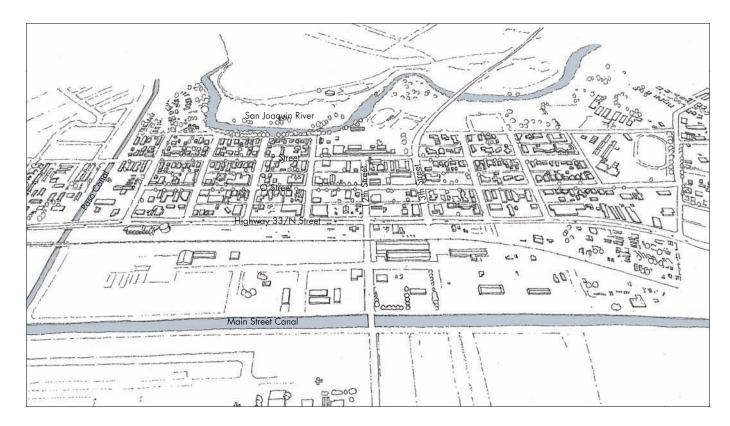
## **Chapter 3: Design Proposals**



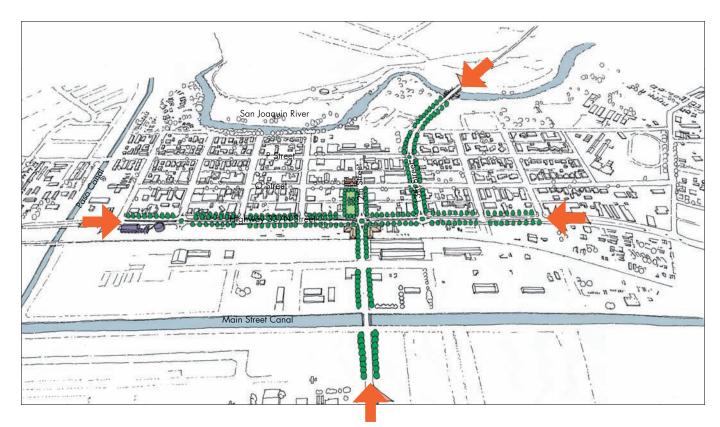
Despite significant challenges, Firebaugh holds great potential for a pedestrianoriented, walkable community that can provide improved commercial services, increased housing choice, and access to high-quality open space. Above: Bird's-eye view of Firebaugh looking east across the town towards the San Joaquin River.

The City has already secured funding from several sources and has considered several potential projects to revitalize different areas of town. In order to assist the City in prioritizing projects that may have a maximum positive outcome, the consultant team has identified a series of Design Principles to help direct the revitalization of central Firebaugh. These Design Principles seek to provide a framework for new implementation programs that can ensure that the City continues to grow in a healthy and viable manner for its present and future residents and visitors.

### **Guiding Design Principles**

- 1. Improve Primary Travel Route linkages to Central Firebaugh.
- 2. Improve Visual and Physical Access to the San Joaquin River.
- 3. Create a Well-Defined, Centrally Located, Compact Town Center.
- 4. Improve North-South Mobility Through the City for Pedestrians and Bicycles.

## **Improved Linkages**



# Design Principle 1: Improve Primary Travel Route Linkages to Central Firebaugh.

The City of Firebaugh is experienced by thousands of travelers every day who pass through the City on Nees Avenue/Avenue 7 1/2 and Highway 33. For many more who live and work in the immediate vicinity these streets are the primary means of access to essential services and businesses. Physical improvements along these streets represent a critical opportunity for projecting a positive and welcoming image.

The plan identifies both short-term and long-term projects for implementation. In the short term, several physical improvements may be implemented along Highway 33 and Nees Avenue. In the long term, these gateways and entrances can evolve into important visual amenities for the community.

Above: Bird's-eye view of Firebaugh looking east across the town towards the San Joaquin River and highlighting the primary travel routes into the central portion of the city.



**Opticos Design: Central Firebaugh Revitalization Plan** 

Highway 33 (N Street) is the primary north-south access corridor for residents and travelers passing through Firebaugh. Recent projects have included new landscaping along the eastern and western edges of 33, improved, signalized intersections at 12th and 13th Streets, and monument signage at the northeast corner of 12th Street and Highway 33. Despite these improvements, it continues to be a challenging environment for pedestrians and bicyclists, with high traffic speeds, incomplete sidewalks, and limited crossing opportunities. In addition, the corridor lacks consistent streetscape elements and remains visually barren.

### 1 Sidewalks

The consultant team witnessed pedestrian traffic during the charrette along the east side of Highway 33 despite incomplete sidewalks. This plan recommends the completion of sidewalks along the east side of Highway 33 from the Paso Canal north to Clyde Fannon Drive, and from Saipan Avenue south to Morris Kyle Drive. This will provide safe connections from outlying residential neighborhoods to central Firebaugh and provide pedestrian access to businesses along the corridor.

### 2 Bicycle Lanes

The central portion of Highway 33 currently has four lanes separated by a central median/turning lane. The outside lanes in both directions are currently 20 feet wide promoting faster traffic speed and decreased pedestrian safety. Between Clyde Fannon Drive and Morris Kyle Drive it is recommended that bicycle lanes be striped along both sides of Highway 33. New bicycle lanes will increase pedestrian safety and cause slower speeds due to the perception of a narrower lane.

The bicycle lanes should be at least 6 feet in width and designated by a durable, highly-visible painted stripe at least 8 inches in width, in line with MUCTD standards. Between 8th and 15th Streets, the bicycle lane should be further designated with the use of stamped concrete or other colorized pavement. These design changes will help signal to motorists that they are entering a central, urbanized area that dictates appropriate caution and speeds.

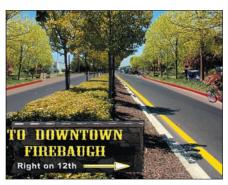
#### 3 Gateway and Median Improvements

The community recognized the potential for visual access gateways at the intersection of Highway 33 and Clyde Fannon Drive on the north side of town and at the intersection of Highway 33 and Morris Kyle Drive on the south side of town. Both of these locations currently have a central turn lane but central medians have not yet been constructed. It is recommended that medians in these areas may serve as gateway points that can provide a setting for appropriate landscaping and signage signifying entry into Firebaugh. New street trees on either side of the street that provide a strong visual marker (such as Canary Date or California Washingtonia Palms) could be planted in coordination with the design of a central median.

Nees Avenue from the west and Avenue 7 1/2 from the east also provide visual access gateways to central Firebaugh. Along Nees Avenue, new street trees and pedestrian-scaled lighting that extends eastward from the Main Street Canal to Highway 33 should be installed to signify entry into central Firebaugh. This







Above, from top to bottom: Existing conditions along Highway 33; Proposed bicycle lane striping to reduce perceived lane width along the outer edge of the highway; One example of an entry monument sign that could be located along the highway at the intersection of Morris Kyle Drive.

landscaping and lighting should be extended along Highway 33 between 12th and 13th Streets and along 13th Street to P Street to provide a strong, unified design statement for the downtown. During the workshop several residents commented in favor of the pedestrian-scaled street lighting that was installed along the south side of the new Avenue 7 1/2 bridge across the San Joaquin River. New lighting should be complementary and pedestrian-scaled in size and character, and spaced no more than 50' on center.

### 4 Truck Parking

Double-axle trucks and trailers are currently using two areas along Highway 33 for both short and long term parking: a northern area, characterized by a long strip west of the highway between the Paso Canal and an area just north of Clyde Fannon Road, and a southern area, characterized by a shorter strip east of the highway between Saipan Avenue and Morris Kyle Drive. These two areas, although convenient to truckers who may live and work nearby, present a poor first image to travelers passing through on Highway 33. During the workshop community members also indicated that refrigeration trucks often idled in the southern area within close proximity to houses that back on to the highway.

Although the truck parking issue may primarily be one of enforcement, it was recognized that off-site truck parking may be a convenience for many residents of Firebaugh. During the workshop, the design team explored some options for the location and organization of a truck parking facility that would seek to minimize negative impacts on the community.

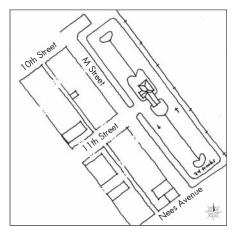
The first option looked at organizing truck parking parallel to Highway 33 just east of the San Joaquin Valley Railroad tracks between 8th Street and 12th Street. Vacant land east of the railroad could potentially accommodate 60 trucks in a single-lane parking format. Trucks would be visually screened from view along Highway 33 through additional landscaping but could still enjoy direct access and easy walking distance to Firebaugh's main street environment on O Street. Primary access would continue to be from Highway 33.

The second option investigated a two-block-long vacant site west of the San Joaquin Valley Railroad tracks between Nees Avenue, 10th Street, and M Street. This site could potentially accommodate two internal rows of truck parking for a total of 74 trucks. Primary access would shift to Nees Avenue.

### 5 Additional Tree Planting

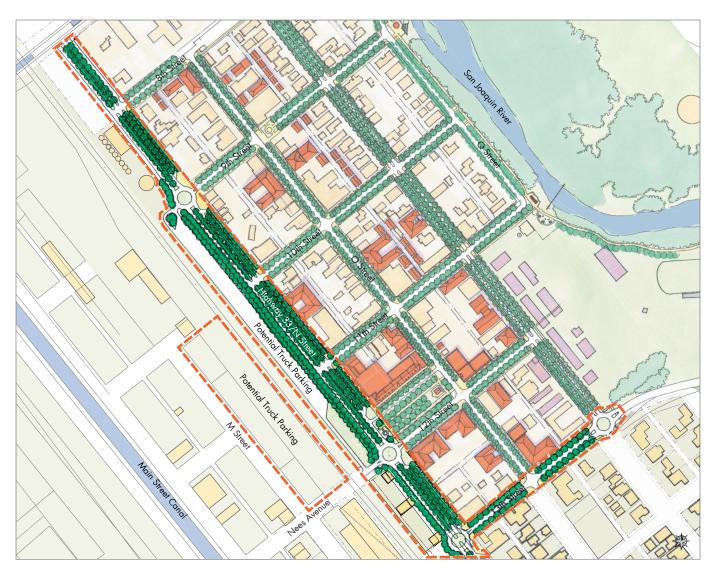
New trees and landscaping have been planted in recent years along Highway 33 between Clyde Fannon Drive and Morris Kyle Drive. However, most of the landscaping has been in the form of small, ornamental trees and shrubs that fail to provide an effective shade canopy or a sense of enclosure along the highway. It is recommended that new street trees be planted along both sides of the highway and along center medians, particularly between 8th Street and 15th Street. Planting should be done 20' to 30' on center to provide a consistent tree row, and trees should be planted in wells as close to the road as possible to maximize shade and enclosure. A complete list of recommended tree species can be found in Appendix A-13.







Above, from top to bottom: Parked trucks west of Highway 33; Sketch of one plan alternative for an organized truck parking facility west of the railroad tracks; New pedestrian-scaled lighting along Avenue 7 1/2 Bridge was commended by many neighborhood residents.



### Long-Term Improvements

Over the long term, additional improvements to Highway 33 and Nees Avenue/ Avenue 7 1/2 should be considered. Traffic counts are currently moderate and are not projected to increase substantially over time. The current four lane configuration provides ample space for the "stacking" of cars and trucks at signalized intersections at 12th Street and 13th Street. As the City continues to revitalize and properties along Highway 33 become more valuable, the City and Caltrans should consider the redesign of the highway to a two-lane road with a generous central median, a retail service drive on the east side of the road, and the use of roundabouts, rather than signalized intersections, to facilitate traffic flow and turning movements. This configureation can accomodate current and future traffic volumes while creating a slower, safer street that will support greater economic activity.

Above: Illustrative vision plan illustrates potential long-term improvements to Highway 33, including roundabouts at Nees Avenue/12th Street, 13th Street, and 9th Street (in coordination with a truck parking facility), new lane configurations, sidewalk improvements, and landscaping between 8th Street and 13th Street, and a retail service drive along the east side of 33 between 9th Street and 13th Street. A roundabout is also illustrated at the intersection of 13th Street and P Street.

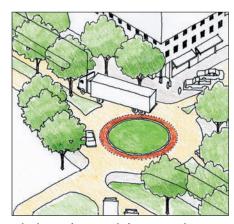




Roundabouts can provide for safer, slower, and more consistent traffic flow, and can be designed for greater pedestrian and bicycle safety. Trucks and agricultural vehicles can pass through roundabouts in low gear, eliminating the need for excessive downshifting as in conventional intersections, and greatly reducing the amount of noise and air pollution that may be incurred. They can also do much to signify a sense of entry into the City, as the setting for public art, landscaping, and entry signage.

In the long term, roundabouts should be considered at the intersections of Highway 33 and 12th and 13th Streets. A roundabout could also provide truck entry into a truck parking facility at 9th Street should such a facility along Highway 33 be considered.

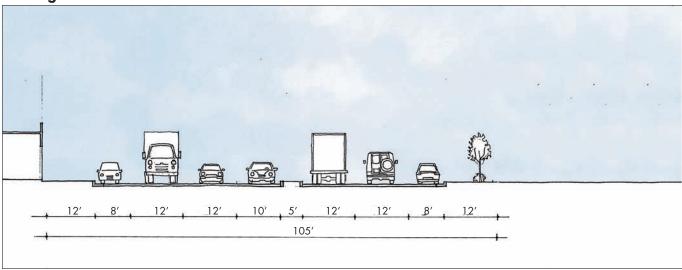
The design team also studied a roundabout at the intersection of 13th Street and P Street. A roundabout in this location can provide a safe and fitting entry into central Firebaugh from the east, and minimize potential conflicts between automobiles and pedestrians and bicyclists traveling along P Street.



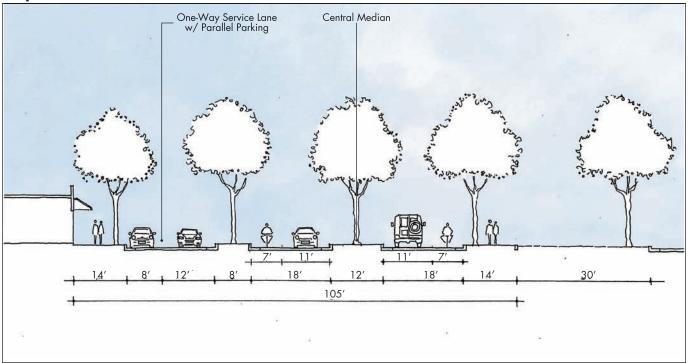
Clockwise from top left: Proposed roundabout along Highway 99 in Gridley, California; proposed roundabout along the Old Redwood Highway in Cotati, California; aerial view illustrating how a roundabout at 9th Street could work to facilitate entry into an organized truck park.

## Highway 33

### **Existing**



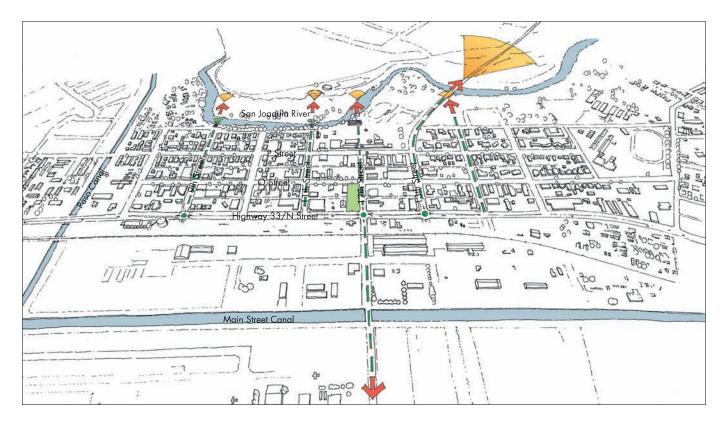
### **Proposed**



The above cross section of Highway 33 looking south illustrates a potential long-term solution for the highway, with a single traffic lane and bicycle lane in each direction, separated by a wide central median. The wide existing right-of-way would allow the inclusion of a service drive along the eastern side of the highway, providing a safe environment for on-street parking in front of Highway 33-fronting businesses, and wider sidewalks for pedestrians.

The redesign of Highway 33 should be considered as part of a larger effort to create a new public face for the City that can aid in the healthy revitalization of commercial properties along 33 as well as O Street.

## **Improved River Access**



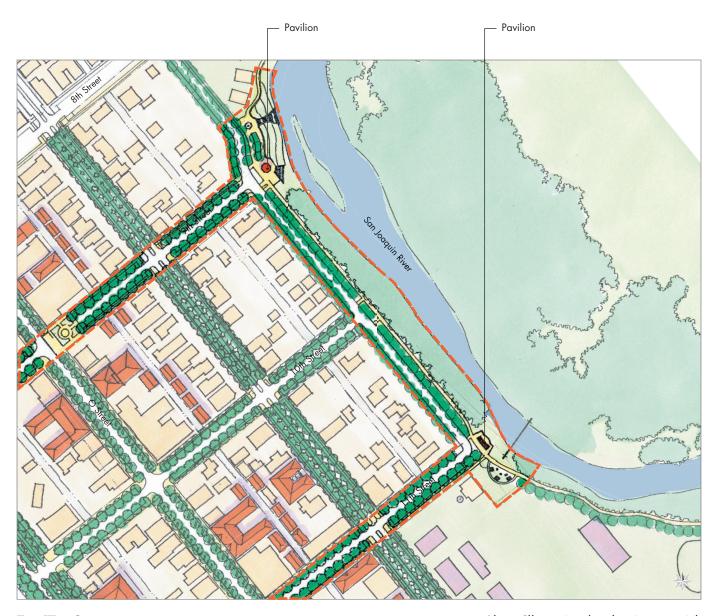
# Design Principle 2: Improve Visual and Physical Access to the San Joaquin River.

The City enjoys close proximity to the San Joaquin River and the natural areas that surround it. The river enjoys high water levels year round, and maintains special historical significance as the location for Firebaugh's original ferry service. Despite its close proximity, the river is not visible from most areas of town, and access down to the river's edge is very difficult.

The recent Friant Dam settlement will seek to restore healthy water levels to the San Joaquin from just outside Fresno to the Sacramento Delta. As the environmental quality of the river continues to improve, it should be promoted as a location of natural, recreational, and historic importance that can be enjoyed by residents and visitors alike. To this end, the plan suggests a series of urban design improvements that can assist in improving visual and physical access to the river.

The design team identified several east-west streets – 9th Street, 11th Street, 12th Street, 13th Street, and 15th Street – that can provide a strong visual termination to the river from Highway 33. These streets should also be prioritized to facilitate east-west movement for pedestrians and bicyclists traveling to and from the river.

Above: Bird's-eye view of Firebaugh looking east across the town towards the San Joaquin River and highlighting opportunities for visual and physical connections to the river.

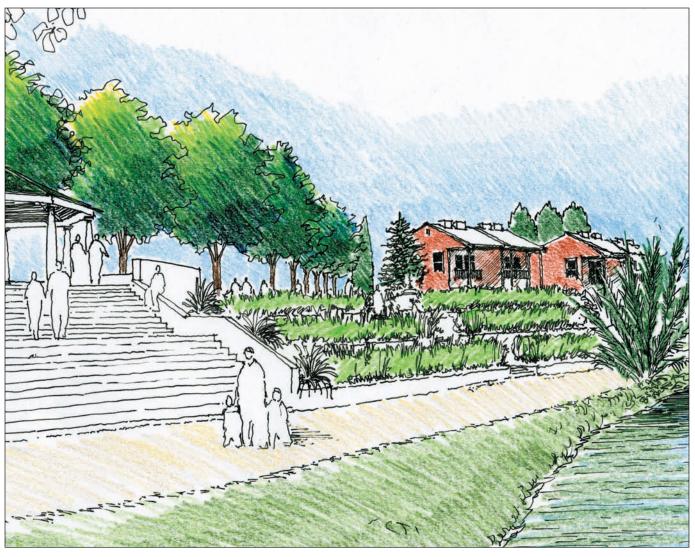


### **East-West Streets**

9th Street has already gained in importance due to the intersection improvements at O Street in coordination with West Hills College. 11th Street crosses an important node on O Street that is bookended by two historically significant buildings, Rebecchi's Department Store on the northwest corner and the Westside Drug Store (formerly the Miller-Lux Mercantile Store) on the southeast corner. The Firebaugh water tower at the end of 11th Street also provides a significant visual terminus.

9th Street and 11th Street should be improved with curb extensions and cross-walks at each intersection between Highway 33 and Q Street in a similar manner to the recent West Hills College improvements at 9th and O Street. New public pavilions should be placed at the visual terminus of 9th and 11 Streets in coordination with landscape improvements, steps, trails, and lighting to provide direct access to the river.

Above: Illustrative plan showing potential improvements along 9th Street and 11th Street in coordination with riverside pavilions along the San Joaquin.



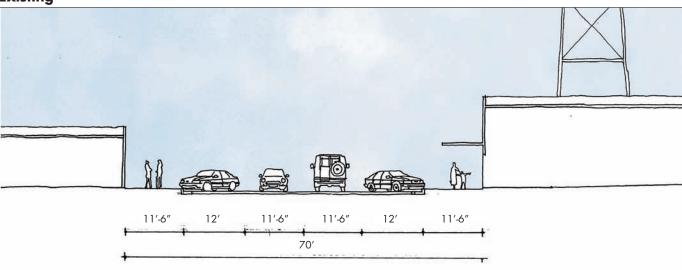
Top: View of potential riverside improvements at the foot of 9th Street. The pavilion could be positioned at the visual terminus of 9th Street and could be visible from the intersection of Highway 33 and 9th. The Firebaugh Bed & Breakfast is visible in the background.

Right: The West Hills College improvements already provide a visual axis from Highway 33. The proposed pavilion would be visible in the background.

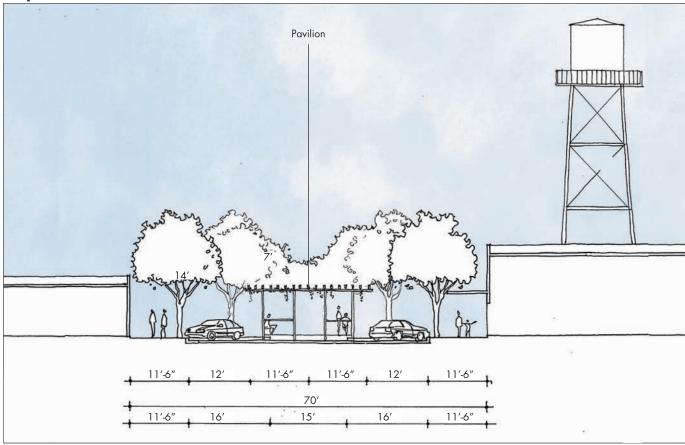


## 11th Street

### **Existing**



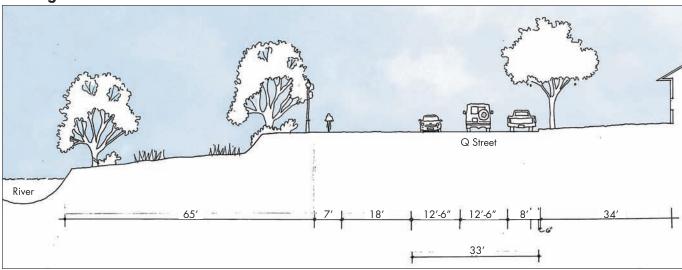
### **Proposed**



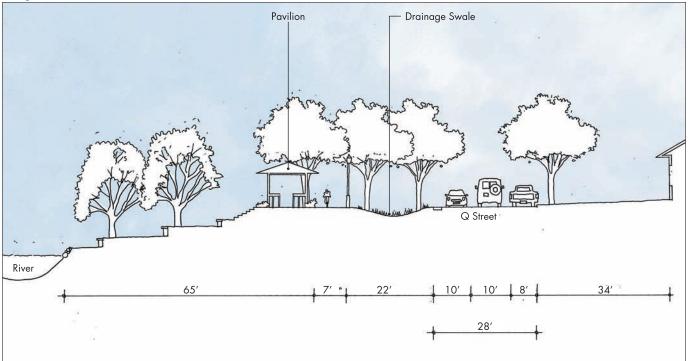
Above: Cross section of 11th Street at Q (looking east) illustrates potential improvements centered around another public pavilion that would mark access to the river and the riverfront trail. While the 9th Street pavilion could function more as a destination, the 11th Street pavilion might simply provide a shaded seating area.

### **Q** Street

### **Existing**



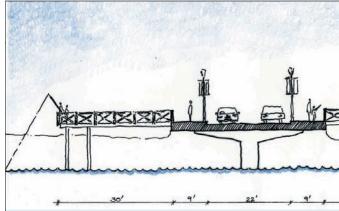
### **Proposed**

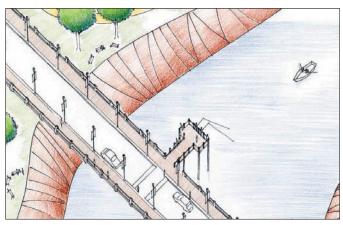


Q Street's interface with the river appears unfinished and incomplete. With the addition of the recent pedestrian trail, pedestrian-scaled streetlights, and benches, the area has moved toward a completed streetscape and trail facility.

The current paved area along Q Street is unnecessarily wide for a non-through street that carries very little traffic. This additional space could be captured to provide a larger landscaped edge along the river, creating a high-quality residential address along Q Street. Such an open space could also be designed to accommodate additional storm water retention as illustrated.









#### **Long-Term Improvements**

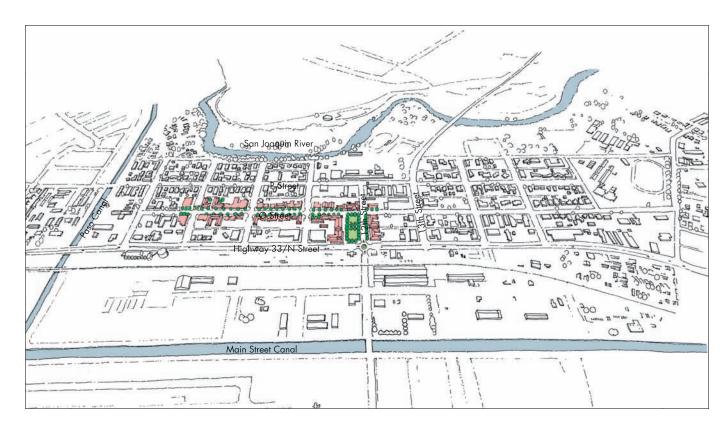
12th Street currently terminates at the entrance to the Mills School along Q Street. The design team recognized that the Firebaugh Community Center and recently completed riverfront trail lies directly behind this entrance. At times of increased pedestrian activity, such as the Rodeo or citywide fairs and events, the City should consider opening the Mills School grounds to the public to allow for free pedestrian flow between O Street and the river.

As 13th Street transitions to Avenue 7 1/2 it provides stunning vistas across the river valley and the agricultural lands beyond. Many community members suggested that the Avenue 7 1/2 bridge could be modified to better accommodate pedestrian access – both physical and visual – down to the river. As river water quality improves, the addition of piers to the bridge should be considered. This would provide a strong visual statement of the town's river identity as travelers cross the bridge into central Firebaugh.



Clockwise from top left: View along 12th Street at the entrance to Mills School which could be opened on special occasions to improve connections to the river; UC Berkeley students' illustration of a pier attached to the Avenue 7 1/2 bridge; An existing example of a similar pier structure; Aerial view of proposed pier in the context of the Avenue 7 1/2 bridge.

## A Compact Town Center



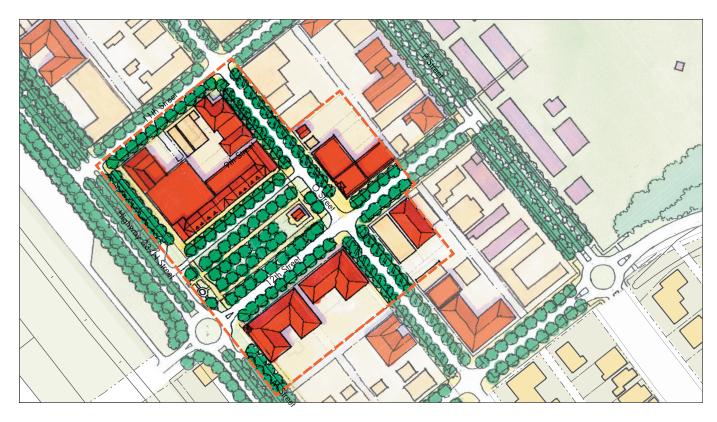
# Design Principle 3: Provide a Well-Defined, Centrally-Located, Mixed-Use Town Center.

O Street provides a "main street" retail storefront environment for local businesses and entrepreneurs. Many of the buildings along O Street are historically significant and provide a great opportunity for visitors to experience the unique character of the City in a pleasing, pedestrian-friendly environment. Despite these positive aspects retail along O Street has struggled in part due to its limited access and visibility from Highway 33, Nees Avenue, and 13th Street.

New economic development in Firebaugh should be organized in a manner that increases the viability of existing O Street businesses, and encourages visitors to patronize existing available services. In addition to physical improvements to O Street, the plan suggests ways in which new mixed-use development in the City may be organized to create such an environment.

This section outlines three strategies that should be pursued to provide Firebaugh with a healthy, vibrant, mixed-use center: The creation of a new, mixed-use development at the intersection of Highway 33 and 12th Street, improvements to O Street; and the encouragement of infill development in central Firebaugh.

Above: Bird's-eye view of Firebaugh looking east across the town towards the San Joaquin River and highlighting focus area for a compact town center.



#### Town Plaza and Mixed-Use Center

A recent economic development study illustrates that new commercial development in Firebaugh may capture some of the retail "leakage" that currently occurs. This potential new development may provide a significant opportunity for increased vitality and viability of O Street businesses, if new development is designed and strategically positioned to complement, rather than compete with, the existing O Street environment.

To this end, the design team explored the potential long-term creation of a new mixed-use center at the intersection of Highway 33 and 12th Street. This development could combine new retail, civic, office, and housing development organized around a public plaza that would provide O Street with a strong southern anchor and provide the community with a "front door" image that would be unique and positive.

The square could provide a viable setting for community festivals and would be suitable for a weekly farmers' market. Managed, on-street parking around the square could provide an opportunity for travelers to "park once," patronize local businesses, and venture over to new and existing businesses in the heart of O Street, merely 1 1/2 blocks away.

Above: The area bounded by Highway 33, 11th Street, O Street, and 12th Street should be considered as a significant redevelopment opportunity that can assist in the healthy revitalization of O Street as a retail environment.