

4 TRANSPORTATION AND CIRCULATION

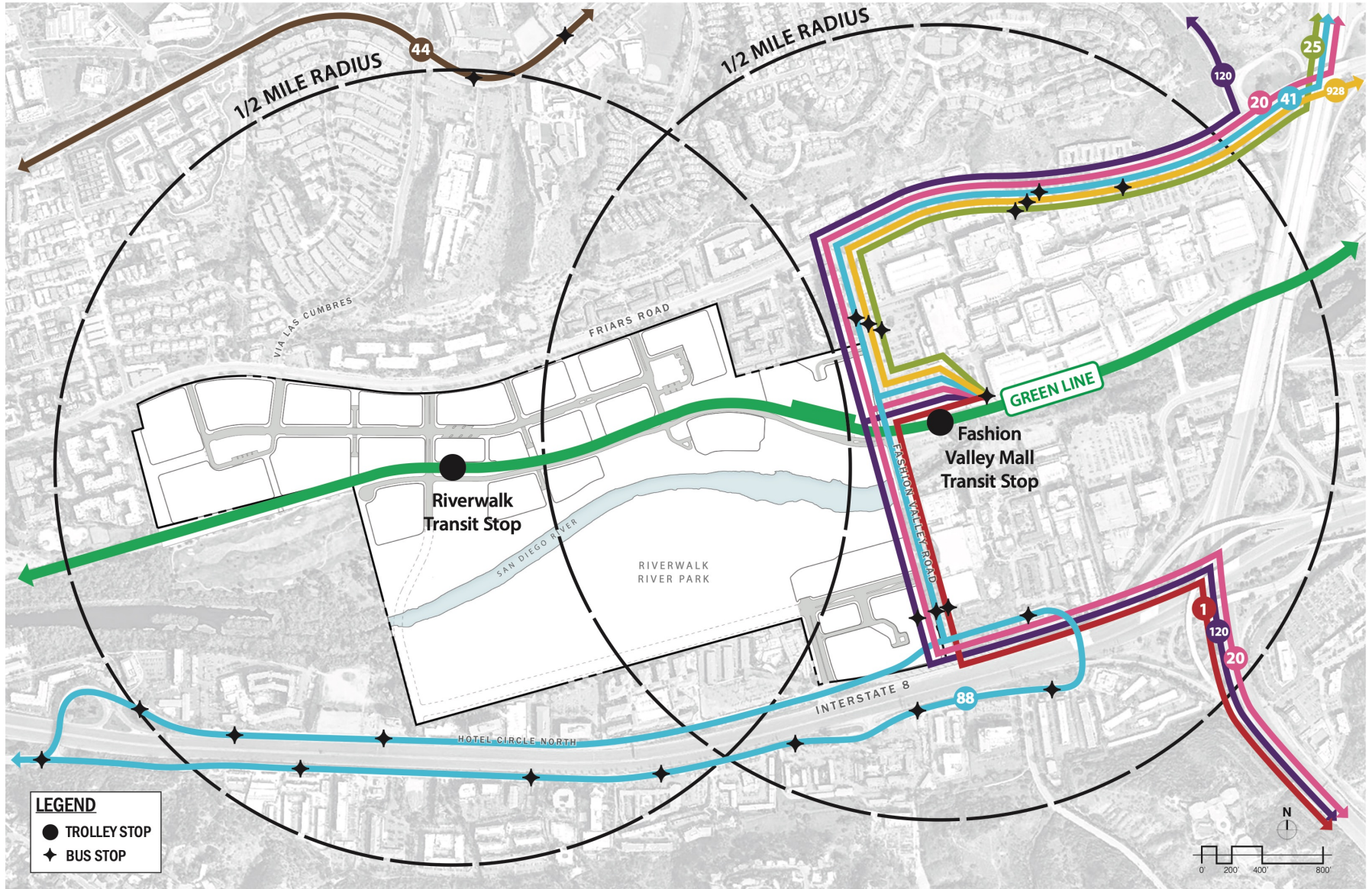
Riverwalk is afforded vehicular accessibility from a **well-established system** of roadways and a variety of transportation options. Regional accessibility is provided by interstate freeways and State highways, while local travel is formulated on north-south and east-west connector streets. Interstate 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.

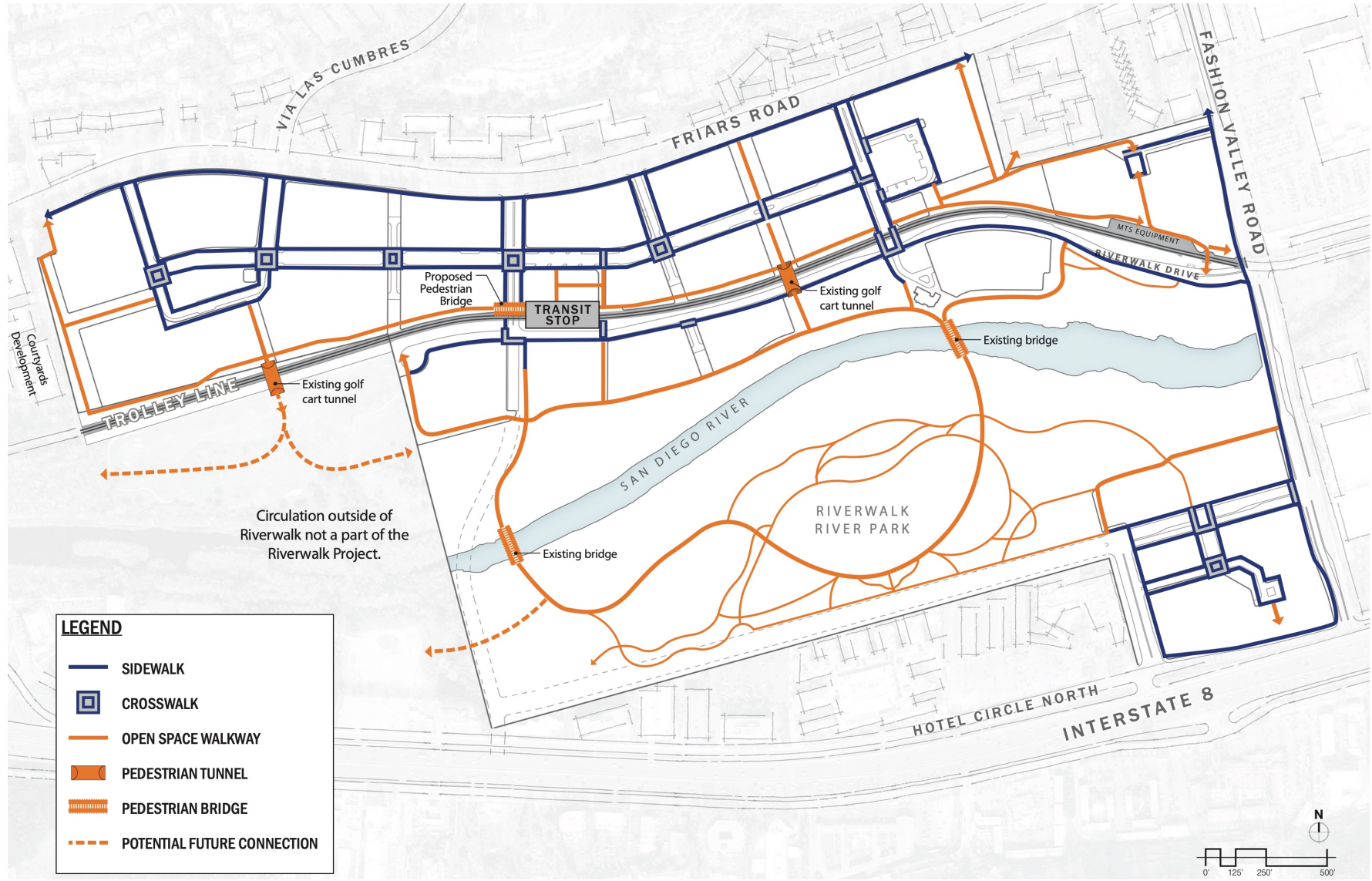
Pedestrian Bridges

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



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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.]

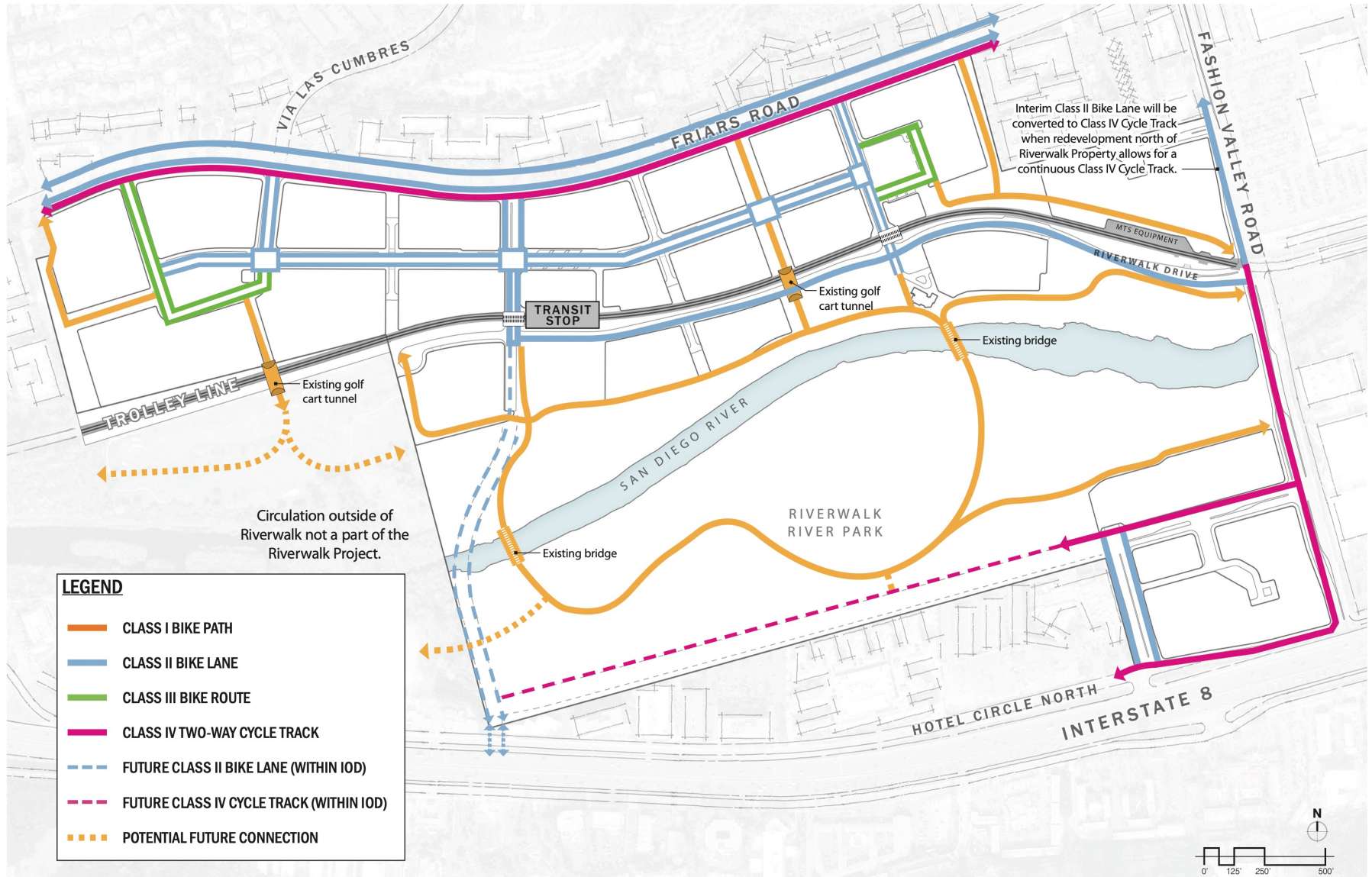
4.2 BICYCLE CIRCULATION

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

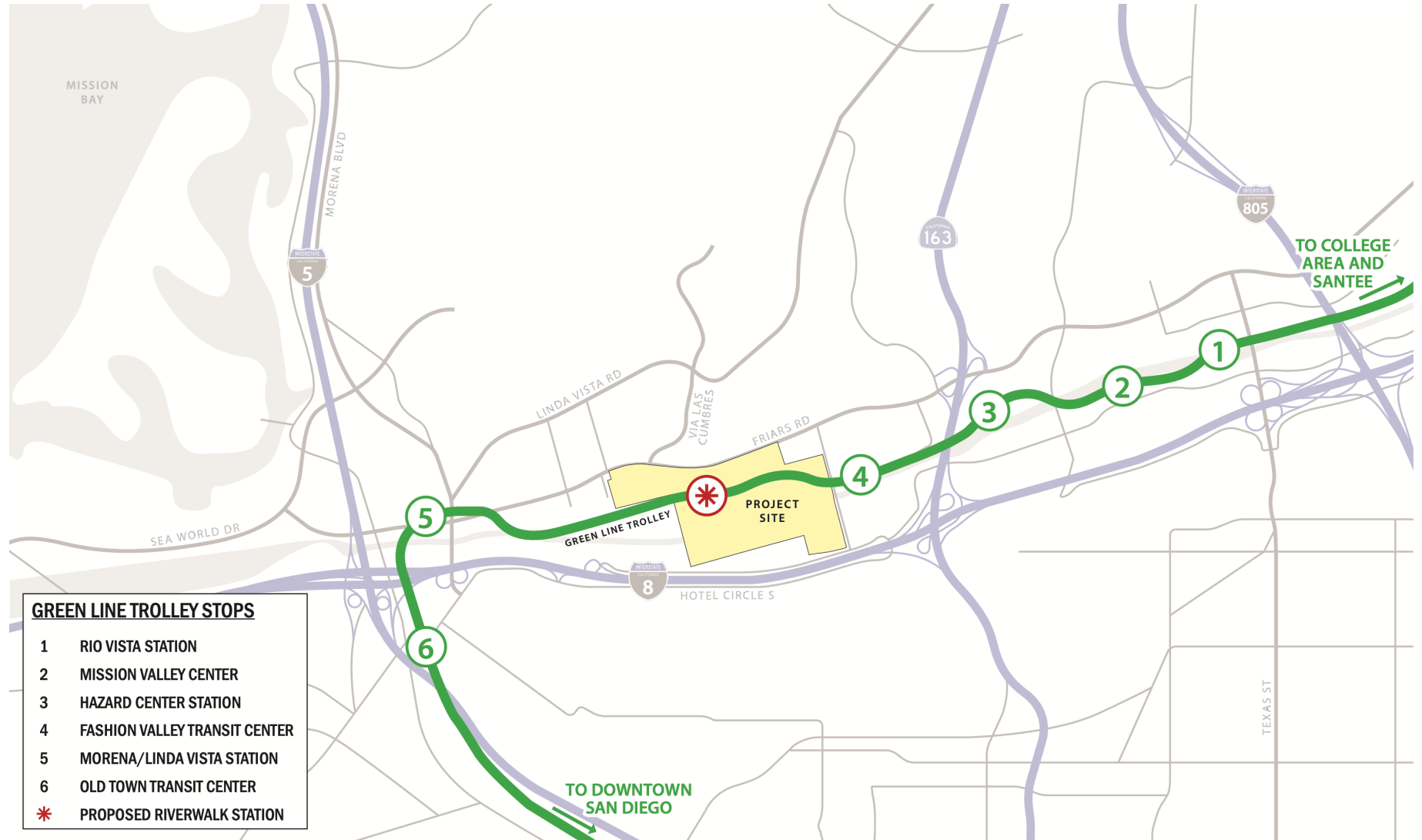
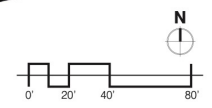
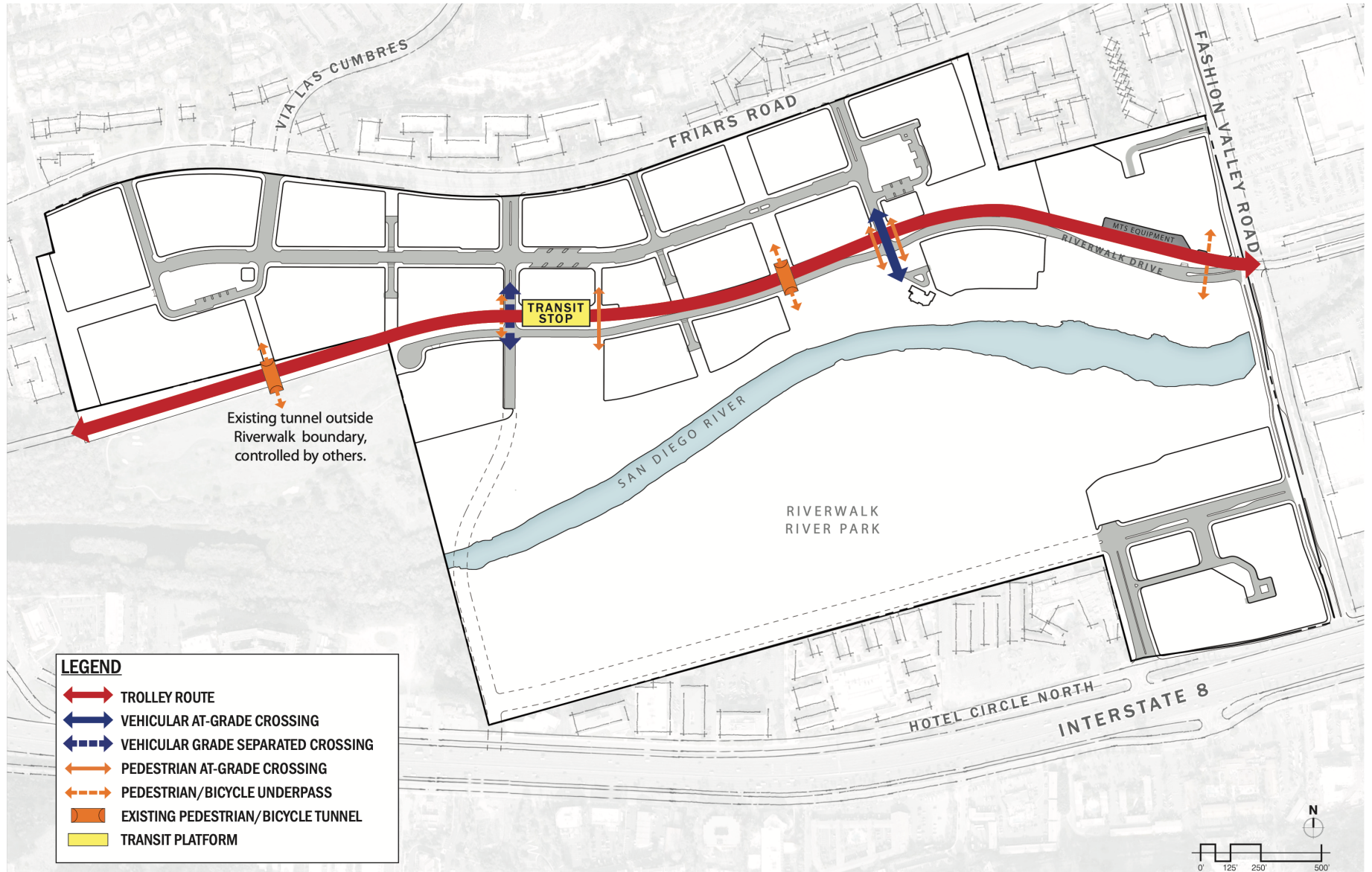


Figure 4-5. Transit/Trolley Stop



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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:

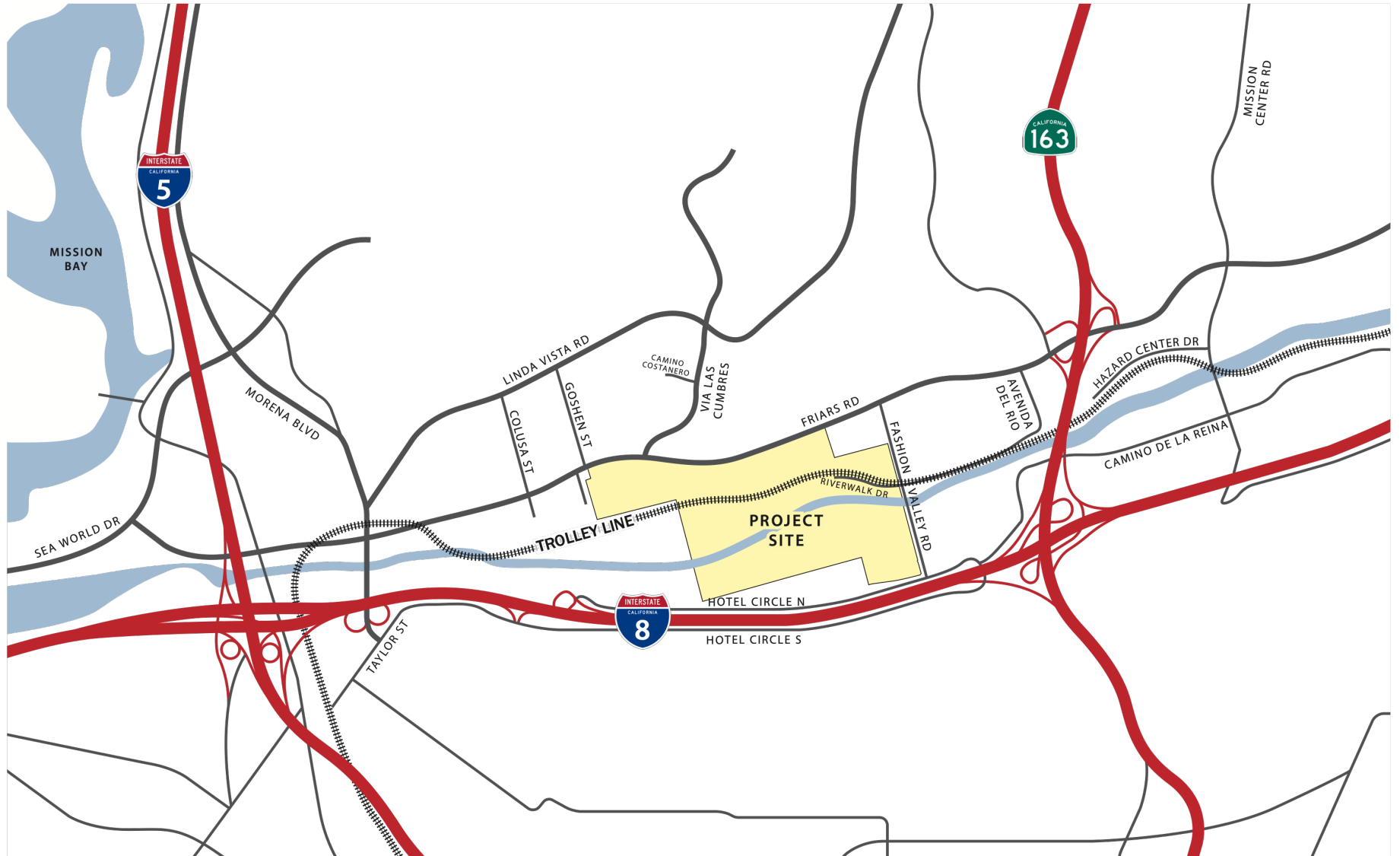
- ◆ Napa Street to Colusa Street - Four-lane divided roadway with a raised median.
- ◆ East of Colusa Street to Fashion Valley Road - Four-lane roadway with an intermittent two-way left-turn lane (TWLTL) and striped median.

- ◆ 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

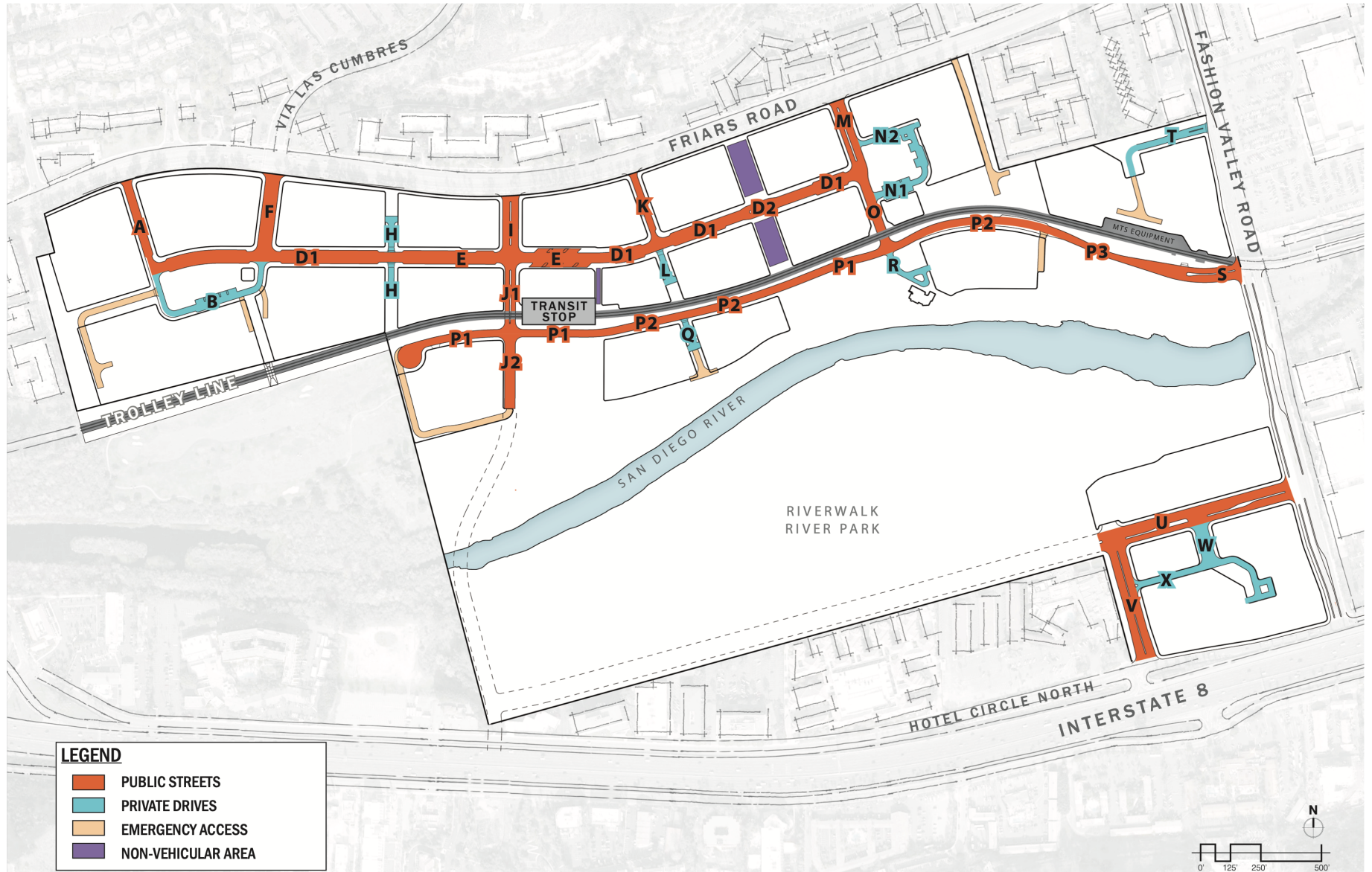


Figure 4-9. Street Section Key Map

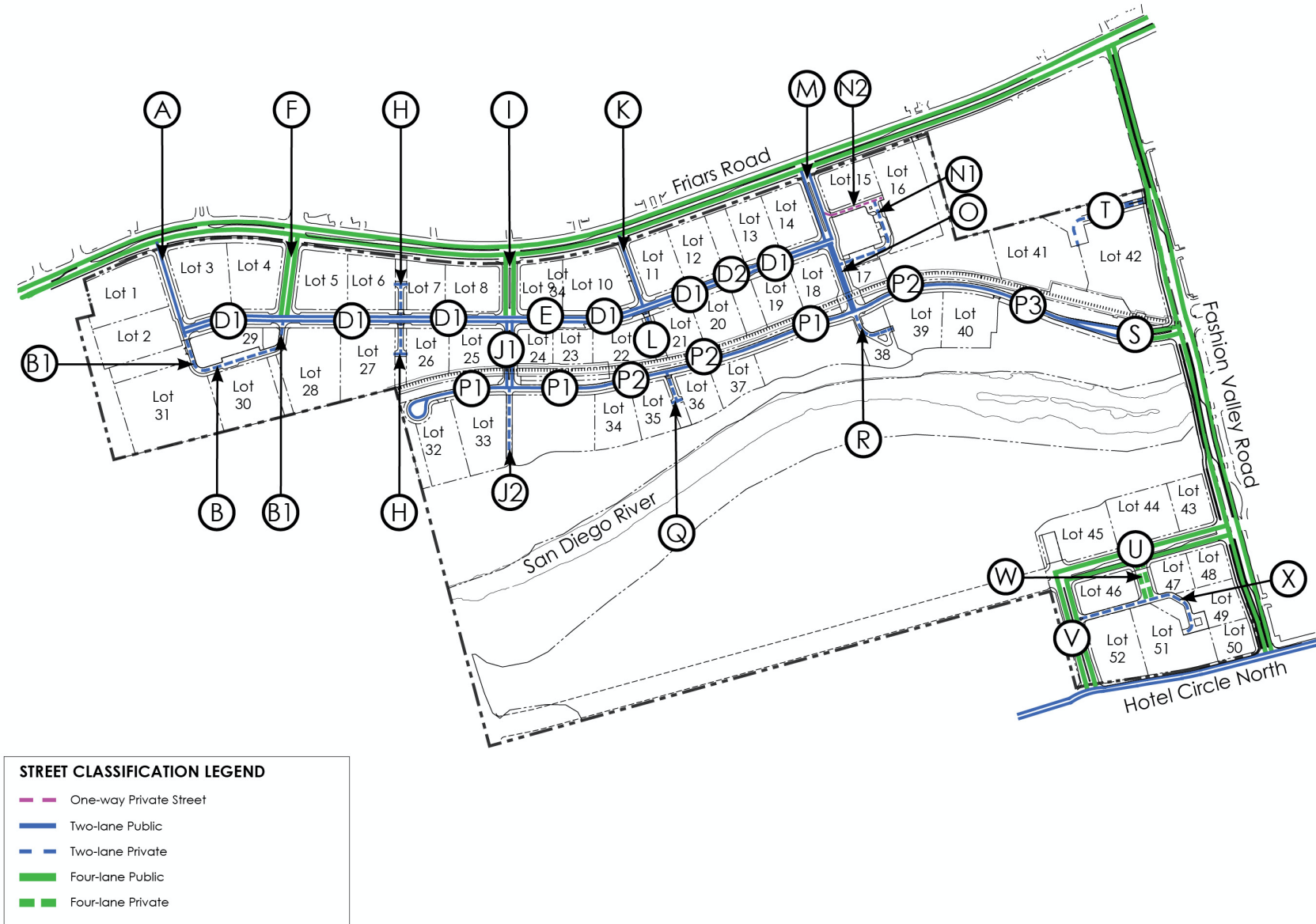

































Figure 4-10. Street Section Synopsis

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	1/11' & 1/11' - 18'	35.5' - 42.5'	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' MIS 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' MIS 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' MIS 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 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 B1 acts as a continuation of Private Driveway B and is located along the eastern and western edges of the park at the western end of the spine road. The western segment of Private Drive B1 has no parking and is configured with an 18-foot southbound lane and an 11-foot northbound lane within a right-of-way of 42 feet six inches. The eastern segment of Private Drive B1 has no parking and is configured with an 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.

Figure 4-11. Street DI (Spine Road)

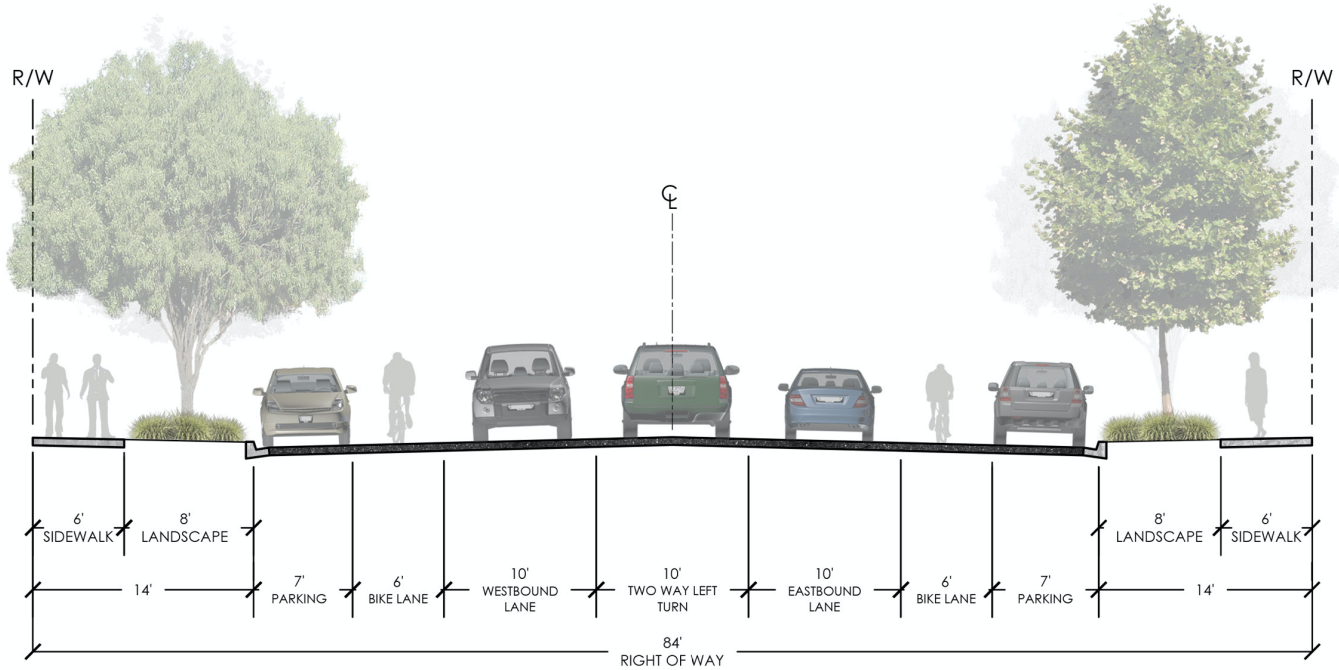


Figure 4-12. Street D2 (Spine Road)

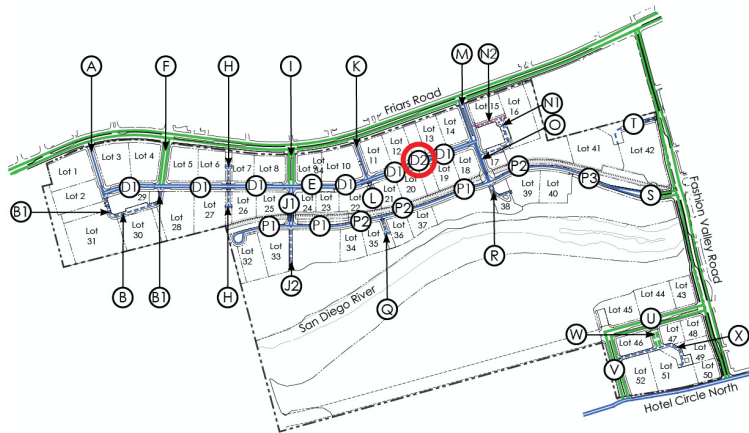
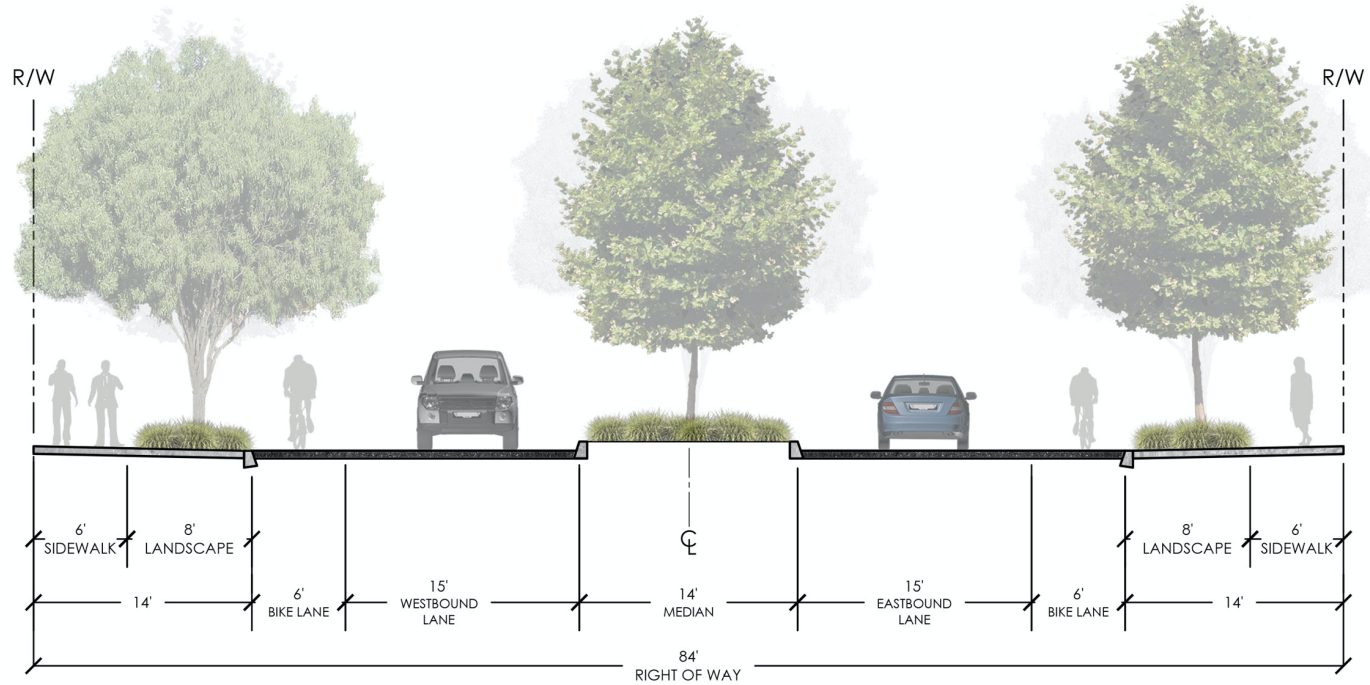


Figure 4-13. Street E (Spine Road)

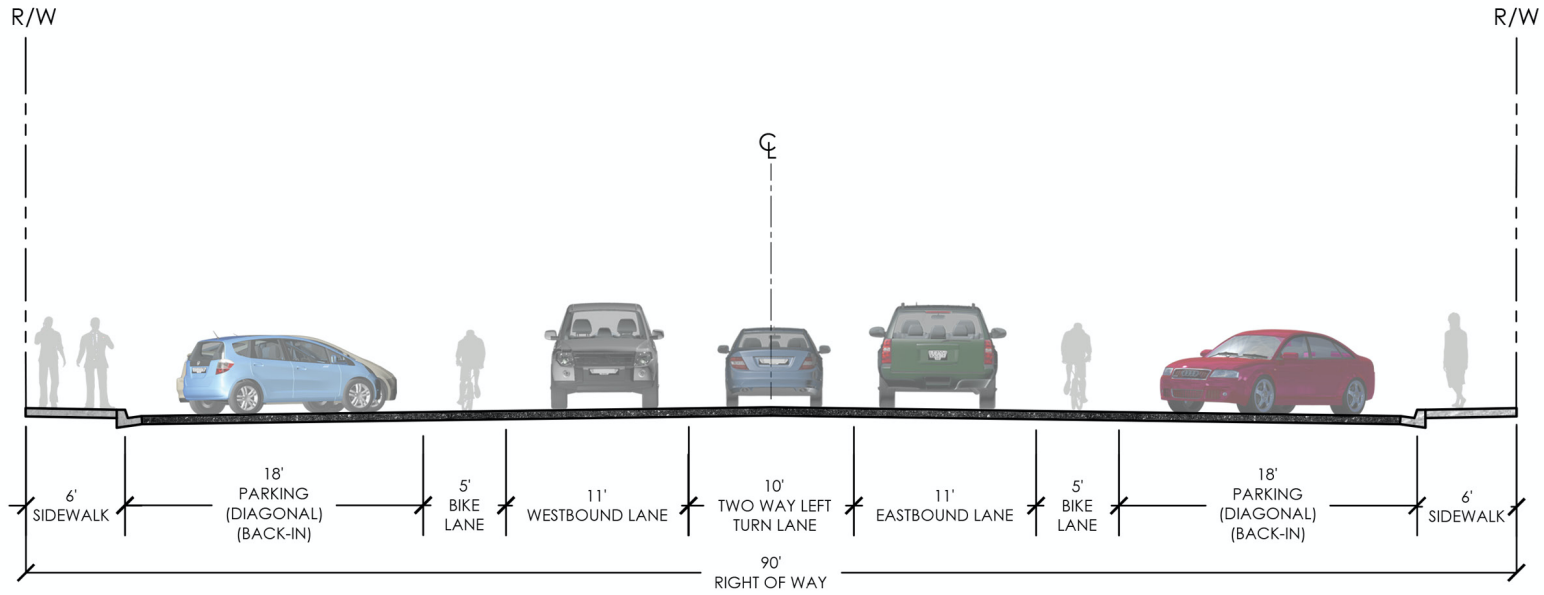


Figure 4-14. Private Driveway B

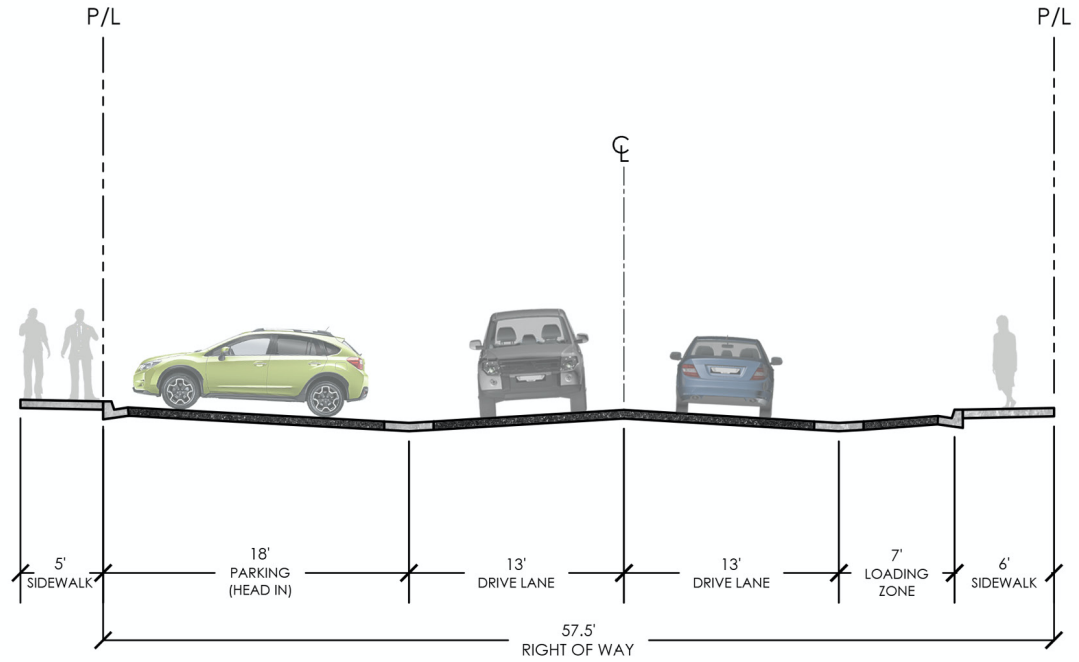
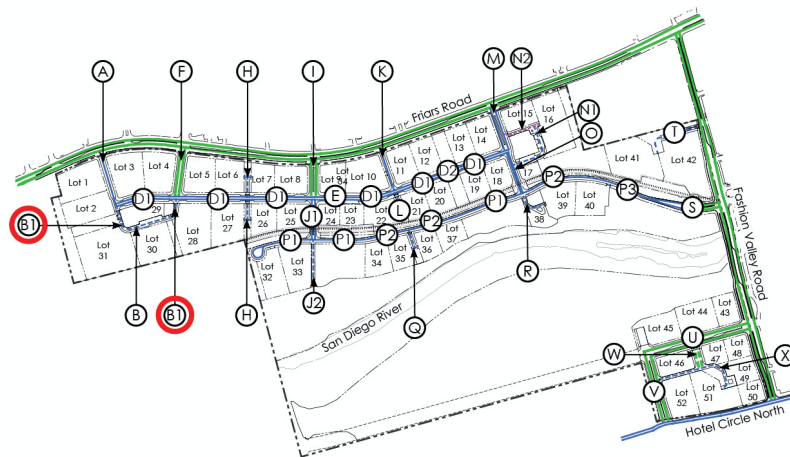
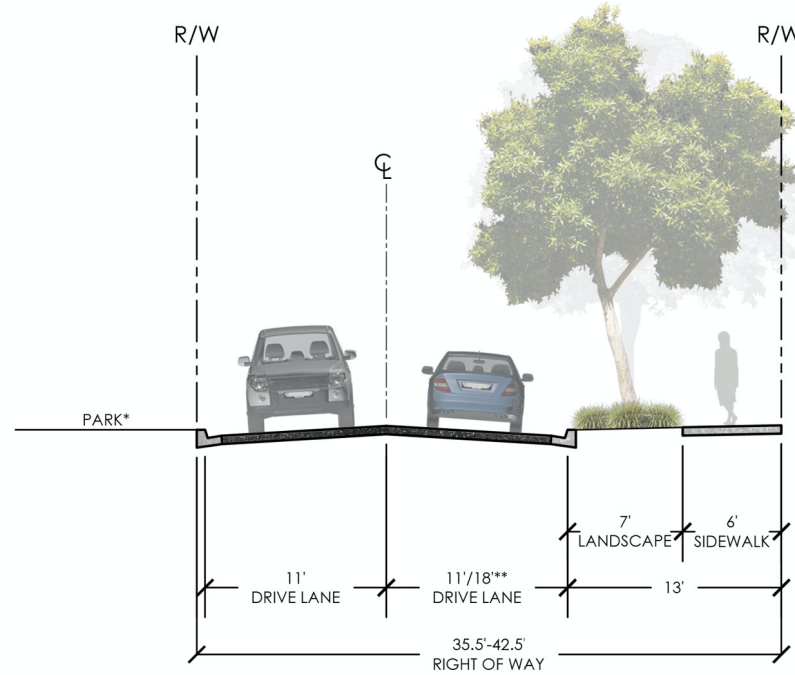


Figure 4-15. Private Driveway BI

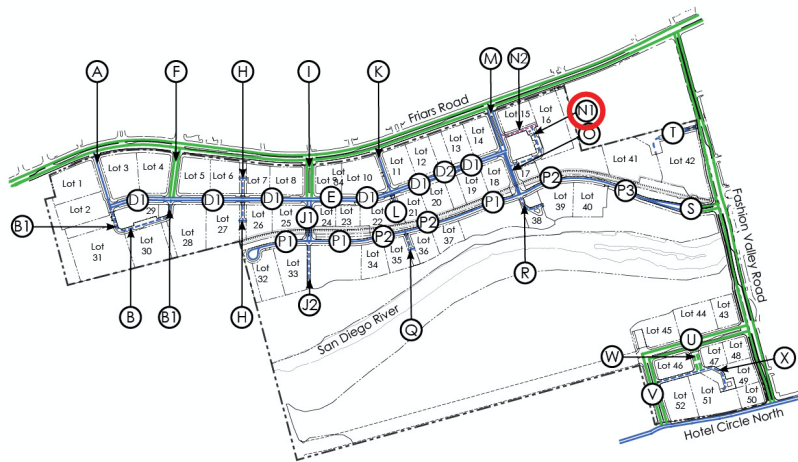
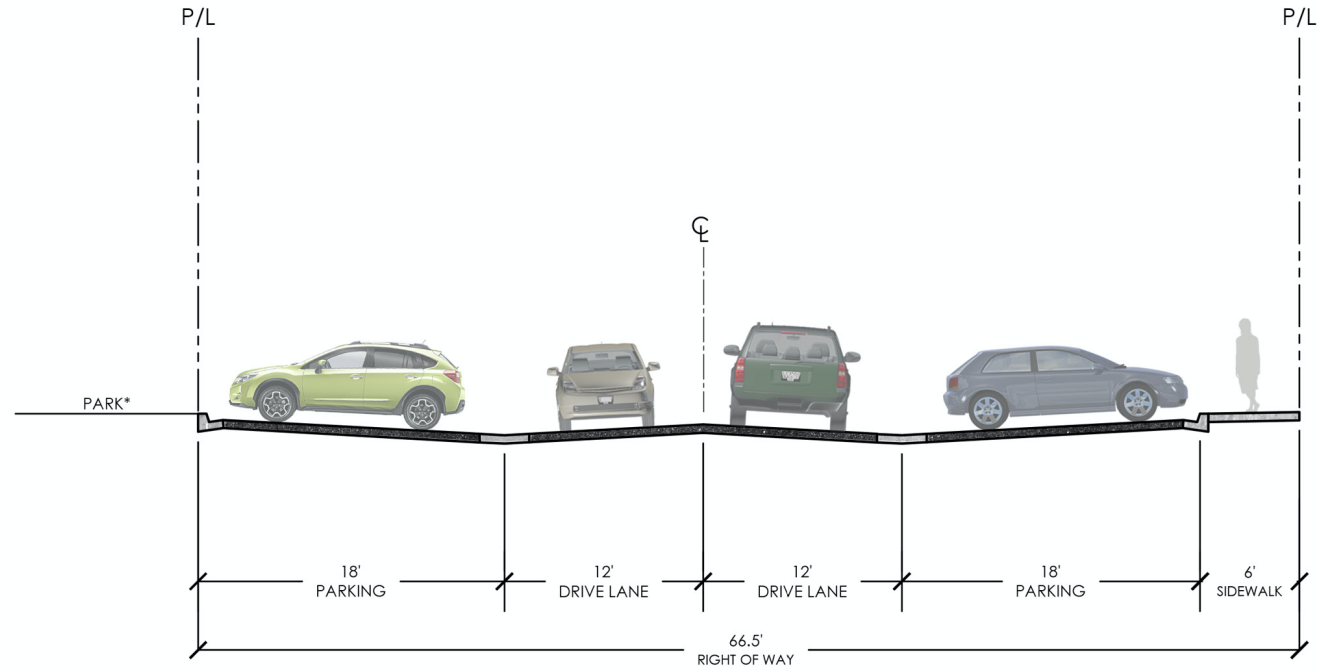


NOTE:
 *If sidewalk is not adjacent to the drive, sidewalk will be provided within the park.
 **11' east of Private Driveway B
 **18' west of Private Driveway B

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.

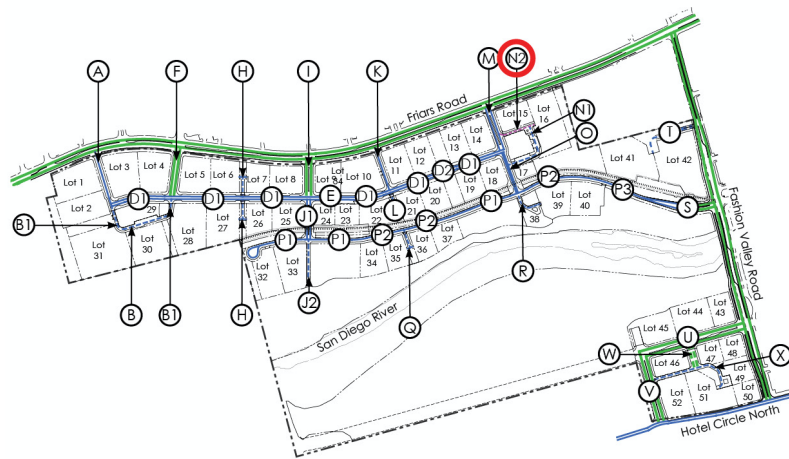
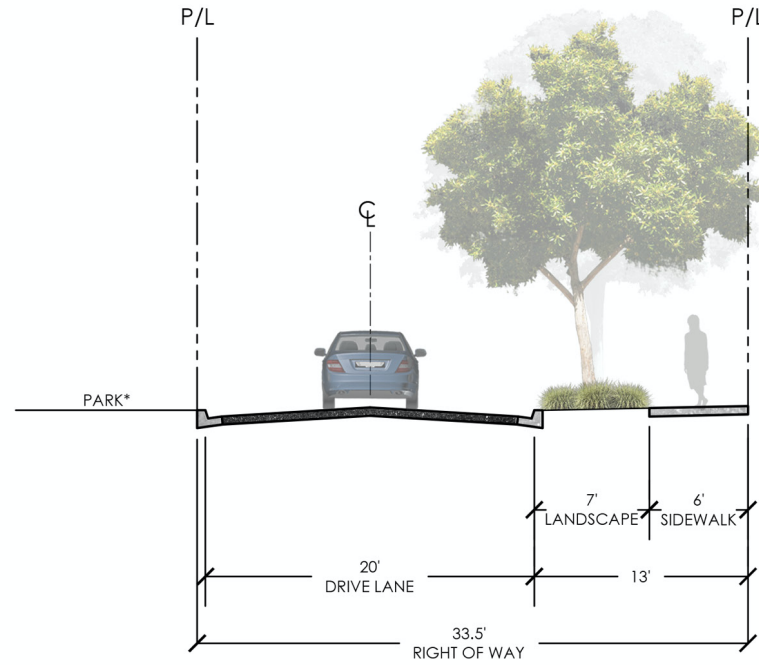
Private Driveway N2, which forms the northern boundary of the park at the eastern end of the spine road, is a private one-way within a right-of-way of 33 feet six inches. The drive lane of 20 feet is separated from a six-foot non-contiguous sidewalk by a seven-foot landscaped parkway.

Figure 4-16. 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 (Riverwalk Drive)

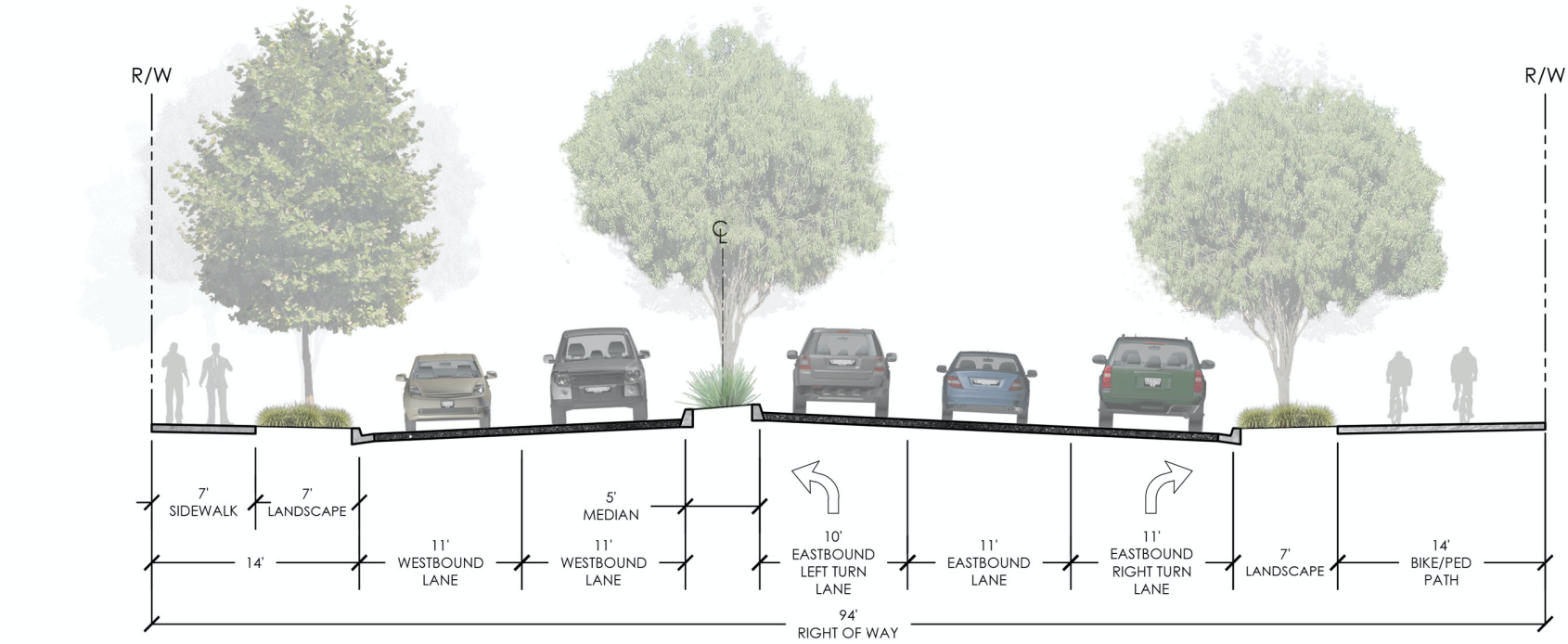


Figure 4-19. Street P3

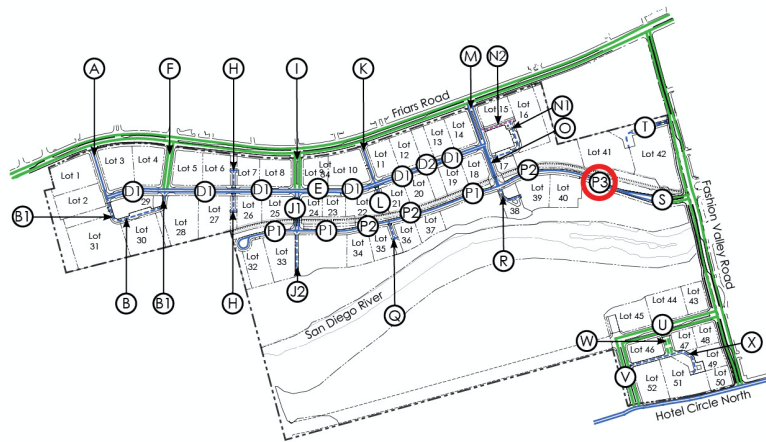
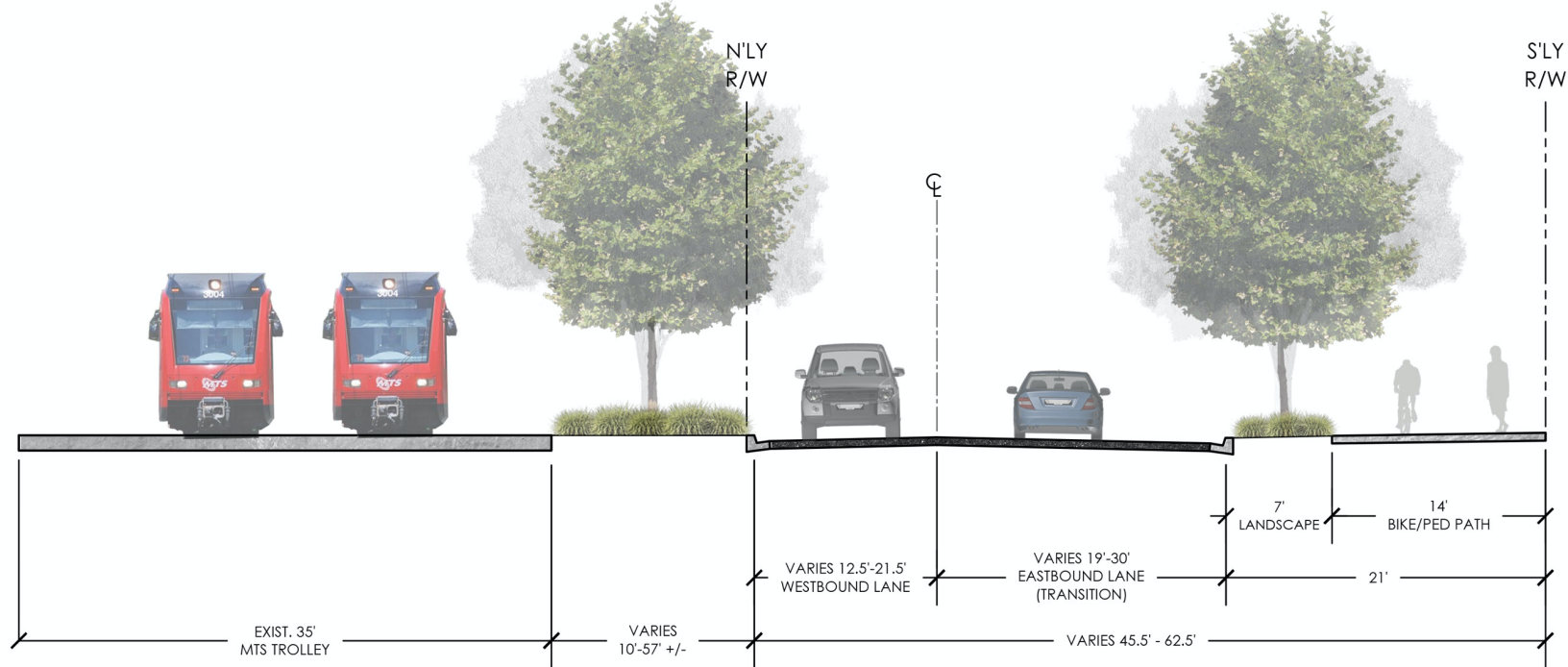


Figure 4-20. Street P2

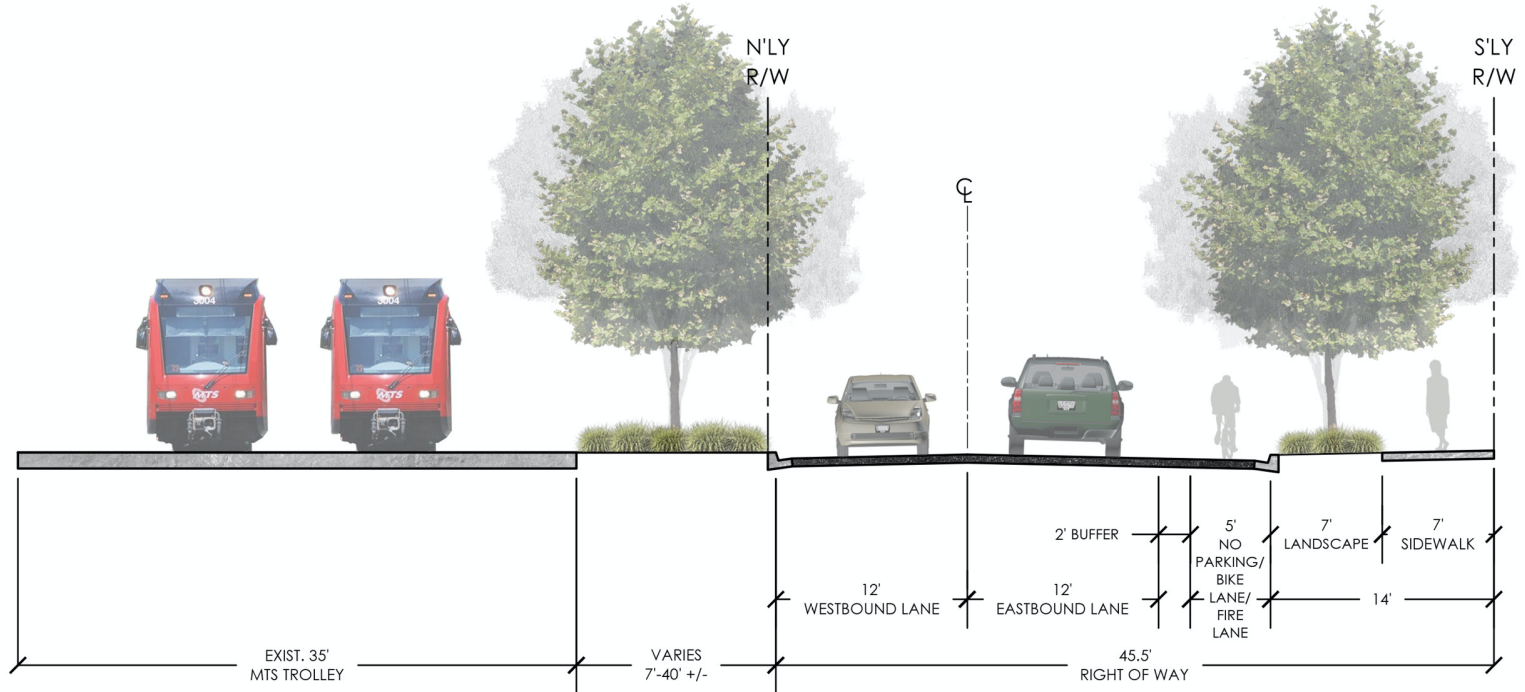
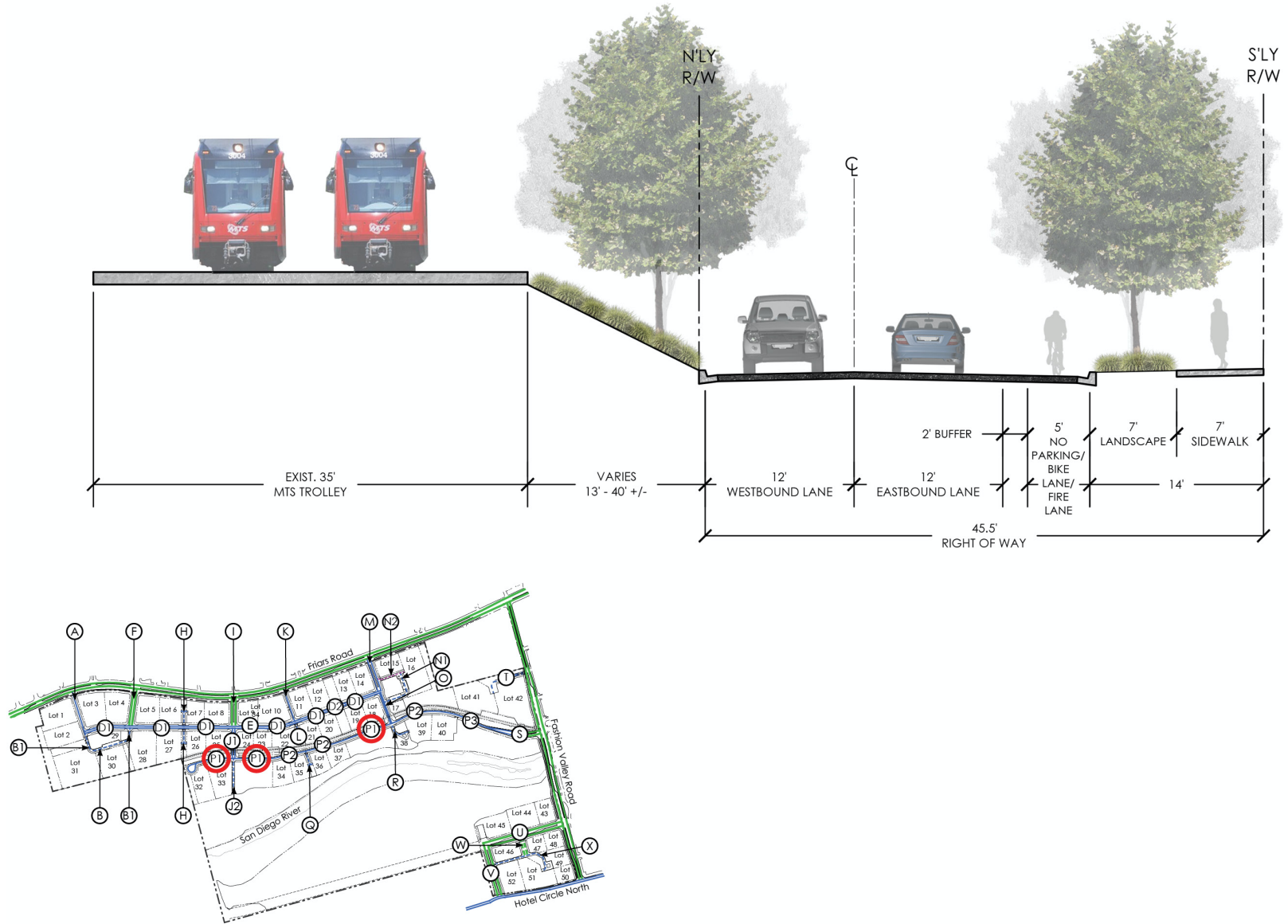


Figure 4-21. Street PI



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

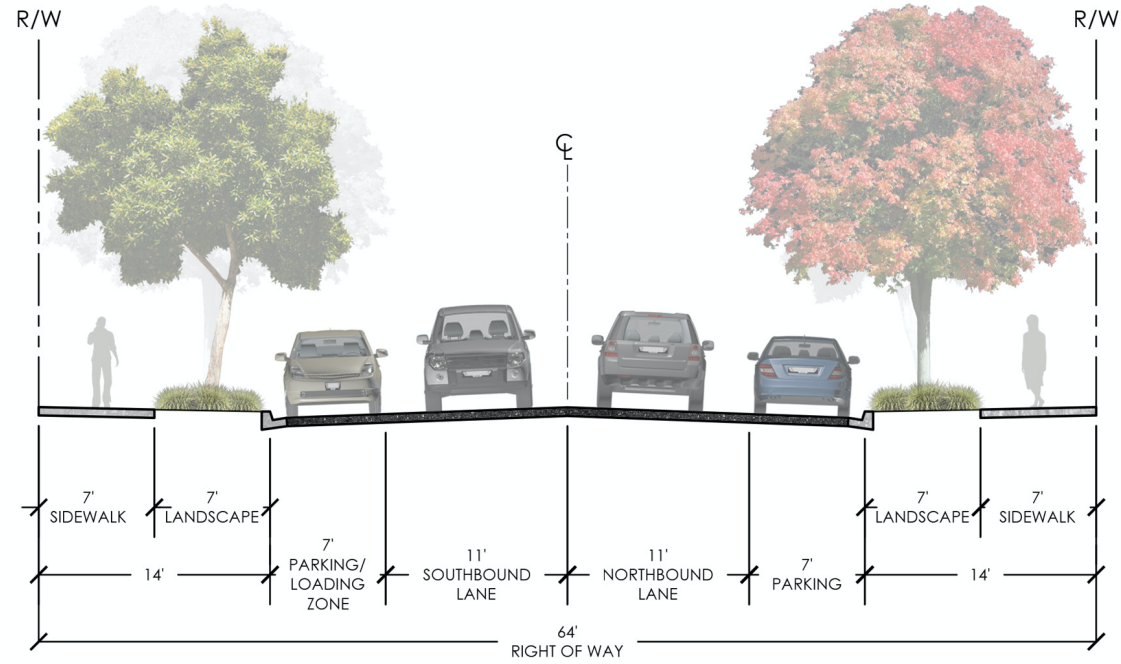


Figure 4-23. Street F

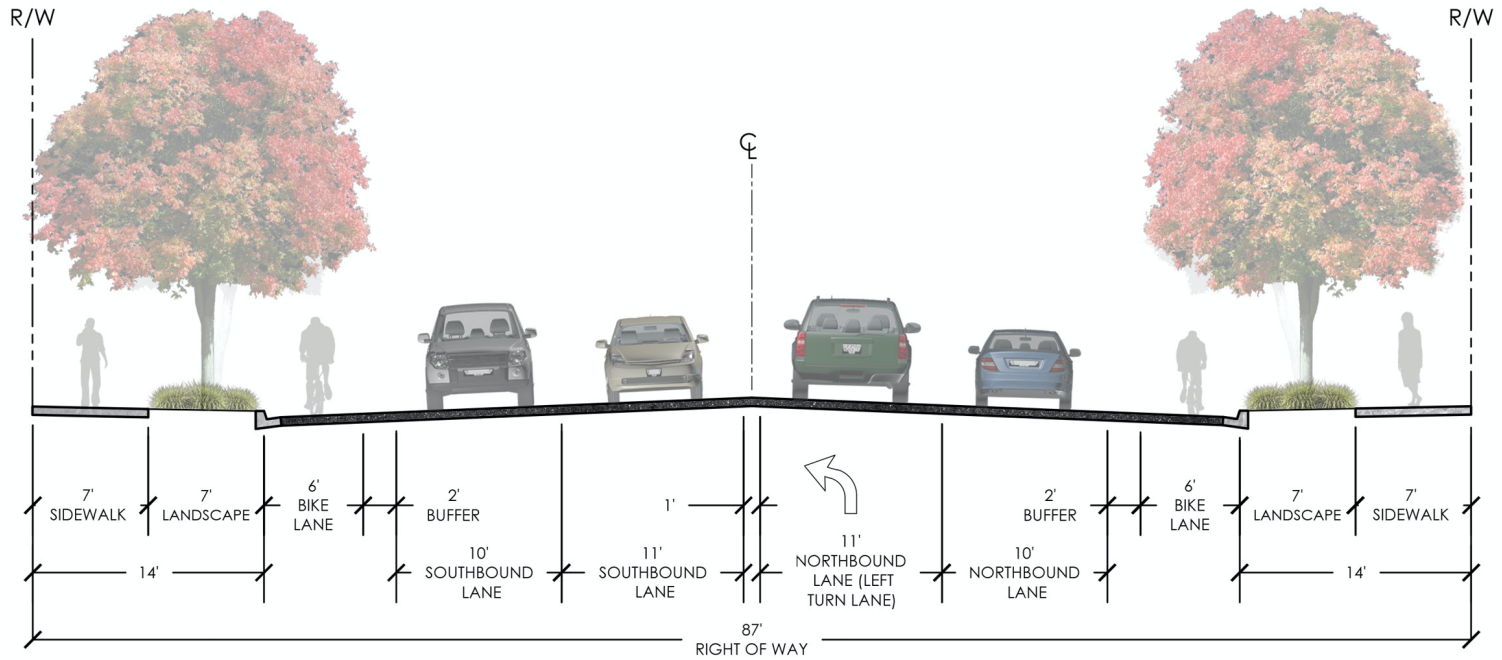


Figure 4-24. Private Driveways H, L, and Q

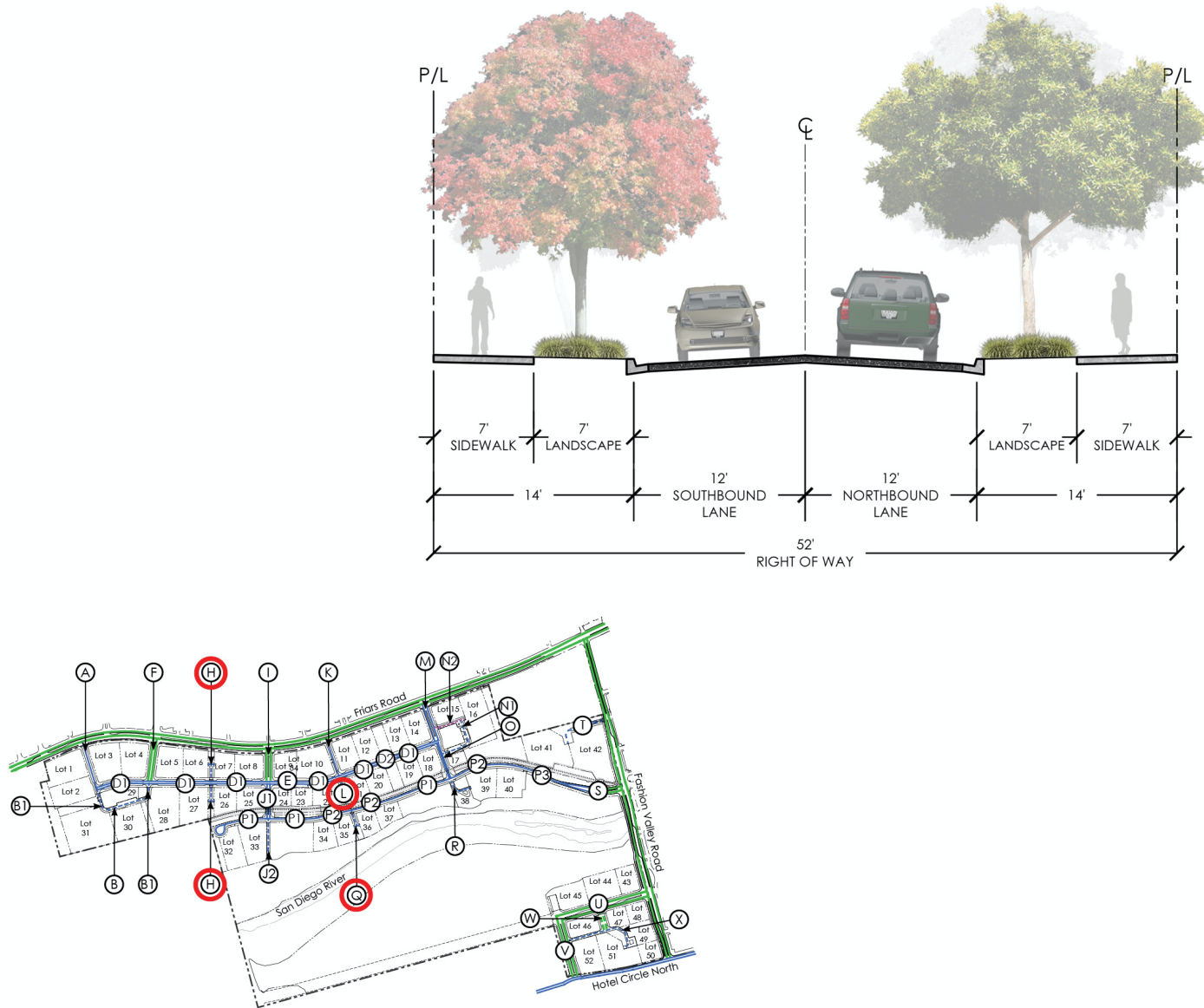


Figure 4-25. Street I

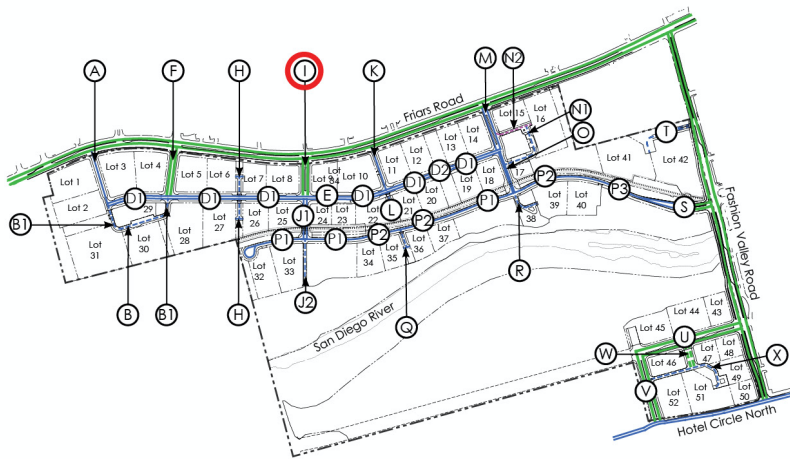
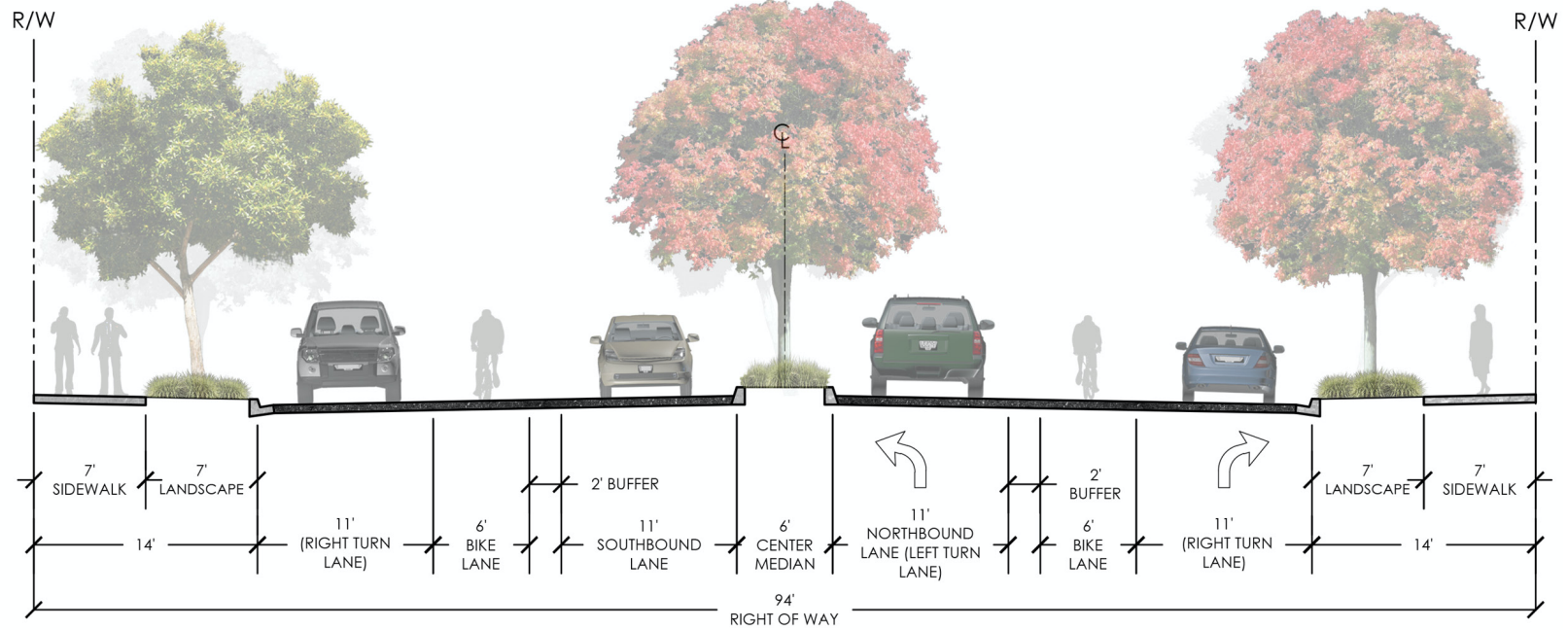
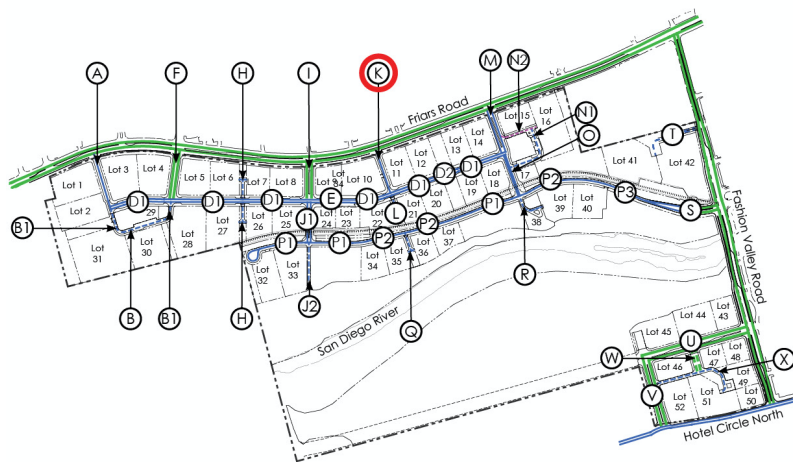
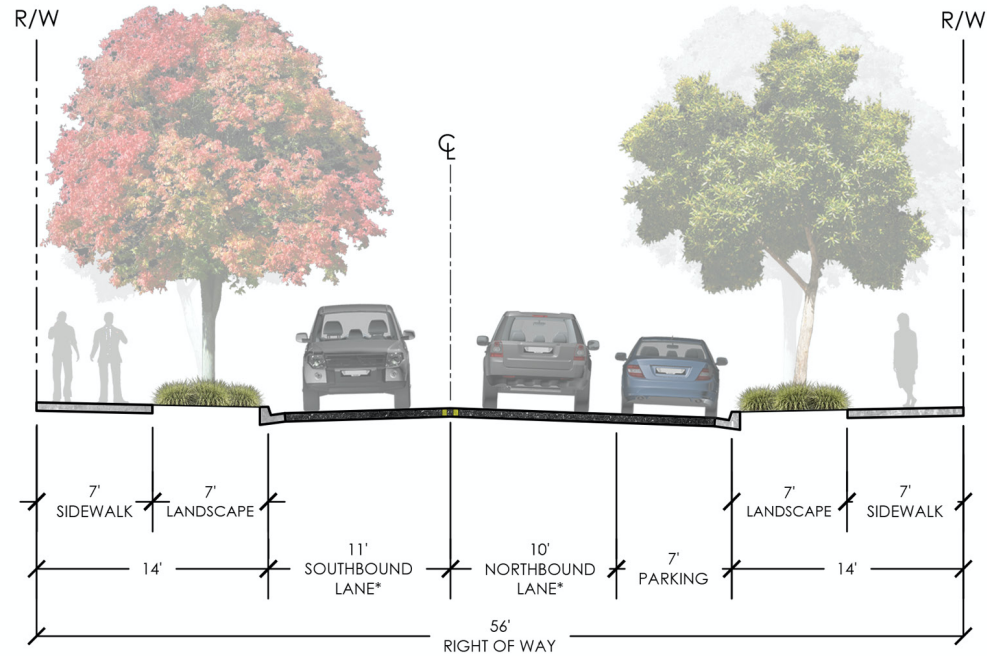
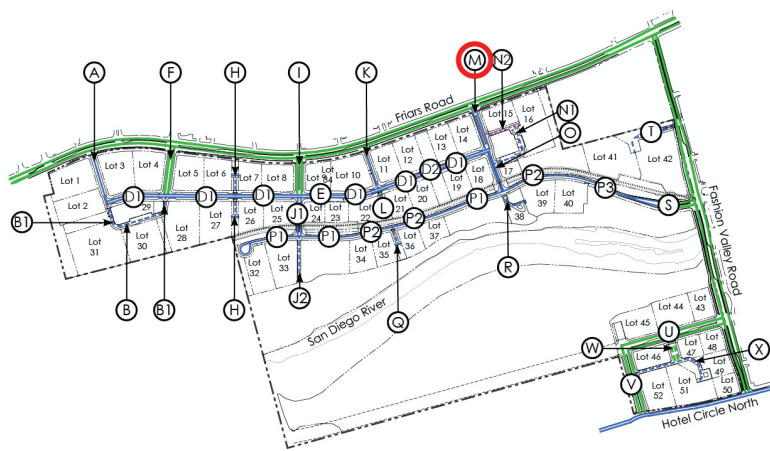
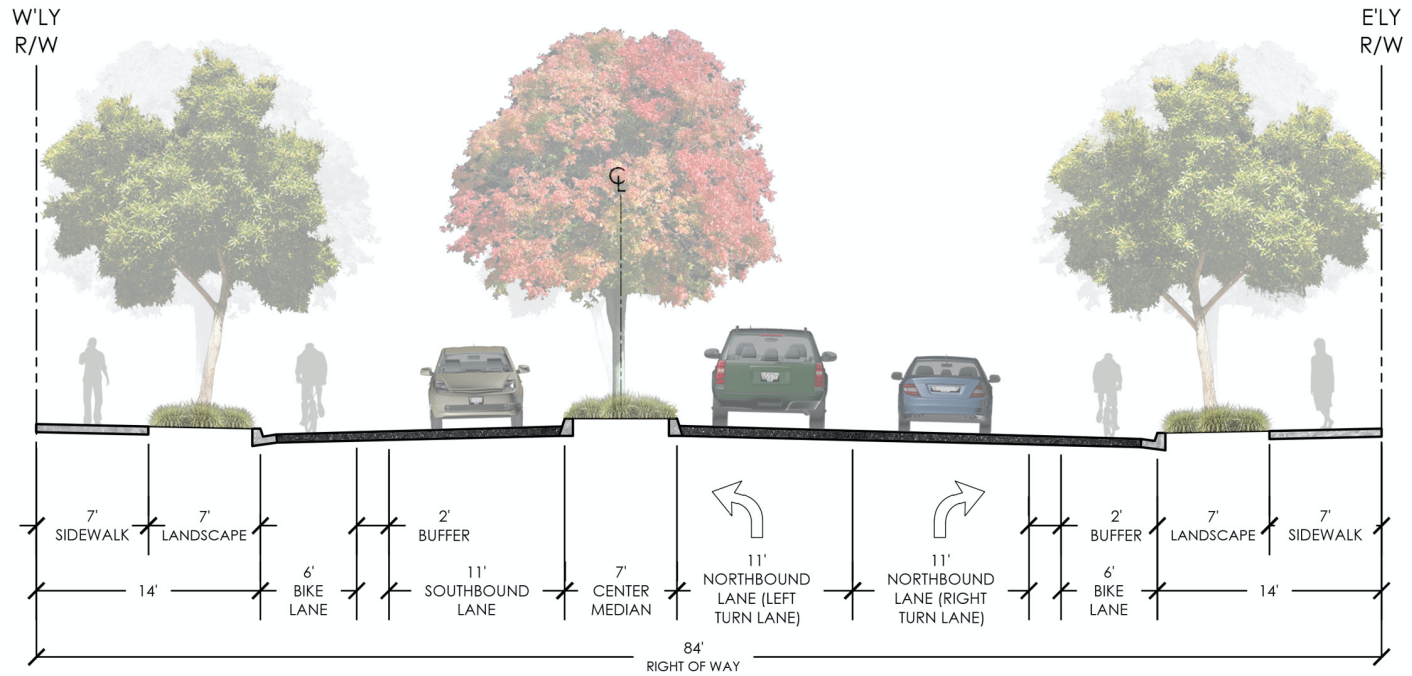


Figure 4-26. Street K



***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

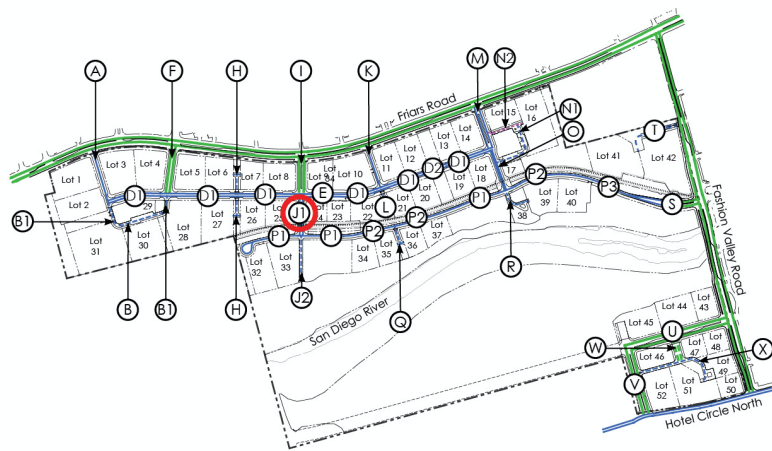
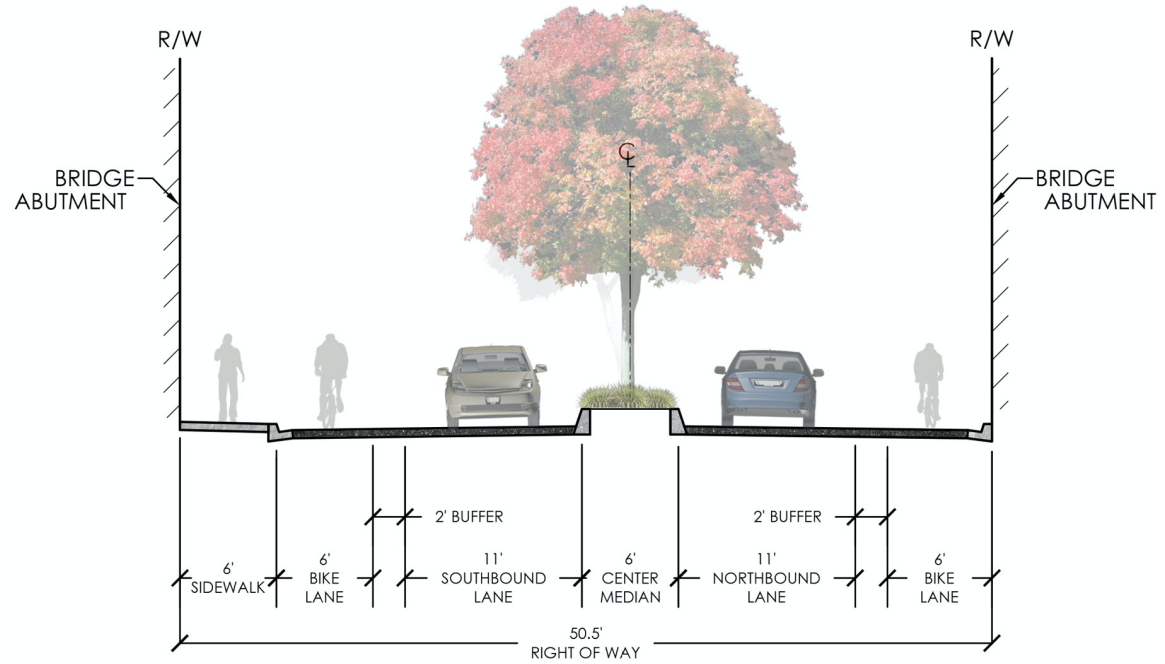


Figure 4-29. Private Driveway J2

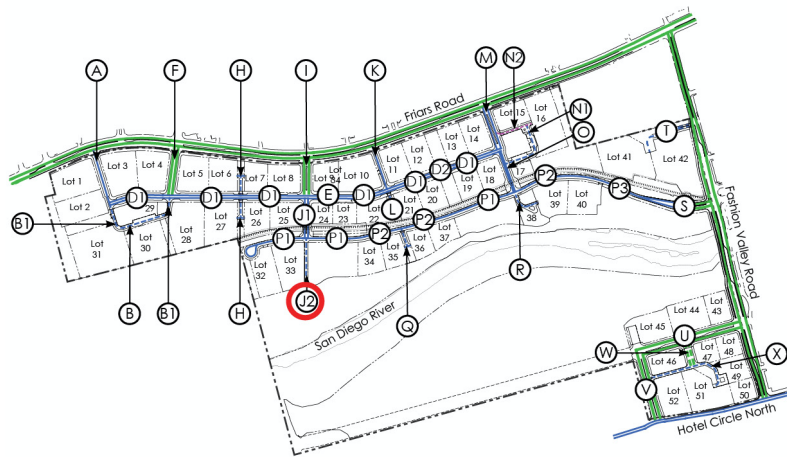
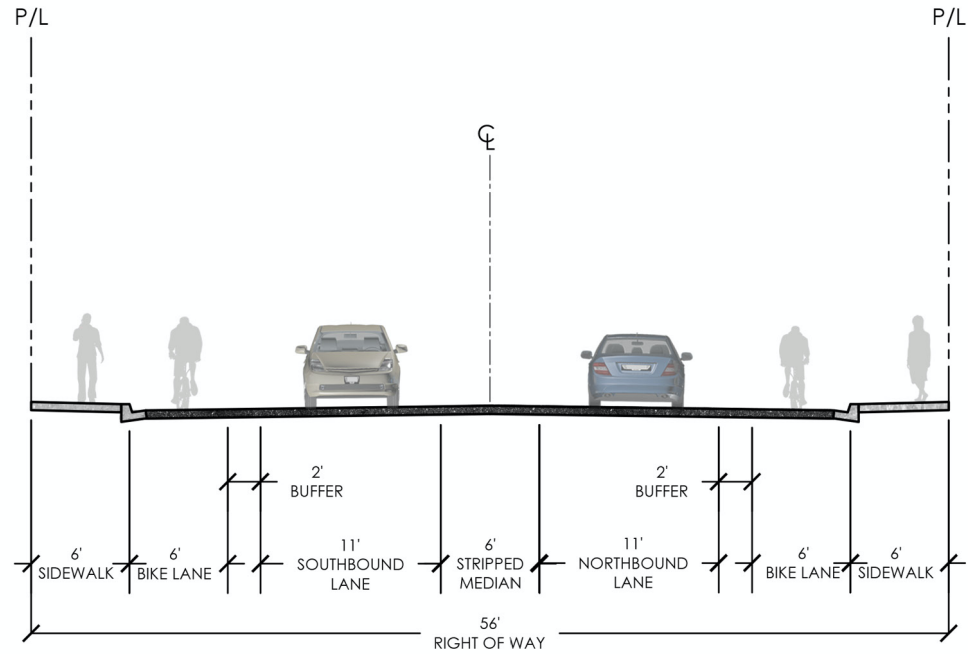


Figure 4-30. Street O

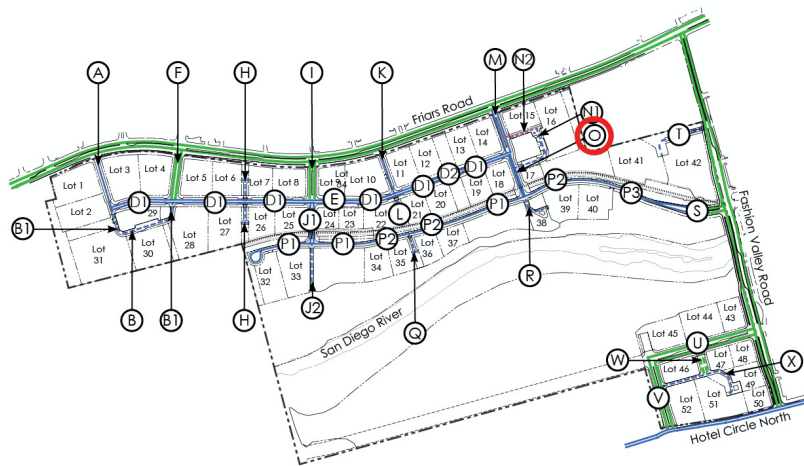
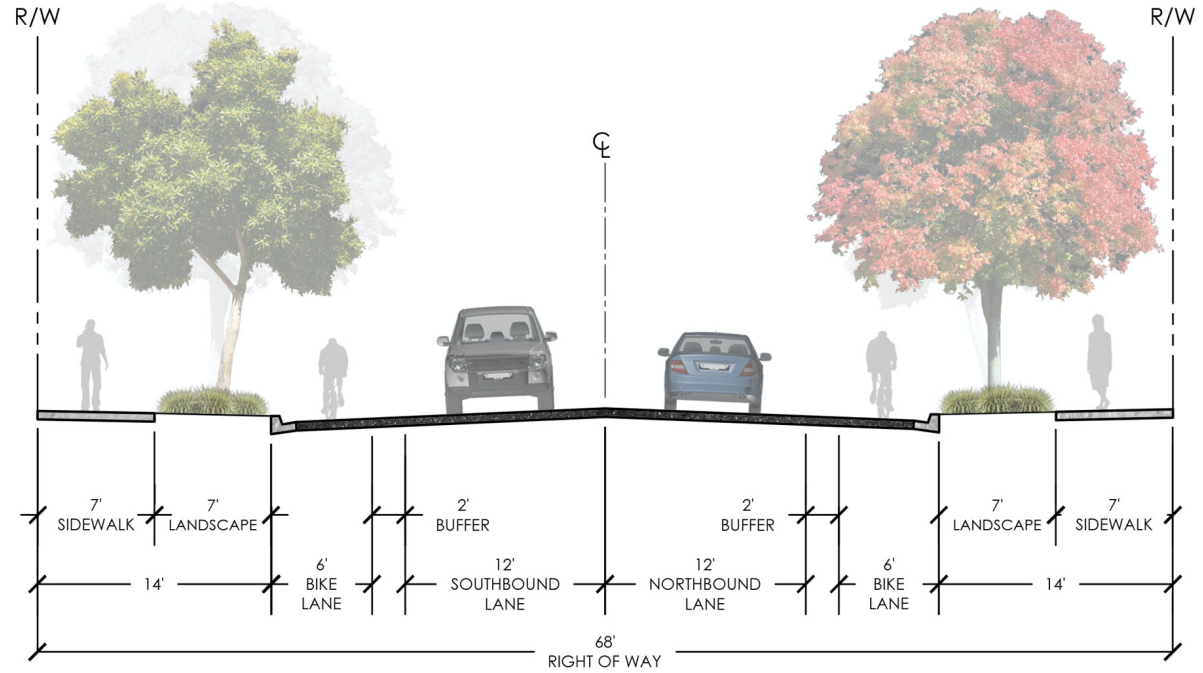


Figure 4-31. Street R

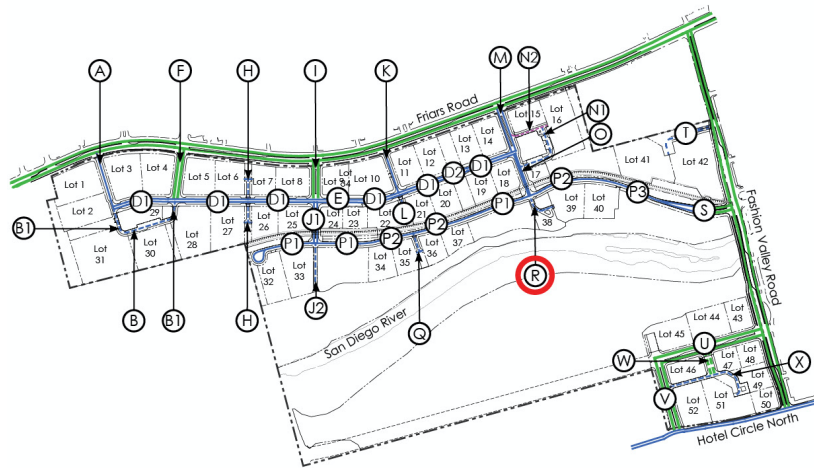
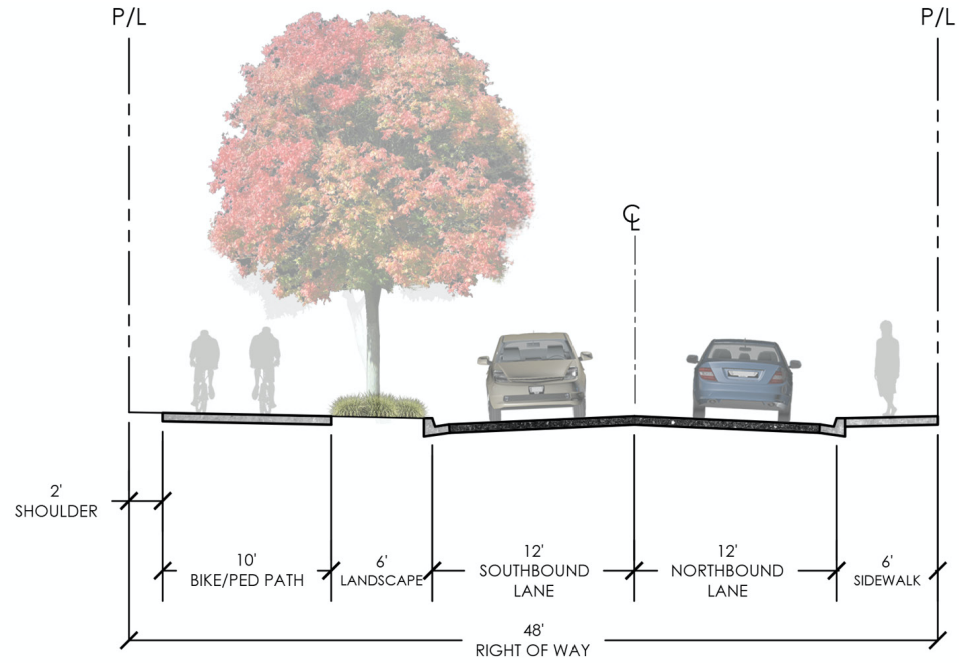
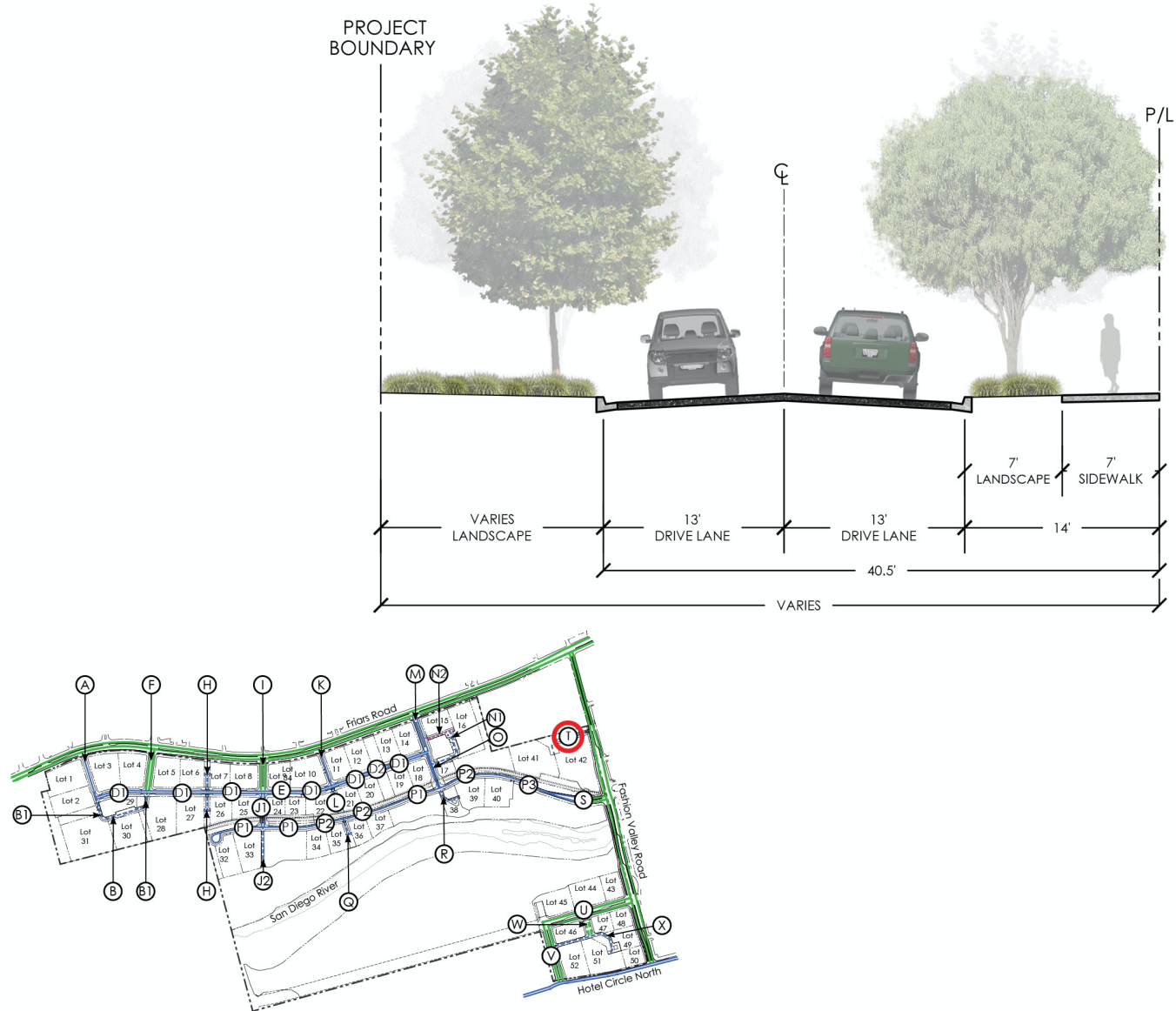


Figure 4-32. Private Driveway T



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

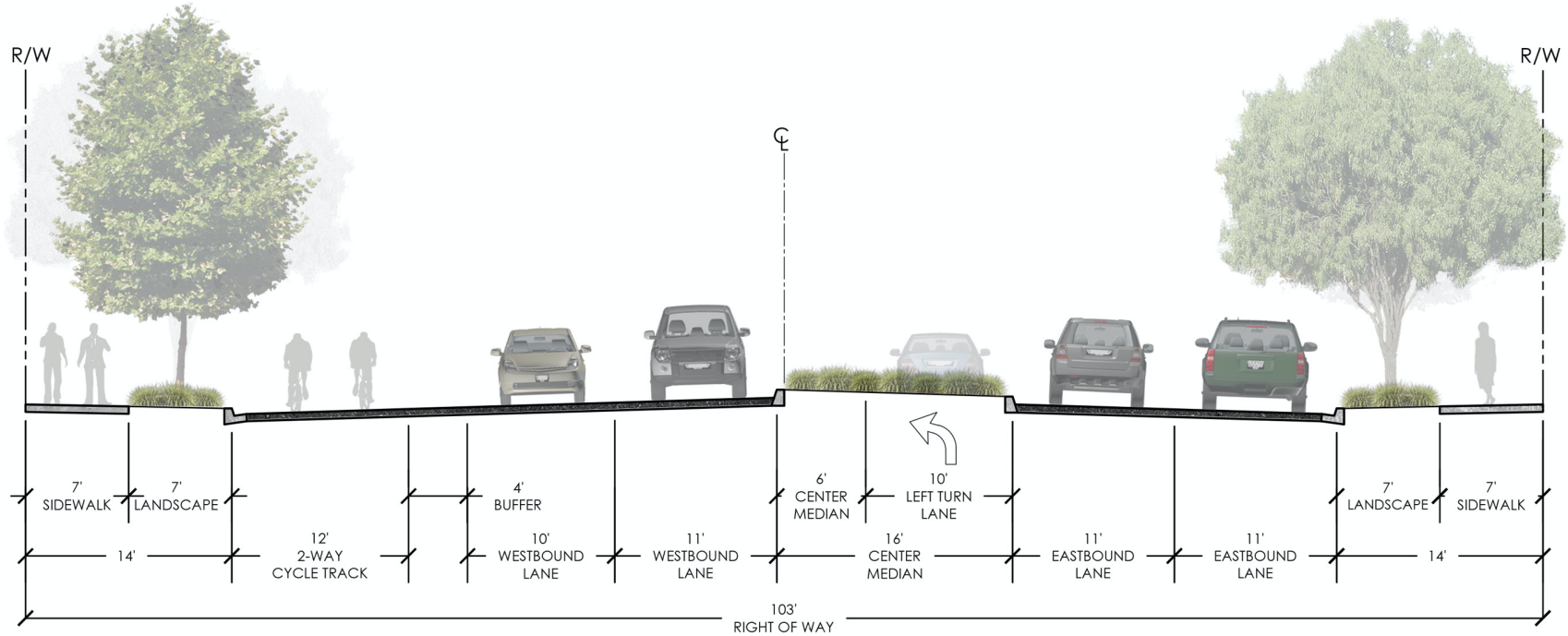


Figure 4-34. Street V

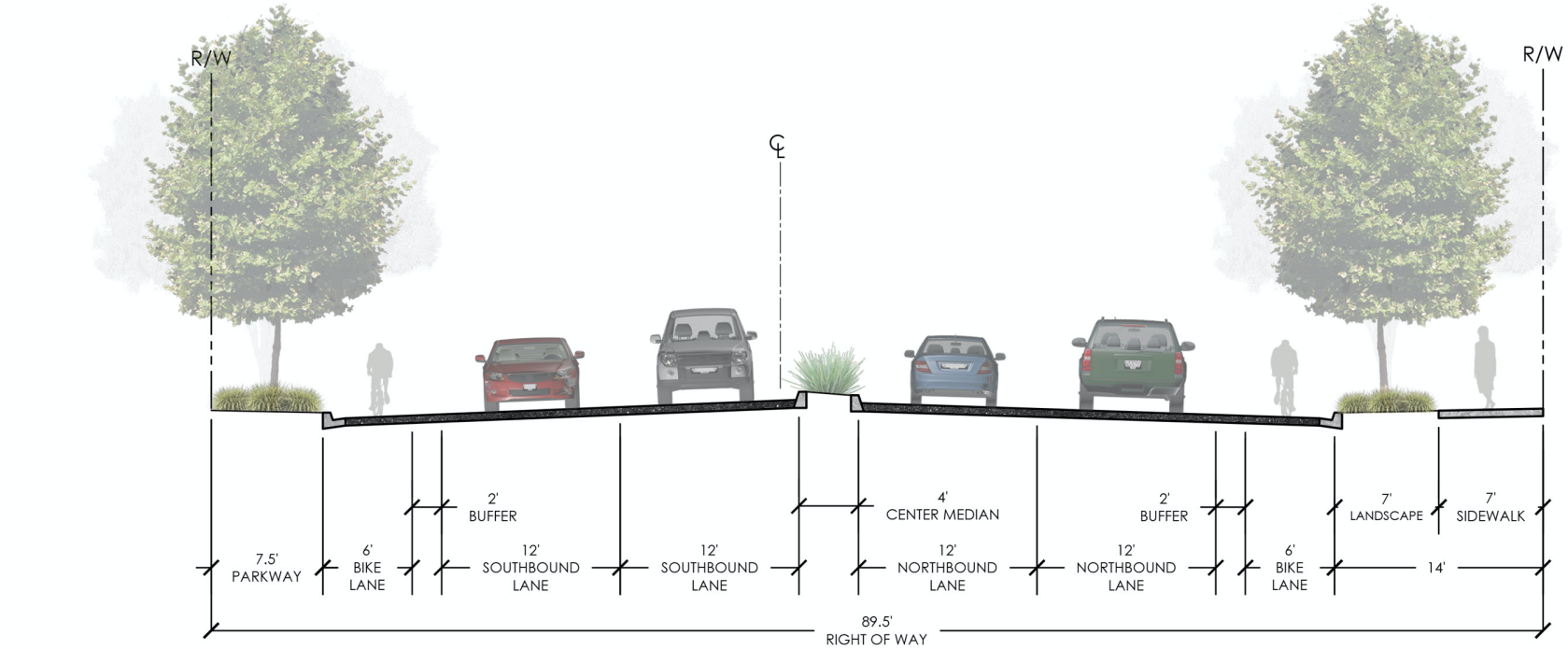


Figure 4-35. Private Driveway X

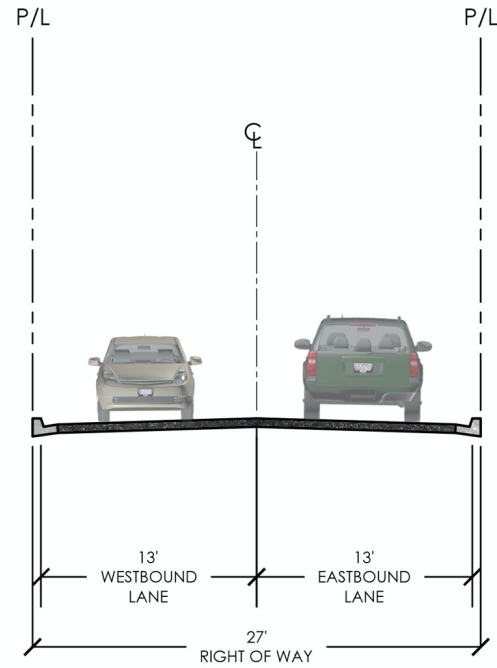
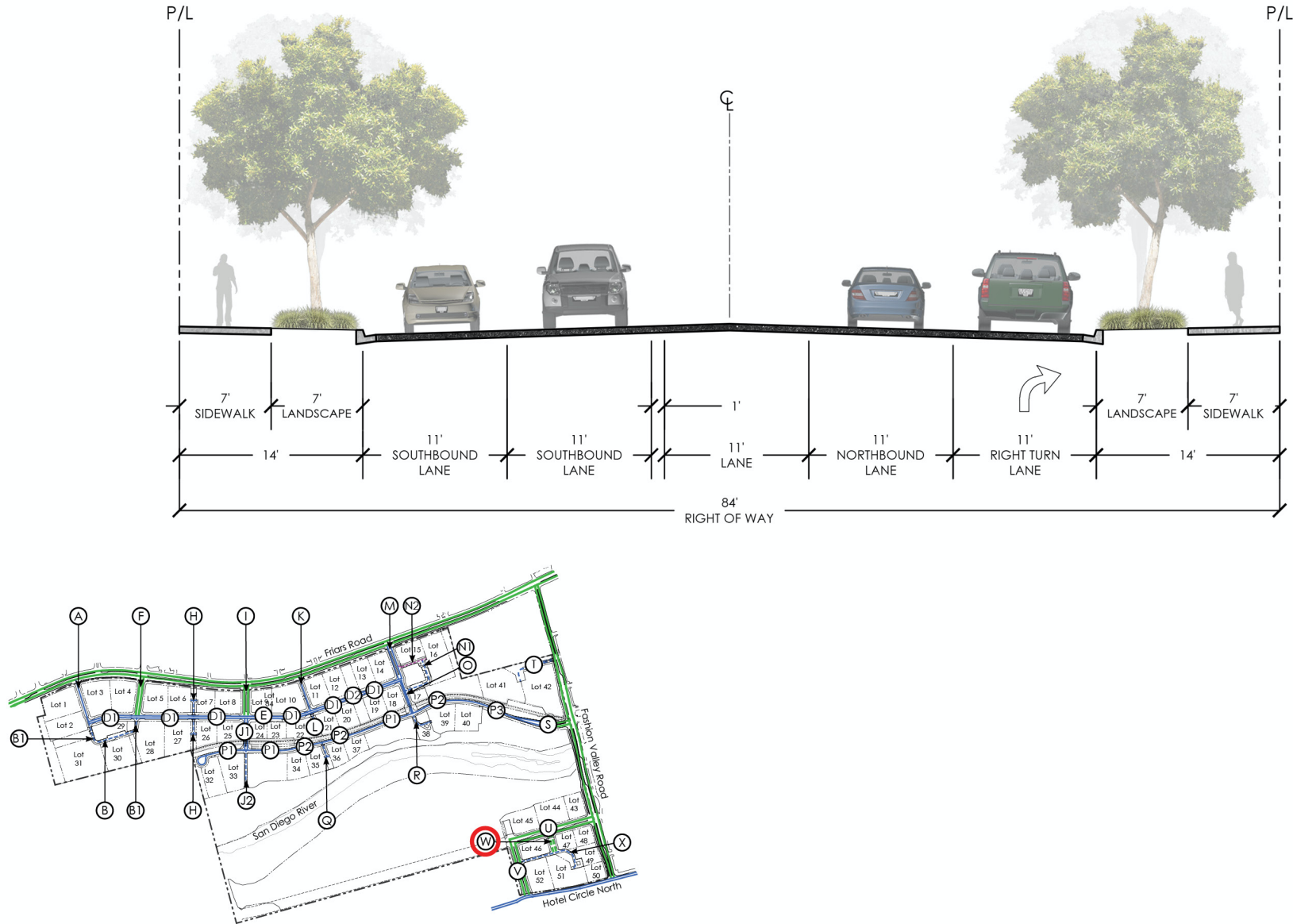


Figure 4-36. Private Driveway W



The Mission Valley Community Plan contemplates Hotel Circle North and South as a one-way couplet. Prior to implementation of the one-way couplet, a Project Study Report must be conducted to finalize design of this and other improvements in the surrounding area. In the event that a one-way couplet is not implemented, or should Caltrans not approve Street V, an alternative road network for the South District is presented in Figure 4-37, *Alternative Road Network – South District*. The alternative road network may be implemented through the associated final map without amending this Specific Plan, the Site Development Permit, the Vesting Tentative Map, or any other project approvals.

In the alternative road network scenario, Street V would not be developed. Street U and Private Driveway W would develop the same configuration as described previously (see Figure 4-33 and Figure 4-36, respectively), but Private Driveway W would have a shorter length between Street U and Private Driveway X, and would transition to Private Driveway Z, as shown in the layout in Figure 4-37.

Private Driveway X and Private Driveway Z (which would provide connectivity from the South District to Hotel Circle North in the same functional manner as Street V) would be developed as two-lane private driveways with one 13-foot travel lane in either direction within a 27-foot right-of-way (Figure 4-38). The construction of Private Driveway Z would create a right-in, right-out driveway with Hotel Circle North.

The alternative road network also requires the project widen Hotel Circle North to 4-lane major standards with a four-foot-wide raised median with Class II buffered bike lanes from I-8 westbound hook ramps to Fashion Valley Road (see Section 4.6.5).

Figure 4-37. Alternative Road Network – South District

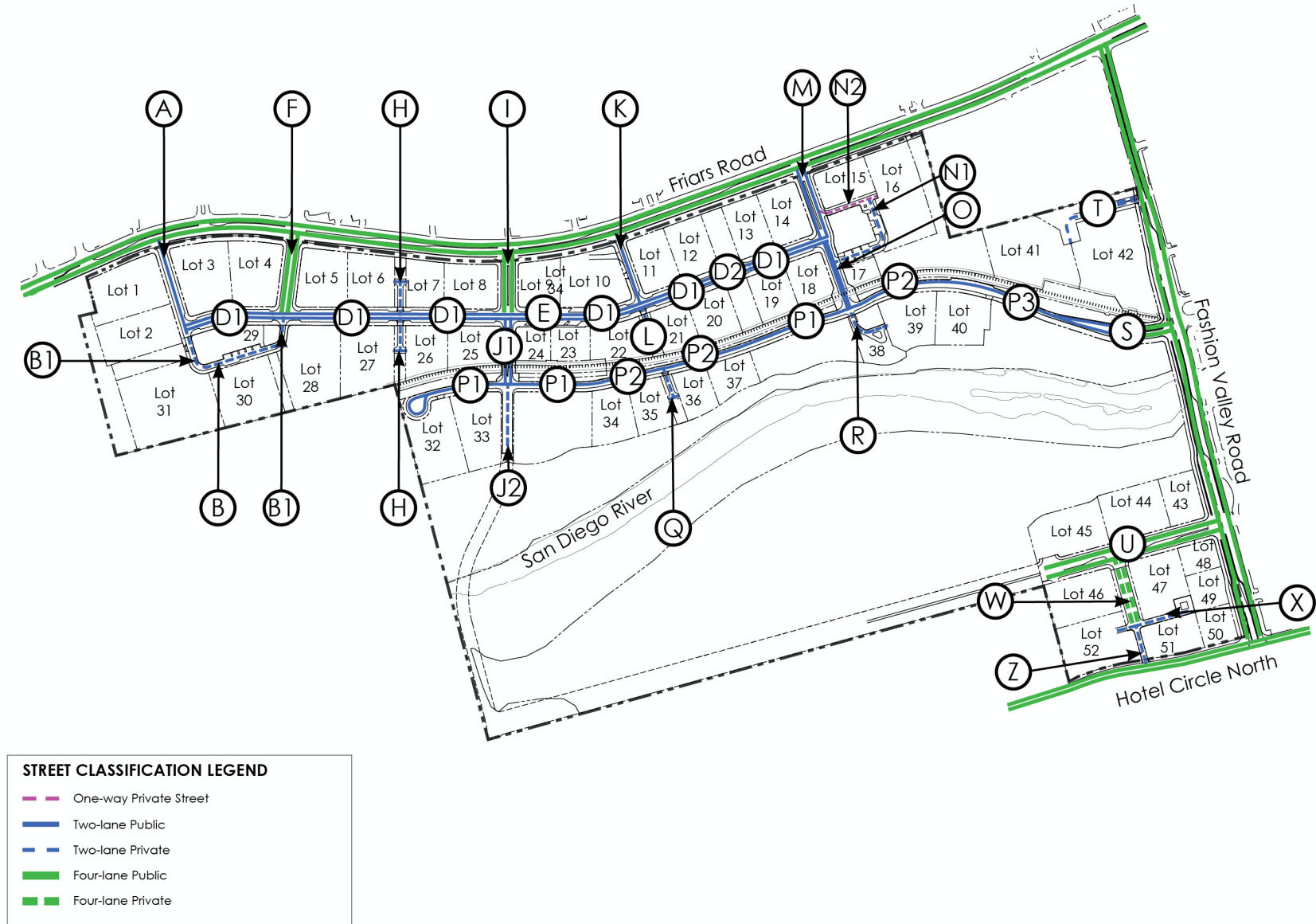
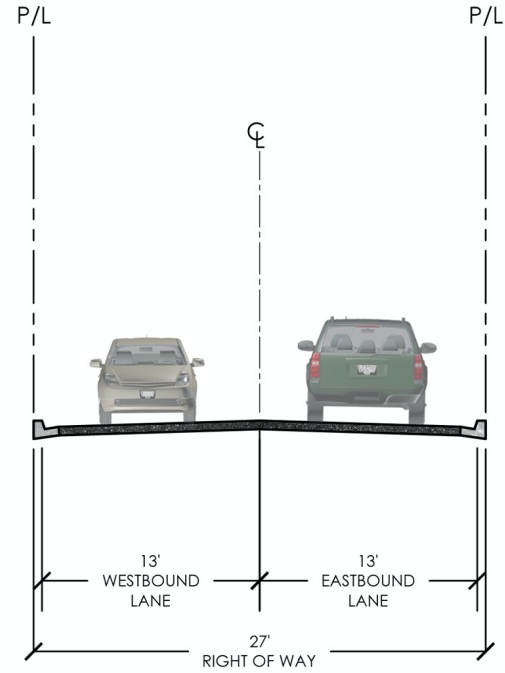


Figure 4-38. Alternative Road Network – Private Driveways X and Z



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 4-39) 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 4-40) 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 4-41) 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 4-42) 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 4-43) 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 4-44). 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 4-39. Friars Road (Existing)

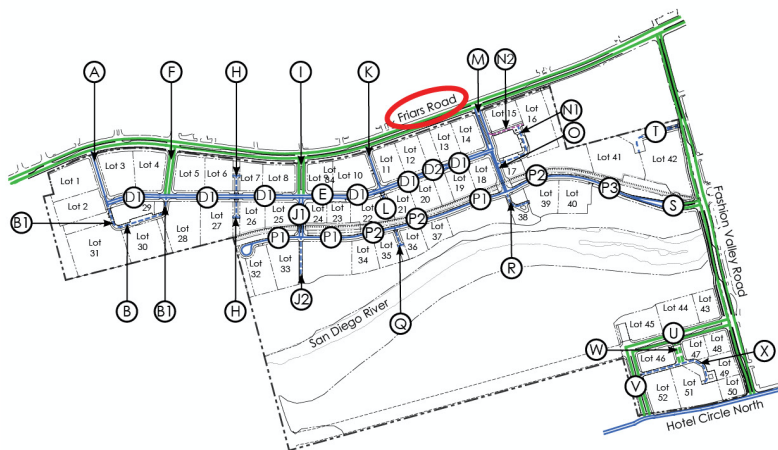
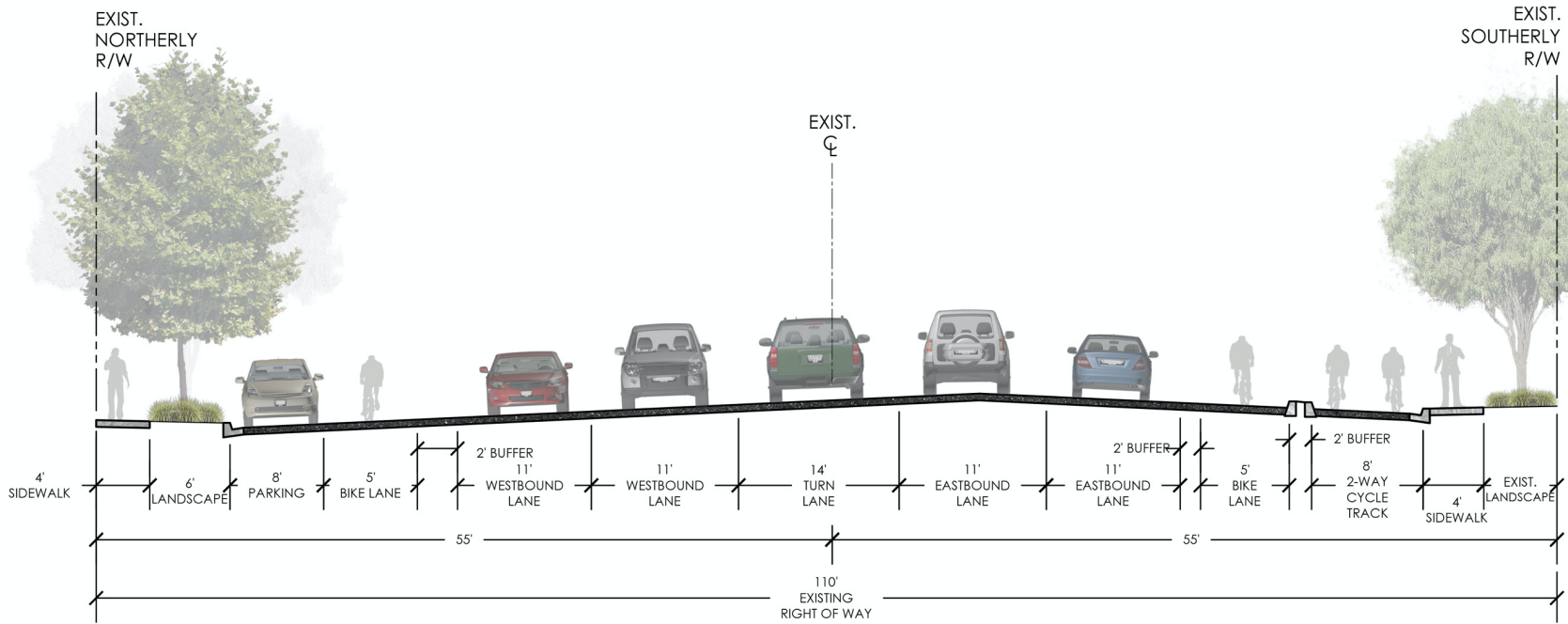


Figure 4-40. Friars Road (Future with Riverwalk)

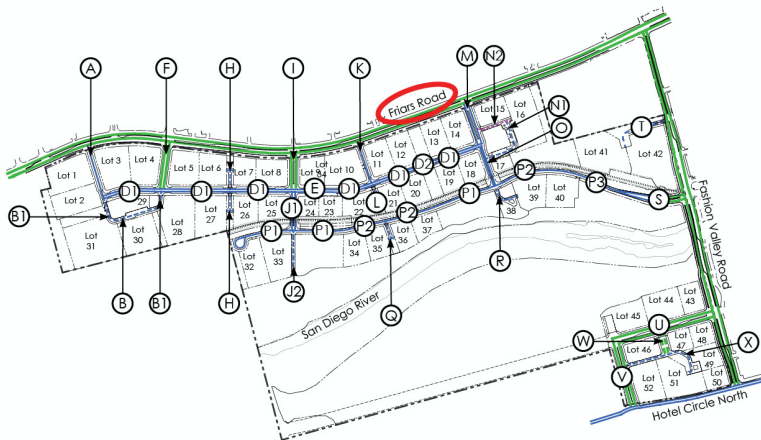
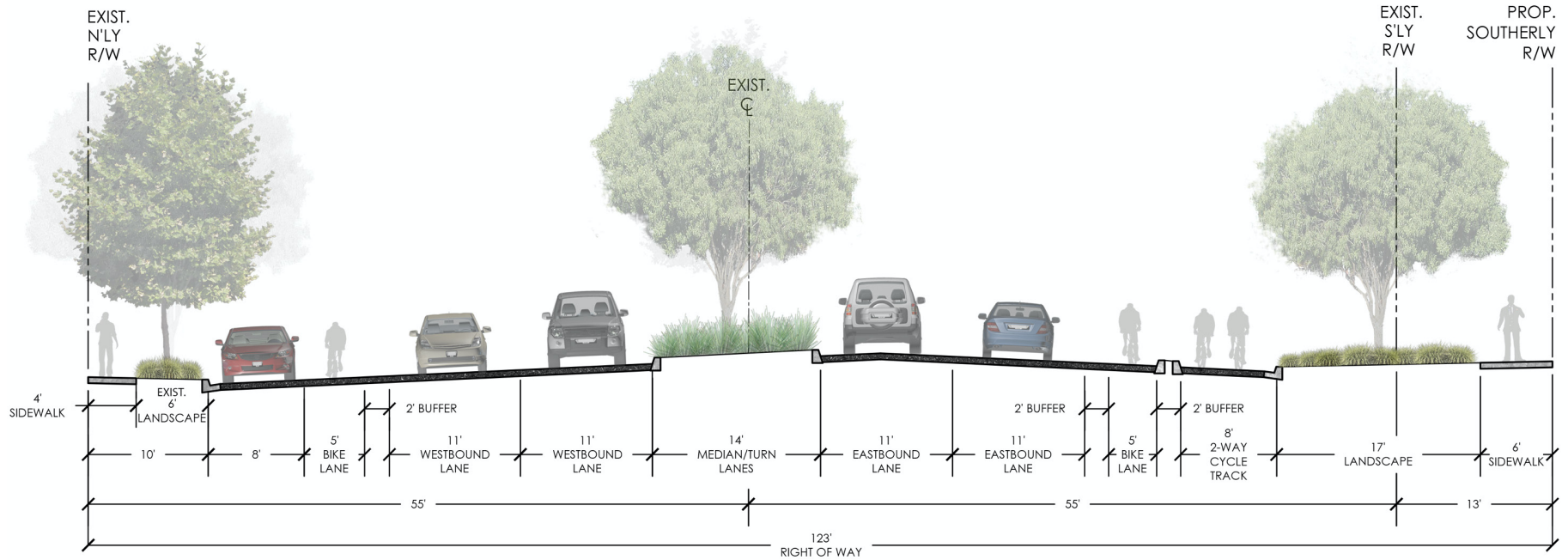


Figure 4-41. Fashion Valley Road (Existing)

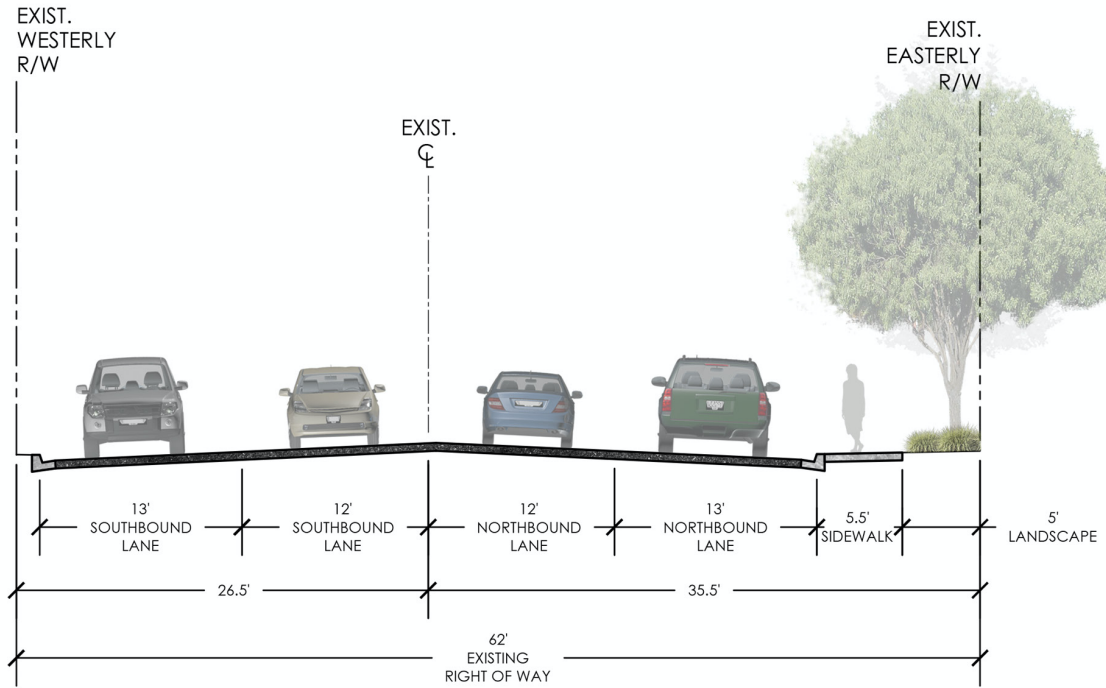


Figure 4-42. Fashion Valley Road (Future with Riverwalk)

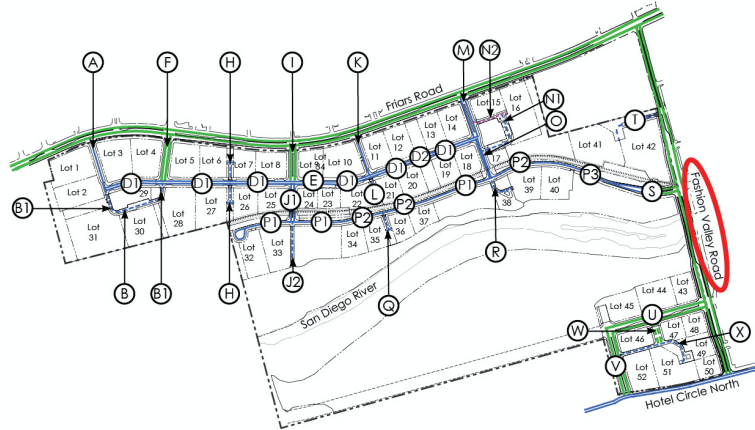
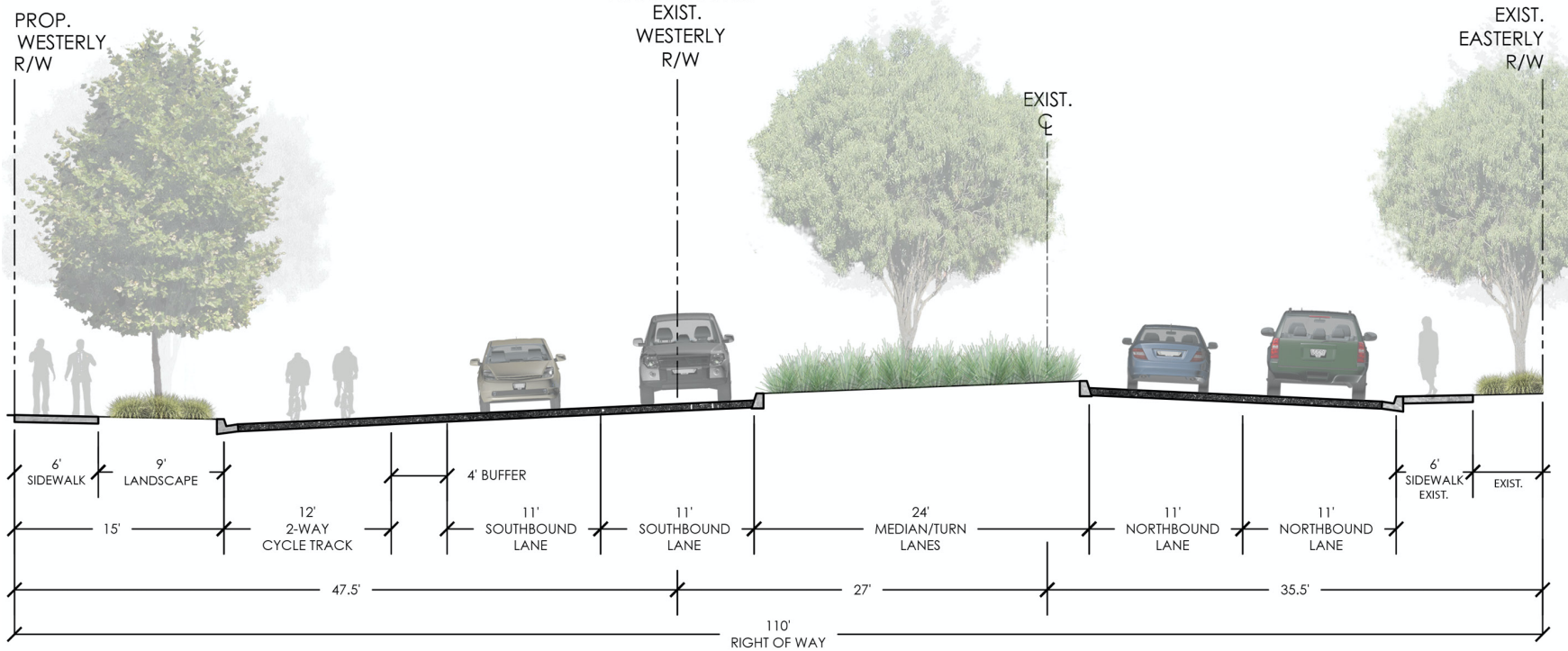


Figure 4-43. Hotel Circle North (Existing)

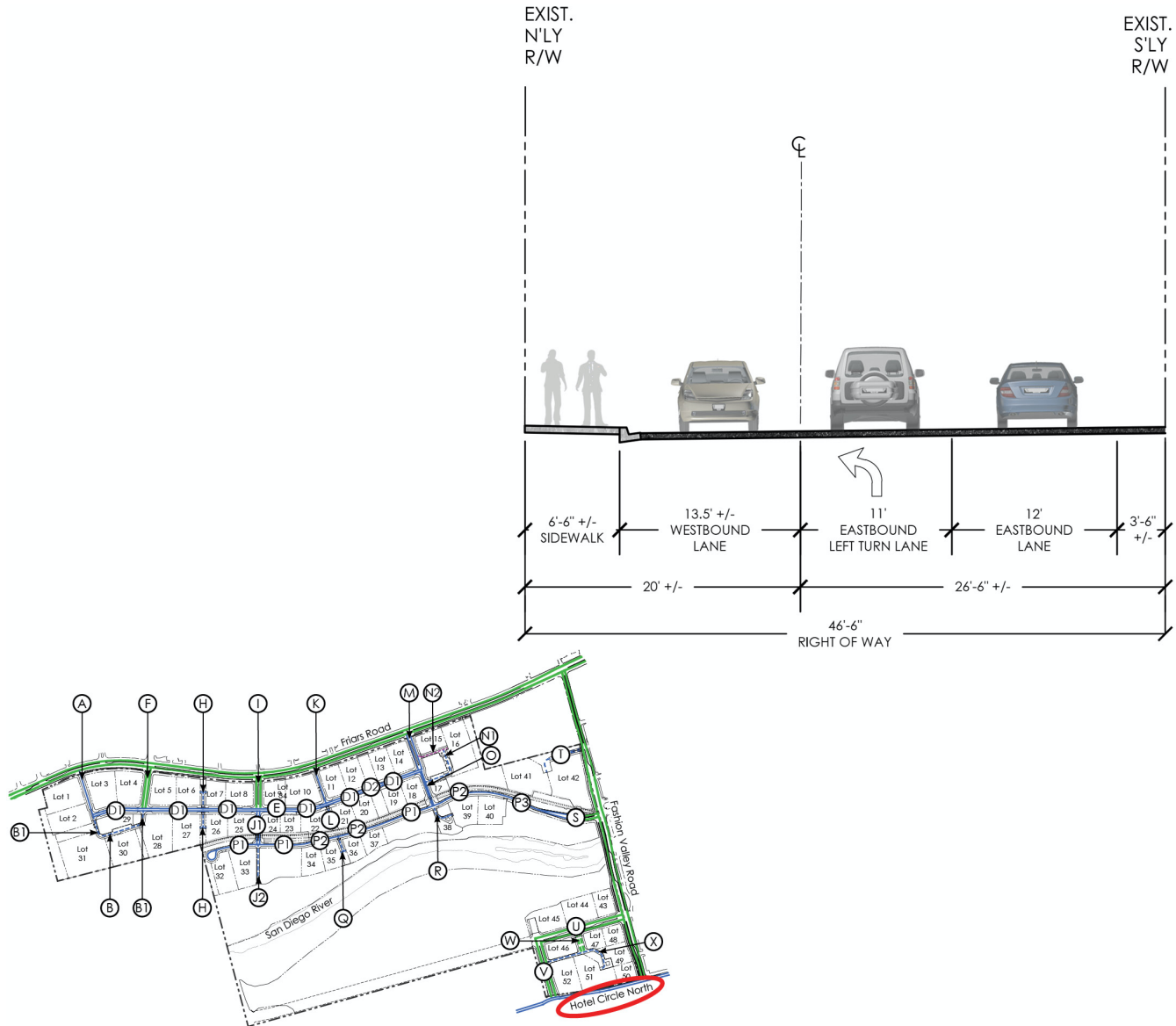
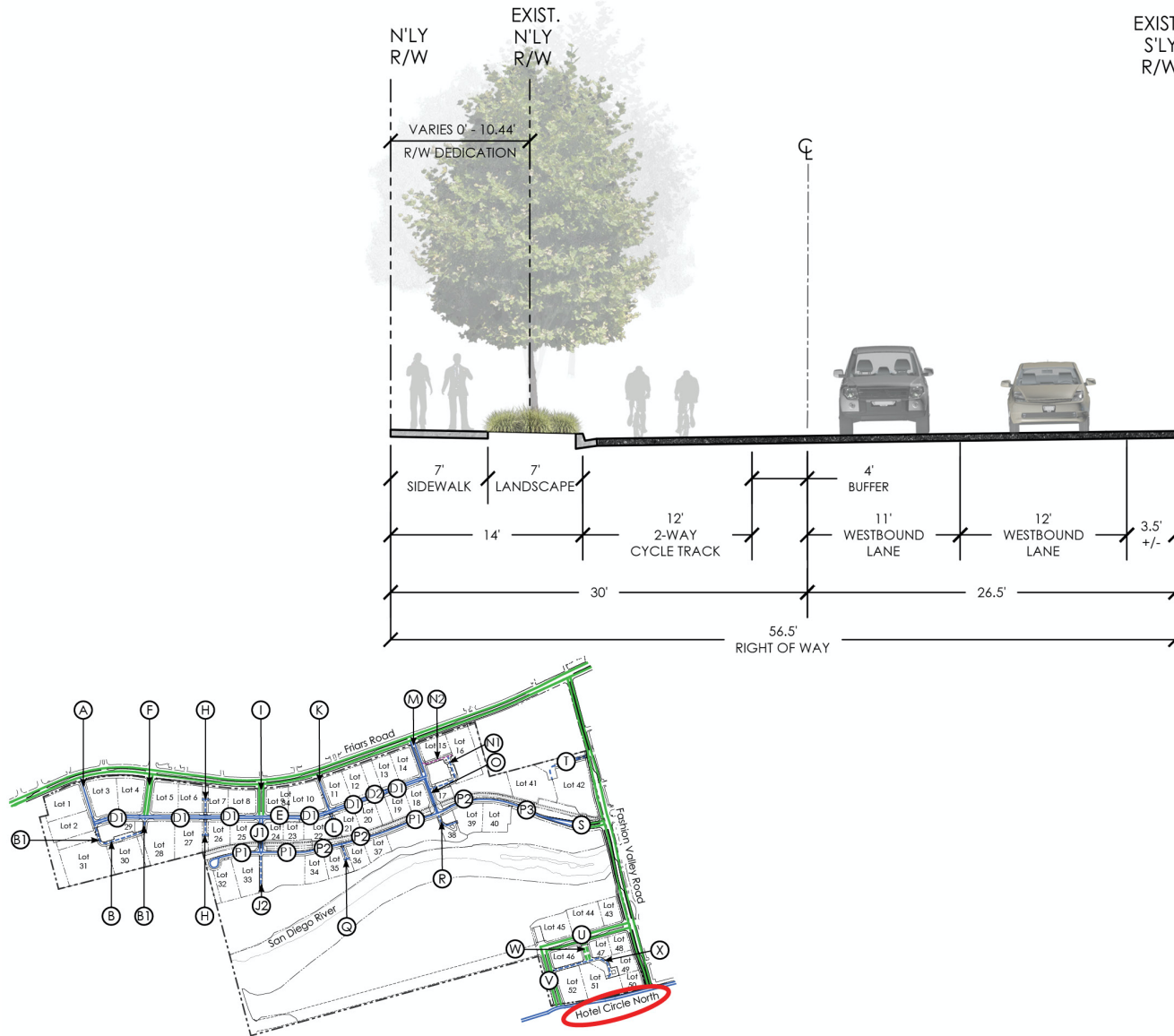


Figure 4-44. Hotel Circle North (Mission Valley Community Plan Planned Configuration)



As described in Section 4.6.4, above, the Mission Valley Community Plan contemplates Hotel Circle North and South as a one-way couplet. In the event that a one-way couplet is not implemented, or should Caltrans not approve Street V, an alternative road network for the South District is presented in Figure 4-37, *Alternative Road Network – South District*. The alternative road network may be implemented through the associated final map without amending this Specific Plan, the Site Development Permit, the Vesting Tentative Map, or any other project approvals.

The alternative road network would result in different future configurations for Fashion Valley Road and Hotel Circle North than what is presented above with the project's proposed roadway network. Fashion Valley Road (Figure 4-45) would be constructed with two 14-foot southbound travel lanes with right turn lanes and two 12-foot southbound left turn lanes. A four-foot center median would separate southbound travel lanes from two 11-foot northbound travel lanes. On the west side of Fashion Valley Road, a 12-foot two-way cycle track

would be separated from the southbound travel lanes by a four-foot buffer. A nine-foot landscaped parkway would separate a six-foot sidewalk from the cycle track. The approximately five-foot-wide sidewalk on the eastern side of the roadway would remain as it is under existing conditions. The alternative configuration of Fashion Valley Road would be constructed within a 119-foot right-of-way.

Under the alternative road network, Hotel Circle North (Figure 4-46) would have two 12-foot westbound travel lanes, two 12-foot eastbound travel lanes, and a 10-foot eastbound left turn lane within a 96.5-foot right-of-way. Six-foot-wide bike lanes in both the eastbound and westbound directions would be provided, with a two-foot buffer between the bicycle facilities and travel lanes. Along the north side of Hotel Circle North, a six-foot sidewalk and nine-foot landscaped buffer would be provided. The alternative configuration of Hotel Circle North would be constructed within a 96.5-foot right-of-way.

Figure 4-45. Fashion Valley Road (Alternate Road Network Configuration)

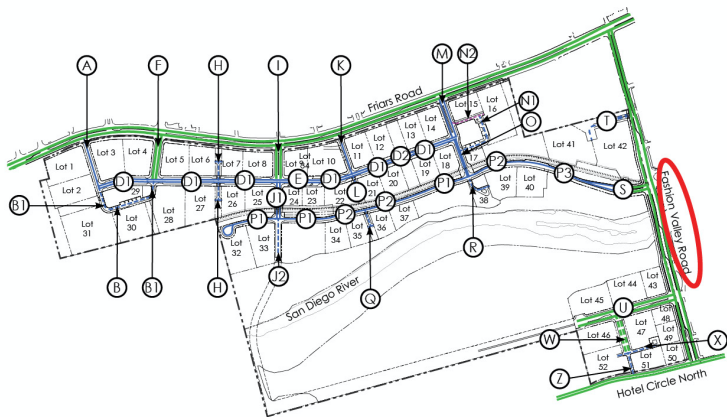
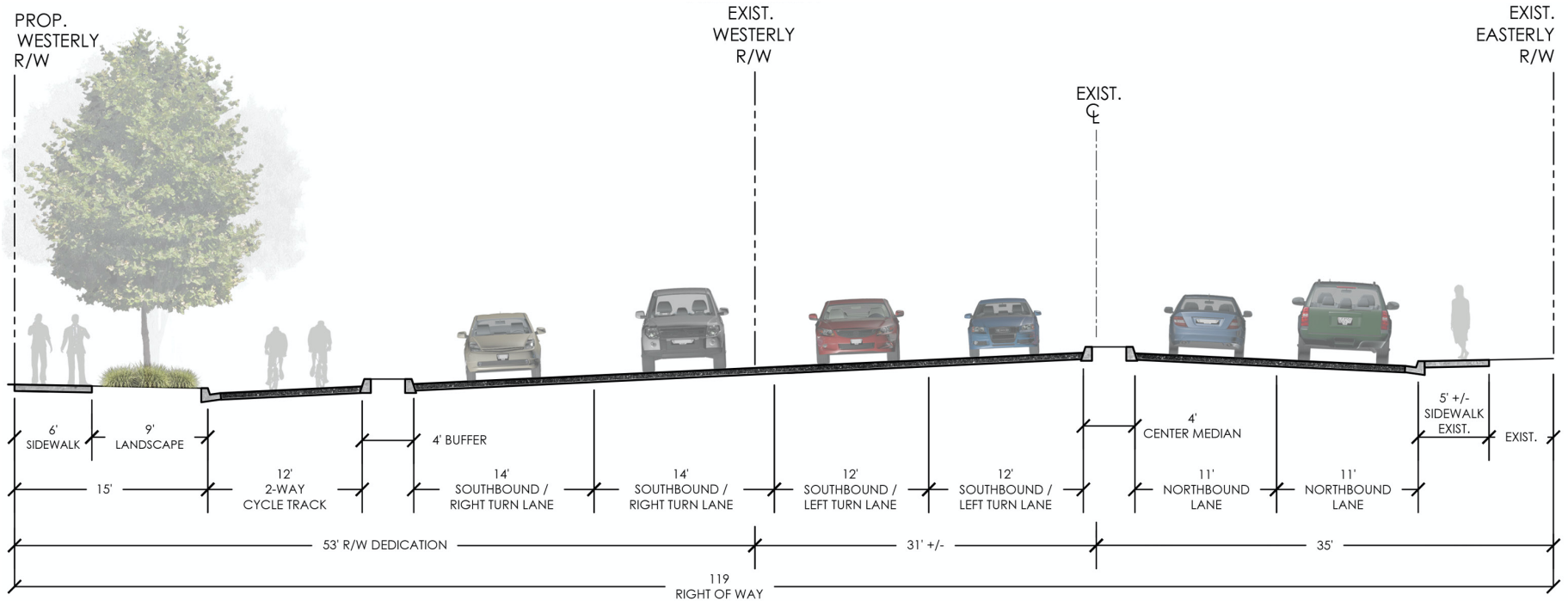
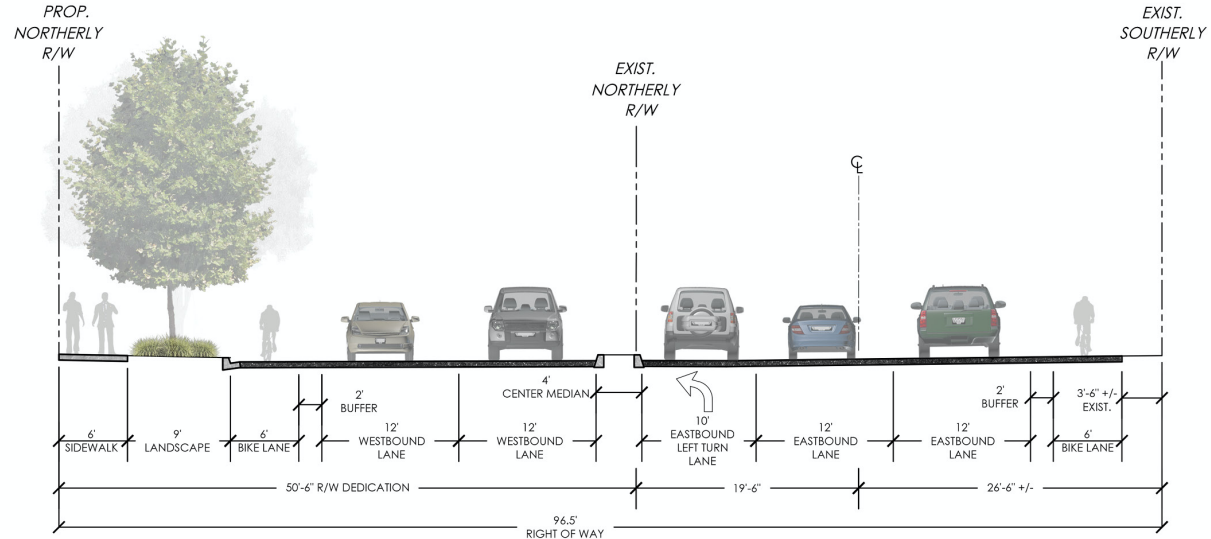


Figure 4-46. Hotel Circle North (Alternate Road Network Configuration)



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 4-47, *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* (September 24, 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 4-47. Riverwalk Access

