

4 TRANSPORTATION AND CIRCULATION

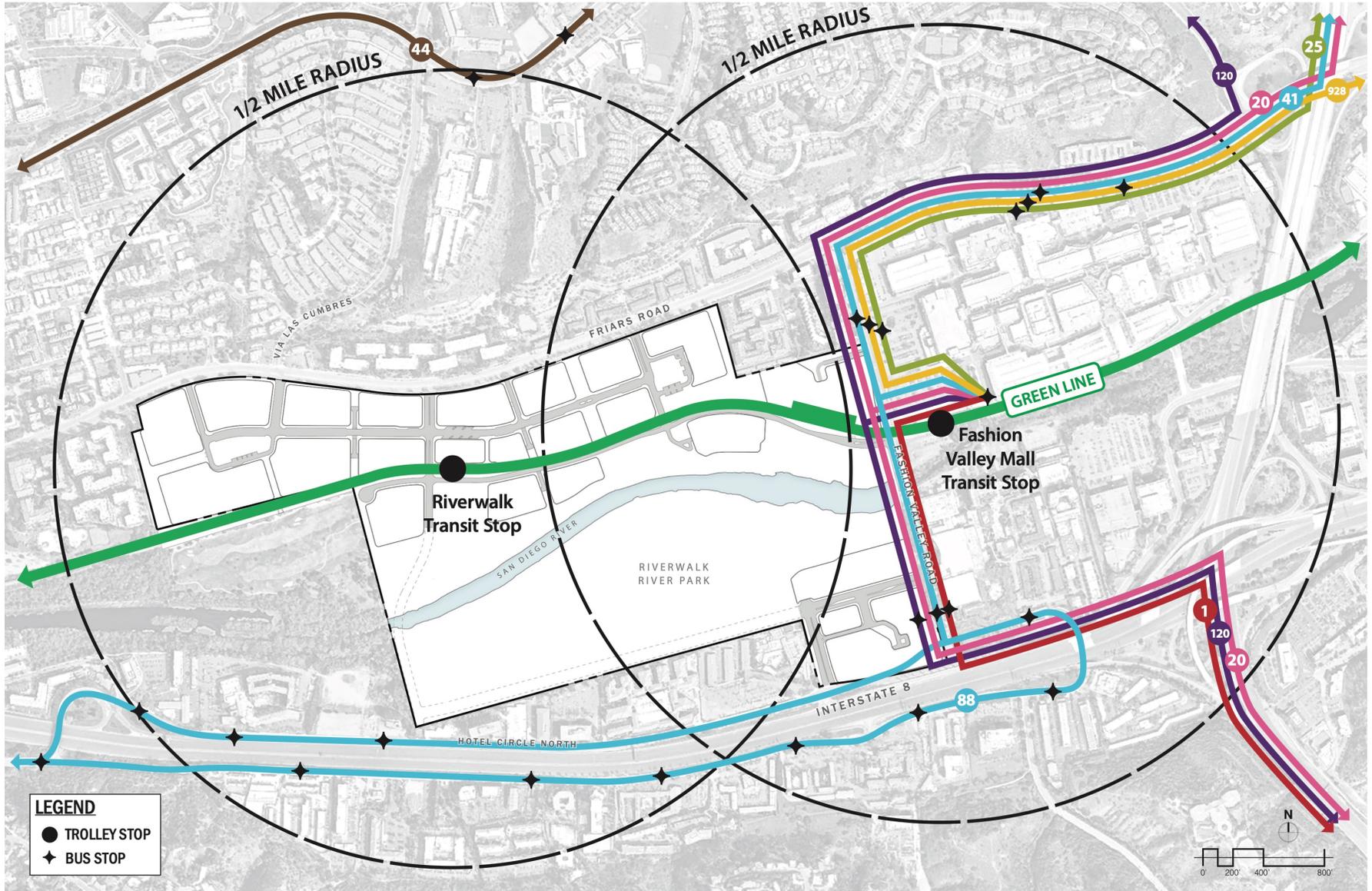
Riverwalk is afforded vehicular accessibility from a **well-established system** of roadways and a variety of transportation options. Regional accessibility is provided by interstate freeways and State highways, while local travel is formulated on north-south and east-west connector streets. Interstate 8 (I-8), a major east-west freeway, is located immediately south of Riverwalk, connecting the Pacific Ocean to the local mountains, the deserts, and Arizona. Interstate 5 (I-5), located approximately 1.5 miles west of Riverwalk, and State Route 163 (SR 163), located approximately one-half mile east of Riverwalk, provide regional access, north-south, from the border with Mexico to points north of San Diego County. Finally, Interstate 805 (I-805), located approximately 3.5 miles east of Riverwalk, connects motorists between the U.S./Mexico border to the mid-coastal communities and cities of San Diego County.

Local circulation is provided via Friars Road to the north and Hotel Circle North to the south, both of which provide east-west travel paralleling the north and south sides of the project, respectively. Friars Road connects Riverwalk and the Mission Valley community to Linda Vista to the north, Morena and Mission Bay to the west, and Grantville to the east. Fashion Valley Road forms Riverwalk's eastern border and connects Friars Road to Hotel Circle North.

In addition, Riverwalk is accessible to the **MTS Green Line Trolley** and **regional bus service**, with a **multi-modal transit center** located immediately east of the Specific Plan area at Fashion Valley Mall (Figure 4-1, *Transit Radius Map*). By way of the Green Line Trolley and local bus routes, Riverwalk is connected to the Old Town Transit Center, west of Riverwalk, and to the City of Santee in the east, as well as the greater San Diego and southern California region via bus, trolley, and commuter rail.

The existing and planned circulation system for Mission Valley will be supported by Riverwalk's **highly activated** features, such as the transit/trolley stop, mixed-use node located around the re-purposed golf course clubhouse, and the employment core of the South District, located within an easy ten-minute walk of complementary residential, commercial, and parks and open space uses. Together, the existing circulation system and the planned roadway, bikeway, and pedestrian network of Riverwalk will achieve a **truly integrated multi-modal transportation system** within central Mission Valley.

Figure 4-1. Transit Radius Map



4.1 PEDESTRIAN CIRCULATION

The entire project is designed to accommodate the pedestrian with linked pedestrian walkways, paths, and sidewalks (Figure 4-2, *Pedestrian Circulation*) to permit access from one part of the project to any other part, as well as the broader community. Riverwalk’s streets incorporate elements that prioritize pedestrian travel, create a pleasant pedestrian environment, and encourage non-vehicular movement. A multi-modal San Diego River Pathway will be located on the north side of the San Diego River that will connect with pedestrian elements (sidewalks and/or paths) within the Districts to the north and south, as well as to off-site sidewalks, providing connectivity to surrounding developments. As such, Riverwalk sidewalks will connect to the community-wide pedestrian network.

The pedestrian network includes utilizing the existing golf cart bridges to cross the San Diego River. These will function not only as a pedestrian link from the

transit/trolley stop and re-purposed golf clubhouse to the southern portions of Riverwalk, but also to activate the Riverwalk River Park. Pedestrian access from the south side of the San Diego River is planned to be available at all times. The two existing tunnels will be utilized for pedestrian access from the north to the south side of the trolley tracks; however, MTS controls the westerly tunnel and the Riverwalk Specific Plan cannot dictate activities on their land.

The existing bridges across the San Diego River will function not only as a pedestrian link from the transportation center and urban core to the southern portions of Riverwalk, but also to activate the Riverwalk River Park. These bridges provide an additional experience that is not only unique to Riverwalk, but also truly novel to the pedestrians and bicyclists that utilize the bridges, as this experience cannot be had from a motor vehicle. The sense of intrigue

and discovery that accompanies the pedestrian bridges encourages residents, employees, and visitors of Riverwalk to leave their cars and enjoy Riverwalk’s recreational elements on foot.

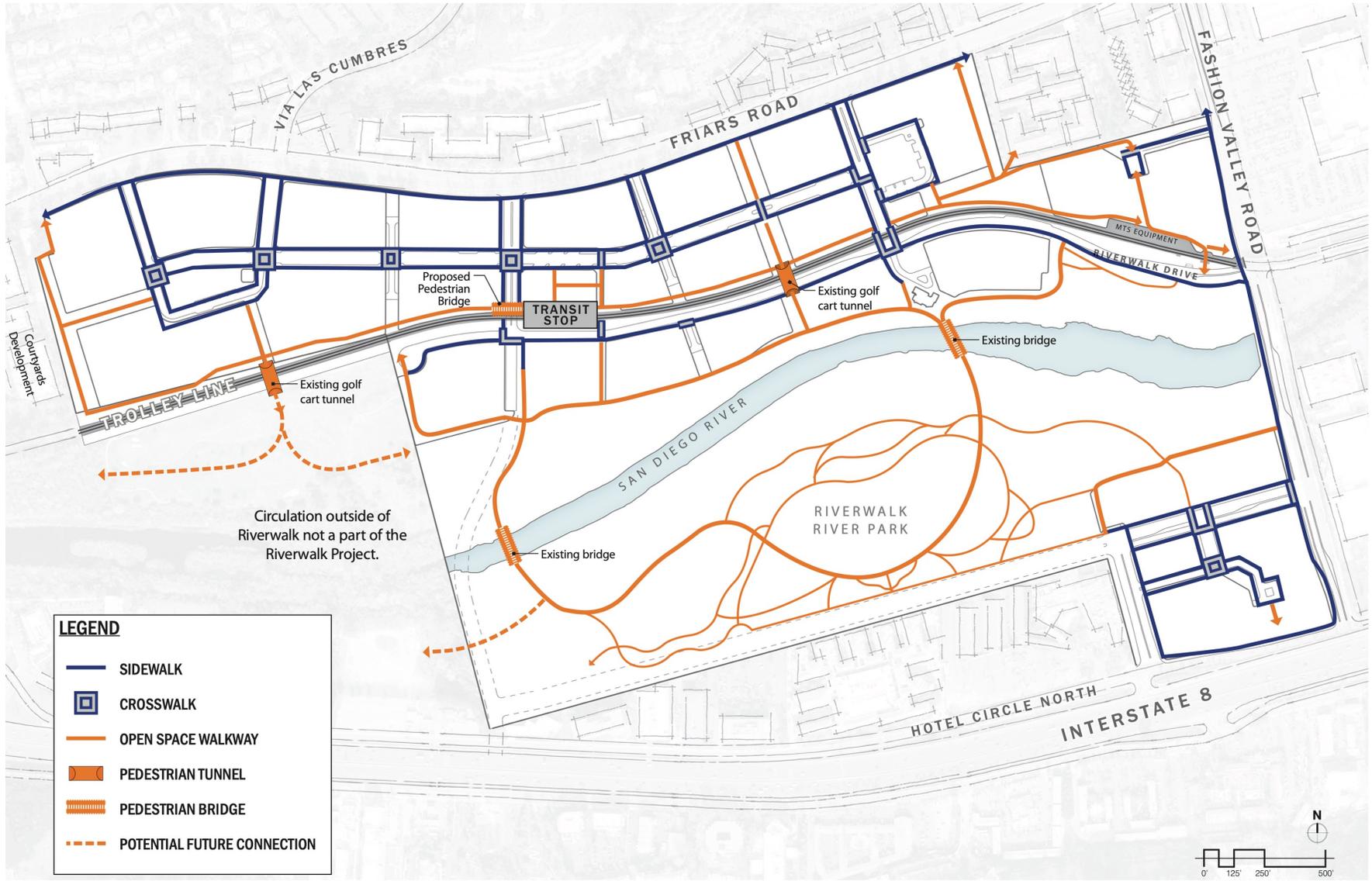
Pedestrian Bridges

Two existing golf cart bridges that span the river will be converted to pedestrian bridges for pedestrian and bicycle use. The travel way of the pedestrian bridges is approximately 11 feet in width. Paths shall connect the pedestrian bridges to the pedestrian trails, the various elements of the park system, and pedestrian/bicycle linkages to the development areas on both sides of the San Diego River.



Existing bridge across the San Diego River

Figure 4-2. Pedestrian Circulation



An additional pedestrian bridge is included over the Street J undercrossing. The pedestrian path that runs along the north side of the MTS trolley tracks will allow uninterrupted pedestrian circulation by providing a pedestrian bridge over the vehicular undercrossing at Street J as part of the transit/trolley stop. This bridge will be physically separated from the bridge structure that supports the trolley tracks, per consultations with the California Public Utilities Commission staff.

Pedestrian Tunnels

Two existing golf cart tunnels under the trolley tracks will be re-purposed for use by pedestrians and bicyclists. The travel way of the tunnels is approximately eight feet wide. The tunnels provide an alternative to at-grade crossings of the trolley tracks and increase the opportunities for pedestrian and bicycles. [Note that western tunnel is located on MTS land and the Riverwalk Specific Plan cannot dictate the use of the tunnel; however, use of the tunnel as means of connecting to the river is strongly encouraged.]

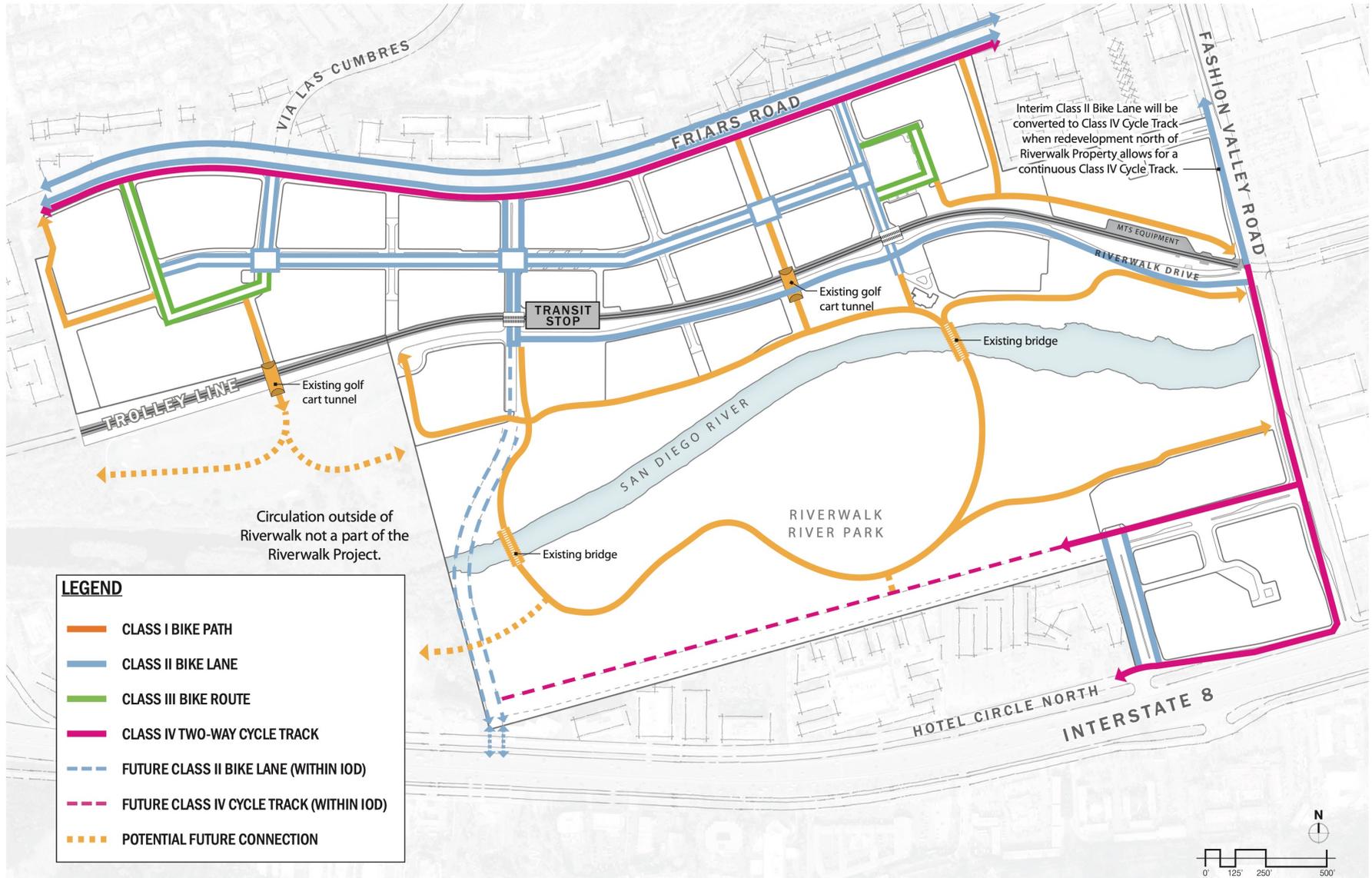
4.2 BICYCLE CIRCULATION

Riverwalk is designed to efficiently accommodate bicycle traffic (Figure 4-3, *Bicycle Circulation*), with interconnected on-street and off-street facilities, such as bike lanes and multi-modal pathways. Riverwalk’s streets contain elements that prioritize bicycle travel and encourage non-vehicular movement. The continuous 14-foot-wide multi-modal San Diego River Pathway that will be located on the north side of the San Diego River will accommodate bicyclists and will connect with bicycle facilities within Riverwalk, as well as the surrounding bicycle network.

The bicycle network will also utilize the existing golf cart bridges to cross the San Diego River. These will allow for uninterrupted bicycle travel throughout the Riverwalk site. The bicycle network consists of the following facilities:

- » Bicycle paths (Class I Bike Path) are facilities separate from roadways used for two-way bicycle travel, which will be provided on the east and west side of the site and throughout the Riverwalk River Park.
- » Bicycle paths are proposed to connect both sides of the San Diego River to connect the Riverwalk River Park open space areas via existing bridges.
- » Bicycle lanes are provided on all public streets throughout Riverwalk, with the exception of Streets A and K.
- » Two-way cycle track will be provided on Friars Road, Fashion Valley Road, and Hotel Circle North along the project frontage.
- » The Friars Road cycle-track will enter Riverwalk at multiple locations, including all signalized intersections.
- » All other Private Driveways within Riverwalk would be signed “bikeways” (Class III Bike Route) shared with motor vehicles with no specially marked lane.

Figure 4-3. Bicycle Circulation



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4.3 LIGHT RAIL TRANSIT

The San Diego Trolley Light-Rail System opened in 1981. It currently connects the South Bay area (ending at the Mexican border) to downtown San Diego and the central San Diego cities of La Mesa, El Cajon, and Santee. Extensions of the system have been completed to connect downtown San Diego to Old Town and through Mission Valley and San Diego State University to La Mesa. The Green Line Trolley was built across the property in 1997, in a generally east-west alignment, approximately half-way between Friars Road and the San Diego River, with the extension to Santee constructed in 2005. There are existing trolley stops at Morena/Linda Vista to the west and Fashion Valley Mall Transit Center to the east, which are separated by approximately 1.8 miles.

As shown in Figure 4-4, *Existing Trolley Network*, in the project area, the Green Line Trolley crosses through Riverwalk in a generally straight line, south of The Courtyards condominiums to the west of the project area, north of Riverwalk Drive, and exiting the property above the Riverwalk Drive/Fashion Valley Road intersection. The Riverwalk Specific Plan includes a new transit/trolley stop, which was identified based upon MTS criteria relative to the separation between existing stations, potential population served, flatness, and visibility. Sufficient right-of-way to provide for the transit/trolley stop will be reserved with recordation of the abutting/surrounding final map(s).

The transit/trolley stop within Riverwalk (Figure 4-5, *Transit/Trolley Stop*) includes a mobility hub that will incorporate parking, pedestrians, bicycles, autos, bus, and commercial activity areas. Pedestrian/bicycle access between the land uses on the south side of the river and the mobility hub on the north side of the river will be provided via a series of trails/paths. The paths/trails will significantly enhance connectivity and will reduce vehicle miles traveled by providing extensive active transportation routes linking Riverwalk's land uses and allowing residents, employees, and visitors a means to traverse the site without an automobile.

Crossings of the trolley tracks are critical for Riverwalk's active transportation and vehicular circulation systems. As shown in Figure 4-6, *Trolley Crossings*, pedestrian and bicycle crossings are facilitated by the two tunnel crossings. At the west and east ends of the trolley platform, at-grade pedestrian crossings will occur, as well as a pedestrian and bicycle underpass at Streets J1/J2. A vehicular grade-separated crossing would also occur at Streets J1/J2, as well as an at-grade crossing at Streets O/R.

Figure 4-4. Existing Trolley Network

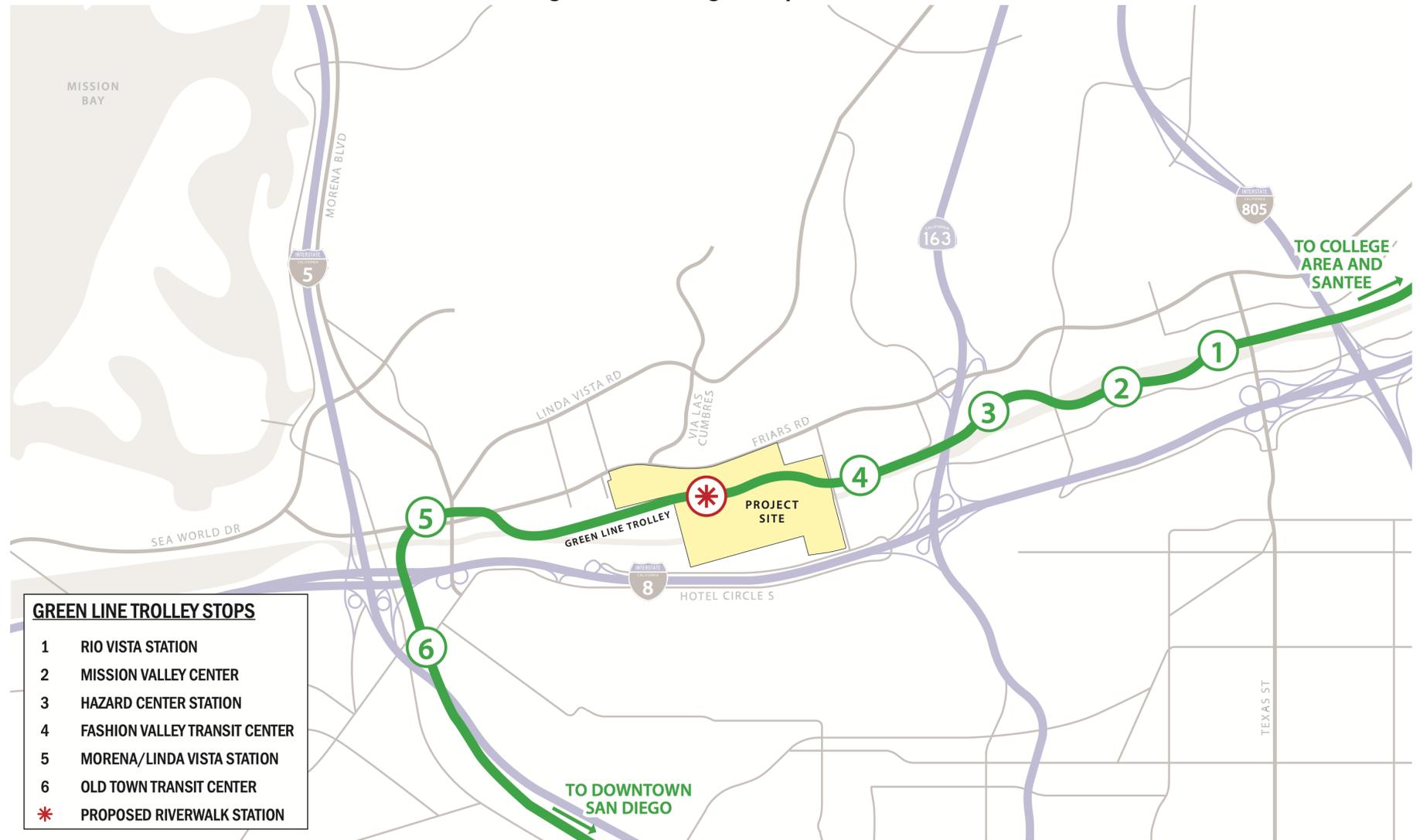
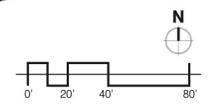
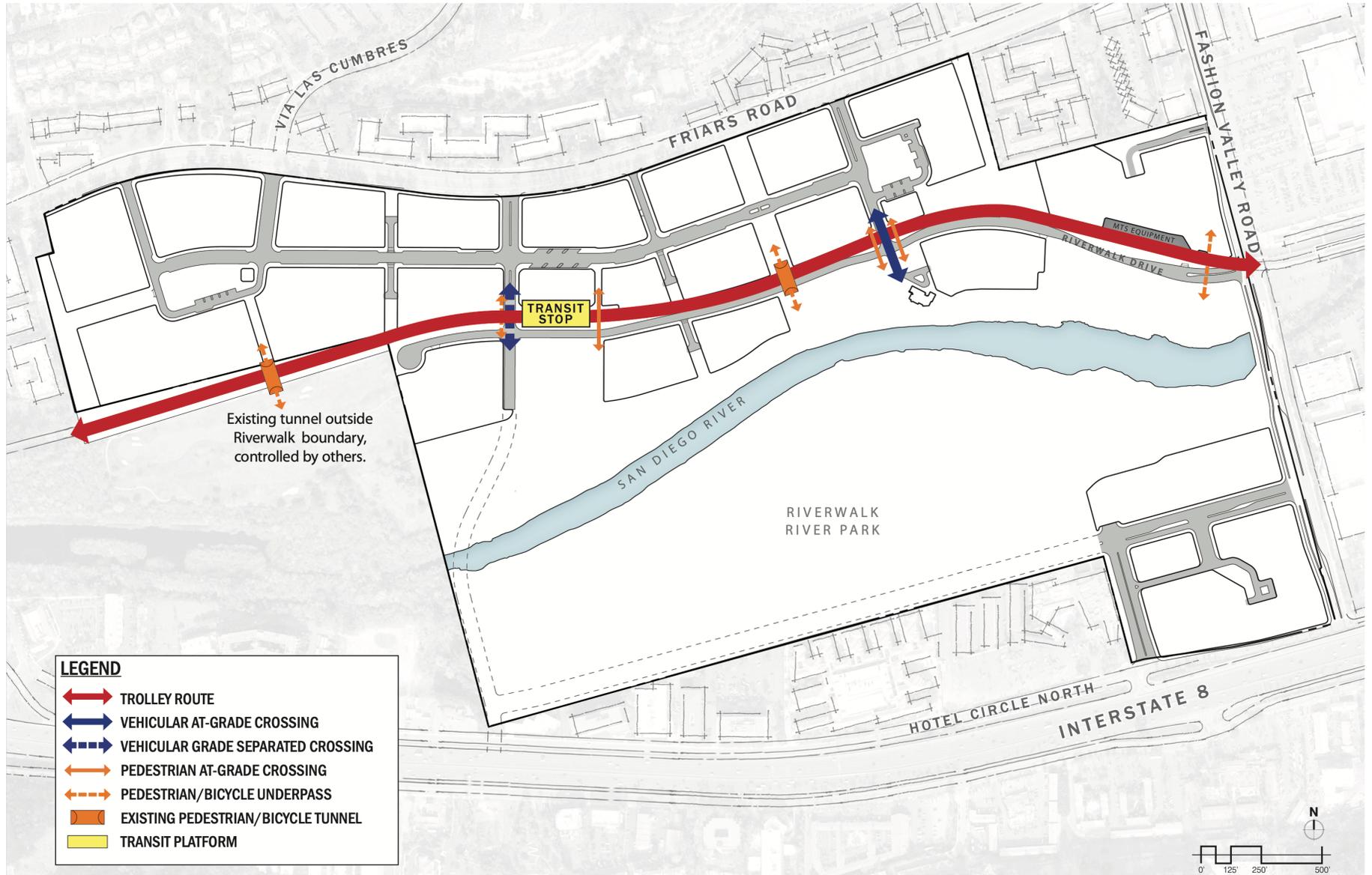


Figure 4-5. Transit/Trolley Stop



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Figure 4-6. Trolley Crossings



4.4 EXISTING STREET SYSTEM

As shown in Figure 4-7, *Existing Vehicular Circulation System*, Riverwalk is served by existing streets which connect to the Specific Plan area. Primary east-west local access is provided via Friars Road, which forms Riverwalk’s northern boundary. Hotel Circle North, which forms Riverwalk’s southern boundary, also provides east-west access, as well as connectivity to I-8. Fashion Valley Road, which forms Riverwalk’s eastern boundary, provides connection between Friars Road and Hotel Circle North. A brief description of these existing roadways and other roadways in the project area, their classifications, and functions is provided below.

- » **Friars Road** forms the boundary between the Linda Vista and Mission Valley communities and is a classified roadway in both Community Plans. Per the Mission Valley Community Plan, Friars Road has an ultimate classification of Four-Lane Major Arterial between east of Napa Street and Fashion Valley Road, a Five-Lane Major between Fashion Valley Road and Fashion Valley Driveway, a Six-Lane Major Arterial between Fashion Valley Driveway and SR 163 SB Ramps/Ulric Street, an Eight-Lane Primary Arterial between the SR 163 SB ramps/Ulric Street and Mission Center Road, and a Six-Lane Expressway between Mission Center Road and Qualcomm Way.

Friars Road is currently built as follows:

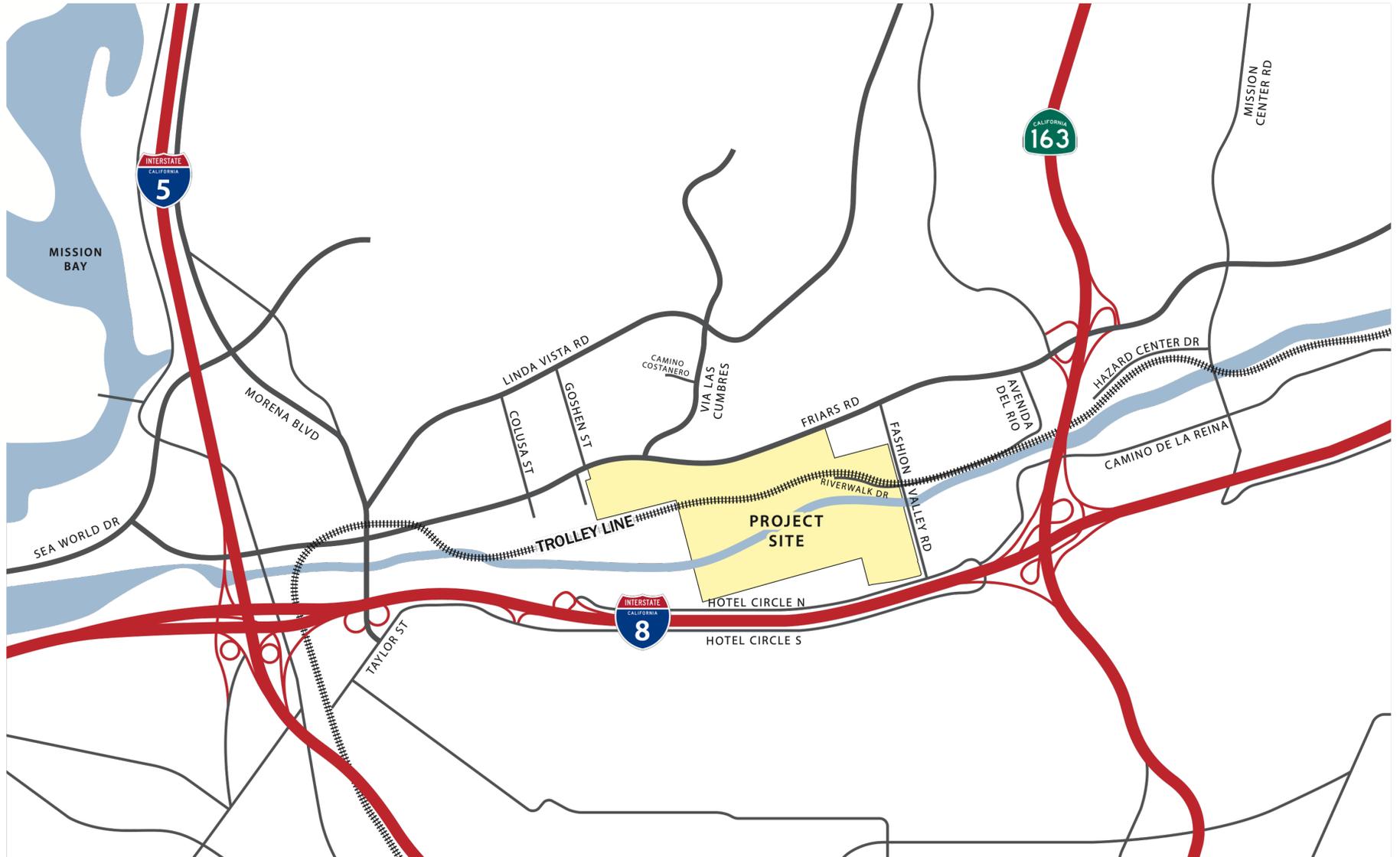
- ◆ Napa Street to Colusa Street - Four-lane divided roadway with a raised median.
- ◆ East of Colusa Street to Fashion Valley Road - Four-lane roadway with an intermittent two-way left-turn lane (TWLTL) and striped median.

- ◆ East of Fashion Valley Road to Avenida de las Tiendas - Three travel lanes in the eastbound direction and two travel lanes westbound, with a raised median.
- ◆ Avenida de las Tiendas to SR 163 - Six-lane facility, with a raised median.
- ◆ SR 163 to Mission Center Road - Seven-lane facility, with a raised median.

Bike lanes and sidewalks are provided along the roadway. The bike lanes on the north side are provided adjacent to the curbside parking between just east of Napa Street and just west of Fashion Valley Road. Bicycle facilities on the south side include a two-way cycle track from Sea World Drive to Riverwalk’s northeast boundary and a bike lane from Napa Street to east of the SR 163 overcrossing. The posted speed limit is generally 45 miles per hour (mph).

- » **Fashion Valley Road** forms the eastern boundary of the Riverwalk site. Fashion Valley Road has an ultimate classification of four-lane Major Arterial in the Mission Valley Community Plan. At the time this Specific Plan was adopted, Fashion Valley Road is a four-lane undivided roadway (Collector) between Friars Road and Hotel Circle North. While this roadway lacks any center left-turn lane or median, left-turn pockets are provided at intersections and one mid-block location, providing additional capacity. Traffic is controlled by signals except for parking lot driveways to commercial retail uses, which are controlled by stop signs. The posted speed limit is 35 mph. Curbside parking is not permitted. No bike lanes are provided, but bus stops are provided.

Figure 4-7. Existing Vehicular Circulation System



- » **Hotel Circle North** forms the southern boundary of the Riverwalk project site. Hotel Circle North has an ultimate classification of a 2-lane one-way couplet in the counterclockwise direction with Class IV Cycle Track in the Mission Valley Community Plan. Hotel Circle North is currently constructed as a two-lane undivided roadway (Collector) with a two-way left-turn lane west of the I-8 ramps, a three-lane undivided roadway (Collector) between the I-8 ramps and Fashion Valley Road, and a two-lane undivided roadway (Collector) with a two-way left-turn lane between Fashion Valley Road and Camino de la Reina. Bike lanes are provided for a short distance on Hotel Circle North just west the I-8 freeway underpass. The Hotel Circle name transition occurs underneath the I-8 freeway.
- » **Hotel Circle South** has an ultimate classification of 2-lane one-way couplet in the counterclockwise direction with Class IV Cycle Track in the Mission Valley Community Plan. At the time this Specific Plan was adopted, Hotel Circle South is constructed as a two-lane undivided roadway with a two-way left-turn lane (Collector). Traffic is controlled by signals or stop signs. The posted speed limit is 35 mph. Curbside parking is not permitted. Bike lanes are provided on Hotel Circle South.
- » **Riverwalk Drive** has an ultimate classification of two-lane Collector between Fashion Valley Road and Avenida del Rio in the Mission Valley Community Plan. At the time this Specific Plan was adopted, Riverwalk Drive is constructed as a two-lane undivided roadway (Collector) that terminates into the Fashion Valley Mall (east of Avenida del Rio). Curbside parking is not permitted.
- » **Via las Cumbres** has an ultimate classification on the Linda Vista Community Plan Circulation Element as a Four-Lane Collector from Friars Road to Linda Vista Road and as a Two-Lane Collector north of Linda Vista Road. Along this stretch, at the time this Specific Plan was adopted, it is built as a three-lane undivided roadway with two lanes of travel in the northbound direction and one lane traveling southbound. A sidewalk is provided only on the west side of the roadway from Friars Road up to Camino Costanero, at which point the sidewalks are then provided on both sides of the roadway. Curbside parking is provided intermittently, a bike lane is provided on the east side of the roadway commencing about 75 feet north of Friars Road continuing to Linda Vista Road, and a sharrow is provided on the west side of the roadway from Friars Road to Camino Costanero that transitions to a bike lane from Camino Costanero to Linda Vista Road. North of Linda Vista Road, a sharrow is provided on the east side of the roadway and a bike lane is provided on the west side of the roadway. The posted speed limit is 35 mph. The Mission Valley Community Plan has an ultimate classification of a two-lane collector with two-way left turn lane within the Riverwalk project site between Friars Road and the MTS trolley tracks. Currently, this planned segment of roadway does not exist and the project does not propose to construct it.
- » **Hazard Center Drive** is a four-lane roadway. The median varies between a striped median and a raised median, with no posted speed limit, between its western terminus and Frazee Road. East of Frazee Road, Hazard Center Drive is a four-lane roadway with a raised median and no posted speed limit. A two-lane extension of Hazard Center Drive is under construction connecting its current western termination with Fashion Valley Mall underneath SR 163. Hazard Center Drive between Avenida del Rio and the western terminus has an ultimate classification of two-lane Collector with two-way left-turn

lane in the Mission Valley Community Plan. Sidewalks are present on both sides of the roadway, but no bicycle facilities are provided. Parking is permitted on both sides of the roadway.

- » **Colusa Street** has an ultimate classification of Two-Lane Collector between Friars Road and Linda Vista Road. At the time this Specific Plan was adopted, it is built as a two-lane roadway between Friars Road and Linda Vista Road. Curbside parking is permitted along both curbs. The posted speed limit is 25 mph.
- » **Avenida del Rio** is classified as a four-lane Collector in the Mission Valley Community Plan. At the time this Specific Plan was adopted, Avenida del Rio is constructed as a four-lane undivided roadway (Collector) between Riverwalk Drive and Camino de La Reina. Avenida del Rio provides access to the Fashion Valley Mall Transit Center. There is no posted speed limit. Curbside parking is not permitted. Bike lanes and bus stops are not provided.

4.5 EXISTING FREEWAY SYSTEM

- » **I-8** is a major east-west Interstate Freeway providing interregional connectivity between San Diego County and Imperial County to the east. It has a posted speed limit of 65 mph. Within the project area, I-8 generally consists of eight travel lanes in the east-west direction with additional auxiliary lanes. Interchanges within the immediate vicinity of project study area provided at Taylor Street, Hotel Circle North, and Hotel Circle South.

- » **I-5** is a major north-south Interstate Freeway providing interregional connectivity between San Diego County and Orange/Los Angeles Counties to the north. It has a posted speed limit of 65 miles per hour. Within the project area, I-5 generally consists of eight travel lanes in the north-south direction with additional auxiliary lanes. The closest access to the I-5 is the I-8/I-5 interchange, which is southwest of the project study area.
- » **SR 163** is a north-south State Route providing interregional connectivity between downtown San Diego and Interstate I5 to the north. It has a posted speed limit of 65 miles per hour. Within the project area, SR 163 generally consists of eight travel lanes in the north-south direction with additional auxiliary lanes. An interchange within the immediate vicinity of project study area is provided at Friars Road. The closest access to SR 163 from Riverwalk occurs at the Friars Road/SR 163 interchange, northeast of the property, or via I-8 eastbound.

4.6 SPECIFIC PLAN STREET SYSTEM

Vehicular circulation within Riverwalk is achieved through connections to the primary network established by existing city streets and improvements to adjacent roadways. The internal street system is based upon a modified grid-pattern that is influenced by the landform, shape of the Specific Plan area, provision of connectivity, and the Mission Valley Community Plan and is constructed as part of the Riverwalk Vesting Tentative Map to connect each District. Additional internal private drives will provide access to development within each District. Figure 4-8, *Riverwalk Vehicular Circulation Plan*, depicts the circulation plan for Riverwalk and designates the classification of roads designed to serve development with the Specific Plan area. Figure 4-9, *Street Section Key Map*, provides the location of the various street types that will make up Riverwalk's street network and associated pedestrian and bicycle amenities, while Figure 4-10, *Street Section Synopsis*, provides the breakdown of each street's characteristics, including roadway width, bicycle lanes, and pedestrian facilities.

The street system for Riverwalk has been designed to achieve a high degree of compatibility between vehicles, pedestrians, and bicyclists. Provided below is a description of the various streets within Riverwalk. The landscape treatment of these roadways is described and illustrated in Chapter 3, *Parks, Open Space, and the Pedestrian Realm*. Streets sections may be modified as required during final mapping and/or preparation of the Improvement Plan. Such modifications will not require an amendment to this Specific Plan.

All public streets will have minimum five-foot sidewalks with a five-foot landscaped separation from curb line. The roadways also have either bike lanes or sharrows to encourage non-motorized movement into and out of the community, which may lead to a reduction in vehicle miles traveled (by making active transportation a safe and attractive mode of transportation). (See discussion in Section 4.2, *Bicycle Circulation*.)

Figure 4-8. Riverwalk Vehicular Circulation Plan

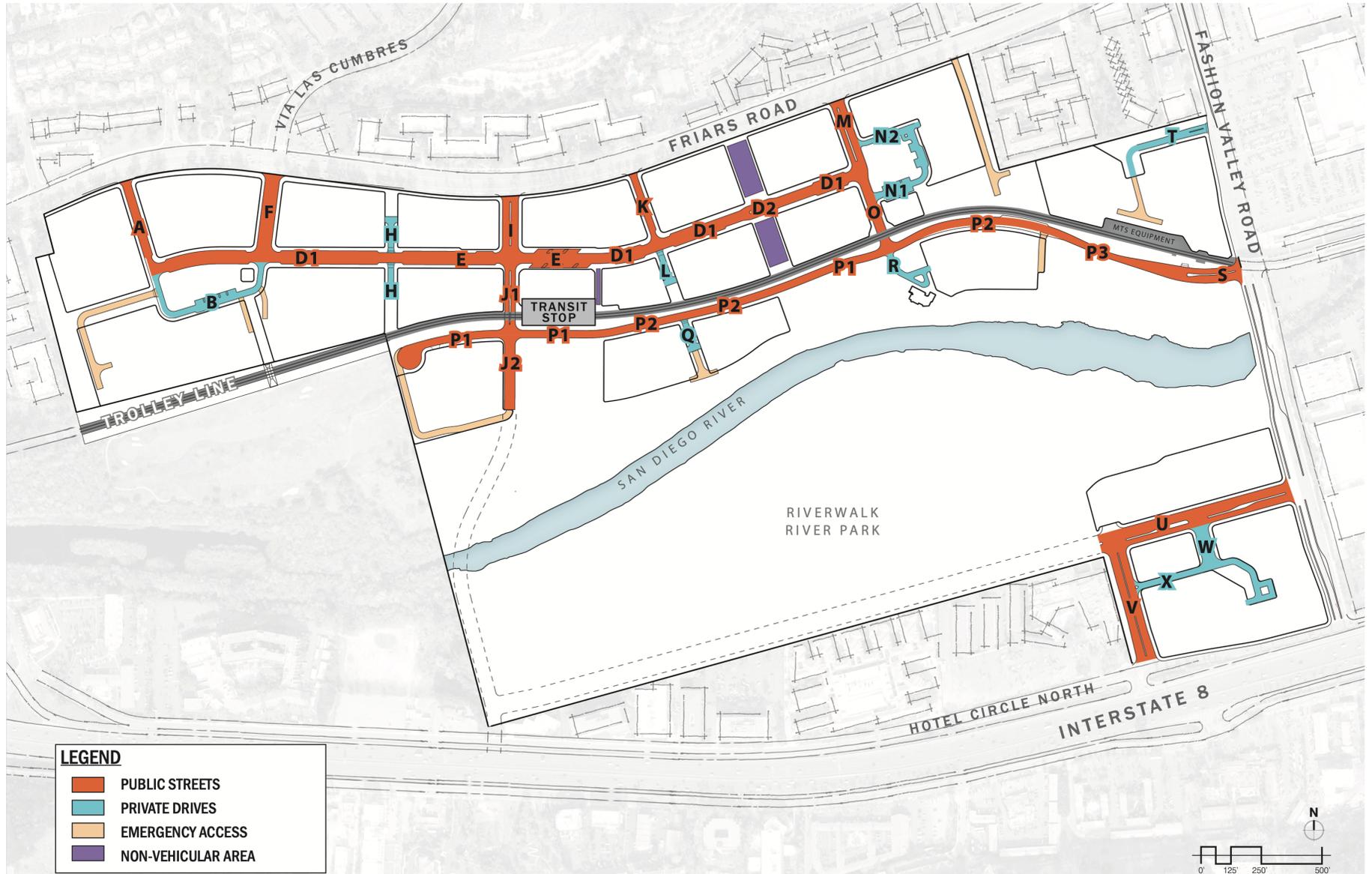


Figure 4-9. Street Section Key Map

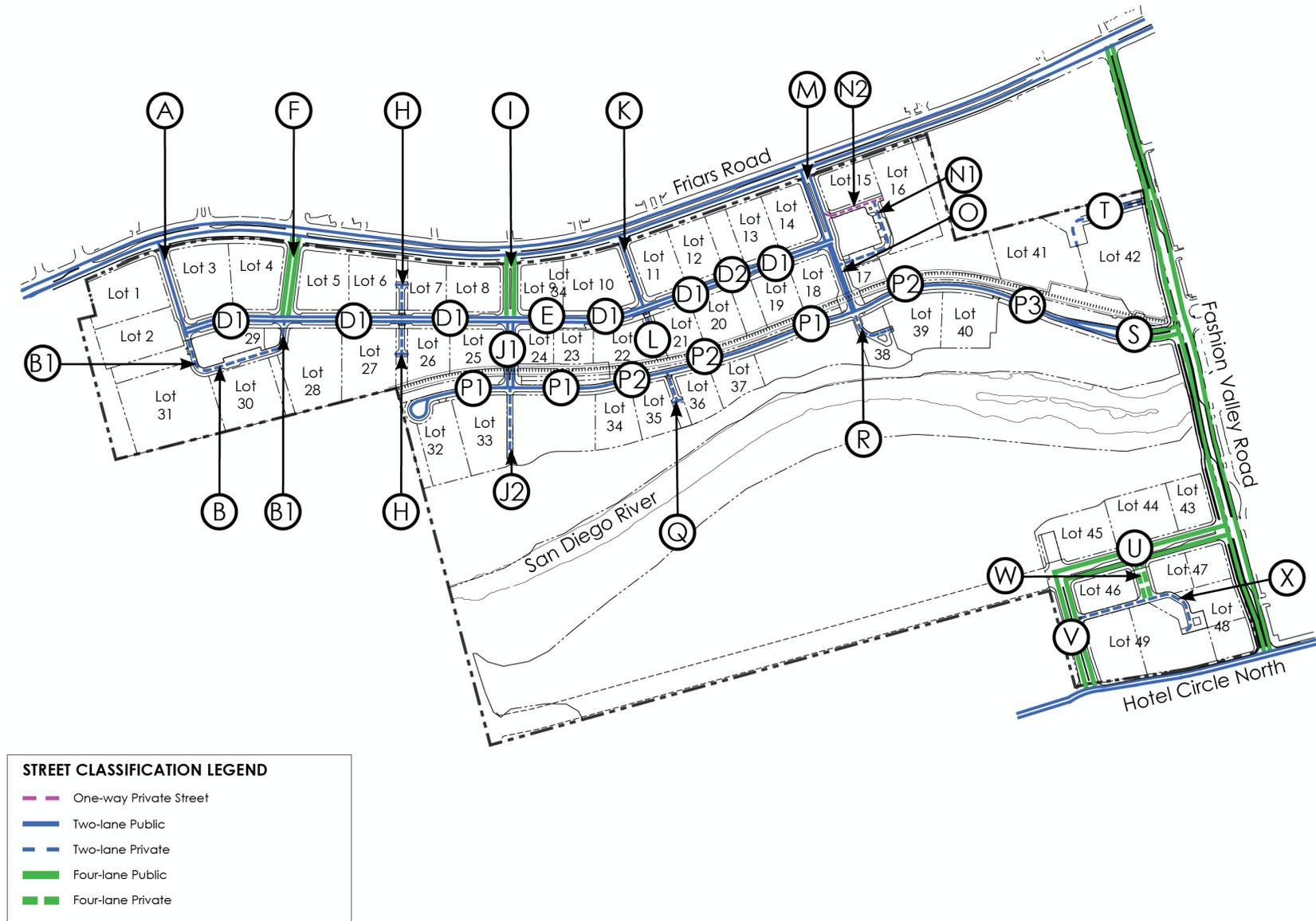


Figure 4-10. Street Section Synopsis

Road Section	Symbol	Public/Private	Bike Lane/Quantity	# Drive Lanes / Lane Width	ROW	Parking	Two-Way Left Turn	Raised Median	Classification	Design Speed	Other
A		Public	No	2/11'	64'	(2) Parallel - 7' wide	No	No	Two-lane Collector	30 MPH	7' Loading Zone
B		Private	No	2/13'	57.5'	Head-in - 18' wide	No	No	Two-way Drive	25 MPH	7' Loading Zone
B1		Private	No	2/11'	35.5'	No	No	No	Two-way Drive	25 MPH	
D1		Public	Yes/2 @ 6'	2/10'	84'	(2) Parallel - 7' wide	Yes/10'	No	Two-lane Collector w/ 2-way Left Turn Lane	35 MPH	
D2		Public	Yes/2 @ 6'	2/15'	84'	No	No	Yes/14'	Two-lane Collector w/ Speed Table	25 MPH	
E		Public	Yes/2 @ 5'	2/11'	90'	(2) Angled - 18' wide	Yes/10'	No	Modified Two-lane Collector w/ 2-way Left Turn Lane	35 MPH	
F		Public	Yes/2 @ 6'	2/10' & 2/11'	87'	No	No	No	Modified Four-lane Urban Collector	35 MPH	(2) 2' Buffers for Bike Lanes
H		Private	No	2/12'	52'	No	No	No	Private Driveway	25 MPH	
I		Public	Yes/2 @ 6'	4/11'	94'	No	No	Yes/6'	Modified Four-lane Collector	30 MPH	(2) 2' Buffers for Bike Lanes
J1		Public	Yes/2 @ 6'	2/11'	50.5'	No	No	Yes/6'	Modified Two-lane Major	25 MPH	(2) 2' Buffers for Bike Lanes & Bridge Abutment
J2		Private	Yes/2 @ 6'	2/11'	56'	No	No	No	Private Driveway	25 MPH	Between Riverwalk Dr. and the San Diego River Trail, Street J2 will be constructed to its ultimate condition.
K		Public	No	1/11' & 1/10'	56'	(1) Parallel - 7' wide	No	No	Modified Two-lane Collector	30 MPH	
L		Private	No	2/12'	52'	No	No	No	Private Driveway	25 MPH	
M		Public	Yes/2 @ 6'	3/11'	84'	No	No	Yes/7'	Modified Two-lane Collector	30 MPH	(2) 2' Buffers for Bike Lanes
N1		Private	No	2/12'	66.5'	(2) Head-in - 18' Wide	No	No	Private Driveway	25 MPH	
N2		Private	No	1/20'	33.5'	No	No	No	One-way Drive (Westbound)	25 MPH	
O		Public	Yes/2 @ 6'	2/12'	68'	No	No	No	Modified Two-lane Collector	30 MPH	(2) 2' Buffer for Bike Lane
P1		Public	Yes/1 @ 5'	2/12'	45.5'	No	No	No	Modified Two-lane Collector	30 MPH	35' MTS Trolley & 7' No Parking/Fire Lane/2' Bike Lane Buffer
P2		Public	Yes/1 @ 5'	2/12'	45.5'	No	No	No	Modified Two-lane Collector	30 MPH	35' MTS Trolley & 7' No Parking/Fire Lane/2' Bike Lane Buffer
P3		Public	Yes/1 @ 14'	1/12.5'-21.5' & 1/19'-30'	45.5'-62.5'	No	No	No	Modified Two-lane Collector	30 MPH	35' MTS Trolley & 14' Bike/Ped Path
Q		Private	No	2/12'	52'	No	No	No	Private Driveway	25 MPH	
R		Private	Yes/1 @ 10'	2/12'	48'	No	No	No	Modified Low-volume Residential Local	25 MPH	10' Bike/Ped Path with 2' Shoulder
S		Public	Yes/1 @ 14'	4/11' & 1/10'	94'	No	No	Yes/5'	Modified Four-lane Major	30 MPH	14' Bike/Ped Path
T		Private	No	2/13'	Varies	No	No	No	Private Driveway	25 MPH	
U		Public	Yes/1 @ 12'	2/10' & 3/11'	103'	No	No	Yes/16'	Modified Four-lane Urban Collector	35 MPH	(1) 12' 2-way Cycle Track w/ 4' Buffer
V		Public	Yes/2 @ 6'	4/12'	89.5'	No	No	Yes/4'	Modified Four-lane Urban Collector w/ Median	35 MPH	
W		Private	No	4/11'	84'	No	No	No	Private Driveway	25 MPH	
X		Private	No	2/13'	27'	No	No	No	Private Driveway	25 MPH	
FVR		Public	Yes/1 @ 12'	4/11'	110'	No	Yes/24'	Yes/24'	Modified Four-lane Major	45 MPH	12' 2-way Cycle Track w/ 4' Buffer
HCN		Public	Yes/1 @ 12'	1/11' & 1/12'	56.5'	No	No	No	Two-Lane Collector	40 MPH	12' 2-way Cycle Track w/ 4' Buffer
FR		Public	Yes/1 @ 8', 2 @ 5'	4/11'	123'	No	Yes/14'	Yes/14'	Four-Lane Urban Major	45 MPH	(1) 8' 2-way Cycle Track & (3) 2' Buffers

4.6.1 Spine Road

Riverwalk's spine road that runs down the center of the North District will physically tie together the land uses and development areas that make up the heart of Riverwalk. Constructed within a right-of-way ranging from 84 feet (Street D1, Figure 4-11; and Street D2, Figure 4-12) to 90 feet (Street E, Figure 4-13), this roadway will connect the uses within the North District to the mixed-use transit/trolley stop located at the center of the District.

The majority of the spine road, Street D1, is a Two-Lane Collector Street with two-way left-turn lane. Street D1 has an 84-foot right-of-way and will develop as a public street with one 10-foot lane of travel in either direction and seven feet of parallel on-street parking provided on either side of the road. An eight-foot landscaped parkway is provided, buffering the six-foot non-contiguous sidewalk from the roadway in either direction. A ten-foot two-way left turn lane is located in the center of Street D1. Six-foot bicycle lanes are provided on either side of the street between the travel lane and the on-street parking.

Within the eastern portion of Riverwalk, the spine road's section Street D2 is a Two-Lane Collector Street with speed table within an 84-foot right-of-way. Street D2 will develop as a public street with one 15-foot lane of travel in either direction with six-foot bicycle lanes provided on either side of the road. An eight-foot landscaped parkway is provided, buffering the six-foot non-contiguous sidewalk from the roadway. A 14-foot landscaped median is located down the center of Street D2.

The central portion of the spine road is public Street E, a modified Two-Lane Collector Street with two-way left-turn lane with a right-of-way width of 90 feet. Street E includes one 11-foot lane of travel in either direction and back-in angle parking (18 feet) provided on either side of the roadway. A 10-foot

two-way left turn lane is located in the center of Street E. Contiguous sidewalks would be six feet in width and five-foot-wide bike lanes are provided in both directions between the travel lanes and the diagonal parking.

The spine road is bookended by two park elements, around which are Private Driveway B and Private Driveway B1 in the west (Figure 4-14 and Figure 4-15, respectively) and Private Driveway N1 and Private Driveway N2 in the east (Figure 4-16 and Figure 4-17, respectively). Private Driveway B1, along the eastern and western edges of the park at the western end of the spine road, is a private drive with one 11-foot travel lane in either direction within a right-of-way of 35 feet six inches. The non-park side of the drive has a seven-foot landscaped parkway and six-foot-wide non-contiguous sidewalk.

Private Driveway B, which forms the southern boundary of the park at the western end of the spine road, is a private drive with one 13-foot travel lane in either direction within a right-of-way of 57 feet six inches. Head-in 18-foot parking is provided on the north side of the drive, as well as a five-foot contiguous sidewalk; the south side of the drive has a seven-foot loading zone and a six-foot contiguous sidewalk.

Private Driveway N1, which forms the eastern and southern boundaries of the park at the eastern end of the spine road, is a private two-lane drive with one 12-foot travel lane in either direction within a right-of-way of 66 feet six inches. Head-in parking with a depth of 18 feet is provided on either side of the drive, as well as a contiguous sidewalk of six feet on the non-park side of the drive.

Private Driveway N2, which forms the northern boundary of the park at the eastern end of the spine road, is a private one-way within a right-of-way of 33 feet six inches. The drive lane of 20 feet is separated from a six-foot non-contiguous sidewalk by a seven-foot landscaped parkway.

Figure 4-11. Street DI (Spine Road)

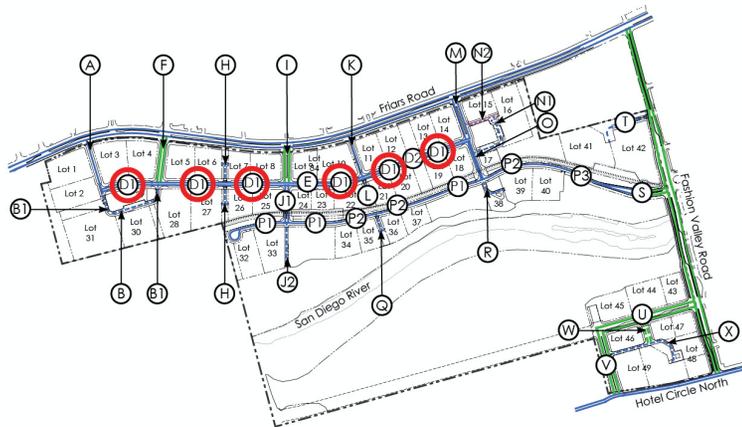
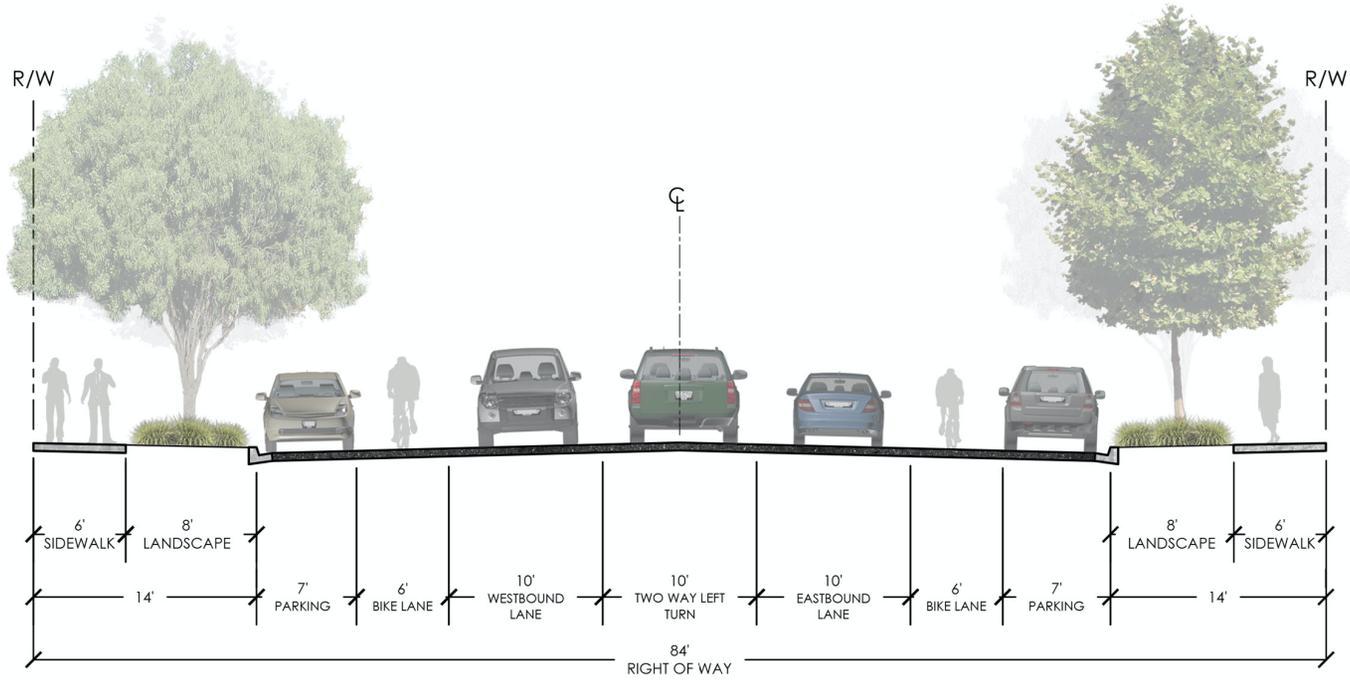


Figure 4-12. Street D2 (Spine Road)

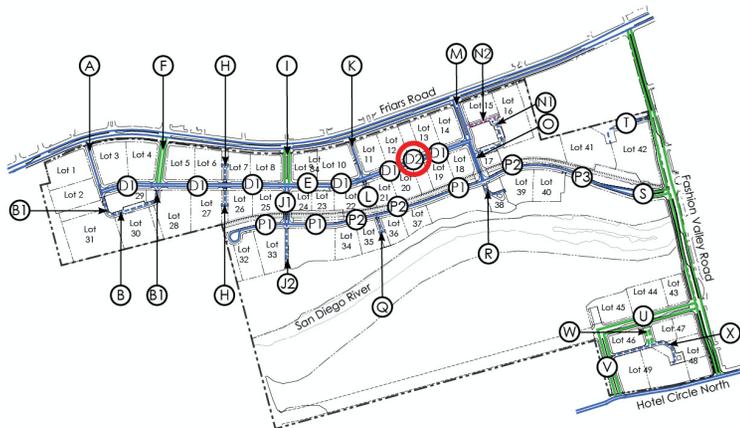
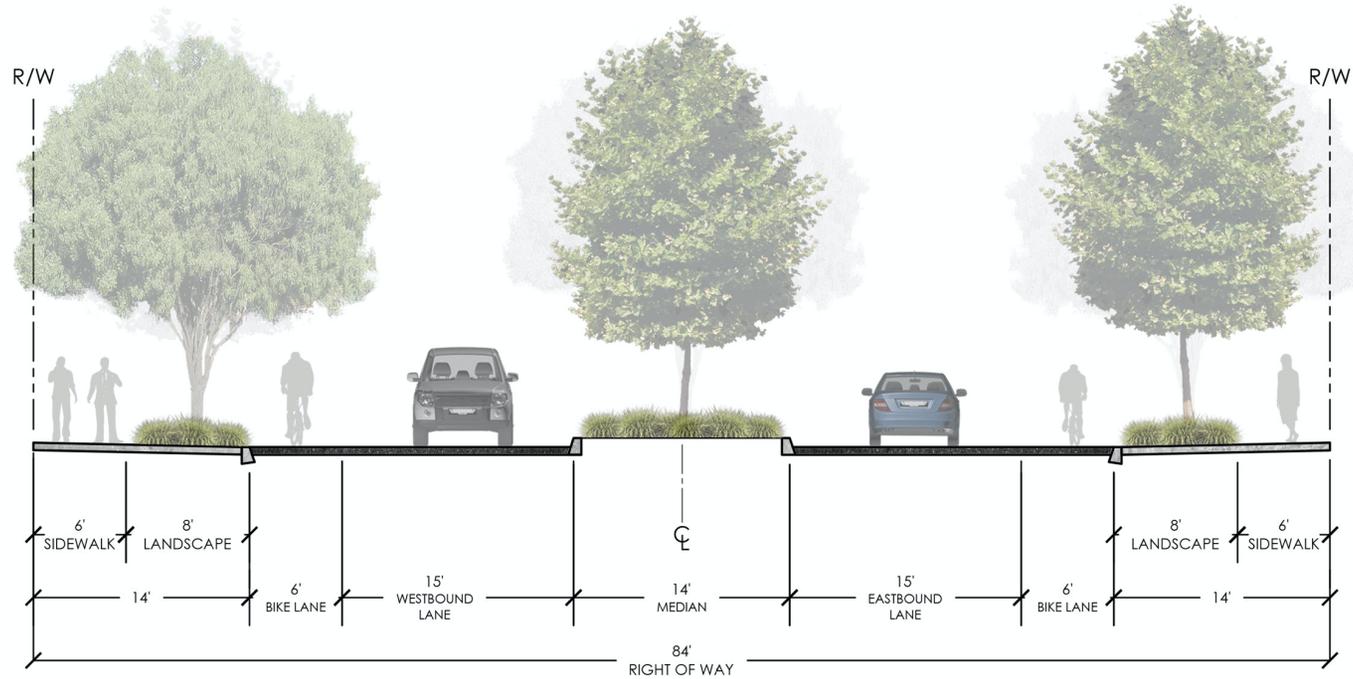


Figure 4-13. Street E (Spine Road)

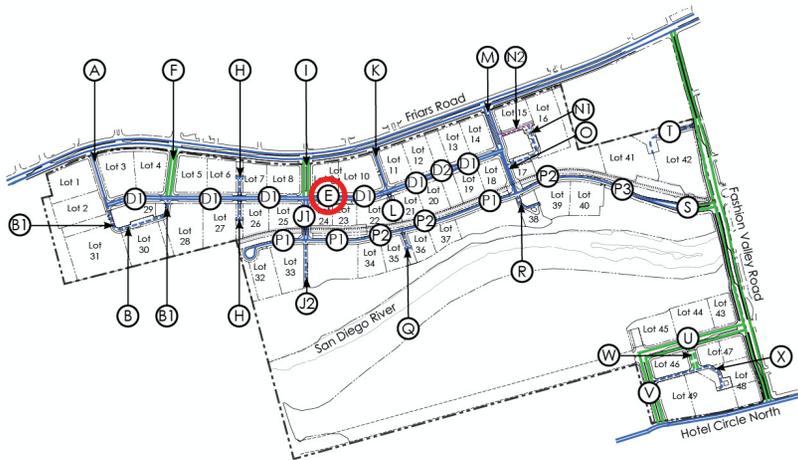
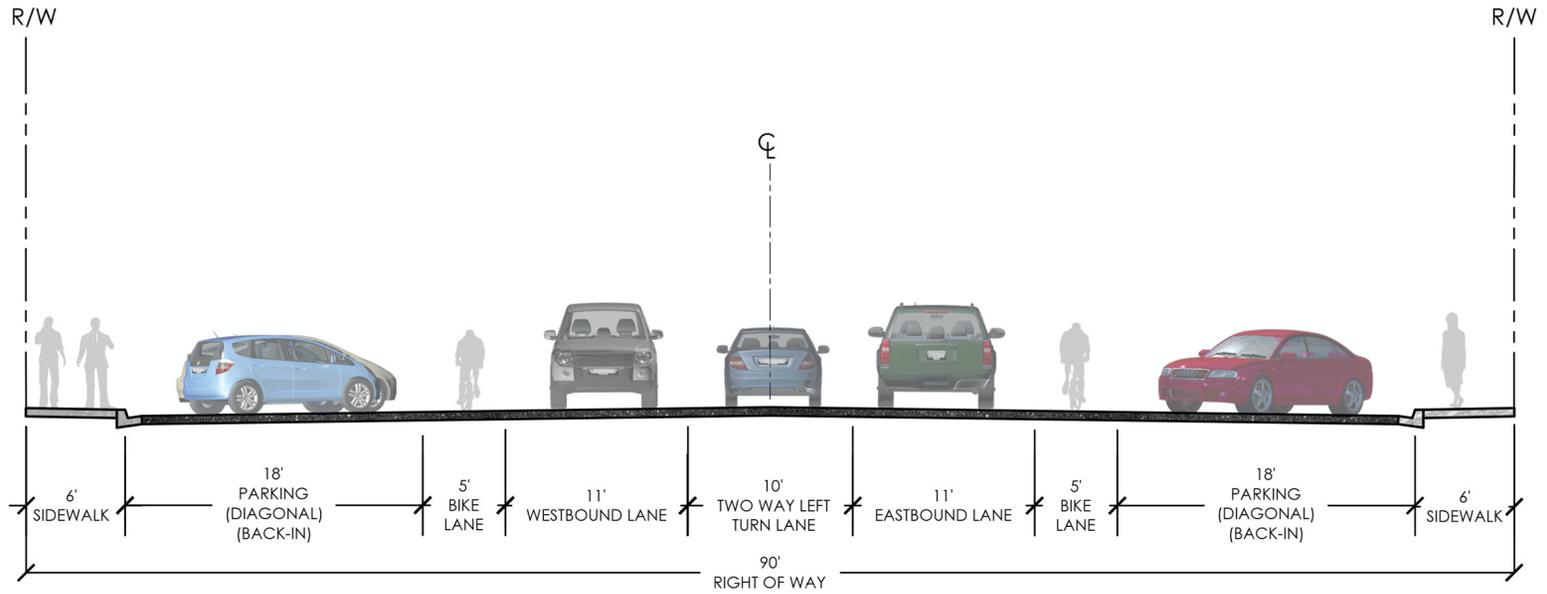


Figure 4-14. Private Driveway B

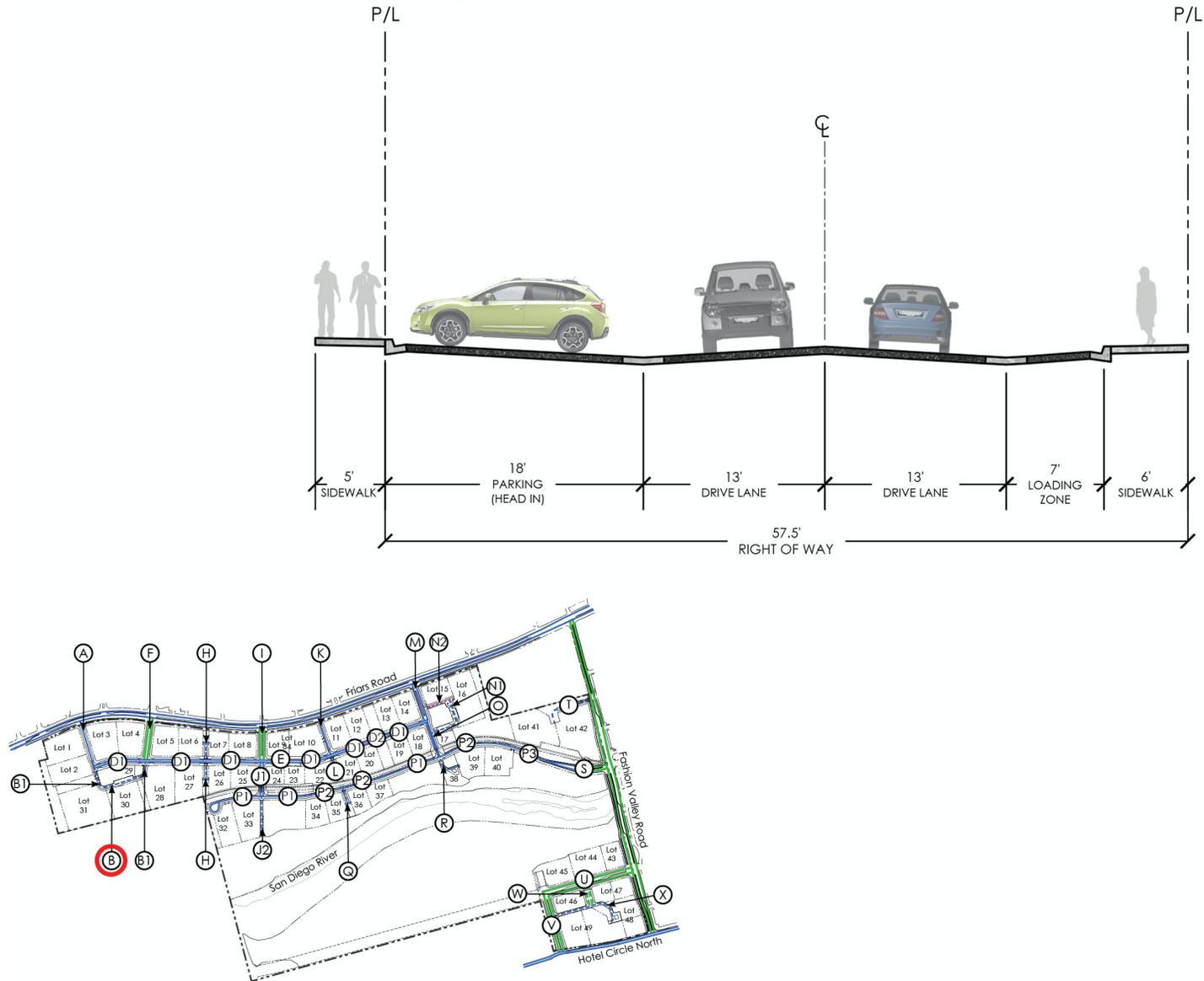
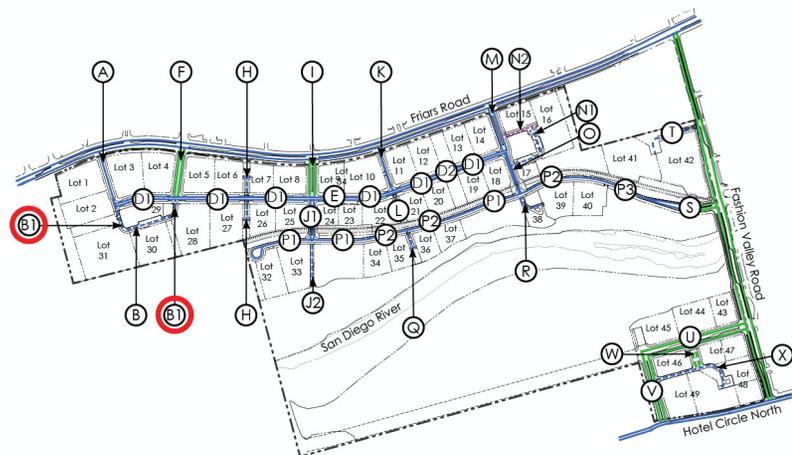
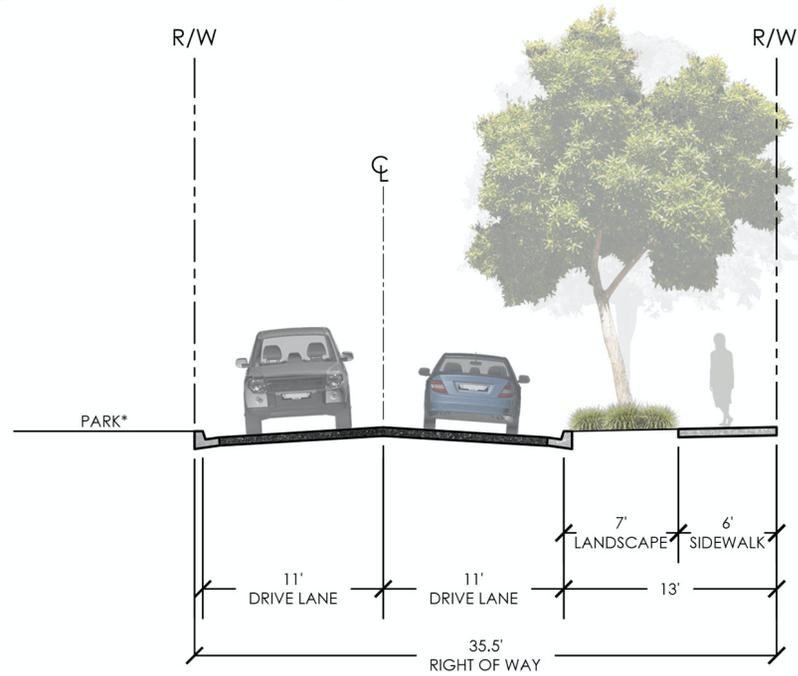
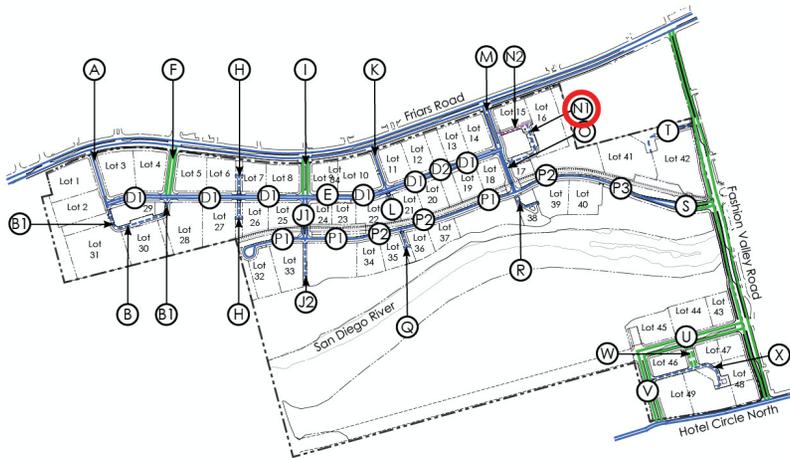
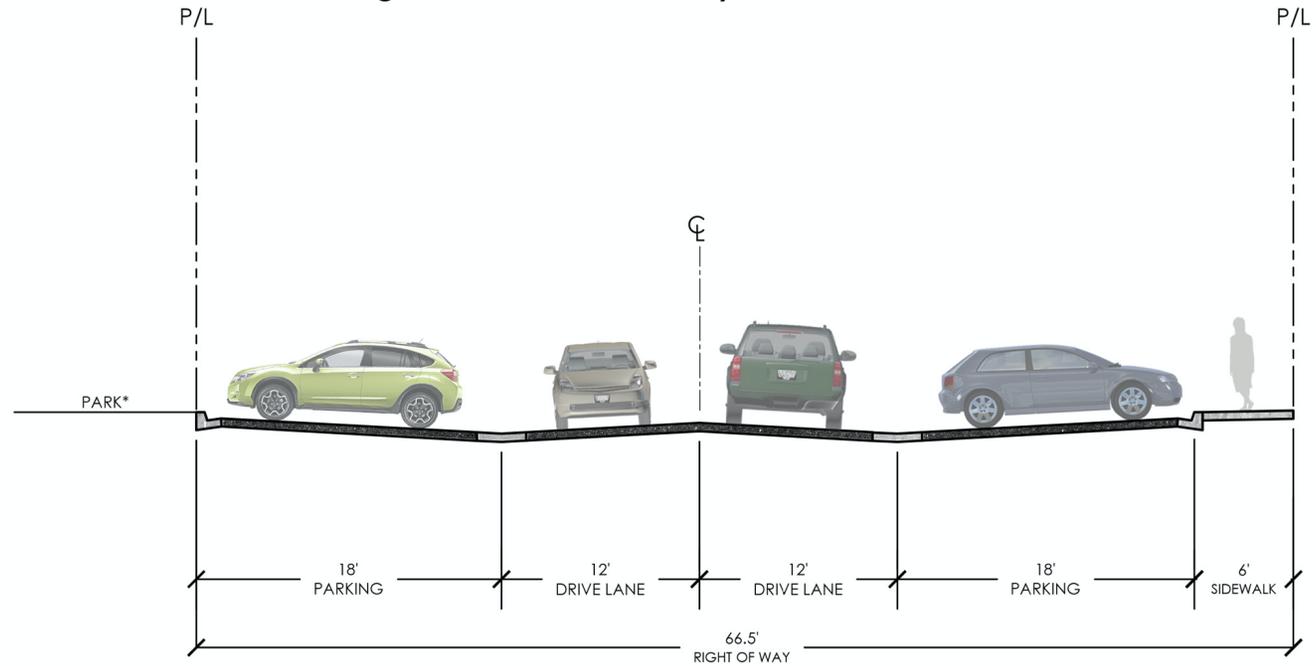


Figure 4-15. Private Driveway BI



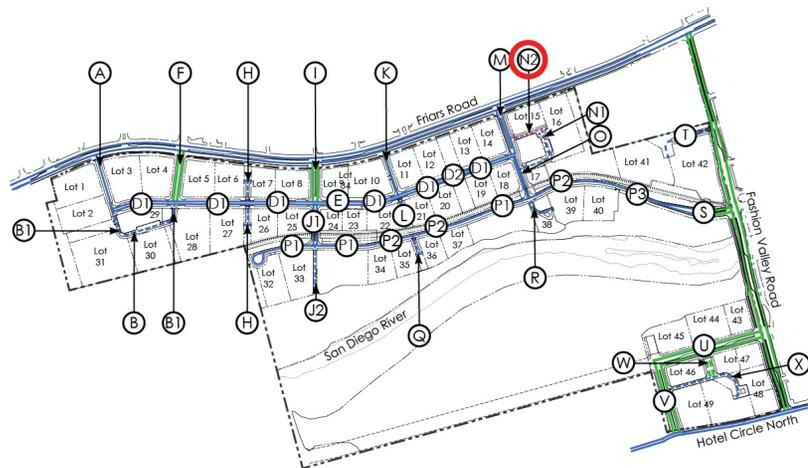
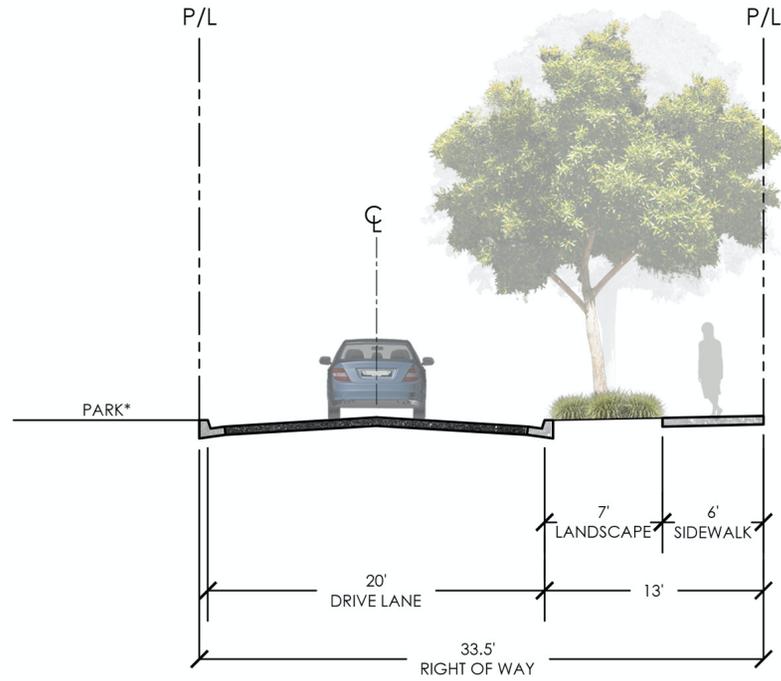
***NOTE:**
If sidewalk is not adjacent to the drive,
sidewalk will be provided within the park.

Figure 4-16. Private Driveway NI



*NOTE:
If sidewalk is not adjacent to the drive,
sidewalk will be provided within the park.

Figure 4-17. Private Driveway N2



*NOTE:
If sidewalk is not adjacent to the drive,
sidewalk will be provided within the park.

4.6.2 Riverwalk Drive

Forming the border between the North District and the Central District, Riverwalk Drive is the second primary east-west roadway of Riverwalk and provides access to development areas within the Central District. Entry onto Riverwalk Drive from Fashion Valley Road is via a modified Four-Lane Major (public Street S, Figure 4-18) with two westbound and two eastbound lanes of 11 feet each and a 10-foot eastbound left turn lane within 94 feet of right-of-way. A five-foot planted median separates the westbound and eastbound travel lanes. A seven-foot sidewalk is located on north side of the road and a 14-foot bicycle and pedestrian path is located on the south side of the road, with seven-foot parkways buffering both elements from the travel lanes.

As Riverwalk Drive enters the neighborhood, public Street P3 (Figure 4-19), a modified Two-Lane Collector with a variable right-of-way width of 45 feet six inches to 62 feet six inches, includes one westbound travel lane with a variable width of 12 feet six inches to 21 feet six inches and one eastbound travel (transition) lane with a variable width of 19 to 30 feet. On the south side of Street P3, a 14-foot bicycle and pedestrian path is separated from the vehicular travel lanes by a seven-foot landscaped parkway. On the north side of Street P3, a landscaped parkway and buffer area ranging from approximately 10 feet to 57 feet separates the travel lanes from the 35-foot MTS trolley area.

The remainder of Riverwalk Drive is a public modified Two-Lane Collector with a 45-foot six-inch right-of-way comprised of two street types (Street P2, Figure 4-20; and Street P1, Figure 4-21). These streets include one 12-foot travel lane in either direction, a two-foot buffer, five-foot no parking/bike lane/fire lane, seven-foot landscaped parkway, and seven-foot sidewalk on the south side of the roadway. On the north side of the streets, a landscaped parkway and buffer area ranging from seven feet to 40 feet for Street P2 and 13 to 40 feet for Street P1 separates the travel lanes from the 35-foot MTS trolley area.

Figure 4-18. Street S

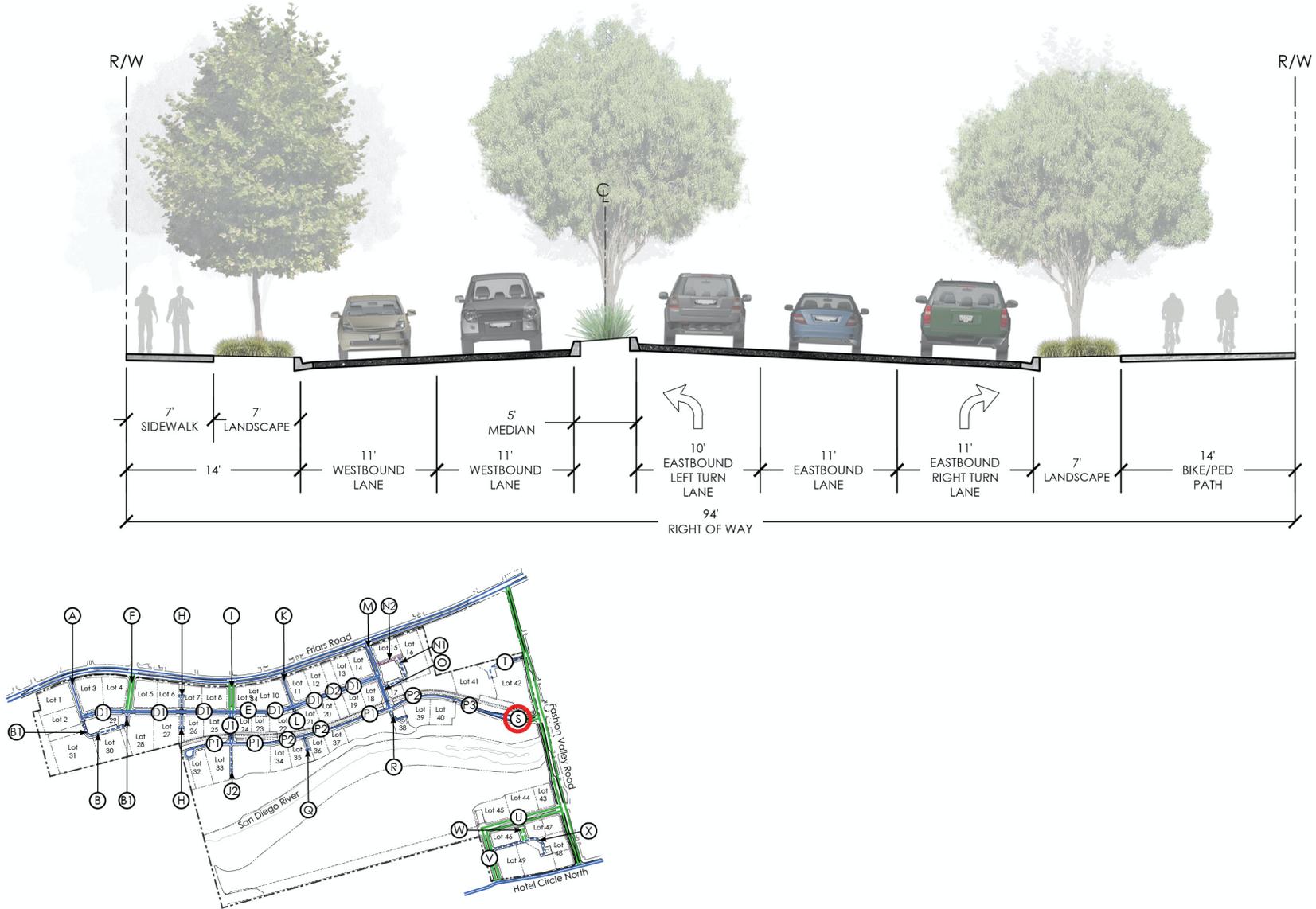


Figure 4-19. Street P3

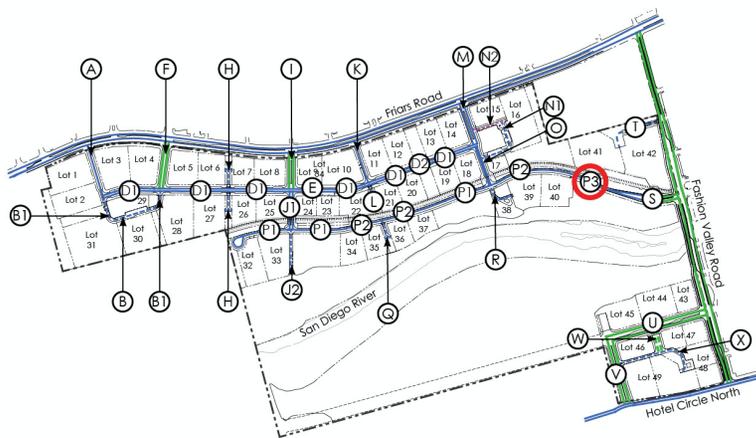
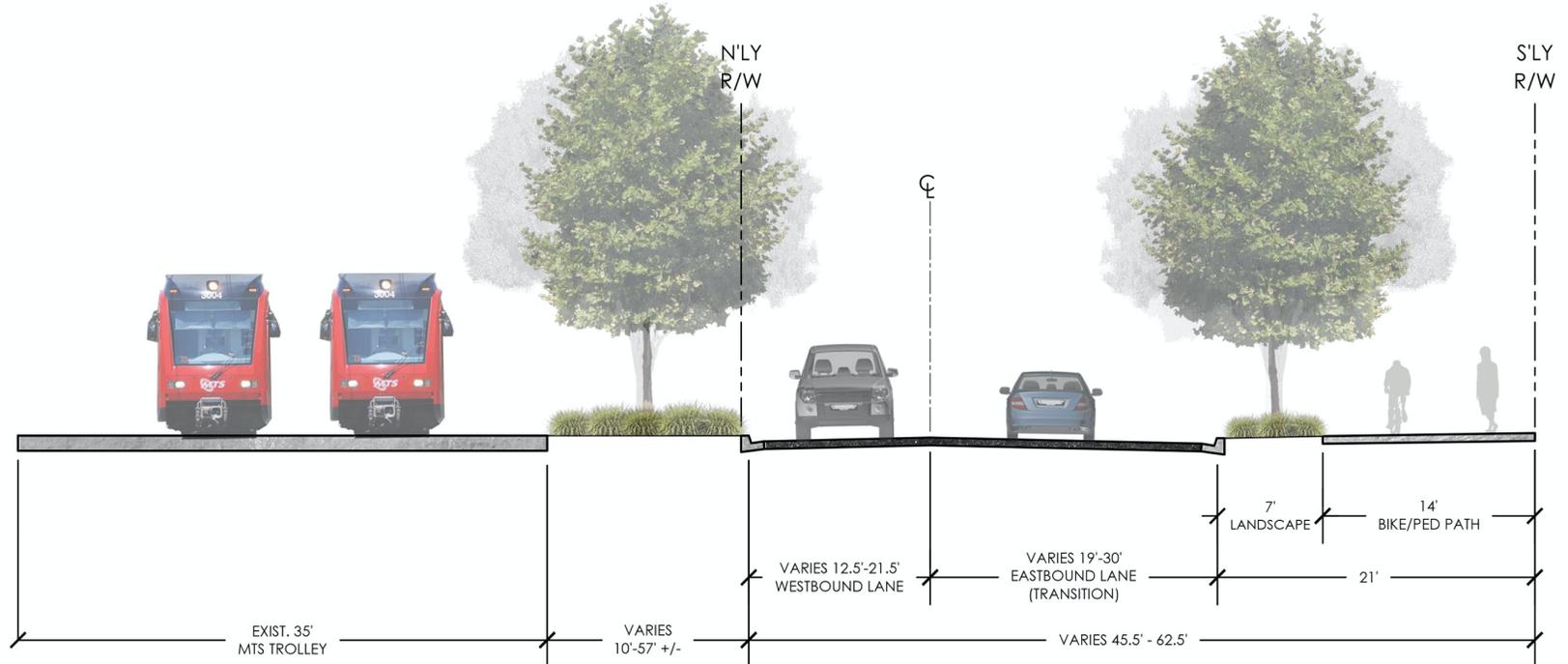


Figure 4-20. Street P2

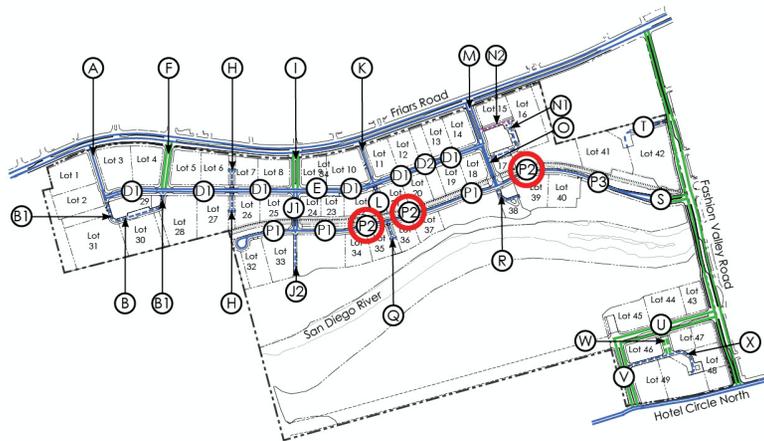
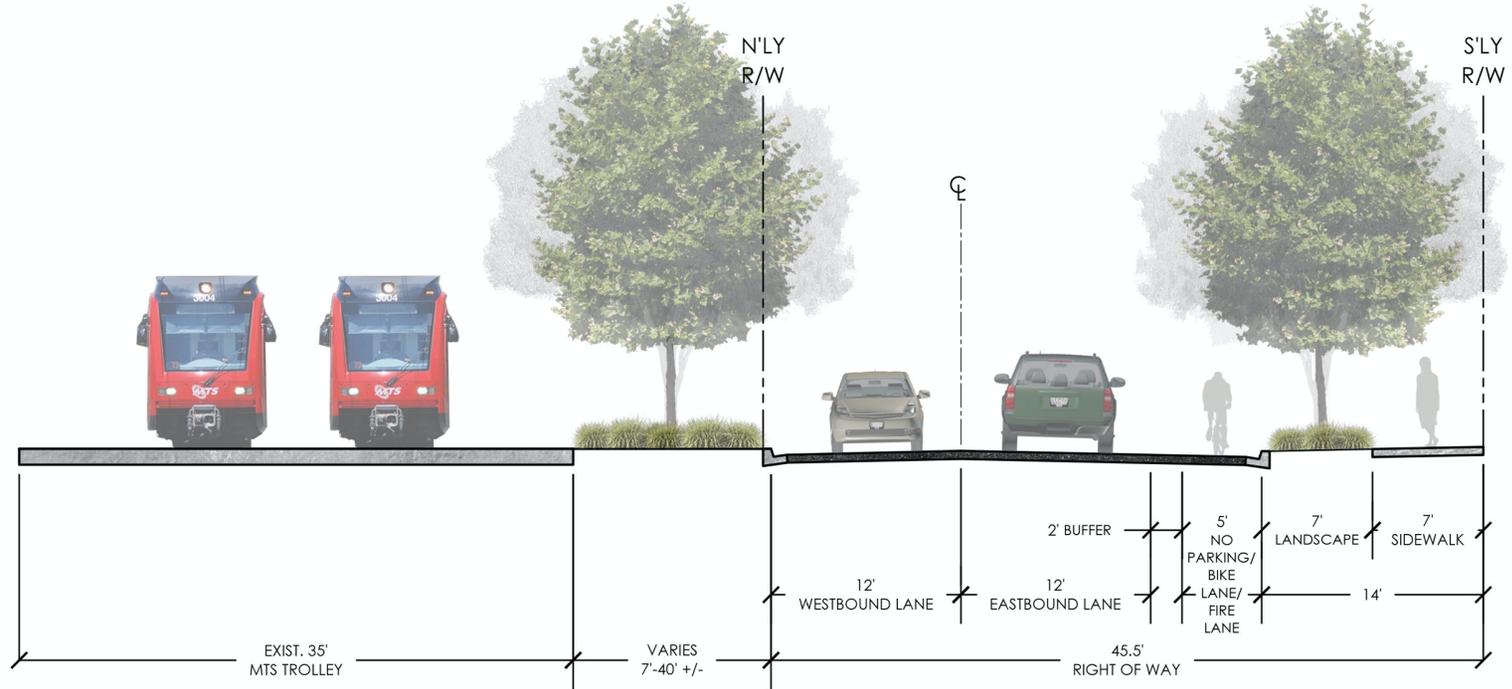
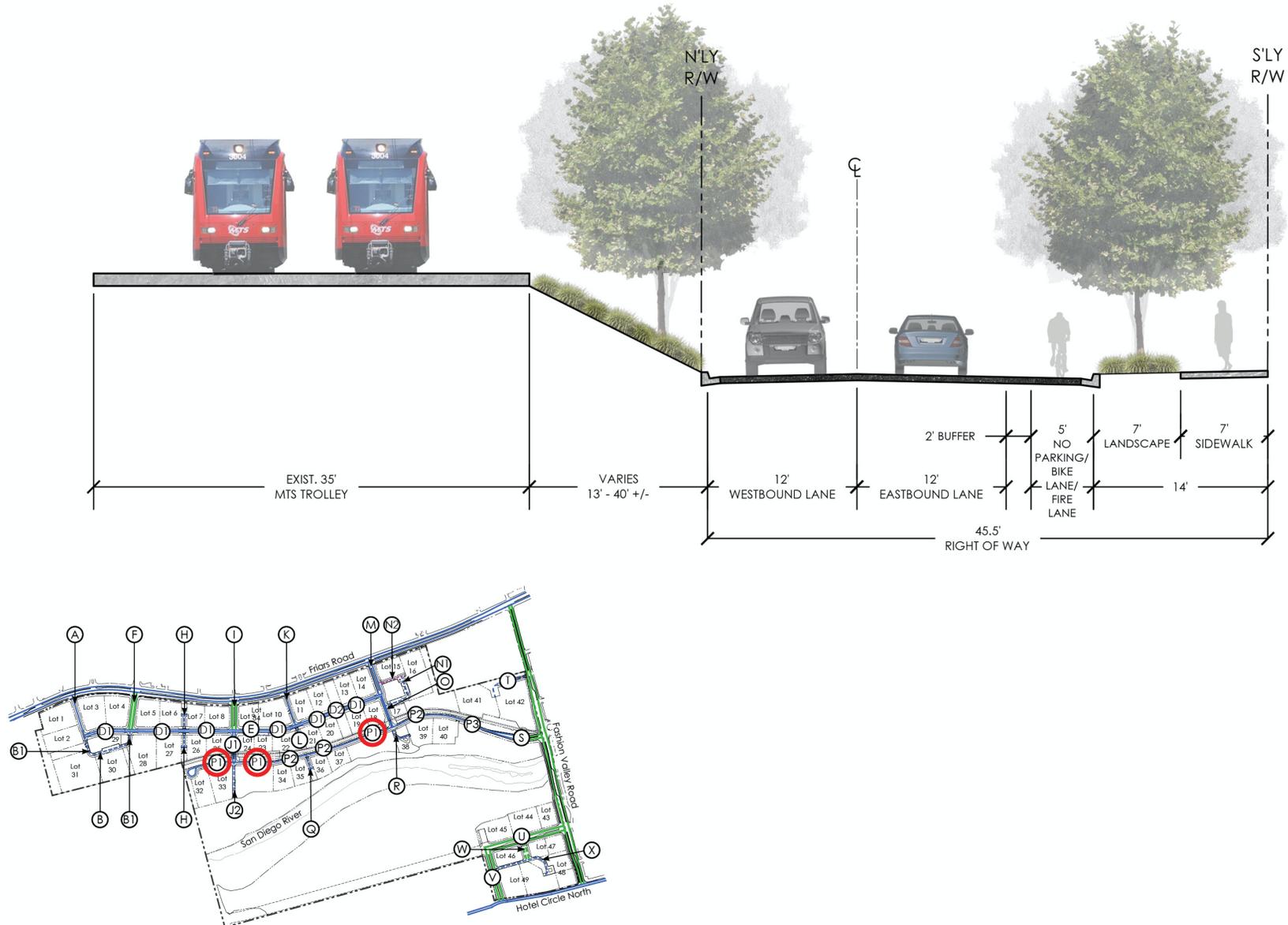


Figure 4-21. Street PI



4.6.3 North District and Central District Streets

The roadway system for the North District is connected to Friars Road to the north and Fashion Valley Road to the east. These streets will provide vehicular and pedestrian access to the North District, as well as through to the Central District. Access points to Riverwalk River Park would be provided from two of the north-south streets that cross through the North District into the Central District. A total of 10 additional street types make up the circulation network within the North District and Central District.

North-south public Street A (Figure 4-22), a Two-Lane Collector, provides access from Friars Road to Street B1 and Street D1. This street accommodates one travel lane of 11 feet in either direction within 64 feet of right-of-way. Seven feet of parking lane/loading zone space is provided on west side of the street and seven feet of parking is provided on the east side of the street. Both sides of the street have a seven-foot landscaped parkway buffering a seven-foot sidewalk from the travel lanes.

North-south public Street F (Figure 4-23), a modified Four-Lane Urban Collector, provides access from Friars Road to Street D1 within an 87-foot right-of-way. This street accommodates one 10-foot and one 11-foot travel lane in either direction, including an 11-foot northbound lane with left-turn lane. Six-foot bike lanes on either side of the road are provided, with a two-foot buffer. On either side of the street, a seven-foot landscaped parkway buffers a seven-foot sidewalk from the travel lanes.

North-south Private Driveway H (Figure 4-24) provides north-south access from Friars Road. The configuration of Private Driveway H is shared with Private Driveways L and Q. These streets have one 12-foot travel lane in either direction within a 52-foot right-of-way. On either side of the street, a

seven-foot landscaped parkway buffers a seven-foot sidewalk from the travel lanes.

North-south public Street I (Figure 4-25), a modified Four-Lane Collector, provides access from Friars Road to Street D1 and Street E within a 94-foot right-of-way. This street accommodates an 11-foot right turn lane in either direction. An 11-foot southbound lane and 11-foot northbound (left turn) lane would be provided, separated from the right turn lanes by a six-foot bike lane (to the interior of the right turn lane) and a two-foot buffer (between the bike lane and the travel lane). On either side of the street, a seven-foot landscaped parkway buffers a seven-foot sidewalk from the travel lanes. A six-foot planted center median is provided along this street.

North-south public Street K (Figure 4-26), a Modified Two-Lane Collector, provides access from Friars Road to Street D1 within a 56-foot right-of-way. This street accommodates one 11-foot southbound travel lane and one 10-foot northbound lane. A seven-foot parking lane is provided on the east side of the road. On either side of the street, a seven-foot landscaped parkway buffers a seven-foot sidewalk from the travel lanes.

North-south public Street M (Figure 4-27), a modified Two-Lane Collector, provides access from Friars Road to Street N2 and Street D1 within an 84-foot right-of-way. This street accommodates one 11-foot southbound travel lane, one 11-foot northbound travel with a left-turn lane, and one 11-foot northbound travel lane with right turn lane. Six-foot bike lanes with a two-foot buffer occur on either side of the street, as well as a seven-foot landscaped parkway that buffers a seven-foot sidewalk from the travel lanes. Additionally, Street M has a six-foot center planted median.

Figure 4-22. Street A

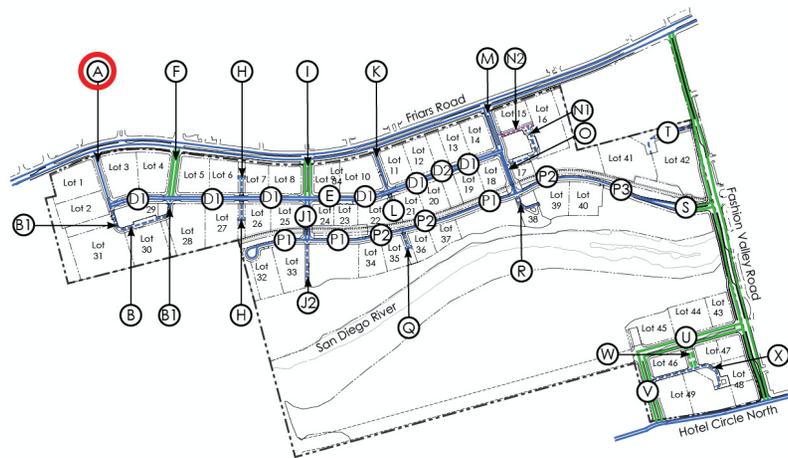
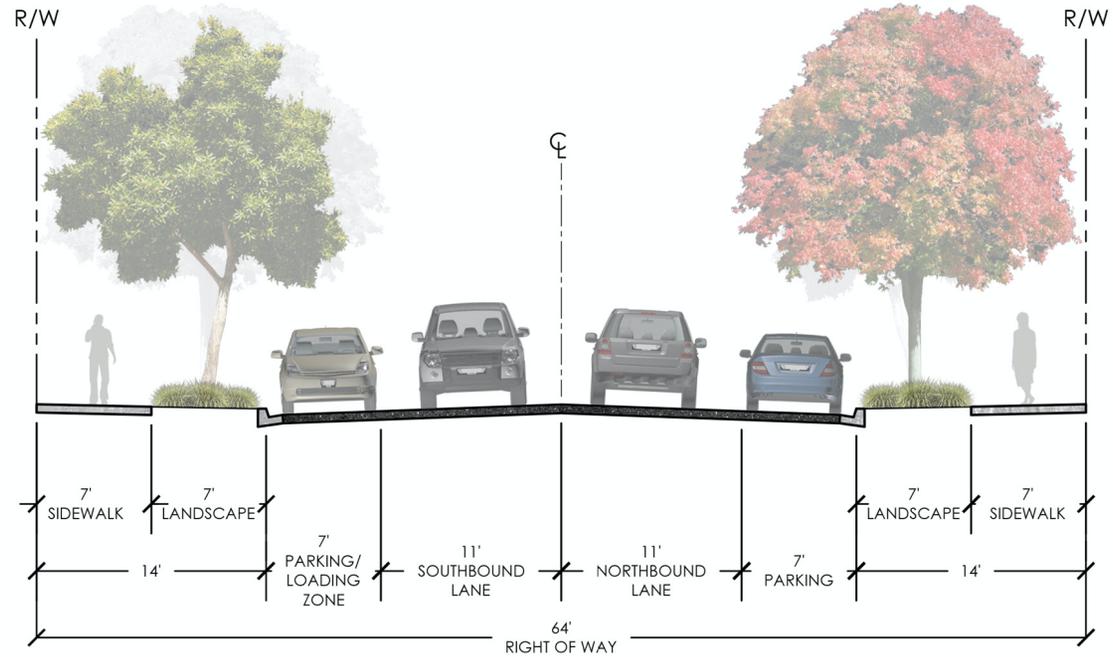


Figure 4-23. Street F

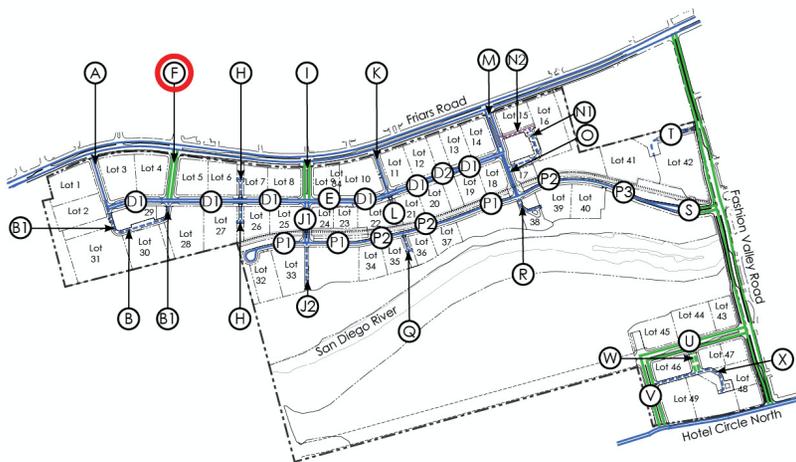
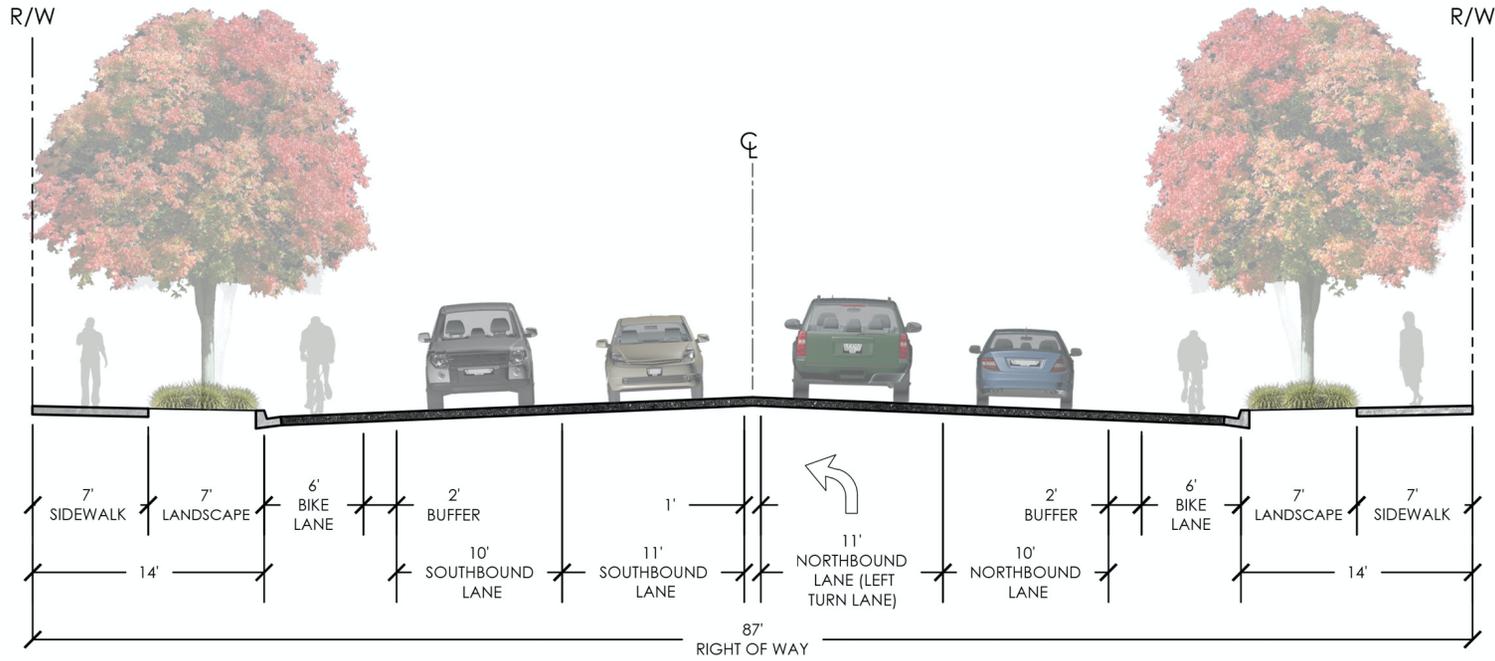


Figure 4-24. Private Driveways H, L, and Q

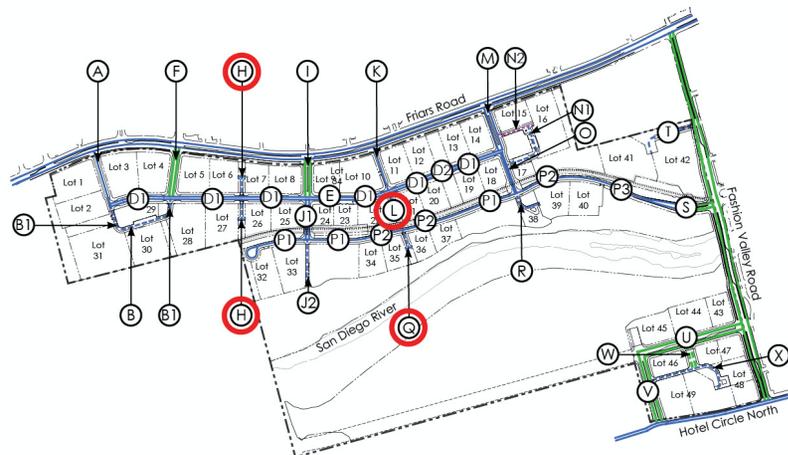
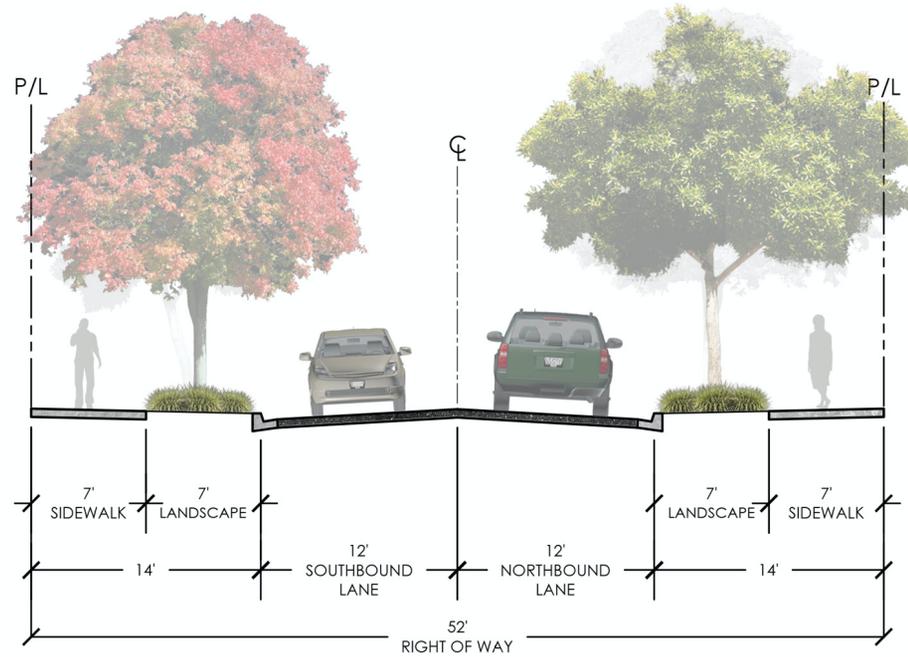


Figure 4-25. Street I

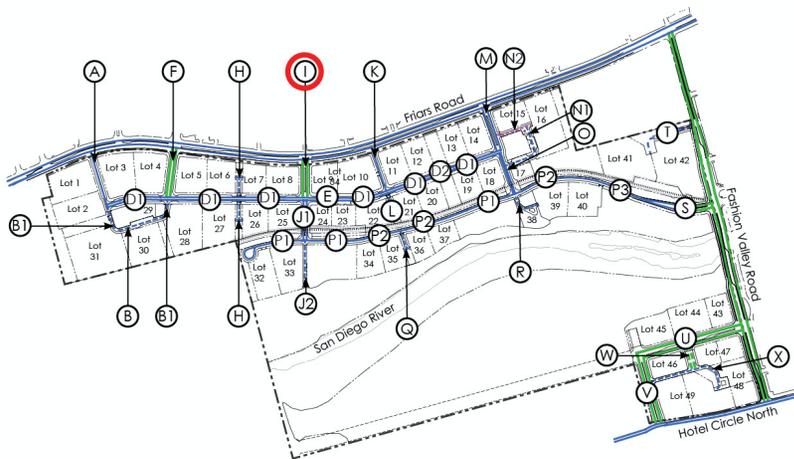
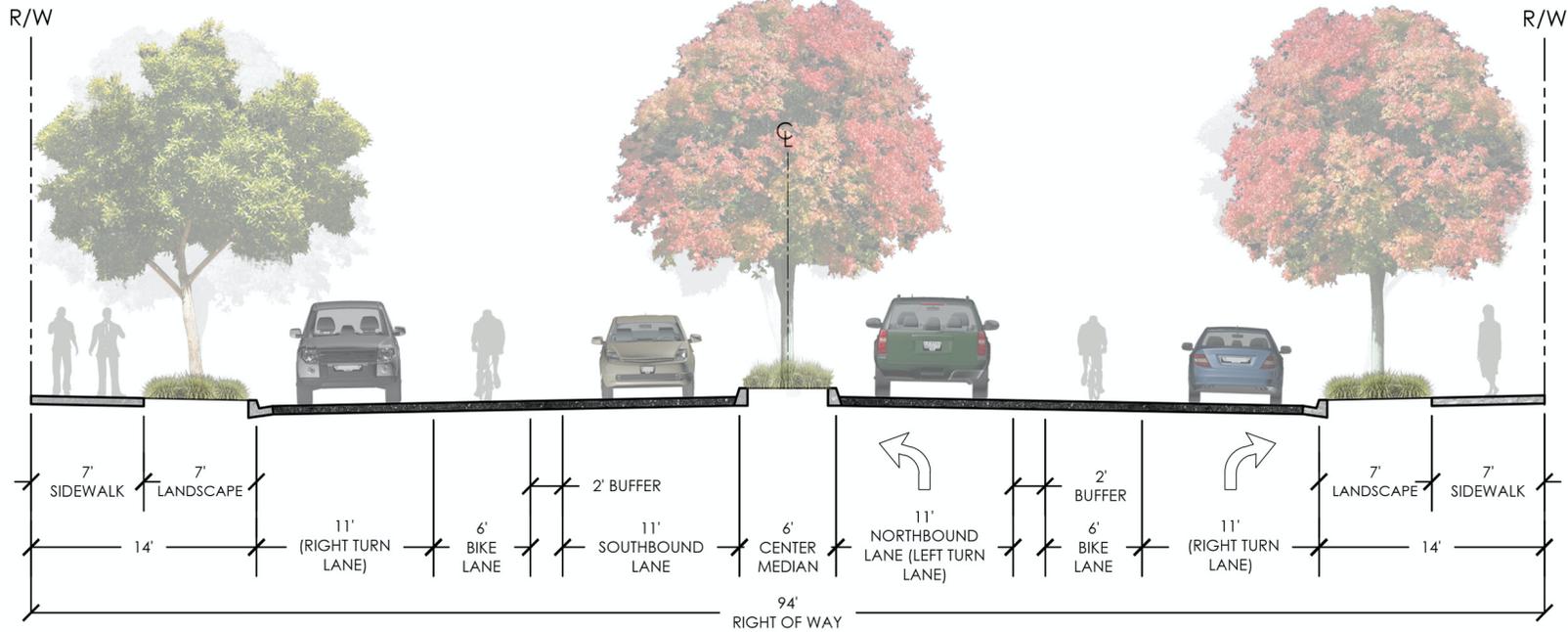
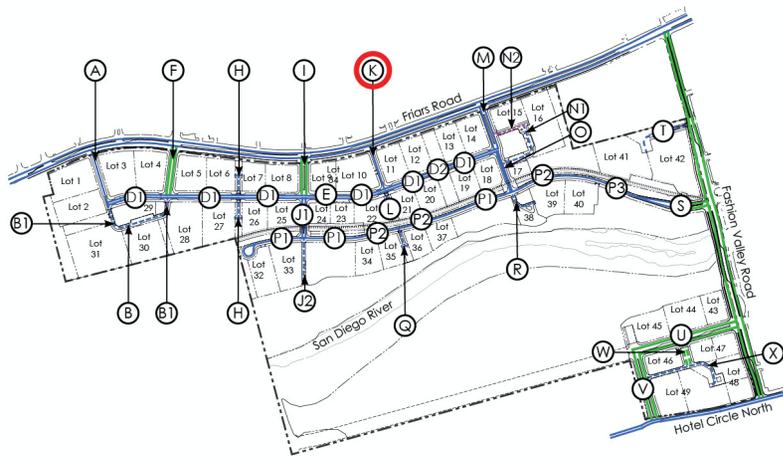
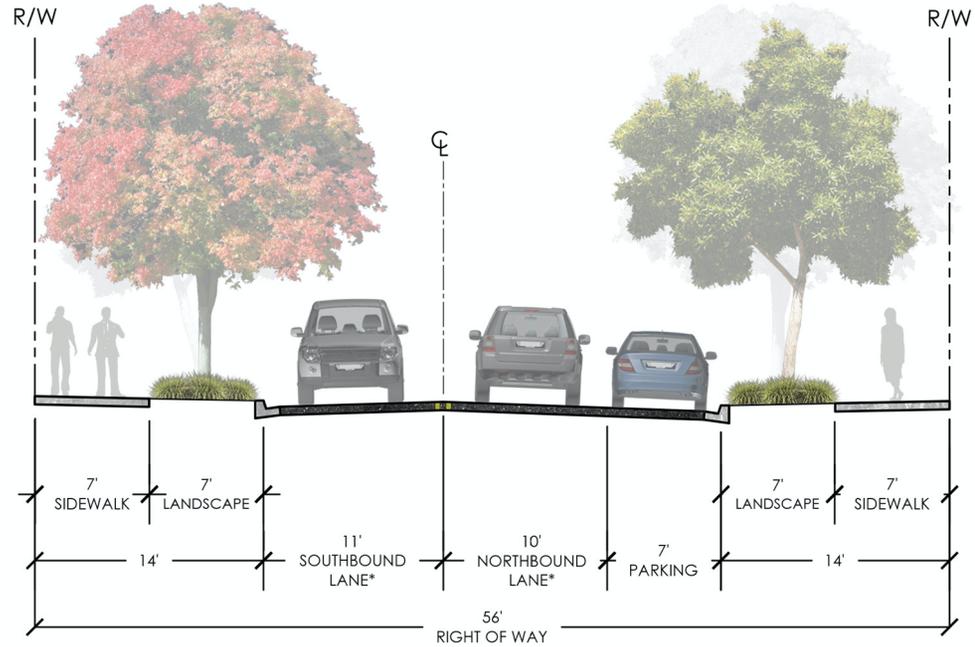
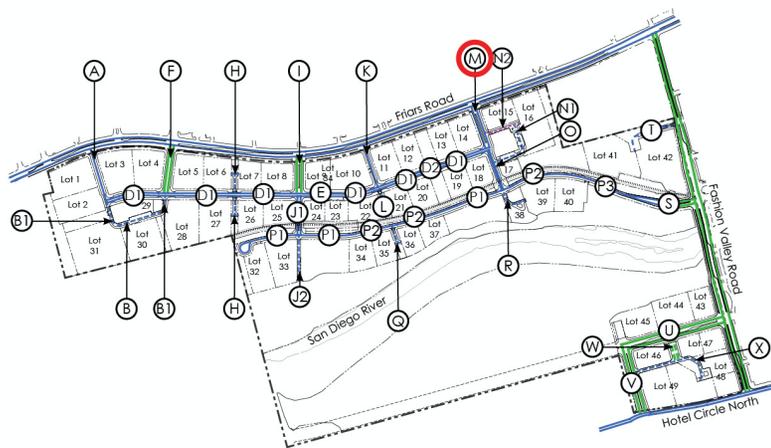
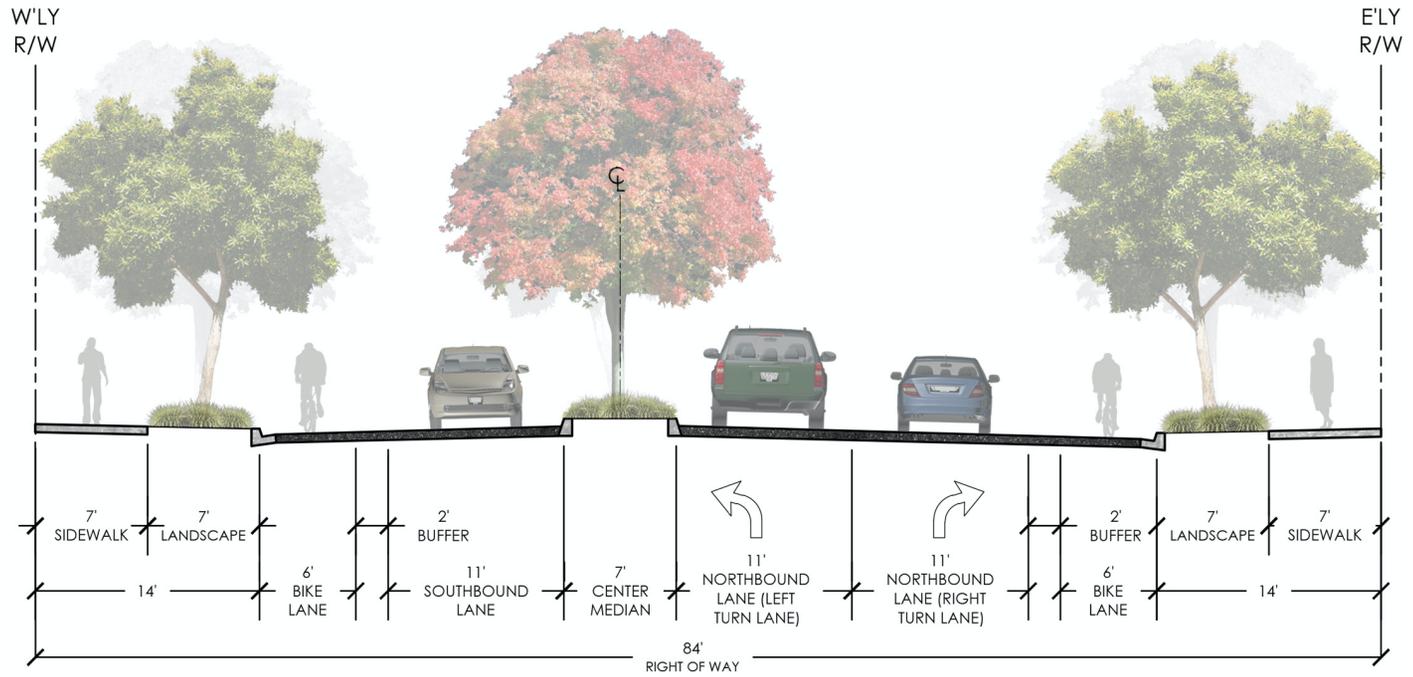


Figure 4-26. Street K



***NOTE:**
At the intersection of Friars Road/Street K, the inbound lane would be 15 feet and the outbound lane would be 13 feet for a transition length of 50 feet.

Figure 4-27. Street M



North-south public Street J1 (Figure 4-28), a modified Two-Lane Major, provides a continuation of Street I on the south side of Street D1 and Street E. Street J1 has one 11-foot travel lane in either direction within a 50-foot six-inch right-of-way with six-foot planted center median. Six-foot bike lanes with two-foot buffers are provided on either side of the street adjacent to the travel lanes, and a six-foot sidewalk also located on the west side of the street.

North-south Private Driveway J2 (Figure 4-29) provides a continuation of Street J1 south of the trolley tracks. Street J2 has a right-of-way width of 56 feet and includes one 11-foot travel lane in either direction and six-foot striped center median. Private Driveway J2 has a six-foot sidewalk with six-foot bike lane and two-foot buffer provided on either side of the road.

An extension of Street J from Friars Road to Hotel Circle South is included in the Mission Valley Community Plan. The Riverwalk project includes an IOD for this street to allow for its future construction. The IOD provides for an extension of Street J from Riverwalk Drive in the north to Hotel Circle North in the south when funding becomes available.

North-south public Street O (Figure 4-30), a modified Two-Lane Collector, provides a continuation of Street M on the south side of Street N1 to Street P2 and Street P1. Street O has one 12-foot travel lane in either direction within a 68-foot right-of-way. On either side of the street, a seven-foot landscaped parkway buffers a seven-foot sidewalk from the travel lanes. A six-foot bike lane separated from travel lanes by a two-buffer occurs on the both sides of the road.

North-south public Street R (Figure 4-31), a modified Low-Volume Residential Local, provides a continuation of Street O on the south of the trolley tracks with a right-of-way width of 48 feet. Street R has one 12-foot travel lane in either direction and a six-foot contiguous sidewalk on the east of the road. A 10-foot bicycle and pedestrian path is located on the west side of the road, with a two-foot shoulder on the west side of the path and a six-foot landscaped parkway on the east side of the path.

Private Driveway Street T (Figure 4-32) provides direct access from Fashion Valley Road in the northwest corner of the project site within a variable right-of-way. Street T has one 13-foot travel lane in either direction. On the south side of the street, a seven-foot landscaped parkway buffers a seven-foot sidewalk from the travel lanes.

Figure 4-28. Street JI

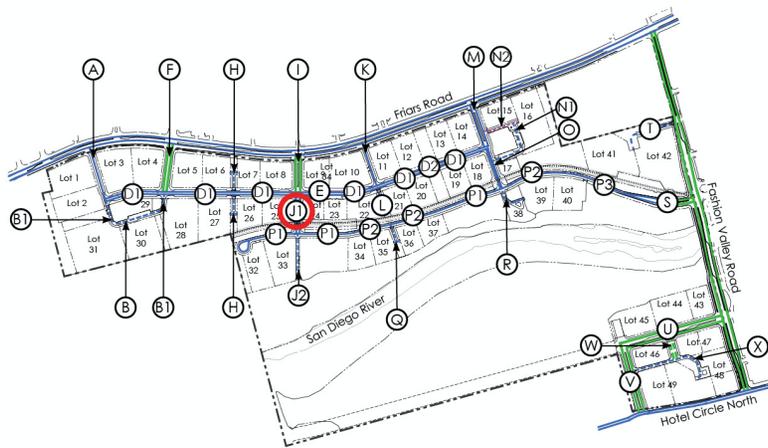
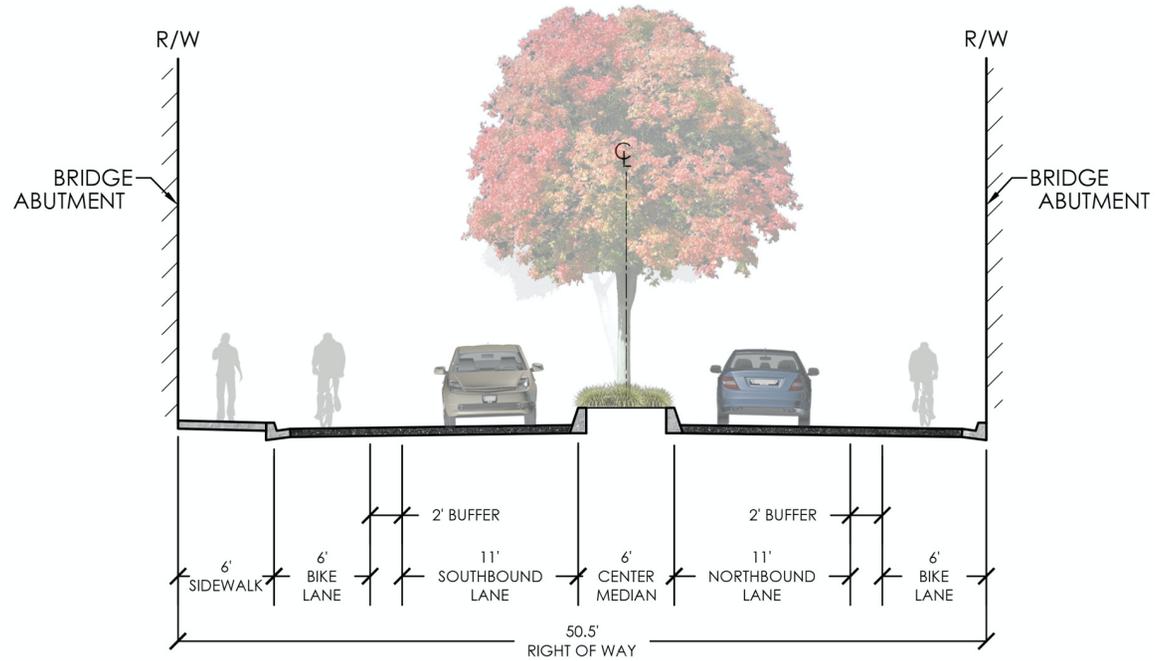


Figure 4-29. Private Driveway J2

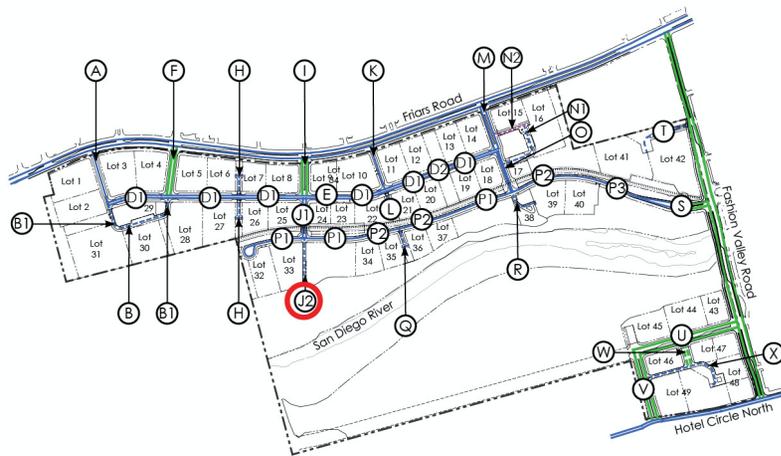
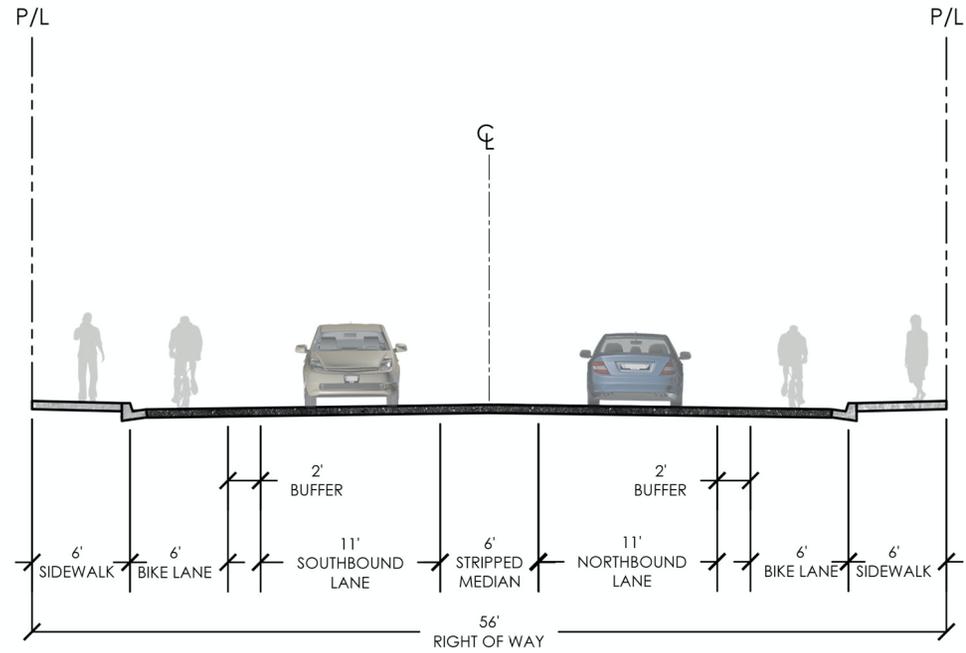


Figure 4-30. Street O

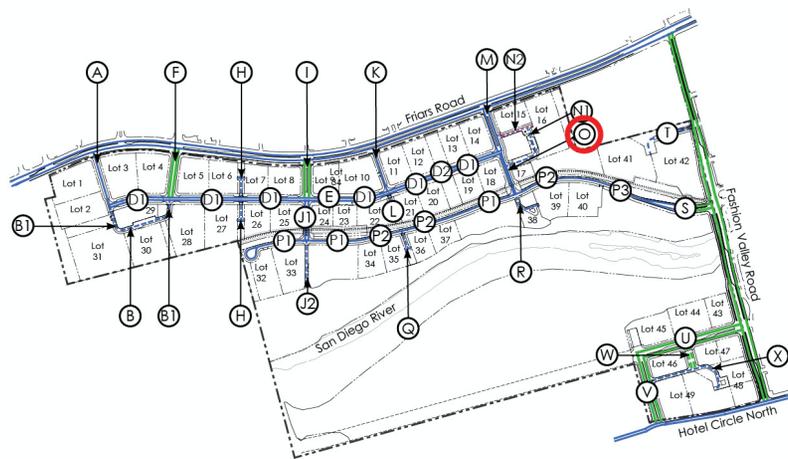
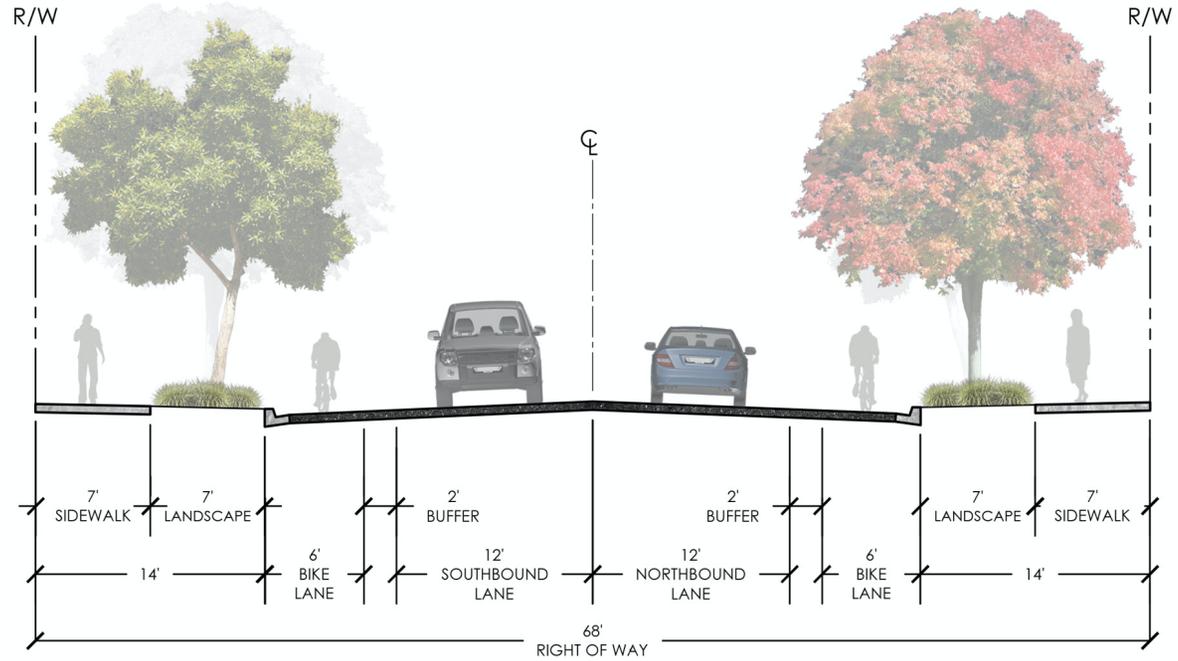


Figure 4-31. Street R

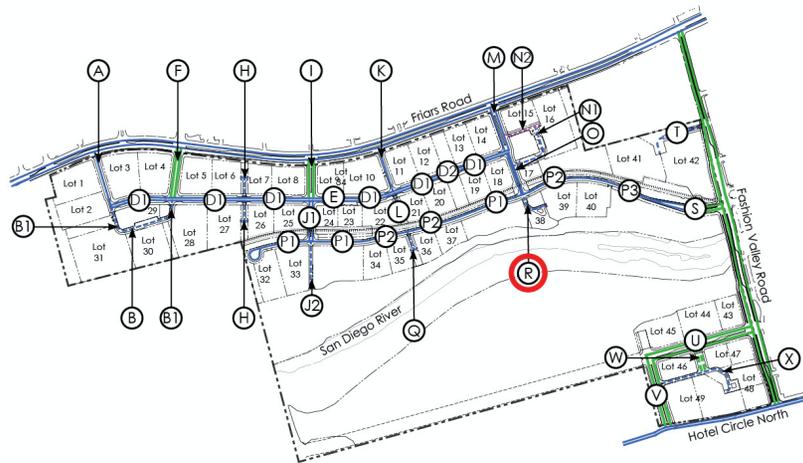
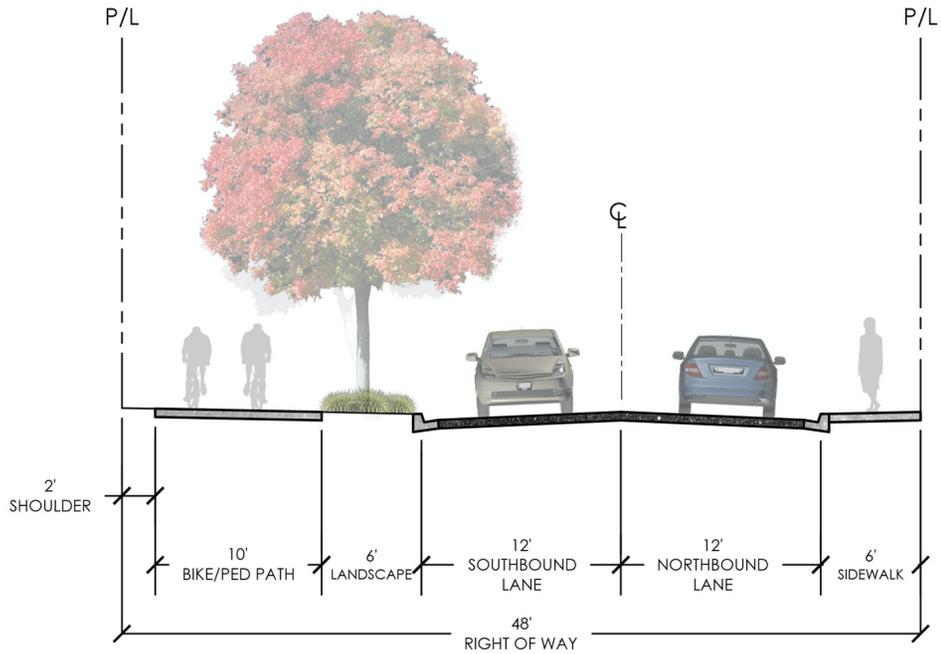
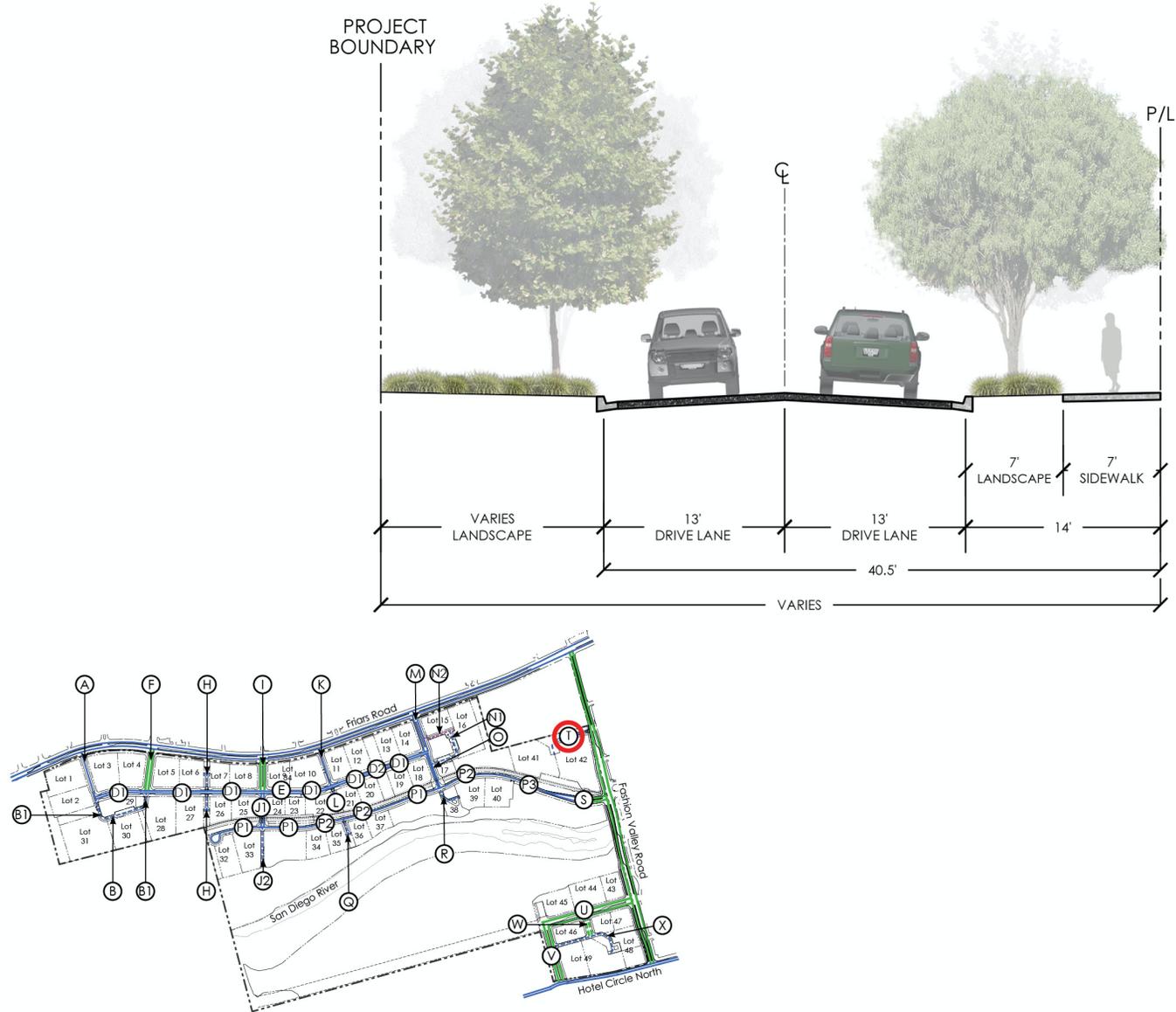


Figure 4-32. Private Driveway T



4.6.4 South District Streets

The roadway system for the South District is connected to Fashion Valley Road north of the intersection with Hotel Circle North and will align with the access drive into the Town and Country Resort Hotel (signalized). This roadway system will also connect to Hotel Circle North, between the I-8 ramp and Fashion Valley Road. These streets will provide vehicular and pedestrian access to the employment component of the Riverwalk Specific Plan, as well as an additional point of access to the Riverwalk River Park. Four street types make up the circulation network within the South District.

East-west public Street U (Figure 4-33), a modified Four-Lane Urban Collector, provides signalized access from Fashion Valley Road and aligns with the access drive from Town and County Resort Hotel. This street includes one 11-foot and one 10-foot travel lane westbound, and two 11-foot travel lanes eastbound with a left turn lane within 103 feet of right-of-way. The street contains a 16-foot planted center median (alternatively constructed as a six-foot planted median and 10-foot left turn where necessary) and a 12-foot two-way cycle track on the north side of the road with a four-foot buffer from travel lanes. A seven-foot landscaped parkway is provided on either side of the street, buffering a seven-foot non-contiguous sidewalk from the travel lanes.

The Mission Valley Community Plan includes an extension of Street U from Fashion Valley Road to the extension of Street J. The Riverwalk project includes an IOD for this future roadway connection. This extension would be ultimately constructed as a Four-Lane Collector with two-way left turn lane.

North-south public Street V (Figure 4-34), a modified Four-Lane Urban Collector with median provides an 89-foot six-inch right-of-way with two 12-foot travel lanes in either direction, separated by a four-foot center median. A seven-foot landscaped parkway is provided on the east side of the street, buffering the seven-foot non-contiguous sidewalk from the roadway. Six-foot bike lanes with two-foot buffers are provided on either side of the street, and a seven-foot six-inch landscaped parkway is provided on the west side of the street.

Private Driveway X (Figure 4-35) provides for internal east-west circulation within the South District. Private Driveway X includes one 13-foot travel lane in either direction.

Private Driveway W (Figure 4-36) provides north-south connectivity interior to South District within 84 feet of right-of-way. The width of this private drive is necessary to serve the South District's employment uses, as this is the central circulation roadway for the entire South District. This drive contains two 11-foot travel lanes in either direction with an 11-foot center lane. A seven-foot landscaped parkway is provided on either side of the street, buffering the seven-foot non-contiguous sidewalk from the roadway.

Figure 4-33. Street U

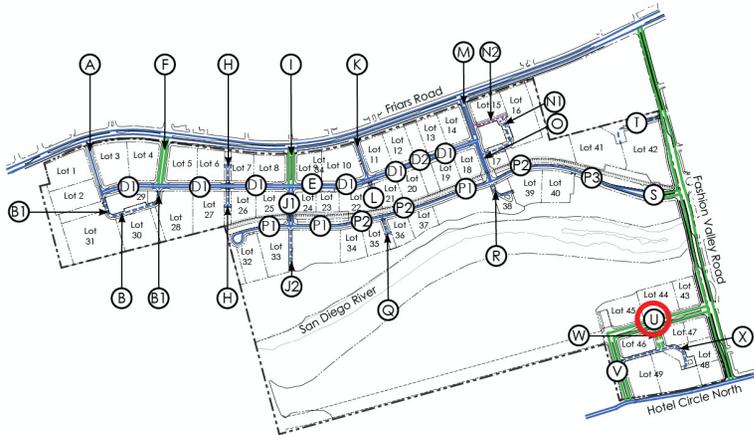
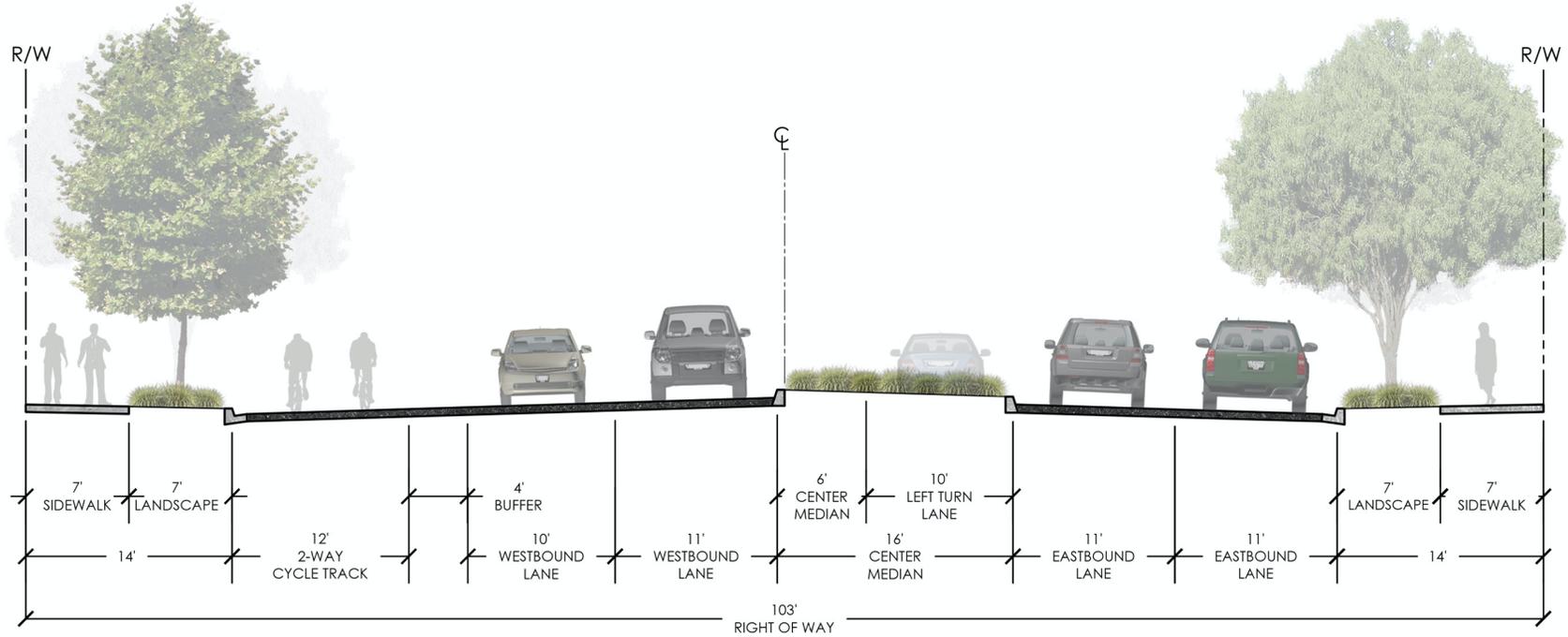


Figure 4-34. Street V

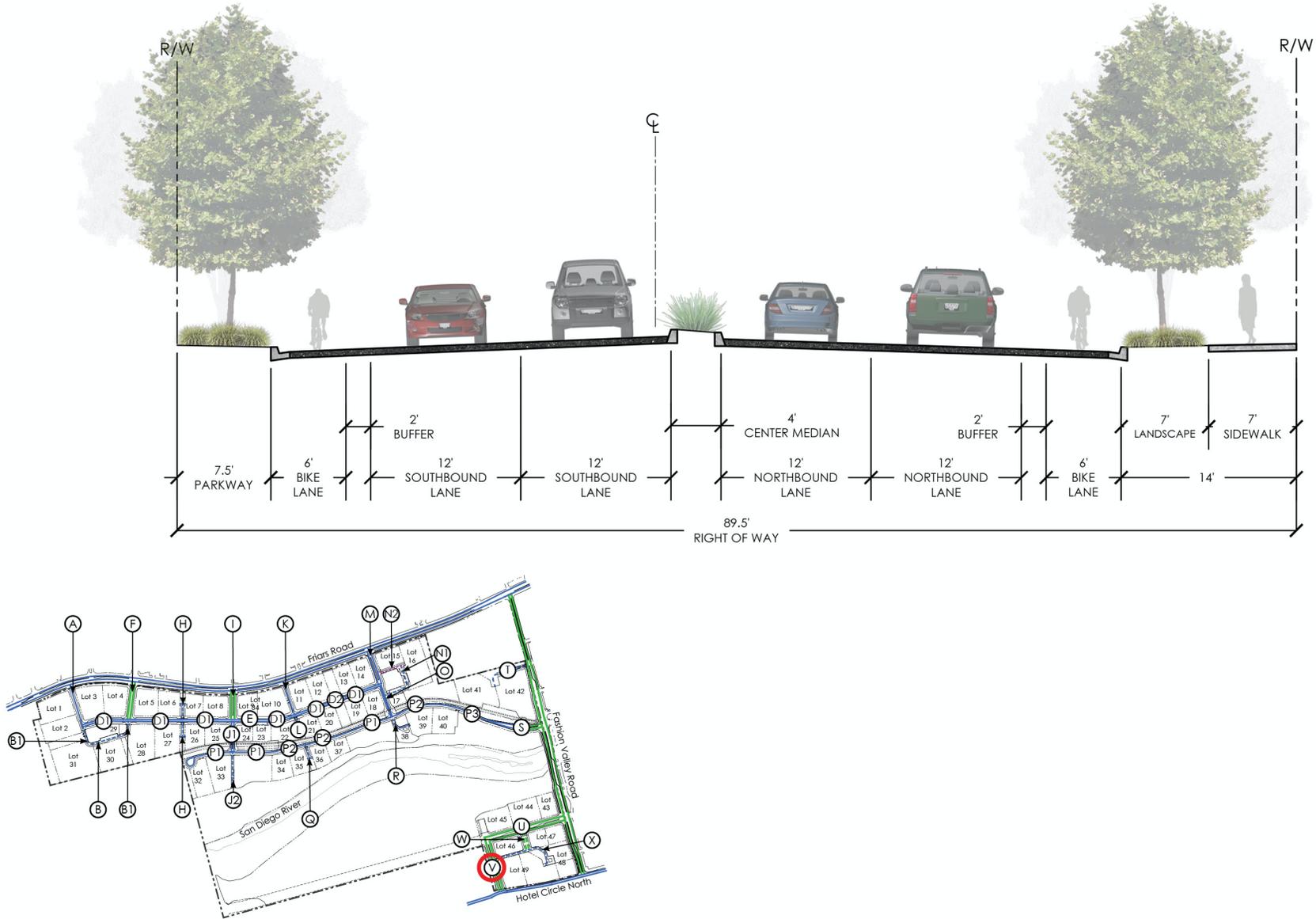


Figure 4-35. Private Driveway X

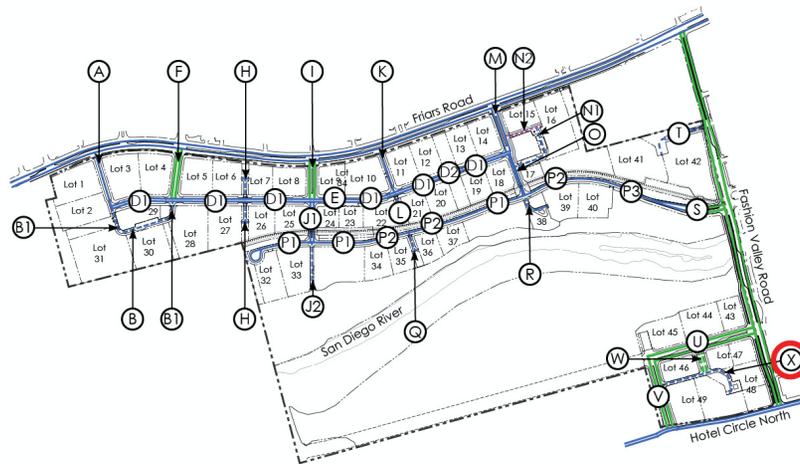
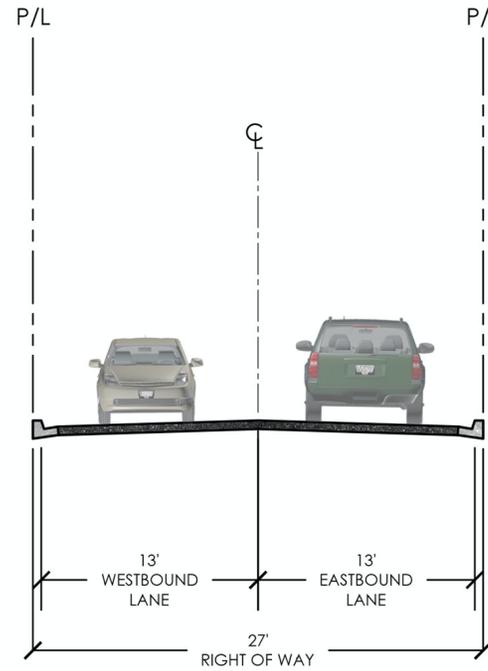
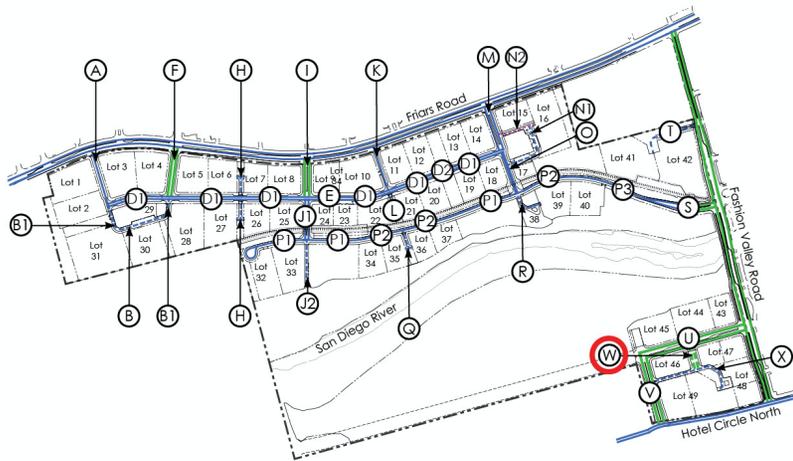
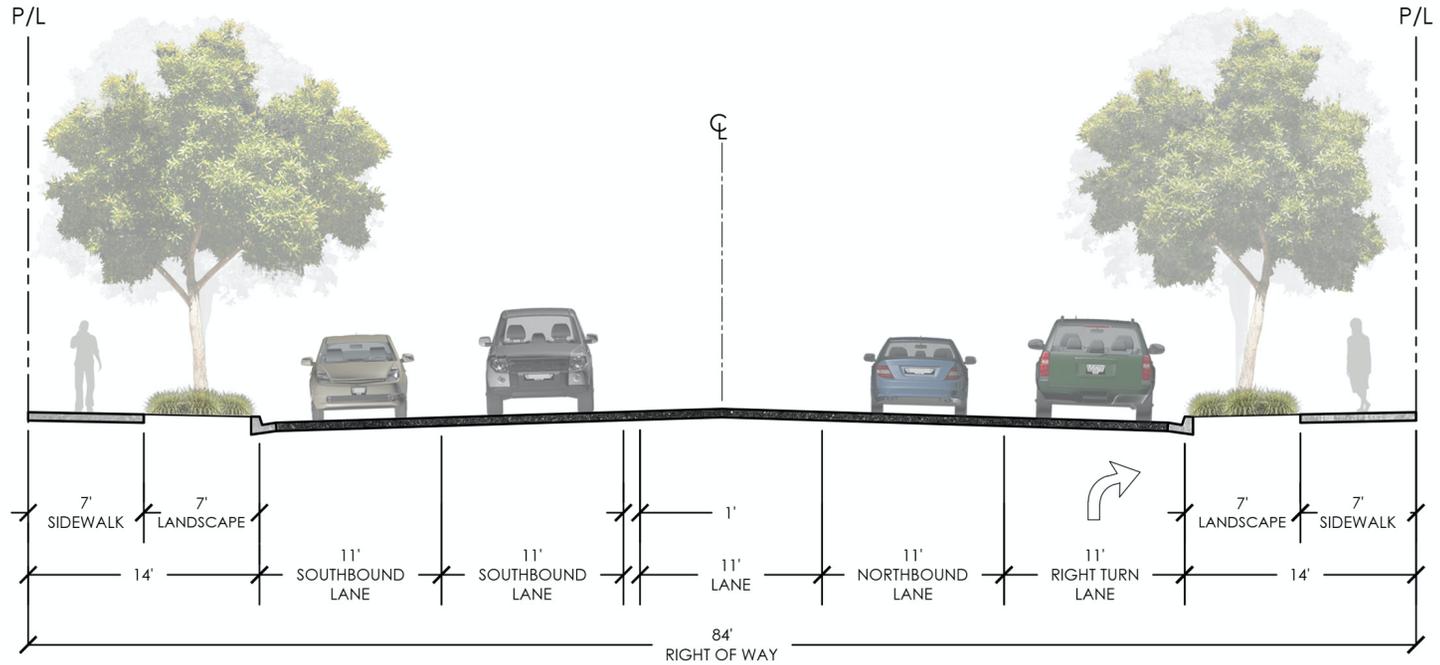


Figure 4-36. Private Driveway W



4.6.5 Existing Surrounding Streets

Riverwalk is located within an existing street network. Streets surrounding Riverwalk include Friars Road to the north, Fashion Valley Road to the east, and Hotel Circle North to the south. Development of Riverwalk results in improvements to these surrounding streets.

East-west Friars Road (Figure 4-37) includes a 110-foot right-of-way with two 11-foot travel lanes in either direction and a 14-foot center turn lane. On the north side of the road, the four-foot sidewalk varies from parking adjacent to separated from the eight-foot parking lane by a six-foot landscaped parkway. A five-foot bike lane with two-foot buffer is located between the parking lane and the travel lane. On the south side of the road, a five-foot bike lane with two-foot buffers and an eight-foot two-way cycle track are located between the travel lane and a four-foot contiguous sidewalk. The existing cycle track transitions to a Class II bike lane approximately 920 feet west of Fashion Valley Road.

With implementation of the Riverwalk project, Friars Road will be modified (Figure 4-38) in the eastbound direction to include two 11-foot drive lanes, a five-foot-wide bike lane with two-foot buffers on either side, an eight-foot-wide two-way cycle track, a 17-foot-wide landscaped parkway, and a six-foot-wide sidewalk. A 14-foot-wide planted median with turn lane will separate the travel lanes and ultimate right-of-way would be 123 feet.

North-south Fashion Valley Road (Figure 4-39) has one 13-foot travel lane and one 12-foot travel lane in either direction within a 62-foot right-of-way. On the east side of the road, there is a five-foot six-inch contiguous sidewalk and a five-foot landscaped area.

With implementation of the Riverwalk project, along the project frontage from Private Drive T to Hotel Circle North, Fashion Valley Road will be widened to 4-lane Major standards. Fashion Valley Road will be modified (Figure 4-40) to include two 11-foot travel lanes in either direction, separated by a 24-foot planted median with turn lanes. A two-way, 12-foot cycle track will ultimately be constructed on the west side of the roadway, with a four-foot buffer between the cycle track and the roadway. To the west of the cycle track, a nine-foot landscaped parkway buffers a six-foot non-contiguous sidewalk. On the east side of the roadway, the existing six-foot contiguous sidewalk will remain. Riverwalk will raise Fashion Valley Road to accommodate larger storm events and provide a soft-bottom condition for the San Diego River. Right-of-way width will be increased to 110 feet.

East-west Hotel Circle North (Figure 4-41) is currently configured along the project frontage with an 11-foot eastbound lane, a 12-foot eastbound lane, and an approximately 13-foot six-inch westbound lane. An approximately six-foot six-inch contiguous sidewalk is provided on the north side of the road. Total right-of-way is 46 feet six inches, with an approximately three-foot six-inch buffer along the southerly right-of-way. The north side of the road would be widened by approximately 10 feet to accommodate a cycle track, parkway and sidewalk.

Hotel Circle North will be reconfigured with implementation of the Mission Valley Community Plan as a one-way street with two westbound travel lanes (one 11-foot lane and one 12-foot lane), a 12-foot two-way cycle track with four-foot buffer, a seven-foot landscaped parkway, and a seven-foot non-contiguous sidewalk (Figure 4-42). Right-of-way width will be increased to 56 feet six inches. This configuration would occur with ultimate implementation of the Mission Valley Community Plan and would not be associated with implementation of the Riverwalk project.

Figure 4-37. Friars Road (Existing)

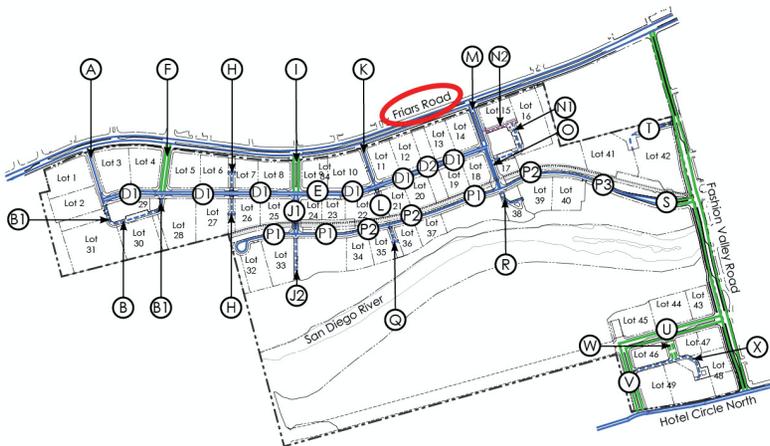
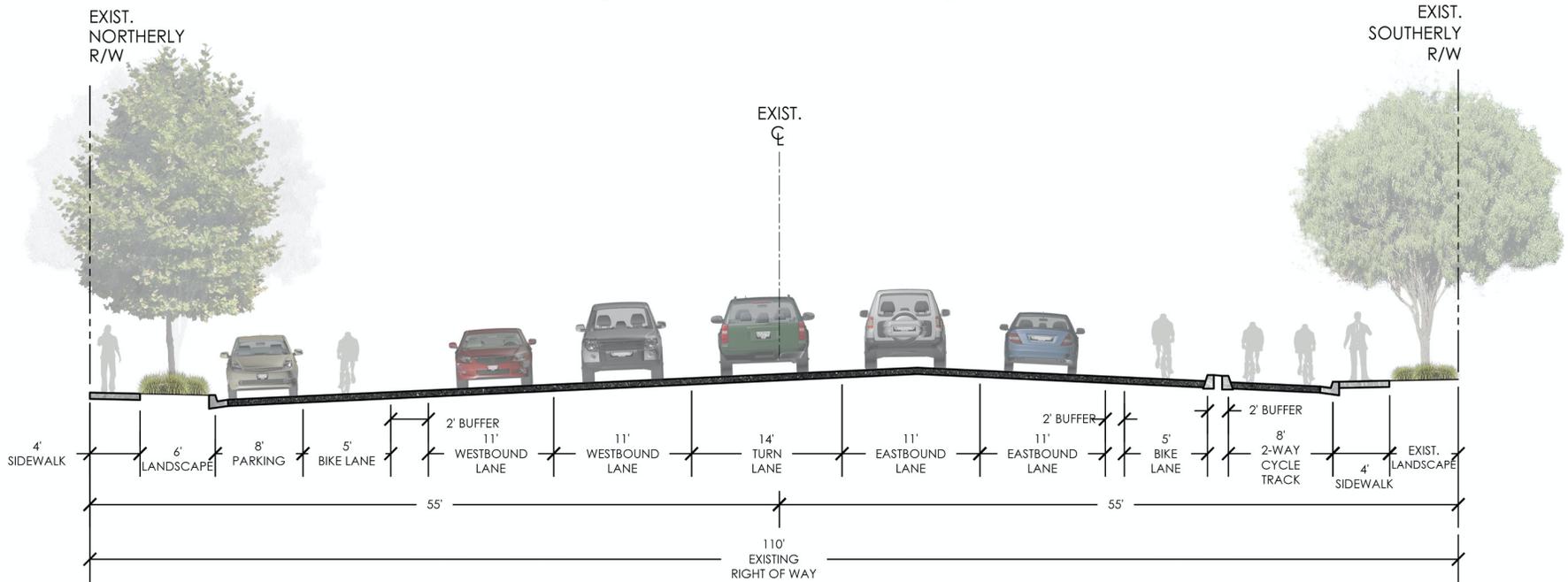


Figure 4-38. Friars Road (Future with Riverwalk)

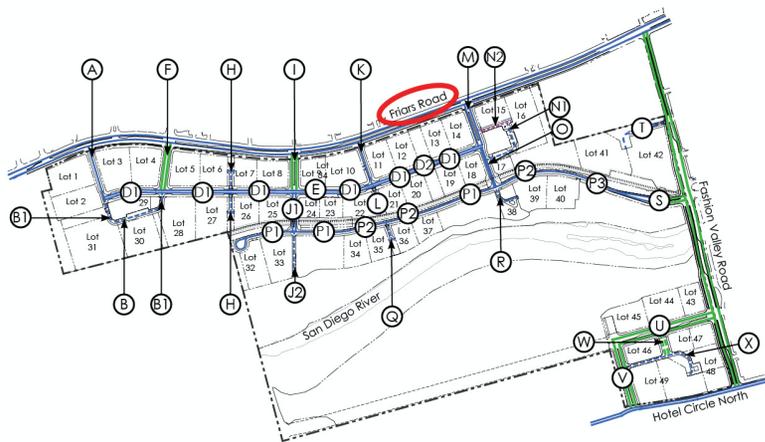
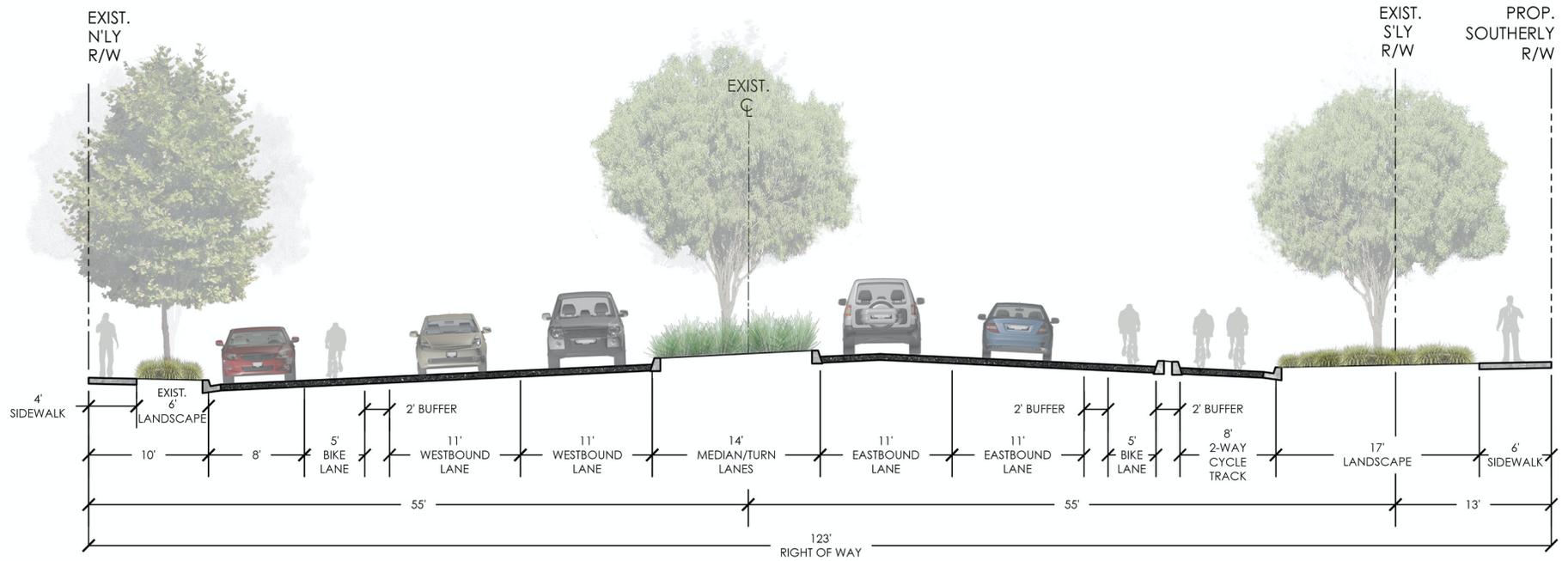


Figure 4-39. Fashion Valley Road (Existing)

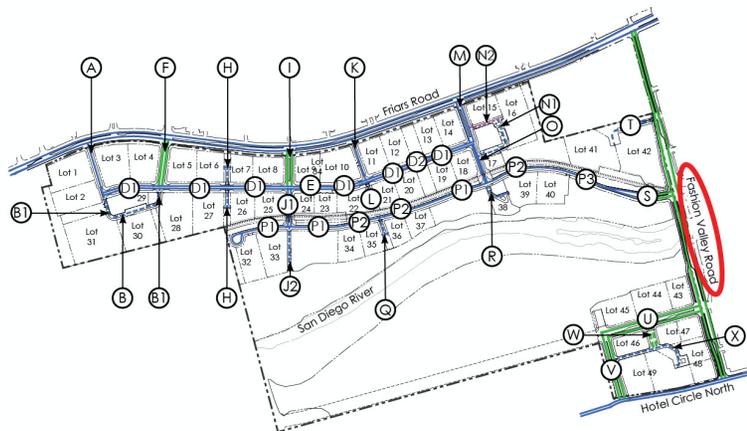
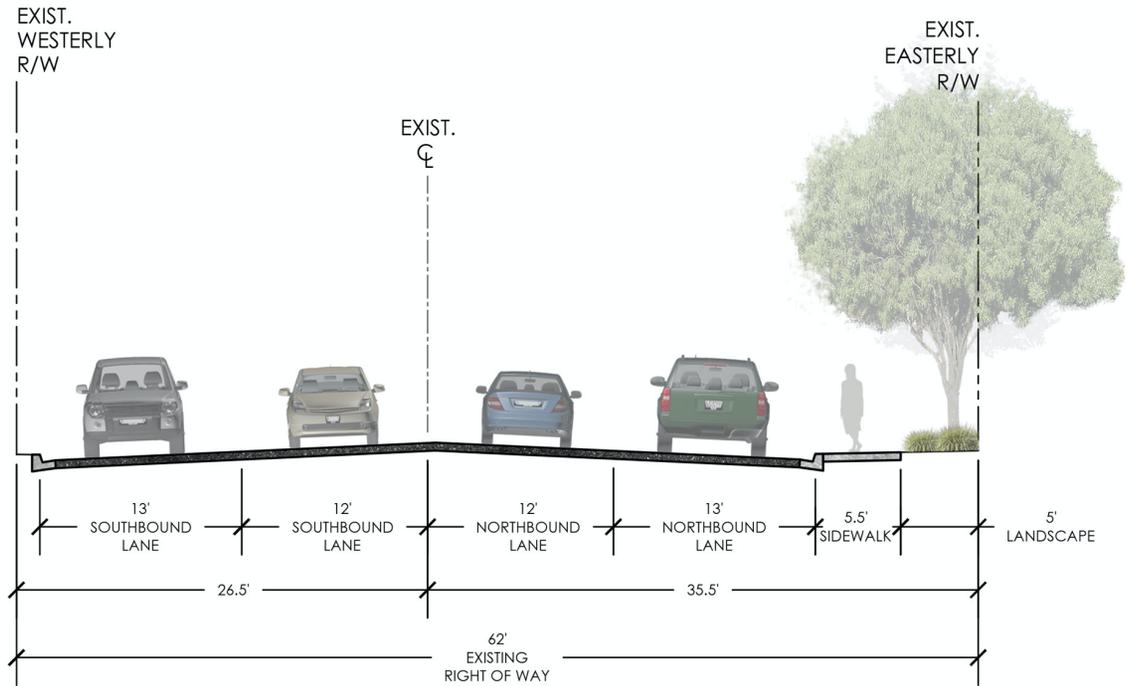


Figure 4-40. Fashion Valley Road (Future with Riverwalk)

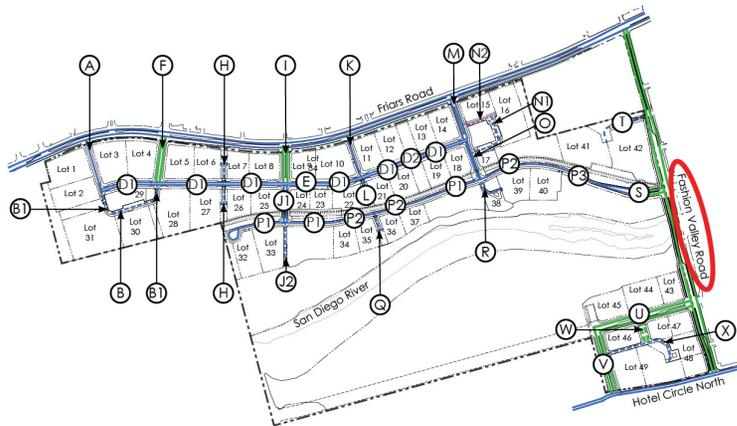
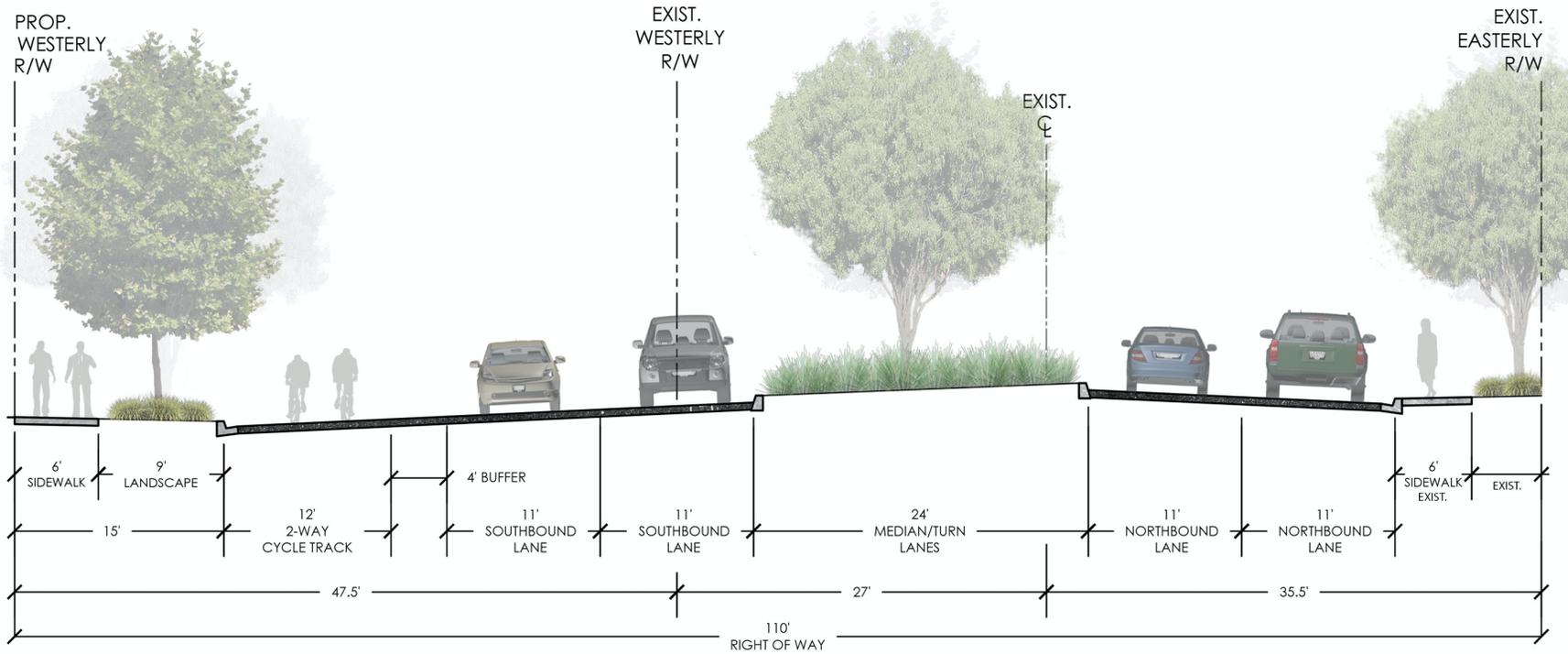


Figure 4-41. Hotel Circle North (Existing)

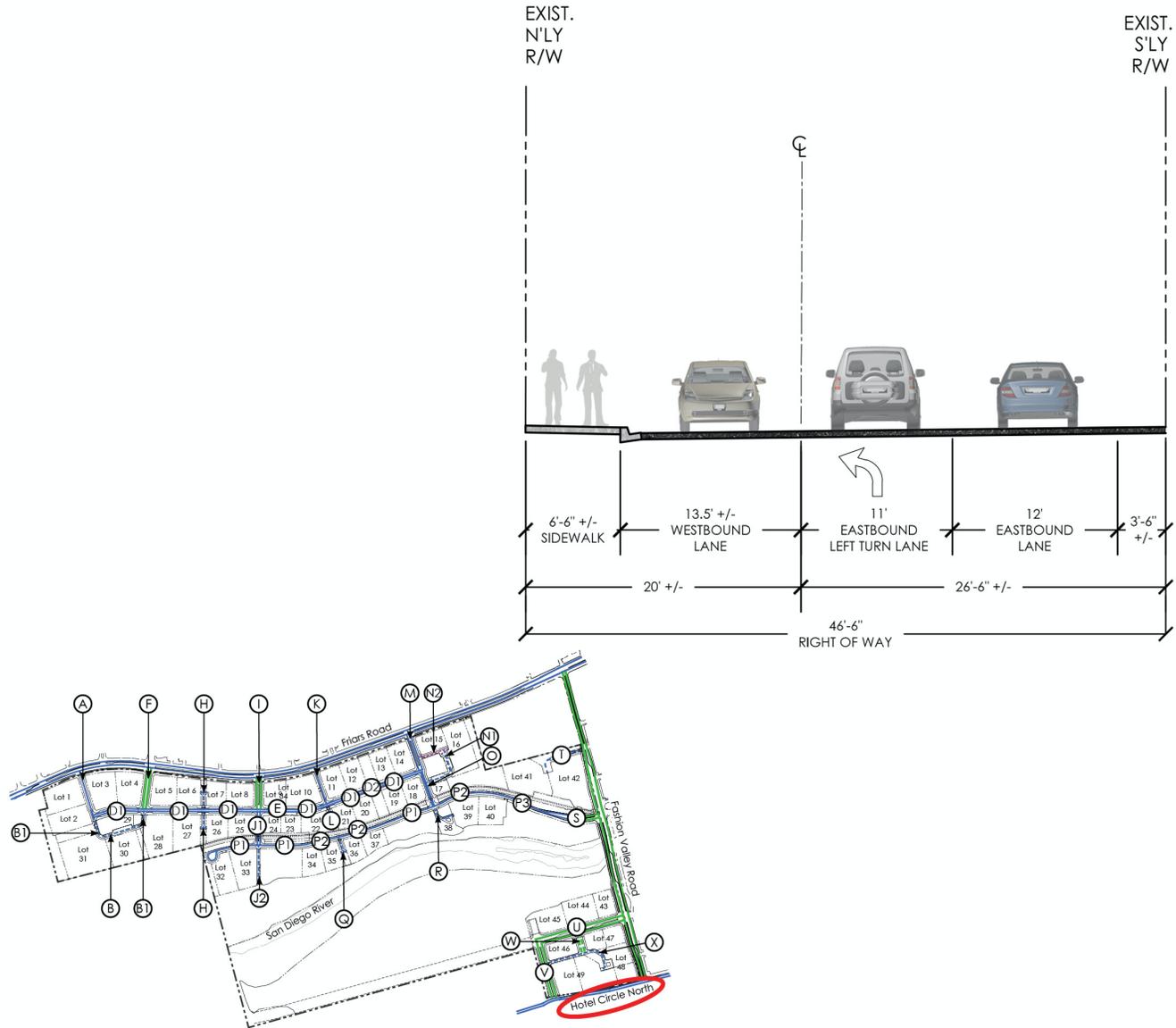
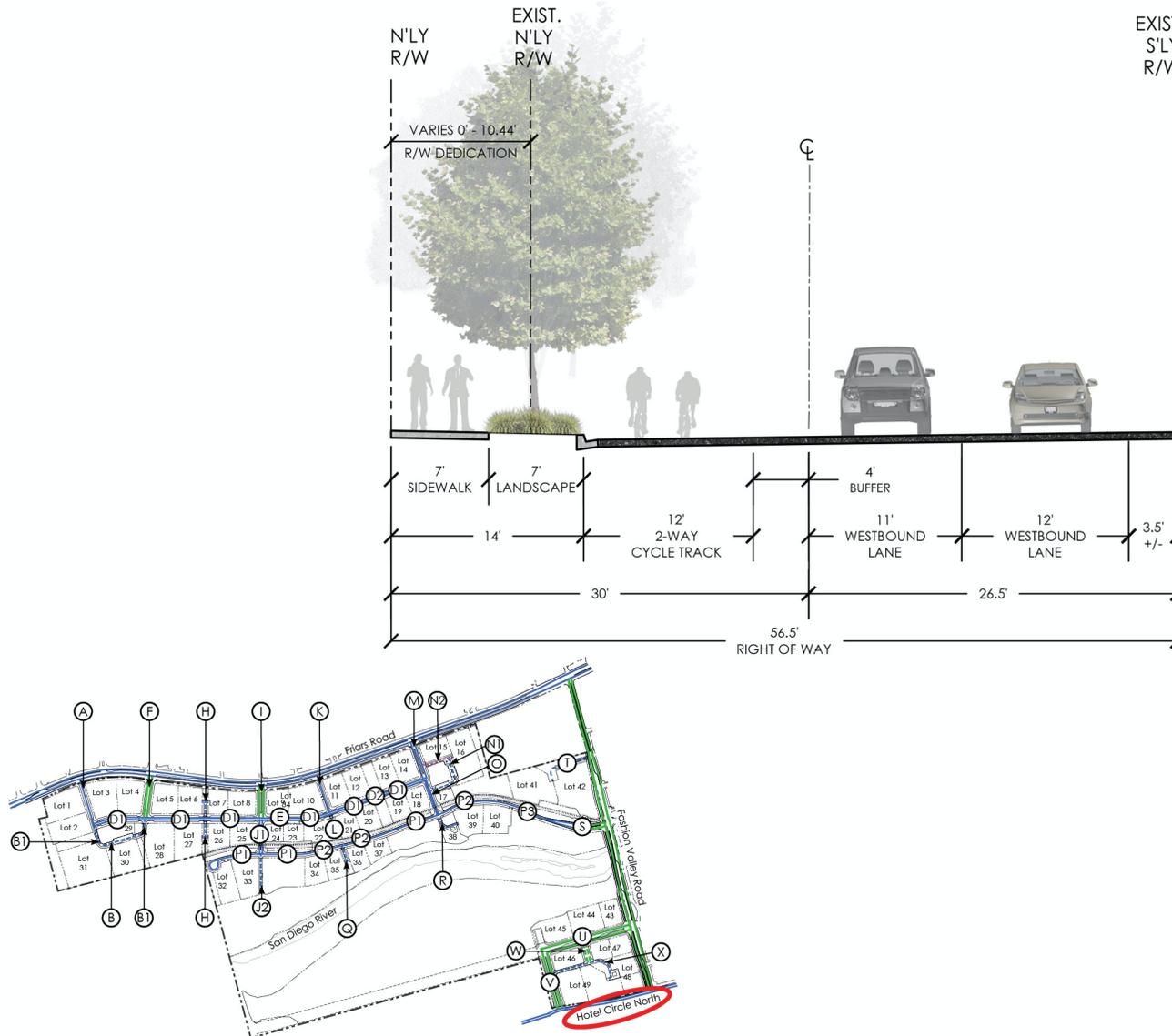


Figure 4-42. Hotel Circle North (Mission Valley Community Plan Planned Configuration)



4.7 VEHICULAR ACCESS AND PARKING

As described above in the street section discussion, access to Riverwalk will occur as signalized or right in/right out intersections. These are shown in Figure 4-43, *Riverwalk Access*.

Few private driveways will be permitted in the project in order to preserve traffic capacity yet provide convenient and safe access. Because the project includes a new transit/trolley stop located in the approximate mid-point of the Riverwalk neighborhood, non-vehicular movement and access to, from, and throughout the community is encouraged and should lead to a reduced parking demand.

Parking will be provided for private developments, visitor use, and public park areas. Since Riverwalk is a mixed-use community, some areas may provide the opportunity for the sharing of parking. Studies indicate that some combinations of land uses require less parking space than the same land uses would individually require at freestanding or isolated locations. Similarly, overall external traffic generation for mixed-use projects is reduced from the normal traffic generation expected from individual land uses. Past Urban Land Institute (ULI) studies concluded that:

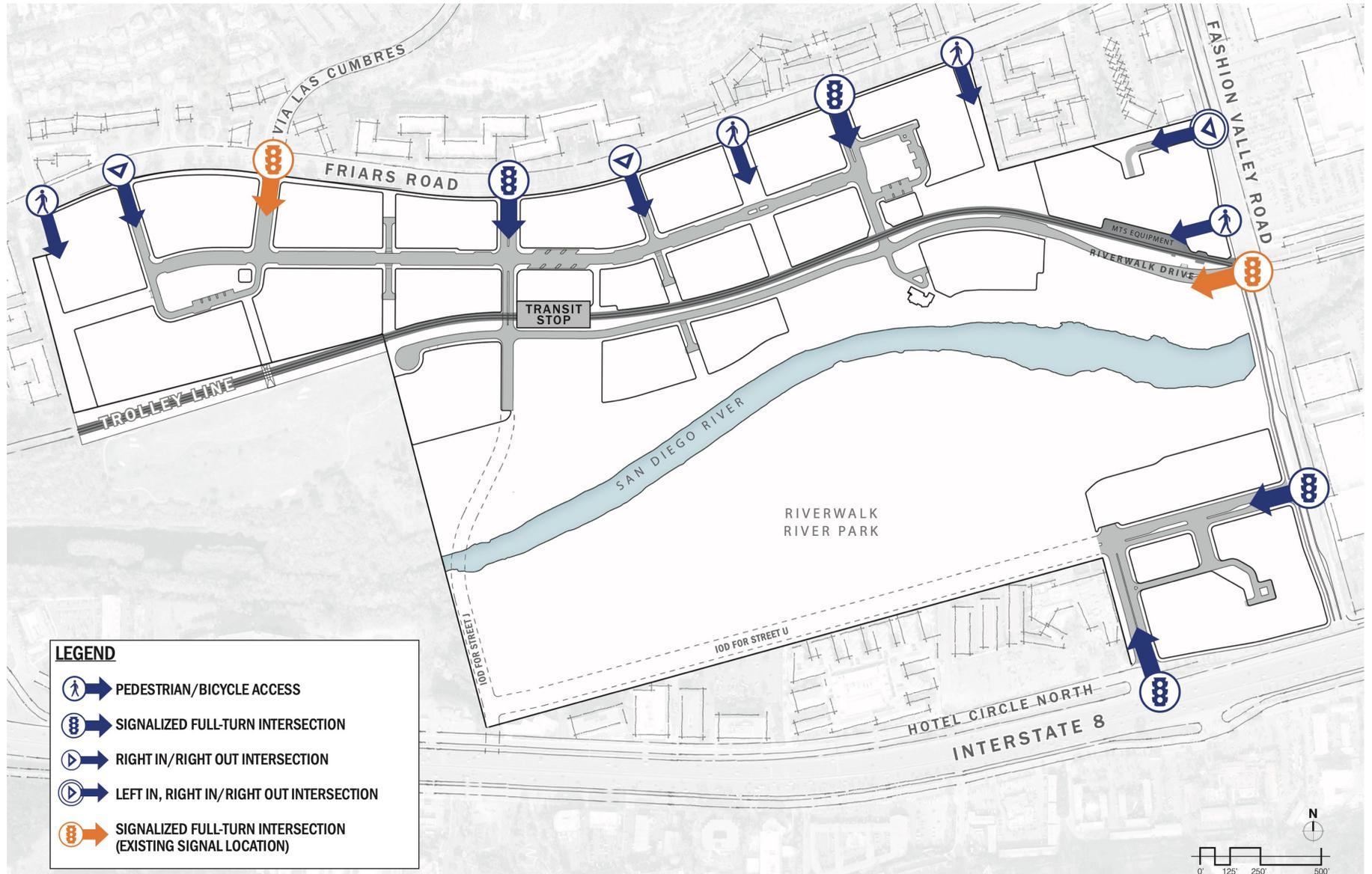
- » Hourly accumulation of parking is significantly different for various types of land uses.

- » There are important seasonal variations which represent another form of time differential.
- » Parking demand was not found to be sensitive to regional factors or city size.
- » Site-specific factors such as transit accessibility are more directly related to parking demand.
- » Reductions in parking space requirements resulting from shared parking have occurred and indicate the following factors:
 - ◆ Actual peak occupancy is consistently lower than simply adding single-use peak parking demands.
 - ◆ Captive market effects often significantly reduce requirements for shared parking.

4.8 TRIP GENERATION ESTIMATE

Full build out of the Riverwalk Specific Plan is anticipated to generate approximately 41,186 driveway ADT. Details of the ADT calculations for the Riverwalk Specific Plan can be found in the *Transportation Impact Analysis* (March 2020) included as part of the Riverwalk Specific Plan EIR and is based upon the City of San Diego Trip Generation Manual, increasing pedestrian/bicycle connectivity, and the reduction of vehicle miles travels.

Figure 4-43. Riverwalk Access



5 PUBLIC SERVICES, UTILITIES, AND SAFETY

5.1 PUBLIC SERVICES

Public services are those institutional responses to basic human needs, such as health, safety, welfare, and education. This section describes the provisions necessary for public services, including schools, libraries, fire and police, solid waste, and public parks and recreation.

Public service needs are based on an area's population. The buildout population for Riverwalk is estimated at 7,998, based on the target residential development of 4,300 dwelling units and a population generation rate of 1.86 people per residence provided by City of San Diego Park planning staff.

5.1.1 Libraries

The City of San Diego Libraries Department recommends a new branch library when there are at least 20,000 residents in the community. In response to this criterion, a new library, located at 2123 Fenton Parkway, was constructed to serve the Mission Valley community in July 2002. Additional libraries that also serve the Specific Plan area are located in adjacent communities: the Linda Vista Branch at 6950 Linda Vista Road and the Mission Hills-Hillcrest/Harley & Bessie Knox Branch at 215 West Washington Street.

The Mission Valley Library, which opened in 2002, provides a computer lab, media (videos, CDs, DVDs), on-line databases, internet access, conference and meeting rooms, family programs, and a library collection of over 70,000 books. The library additionally includes a meeting room with public art displays, a children's library, computer lab, outdoor patio with a flowing river sculpture, and a terrace.

The Linda Vista Library is located in a 10,000-square-foot building, which opened in 1987. As Linda Vista is home to many first-generation immigrants, the library has an extensive collection of titles in Spanish, Vietnamese, Chinese, and Japanese, along with smaller holdings in other languages. This library contains 19 computers for public use and one meeting room.

The Mission Hills-Hillcrest/Harley & Bessie Knox Library opened in 2019. The 14,000-square-foot library features modern amenities, including designated areas for teens and young children, a community meeting space, study rooms, computer labs, drought-tolerant landscaping, an underground parking garage, and a design expected to achieve LEED Gold certification. This library houses a special collection of LGBTQ books.

5.1.2 Schools

Schools located within the San Diego Unified School District (SDUSD) provide elementary and secondary public education to students generated by residential development in Riverwalk. Although currently there are no public schools located within Mission Valley, the community is served by eight elementary schools, five middle schools, and four high schools located in communities bordering Mission Valley. Carson Elementary School, located at 6905 Kramer Street in the Linda Vista community, provides education for students Kindergarten through Grade 5; Montgomery Middle School, located at 2470 Ulric Street in the Linda Vista community, serves Grade 6 through Grade 8; and Kearny High School, located at 1954 Komet Way in the Linda Vista community serves Grade 9 through Grade 12. Additionally, a new public

elementary school is planned at Civita, located two miles east of Riverwalk within the Mission Valley community. This new school will serve kindergarten through fifth grade and will be Mission Valley's first public school.

Senate Bill (SB) 50 was enacted in 1998 authorizing the collection of developer fees for school facilities construction and establishing a maximum cap on such fees (and indexes for inflation). As a result of SB 50, Government Code section 65995 and California Education Code section 17620 allows school districts to levy fees on residential or commercial/industrial construction projects within a school district's boundaries. Developers of projects within Riverwalk will be responsible for the payment of fees associated with public school service based on size of residential units and commercial uses as established by SDUSD. Present City policy requires that verification of payment of school fees be made prior to the issuance of building permits. Additionally, a portion of the property taxes generated by the project will be allocated to the SDUSD.

Several universities and community colleges are located near to Riverwalk and provide its residents with opportunities for higher education. National University and Brandman University are located within the Mission Valley community. The University of San Diego and San Diego Mesa Community College are in the neighboring community of Linda Vista, and San Diego State University is east of Mission Valley in the College Area community. San Diego City College is located in downtown San Diego, and Grossmont College is located in the City of El Cajon. Access from Riverwalk to all of the surrounding colleges and universities is provided via the Green Line Trolley and connecting buses.

5.1.3 Fire and Rescue

Fire and rescue protection is provided by the City of San Diego Fire-Rescue Department. The Riverwalk Specific Plan area is served by two fire stations: Station 5 at 3902 Ninth Avenue and Station 45 at 9366 Friars Road. Station 5 houses an engine and a battalion. Station 45 houses an engine, a battalion, a truck, and two HazMat units.

The provision of fire and emergency access to all structures within the Riverwalk neighborhood is a critical function of the City of San Diego. Therefore, prior to the issuance of the Building Permit for each individual lot, the Building Plans shall demonstrate compliance with the City's Fire and Safety codes in effect at the time of Building Permit application. This will likely include drivable surfaces, hose reach requirements, ladder access, and standpipe and building identification, as well as other requirements.

While human access to the San Diego River within the Riverwalk River Park will be restricted, two emergency access points for the San Diego Fire-Rescue Swift Water team will be located adjacent to the existing pedestrian bridges. These will be utilized only for emergency vehicle access during water rescues in the San Diego River.

5.1.4 Police

Police protection within the City of San Diego is provided by the City of San Diego Police Department. The Specific Plan area would be served by officers from the Western Division located at 5215 Gaines Street.

Goal for Greatness:
 Support a safe community through integration of passive crime prevention design and activation throughout the Districts.

In addition to police protection, Riverwalk incorporates elements of Crime Prevention through Environmental Design (CPTED) in order to reduce the incidence of crime in the neighborhood. CPTED is a multi-disciplinary approach to deterring criminal behavior through environmental design. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts. Specifically altering the physical design of the communities in which people reside and congregate in order to deter criminal activity is the main goal of CPTED. CPTED principles of design affect elements of the built environment ranging from the small-scale (such as the strategic use of shrubbery and other vegetation) to the overarching, including building form of an entire urban neighborhood and the amount of opportunity for "eyes on the street".

5.1.5 Public Parks and Recreation

The population-based standards for City parks are identified in the Recreation Element of the General Plan, Table RE-2. Parks can range in size:

- » Less than one-acre Pocket Parks/Plazas (serve the population within a ¼-mile);
- » Mini Parks of one to three acres (serve the population within a ½-mile);
- » Neighborhood Parks of three to 13 acres (serve a population of 5,000 – approximately within one mile);
- » Community Parks of 13 to 20 acres (serve a population of 25,000); and

- » Major Parks of 20 or more acres (serve one or more community planning areas).

Based upon information provided by Park planning staff, Mission Valley will have an estimated population of 1.86 persons per household. With a maximum residential buildout of up to 4,300 units, Riverwalk will generate a population of approximately 7,998. Using City standards, this local population represents a requirement of approximately 22.4 acres of population-based parkland area. In accordance with provision of required population-based park space, Riverwalk will provide approximately 51 acres of publicly-owned park land.

Riverwalk will satisfy more than its 22.4-acre population-based park requirement through the provision of parks on-site as described below and further described in Chapter 3, *Parks, Open Space, and the Pedestrian Realm*. Urban parks will be phased with development in the North District. These parks will be privately-owned, privately-maintained, and publicly-accessible parks. Public access with private maintenance to these parks will be assured through the provision of recreation easements, or similar access agreements.

The Riverwalk River Park, which is planned to serve as a location for a Recreation Center, will be a publicly-owned City of San Diego park, subject to the Development Agreement.

As presented in Chapter 3, *Parks, Open Space, and the Pedestrian Realm*, of this Specific Plan, Riverwalk provides a total of approximately 97 acres of parks and open space within the overall development. This involves approximately:

- » **Improvements to the San Diego River** (approximately 35 acres): including surrounding habitat restoration and protection area and a no-use buffer;

- » **Dedication of land and completion of interim park improvements for the Riverwalk River Park** (approximately 51 acres): the Riverwalk River Park surrounding the San Diego River.
- » **North District Urban Parks** (approximately 10 acres): a collection of pocket parks, mini parks, and neighborhood parks interwoven into Riverwalk's North District.
- » **Central District Urban Parks** (approximately 6.5 acres): a collection of pocket parks, mini parks, and neighborhood parks interwoven into Riverwalk's Central District.
- » **Open Space** (approximately 0.6 acres): Located within the North and Central Districts (0.2 acre and 0.4 acre, respectively), providing landscape buffer along portions of the existing trolley tracks.

5.2 PUBLIC UTILITIES

Riverwalk is located within the urbanized community of Mission Valley. As such, public utilities including water, sewer, gas, and electricity are readily available to serve Riverwalk. Development within Riverwalk will provide the necessary connections, extensions, and upgrades to the existing utilities. As part of the Riverwalk Vesting Tentative Map, a drainage plan and storm water control plan have been developed to control runoff and carry storm water, in accordance with City regulations.

5.2.1 Water Service and Facilities

The City of San Diego Water Utilities Department provides water to the site as part of the Metropolitan System. Water demand projections have been calculated in accordance with the City of San Diego Water Department's Facility Design Guidelines. The projected average day demand for the fully developed Riverwalk Specific Plan is 1.16 million gallons per day (mgd).

Figure 5-1, *Water Facilities*, illustrates the planned water distribution systems for the project. Water facilities have been designed in a manner to ultimately serve buildout of the project, with considerations to offsite water demand as well. Water service is available in Friars Road and Fashion Valley Road from an existing 16-inch diameter line, which will be looped and interconnected to existing smaller diameter distribution lines in Hotel Circle North through Riverwalk's street network.

5.2.2 Sewer Service and Facilities

Sewer service will be provided by the City. Figure 5-2, *Riverwalk Sewer Facilities*, depicts the planned sewer facilities and connections that will be necessary to serve development in Riverwalk. Based upon City of San Diego design criteria, the average daily flow anticipated at buildout of Riverwalk Specific Plan is 0.845 million gallons per day (MGD).

As shown in Figure 5-2, *Sewer Facilities*, sewer service will be provided by the 78-inch diameter North Mission Valley trunk sewer. Sewer collector mains will be installed throughout the project as required and will connect to the existing trunk sewer.

Figure 5-1. Water Facilities

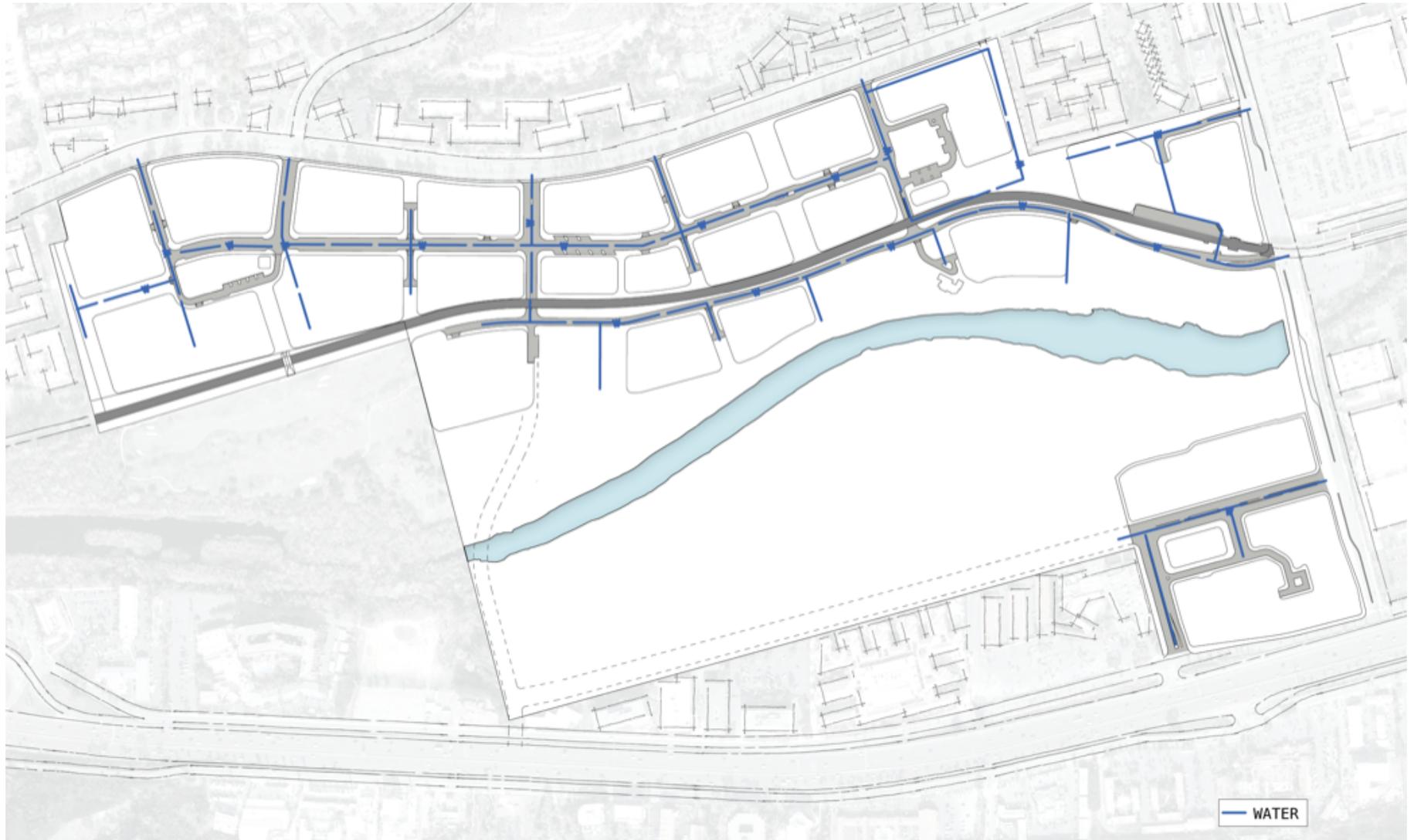
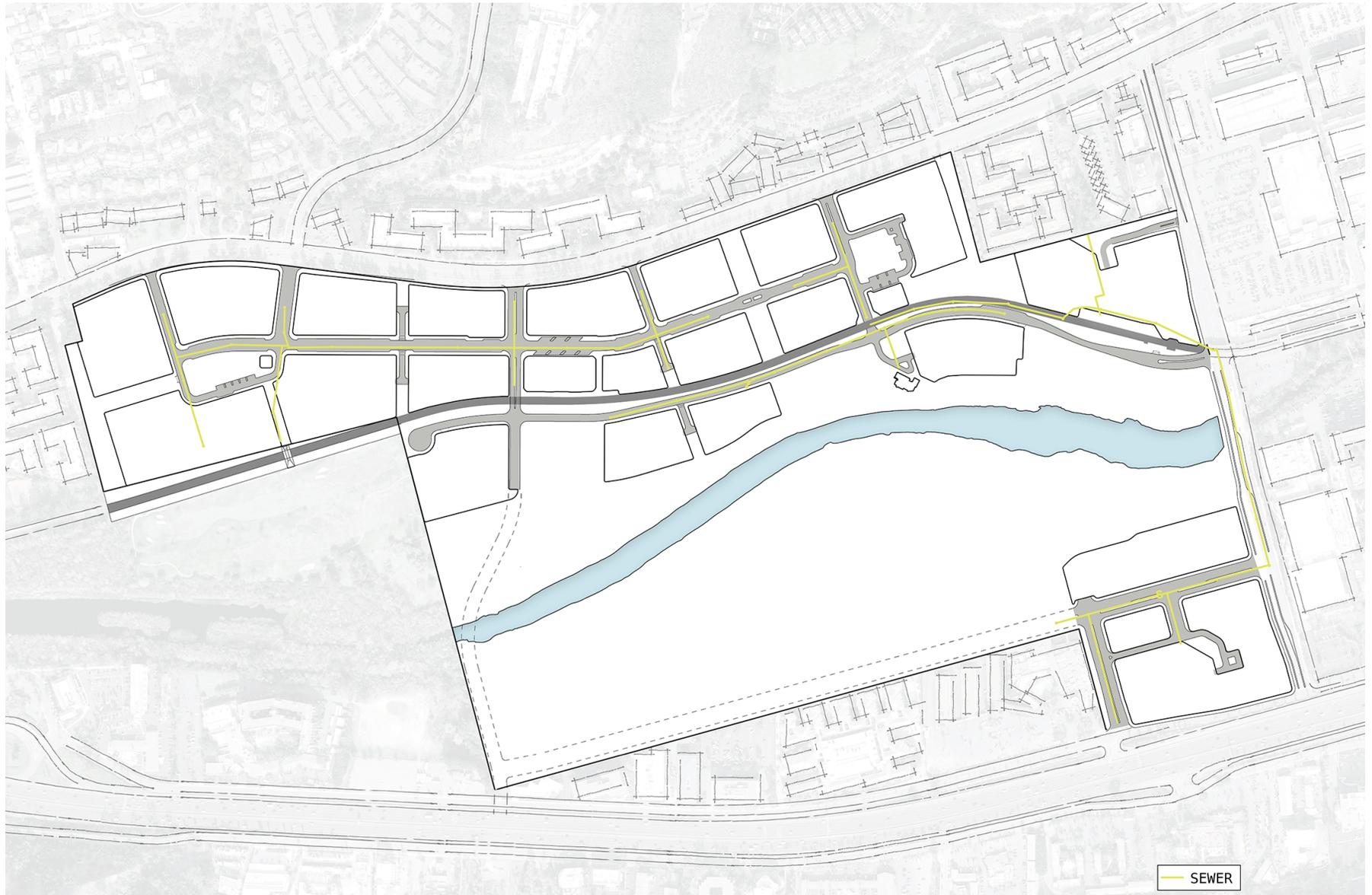


Figure 5-2. Sewer Facilities



5.2.3 Drainage Facilities

Existing public drainage facilities will be extended through the project within public storm drain easements in storm drain facilities designed according to City Engineers' requirements. Storm drains will be installed within the project in a combination of public and private drainage systems in accordance with requirements of the State Regional Water Control Board and the City's design standards.

Jurisdictional Permits

Projects that would impact wetland/riparian features that would be considered jurisdictional by state and or federal agencies would require permits. The type of permit will depend upon the proposed impact and the regulations/requirements of each regulatory agency. The typical regulatory agencies that are involved in issuing permits for impacts to jurisdictional resources are the U.S. Army Corps of Engineers (Corps), California Department of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB). The Corps regulates federal jurisdictional resources under the Federal Clean Water Act. For the state, the CDFW regulates impacts under the California Fish and Game Code and the RWQCB under the Porter Cologne Act. Below is further discussion of each of these regulatory paths.

Federal Clean Water Act. Under Section 404 of the Clean Water Act, the Corps is charged with regulating the discharge of dredge and fill materials into jurisdictional Waters of the U.S. The terms "Waters of the U.S." and "jurisdictional waters" have a broad meaning that includes special aquatic sites, such as wetlands. Corps wetland boundaries are determined using three criteria (vegetation, hydrology, and soils) established for wetland delineations, as described within the Wetlands Delineation Manual and Regional

Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region.

Waters of the U.S., as defined by regulation and refined by case law include:

- (1) The territorial seas;
- (2) Coastal and inland waters, lakes, rivers, and streams that are navigable Waters of the U.S., including their adjacent wetlands;
- (3) Tributaries to navigable Waters of the U.S., including adjacent wetlands; and
- (4) Interstate waters and their tributaries, including adjacent isolated wetlands and lakes, intermittent and ephemeral streams, prairie potholes, and other waters that are not a part of a tributary system to interstate waters or navigable Waters of the U.S., the degradation or destruction of which could affect interstate commerce.

Section 401 of the Clean Water Act requires that any applicant for a federal license or permit to conduct any activity that may result in a discharge to Waters of the U.S. must obtain a Water Quality Certification, or a waiver thereof, from the state in which the discharge originates. In California, the RWQCB issues Water Quality Certifications.

California Fish and Game Code. California Fish and Game Code provides specific protection and listing for several types of biological resources. Section 1600 of California Fish and Game Code requires a Streambed Alteration Agreement for any activity that would alter the flow, change or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake.

Typical activities that require a Streambed Alteration Agreement include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement. Notification is required prior to any such activities, and CDFW will issue a Streambed Alteration Agreement with any necessary mitigation to ensure protection of the State's fish and wildlife resources.

Porter-Cologne Water Quality Control Act of 1970. The Porter-Cologne Water Quality Control Act of 1970 grants the State Water Resource Control Board and its regional offices power to protect water quality and is the primary vehicle for implementation of the State's responsibilities under Section 401 of the Clean Water Act. The Porter-Cologne Act grants the State Water Resource Control Board authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. Typically, the State Water Resource Control Board and RWQCB act in concert with the Corps under Section 401 of the Clean Water Act in relation to permitting fill of Waters of the U.S.

Off-site Improvements

The following improvements to public facilities will be implemented as part of Riverwalk.

Friars Road. Limitations of public improvements to Friars Road will be from about 900 feet west of the westerly project boundary easterly to Fashion Valley Road intersection. Work items for this improvement include:

- » Dedication of additional 13-foot right-of-way.
- » Construction of a raised median throughout the limit's length.

- » Removal and replacement of existing curb and gutter along the project frontage.
- » Removal of existing sidewalk and replacement with six-foot-wide concrete sidewalk along the project frontage.
- » Addition of a five-foot bike lane with two-foot painted buffer.
- » Re-stripping of travel lanes.

Fashion Valley Road. Limitations of public improvements to Fashion Valley Road will be from the Friars Road intersection southerly to the Hotel Circle Intersection. Work items for this improvement include:

- » Dedication of additional 47.5 feet of right-of-way.
- » Construction of a raised median from the Riverwalk Drive intersection southerly to the Hotel Circle North intersection.
- » Construction of a two-way cycle track with raised buffer from the Riverwalk Drive intersection southerly to the Hotel Circle North intersection.
- » Construction of curb and gutter.
- » Construction of a six-foot-wide concrete sidewalk along the project frontage.
- » Re-stripping of travel lanes.

Hotel Circle North. Limitations of public improvements to Hotel Circle North will be from the I-8 off-ramp/on-ramp intersection easterly to the

Fashion Valley Road/Hotel Circle North intersection. Work items for this improvement include:

- » Dedication of additional zero feet to 14.44 feet of right-of-way.
- » Construction of a two-way cycle track with painted buffer along the project frontage.
- » Construction of a six-foot-wide concrete sidewalk along the project frontage.
- » Re-striping of travel lanes.

5.2.4 Solid Waste

Solid waste services in the project area is provided by the combined service of the City of San Diego Environmental Services Department (ESD) and private collectors. The City provides refuse collection for single-family and multi-family residences located on public streets that meet City safe storage and access requirements; collection services for all other developments must be contracted-out by franchised private hauling companies. Solid waste generated within the City of San Diego is taken to either the City of San Diego's West Miramar Landfill, which is located north of Highway 52 at 5180 Convoy Street in San Diego; the Sycamore Sanitary Landfill, located at 8514 Mast Boulevard in San Diego; or the Otay Landfill, located at 1700 Maxwell Road in Chula Vista.

5.2.5 Electricity and Natural Gas

Electric service will be provided from existing systems adjacent to the site, primarily those in Friars Road. Initial feeds will originate at SDG&E's Old Town

substation (located at Gaines Street and Napa Street), with future feeds coming from some combination of the Old Town substation and the Fashion Valley substation, or a new substation not yet sited. The principal natural gas source for the site will be SDG&E's existing 20-inch transmission main in Friars Road. This main will adequately serve the site.

5.3 PUBLIC SAFETY

In addition to city-wide public safety concerns that are attended to by the San Diego Police Department and San Diego Fire-Rescue, each community has its own set of community-specific public safety concerns. Within Mission Valley, these include compatibility with the airports within whose influence areas a site is located, as well as emergency evacuation in the event of such natural disasters as flooding or wildfire.

5.3.1 Airport Land Use Compatibility

The Riverwalk site is located within the Airport Influence Area (AIA) Review Area 2 for San Diego International Airport and Montgomery-Gibbs Executive Airport. Within Review Area 2, only the following land use actions require ALUC review:

- » Any object which has received a final notice of determination from the FAA that the project will constitute a hazard or obstruction to air navigation, to the extent applicable.
- » Any proposed object in an area of terrain penetration to airspace surfaces which has a height greater than 35 feet above ground level.
- » Any project having the potential to create electrical or visual hazards to aircraft in flight, including: electrical interference with radio

communications or navigational signals; lighting which could be mistaken for airport lighting; glare or bright lights (including laser lights) in the eyes of pilots or aircraft using the Airport; certain colors of neon lights- especially red and white- that can interfere with night vision goggles; and impaired visibility near the Airport. The local agency should coordinate with the airport operator in making this determination.

- » Any project having the potential to cause an increase in the attraction of birds or other wildlife that can be hazardous to aircraft operations in the vicinity of the Airport. The local agency should coordinate with the airport operator in making this decision.

Developments within Riverwalk shall comply with the Airport Land Use Compatibility Overlay Zone of the City of San Diego Municipal Code, which implements the policies and criteria in the San Diego International Airport ALUCP, because the project site is located within AIA Review Area 2 for San Diego International Airport and properties within the Riverwalk Specific Plan may be subject to some annoyances or inconveniences associated with proximity to an airport and airport operations (such as noise, vibration, overflights, or odors). The San Diego County Regional Airport Authority may be contacted for information regarding hours of airport operation, airport master plans, and other relevant information regarding airport operations.

The project site is located within the Airspace Protection Boundary for San Diego International Airport. Development with structures exceeding the Federal Aviation Administration (FAA) CFR Part 77 noticing criteria shall provide notification to the FAA prior to construction as required by the Airport Land Use Compatibility Overlay Zone. The FAA shall have the sole and exclusive regulatory authority over the operation of aircraft. Additionally, the project site is located within the Overflight Area Boundary, which requires

overflight notification for new residential development within the overflight area boundary.

As noted, the Riverwalk site is also located within AIA Review Area 2 for Montgomery-Gibbs Executive Airport. Riverwalk is outside of any airport safety boundaries, including the Overflight Area Boundary. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2.

5.3.2 Emergency Evacuation

The Mission Valley community is subject to periodic flooding during major storm events. Flooding can affect mobility through Mission Valley, closing important road connections and affecting emergency services.

In September 2014, the San Diego County Board of Supervisors approved the San Diego County Emergency Operations Plan (EOP). The plan is used by all key partner agencies within the county, including the City of San Diego, to respond to major emergencies and disasters. The EOP describes a comprehensive emergency management system which provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism and nuclear-related incidents. It delineates operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization, and describes the overall responsibilities for protecting life and property and assuring the overall well-being of the population. The plan also identifies the sources of outside support which might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies and the private sector.

Goal for Greatness:

Ensure the safety of residents, employees, and visitors by properly treating the San Diego River's hydrology and potential flood events.

The EOP has a number of Annexes applicable to specific elements of emergency response, such as Fire and Rescue, Law Enforcement, Logistics, etc. The Evacuation Annex provides evacuation planning for the County of San Diego Operational Area (OA). The overarching goal of evacuation planning is to maximize the preservation of life while reducing the number of people that must evacuate and the distance they must travel to seek safe refuge. The OA Evacuation Annex describes how emergency managers will cooperate and the decisions they will have to make and implement to respond to a disaster that requires an evacuation of residents and their pets. The OA Evacuation Annex also aims to lessen the impact a large-scale evacuation can have on the host communities.

The OA Evacuation Annex is intended to be used as a template for the development of other jurisdictional evacuation plans and will support or supplement the evacuation plans prepared and maintained by each local jurisdiction. The annex outlines strategies, procedures, recommendations, and organizational structures that can be used to implement a coordinated evacuation effort in the OA. In addition, this annex provides general estimates on the number of residents in the OA who may need to be evacuated due to specific hazards in their area. The annex provides estimates for the number of residents that may require sheltering or transportation assistance, and the estimated number of pets that may need to be evacuated. The annex also provides hazard specific considerations, general evacuation transportation routes and capacities, countywide shelter capacities, evacuation resources available locally and through mutual aid, and access and functional needs considerations. This annex would guide evacuation procedures, should they ever become necessary for Mission Valley and/or Riverwalk.

The Riverwalk Specific Plan facilitates emergency response through the following measures:

- » Reconstruction of Fashion Valley Road to allow for an improved 10- to 15-year storm event crossing, increasing accessibility across the Valley at times of heavy rains.
- » Improving hydrology and hydraulics of the San Diego River through appropriate site grading in accordance with FEMA and in a manner that protects development during flooding.

5.3.3 Flood Control Measures

The San Diego River flows in a westerly direction through the site. FEMA has mapped an associated 100-year floodplain and floodway, which are generally bounded by the MTS trolley line to the north and I-8 to the south. Riverwalk proposes to encroach within a portion of the floodplain and floodway. The encroachment is associated with a portion of the multi-use development pads along the north and south edges of the river, as well as the park site within the central portion of the river. The development pads of Riverwalk will be elevated above the floodplain, while the park site will convey flood flows.

Local and Federal regulations allow encroachments if the pre-project 100-year water surface elevations are not raised. Riverwalk will meet this criteria by generally lowering the elevations of the Riverwalk River Park, which will create additional conveyance within the central floodplain area. The lowering will offset the encroachments for the development pads. Riverwalk will also improve the Fashion Valley Road culverts in order to provide greater flood capacity under Fashion Valley Road.

Fashion Valley Road is currently subject to inundation during moderate storm events. The project will install vehicular barrier gates across Fashion Valley Road north and south of the river channel. The gates are a safety measure that will prevent vehicles from crossing Fashion Valley Road during the flood stage. The gates will be triggered by sensors that measure water level. The gates will automatically open when the river begins overtopping Fashion Valley Road (to prevent vehicular traffic from crossing when the roadway is flooded) and automatically close when the flood level recedes below Fashion Valley Road (allowing vehicles to cross once the road is no longer flooded).

5.3.4 Brush Management

A Brush Management program is required where structures could be located on premises within 100 feet of native or naturalized vegetation. The City's Very High Fire Hazard Severity Zone (VHFHSZ) Map identifies an area of potential vegetated fuel load along the San Diego River, which traverses the project site. Therefore, a Brush Management Plan has been developed for Lots 36 through 40 where development may be within 100 feet of the native or naturalized vegetation (Figure 5-3, *Brush Management*).

Development on Lots 36 through 40 would be separated from the fuel through a Zone One measuring between 25 feet and 70 feet. The Zone One will consist of developed fire breaks in the form of building setbacks, the Riverwalk River Park, the San Diego River Pathway, and various trails. The Zone One will measure between 25 feet and 70 feet and all structures fronting the San Diego River within Lots 36 through 40 will be subject to alternative compliance measures as allowed under §142.0412(i).

According to §142.0412(i), an applicant may request approval of alternative compliance for brush management in accordance with Process One if all of the following conditions exist:

- (1) The proposed alternative compliance provides sufficient defensible space between all structures on the premises and contiguous areas of native or naturalized vegetation as demonstrated to the satisfaction of the Fire Chief based on documentation that addresses the topography of the site, existing and potential fuel load, and other characteristics related to fire protection and the context of the proposed development.
- (2) The proposed alternative compliance minimizes impacts to undisturbed native or naturalized vegetation where possible while still meeting the purpose and intent of Section 142.0412 to reduce fire hazards around structures and provide an effective fire break.

Figure 5-3. Brush Management

