Her biggest concerns with the roundabout are: 1) The safety for the students and their guardians navigating the roundabout crosswalks. 2) Additional funding she may need to staff another crosswalk guard. 3) Safety of vehicles moving through the roundabout.

Tuesday, 5/13/25

2. South Central Collaborative

Shannon Scutari, principal officer of the organization, South Central Collaborative, met with the project team on Tuesday, 5/13/25. Ms. Scutari was not present for the first round of stakeholder engagement that took place in 2024. She suggested three additional stakeholders the project team should meet with for feedback, Victor Vidales of SoPho Convening, Petra Falcon of Promise AZ, and Star Reyes of Raza Development Fund.

Current Conditions Comments and Questions

- Made comments on the evolution of land use and how this corridor is a case study that can represent a lot of areas in The Valley and in the U.S. in general.
- Connection to the Light Rail in this corridor would be great and would help with the success of the Light Rail.

Alternatives Comments and Questions

- **Alternative 1:** Would like to see the metrics of the Pedestrian Environmental Quality Index. Appreciates the use of the Index, as it removes emotion, and provides data to be referenced that is qualitative, justifiable, and equitable. Likes the improvements to the ramps to be upgraded to ADA standards.
- **Alternative 3:** No comments/questions.

Wednesday, 5/14/25

3. South Phoenix Concerned Citizens

Eric Keel, Booker Henry, and Carole Henry, all representing the Community Based Organization (CBO), South Phoenix Concerned Citizens, met with the project team on Wednesday, 5/14/25. All three were present for the initial stakeholder engagement in 2024.

Current Conditions Comments and Questions

- **Q:** Eric Keel wanted to make sure that garbage collection day was accounted for in the initial survey of the area, since the photos used in the presentation were not representative of a collection day. **A:** Kevin Kugler, of Michael Baker, assured Eric that this was a factor they surveyed and is discussed and acknowledged in the TAC memo. **Q:** The group inquired if there is something we can do in the meantime to help with this issue? They said it was discussed at the previous stakeholder meeting that perhaps some sort of postcard or flyer could be sent out to the residents, instructing/reminding them of where to leave bins on collection days. Eric Keel and Carole Henry said they tried reaching out to Public Works about this, but were not able to get in contact with the right person. **A:** The project team said that they would forward this concern to Public Works.
- You cannot get past 10th Street on Vineyard during school drop off/pick up times.

Alternatives Comments and Questions

- **Alternative 1:** No comments/questions.
- **Alternative 2: Q:** Has the public been notified about the study/given the opportunity to give input? **A:** Kevin Kugler of Michael Baker and Trinity Slabbekoorn of YPMO, explained that the City decided to shift from a public forum to engaging with specific community leaders, like them. We encouraged them to spread the word of the Study website to their community members and to call the hotline or send an email to engage and give feedback that way. **Q:** Have there been conversations with the property owners who's property may need to be obtained to create the new street? **A:** Kevin Kugler of Michael Baker, said that he believes these conversations have happened years prior to this Study taking place.
- **Alternative 3:** 10th Street is offset on height in the intersection so be aware of that for roundabout construction.

Wednesday, 5/28/25

4. C.O. Greenfield Academy of Design and Innovation

Stacie Banks, principal of C.O. Greenfield Academy of Design and Innovation, met with the project team on Wednesday, 5/28/25. Ms. Hart was present for the first round of stakeholder engagement that took place in 2024.

Current Conditions Comments

- Agrees that speeding is a major issue.

Alternatives Comments and Questions

- **Alternative 1: Q:** Why doesn't this alternative have improvements to the crosswalks? We would like improved crosswalks no matter what. **A:** We will take back that feedback and incorporate that into the design plan for the preferred alternative. **Q:** Will JFK's parcel be affected? **A:** Yes it's possible depending on the alternative that is selected, but most of the impact will be to the north.
- **Alternative 2:** On-street parking on north or south side of the street would be a nightmare for drop off/ pick up times at the school. 10th Street is already bad enough. She likes the idea of a landscape buffer.
- **Alternative 3:** She likes the roundabout option and is a big proponent of them, but understands that there is resistance to them. She likes where the crosswalks are located. **Q:** Are you anticipating these improvements are going to increase traffic on Vineyard Road? **A:** Brian Fellows of the City of Phoenix Street Transportation Department responded, there are studies that show if safety improvements are made to slow people down, less vehicles will use the road and ideally you'll have less traffic and lower speeds.

Wednesday, 6/4/25

5. Promise AZ and The Raza Fund

Victor Vidales of SoPho Convening, Petra Falcon of Promise AZ, and Star Reyes of Raza Development Fund met with the project team on 6/4/25. They were not part of the first round of stakeholder engagement that took place in 2024, as they were recommended to the project team by Shannon Scutari, who the project team met with on 5/13/25.

Additional relevant information on the stakeholders:

- Victor Vidales - local resident born and raised in the Study area and is a South Phoenix business owner.
- Petra Falcon - a south Phoenician for 50 years, she walks the area often, has worked for the City Of Phoenix, and is currently involved in community work with John F. Kennedy School of Inquiry and the local Phoenix Police Department. She is also a member of the South Mountain Village Planning Committee.
- Star Reyes - born and raised in the Study area and still has family who lives there, South Phoenix business owner, and is very involved in the community through multiple Community Based Organizations (CBOs).

Current Conditions Comments and Questions

- Ms. Falcon noted that the area is very dark at night due to poor street lighting. She also mentioned that parking is a big issue on Vineyard Road and on 10th Street, 11th Street, and 12th Street. She had some questions, including:

1) **Q:** Has the public been engaged? If so, how did you perform the engagement? Did you go door-to-door? **A:** Brian Snider of Michael Baker and Trinity Slabbekoorn of YPMO, explained that the City decided to shift from a public forum to engaging with specific community leaders, like them, and that public engagement would likely take place later in the project.

2) **Q:** What is the long term plan for the schools? **A:** Brian Snider, Michael Baker replied that the schools are here to stay and the project team has been in communication with both principals at John F. Kennedy Academy of Inquiry and C.O. Greenfield Academy of Design and Innovation.
3) **Q:** Is the team considering improvements at 7th Street and Southern Avenue? Residents in the area have made requests to the City to improve this area's street lights and traffic signals. **A:** Brian Snider of Michael Baker explained that the area is outside of the scope of this Study, but that we will take these comments back to the City.

Alternatives Comments and Questions

- **Alternative 1:** No comments/questions.
- **Alternative 2:** Star Reyes's preferred alternative, as she does not like roundabouts because people generally do not know how to use them.
- **Alternative 3:** Victor Vidales preferred alternative, but does not want to lose the trees on the north side of Vineyard Road at the 10th Street intersection. Would prefer for the land acquisition to take place on the south side of the street, pending cooperation from the John F. Kennedy Academy of Inquiry and the Roosevelt School District. Of note from this group - the Roosevelt School District was just approved for a $150 million bond. Mr. Vidales also recommends to take the Green Stormwater Infrastructure (GSI)up a notch and create bioswales, to ensure longevity for the vegetation, and for pedestrian safety. A beta program to include bioswales into road improvements recently occurred during construction of the South Central Light Rail extension. Mr. Vidales business is located in the area, which is located approximately at South Central Avenue and Southern Avenue. His business was part of the land acquisitions to create these bioswales.

Overarching Comments and Questions

- Through, feeder streets such as 10th Street, 12th Street, and 13th Place should be looked at. It is negligent to not look at the area more holistically to fix the problems with pedestrian and vehicular safety. Urged to expand the limits of the Study.
- Please stay culturally sensitive when developing the final design plans. In a predominately Mexican-American community, large gatherings happen often, and street parking is bad. Purchasing more than the standard street width and adding landscape buffers would help alleviate this problem.
- Incorporate art when possible - would be great to see some murals or other fixtures throughout the corridor.
- Radar speed feedback signs would be a great add to improve safety.
- Make sure to use lots of visuals when engaging the public.
- This group would like to be involved in next steps.

1.3 IN-PERSON OUTREACH & ENGAGEMENT

Two stakeholders, the Church of Christ at the Vineyard and the United States Post Office, both located within the study corridor were unreachable via telephone or email to schedule a virtual stakeholder meeting. YPMO determined the best way to engage these stakeholders was in-person, and with the help of the project team, developed an "Alternatives Fact Sheet" (see Appendix A). This fact sheet mirrored much of what was presented at the virtual meetings, with an opportunity to give feedback via the project hotline or email.

On 5/23/25, YPMO conducted in-person outreach to the two stakeholders. Below is a summary of engagement:

- **United States Post Office (USPS)** located at 6825 S 7th Street. YPMO spoke with the manager on duty and explained the Study objectives and requested feedback on the proposed alternatives. The manager

seemed interested and appreciated being involved in the conversation. Several fact sheets were left with the manager to distribute to other managers, staff, and mail carriers. As of 6/5/25, no feedback has been received from the USPS.

- **Church of Christ at the Vineyard** located at 6642 S 16th Street. Since the Church was closed during outreach, YPMO left a fact sheet, in a door hanger bag, on the front door of the Church. A copy of the Alternatives Fact Sheet was also mailed to the owner of the Church, per the Maricopa County Assessor's Parcel Viewer. As of 6/5/25, no feedback has been received from the Church.

APPENDIX A

Preliminary Design Study Phase Alternatives Fact Sheet

Streets PHX
STREET TRANSPORTATION DEPARTMENT

STUDY FACT SHEET

Vineyard Road Pedestrian Safety Study

Vineyard Road: 7th Street to 16th Street

Project No. ST87100174

Study Overview

The goal of the **Vineyard Road Pedestrian Safety Study** is to evaluate alternatives and recommend enhanced mobility design solutions for **Vineyard Road from 7th Street to 16th Street**. Recommendations will focus on improving the safety, accessibility, and multimodal connectivity of the area's residents and children walking, biking, or rolling to or from John F. Kennedy Academy of Inquiry and C.O. Greenfield Academy of Design and Innovation.

We want your feedback. Please review the three alternatives illustrated below.

Study Timeline

Pre-Design Study: Summer 2024 - Summer 2025

This is in the preliminary study phase. Funding is not yet available for design and construction.

Overview of Alternatives

Three draft alternatives are recommended, each providing improvements to enhance safety, mobility, and comfort for people who walk, drive wheelchairs, ride bicycles, and drive motor vehicles.

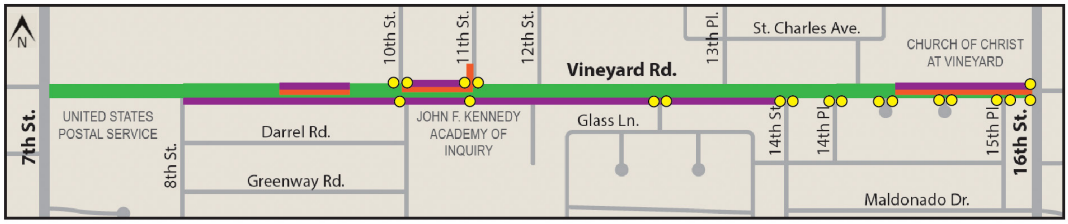
Alternative 1: 40-foot-wide street, two 12-foot travel lanes, two 8-foot parking lanes, and widened sidewalks to 5 feet.

Alternative 2: 40-foot-wide street, two 12-foot travel lanes, two 8-foot parking lanes, traffic calming features, and enhanced sidewalks.

Alternative 3: 40-foot-wide street, two 12-foot travel lanes, two 8-foot parking lanes, traffic calming features, enhanced sidewalks, and a roundabout at Vineyard Road & 10th Street.

Improvement Elements	Alternative 1	Alternative 2	Alternative 3
Modernize street design to city standard, allowing for sidewalks	X	X	X
Sidewalks brought up to 5-foot standard	X	X	X
11th Street Intersection Improvement	X	X	X
Improved street lighting	X	X	X
ADA-Compliant Curb Ramps	X	X	X
Landscape buffer		X	X
Improved Crosswalks		X	X
Eight-foot-wide sidewalk extension		X	X
Green Stormwater Infrastructure		X	X
Additional Traffic Calming		X	X
10th Street Roundabout			X

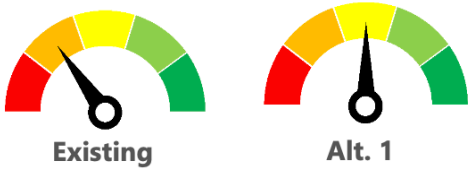
Alternative 1



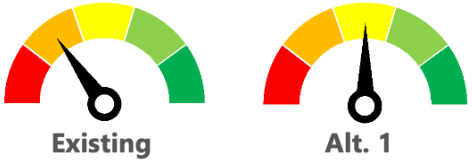
Study Corridor
New/Reconstructed 5' Sidewalk
Standard Roadway Width
New/Reconstructed ADA Ramp

Pedestrian Environmental Quality

Street Segments



Intersections



40-foot-wide street, two 12-foot travel lanes, two 8-foot parking lanes, and widened sidewalks to 5 feet.

Streets PHX
STREET TRANSPORTATION DEPARTMENT

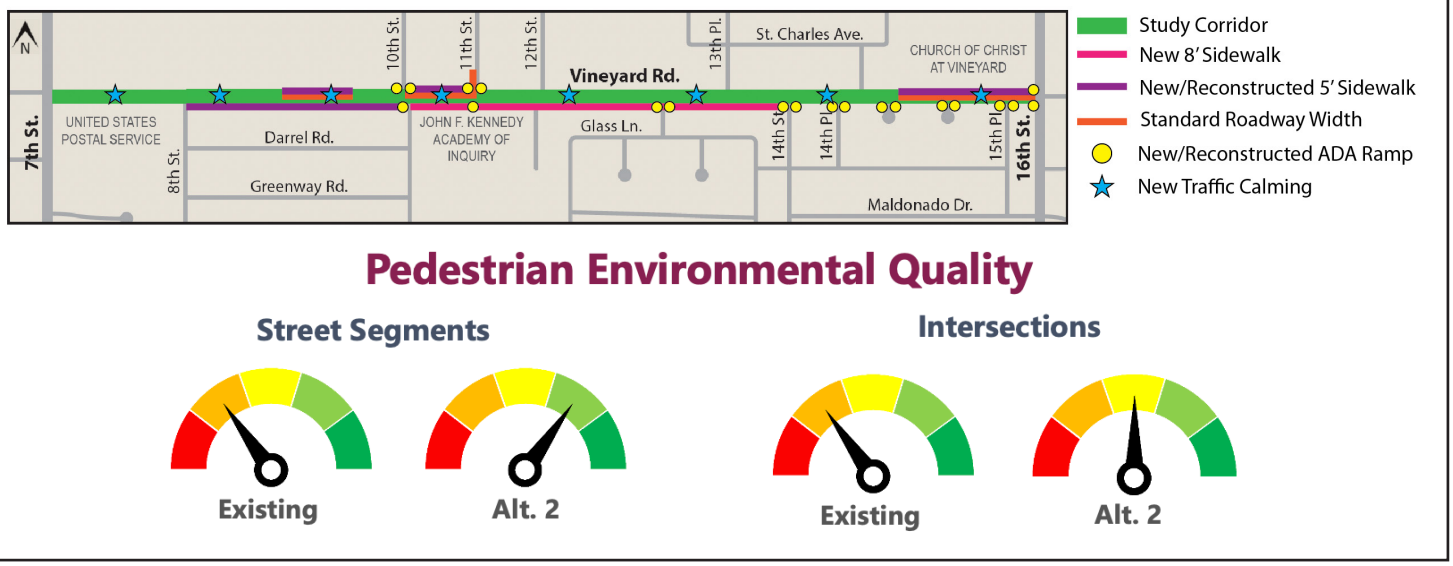
STUDY FACT SHEET

Vineyard Road Pedestrian Safety Study

Vineyard Road: 7th Street to 16th Street

Project No. ST87100174

Alternative 2



40-foot-wide street, two 12-foot travel lanes, two 8-foot parking lanes, traffic calming features, and enhanced sidewalks.

Alternative 3

40-foot-wide street, two 12-foot travel lanes, two 8-foot parking lanes, traffic calming features, enhanced sidewalks, and a roundabout at Vineyard Road & 10th Street.

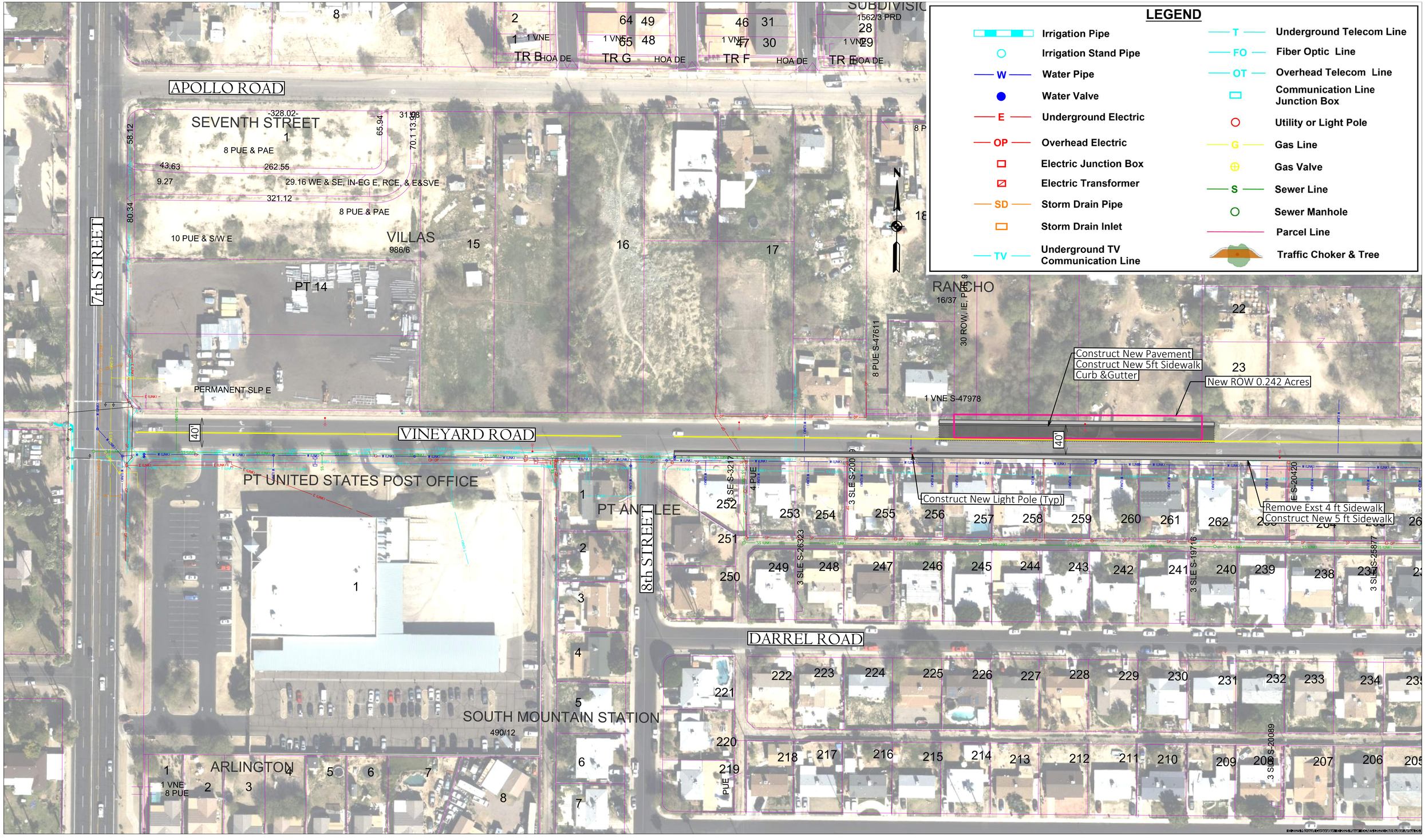
We Want to Hear from You!

Please participate and give feedback on the three alternatives presented on this fact sheet by calling the project information hotline at **(602) 235-2600** or by emailing the project team at **trinity@yourprojectmo.com.** We look forward to hearing from you.

Scan the QR code or visit **phoenix.gov/streets/vineyard7to16** to learn more about this project and other improvement projects.

Appendix C – Vineyard Road Study Corridor Alternatives15% Design Plans

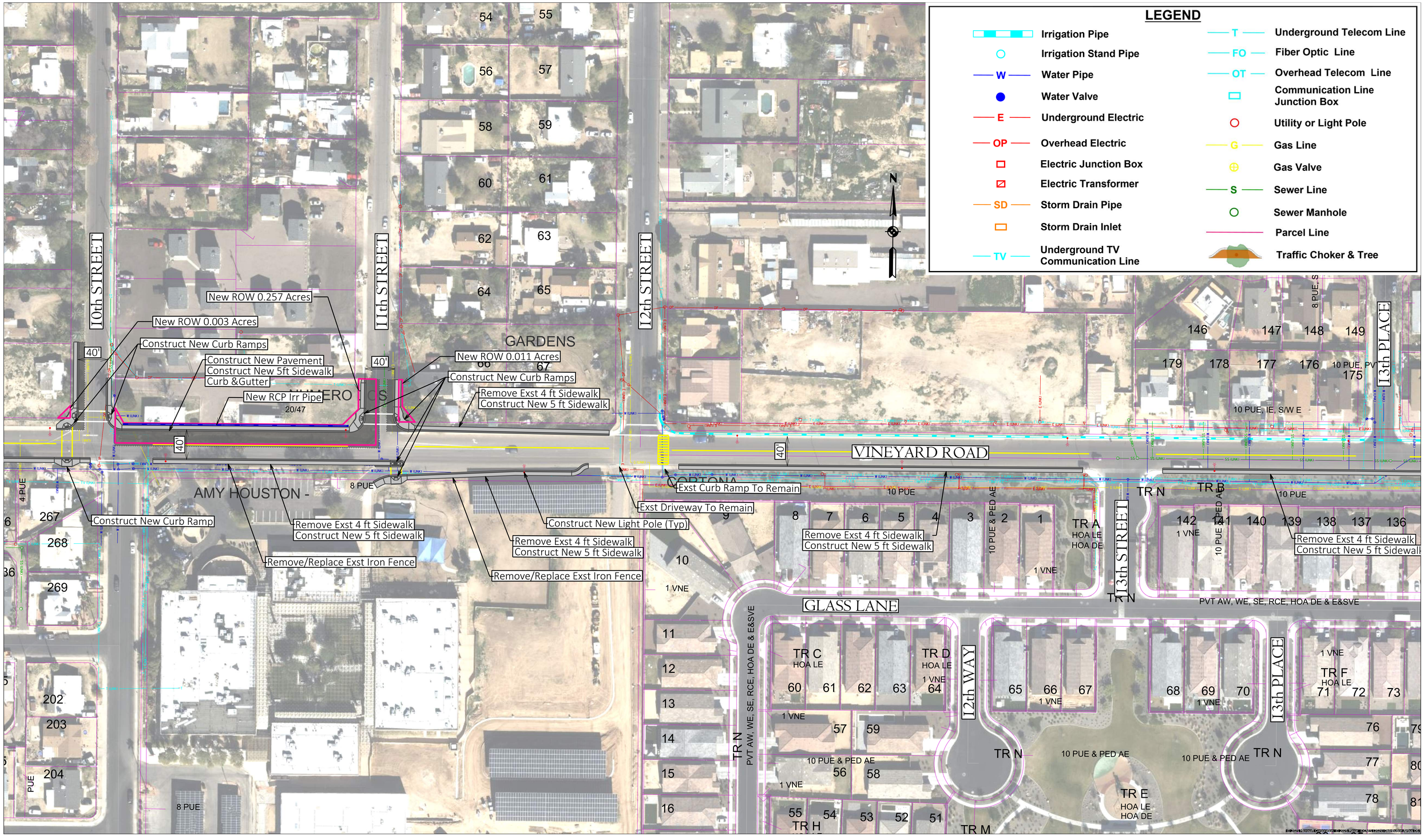
Page intentionally left blank



LEGEND

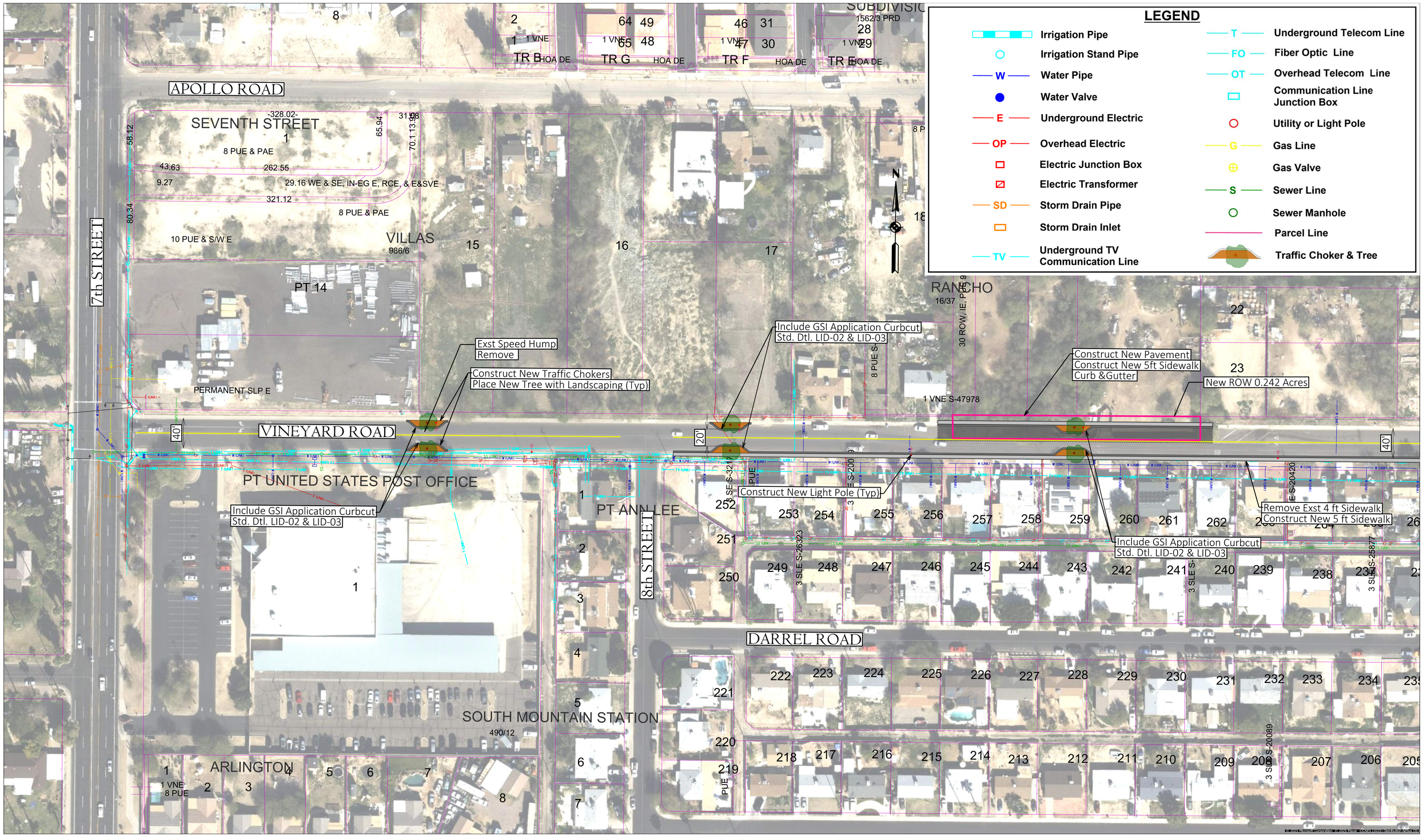
- Irrigation Pipe
- Irrigation Stand Pipe
- W — Water Pipe
- Water Valve
- E — Underground Electric
- OP — Overhead Electric
- Electric Junction Box
- Electric Transformer
- SD — Storm Drain Pipe
- Storm Drain Inlet
- TV — Underground TV Communication Line
- T — Underground Telecom Line
- FO — Fiber Optic Line
- OT — Overhead Telecom Line
- Communication Line Junction Box
- Utility or Light Pole
- G — Gas Line
- Gas Valve
- S — Sewer Line
- Sewer Manhole
- Parcel Line
- Traffic Choker & Tree

VINEYARD ROAD - ALTERNATIVE 1
EXHIBIT 1 of 3



VINEYARD ROAD - ALTERNATIVE 1
EXHIBIT 2 of 3

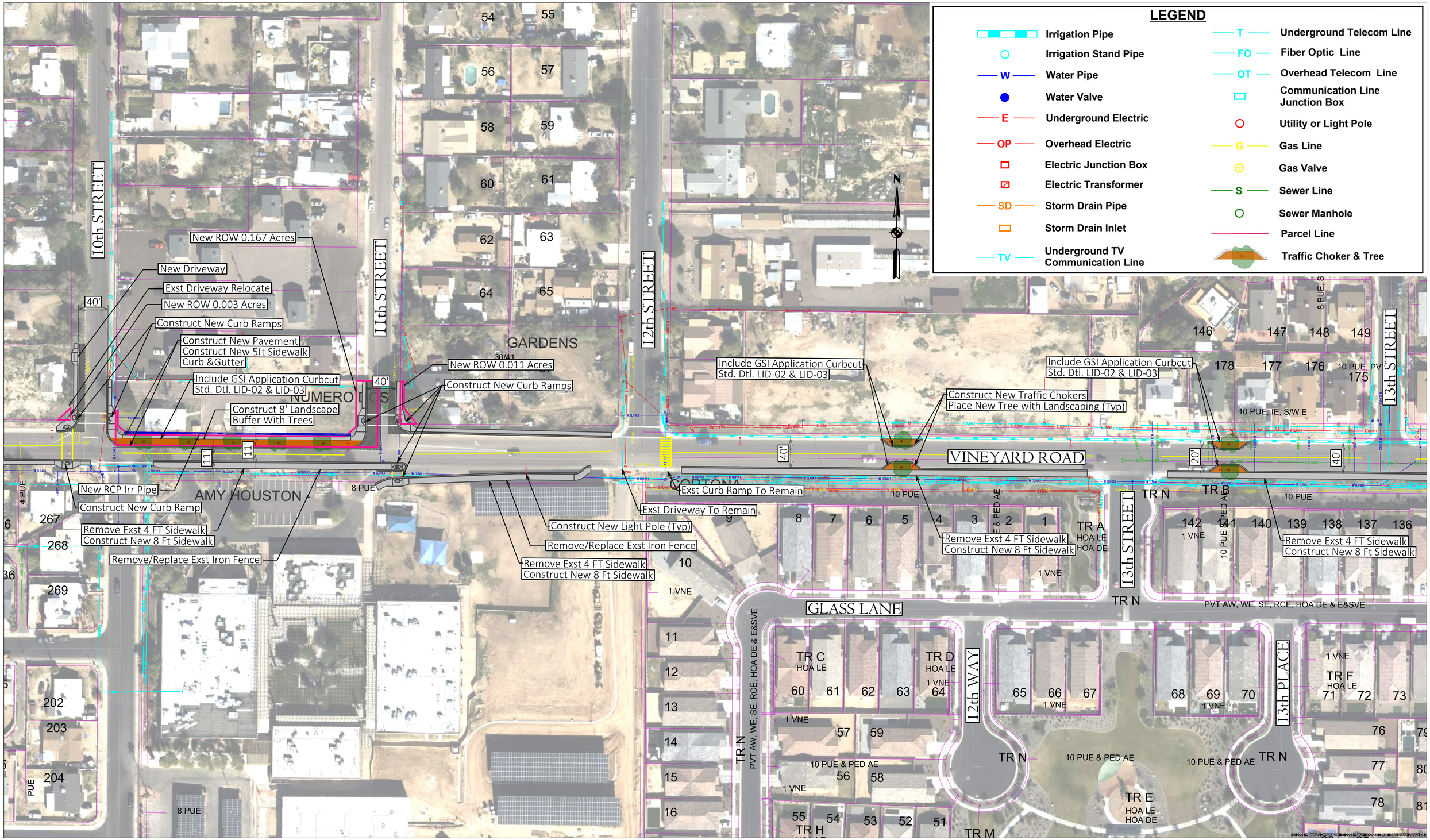
VINEYARD ROAD - ALTERNATIVE 1
EXHIBIT 3 of 3



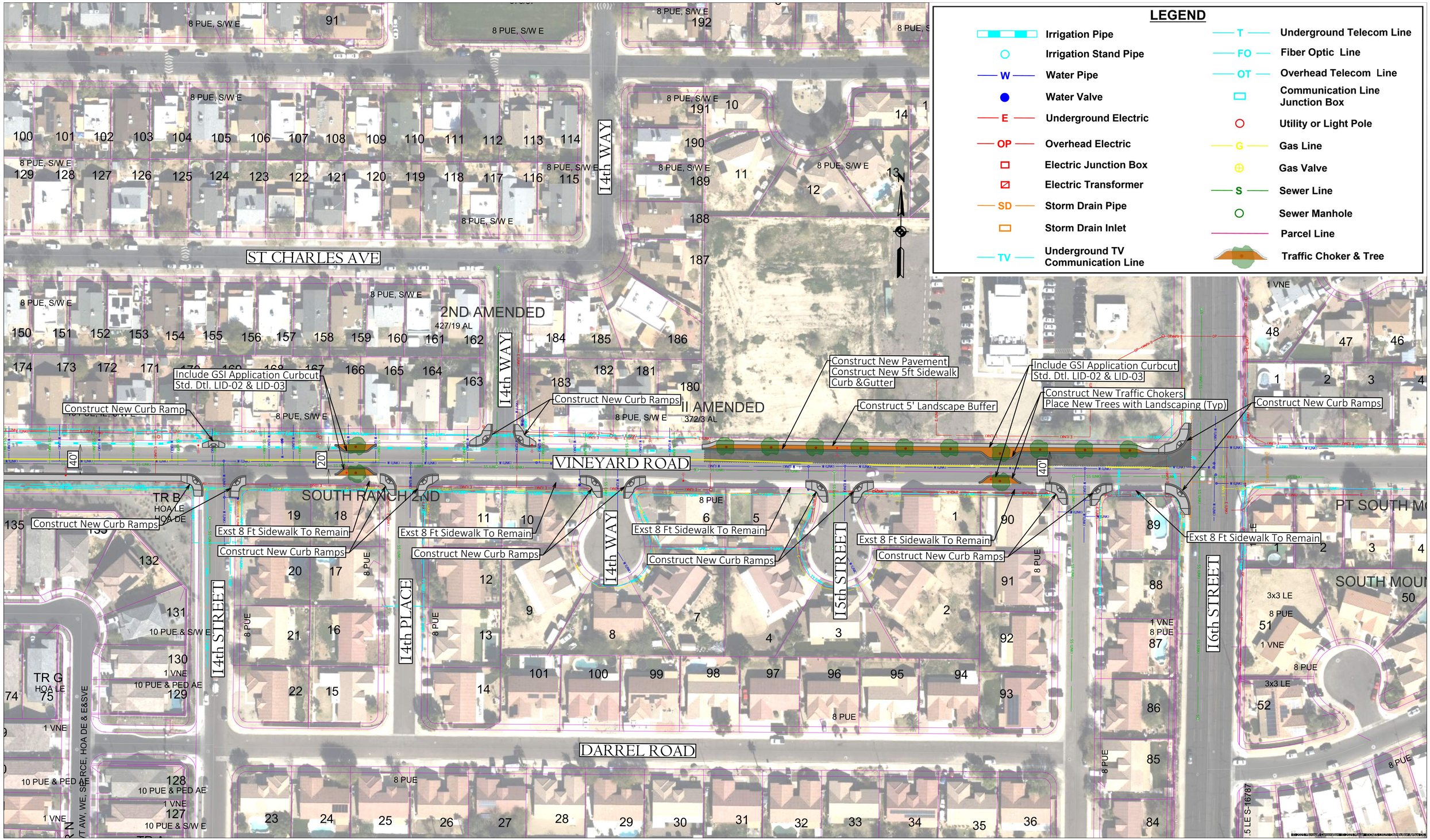
LEGEND

- Irrigation Pipe
- Irrigation Stand Pipe
- W — Water Pipe
- Water Valve
- E — Underground Electric
- OP — Overhead Electric
- Electric Junction Box
- Electric Transformer
- SD — Storm Drain Pipe
- Storm Drain Inlet
- TV — Underground TV Communication Line
- T — Underground Telecom Line
- FO — Fiber Optic Line
- OT — Overhead Telecom Line
- Communication Line Junction Box
- Utility or Light Pole
- G — Gas Line
- Gas Valve
- S — Sewer Line
- Sewer Manhole
- Parcel Line
- Traffic Choker & Tree

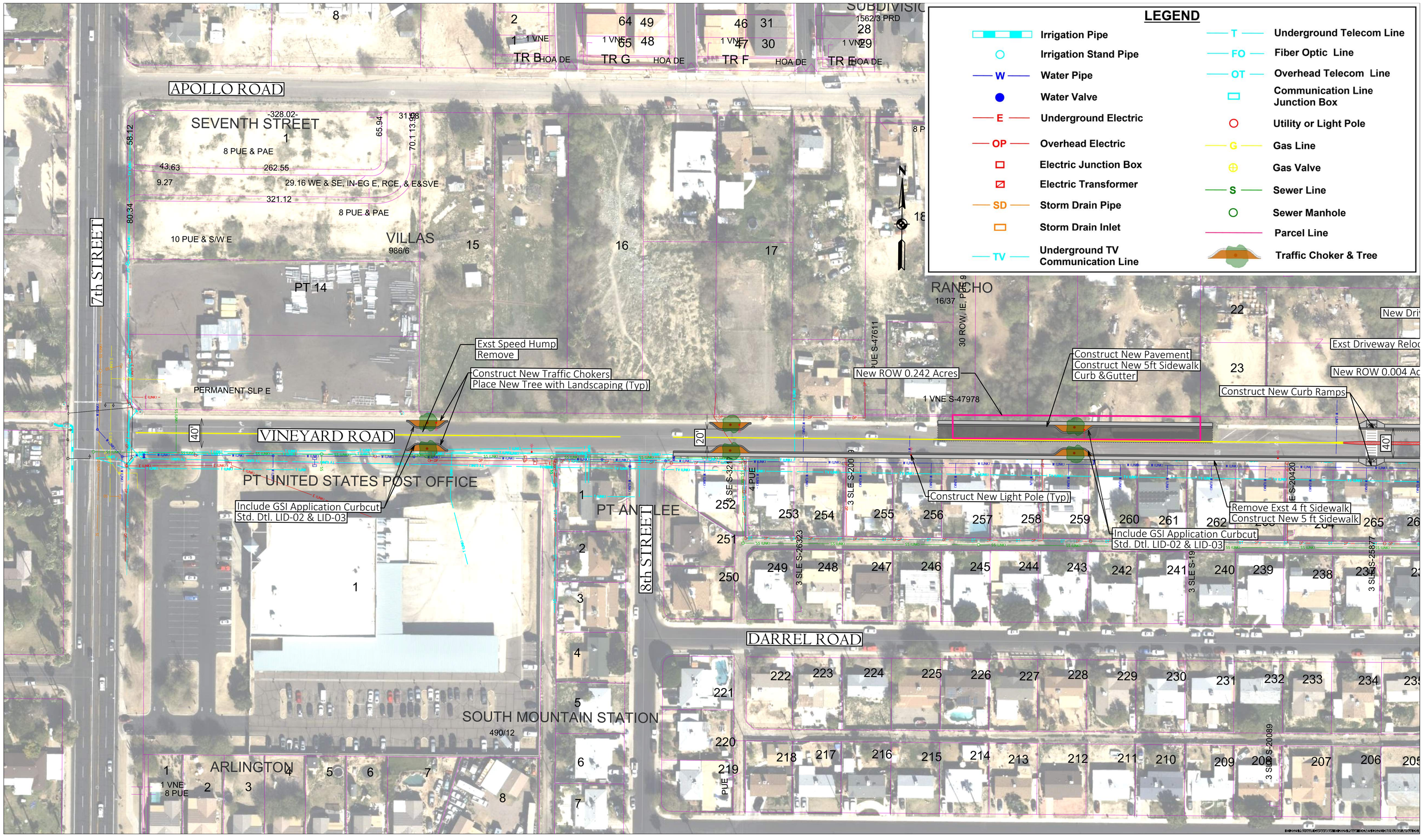
VINEYARD ROAD - ALTERNATIVE 2
EXHIBIT 1 of 3



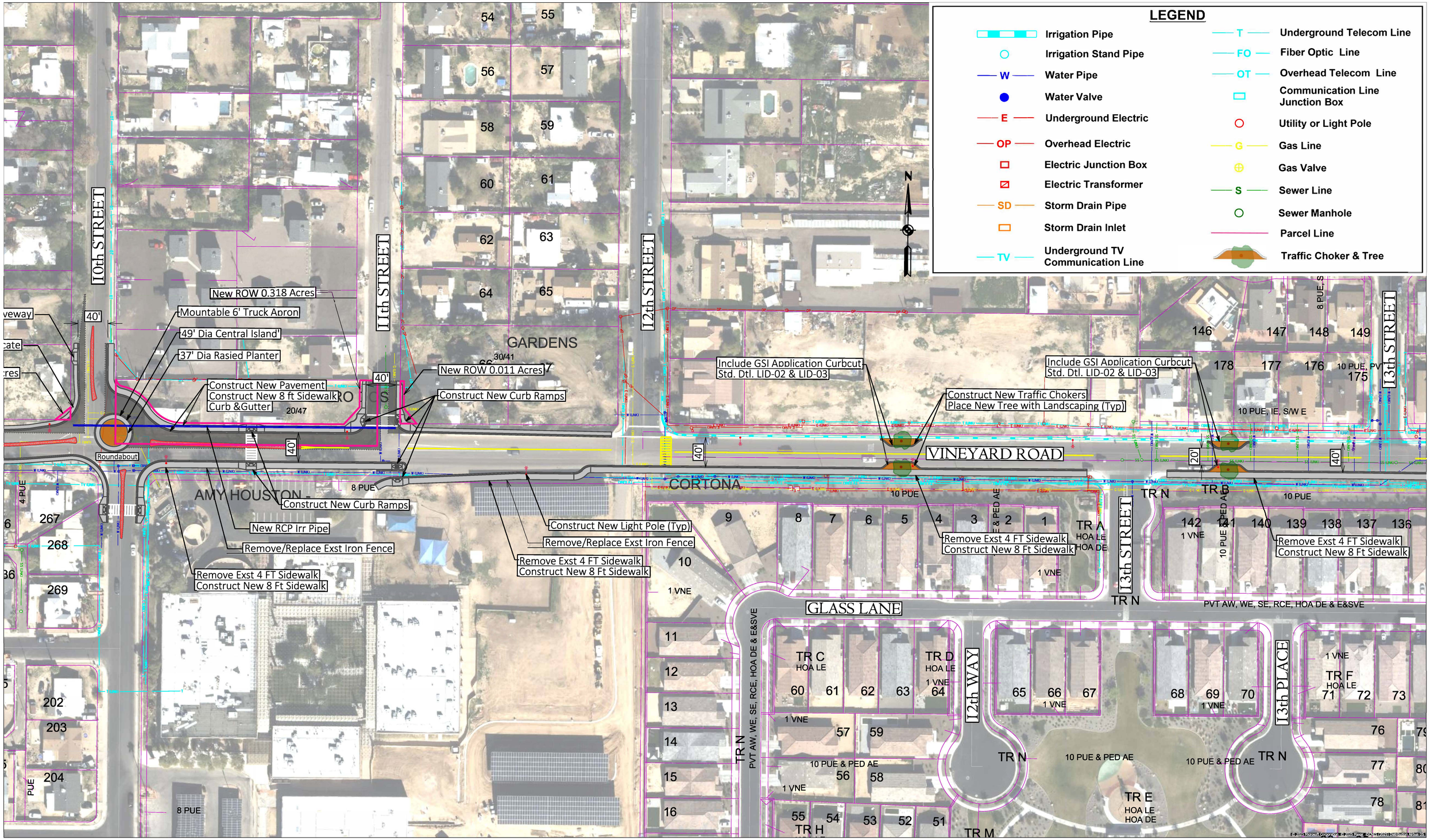
VINEYARD ROAD - ALTERNATIVE 2
EXHIBIT 2 of 3



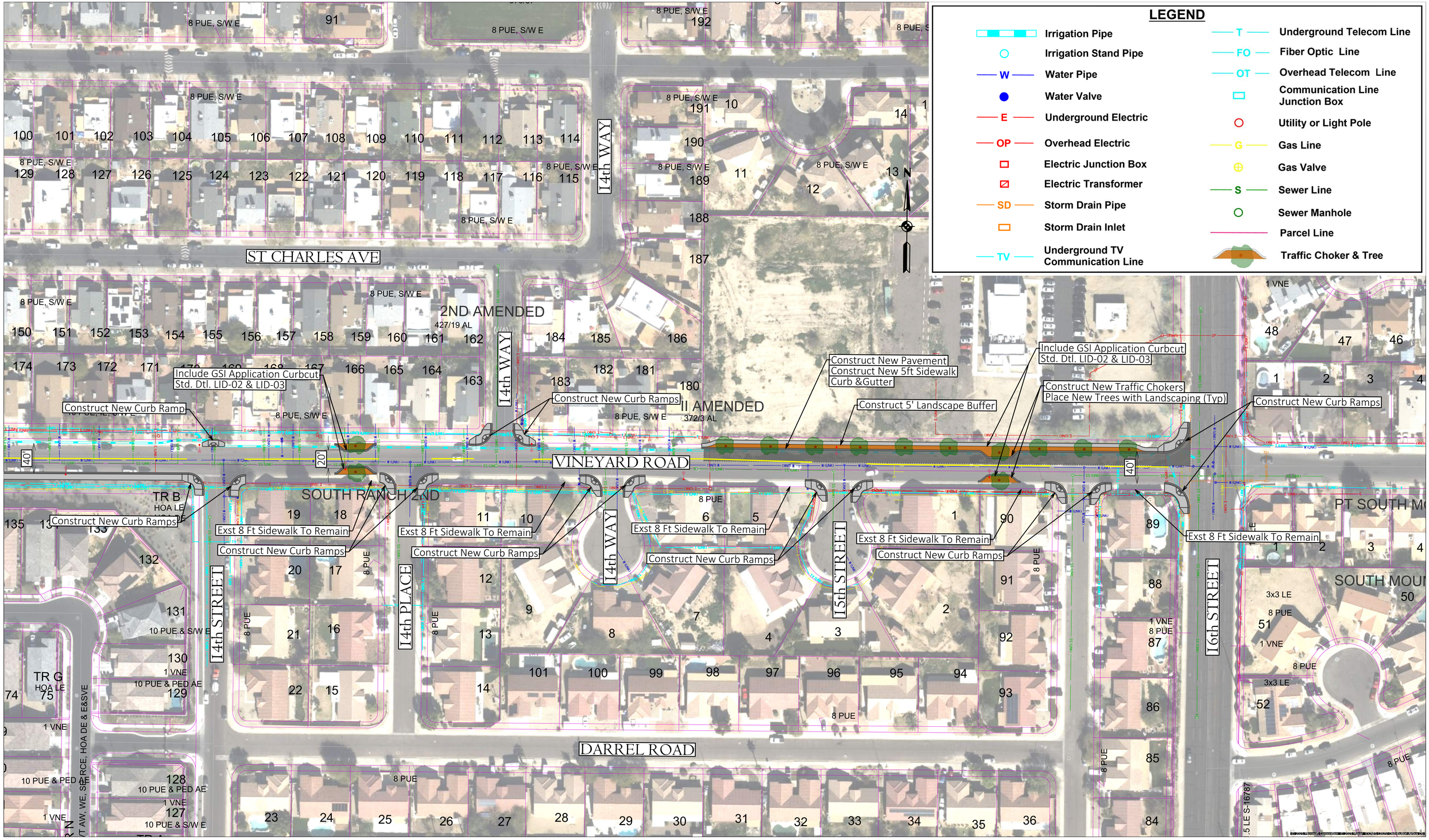
VINEYARD ROAD - ALTERNATIVE 2
EXHIBIT 3 of 3



VINEYARD ROAD - ALTERNATIVE 3
EXHIBIT 1 of 3



VINEYARD ROAD - ALTERNATIVE 3
EXHIBIT 2 of 3



VINEYARD ROAD - ALTERNATIVE 3
EXHIBIT 3 of 3

Appendix D – Alternative 4: Low-Cost Sidewalk Improvements

Upon completion of the VRPSS, City of Phoenix staff requested a planning-level cost estimate and design files for a low-cost solution that exclusively filled sidewalk gaps along the study corridor. The purpose of Alternative 4 is improving the Vineyard Road study corridor at the lowest cost possible while filling the three sidewalk gaps on the north side of Vineyard Road at the following three half-street locations:

- 405 feet east of 8th Street to 411 feet west of 10th Street;
- 10th Street to 11th Street; and
- 265 feet west of 14th Way to 16th Street.

Alternative 4 would include the addition of curb and gutter, five-foot-wide sidewalk, and adjacent improvements to curb ramps at intersections. Right-of-way acquisition is required within Alternative 4.

Alternative 4 was not evaluated with Alternatives 1-3 because it was included after the completion of the VRPSS. The following page includes an itemized planning-level cost estimate, and design files were shared with the City.

Vineyard Road Pedestrian Safety Study - Alternative 1											
Construction	**Qty**	**Unit**	**Unit Cost**	**Total Cost 24/25**	**Total Cost 25/26**	**Total Cost 26/27**	**Total Cost 27/28**	**Total Cost 28/29**	**Total Cost 29/30**	**Total Cost 30/31**
Reg Corner ADA Ramp	3	EA	$ 7,500.00	$ 22,500						
Curb & Gutter	1,339	LF	$ 18.56	$ 24,852						
Sidewalk 5Ft Local Street (<1000Sf $16) [Both Sides]	6,660	SF	$ 10.00	$ 66,600						
Survey/Utility & Row Mapping/Const Docs 30% Roll Plot	1	EA	$ 9,600.00	$ 9,600						
Tree Removal	2	LS	$ 1,500.00	$ 3,000						
Construction				**$ 126,551.84**	**$ 131,613.91**	**$ 136,878.47**	**$ 142,353.61**	**$ 148,047.75**	**$ 153,969.66**	**$ 160,128.45**
SWPP Allowance (.75%)			0.75%	$ 949.14	$ 987.10	$ 1,026.59	$ 1,067.65	$ 1,110.36	$ 1,154.77	$ 1,200.96
Misc Removal and other work (2%)			2%	$ 2,531.04	$ 2,632.28	$ 2,737.57	$ 2,847.07	$ 2,960.96	$ 3,079.39	$ 3,202.57
SURVEY/UTILITY & ROW MAPPING/CONST DOCS 30% ROLL PLOT			2%	$ 2,531.04	$ 2,632.28	$ 2,737.57	$ 2,847.07	$ 2,960.96	$ 3,079.39	$ 3,202.57
Mobilization			2%	$ 2,531.04	$ 2,632.28	$ 2,737.57	$ 2,847.07	$ 2,960.96	$ 3,079.39	$ 3,202.57
Traffic Control/Police Officer			6%	$ 7,593.11	$ 7,896.83	$ 8,212.71	$ 8,541.22	$ 8,882.87	$ 9,238.18	$ 9,607.71
Allowance for Extra Work (0-10% of subtotal depending on site conditions)			10%	$ 12,655.18	$ 13,161.39	$ 13,687.85	$ 14,235.36	$ 14,804.78	$ 15,396.97	$ 16,012.84
Contingency (20%)			20%	$ 25,310.37	$ 26,322.78	$ 27,375.69	$ 28,470.72	$ 29,609.55	$ 30,793.93	$ 32,025.69
Total Project Construction Cost				**$ 180,652.75**	**$ 187,878.86**	**$ 195,394.02**	**$ 203,209.78**	**$ 211,338.17**	**$ 219,791.69**	**$ 228,583.36**
Pre-Design/Study			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Design ($50K minimum Major)			Min(50K/15% of Const)	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00
Design Admin			25% of Design	$ 12,500.00	$ 12,500.00	$ 12,500.00	$ 12,500.00	$ 12,500.00	$ 12,500.00	$ 12,500.00
Public Information Office (PIO)	1	EA	$ 30,000.00	$ 30,000.00	$ 31,200.00	$ 32,448.00	$ 33,745.92	$ 35,095.76	$ 36,499.59	$ 37,959.57
APS/SRP Design Fee	0	EA	$ 10,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
T2050 Streetlighting Fee (T2050 projects only)	0%		2% of Construction	$ -	$ -	$ -	$ -	$ -	$ -	$ -
State Land Acquisition	0	SF	$ 10.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
State Land Admin per property of State Land	0	EA	$ 17,250.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW Acquisition per square foot of land	3,920.4	SF	$ 7.55	$ 29,599.02	$ 30,782.98	$ 32,014.30	$ 33,294.87	$ 34,626.67	$ 36,011.73	$ 37,452.20
Appraisal per property	4	EA	$ 2,500.00	$ 10,000.00	$ 10,400.00	$ 10,816.00	$ 11,248.64	$ 11,698.59	$ 12,166.53	$ 12,653.19
Appraisal Admin per property	4	EA	$ 327.00	$ 1,308.00	$ 1,360.32	$ 1,414.73	$ 1,471.32	$ 1,530.17	$ 1,591.38	$ 1,655.04
Phase 1 Environmental per property	4	EA	$ 3,000.00	$ 12,000.00	$ 12,480.00	$ 12,979.20	$ 13,498.37	$ 14,038.30	$ 14,599.83	$ 15,183.83
Title Service Reports per property	4	EA	$ 650.00	$ 2,600.00	$ 2,704.00	$ 2,812.16	$ 2,924.65	$ 3,041.63	$ 3,163.30	$ 3,289.83
Title Service Legals/Deeds per property	4	EA	$ 327.00	$ 1,308.00	$ 1,360.32	$ 1,414.73	$ 1,471.32	$ 1,530.17	$ 1,591.38	$ 1,655.04
Real Estate Admin per property (Collector, Major)	4	EA	$ 8,000.00	$ 32,000.00	$ 33,280.00	$ 34,611.20	$ 35,995.65	$ 37,435.47	$ 38,932.89	$ 40,490.21
Real Estate TCE Charge for Federal Aid projects	0	EA	$ 10,800.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ROW Fee Title	3,920.4	SF	$ 21.00	$ 82,328.40	$ 85,621.54	$ 89,046.40	$ 92,608.25	$ 96,312.58	$ 100,165.09	$ 104,171.69
Temporary Construction Easement	0	SF	$ 1.50	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Environmental Monitoring/Archeology ($100K Major) Use unless the Environmental section submits an estimate	1	Job	$ 20,000.00	$ 20,000.00	$ 20,800.00	$ 21,632.00	$ 22,497.28	$ 23,397.17	$ 24,333.06	$ 25,306.38
DCM Construction Administration Fee (See list below)	Proj Type	1	20%	$ 36,130.55	$ 37,575.77	$ 39,078.80	$ 40,641.96	$ 42,267.63	$ 43,958.34	$ 45,716.67
Procurement - Construction	1	EA	$ 8,000.00	$ 8,000.00	$ 8,320.00	$ 8,652.80	$ 8,998.91	$ 9,358.87	$ 9,733.22	$ 10,122.55
Testing & Materials (1%)		EA	1% of Construction	$ 1,806.53	$ 1,878.79	$ 1,953.94	$ 2,032.10	$ 2,113.38	$ 2,197.92	$ 2,285.83
Utilties Adjustment (5%)		6	5% of Construction	$ 10,839.17	$ 11,272.73	$ 11,723.64	$ 12,192.59	$ 12,680.29	$ 13,187.50	$ 13,715.00
Utility Inspection			1% of Construction	$ 1,806.53	$ 1,878.79	$ 1,953.94	$ 2,032.10	$ 2,113.38	$ 2,197.92	$ 2,285.83
Inflation Increase per Year				0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Project Grand Total				**$ 522,878.94**	**$ 541,294.10**	**$ 560,445.86**	**$ 580,363.70**	**$ 601,078.25**	**$ 622,621.38**	**$ 645,026.23**