4 CIRCULATION AND TRANSPORTATION

A successful Area Plan must accommodate all modes of travel safely and effectively. This section describes how each mode of travel is accommodated within the site boundary.

4.1 OVERVIEW

Transportation and circulation are critical components of the safe and effective movement of people and goods within the site and beyond. The Area Plan accommodates all modes of travel, with an emphasis on pedestrians and bicyclists including the requisite accommodations to them as transit users. By concentrating high-density development around the Station with a diversity of uses in close proximity, the Area Plan aims to reduce the reliance on private vehicles, helping to minimize traffic congestion and the amount of land dedicated to parking. The Area Plan envisions the following:

- A transportation hierarchy with people-powered travel modes first, transit next, then car share, and lowest priority for single occupant vehicles.
- A vehicular circulation plan which serves the needs of on-site development but eliminates the possibility of through traffic. Other modes of travel take priority on the street network.
- Segregation of pedestrians, bicycles, vehicles and light rail at the main point of entry from the 5th and H Street intersection.
- An integrated pedestrian network of generous sidewalks, plazas and roadway crossings at locations where vehicles will be travelling at lower speeds.
- A bicycle network that builds upon the existing City plans and integrates more fully with the routes to downtown to the south and east and across the river to West Sacramento.
- An integrated circulation plan which prioritizes transit access over private vehicles and supports the electrification of local and regional fleets for zero-emission mobility.
- A public parking strategy and management plan that efficiently accommodates limited on-site demand, supports commuter travel patterns and effectively uses existing parking spaces rather than creating new ones in the interim. No surface parking lot is allowed. The proposed district-wide shared parking supply transforms the space on site for cars into space for people.
- Reduced but flexible parking Principles for private development based on current best practice and to be complementary to the City's shared district parking philosophy.

4.2 CONTEXT

Sacramento Valley Station is the nation's seventh busiest Amtrak Station, served by two of the top five intercity Amtrak routes, and with more than 1.2 million passengers annually. Average weekday use exceeds 3,500 passengers, served by a fully integrated Amtrak bus operation with 22 departures a day. Regional transit light-rail service terminates at the Station, with trains every 30 minutes. Two local bus routes and one intercity route to BART also serve the Station hourly.

To serve these passengers and accommodate train and bus operations, the facilities include the Historic Station to the south, two platforms, four passenger tracks and two freight bypass tracks approximately 500 feet north of the Historic Station. The Historic Station currently provides rail service and passenger amenities. Adjacent to the railroad operational area is the eight-berth intercity bus station, the LRT station and local bus stops. The "front door" of the Station is the historic building fronting onto I Street. H Street is also heavily used between the Historic Station and platforms.

To access the Station from the west, trains cross the I Street Bridge (over the Sacramento River), a two-level steel truss swing bridge built in 1911. The bridge carries two tracks on the lower level, which then approach at grade into the Station platform area. After landing on the east bank, the tracks skew slightly to the northeast and fan out to the platform area, while passing under the I-5 elevated freeway. Maritime traffic occasionally delays rail traffic as the bridge opens to let boats navigate the Sacramento River. It should be noted that the majority of daily commute passengers do not currently use the Historic Station lobby, preferring to take the shortest to and from their points of departure.

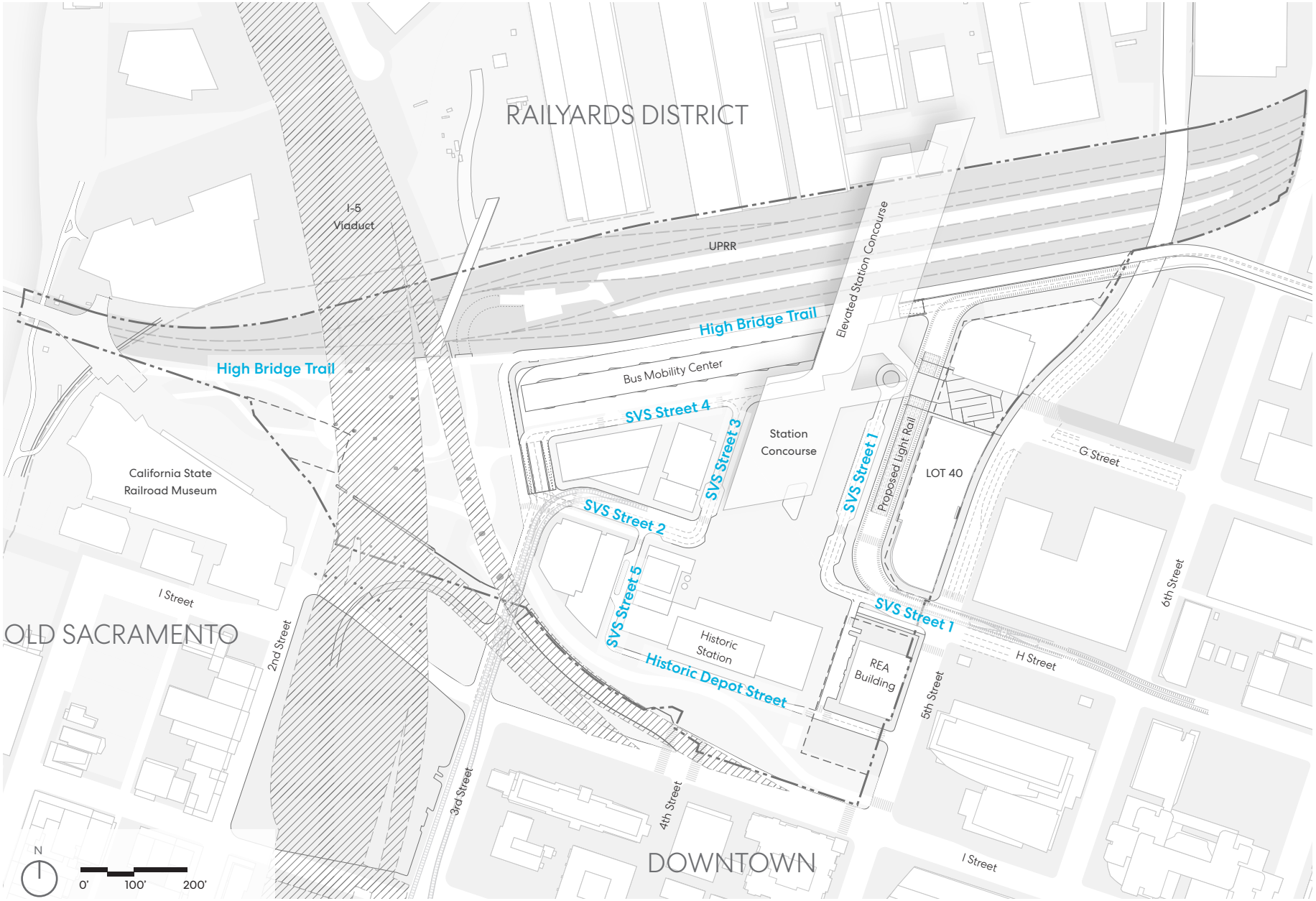

Figure 4.1 *Street Names*

4.3 ACCESS

Vehicles

The street network has been laid out to serve the needs of the private development blocks for access, parking, servicing and loading. Private vehicles entering the site to park will do so only to park in the lower level of the Bus Mobility Center or within development blocks A and B, should their development include on-site parking. Any on-site parking within Lot 40 must be accessed from 5th Street, not from within the site, due to the placement of the new light rail tracks and platform. Each street section in the Area Plan has been sized and configured to accommodate only those vehicles needing access and this approach should be carried through into the detailed design of the streets.

Operational changes to traffic movement and volumes on the extension of 3rd Street north and the partial closure of H Street at the Transit Plaza are discussed in more detail in Appendix XX, DKS's Concept of Operations Memorandum.

Refer to Figure 4.2 for the vehicle circulation network.

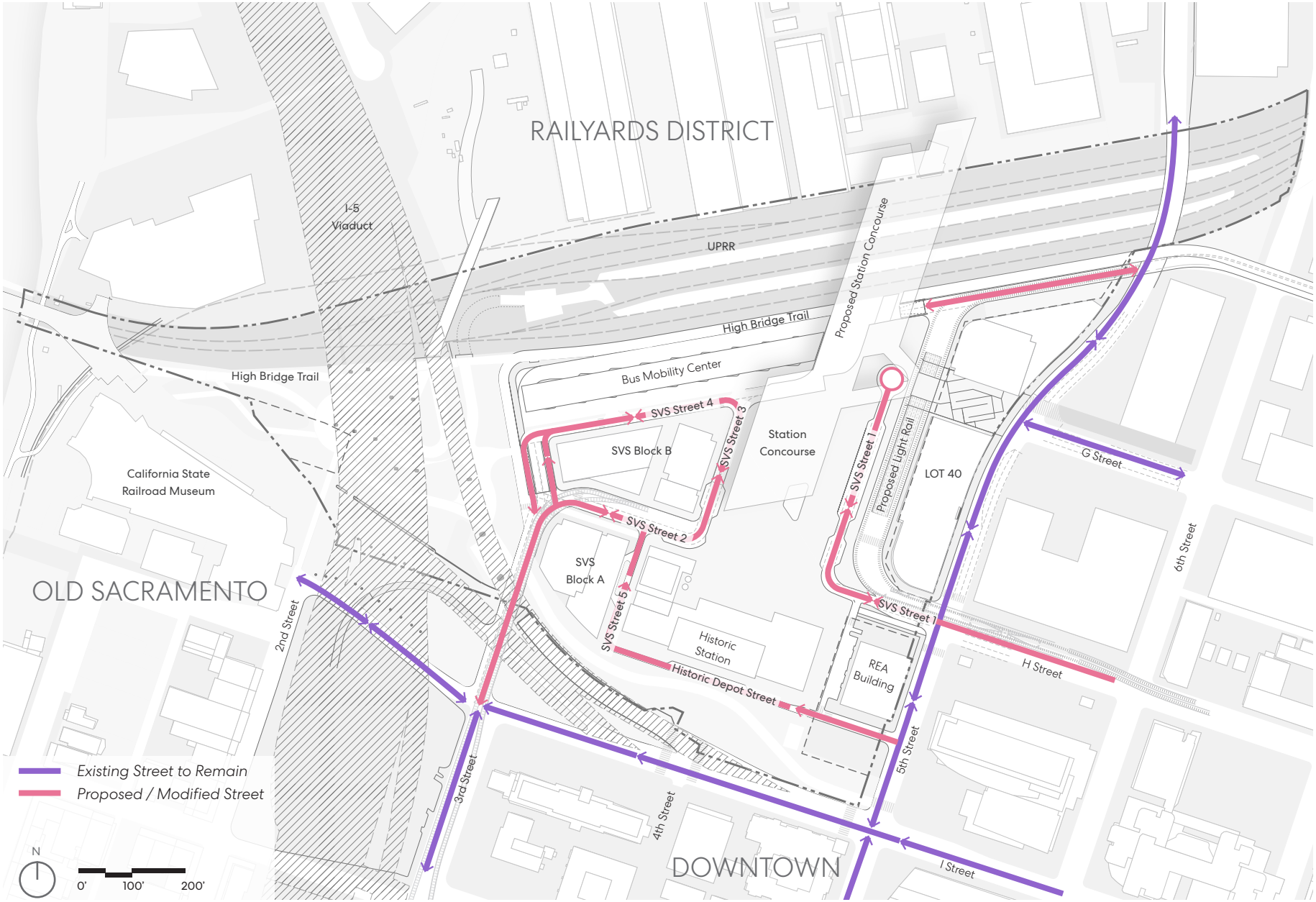

Figure 4.2 *Street Network*

Pick-up/Drop-off

The Area Plan provides a variety of opportunities for pick-up and drop-off with the intent that each of these zones is close to the travelers' intended destination. The main pick-up and drop off for the new Station concourse is located on the eastern side of the Transit Plaza, parallel to the LRT platform, depicted on plan as SVS Street 2. Vehicles accessing this pick-up/drop-off zone will enter from the 5th and H Street intersection, turnaround at the end of the loop and leave by the same intersection.

A secondary, smaller, pick-up/drop-off zone is located on the west side of the Transit Plaza, on SVS Streets 1 and 3. This zone may also serve passengers arriving at the Station from the west, but it is primarily intended to serve development block B and passengers wishing to gain access to the north side of the Historic Station. This zone is on a two-way loop around development block B and may be accessed from a clockwise or counterclockwise route.

SVS Street 3 includes a short pick-up/drop-off zone on the eastern side to serve development Block A. This is part of a one-way loop and must be entered from 5th Street. This same loop contains a pick-up/drop-off zone directly in front of the south entrance to the Historic Station for those passengers wishing to access the amenities within the rehabilitated building or preferring to walk through the building to gain access to the Transit Plaza and new Station Concourse.

Refer to Figure 4.3 for pick-up/drop of locations and recommended lengths of zones based on projected TNC forecasting.[1]

1 *From ARUP's SVS Baseline Planning Capacity Memo 24 Jan, January 24, 2017, page 8 of 9: "Based on 1,500 passengers in the peak 15 minutes with 15% using cabs/TNCs, and assuming 1.5 passengers per vehicle, about 50 cabs would be needed in a five minute window. This requires a holding lot for about 50 vehicles and a curb length of about 200 feet for pick-up." ... The annotated Taxi/TNC formula that leads to 1,500 passengers in the peak 15 minutes is as follows: 12,000/passengers hour (based on aspirational SVS passenger capacity) x 33% (assumed future taxi/TNC mode share) = 4,000 in the peak hour. 4,000 x .33 = peak 15 minutes (assuming 1/3 of peak hour passengers arrive in the peak 15 minutes) = approximately 1,500 passengers in the peak 15 minutes.*

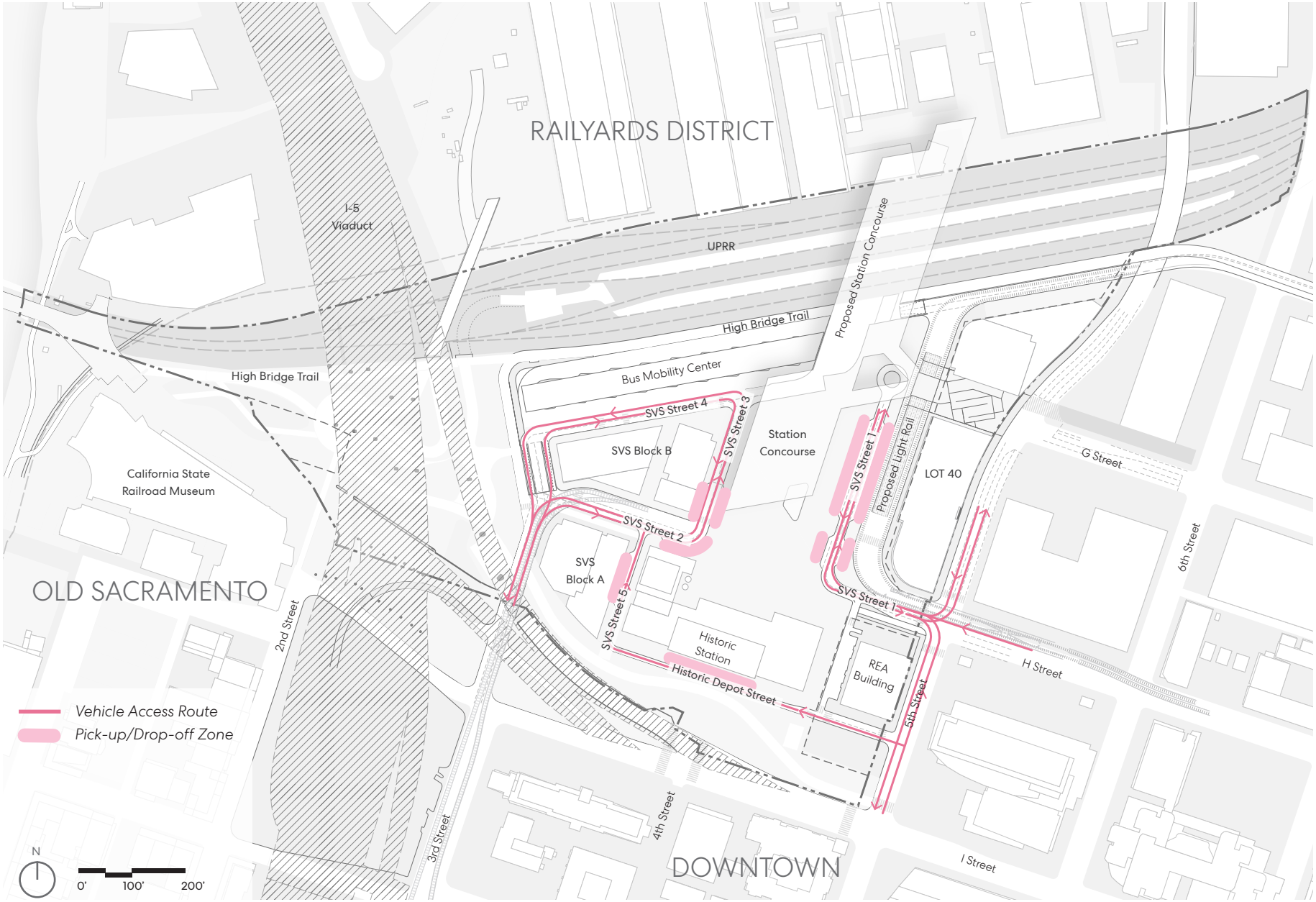

Figure 4.3 *Pick-up/Drop-off Access*

Pedestrians

All streets, paths and plazas within the Area Plan are designed with people and place in mind. The layout and design of the public realm includes high-quality pedestrian facilities to improve the safety and convenience of pedestrians. These include sidewalks, paths, crosswalks, plazas and a pedestrian bridge at the 5th Street Plaza. Vertical circulation is catered for with stairs, ramps, elevators and escalators at key transition points. The road network has been laid out with frequent turns, narrow lanes and generous crosswalks to ensure vehicles are moving slowly within the site, reducing the potential for conflicts between pedestrians and vehicles. Recommended building locations, shapes and heights, along with open space landscape design requirements, will ensure that large portions of the pedestrian network are shaded and comfortable year-round.

Refer to Figure 4.4 for the zones of pedestrian priority within the public realm.

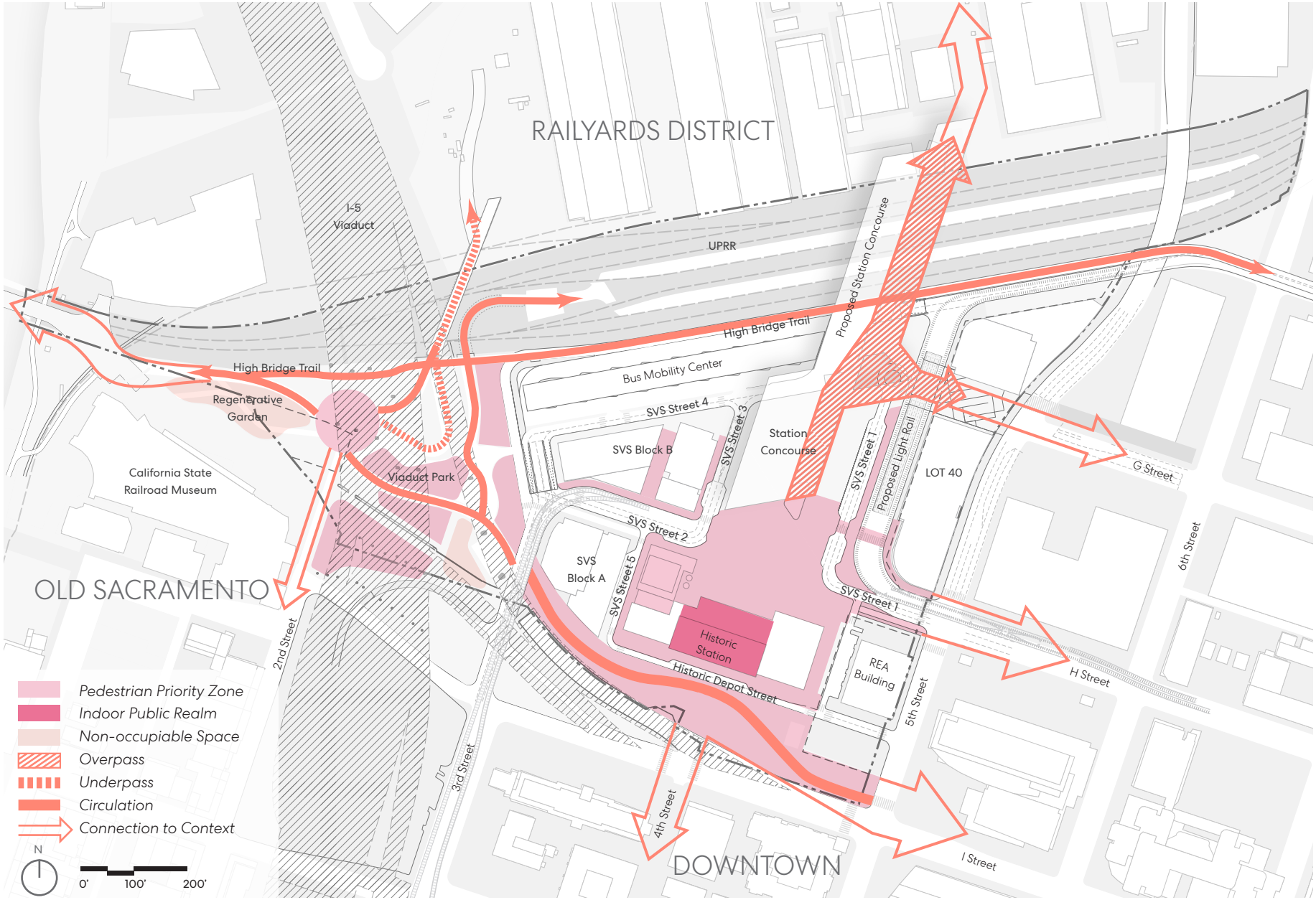

Figure 4.4 *Pedestrian Network*

Bicycles

The bicycle network is designed to provide convenient access to the station, for those who regularly bicycle to the station, and to encourage those infrequent riders, with safe and clearly marked paths to connect easily to their destination. The network connections are designed to allow for continuous bicycle access from the surrounding street network into the fabric of the station paths and access points. People riding bicycles to or through the station should be able to access station entrances and seamlessly connect to other on- and off-street bike routes, and these connections should reinforce low-stress bike routes for downtown commuters. The planned connections called for in the Area Plan fill in gaps that currently exist in the bicycle network, making the downtown bicycle network more functional for everyone getting to the station, and traveling through the station.

The operational feasibility and configuration of the bicycle routes along 5th Street and into the SVS site at the 5th Street and SVS Street 1 intersection are discussed in more detail in Appendix XX, DKS's Concept of Operations Memorandum.

Refer to Figure 4.5 for on-site bicycle network and connections to the wider network.

Principles

- Establish a bike network link between the primary Station Concourse entrance point and the off-street bike route connecting near F Street in the east and near Front Street (and the river) in the west (proposed link between Class 1 path and Bike Hub in Station Concourse).
- Establish a bike network link between H Street and the Historic Station (proposed Class 1 path).
- Establish bike network links that provide north/south connections via two underpasses: one under the Station Concourse, and one under the tracks at the west end of the station.
- Provide a low-stress, separated east/west bike connection between F Street and the river (High Bridge Trail) for continuous bike commute access to the west side of the station. This may be a combination of Class IV Bikeway (separated bikeway) and a Class I Bikeway (bike path or multi-use path) with a designated pedestrian zone to connect from 7th Street to the path west of 5th Street.
- Establish a bike network link between the on-street bike lane on G Street and the 7th Street connection to the F Street bikeway.
- Initiate a separate study for a bike network link between the east entrance to the Station Concourse and the on-street east bound bike lane on H Street, via 5th Street; this connection requires intersection treatment to carry the bike network across 5th Street to position people on bikes for a through crossing and curb modifications to the west sidewalk to facilitate the southbound bike connection on 5th Street. Refer to Appendix D for more detail.
- Connect the westbound on-street bike lane on the north side of I Street east of 5th Street to a Class I Bikeway through the south edge of the Historic Station (immediately north of I Street). Note, there is currently a westbound Class II Bikeway (bike lane) on the south side of I Street that connects to 2nd Street.
- Connect the on-street bike lane across the east edge of the station, providing a continuous north/south on-street bike route on 5th Street that connects to the planned development north of the station.
- Add a north/south pedestrian and bicycle connection on 4th Street immediately south of the Historic Station where the existing street grid does not provide a through path. This is consistent with the City's concept study for a bike connector through Chinatown to J Street.
- Provide a direct connection between the off-street F Street-river path and the street grid southwest of the station, via 2nd Street to Old Sacramento Waterfront district.
- Reinforce the bike network connections to the future I Street Bridge, which will provide a pedestrian and bike connection to West Sacramento. Where the bike connection passes through the plaza in Viaduct Park, use visual and texture cues to indicate the separation between spaces for pedestrians and people riding bikes. On the bridge ramp connecting to the at-grade path and park, consider using gentle, bike path-scale speed humps to slow downhill riders before they enter the shared space.

Guidelines

- Reinforce bike access to all station entrances including both the Station Concourse and the Historic Station, from the surrounding on-street bike network on the downtown street grid.
- Reinforce bike access through the station with a connecting path for bike commuters traveling

Figure 4.5 *Bike Network*

east/west between the river and the downtown street grid.

- Reinforce bike access to the station from planned development north of the tracks.
- Improve bike and pedestrian connectivity in the surrounding street network where there are opportunities for new paths through existing blocks.

Refer to Figure 4.6 for the bike classification.

Class I Bikeway

Class II Designated Bikeway

Class IV Protected Bikeway

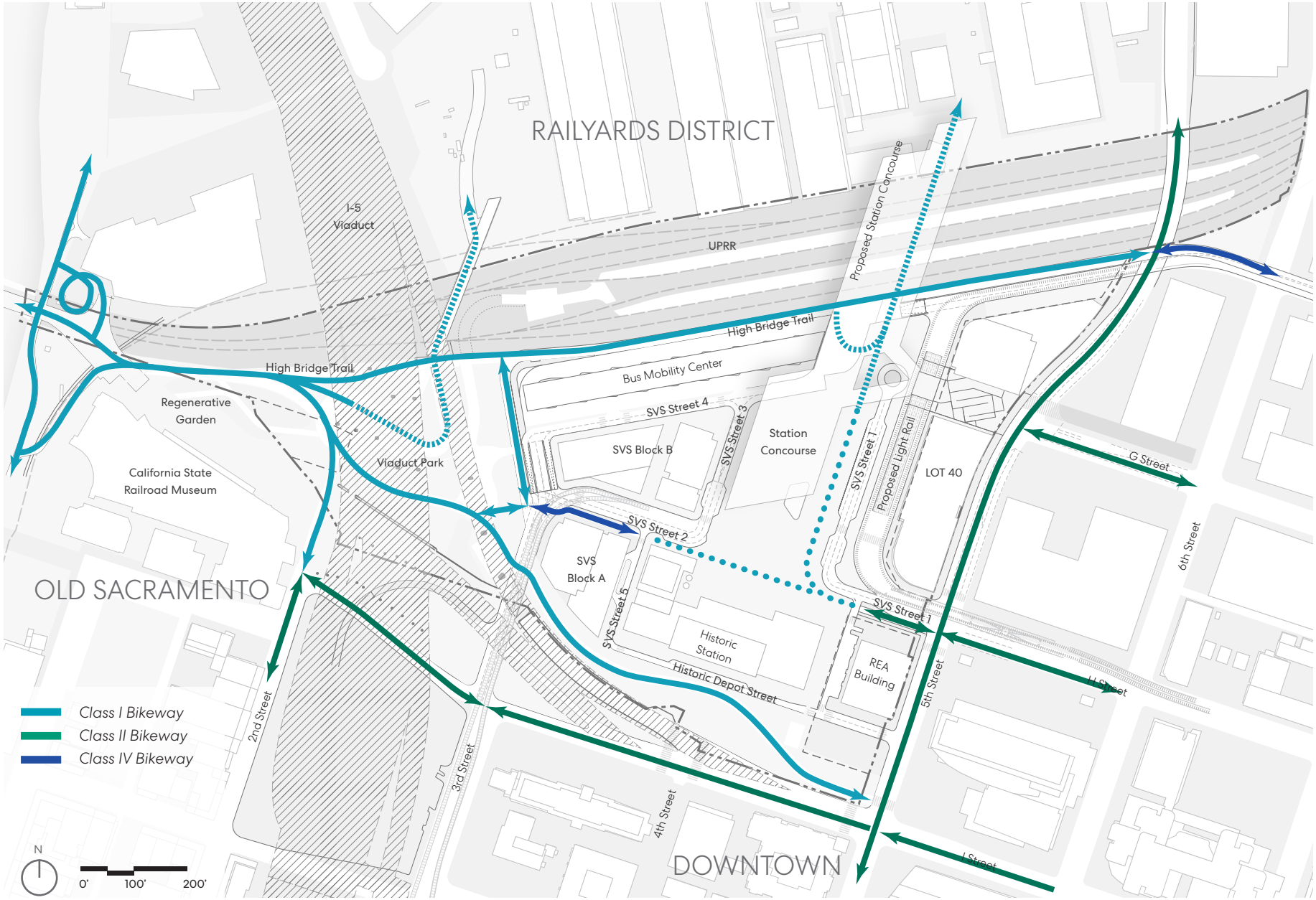

Figure 4.6 *Bike Route Classification*

Emergency Vehicles

The road network has been laid out to ensure emergency vehicle access to all necessary points and has been reviewed with City of Sacramento Fire Department (SFD). Emergency vehicles are allowed to traverse the non-vehicular section of SVS Street 1 (across the Transit Plaza) to ensure a rapid response and avoid detours around the site. The turnaround loop at the northern end of the pick-up/drop-off zone on SVS Street 2 must be designed to allow emergency vehicles to travel over the traffic circle and continue north on to the F Street extension and then east to exit the site. The High Bridge Trail must be designed to allow emergency vehicles travelling west on F street to transition onto the bicycle and pedestrian trail to access the north side of the Bus Mobility Center and to turn southbound at the western end of the Bus Mobility center to exit the site. Further consultation with SFD will be required during design implementation.

Refer to Figure 4.7 for emergency vehicle routes.

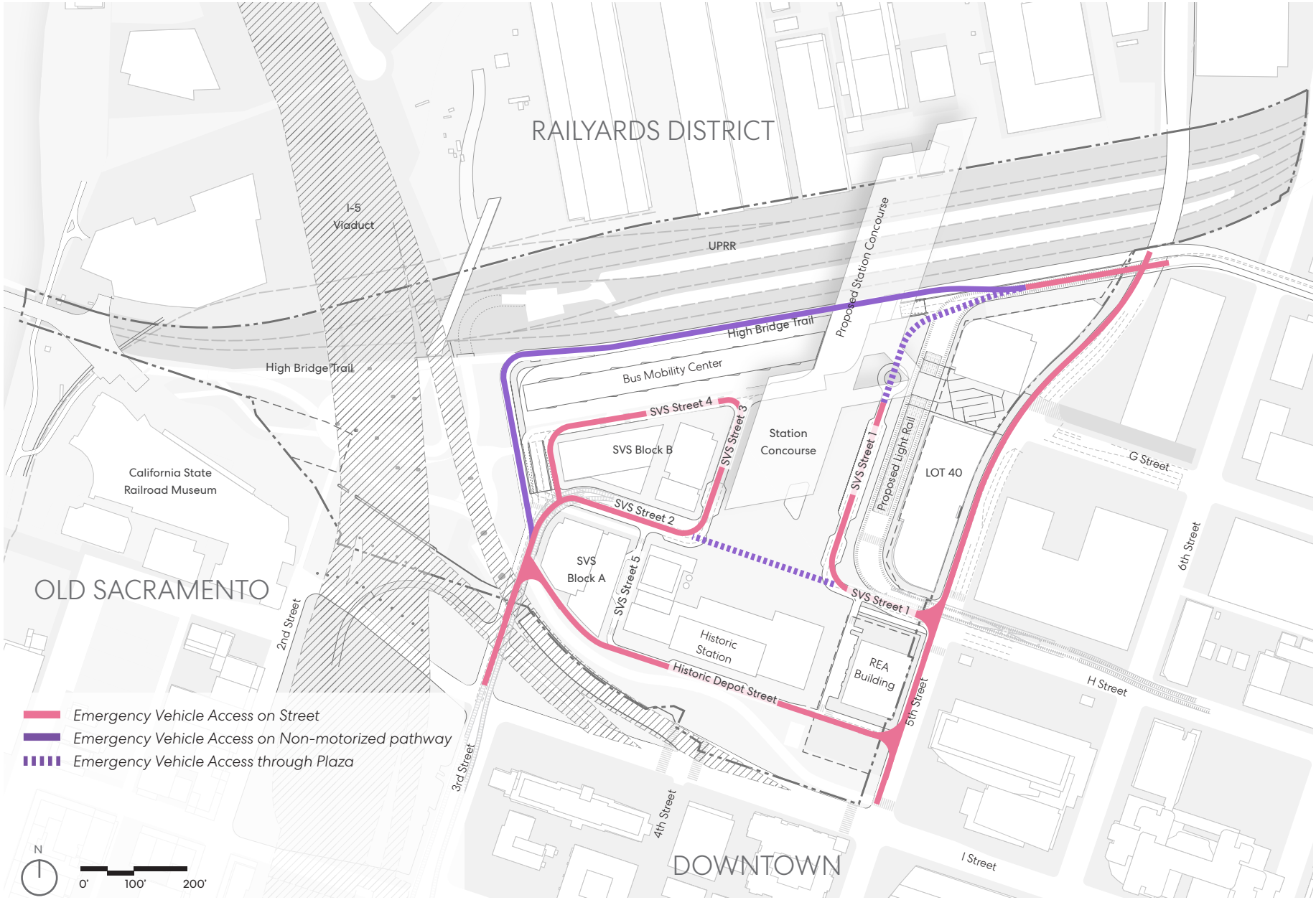

Figure 4.7 *Emergency Vehicle Access*

Transit

The success of transit is strongly dependent upon the level of convenience that is offered to the patron. The most direct service with the fewest mode changes will enjoy the highest levels of ridership. Where mode changes are required, transfers need to be direct and convenient, both in terms of scheduling and proximity. The ability to provide multiple transit options at transfer points increases the level of synergy between modes and convenience for riders.

Sacramento Valley Station has been the transportation hub for downtown Sacramento for more than 90 years. As the region and state continue to grow, the station provides the opportunity to leverage its transportation prominence into a new downtown urban center that incorporates and embraces the location as a major live-work hub for the Sacramento region. Multiple modes of transportation converge at the site, including passenger rail, freight rail, light rail, local and regional bus service on local streets and regional services connecting to the freeway. The Area Plan ties many of these modes together at the enhanced SVS. This section describes the various transit options available to the site and the potential for the SVS to transform the nature of transportation into downtown Sacramento and the Railyards area.

This Area Plan includes the City's plan for the creation of a regional transportation hub, referred to as the SVS, that can provide this synergy. The SVS also builds upon the State's commitment to increase commuter and intercity rail service, as well as the region's objective for expanding its light rail system, all of which accommodates increased ridership and allow for future implementation the connection to the high-speed rail system. The Station provides a direct connection between the transit systems operated by Amtrak, Capitol Corridor, and the San Joaquin Corridor intercity rail services; intercity bus services including private bus lines; the Sacramento Regional Transit District's local light rail; and fixed route bus services and other local public transit systems for hourly routes and commuter peak connections, as well as regional bus and local shuttle services serving the downtown area. The design of the SVS offers the transit patron direct and convenient access to virtually all regional transit modes. The location of the SVS within the site also serves as a major catalyst for adjacent development, including employment centers and residential uses, all within close walking distance to the SVS, the expanding Railyards and Downtown Sacramento.

The first several phases of SVS are complete – including the relocation of the tracks and new platforms, and the rehabilitation of the historic depot. New development within this project introduces a new above-grade concourse that provides for increased passenger capacity and a superior passenger experience. These improvements include new connection to the historic depot and light rail platforms provided by walkways, stairs, ramps, escalators and elevators to the above ground concourse. Passenger services will be distributed throughout the buildings and concourse comprising the SVS, including the historic Southern Pacific Railroad historic depot, the new concourse and relocated bus bays and passenger drop-off locations. Passenger services include information services for all transit modes as well as passenger waiting area and travelers' assistance. In addition, passenger amenities such as restaurants, news, magazine and bookstores, quick-serve food services, retail services and a hotel will eventually be provided as part of the new Station or surrounding development. Amtrak long distance services has additional specialized needs, which will also be accommodated, including check baggage and first-class passenger amenities.

Refer to Figure 4.8 for transit access map.

Passenger Rail

The Capital Corridor intercity train service operates 32 trains a day through the Station and plans to add trains with new agreements with UPRR to meet service demands. In addition, two trains daily roundtrips serve the San Joaquin Valley from SVS. The recently adopted State Rail Plan identifies SVS as a key component of the statewide rail system and proposes large service increases for both Capitol Corridor and the San Joaquin services. Under the plan, by 2040 the number of trains increases to more than 100, with 30-minute Capitol Corridor service to Roseville and 30-minute service to the Bay Area. If a proposed conventional rail tunnel is provided between Oakland and San Francisco, Sacramento will have the first direct rail connection to San Francisco, which could spur further ridership increases. In addition, two roundtrip long-haul interstate passenger trains, the Coast Starlight and the California Zephyr, traverse the Station in each direction every day.

The State Rail Plan memorializes the increasing demand for transportation services. While these

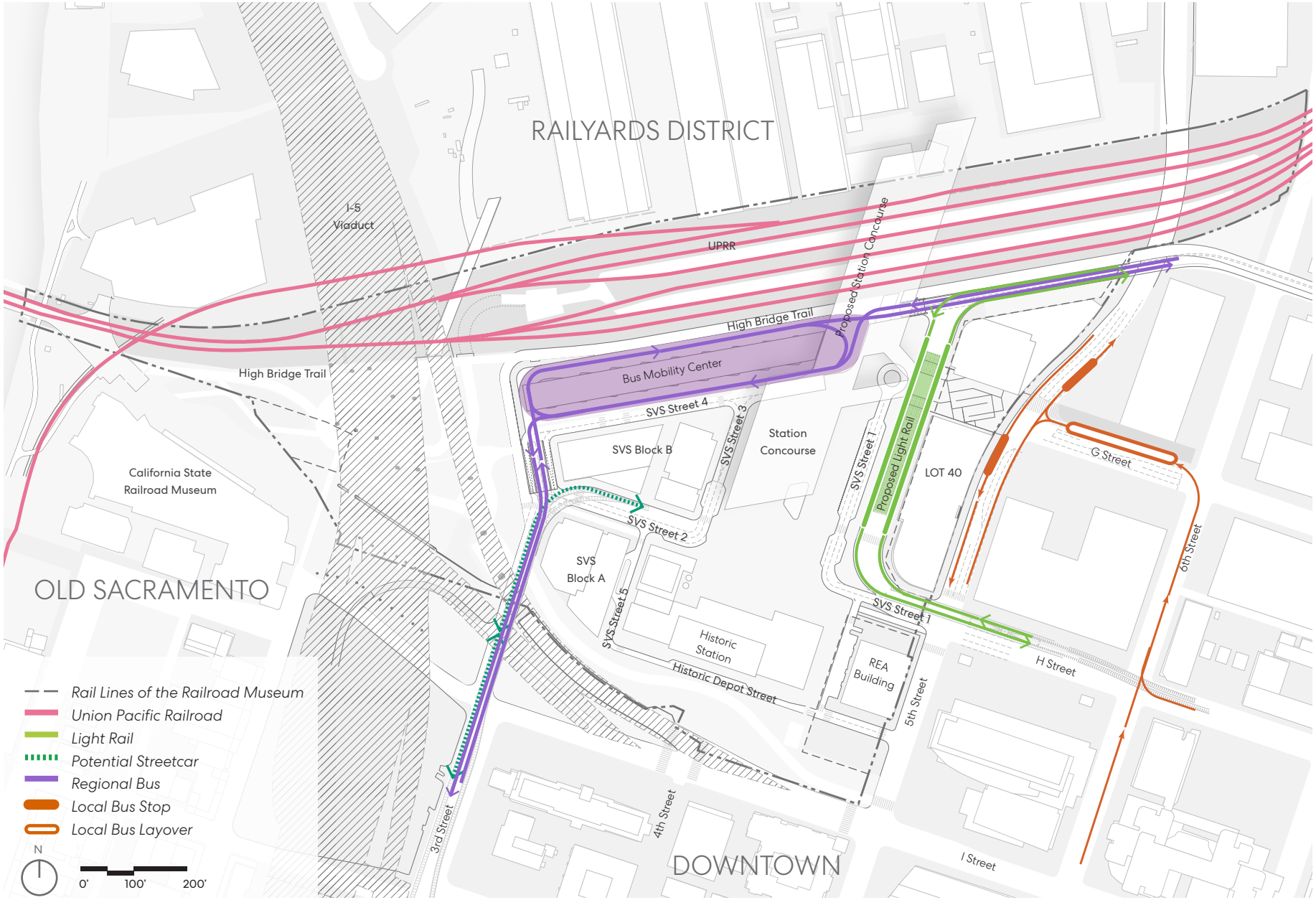

Figure 4.8 *Transit Access*

continued increases in ridership and number of trains benefit regional mobility, they also suggest that the current facility requires additional investment to accommodate expected passenger and operational growth.

Light Rail

Light rail service from the Gold Line to Folsom is currently provided at the Sacramento Valley Station. Green Line light rail service runs adjacent to the site on a single track couplet along 7th Street and 8th Street terminating to the north at the Township 9 Station along Richards Boulevard.

The City, in partnership with Sacramento Regional Transit, is redesigning SVS to accommodate the extension of light rail to Sacramento International Airport. The Green Line to the Airport Project will be routed into the SVS area and extend to a second track along 7th Street between Township 9 and the Plan Area. Beyond Township 9, the Green line to the Airport project will continue west along Richards Boulevard towards the Interstate 5 freeway turning onto Sequoia Pacific Boulevard to cross the American River, extending north through South Natomas and North Natomas and terminating at the Sacramento International Airport. When interlined with the Gold Line, the Green Line to the Airport Project will provide a one-seat 34-mile ride from the airport to Folsom connecting through the River District, the Railyards District, Downtown, Midtown and Rancho Cordova.

Sacramento RT currently has a Draft EIS pending with the Federal Transit Administration. Once approved, SacRT will be able to pursue this extension, which is expected to be developed in phases. It should be noted that this extension is estimated to increase ridership capacity across the American River by at least 20%, and perhaps as much as 40%.

Current phasing for the extension focuses on immediate improvement in the vicinity of the new Major League Soccer Stadium, with a new a new light rail Station along 7th at South Park Street. Also, the LRT existing station, currently situated on the north side of the historic depot, will be relocated as part of the SVS project. It will be reoriented in a north-south orientation on the east side of the site, north of H Street. Northbound out of the SVS, the light rail tracks will follow an F Street alignment to 7th Street. An alternative "bypass" would be provided on 7th Street.

The Green Line to the Airport Project will play a central transportation role within the SVS, ultimately being the 'mainline transit" through the Sacramento region. Higher density residential and commercial land uses are designated along the light rail line to generate transit ridership.

Local and Regional Bus Service

The Railyards area is well served by the Sacramento Regional Transit District, as well as other regional bus service providers. Regional commuter bus routes currently bring 17 bus routes to the vicinity with stops at either F Street or G Street on 7th Street and an additional 10 bus routes stop on J Street between 3rd and 6th Streets. The ultimate bus system serving the site will consist of direct bus-rail services provided by the rail agencies, regional bus agency services that include commuter bus routes, and local bus operations through Regional Transit and other local transit services. 7th Street will be designated as a transit-priority street, connecting downtown with Richards Boulevard and the River District. The River District, adjacent to and north of the Railyards, is Sacramento's next expansion of downtown north to the American River. Its future development is anchored by the new 1.25 million square foot State Office campus at 7th and Richards. This campus will eventually house 5,000 state workers and provide community amenities including food services and public meeting spaces for the neighborhood.

Within SVS, significant improvements to bus facilities are planned. Specifically, a new 18 bay Bus Mobility Center immediately adjacent to the rail trackways, and accessed directly from the overhead concourse, will provide terminal space for intercity bus, regional buses, and in the first years, Sacramento RT buses. The facility would also enable electric bus changing, thereby advancing the regional feasibility for inter-city ZEV transit. See section XXX for additional detail.

In addition, as 5th Street becomes connected from Richards Boulevard, it will become an important regional bus corridor. Buses could exit on either I-5 at Richards Boulevard, or via Hwy 160 and North 12th Street and then proceed to 5th Street, serving the emerging River District employment sites. At 5th Street, buses would route towards downtown, serving the Railyards District and, importantly, the Kaiser Health medical campus. At G Street, a new pedestrian bridge from 5th Street into the new passenger concourse will provide direct access for local and regional buses, providing direct pedestrian

access to the Station from the local bus stops for through routes and the bus layover bay for routes terminating at the Station.

Freight Rail

Presently, Union Pacific, Amtrak, San Joaquin and Capitol Corridor intercity trains operate at the Sacramento Valley Station. Union Pacific currently operates more than a dozen freight trains on the main line through the Railyards site each day. These freight trains operate on the outside tracks of the station platform area. Where the passenger tracks converge onto the freight main line before entering the I Street bridge, the California Railroad Museum's Sacramento Northern line crosses to access the historic shops buildings where the museum is planned to expand their operations.

Passenger train schedules are subject to approvals from UPRR and the number of trains governed by agreement between the state and UPRR. Currently, the CCJPA schedule of 32 trains is the maximum under the agreement. CCJPA is working with UPRR to add an additional third track to Roseville and to relocate service operation and crew-base facilities from SVS to this new location in the coming years. These improvements by the City's partnering rail agencies will have a direct bearing on the phasing of improvements at SVS.

Service and Loading

Streets within the circulation network have been laid out with sufficient width and turning radii at corners to allow service vehicles to access all portions of the site and buildings which are likely to need servicing and loading facilities. These facilities are restricted to certain sides of buildings and areas of open spaces to minimize their visual intrusion into the public realm. Refer to Figure 4.9 for portions of the site where servicing and loading is allowed and for the recommended access routes.

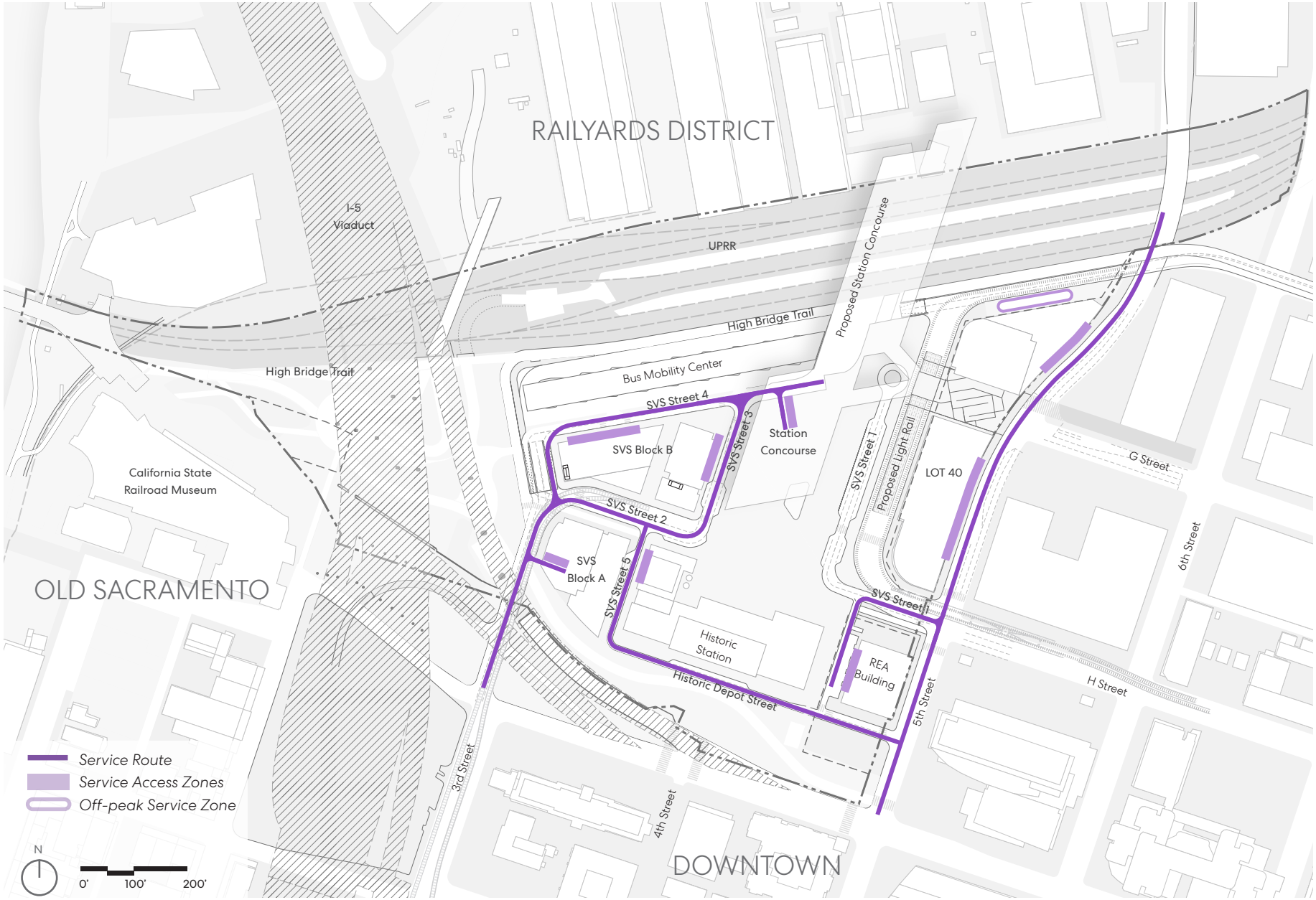

Figure 4.9 *Service Access*

4.4 ACCESSIBILITY

The goals and policies embedded within the layout of the Area Plan will improve mobility for all users, including those with physical disabilities. All infrastructure and facilities must be designed to meet the requirements of the Americans with Disability Act (ADA). Specific improvements include generous sidewalks, frequent and wide crosswalks, ramps alongside stairs, strategically located elevators and escalators, improved signage and wayfinding for pedestrians.

4.5 PUBLIC PARKING STRATEGY

All public parking on-site must be located in the lower level of the Bus Mobility Center. Surface parking lots and on-street parking are not allowed. Parking will focus on electric vehicle charging options, for both light-duty and medium-duty vehicles. Refer to Section 6, pages 160-162 for principles and guidelines for the provision of public parking in the Bus Mobility Center.

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