Chapter 1
Proposed Project

1.1 Introduction

The proposed project is the West Oakland Link (Project or Link). It is a new bicycle/pedestrian path connection between West Oakland and the bike path leading to the East Span of the San Francisco Oakland Bay Bridge (Bay Bridge) in Oakland, California (**Figure 1-1**). The Link would provide connect to existing segments of the regional San Francisco Bay Trail. In addition, the Link would provide safe access to the newly constructed bicycle/pedestrian path connecting to and on the Bay Bridge (Bay Bridge Trail), as well as a connection between West Oakland and the Port via the Class I trail along the east side of Maritime Street.

The Class I Link would be approximately 6,030 feet (1.14 mile) in length. On the west end, the Link would connect to the Bay Bridge Trail near the Caltrans maintenance facility on the south side of the Bay Bridge toll plaza. On the east end, the Link would connect to the existing bicycle/pedestrian path on Mandela Parkway in West Oakland. In addition, at the east end, there would be 8,170 feet of Class II bike lanes on surface streets. There may also be a 100-space parking lot on Wood Street. There could be stormwater treatment areas on undeveloped land west of Wood Street and landscaping in the Mandela Parkway median and along the Class I Link. Refer to **Figures 1-2** and **1-3**.

The Link was originally proposed by the Gateway Park Working Group as an element of Gateway Park, which is now named Judge John Sutter Regional Shoreline. The Gateway Park Working Group includes the following nine local, regional and state agencies: The Bay Area Toll Authority (BATA), the California Department of Transportation (Caltrans), San Francisco Bay Conservation and Development Commission (BCDC), California Transportation Commission (CTC), East Bay Regional Park District (EBRPD), City of Oakland, Port of Oakland, East Bay Municipal Utility District (EBMUD), and Association of Bay Area Governments (ABAG's). Subsequently, the Link, with its own independent utility and logical termini, was bifurcated from the Judge John Sutter Regional Shoreline project to become a standalone project. The agency responsible for operation and maintenance of the Link is anticipated to be Caltrans with full financial contribution from BATA.

Caltrans is the lead agency under the National Environmental Policy Act (NEPA). BATA is the lead agency under the California Environmental Quality Act (CEQA). The environmental documents are a CEQA initial study/mitigated negative declaration (IS/MND) and a NEPA categorical exclusion (CE). BATA has been working in close cooperation with Caltrans during the development of the project and environmental document.

This IS has been prepared in compliance with CEQA to support the proposed MND, the NEPA CE, and other required permits and approvals.

1.2 Project Purpose

The purpose of the Project is to provide a safe connection for bicyclists and pedestrians to travel between West Oakland and the Bay Bridge Trail and the Class I trail along the east side of Maritime Street. The area in between is occupied by industry, roadways, railways and Interstate (I-) 880. Current access for

bicyclists and pedestrians is on roadways extending through the industrial area that have heavy truck traffic, roadway intersections, and multiple at-grade rail crossings at Burma Road.

1.3 Project Description

The Project is a new Class I bike path[1] on Wood Street located in the City of Oakland, Alameda County, near the I-880 and I-80 interchange and the East Span of the Bay Bridge (**Figures 1-1**, **1-2**, and **1-3**).

The Class I portion of the Link would extend 6,030 feet (1.14 miles) between Mandela Parkway on the east and the Bay Bridge Trail on the west. The Link is an elevated structure for most of this distance to provide access across existing freeways, railways and industrial areas. It is an independent structure, except over the railroad tracks where it would be on the West Grand Avenue overcrossing structure. The elevated Link reaches a maximum height of 37 feet where it is on the overcrossing structure.

The Class I portion of the Link would be 17 feet wide (15 feet clear width and 2 feet for fencing), except on the West Grand Avenue overcrossing structure where it reduces to 14 feet wide (10 feet clear width and 4 feet for barrier and fencing). The Link would have a maximum grade of 5 percent. The Link would be open at all times and would have low level lighting (refer to Section 1.3.4.4).

The Project would also include 8,170 feet of Class II bike lanes. The Class II bike lanes constructed for the Link would extend along surface streets near the east touchdown of the Link, providing connections to Mandela Parkway and to the proposed Wood Street parking lot. A 100-space parking lot would be constructed at the east end of the Class I portion of the Link, if funding is available.

The Project could also include an innovative spur connection to the proposed Oakland Maritime Support Services (OMSS) building and is designed to land on the roof of this building. This connection would provide lookout areas for path users and access for first responders when attempting to reach path users in the event of an emergency.

The Class I portion of the Link at the Maritime Street area could also include a ramp that would tie in to the Class I path along the east side of Maritime Street and connect with the Port of Oakland.

The Project would require the conversion of roadway shoulders to bicycle path for the Link, and lane reduction at the West Grand Avenue/Mandela Parkway intersection.

[1] Bicycle Path Classifications:

- **Class I bikeways (bike paths)** are separate paths with exclusive right-of-way for bicycles and pedestrians, with minimal vehicular crossings.
- **Class II bikeways (bike lanes)** are striped lanes on streets, separating bicycles from vehicles, within the road right-of-way.
- **Class III bikeways** are lanes shared with motor vehicles.
- **Class IV bikeways (separated bikeways)** are bikeway for the exclusive use of bicycles.

Source: California Department of Transportation. Highway Design Manual. Chapter 1000 Bicycle Transportation Design. Last updated July 1, 2000. https://dot.ca.gov/-/media/dot-media/programs/design/documents/chp1000-a11y.pdf.

Project Location

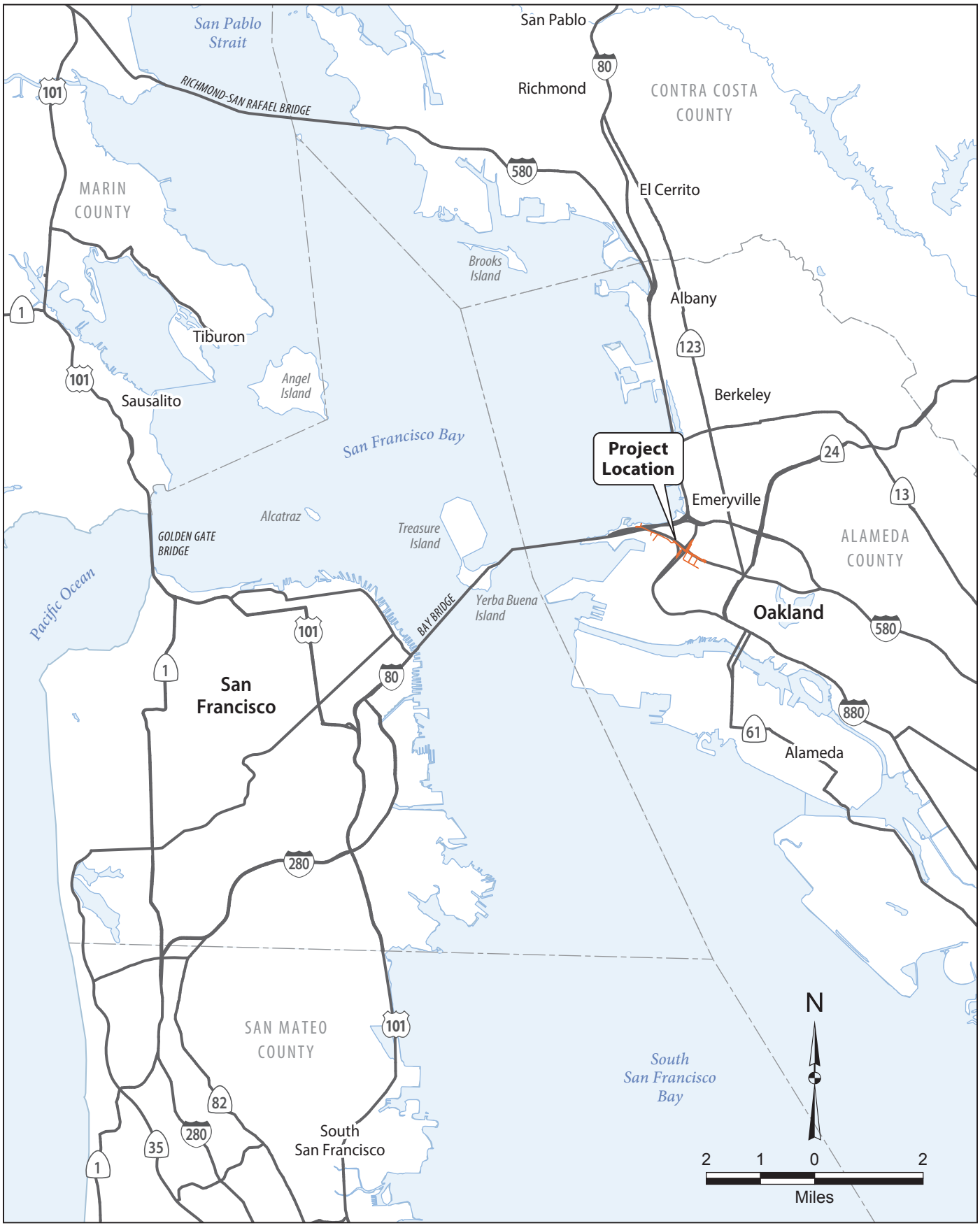

Figure 1-1

West Oakland Link

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Project Area

Figure 1-2

West Oakland Link

Bike Path Segments

Figure 1-3

Path

1.3.1 Class I Link Segments

The Class I portion of the Link has been divided into the following five segments described below from east to west (**Figure 1-3**).

1. Segment 1: At-Grade Connection to Mandela Parkway
2. Segment 2: Separate Elevated Structure East
3. Segment 3: West Grand Avenue Overcrossing
4. Segment 4: Separate Elevated Structure West
5. Segment 5: At-Grade Connection to Bay Bridge Trail
6. Ramp Connection to Class I Path along East Side of Maritime Street
7. Ramp Connection to OMSS Building

1.3.1.1 Segment 1: At-Grade Connection to Mandela Parkway

The Class I portion of the Link would be at-grade along the south side of West Grand Avenue, between Mandela Parkway and Campbell Street (**Figure 1-4**). This segment would be approximately 450 feet long and 15-feet wide since no fencing is required. There would be a landscaped island on the north side of the Link to separate the Link from vehicular traffic.

On the west side of the West Grand Avenue/Mandela Parkway intersection, the eastbound through lanes on West Grand Avenue would be reduced from three (existing) to two (future with Project).

Campbell Street and Willow Street would dead end or become a cul-de-sac where they intersect with the West Grand Avenue alley (the extension of West Grand Avenue that extends between Campbell Street and Wood Street) on the south side of West Grand Avenue. This would prevent regular vehicular traffic from crossing the new Class I portion of the Link because there would not be adequate vertical clearance under the Link structure for vehicles. The West Grand Avenue alley on the south side of the West Grand Avenue structure would be permanently closed to vehicular traffic or vacated. The north side of the West Grand Avenue alley would remain open.

1.3.1.2 Segment 2: Separate Elevated Structure East

From Campbell Street, the Class I portion of the Link would continue for approximately 1,050 feet as a separate structure along the south side of West Grand Avenue (**Figure 1-5a**). The Link would increase in elevation with a gradient that would be Americans with Disability Act (ADA) compliant and then cross over Willow Street and Wood Street (**Figure 1-5b**). After the Wood Street crossing, the Link would connect to the existing West Grand Avenue overcrossing (refer to Segment 3, below) just east of Frontage Road. The West Grand Avenue/Frontage Road crosswalk would be improved. Construction of this segment would require modifications to the West Grand Avenue alley, Campbell Street, and Willow Street. The West Grand Avenue alley is the narrow one-way (eastbound) street on the south side of West Grand Avenue, between Mandela Parkway and Wood Street. The alley would be permanently closed to vehicular traffic or vacated. Where Campbell Street currently intersects with West Grand Avenue, bollards would be installed to allow emergency vehicles access to Campbell Street but prevent regular vehicular traffic from crossing the new Class I portion of the Link on the south side of West Grand Avenue. Where Willow Street currently intersects with West Grand Avenue, a cul-de-sac would be created on the south side to prevent vehicular traffic, other than emergency vehicles, from crossing the new Class I portion of the Link.

1.3.1.3 Segment 3: West Grand Avenue Overcrossing

After the Wood Street overcrossing, the Class I portion of the Link would continue on the West Grand Avenue overcrossing for approximately 780 feet (**Figure 1-6a**). It would cross over Frontage Road and narrow-gauge railroad tracks (or a spur line), under I-880 freeway structures, and over the Port of Oakland as well as BNSF Railway (BNSF) and Union Pacific Railroad (UPRR) tracks (**Figure 1-6b**). The width of the eastbound travel lanes would be reduced by 1 to 2 feet to provide enough width for the Link, using the existing West Grand Avenue structure. After crossing the railroad tracks, the Link would continue as a separate structure on the south side of West Grand Avenue (refer to Segment 4).

1.3.1.4 Segment 4: Separate Elevated Structure West

After crossing railroad mainline and yard tracks, the Class I portion of the Link would continue for approximately 3,400 feet as a separate structure on the south side of West Grand Avenue and the I-880 outrigger structure. It would cross over Maritime Street and four at-grade rail crossings on Burma Road, then continue to the touchdown near the Caltrans maintenance facility (**Figures 1-7a and 7b** and **Figures 1-8a and 8b**). East of the Caltrans maintenance facility, the Link would descend with a switchback curve.

This segment could also include two ramps from the elevated structure to Maritime Street, which could be constructed if funding is available. On the east side of Maritime Street, there could be a 700-foot-long ramp, extending toward Admiral Toney Way. On the west side of Maritime Street, there could be a 250-foot-long ramp, extending to a roof-top landing and lookout area on the planned OMSS building. The maximum grade on the ramps would be 5 percent. The ramp and landing would be open at all times and would have low-level lighting (refer to Section 1.3.4.4). The completion date and operating hours for the OMSS building are not yet known.

1.3.1.5 Segment 5: At-Grade Connection to Bay Bridge Trail

From the west touchdown, the Class I portion of the Link would continue another 350 feet at grade level under the I-880/I-80 connection lanes, then connect to the existing Bay Bridge Trail (**Figures 1-8a and 1-8b**).

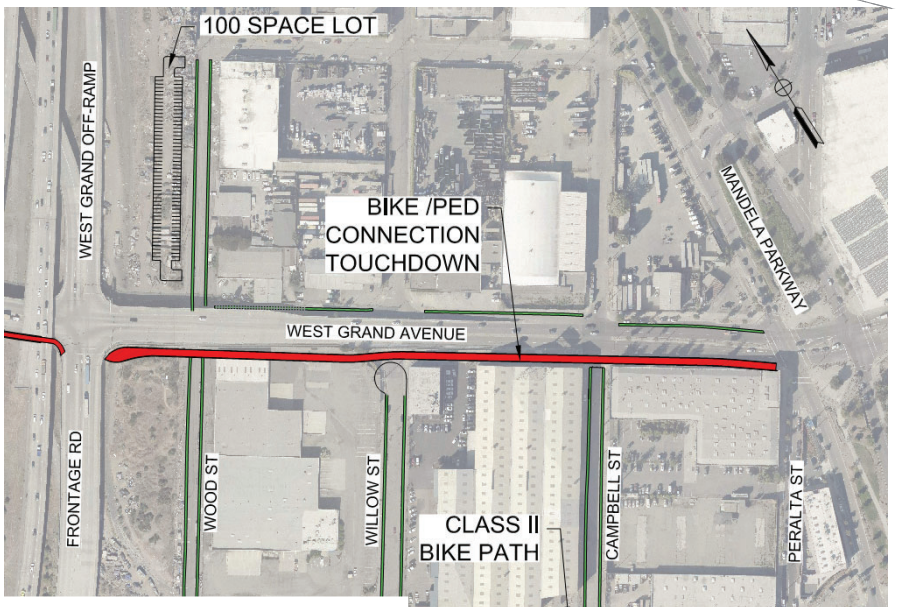
1.3.1.6 Ramp Connection to Class I Path along East Side of Maritime Street

The Class I portion of the Link at the Maritime Street area could also include a ramp that would tie in to the Class I path along the east side of Maritime Street to and from Admiral Toney Way. The tie-in at the Link segment would begin 600 feet east of Maritime Street, continue to the south, and touch down approximately 130 feet north of Admiral Toney Way. The tie-in would provide access to the Port of Oakland and additional access for first responders when attempting to reach path users in the event of an emergency.

1.3.1.7 Ramp Connection to OMSS Building

The Project could also include an innovative spur connection to the OMSS building; the spur would be designed to land on the roof of this building. The OMSS building would provide lookout areas, restroom facilities, and concessions for path users and access for first responders when attempting to reach path users in the event of an emergency.

Bike Path Segment 1



X ▶ Direction and Location of Photo

Photo B: Mandela Parkway

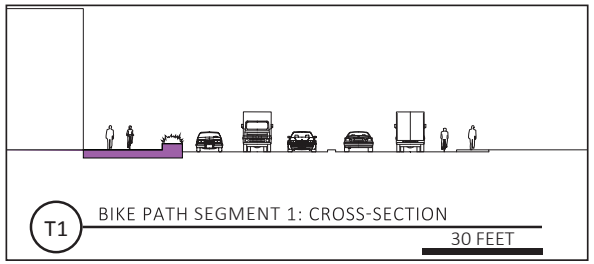


Figure 1-4

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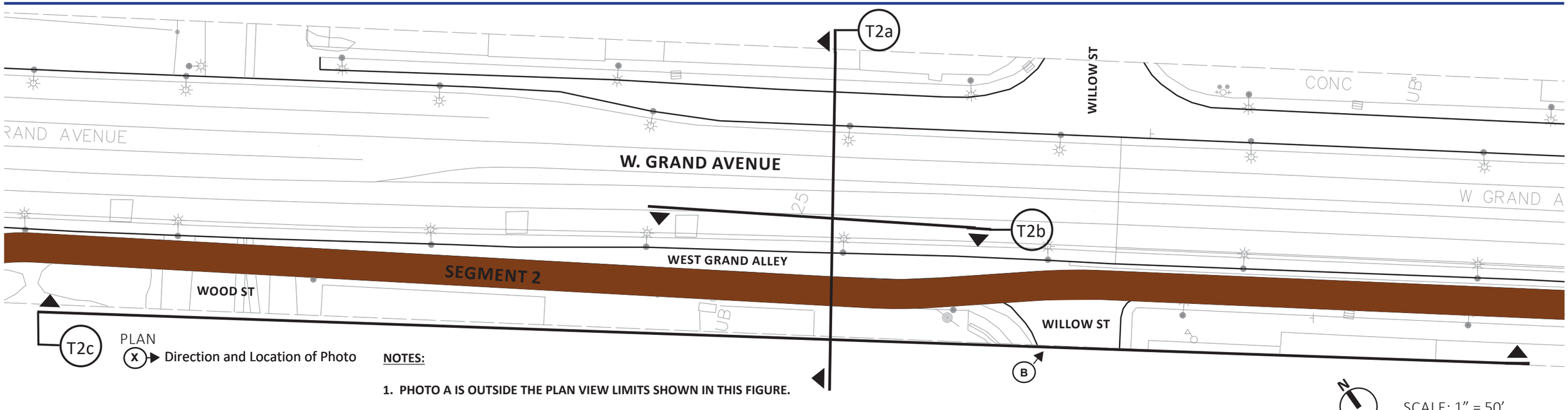
Bike Path Segment 2



NOTES:

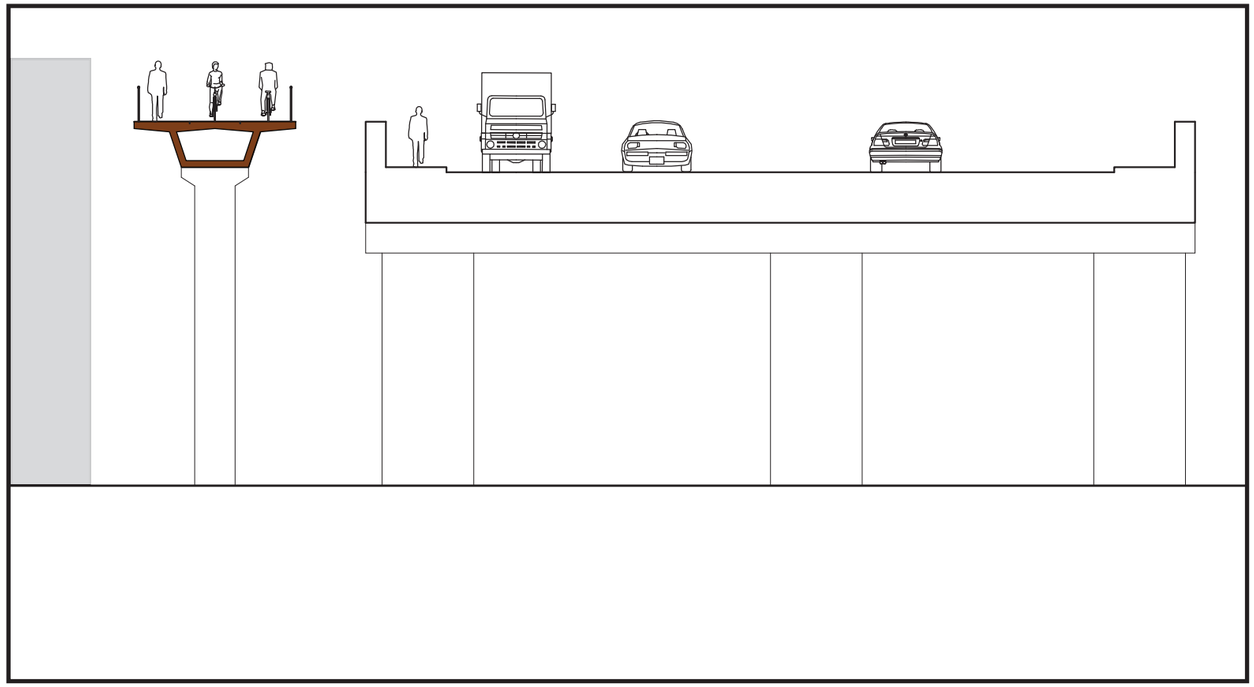
1. **PHOTO A IS OUTSIDE THE PLAN VIEW LIMITS SHOWN IN THIS FIGURE.**
2. **FOR LOCATION OF PHOTO A, SEE LOCATION OF SIMULATED KEY VIEW 4 IN FIGURE 2.1-1.**

Photo A: West Grand Avenue

Photo B: Willow Street

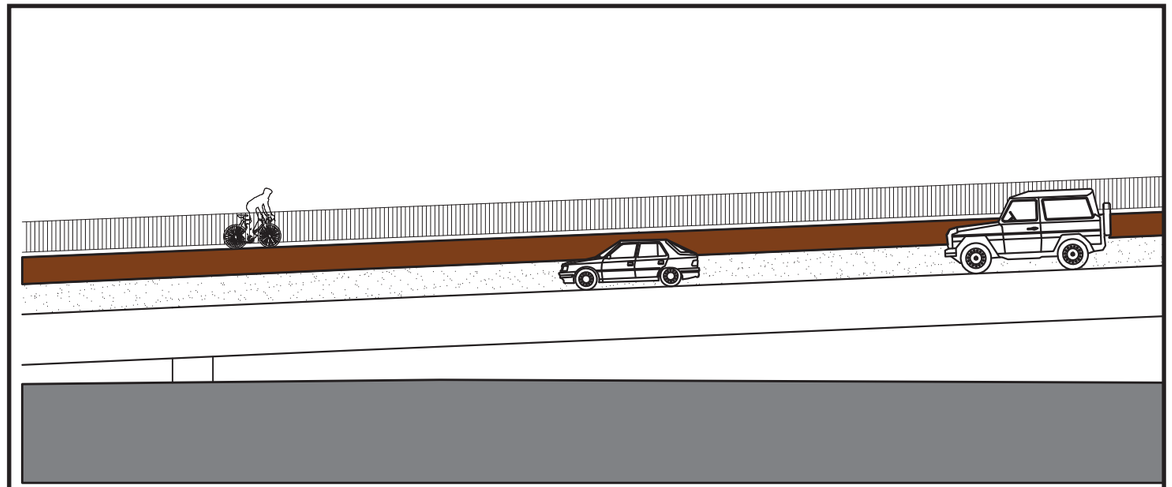
Figure 1-5a

Bike Path Segment 2



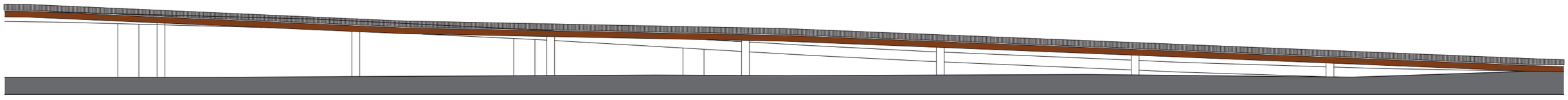
T2a SEGMENT 2: CROSS SECTION

SCALE: 1” = 15’



T2b SEGMENT 2: ELEVATION LOOKING SOUTH

SCALE: 1” = 15’

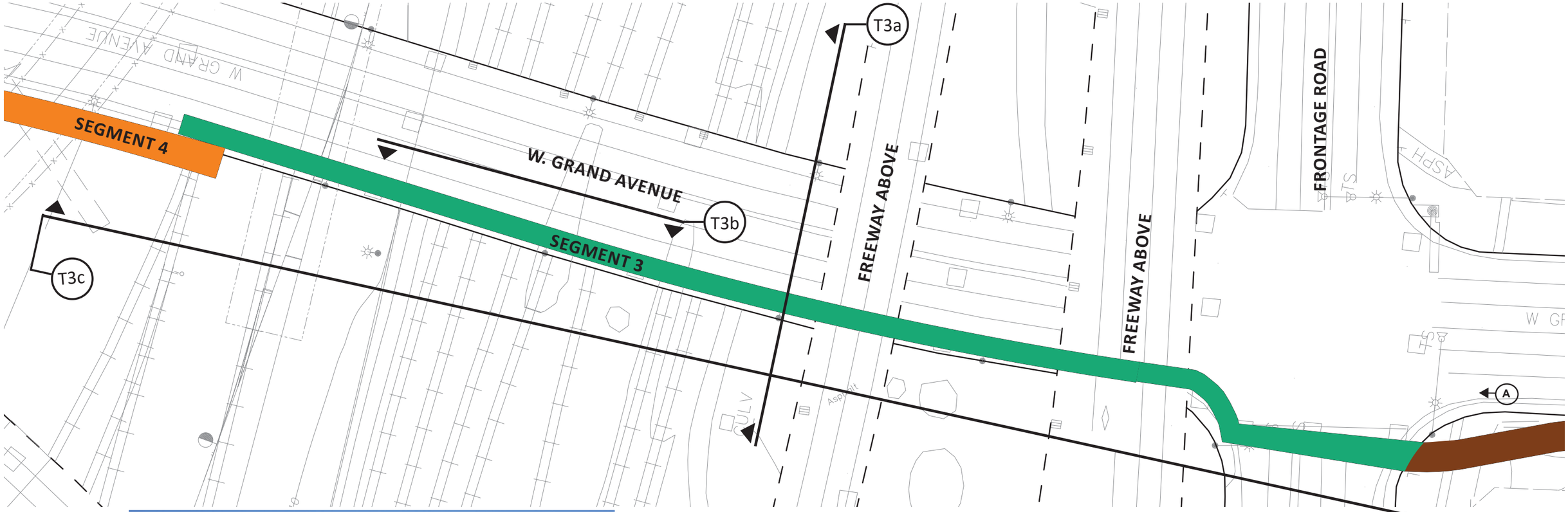


T2c BIKE PATH ELEVATION LOOKING NORTH

SCALE: 1” = 50’

Figure 1-5b

Bike Path Segment 3



PLAN

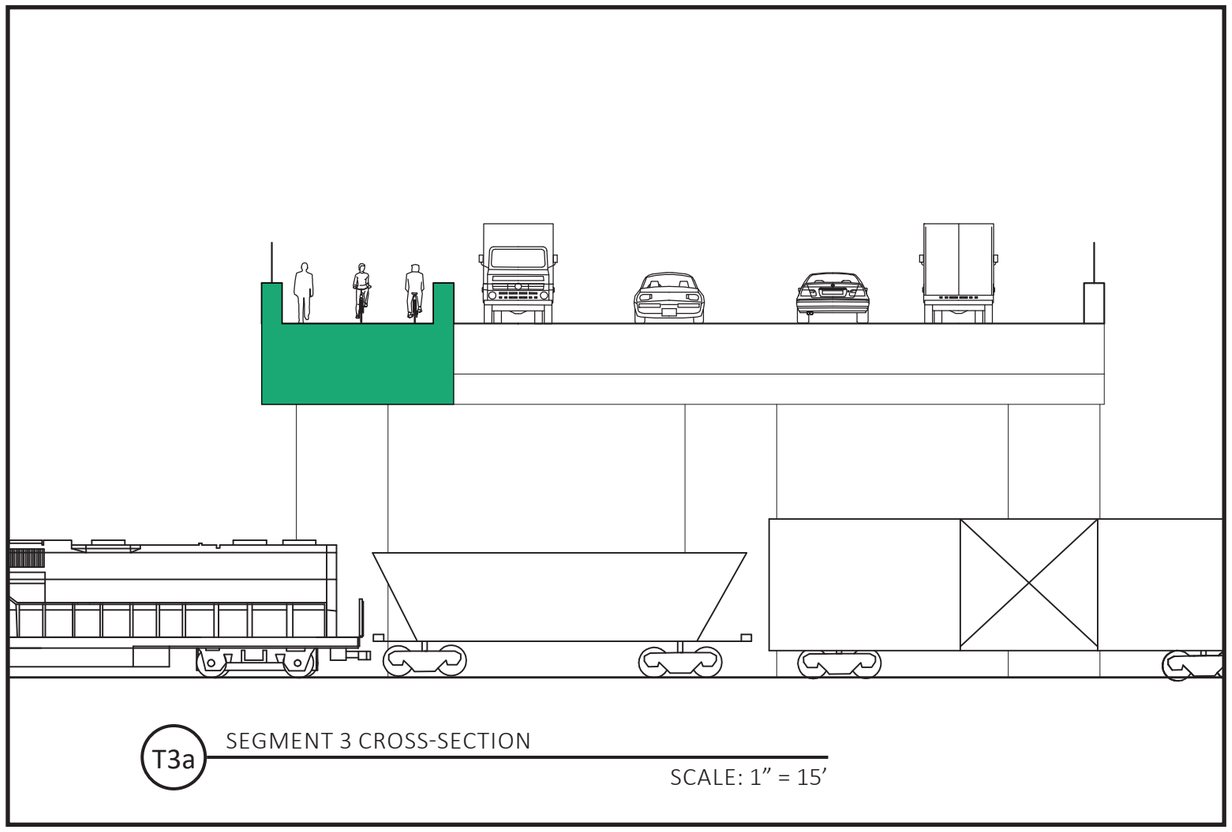
SCALE: 1” = 50’

Photo A: West Grand Avenue

X Direction and Location of Photo

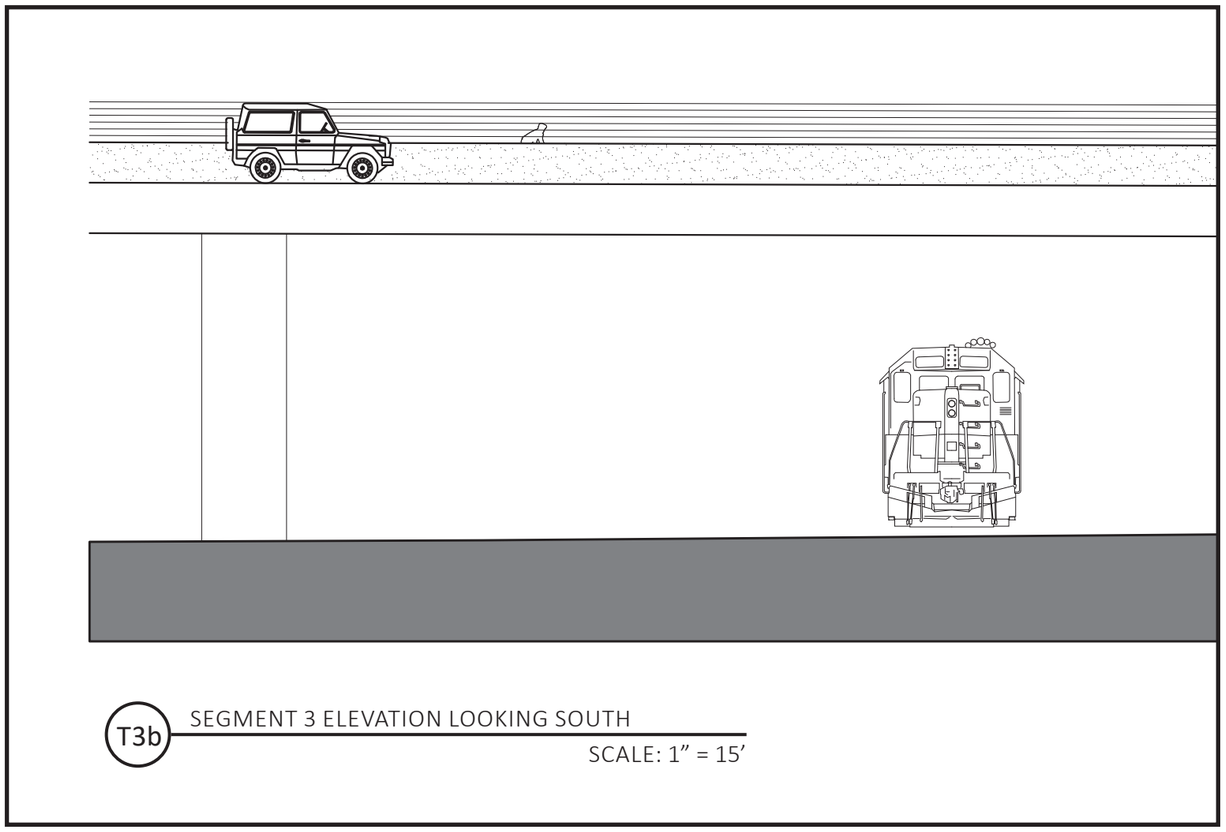
Figure 1-6a

Bike Path Segment 3



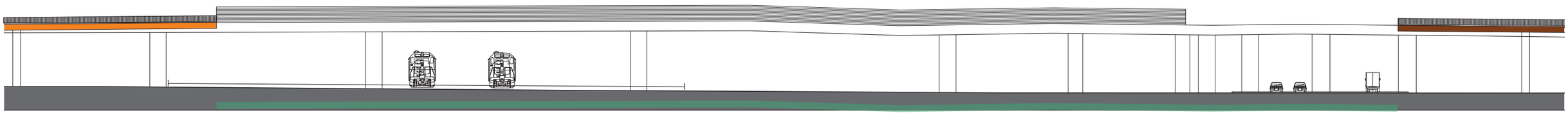
T3a SEGMENT 3 CROSS-SECTION

SCALE: 1” = 15’



T3b SEGMENT 3 ELEVATION LOOKING SOUTH

SCALE: 1” = 15’

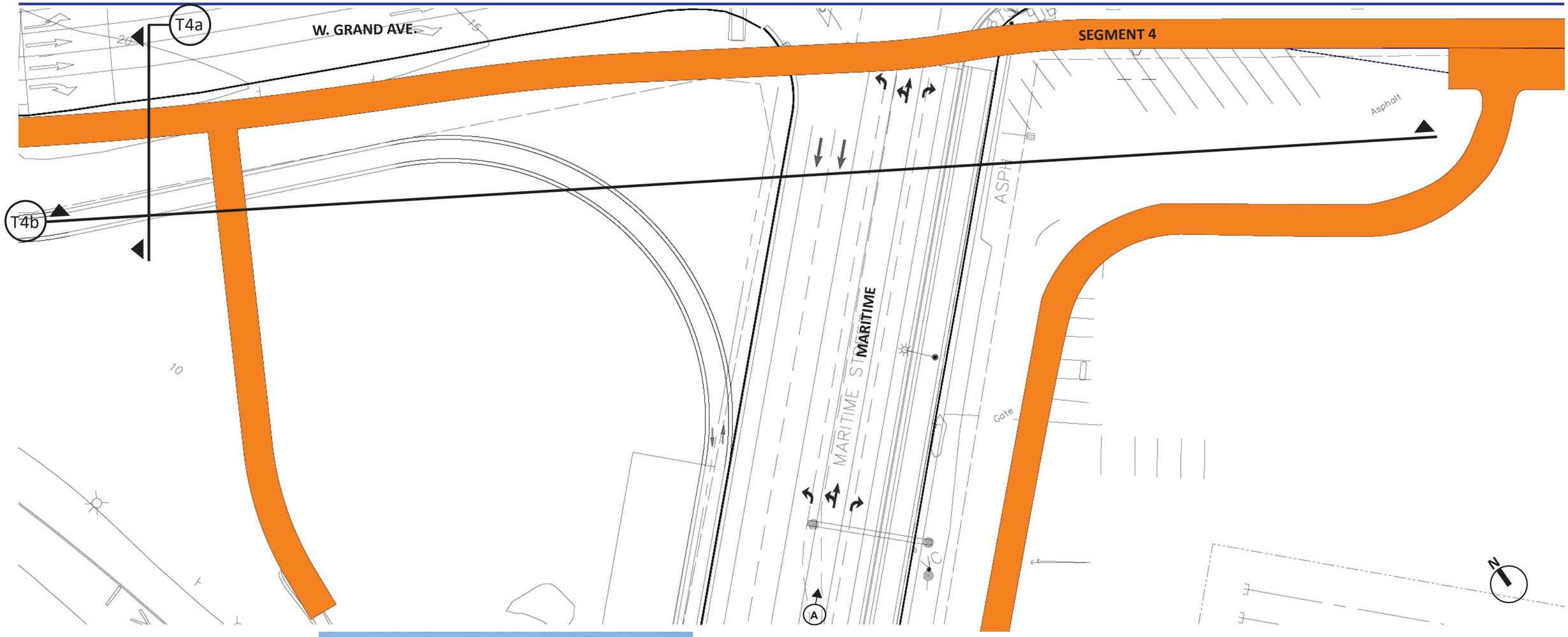


T3c BIKE PATH ELEVATION LOOKING NORTH

SCALE: 1” = 50’

Figure 1-6b

Bike Path Segment 4



PLAN

SCALE: 1” = 50’

Photo A: Maritime Street

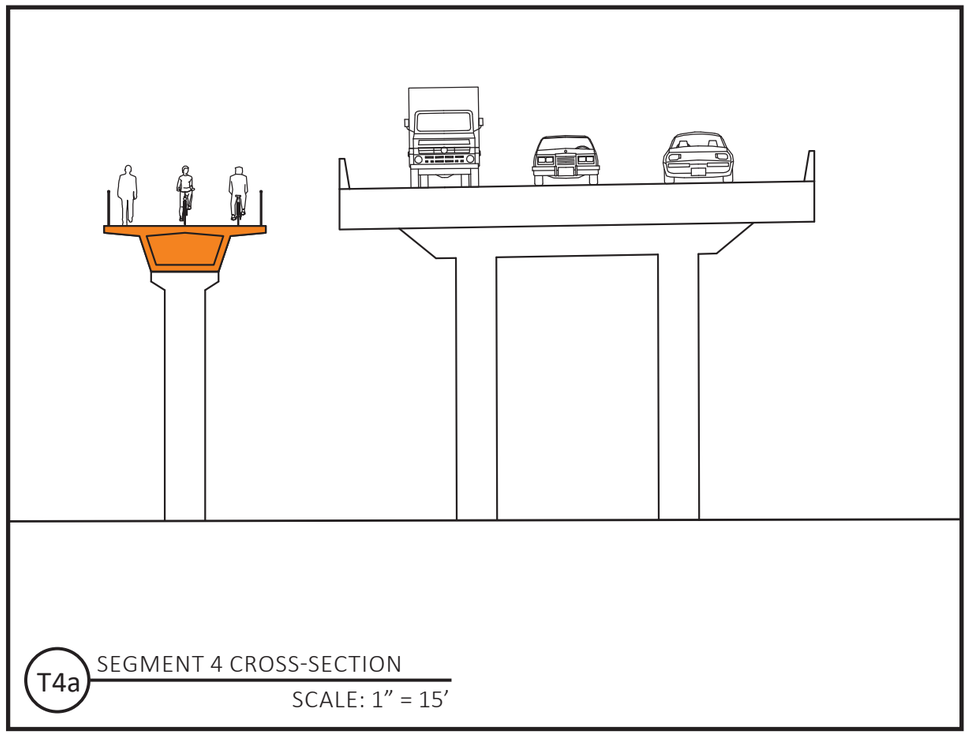
(X)▶ Direction and Location of Photo

Figure 1-7a

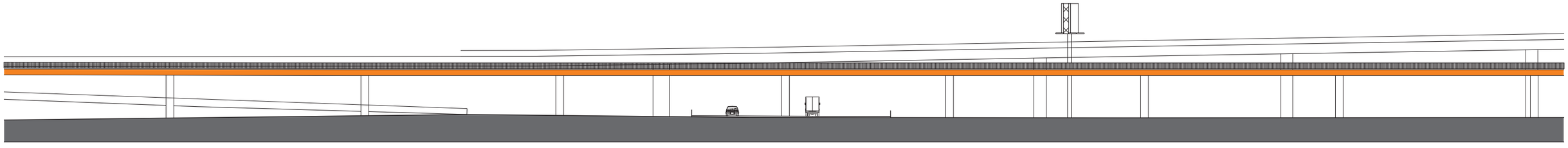
West Oakland Link

EINWILLERKUEHL

Bike Path Segment 4



T4a SEGMENT 4 CROSS-SECTION
SCALE: 1” = 15’



T4b BIKE PATH ELEVATION LOOKING NORTH
SCALE: 1” = 50’

Figure 1-7b

Bike Path Segment 5

Photo A: Bay Bridge Trail

Photo B: View from I-80

BAY BRIDGE TRAIL

SEGMENT 5

W. GRAND AVE.

SEGMENT 4

BAY BRIDGE TRAIL

T5a

T5b

NOTES:

1. PHOTOS A AND B ARE OUTSIDE THE PLAN VIEW LIMITS SHOWN IN THIS FIGURE.

2. FOR LOCATION OF PHOTO A, SEE LOCATION OF SIMULATED KEY VIEW 7 IN FIGURE 2.1-1.

3. FOR LOCATION OF PHOTO B, SEE LOCATION OF SIMULATED KEY VIEW 8 IN FIGURE 2.1-1

N

SCALE: 1” = 50’

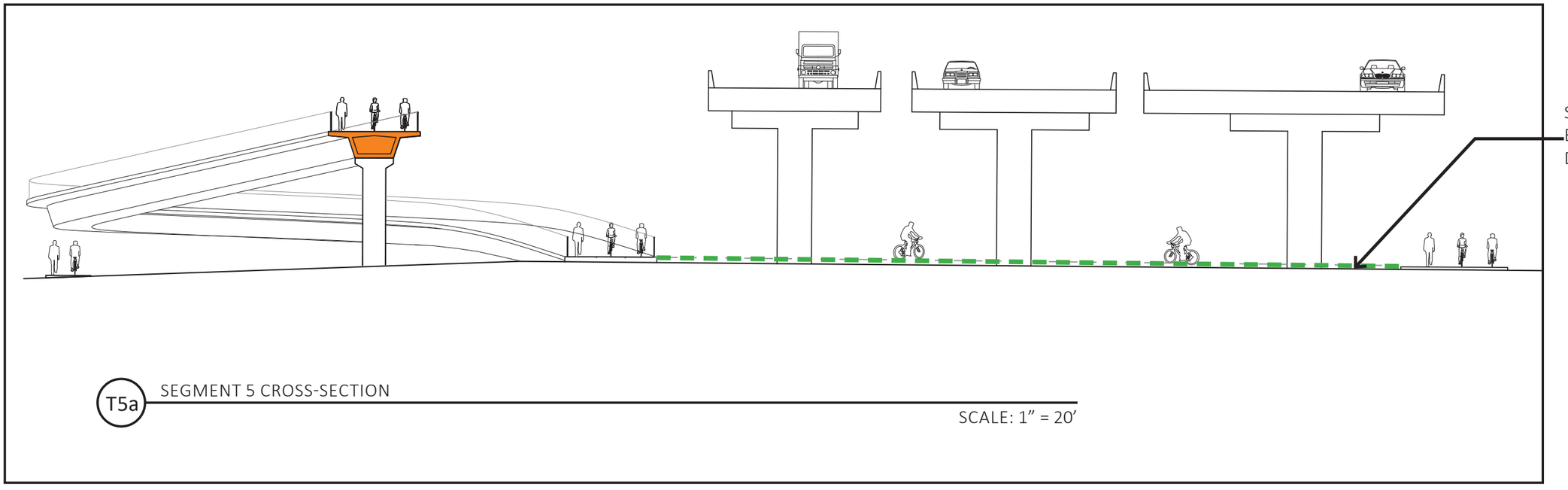
Figure 1-8a

West Oakland Link

PLAN

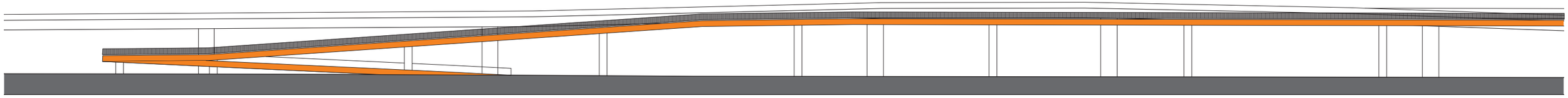
EINWILLERKUEHL

Bike Path Segment 5



T5a SEGMENT 5 CROSS-SECTION

SCALE: 1" = 20'



T5b BIKE PATH ELEVATION LOOKING NORTH

SCALE: 1" = 50'

Figure 1-8b

1.3.2 Class II Bike Lanes

The Project also includes Class II bike lanes along surface streets near the east touchdown of the Link, providing connections to Mandela Parkway, the proposed Wood Street parking lot, and planned development along Wood Street (**Figure 1-3**). The width of the Class II bike lanes, extending along each side of the street, would be 5 feet. The Class II bike lanes, which cover approximately 8,170 feet in length, would be constructed after the Class I portion of the Link, if funding is available.

Class II bike lanes would extend along the following surface streets:

- West Grand Avenue alley (westbound), from Peralta Street to Wood Street
- 20th Street, from Peralta Street to Wood Street
- Wood Street, from 20th Street to 24th Street
- Willow Street, from 20th Street to West Grand Avenue
- Campbell Street, from 20th Street to West Grand Avenue
- Wood Street Parking Lot

The Project could include construction of a new 100-space parking lot located on the west side of Wood Street, north of West Grand Avenue, and beneath the east side of the I-880 freeway (**Figure 1-3**). The parking lot would cover 0.48 acre (21,217 sf).

The parking lot would include lighting to achieve a minimum of 1 foot-candle[2] at primary circulation areas. The parking lot would include landscaping, which could include drought-tolerant trees, shrubs and groundcover on an additional 6,000 sf. The purpose of the parking lot is (1) to provide a convenient way for some users of the Link to park and then walk/bicycle on the Link and (2) to provide an alternative way for some users of Judge John Sutter Regional Park to reach the park by bicycling or walking rather than driving to the park itself. The parking lot would increase the range of users for the Link and park, including people who are unable to access the Link by walking or bicycling because of distance or other obstacles. Some users with mobility challenges may not be able to walk or bicycle the entire distance to reach the Link (or do it safely) but could use the Link if they were to drive to the parking lot and then walk or bicycle along the Link to reach the park or other destinations. The Wood Street parking lot would be constructed after the Link, if funding is available.

1.3.3 Mandela Parkway Median

The Project could include streetscape improvements, such as landscaping and art work, on the Mandela Parkway median within one block of West Grand Avenue. The landscaping would enhance the existing landscaping and would not involve any major changes.

1.3.4 Project Features

Project features would include access points, fencing, lighting, rest areas, way-finding elements, landscaping, stormwater drainage infrastructure, safety measures, and operations and maintenance facilities. The final design process will include community workshops to solicit community input on

[2] The term foot-candle refers to a measurement of illumination. It is a unit of illumination, equivalent to the illumination produced by a source of one candle at a distance of one foot and equal to one lumen incident per square foot. http://en.wikipedia.org/wiki/foot-candle.

project aesthetics and landscaping. The design will incorporate design elements desired by the community to instill a feeling of pride and project ownership that reflects the value and character of the community.

1.3.4.1 Access

As described above for Segments 1 and 5, the Link would be accessible from Mandela Parkway at West Grand Avenue on the east end and from the Bay Bridge Trail on the west end (**Figure 1-3**). In addition, there could be access points on either side of Maritime Street, whereby the elevated portion of the Link could have ramps extending down to the east and/or west side of Maritime Street (**Figure 1-3**). On the west side of Maritime Street, the ramp would be approximately 250 feet in length and could include a landing on the roof top of the planned OMSS building. On the east side of Maritime Street, the ramp would be approximately 700 feet. Both ramps would have a maximum grade of 5 percent. As mentioned previously, the Link and landing would be open at all times and would include low level lighting. OMSS building hours are unknown at this time.

1.3.4.2 Design

The Class I portion of the Link would be multipurpose and accessible to bicyclists and pedestrians. It would be designed to comply with the Caltrans Highway Design Manual for paths. The elevated structure would be designed to comply with current Caltrans structural design requirements for pedestrian bridges, including Caltrans Standard Plans and 2018 Standard Specifications (or the most current). Ramps and curb cuts would comply with the ADA requirements. In addition, the elevated portions of the Link and any retaining walls would have some texture on the columns and likely on the outside edge of the bridge deck.

1.3.4.3 Fencing and Barriers

The elevated portion of the Link would include fencing that is 8 feet in height above the finished surface. Fencing would be needed where the path crosses over a road or railroad; a metal guardrail barrier would be used over other areas. The fencing and barriers would comply with all relevant building, Caltrans, railroad, and safety codes. The fencing and metal guardrail barrier types have not been determined but would provide views. It is likely to be chain link fencing when the Link is on West Grand Avenue over the railroad tracks (Segment 3). For Segment 3, there would be a concrete barrier with a minimum height of 42 inches between the Link and vehicular traffic. The design for the fencing and metal guardrail barrier would meet the technical and safety requirements of the *Highway Design Manual*, following the project aesthetic theme and language developed during the community design workshops.

1.3.4.4 Lighting

The Link would be open at all times. Therefore, low-level lighting would be installed along the Link. It is anticipated that 1-foot-candle (minimum) light-emitting diode (LED) lights would be side mounted in the barrier along the elevated segments, although there could also be some overhead lights installed at the top of the fencing if deemed necessary for safety. Lighting along the at-grade segments would be provided by new or existing streetlights or pedestrian light standards and would be in conformance with the City of Oakland's Outdoor Lighting Standards and the Port of Oakland's Exterior Lighting Policy. The design of the lighting system would prioritize safety while preventing light pollution. The community can help develop creative design alternatives rather than the traditional cobra-head lighting option.

1.3.4.5 Lookout Areas

The elevated portion of the Link could have some wider areas that would serve as lookout areas, but their number and location has not been determined. It is anticipated that there would be up to three such lookout areas dispersed along the elevated segments.

1.3.4.6 Way-Finding and Interpretive Elements

The Link would include centerline striping and way-finding signage. There could also be safety signage, such as signs indicating the bicycle speed limit. In addition, the Link could include *way-finding and interpretive elements*, which may include topics of community interest such as old Bay Bridge artifacts, to help guide users to the existing paths and to the new East Span of the Bay Bridge. Proposed signage on West Grand Avenue would adhere to Caltrans's Gateway Monument Policy.

1.3.4.7 Landscaping

The elevated portion of the Link could include planters in the wider lookout areas or attached to the exterior sides of the structure. There could also be some landscaping under the structure at the west end touchdown (where the Link makes a switchback curve and descends) and at the east end (between Wood Street and Campbell Street).

1.3.4.8 Stormwater Drainage

Stormwater on the elevated structure would likely drain off at downspouts at the columns and continue as surface flows or be conveyed to an existing drainage system, depending on the existing drainage patterns and facilities at each location. There would be no stormwater flowing directly into existing wetlands or drainages.

The Project includes provision of approximately 0.93 acres (40,510 sf) of stormwater treatment because the Project would add approximately 1.68 acres (73,180 sf) of new impervious surfaces (WRECO 2014a). This represents a treatment ratio of 1:1.8. Stormwater treatment options include vegetated flow-through treatment areas or bio-treatment basins beneath the elevated Link and/or in vacant areas next to or adjacent to freeways and the proposed Wood Street parking lot (**Figure 1-9**).

1.3.4.9 Safety

In addition to the fencing and lighting described above, the elevated portion of the Link would include solar call boxes and security cameras. It is anticipated that the Link would be patrolled periodically by California Highway Patrol (CHP) or City of Oakland officers on bicycles. Closed-circuit television would record and retain images for up to four weeks; this information would be available to law enforcement should a crime occur.

1.3.5 Operation & Maintenance

The Link would be open 24 hours per day, seven days per week. Maintenance would include weekly trash removal, monthly sweeping, and bi-annual inspections for restriping, resurfacing, repairs, and bridge inspection and maintenance per state requirements. BATA would be financially responsible for maintenance of the completed project, including any installed landscaping. BATA is currently in discussions with Caltrans regarding operations and maintenance responsibilities. An agreement is expected to be concluded before the start of construction.

1.4 Interaction with the Bay Bridge Forward Projects

The first phase of the Bay Bridge Forward projects, Phase 1, completed in January of 2019, converted the existing shoulder at the West Grand Avenue on-ramp to the Bay Bridge to an high-occupancy vehicle (HOV)/bus lane. Phase 2, expected to open in late 2021, will provide additional access and operational improvements for carpools and buses by converting the existing westbound right shoulder on West Grand Avenue between the I-580 eastbound on-ramp and the intersection of West Grand Avenue with Frontage Road to an HOV/bus lane. In addition to the proposed Link, a multi-use path for bicyclists and pedestrians, separated from vehicle traffic with a barrier, is planned for construction on the south side of West Grand Avenue between Maritime Street and Mandela Parkway under Bay Bridge Forward Phase 2. The West Oakland Link would provide a 15-foot Class I path for the majority of its length, the majority of which would be constructed on an independent structure. In contrast, the Bay Bridge Forward Phase 2 would provide an 8- to 10-foot Multi-use Path (MUP) which would be separated from the roadway by a barrier.

1.5 Project Phasing

The Link may be implemented in more than one phase to respond to timing and availability of funds and to the schedule for related projects. The following section discusses possible phasing options.

All Class II lanes and bicycle boxes would be installed as part of the initial period of construction, regardless of Phasing Option.

1.5.1 Phasing Option 1

Phasing Option 1 would construct approximately 2,900 feet of Class I path structure, beginning approximately 600 feet east of Maritime Street and continuing to the Bay Bridge Trail. Starting from the east, the structure would begin approximately 600 feet east of Maritime Street with an interim connection to the multi-use path (MUP), which was installed as part of the high-occupancy vehicle/bus extension project. Under Phasing Option 1, the West Oakland Link profile would be lowered to tie in to West Grand Avenue. The structure would continue west, parallel to West Grand Avenue. The elevated Link structure would span Maritime Street and the existing at-grade railroad crossings near Burma Road. The structure would then continue under the Interstate 80 ramps and tie in at the connection to the Bay Bridge Trail. Construction under the initial build portion of Phasing Option 1 would correspond to a portion of Segment 4 and all of Segment 5.

When additional funding for construction is available, the Link would be extended eastward to Mandela Parkway. The interim connection to West Grand Avenue could either be demolished or retained as an emergency access point. The remaining easterly portion of Segment 4 would be constructed with a slightly revised vertical profile. Segments 1 through 3 as well as the ramps to Maritime Street and Oakland Maritime Support Services (OMSS) (the remainder of Segment 4) would also be constructed.

1.5.2 Phasing Option 2

Phasing Option 2 would be similar to Phasing Option 1. However, a 600-foot segment on the east side of Maritime Street would be designed and constructed so that the bridge deck could be raised during a future phase of the project, providing a smooth profile and minimizing elevation changes for the Link under the full build condition. Construction under the initial build portion of Phasing Option 2 would correspond to a portion of Segment 4 and all of Segment 5.

Potential Stormwater Treatment Areas

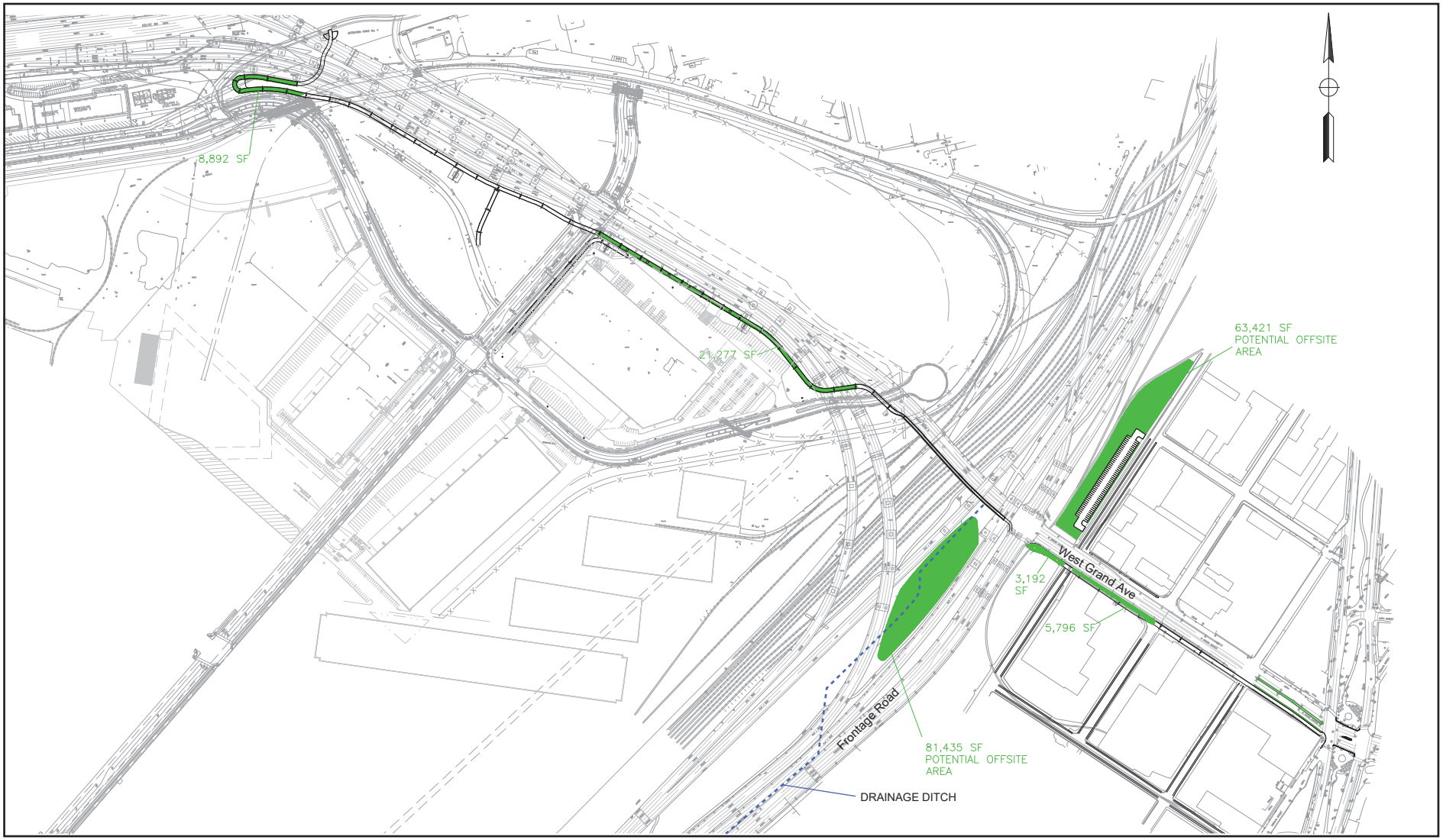


Figure 1-9

When additional funding for construction becomes available, the Link would be extended eastward to Mandela Parkway. The above-mentioned 600 feet of the bridge deck could be raised to its final elevation by extending the bridge columns. Segments 1 through 3, the remaining easterly portion of Segment 4, and the ramps to Maritime Street and OMSS would also be constructed.

1.5.3 Phasing Option 3

Phasing Option 3 would construct Segment 4, except for the ramps to Maritime Street, OMSS, and Segment 5 of the Link project.

When additional funding for construction is available, Segments 1 through 3 and the ramps to Maritime Street and OMSS could be constructed.

1.6 Project Construction

1.6.1 Excavation and Grading

Project construction would require excavation, grading and new pavement as follows:

- Excavation up to 5 feet deep for 45 column footings for the elevated portion of the Link (note that supporting piles would be driven 50–60 feet deep);
- Excavation up to 3 feet deep for at-grade modifications at the west end touch down near the Caltrans maintenance facility and the east touch down at Campbell Street and Willow Street, where there would be intersection modifications to create cul-de-sacs;
- Excavation up to 3 feet deep for at-grade modifications along City streets for new pavement sections, sidewalks and driveways; and
- Excavation up to 3 feet deep and grading for gravel and asphalt pavement at the Wood Street parking lot.

It is estimated that the Project would result in up to approximately 2,600 cubic yards of cut material.

During excavation, soils would be tested for contamination. Clean soils would be used or sold for reuse at nearby construction sites. Contaminated soils would be disposed of at an appropriate facility.

It is estimated that approximately 44 trees could be removed along the alignment, based on review of an aerial photo and a site visit. Replacement planting would proceed consistent with City of Oakland municipal code.

1.6.2 Construction Hours and Duration

Construction is anticipated to occur between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday. It is possible that evening work will be required for construction over Maritime Street and Burma Road. There would be no construction after 7:00 p.m. or on weekends or national holidays without special permission from the City of Oakland.

If the project is constructed as a single contract, project construction is estimated to occur over 24 months from October 2023 to October 2025. However, as discussed above, the project may be constructed in phases:

- Phasing Option 1 would take 21 months for the initial build and the remaining construction would take an additional 18 months.
- Phasing Option 2 would take 21 months for the initial build and the remaining construction would take an additional 18 months.
- Phasing Option 3 would take 21 months for the initial build and the remaining construction would take an additional 15 months.

1.6.3 Vehicle Access

Construction truck activity and haul routes would be limited to key collector roads, including West Grand Avenue, Maritime Street, Frontage Parkway, and Wood Street. Construction vehicles may also use Burma Road, Mandela Parkway, Campbell Street, Willow Street, Peralta Street, and 20th Street.

Construction activities are not anticipated to result in any long-term road closures, except for eastbound West Grand Avenue alley and its intersections with Willow Street and Campbell Street West. Temporary road closures could include Campbell Street and Willow Street for intersection modifications at West Grand Avenue, West Grand Avenue alley to allow for footing construction and excavation, and Maritime Street to place falsework over Maritime Street for the new elevated structure.

Construction vehicles and equipment would not park or stop along key collector roads, such that they would block emergency vehicle access or hinder emergency response.

Temporary lane closures could occur on West Grand Avenue, Maritime Street, Wood Street, Willow Street, Engineers Road, Peralta Street, Campbell Street, and 20th Street. In those instances, detours will be provided.

1.6.4 Construction Equipment

Construction equipment and vehicles could include backhoes, loaders, excavators, tractors, cranes, lifts, pile drivers, concrete trucks and pump, paving machine, compactors/rollers, and trucks for demolition, grading, and materials delivery.

Construction equipment and power tools could include jackhammers, air compressors, generators, concrete saws, power drills, welding equipment, sandblasting equipment, painting equipment, power and impact wrenches, and the like.

Piles for the 45 footings (estimated amount to support the elevated portion of the Link) could be driven piles (precast concrete or steel) or cast-in-drilled-hole concrete piles, or a combination depending on the specific site conditions along the structure.

1.6.5 Staging

Construction staging would be on a disturbed or paved area, away from drainages. Options include using the Wood Street parking lot area before parking lot construction begins and/or renting a nearby parcel, possibly along Maritime Street or Burma Road.

1.7 Avoidance and Minimization Measures

As part of the Project, standard avoidance and minimization measures (AMMs) would be implemented, as listed below.

AMM AES-1: Apply Textured Surfaces

Community input will ultimately drive the design on aesthetics and finishes used for support columns, elevated structures, and retaining walls so that they incorporate design elements desired by the community. However, at a minimum, a roughened, textured surface shall be used for support columns, elevated structures, and retaining walls. This will soften the verticality of surfaces by providing visual texture and will reduce the amount of smooth surfaces that can reflect light, reducing glare, and be attractive for graffiti. A different texture than the minimum requirement may be used if community input favors such a change.

AMM AES-2: Replace Vegetation

Vegetation that is destroyed, damaged, or removed by the Project or through incidental construction activities will be replaced, irrigated, and maintained during a plant establishment period. The plant establishment period for plants installed as part of the Project will be 3 years; 5 years for plants installed through mitigation. In addition, all disturbed areas shall be restored to their previous condition or better. Disturbed areas will be hydroseeded to blend the area into the surrounding context. In addition, tree and shrub plantings may be feasible in disturbed areas, where necessary.

AMM CUL-1: Stop Work if Buried Cultural Resources Are Discovered

During Project construction, the Bay Area Toll Authority (BATA)/Caltrans, or construction contractor, will ensure that work is stopped work if buried cultural resources are inadvertently discovered during ground-disturbing activities. Buried cultural resources include, but are not limited to, chipped or ground stone, historic debris, building foundations, or human bones. If there is evidence of such resources, work will stop in that area and within 100 feet of the find until a qualified professional archaeologist can assess the significance of the find and develop appropriate treatment measures in consultation with BATA/Caltrans. BATA/Caltrans will be responsible for ensuring that treatment measures are implemented prior to the resumption of construction on that portion of the site. If discovered resources include human bones, implementation of **AMM CUL-2** is also required.

AMM CUL-2: If Human Remains Are Discovered, Comply with State Laws Relating to Human Remains.

If human bones or remains are inadvertently discovered during Project construction, BATA/Caltrans, or construction contractor, will ensure that work is stopped work if buried cultural resources are inadvertently discovered during ground-disturbing activities. Consequently, if any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains (1) until the County Coroner has been informed and has determined that no investigation as to the cause of death is required and (2), if the remains are of Native American origin:

- The descendants of the deceased Native American(s) have made a recommendation to the landowner or the person responsible for the excavation work regarding the means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in PRC Section 5097.98; or

- The NAHC has been unable to identify a descendent or the descendent failed to make a recommendation within 24 hours after being notified by the NAHC.

1.8 Right-of-Way and Permits/Approvals Needed

1.8.1 Right-of-Way

The right-of-way along the Class I portion of the Link is primarily owned by Caltrans or the City of Oakland, with the exception of up to five privately owned parcels between Wood Street and Frontage Road where there would be minor ROW acquisitions. The right-of-way along the Class II bike lanes is owned by the City. The right-of-way for the Wood Street parking lot is owned by BNSF. The City of Oakland has committed to granting a highway or structure easement where the Link goes over City-owned property that might have been leased to third parties.

1.8.2 Permits/Approvals

The Project may require permits or approvals or may obtain funding from the following agencies:

- Federal Highway Administration (FHWA) – Funding
- California Department of Transportation (Caltrans) – Encroachment Permit, National Pollutant Discharge Elimination System (NPDES) Statewide Stormwater Permit (Order No. 2012-0011-DWQ), funding
- City of Oakland – Encroachment, grading, and tree permits
- Port of Oakland – Encroachment permit
- Alameda County Transportation Commission – Funding
- Bay Area Toll Authority – Board Approval, Funding
- City of Oakland and California Department of Toxic Substances Control (DTSC) - Approval of use not identified in the Oakland Army Base Reuse Plan and incorporated into the Remedial Action Plan/Risk Management Plan (RAP/RMP).

The following permits would also be required if the existing earthen drainage ditch under I-880 is impacted by the potential stormwater treatment area that may be located there (**Figure 1-9**).

- U.S. Army Corps of Engineers – Section 404 Nationwide Permit
- California Department of Fish and Wildlife – Section 1602 Streambed Alteration Agreement
- California Regional Water Quality Control Board – Section 401 Water Quality Certification

The City of Oakland adopted *Conditions of Approval & Uniformly Applied Development Standards Imposed as Standard Conditions of Approval* (SCA) on November 3, 2008 (Ordinance No. 12899 C.M.S.). The SCA includes general conditions of approval for all projects, general conditions for major permits, and uniformly applied development standards, imposed as standard conditions of approval. (City of Oakland 2008, as amended 2013, 2014, 2018, and 2020) The Oakland SCA is discussed as relevant in the Regulatory Setting sections of Chapter 2, *CEQA Environmental Checklist*.

In compliance with the Oakland SCA, the Project will include compliance measures established as part of the Caltrans NPDES Statewide Stormwater Permit (Order No. 2012-0011-DWQ), which regulates all

discharges from Caltrans Municipal Separate Storm Sewer Systems (MS4s) and maintenance facilities. The Project will also implement construction BMPs and other measures and as part of the Caltrans' Storm Water Management Plan (SWMP). This Project involves more than 1 acre of land disturbance. Therefore, applicable information will be described regarding compliance with requirements of the Construction General Permit (Order No. 2009-0009-DWQ, and amended by Order No. 2012-0006-DWQ), as well as any other applicable related permits and regulations. Refer to Section 2.10, *Hydrology and Water Quality*, for additional information.