Chapter 2: Options

Existing Roadway Summary

Crows Landing Road, as it exists today, has 100 feet of right of way from State Route 99 to Modesto's Sphere of Influence boundary at Whitmore Avenue with a small segment 105 feet wide. North of State Route 99, the right of way varies from about 60 to 90 feet. The road is designed with limited, narrow raised medians at School Avenue, Hatch Road, and Butte Avenue/Winmoore Avenue. Marked crosswalks are currently located at School Avenue, Hatch Road, Amador Avenue, and Whitmore Avenue. There are no bicycle lanes and sidewalks are absent in some places, obstructed in others, and narrow where they exist along much of Crows Landing Road. The design speed for this road is 45 miles per hour and the posted speed limit is 35 miles per hour from S. 7th Street to Hatch Road and 40 miles per hour from Hatch Road to Whitmore Avenue.

Collisions are fairly common at some intersections and uncommon at others. Four pedestrian fatalities (two at Glenn Avenue) indicate a need for improving safety for pedestrians in particular, although the five bicycle-involved collisions, of which 80 percent were injury collisions, also indicate a need for improved conditions for bicycle riders. Collisions involving pedestrians and bicycle riders are especially dangerous; careful consideration must be given to reducing those collisions. Although motor vehicle-only collisions have lower injury rates, it is both possible and desirable to reduce injury and collision rates for motorists. The entire corridor is being evaluated for safety improvements, with special attention given to intersections with severe or a high number of collisions.

Planned Roadway Summary

Modesto's General Plan shows Crows Landing Road as a six-lane principal arterial, which is 127 feet wide with bike lanes. As shown on many of the following pages, widening Crows Landing Road would mean significant changes for many businesses. Modesto's practice is to acquire additional right of way from property owners when they seek new entitlements, such as when subdividing or rezoning property. This method of right of way acquisition is inexpensive, but very slow and reduces the amount of land available for development. Additionally, widening the road increases the distance needed for pedestrians to cross the road and the time they must spend in the roadway in order to cross. Widening a roadway tends to increase the speed at which motorists travel, as well, which has the effect of increasing the severity of collisions.

Possible Options Summary

The challenge of planning the Crows Landing Road corridor is to balance the needs of and improve safety for all users of the roadway, including commercial trucks. Intersections that need particular attention include Whitmore, Amador, Glenn, Imperial, Algen, and Blankenburg Avenues and Winmoore Way, although the entire corridor is being considered for safety improvements. Two major options were considered: (1) developing Crows Landing Road as planned in the 1995 General Plan as a six-lane, 127-foot wide principal arterial from S. 7th Street to Whitmore Avenue and (2) reallocating the existing 100-foot right of way from State Route 99 to Whitmore Avenue. Option 2 includes two sub-options for the segment between State Route 99 and South 7th Street: (1) developing the road to 100 feet and (2) reallocating existing right of way with minor widening to 60 feet and possible relinquishment of some right of way in excess of 60 feet.

Pedestrian Safety

There are several ways to improve safety for pedestrians crossing a road. The crossing distance can be reduced by narrowing the road and/or adding raised medians, and traffic speeds can be reduced. Mid-block crosswalks can be added where crossings are common and marked crosswalks. Crossing times can be increased at traffic signals. Lighted crosswalks or lighted crosswalk warnings can be installed and overhead pedestrian crossings can be built. Traffic operating speeds can be reduced by narrowing travel lanes or reducing the number of travel lanes. Reducing the actual or perceived width of the roadway can also reduce operating speeds by adding raised medians, reducing lane widths, adding bike lanes, and adding trees at the roadway edge or the median, or both. Increasing pedestrian safety through these measures has the additional benefit of reducing the frequency and severity of collisions between cars and between cars and bicycles.

Outstanding Issues

As was noted in the Existing Conditions Report, the City of Modesto has jurisdiction over areas within its boundaries and much of Crows Landing Road lies outside of Modesto. However, it is the policy of Stanislaus County to implement Modesto's policies when development occurs in areas that will eventually be annexed to Modesto. This includes the entire corridor from S. 7th Street to Whitmore Avenue. Within its boundaries, Modesto can implement improvements as money becomes available or as new development occurs. Outside of its boundaries, Modesto's ability to make improvements is limited to agreements that can be reached with Stanislaus County.

Butte Avenue The first 255 linear feet of Butte Avenue west of Crows Landing Road is not deeded public right of way, although it is paved and the north side of the road is finished with curb, gutter, and sidewalk.. Right of way issues may pose some impediment to improvements and will need to be clarified and resolved prior to future annexation.

Segment North of State Route 99 The portion of Crows Landing Road that lies between State Route 99 (SR 99) and S. 7th Street ranges between 60 and 90 feet. The public right of way is partially paved and lacks sidewalks, curb, and gutter. In order to make improvements that are more than temporary along this segment, various decisions must be made, some of which may include right of way acquisition or relinquishment. Decisions related to right of way width are shown at 127 feet (6 travel lanes), 100 feet (4 travel lanes), and 60 feet (2 travel lanes). Other finished widths are possible, these widths are simply examples of how various widths might function. Each of these options includes bicycle facilities and sidewalks. This roadway is an important connection between downtown and South Modesto.

State Route 99 Overcrossing and Interchange The Crows Landing Road overcrossing of State Route 99 (SR 99) is 65 feet wide. The traveled roadway is 50 feet wide, which includes two through lanes, a right-turn lane for northbound SR 99 and a left-turn pocket for southbound SR 99. There is a raised concrete shoulder on either side of the traveled roadway, too narrow to comfortably or safely accommodate a pedestrian (about two feet wide). The interchange is a half diamond configuration with both northbound and southbound on- and off-ramps. Some truck traffic uses the Crows Landing Road interchange, but the interchange is mostly used by passenger vehicles. Widening the northern segment of Crows Landing Road to four lanes from the existing two lanes without rebuilding and enlarging the interchange would create a bottleneck at the bridge and would draw more regional and truck traffic north of Hatch Road to 7th Street. Whether the northern segment of Crows Landing Road will be widened to four lanes and the timing of any widening or whether the road will remain at two lanes will not be decided in this study. The disposition of the northern segment (north of SR 99) will affect the magnitude of funding committed to any future changes to Crows Landing Road interchange.

7th Street Bridge Replacement The existing 7th Street Bridge, also known as the Lion Bridge, is scheduled to be replaced. This is a joint project of Stanislaus County and the City of Modesto, with the County taking the lead. The bridge replacement extends to the landings on both sides of the Tuolumne River and ends at the Crows Landing Road intersection with 7th Street. Although the bridge is historic, the structure is in poor condition and cannot be rehabilitated, due to its design. The bridge may be rebuilt with two travel lanes, bicycle facilities, and sidewalks or it may be rebuilt with four travel lanes, bicycle facilities, and sidewalks. A traffic signal will control the intersection of 7th Street and Crows Landing Road. Modesto is working with Stanislaus County to ensure that the Crows Landing Road corridor planning effort and the bridge planning effort are complementary.

Whitmore Avenue The Whitmore Avenue intersection is under the jurisdictions of Stanislaus County and the cities of Ceres and Modesto. Because Ceres has annexed the area south of Whitmore Avenue, it will be responsible for improving half of the Crows Landing Road intersection. Modesto will coordinate improvements at this intersection with both Ceres and Stanislaus County.

Implementing Roadway Improvements

For simplicity, improvements have been categorized as "short-term," "intermediate- or mid-term," and "long-term." Practically speaking, the timing of all improvements is affected by jurisdictional issues and cost. Some improvements are relatively inexpensive and can be implemented more quickly, while others are most costly and won't be implemented until new development occurs.

Short-Term Actions: resurface and restripe roadway and add bicycle facilities, maintain street lighting, install marked crosswalks at some intersections, increase size of street signs
Intermediate-Term Actions: install mid-block crosswalks and warning lights, install raised medians/pedestrian refuges at limited locations, add street signs to medians, remove signal at Butte Avenue
Long-Term Actions: install street trees, install complete raised medians and mid-block pedestrian crossings, add street signs to medians, install bulbouts, widen roadway, install pedestrian overcrossing

Option 1: 1995 General Plan, 6-Lane Principal Arterial, 127 Feet of Right of Way

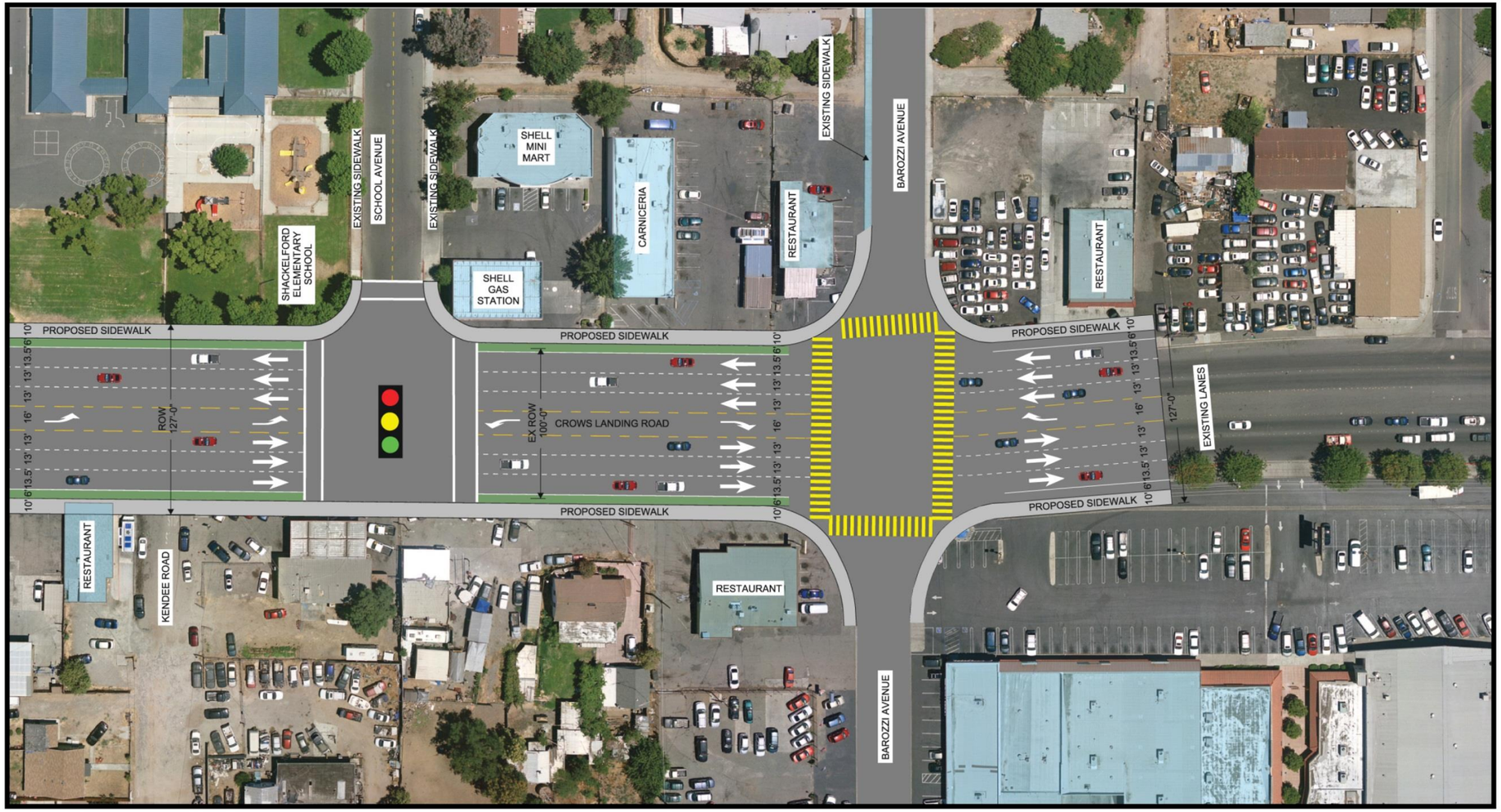
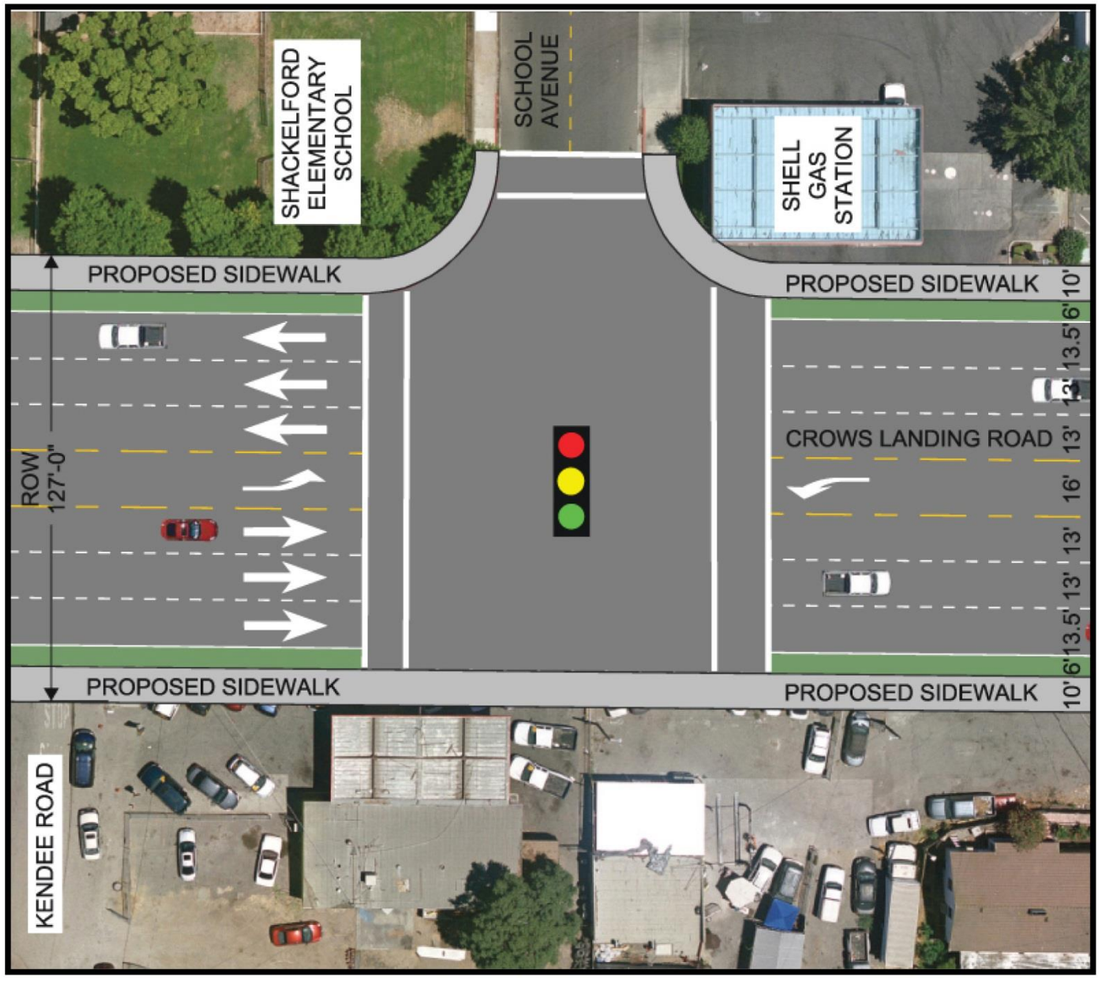


Figure 1.1
Option 1
127-Foot 6-Lane Arterial
School Avenue to Barozzi Avenue

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Will hang from traffic signals
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	At traffic signals
Two-Way Turn Lane:	Yes	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	16 feet	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		
Turning Movements from CL Road:	Left and right, all intersections and driveways				

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.



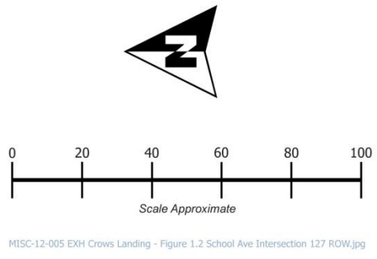


Figure 1.2
Option 1
127-Foot 6-Lane Arterial
School Avenue Intersection

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Will hang from traffic signal arm
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	Yes
Two-Way Turn Lane:	No	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	n/a	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		
Turning Movements from CL Road:	Left and right, all approaches				

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.

MODESTO
CALIFORNIA

Figure 1.3
Option 1
127-Foot 6-Lane Arterial
Barozzi Avenue to Amador Avenue

N

0 40 80 120 160 200
Scale Approximate

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Will hang from traffic signal arm
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	No
Two-Way Turn Lane:	Yes	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	16 feet	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		
Turning Movements from CL Road:	Left and right, all intersections and driveways				

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.

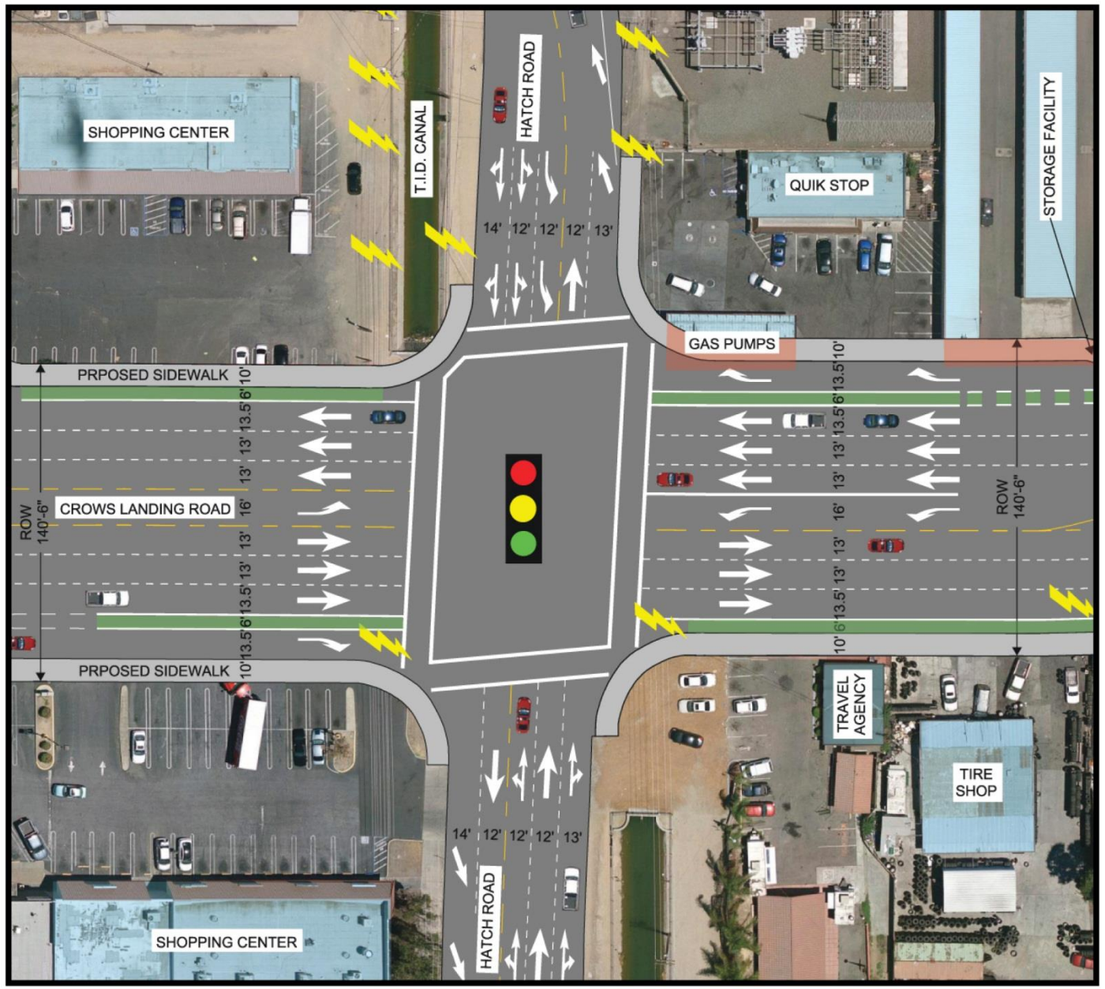


Figure 1.4
Option1
127-Foot 6-Lane Arterial
Hatch Road Intersection

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Will hang from traffic signal arm
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	Yes
Two-Way Turn Lane:	Yes	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	16 feet	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	60 feet	Raised Median Width:	not applicable		
Turning Movements from CL Road:	Left and right, all approaches				

Note: All above-ground utilities (electrical poles, fire hydrants) will need to be relocated.

Figure 1.5
Option 1
127-Foot Arterial
Winmoore Way Vicinity

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Will hang from traffic signal arm
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	At signalized intersections
Two-Way Turn Lane:	Yes	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	16 feet	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		
Turning Movements from CL Road:	Left and right, all intersections and driveways				

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.

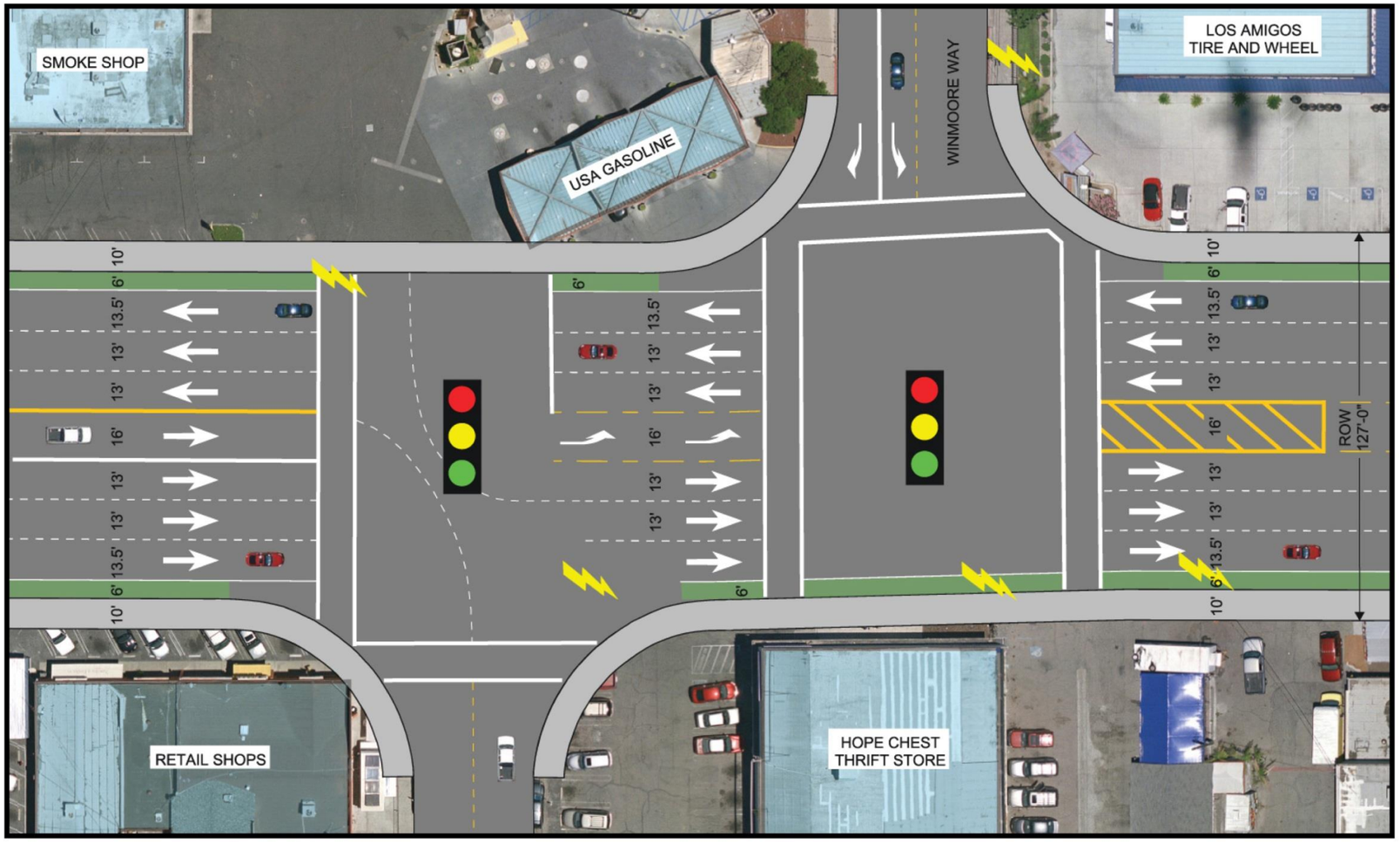


Figure 1.6
Option 1
127-Foot 6-Lane Arterial
Winmoore Wy-Butte Ave Intersection

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Will hang from traffic signal arm
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	Yes
Two-Way Turn Lane:	No	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	n/a	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		
Turning Movements from CL Road:	Left and right, all approaches				

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.)

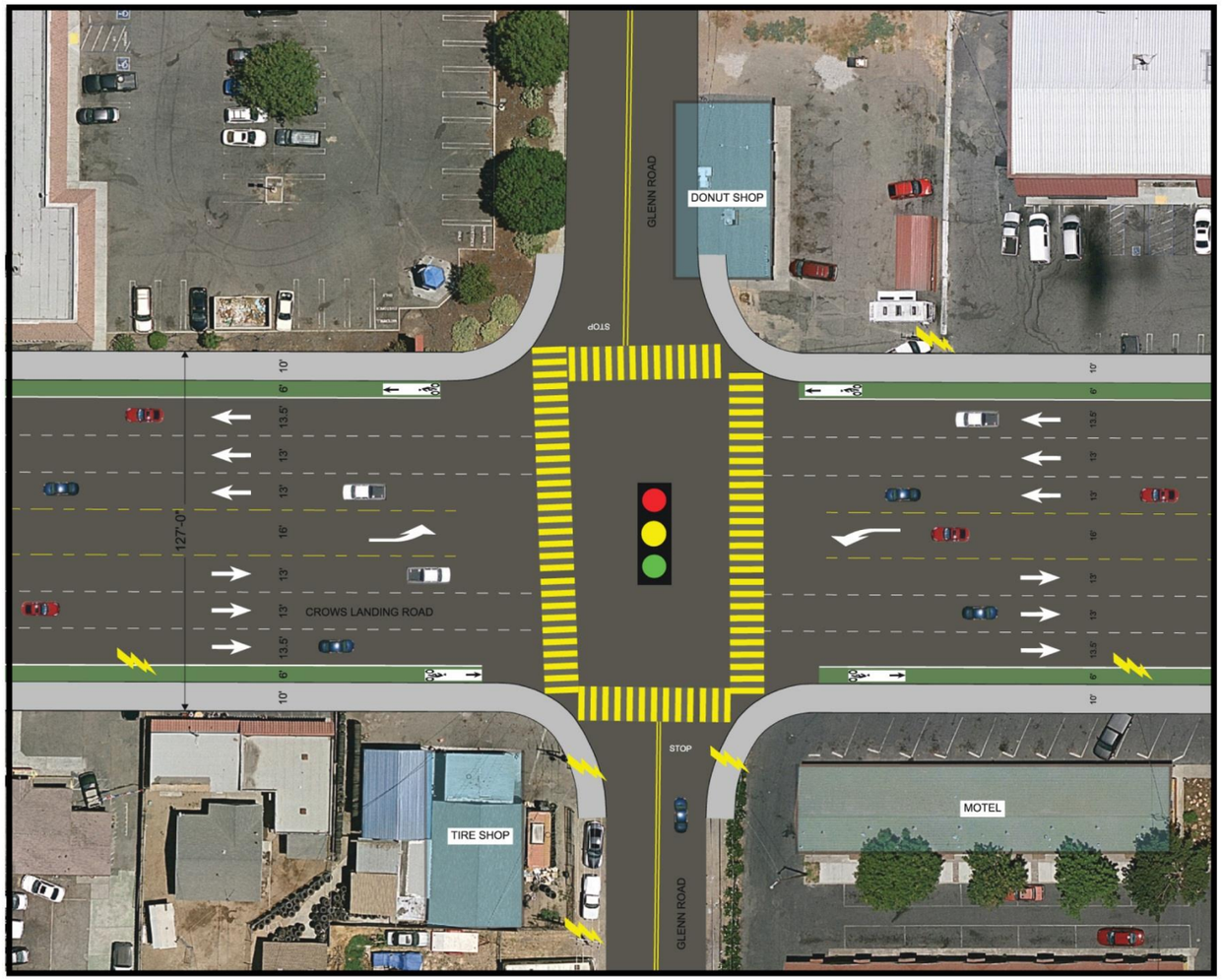
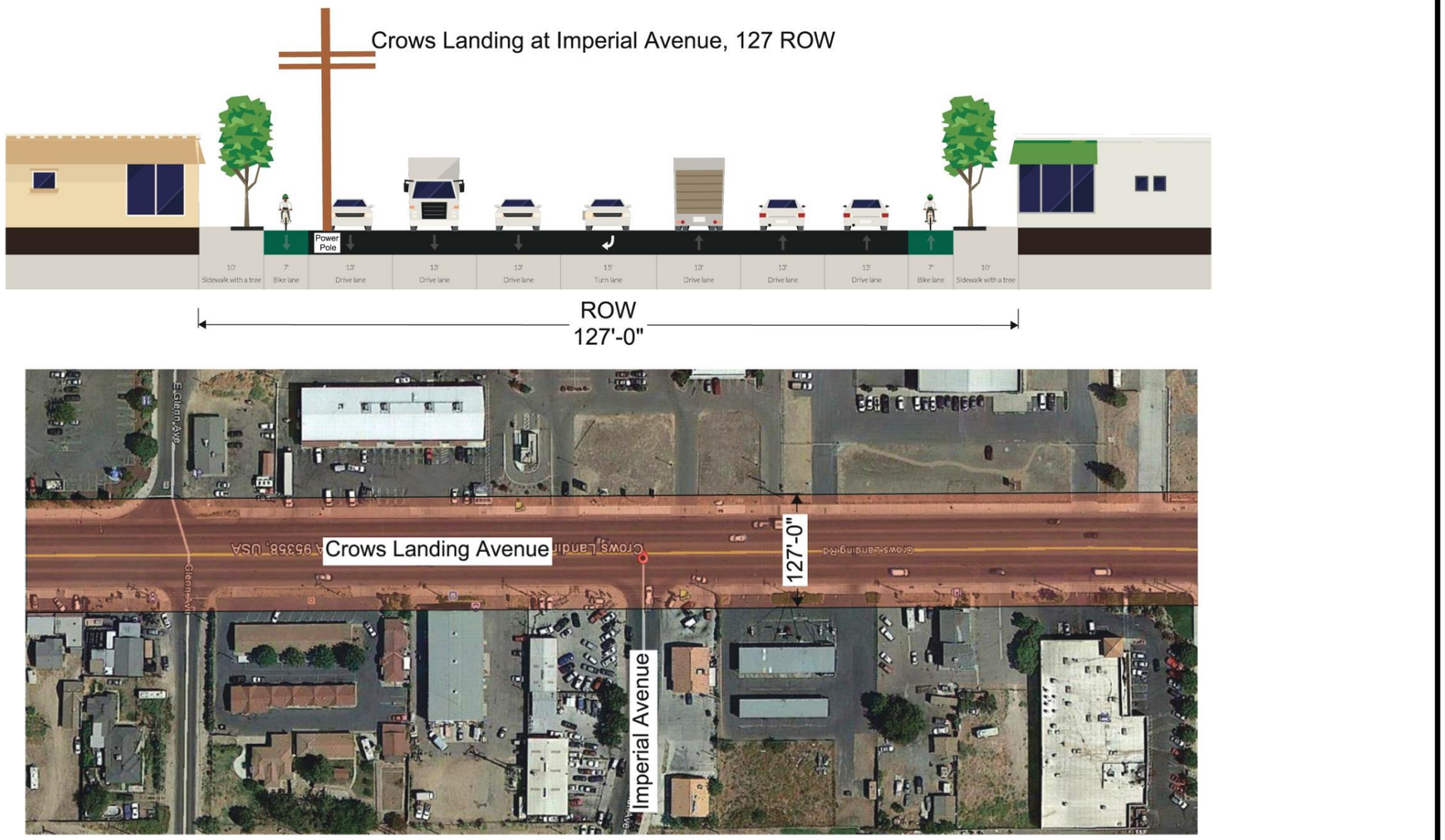


Figure 1.7
Option 1
127-Foot 6-Lane Arterial
Glenn Avenue - E. Glenn Avenue Intersection

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Can be placed in sidewalk
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	No
Two-Way Turn Lane:	Yes	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	16 feet	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		

Turning Movements at This Intersection: Left and right, all approaches

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.



0 100 200 300

Scale Approximate

MISC-12-005 EXH Crows Landing - Figure 1.8 Imperial Ave Cross Section 127 ROW.jpg

Figure 1.8
Option 1
127-Foot 6-Lane Arterial
Imperial Ave Cross-Section

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Can be placed in sidewalk
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	No
Two-Way Turn Lane:	Yes	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	16 feet	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		
Turning Movements from CL Road:	Left and right, all intersections and driveways				

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.

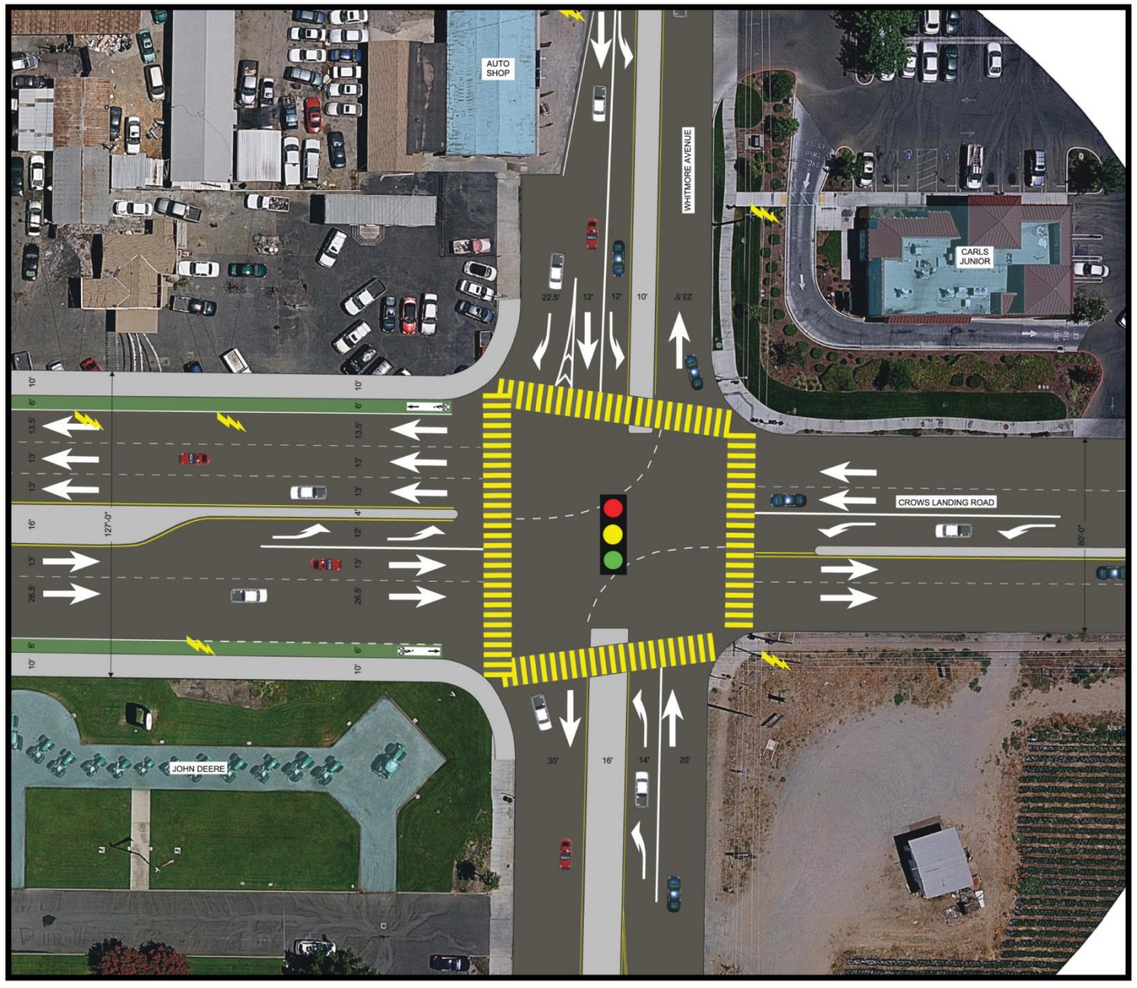


Figure 1.9
Option 1
127-Foot 6-Lane Arterial
Whitmore Avenue Intersection

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Will hang from traffic signal arm
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	Yes
Two-Way Turn Lane:	No	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	n/a	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		

Turning Movements at This Intersection: Left and right, all approaches

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.

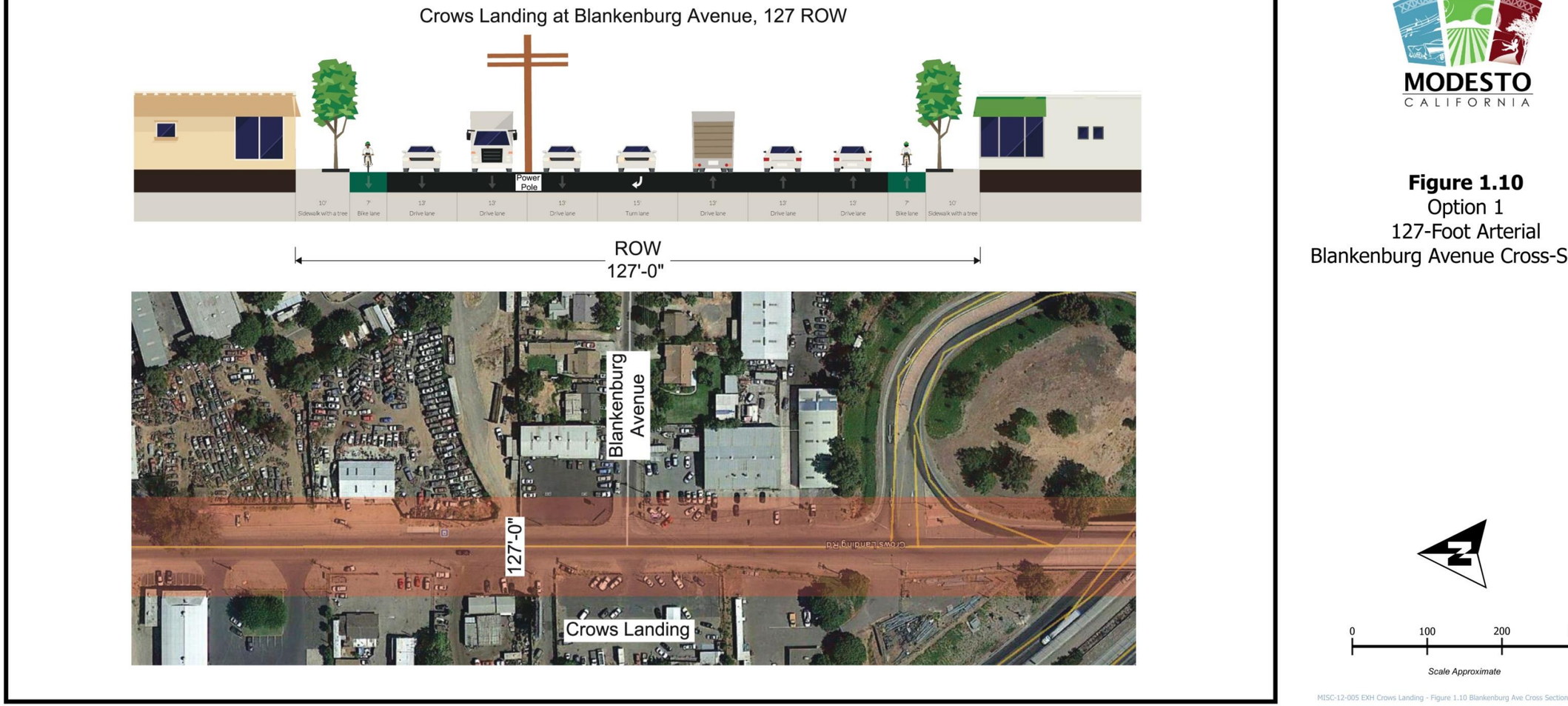


Figure 1.10
Option 1
127-Foot Arterial
Blankenburg Avenue Cross-Section

Number of Travel Lanes:	6	Sidewalk Width:	10 feet	Enhanced Street Signs:	Can be placed in sidewalk
Lane Width:	13-13.5 feet	Bike Lane:	Yes	Marked Crosswalks:	No
Two-Way Turn Lane:	No	Bike Lane Width:	6 feet	Typical Crossing Distance:	117 feet
Two-Way Turn Lane Width	n/a	Street Trees:	Possible	Typical Crossing Time:	33 seconds
Target Speed:	35 mi/hr	Raised Median:	None		
Intersection Curb Radius:	30 and 60 feet	Raised Median Width:	not applicable		
Turning Movements at Local Intersections:	Left and right, all approaches				

Note: Above-ground utilities (electrical poles, fire hydrants) will need to be relocated.