

Riverside-Downtown Station Improvements Project Executive Summary



December 2021

Executive Summary

ES 1.0 Introduction and Background

ES 1.1. Introduction

The Riverside County Transportation Commission (RCTC) and Metrolink in collaboration with the Federal Transit Administration (FTA) propose to improve the Riverside-Downtown Station at 4066 Vine Street in Riverside, California (the Project).

The Project is located in Downtown Riverside, east of the State Route (SR) 91 Freeway and a short distance from SR 60. Figure ES-1. Regional and Project Location Map, illustrates the regional and project location. Proposed improvements include the construction of an additional passenger loading platform and tracks to improve Metrolink service and the extension of the existing pedestrian bridge and additional elevator and stair access. The proposed track would connect to the existing station layover tracks on the east side. The proposed Project would also provide additional parking and improve traffic flow on the east side of the station. These improvements would improve Metrolink train connections and operations without affecting Burlington Northern Railroad and the Atchison, Topeka, and Santa Fe Railway (BNSF) service. The proposed Project would enhance train efficiency and operations to allow more reliable/on-time train service and provide equitable access to regional public transportation for the general public. Other benefits of the proposed Project would include the construction of pedestrian facilities (such as sidewalks), lighting and incorporation of aesthetic elements within the project site. It is anticipated that proposed improvements to the Riverside-Downtown Station would increase train ridership and reduce congestion on freeways and associated vehicle emissions.

The proposed Project is subject to state and federal environmental review requirements because it involves the use of federal funds administered by the FTA; therefore, two environmental documents have been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA) and California Environmental Quality Act (CEQA). RCTC is the lead agency under CEQA, and FTA and RCTC are joint lead agencies under NEPA. The NEPA Environmental Assessment (EA) and CEQA Draft Environmental Impact Report (EIR) are two separate standalone documents and are concurrently being circulated for public review.

ES 1.2. Background

Metrolink has a total of seven commuter lines, and the Riverside-Downtown Station currently provides service to three of these commuter lines: the Riverside Line with connections to Pomona, City of Industry, and Los Angeles; the Inland Empire Orange County Line (IEOC) with service to Santa Ana, Irvine, and Oceanside; and the 91/Perris Valley Line (91/PV Line) that starts in Perris and stops in Riverside before heading to Fullerton and Los Angeles. The station is an origin and destination station for all 12 Riverside Line trains (i.e., four 91/PV Line trains and eight IEOC Line trains). Altogether, there are 12 Riverside Line weekday trains that travel between Riverside and Los Angeles Union Station (LAUS); 13 91/PV Line weekday trains that travel between Perris-South and LAUS; and 16 IEOC Line trains that travel between San Bernardino County and Orange County, for a total of 41 weekday Metrolink passenger trains. Two Amtrak trains currently service and operate through the Riverside-Downtown Station each day.

In addition to passenger train service, Riverside County has three rail mainlines owned by BNSF and Union Pacific Railroad (UPRR), both the BNSF and the UPRR operate freight trains through the Riverside-Downtown Station. On average, approximately 50 to 60 freight trains operate through the Riverside-Downtown Station each day, with this number raising or lowering depending on seasonal variations (RCTC, 2020).

Metrolink's Southern California Rail Expansion (SCORE) Program is a \$10 billion initiative to upgrade the regional rail system to meet the current and future needs of the traveling public. The Project was funded from the State's Transit and Intercity Rail Capital Program in April 2018. The Project was also included in RCTC's *Short-Range Transit Plan FY 2021–24/25* (RCTC, 2020) to increase regional rail service based on ridership trends, growth projects, and RCTC goals.

The Riverside-Downtown Metrolink Station is an integral transportation hub that connects the City of Riverside's Innovation District to the rest of Southern California and beyond. Aside from the LAUS, the Riverside-Downtown Station serves more routes than any station in the Metrolink network. In addition to connecting to business and technology centers across the region, Metrolink service also links the University of California, Riverside with other leading academic institutions such as the University of California, Irvine; University of California, Los Angeles; University of Southern California; California State Polytechnic University; Pomona; and California State University, Fullerton. Before the COVID-19 pandemic, the Riverside-Downtown station served over 1,000 morning boardings. Although ridership has not recovered from pre-pandemic levels, it is anticipated that ridership rebuilding would continue as COVID-19 restrictions ease. Looking forward into the future, this project supports Metrolink's SCORE program with increased frequency goals of having trains serve the station every 15 to 30 minutes throughout the day. With that higher level of service, ridership is expected to grow over the next 10 years. Metrolink anticipates regional mass transit demand to increase and require improvements at the station to address existing and future operational deficiencies and accommodate future projected train service through the construction of additional passenger tracks, platforms and parking.

The Riverside Transit Agency's (RTA) Mobility Hub is in early design phase and would be located across from the Riverside-Downtown Station. Enhancements of local transit service with the completion of RTA's Mobility Hub would result in frequent transit connections to every area of Riverside and provide a link to San Bernardino and Redlands. Because of the proximity of the Riverside-Downtown Station to the future Mobility Hub, all demographics within the service area would have access to equitable regional transportation.

Amtrak also serves the station with the Southwest Chief long distance train to Flagstaff, Albuquerque, Kansas City & Chicago and bus/train connections to the Central Valley, Sacramento, and San Francisco. Planning is also underway to provide multiple daily Amtrak trains from Riverside to the Coachella Valley with stops in Banning, Palm Springs, Indio and eventually Phoenix, Arizona. Other out-of-state service at the Riverside-Downtown Station include daily Megabus connection to Las Vegas.

Metrolink currently has one of the cleanest locomotive fleets in the nation and has committed to pursuing future zero emission options in its recent Climate Action Plan. RCTC shares Metrolink's vision in reducing emissions and sustainable practices in advance planning by working with the City of Riverside to create a plan for an integrated Transit Oriented Community around the station that combines the best of "Car Free," livable, equitable, and walkable residential and employment opportunities that are well connected to transit.



Figure ES-1. Regional and Project Location Map

ES 1.2.1. Future Passenger and Freight Rail

Future Passenger Rail

Based on the *Metrolink Strategic Business Plan* (2021), Metrolink's Service Strategic Actions for the 91/PV Line and IEOC lines would increase train service within the next 5- to 30-year horizon. By 2025, the number of Metrolink passenger trains traveling through the Riverside-Downtown Station would increase to 49 trains or by 69 percent, during the weekday in addition to Amtrak and freight. Successful delivery of capacity, operations and service investments at the station are a crucial element of the Metrolink 2021 Strategic Business Plan; investments would improve reliability and customer experience by doubling capacity (adding new platforms, tracks, and parking) for train service needs due to projected growth. By 2050 additional peak hour and off-peak services could increase to 82 trains or 183 percent for weekday along the 91/PV Line and IEOC Lines.

Future Freight Rail

Consistent with the goals in the 2018 California State Rail Plan, the Project would improve efficiency on the railroad mainlines. California businesses export roughly \$162 billion worth of goods to more than 225 foreign countries annually (Caltrans, 2018). By 2040, the state's freight railroad loads will have increased by 38 percent, compared to 2013. Investments to address bottlenecks, improve operations, and increase capacity throughout the network will reduce congestion and delays. In turn, an improved freight rail network will help shift goods movement away from congested roadways, which have a limited ability to expand.

ES 2.0 Purpose and Need

ES 2.1. Project Purpose

The overall purpose of the Project is to expand capacity and improve operations and efficiency, connectivity, and the passenger experience at the Riverside-Downtown Station. The Project is intended to:

- Expand platform capacity to meet passenger train storage needs
- Allow for train meets off the BNSF mainline and minimize impacts to BNSF operations
- Improve train connectivity and passenger accessibility while minimizing impacts on improvement projects near the station that are already designed or in construction
- Facilitate more efficient passenger flow and reduce dwell times
- Enhance safety and access for station users
- Accommodate projected future demand

Riverside-Downtown Station Improvements Project Benefits:



Opportunities and equitable access to public transportation for all users



Convenient access and regional connectivity to train service within the Eastside Neighborhood and the City of Riverside



Pedestrian friendly, ADA-compliant sidewalks and crosswalks adjacent to the station with enhanced lighting, trees, and landscape



Enhanced train efficiency and operations to allow more reliable/on-time train service



ADA access, additional parking, and drop off areas on the eastside of the station to accommodate and encourage future ridership



Enhancements to increase ridership, reducing congestion on freeways and associated vehicle emissions



ES 2.2. Project Need

Beyond the infrastructure capacity need to address existing and future train congestion at the Riverside-Downtown Station, there is an operational deficiency due to the lack of a crossover at the station from west to east which limits train meet options. The proposed Project would address limitations by adding flexibility to operate service between Los Angeles and Perris-South by improving options for 91/PV Line train meets to meet nose to nose, nose to back, or back to back on one of the tracks, while allowing trains to pass through on the other track.

In addition, there is a lack of crossovers from the station to Perris-South which limits train meets and passing options for rail traffic. As such, trains coming from or going to Perris-South and Riverside-Downtown are not able to meet or pass each other. In addition, the San Jacinto Subdivision, extending from Control Point Highgrove to Perris-South, is currently a single track mainline that does not permit trains to meet or pass. This existing limitation in train infrastructure between Riverside-Downtown and Perris-South creates blockages on the BNSF mainline and results in train service and freight train delays. Additional platform tracks on the east side of the station, where trains can meet and hold off at the BNSF mainline, could alleviate congestion and ensure additional passenger service does not impede freight service.

Existing train infrastructure limitations due to lack of crossovers at the Riverside-Downtown Station and from the Riverside-Downtown Station to Perris-South would continue to worsen operational conditions in the next 5 years because Metrolink passenger train service at the Riverside-Downtown Station is anticipated to increase by 69 percent. In addition to the projected increase in freight train traffic, conditions at the station would deteriorate and could affect service times along the Metrolink network (Metrolink, 2021). Without the planned service capacity improvements, the Riverside-Downtown Station would not be able to manage the anticipated train meets, and blockages would continue to deteriorate along the BNSF mainline, causing longer delays and service disruptions. Operational improvements are needed to address these deficiencies.

ES 2.2.1. Access and Parking

The increase in Metrolink train service at the station and future regional growth forecasts are anticipated to increase the demand for on-site parking and easier access to the station. According to Metrolink's *Strategic Business Plan* (Metrolink, 2021), parking at the Riverside-Downtown Station is 93 percent utilized, and station access has been identified as a "high-priority" for improvements. Additional train service and future increase in passenger trips is expected to strain the existing on-site parking supply and impede access to and from the station.

ES 2.3. Alternatives Considered

To comply with CEQA, an EIR shall describe a range of reasonable alternatives to the project, or at the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. Chapter 2 of the Draft EIR discusses the Build Alternative which was selected because it met the most performance criteria (including the capacity for growth) and would best meet the basic objectives of the Project. Chapter 5 of the Draft EIR includes a comparison of alternatives and provides an analysis of a range of reasonable alternatives that were considered for study in the Draft EIR.

To comply with NEPA, the EA should discuss alternatives to the proposed action including the no build alternative and identify any other alternatives considered. The Build Alternative was selected because it met the most performance criteria (including the capacity for growth) and would best meet the purpose and need of the project. The Build Alternative and the No Build Alternative were analyzed in the EA and the Draft EIR. In addition, scoping comments received informed the identification and development of alternatives to the proposed Project. Based on these considerations, the following alternatives have been identified by RCTC and FTA for consideration in the EA and the Draft EIR.

ES 2.3.1. No Build Alternative

Under the No Build Alternative, implementation of improvements at the Riverside-Downtown Station would not be constructed and the current configuration of the Riverside-Downtown Station would remain the same. Although there would be no project-related impacts to environmental resources, the No Build Alternative would not meet the Project objectives or improve operations to accommodate the 91/PV Line or the IEOC Lines. Train capacity and storage would be limited to the existing platforms. The No Build Alternative does provide insight on future conditions with no improvements and serves as a baseline for comparison with the Build Alternative.

ES 2.3.2. Build Alternative

RCTC and Metrolink propose improvements to the following elements of the Riverside-Downtown Station: 1) Station Platform and Tracks; 2) Pedestrian Access; and 3) Parking, Circulation, and Streetscape. The proposed improvements include building an additional passenger loading platform and tracks to the east side of the existing station to improve Metrolink service and extend the existing pedestrian overpass to access the new proposed platform (Figure ES-2).

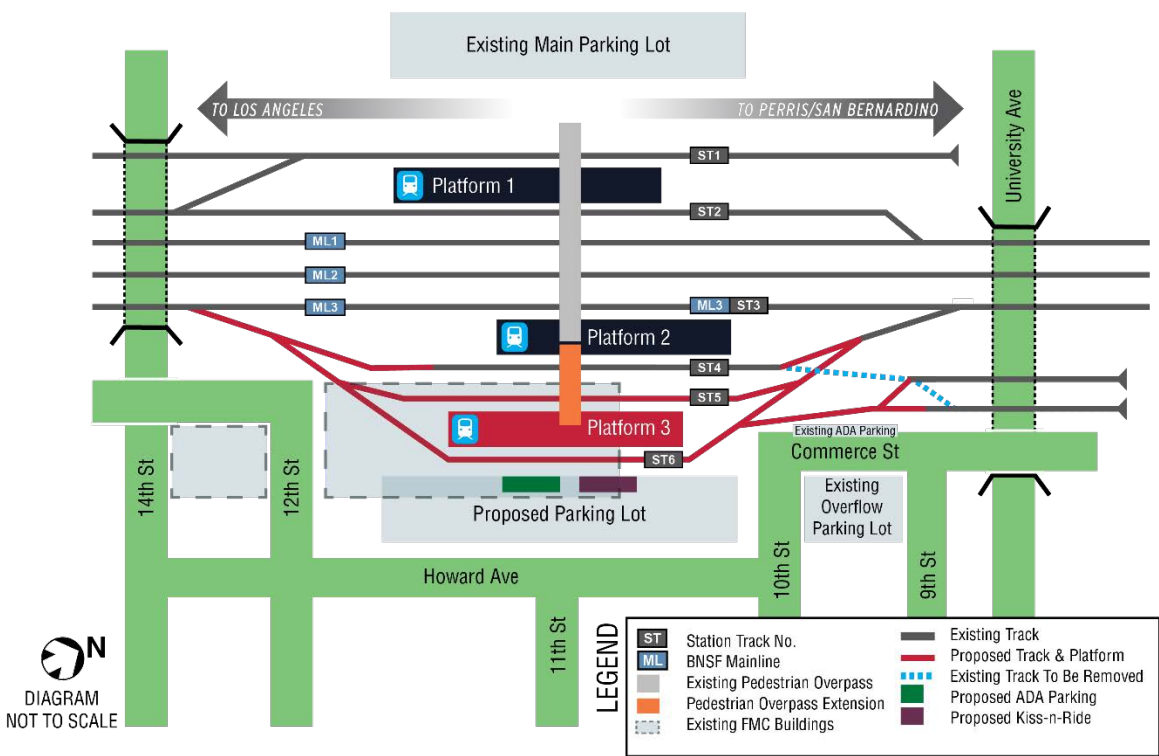


Figure ES-2. Build Alternative

The proposed track would also connect into the existing station layover tracks on the north end of the station and provide additional parking and improve traffic flow on the east side of the station. A summary of the proposed Build Alternative improvements is presented in Table ES-1. Summary of Proposed Build Alternative Improvements.

Table ES-1. Summary of Proposed Build Alternative Improvements

Element	Description
Station Platform and Track Improvements	<ul style="list-style-type: none"> • Add a new center platform (Platform 3) • Add new tracks (Station Tracks 5 and 6) • Modify the railroad signal system
Pedestrian Access Improvements	<ul style="list-style-type: none"> • Extend pedestrian overpass access to the new Platform 3 • Provide emergency egress at three locations
Parking, Circulation, and Streetscape Improvements	<ul style="list-style-type: none"> • Relocate ADA parking • Modify the bus drop-off area • Add sidewalks and trees • Add parking spaces
Utility Relocations	<ul style="list-style-type: none"> • Gas: SoCal Gas Company • Electric: City of Riverside • Water: City of Riverside • Fiber Optic: AT&T, Spectrum, Frontier and Sprint • Cable TV: CenturyLink • Storm Drain and Sewer: City of Riverside

ADA = Americans with Disabilities Act

ES 2.3.3. Design Options

As part of the Build Alternative, Design Option 1 proposes a longer extension of the pedestrian overpass access from the new proposed platform to the new surface parking lot and is intended to be incorporated with one of the parking design options. Design Options 1A, 1B, 2A, 2B, 3A, and 3B are associated with the new surface parking lot and an option to combine this new parking lot with the existing overflow parking lot on the east side of the station. The combined parking lot design option includes traffic circulation improvements along Howard Avenue, 9th Street, 10th Street, and Commerce Street. If RCTC decides to move forward with the Build Alternative and any one of the six proposed parking design options, Design Option 1 may or may not be selected to be incorporated as part of the selected Build Alternative.

Pedestrian Overpass Access Improvements

Access from the existing station area would be provided by the proposed extension of the pedestrian overpass (Figure ES-3. Build Alternative with Pedestrian Overpass Access Design Option 1). The Build Alternative with Pedestrian Overpass Access Design Option 1 includes a longer extension of the pedestrian overpass to Platform 3 and new surface parking lot (two spans, two towers/elevators).

The new pedestrian overpass elevator tower would be located 14 feet clear of both Track 5 and Track 6 on Platform 3. Emergency egress access would be provided by two 10-foot-wide, at-grade pedestrian crossings at the north and south end of Platform 3 to the proposed surface parking lot.

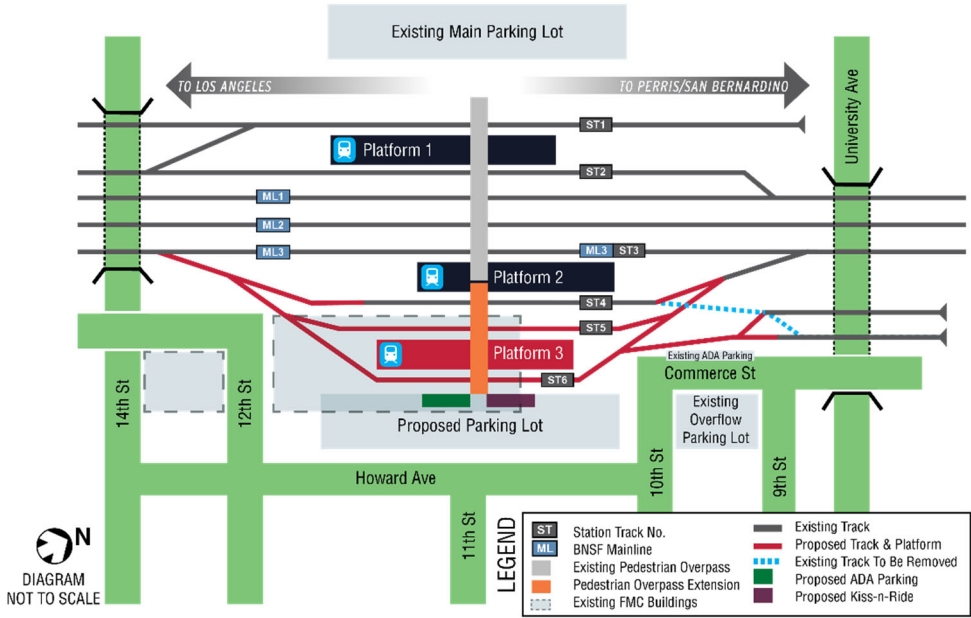


Figure ES-3. Build Alternative with Pedestrian Overpass Access Design Option 1

Parking, Circulation, and Streetscape Improvements

All parking design options would require the acquisition of parcels directly east of the station and demolition of existing structures and other ancillary structures to facilitate construction of the proposed Build Alternative improvements: A summary of proposed parking design options is presented in Table ES-2 and illustrated on Figure ES-4 through Figure ES-9 (see pages ES-30 through ES-35).

Table ES-2. Proposed Parking Design Options

Build + Design Option	Description
<i>Parking, Circulation, and Streetscape Improvements</i>	
Parking Design Option 1A	<ul style="list-style-type: none">• New surface parking lot east of station.• Up to approximately 556 parking spaces¹• <i>Impacts existing structures and other ancillary structures and residential parcels on the corner of 12th Street and Howard Avenue to facilitate construction of the proposed improvements.</i>
Parking Design Option 1B	<ul style="list-style-type: none">• New surface parking lot east of station.• Up to approximately 500 parking spaces¹• <i>Avoids relocation impacts to residential parcels on the corner of 12th Street and Howard Avenue.</i>
Parking Design Option 2A	<ul style="list-style-type: none">• New surface parking lot east of station combined with existing overflow parking lot with the extension of Howard Avenue through to 9th Street.• Up to approximately 560 parking spaces¹• <i>Impacts existing structures and other ancillary structures and residential parcels on the corner of 12th Street and Howard and requires acquisition of additional parcels directly east of the existing overflow parking lot.</i>

Build + Design Option	Description
Parking Design Option 2B	<ul style="list-style-type: none"> New surface parking lot east of the station combined with existing overflow parking lot and the extension of Howard Avenue through to 9th Street. Up to approximately 516 parking spaces¹ <i>Avoids relocation impacts to residential parcels on the corner of 12th Street and Howard Avenue.</i>
Parking Design Option 3A	<ul style="list-style-type: none"> New surface parking lot east of the station combined with existing overflow parking lot and the extension of Howard Avenue through to 9th Street. Up to approximately 470 parking spaces¹ <i>Avoids relocation impacts to additional parcels east of the existing overflow parking lot by routing Howard Avenue around the parcels.</i>
Parking Design Option 3B	<ul style="list-style-type: none"> New surface parking lot east of the station combined with existing overflow parking lot and the extension of Howard Avenue through to 9th Street. Up to approximately 414 parking spaces¹ <i>Avoids relocation impacts to additional parcels east of the existing overflow parking lot and residential parcels on the corner of 12th Street and Howard Avenue.</i>

¹. Indicates an approximate number of parking stalls. Number of parking stalls provided are the maximum estimate of parking stalls within the preliminary layout for each design option. These options illustrate the potential capacity of each parking lot design option for evaluation and comparison purposes in this EA and EIR. The number of stalls may change due to implementation of proposed avoidance, minimization, and mitigation measures for noise. In addition, the number of stalls may change during the final design phase due to design refinement to accommodate existing site hydrological conditions. These factors may reduce the approximate number of parking stalls under each estimate, but the potential reductions in the number of parking stalls are proportionate with the maximum parking stall estimate under each design option.

ES 2.3.4. Right of Way Requirements

Full acquisition of the existing Prism Aerospace building would be required to construct the Build Alternative. Depending on the design option selected, additional industrial and/or residential parcels would be required. Temporary construction easements (TCE) may be required to accommodate the construction of project features adjacent to the Project. Right of way (ROW) requirements identified in the EA and the Draft EIR are considered preliminary (approximately 15 percent complete) and are subject to refinement as additional information and design plans are further developed. ROW requirements to construct the proposed Project may result in a minor increase or decrease in response to comments or selection of a preferred alternative and/or during subsequent phases of project development or final design; however, the project footprint would remain the same.

ES 2.3.5. Construction Schedule

Project construction activities will occur for an estimated total of 24 months. It is anticipated that construction of the Build Alternative would begin in late 2023 and be completed by late 2025. Project construction would typically take place between the hours of 7:00 a.m. and 7:00 p.m. within the City of Riverside, in accordance with the City of Riverside Municipal Code § 7.35.0120(G). The proposed Project and selected parking design option would be constructed in phases to avoid impacts to commuter and freight train schedules during construction.

ES 2.3.6. Preliminary Cost Estimate

The Project is funded by Measure A proceeds, Southern California Optimized Rail Expansion Program, and an FTA grant. Preliminary cost estimates for the Build Alternative vary by design option from approximately \$64.7 million to \$80.4 million, as summarized in Table ES-3.

Table ES-3. Preliminary Cost Estimate

Project Cost	Design Option 1 ^a	Build Alternative					
		+ Design Option 1A	+ Design Option 1B	+ Design Option 2A	+ Design Option 2B	+ Design Option 3A	+ Design Option 3B
Construction	\$4,038,000	\$20,449,000	\$20,384,000	\$20,839,000	\$20,774,000	\$20,678,000	\$20,614,000
Environmental	--	\$6,413,000	\$6,404,000	\$6,421,000	\$6,412,000	\$6,413,000	\$6,404,000
ROW	--	\$14,032,000	\$11,853,000	\$18,060,000	\$15,881,000	\$14,042,000	\$11,863,000
Engineering	\$485,000	\$8,707,000	\$8,706,000	\$10,000,000	\$9,446,000	\$9,444,000	\$9,443,000
Support Costs ^b	\$485,000	\$2,221,000	\$2,213,000	\$2,268,000	\$2,260,000	\$2,249,000	\$2,241,000
Other Costs ^c	\$1,073,000	\$15,374,000	\$15,125,000	\$16,724,000	\$16,307,000	\$16,083,000	\$15,835,000
Total	\$6,081,000	\$67,196,000	\$64,685,000	\$74,312,000	\$71,080,000	\$68,909,000	\$66,400,000

^a. RCTC may choose to incorporate Design Option 1 to any of the Design Options (1A through 3B). The cost of Design Option 1 would be added to the cost of the Build Alternative and parking lot design option selected.

^b. Support costs include project management and construction management.

^c. Other costs include contingency and inflation.

-- indicates not applicable

ES 2.4. Permits and Approvals

RCTC is seeking federal funding for the Riverside-Downtown Station Improvements Project and is required to comply with federal environmental regulations under NEPA (Code of Federal Regulations (CFR) Title 40, Parts 1500-1508) and its implementing regulations, in accordance with 23 CFR part 771. While FTA and RCTC are joint lead agencies for the proposed Project under NEPA, FTA manages and provides oversight for the development and approval of the NEPA environmental document. Approval of the EA from both agencies is required to proceed to the next phase. Under CEQA, certification of the Final EIR and approval of the Project by RCTC would be required prior to construction and implementation of the Project. The EIR, as defined by § 15161 of the State CEQA Guidelines, serves as an informational document for the general public and the proposed Project's decision-makers. RCTC, as CEQA lead agency, has the responsibility for preparing and circulating the Draft EIR for public review and certifying the Final EIR, pursuant to State CEQA Guidelines § 15089 and 15090, respectively. Implementation of the Project would require discretionary actions and permits from the agencies identified in Table ES-4.

Table ES-4. Anticipated Permits and Approvals

Agency	Action	Timing
CPUC	Approval for pedestrian bridge and at-grade crossings	Final Design Phase
City of Riverside	Approval of street improvements	Final Design Plans and Construction Phase
City of Riverside	Obtain encroachment permit	Final Design Phase
Federal Transit Administration	Approval of NEPA Environmental Document	End of Environmental Phase
Regional Water Quality Control Board	SWPPP and NPDES General Permit	Pre-construction and Construction Phases

Agency	Action	Timing
Riverside County Transportation Commission	Certification of the EIR, adoption of Findings and Statement of Overriding Considerations, adoption of the Mitigation Monitoring and Reporting Program	End of Environmental Phase
SHPO	Concurrence with the HRR historic property eligibility determination, FOE, Section 4(f) Individual Evaluation and MOA	Environmental Phase
SHPO/U.S. Department of Interior	Draft Individual Section 4(f) concurrence from the official with jurisdiction	Environmental Phase

Source: HNTB, 2020

CPUC = California Public Utilities Commission

FOE = Finding of Effect

HRR = Historic Resources Report

MOA = Memorandum of Agreement

NPDES = National Pollutant Discharge Elimination System

SHPO = State Historic Preservation Officer

SWPPP = Stormwater Pollution Prevention Plan

ES 2.5. Summary of Environmental Impacts

This environmental document addresses the potential environmental impacts of the proposed Project and was prepared based on public and agency input. In compliance with NEPA regulations and the State CEQA Guidelines, the EA and Draft EIR evaluated potential environmental consequences associated with construction and operation of the Build Alternative and design options. Various environmental topics were evaluated related to the proposed Project. As part of the scoping and environmental analyses completed for the Project, agriculture and forestry and mineral resources were considered, but no impacts were identified. Consequently, there is no further discussion of these environmental topics in this document. Due to the highly urbanized nature of the project study area, potential environmental impacts pertain primarily to the built environment. As summarized in Table ES-5, the Build Alternative would result in no impacts to public services, wildfire, or safety and security, and most of the evaluated environmental resources (aesthetics, air quality, biological resources, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, population and housing, recreation, transportation, tribal cultural resources, land use planning, and environmental justice would result in less than significant or no adverse effects). Hazards and hazardous materials, utilities and service systems, noise, archaeological and tribal cultural resources would have potentially significant impacts or adverse effects, but could be mitigated to reduce the severity of the impact to less than significant impacts or to no adverse effect.

ES 2.6. Unavoidable Significant Impacts under CEQA and Adverse Effects under NEPA

The Build Alternative and all design options would result in unavoidable significant impacts under CEQA and adverse effects under NEPA after implementation of proposed avoidance, minimization, and mitigation measures for the following environmental resource topics:

- **Cultural/Section 4(f):** Former FMC Plant 1 building. The Build Alternative would require the demolition of the FMC Plant 1 building. Demolition of the historic structures would also cause indirect impacts to the former FMC Plant 2 building's integrity of setting and association.
- **Noise:** If the Build Alternative with Design Option 1B, 2B, or 3B is selected; there would be potentially significant noise impacts to two residences at 3021 12th Street during demolition of the former FMC Plant 1 building (Prism Aerospace building).

ES 2.7. Summary of Environmental Consequences and Mitigation Measures

Table ES-5 provides a summary of all potential environmental impacts of the Build Alternative and all design options. For further and more detailed information about each of the impacts as they pertain to the Build Alternative and all design options, the reader is referred to Chapter 4.0 of the EA and Chapter 3.0, 4.0, and 5.0 of the Draft EIR. Table ES-5 includes a list of proposed avoidance, minimization, and/or mitigation measures to be implemented to address potential project-related permanent and temporary impacts. RCTC and FTA are committed to satisfying all applicable federal, state, and local environmental regulations and applying reasonable and feasible mitigation measures to reduce adverse effects and potentially significant impacts. Should FTA and RCTC approve the Project, in accordance with NEPA regulations, the Environmental Commitments Record, which lists all the committed mitigation measures, would be adopted and included in the NEPA approval document. Similarly, should RCTC approve the Project, in accordance with CEQA regulations, it will also adopt the Mitigation Monitoring and Reporting Program upon approval of the proposed Project, these mitigation measures will become part of the Project, and will be considered binding under CEQA and NEPA.

Table ES-5. Summary of Environmental Impacts

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
Aesthetics/Visual			
<p><i>Aesthetics/Visual:</i> <i>Temporary Impacts (Construction)</i> Temporary construction related impacts, are anticipated due to removal of trees and potential night time work requiring the use of lighting.</p>	Construction-related impacts are similar under all design options.	<p>AES-1: Landscape design will be in accordance with RCTC Station Design Criteria, following RCTC’s general landscape requirements and in coordination with the City of Riverside to the greatest extent possible. The new parking lot(s) design will be compatible with landscaped parking lots within the project area with drought tolerant vegetation, trees, and lighting.</p> <p>AES-2: Nighttime construction activities near residential areas will be avoided to the extent feasible. If nighttime work is required, the construction contractor will install temporary lighting in a manner that directs light toward the construction area and will install temporary shields as necessary so that light does not spill over into residential areas.</p> <p>AES-3: During final design, all new or replacement lighting would be designed to be directed away from residential areas. To the greatest extent feasible, new light fixtures will include appropriate shields to direct light away from residential areas.</p> <p>AES-4: Noise barrier design will be consistent with RCTC and local jurisdiction standards and an aesthetic design treatment plan will be implemented to soften the noise barrier’s structural intrusion, as well as maintain the community character and history. RCTC shall maintain the paint color and aesthetics over time.</p> <p>AES-5: Consultation regarding potential indirect adverse visual effects to historic properties will be conducted with consulting parties in accordance with Section 106 of the National Historic Preservation Act of 1966.</p> <p>BIO-2: See Biological Resources section below for further details on this measure.</p>	<p>CEQA: Less Than Significant Impact NEPA: No Adverse Effect</p>
<p><i>Aesthetics/Visual:</i> <i>Permanent Impacts (Operations)</i> The Build Alternative would remove the Prism Aerospace Building (formerly the FMC) and residential houses (under Design Options 1A, 2A, and 3A), which is an existing obstruction to views of Mount Rubidoux looking west along 12th Street. Removal of this building and construction of the 12-foot noise barrier (located on the eastern edge of the Prism Aerospace building structure as depicted in Figure 4-20 of the EA) would enhance views from this vantage point and result in a beneficial impact. The Build Alternative and all design options would incorporate streetscape improvements such as providing uniform landscape elements along ADA-compliant sidewalks to buffer the station and local roadways. Landscape improvements would incorporate drought-tolerant planting, and to the greatest extent feasible, use recycled water to maintain landscape elements. In addition to landscape elements, street lighting would be incorporated along sidewalks to enhance safety and walkability to and from the station.</p>	<p>Changes to the surrounding existing visual environment include landscaping and lighting, construction of a 12-foot-high noise barrier and removal of the following structures by design option and construction of an 8-foot high wall along Howard Avenue for design options 2A or 2B:</p> <ul style="list-style-type: none">• Design Option 1A: FMC Complex and two 12th Street residences• Design Option 1B: FMC Complex• Design Option 2A: FMC Complex two 12th Street residences and two multifamily and one business on 9th Street and 10th Street• Design Option 2B: FMC Complex and two multifamily residences one business on 9th Street and 10th Street• Design Option 3A: FMC Complex and two 12th street residences• Design Option 3B: FMC Complex		

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
Air Quality			
<p>Air Quality:</p> <p><i>Temporary Impacts (Construction)</i></p> <p>The Project would result in temporary impacts to air quality from dust and emissions.</p> <p><i>Permanent Impacts (Operations)</i></p> <p>Overall, the Build Alternative and all design options would result in a net decrease in emissions compared to No Build conditions due to the reduction in regional VMT. Moreover, the Build Alternative and all design options would not result in an increase in criteria pollutants in the South Coast Air Basin where it is designated as federal non-attainment for O₃ and PM_{2.5}. As such, operation of the Build Alternative would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment.</p>	<p>Temporary and permanent impacts are similar under the Build Alternative and all design options.</p>	<p>AQ-1: In accordance with SCAQMD Rule 403, fugitive dust emissions from the project site shall be controlled by regular watering or other dust preventive measures, as specified in SCAQMD Rule 403:</p> <ul style="list-style-type: none">• Minimize land disturbed by clearing, grading, and earth moving, or excavation operations to prevent excessive amounts of dust.• Provide an operational water truck on-site at all times; use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas; watering shall occur at least twice daily with complete coverage, preferably in the late morning and after work is done.• Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.• Securely cover trucks when hauling materials on or off-site.• Stabilize the surface of dirt piles if not removed immediately.• Limit vehicular paths, limit speeds to 15 miles per hour on unpaved surfaces, and stabilize any temporary roads.• Minimize unnecessary vehicular and machinery activities.• Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.• Revegetate or stabilize disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.	<p>CEQA: Less Than Significant Impact</p> <p>NEPA: No Adverse Effect</p>

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
Biological Resources			
<p>Biological Resources: Temporary Impacts (Construction) There are limited biological resources within and near the Project as the majority of this area is covered with hardscape. Plant species within the biological study area typically consist of non-native and ornamental landscaping. There is a potential for nesting birds and roosting bats to occur on-site during construction.</p>	Potential temporary impacts resulting from the construction of the Build Alternative and all design options are similar.	BIO-1: The following measures will be implemented by the Project to avoid and minimize impacts to special-status and nesting birds during construction.	CEQA: Less Than Significant Impact with Mitigation Incorporated NEPA: No Adverse Effect
<p>Biological Resources: Permanent Impacts (Operations) The Project would require replacement of up to 51 trees within the project footprint.</p>	<p>The Build Alternative design options would require the removal of trees as follows:</p> <ul style="list-style-type: none">• Design Option 1/Design Option 1A: up to 36• Design Option 1B: up to 32• Design Option 2A: up to 51• Design Option 2B: up to 47• Design Option 3A: up to 47• Design Option 3B: up to 43	<ul style="list-style-type: none">• Where feasible, the contractor will complete tree and shrub removals and structure demolition between September 1 and January 31, which is outside of the nesting season.• During nesting season (February 1 through August 31) pre-construction surveys for active nests (nests with eggs or juvenile birds that are dependent on parental care) will be conducted by a qualified biologist no more than 48 hours prior to starting construction activities. Surveys will cover any potential nesting sites within 500 feet of construction activity, including vegetation removal and structure demolition.• Surveys and avoidance measures for active nests will conform to current USFWS and CDFW protocol and recommendations.• If active nests are observed during pre-construction surveys or during construction, active nest sites will be designated as environmentally sensitive areas and identified with appropriate markers for the duration that eggs or juvenile birds are nest-dependent.• A qualified biologist will develop buffer recommendations for active nests that are site and species-specific, based on current USFWS and CDFW guidance, and at an appropriate distance that will protect normal bird behavior to prevent nesting failure or abandonment. Additional buffer distance will be implemented for raptors. Buffers will be in place for the duration eggs or juvenile birds are nest-dependent.• The qualified biologist will monitor the behavior of the birds (adults and young when present) at the nest site to ensure they are not disturbed by project construction. Nest monitoring will continue during nearby construction, until the biologist has confirmed the young have fully fledged (have completely left the nest site and are no longer dependent on the parents).• A qualified biologist will conduct WEAT for all on-site workers regarding environmental protection measures on the Project, including tree protection measures, stormwater and water quality protection measures, invasive species, and potential special-status species that could occur in or near the Project, including roosting bats, peregrine falcon, and nesting birds. <p>BIO-2: The final design of the Project will avoid or minimize tree removals to the extent feasible. The following measures will be implemented to avoid and minimize tree removal and damage to trees during construction:</p> <ul style="list-style-type: none">• The size and species of trees that would require removal will be determined prior to construction.• Trees within the project footprint will be surveyed by a licensed arborist prior to removal and transplant.	

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
		<ul style="list-style-type: none">Trees that do not need to be removed will have protection measures implemented, where necessary, to prevent incidental damage during construction. Protection measures will be implemented as specified by the arborist.Trees that need to be removed will be transplanted within the project footprint to the greatest extent feasible.Trees within the City ROW that are removed and cannot be transplanted will be replaced as follows: Non-native trees will be replaced at a 1:1 ratio and native trees will be replaced at a 3:1 ratio (replaced:removed) within or near the Project to the greatest extent feasible. Tree replacement and planting will be coordinated through the City of Riverside in accordance with applicable landscaping plans and approved aesthetic concepts. <p>BIO-3: Bats could roost in structures and vegetation within the project footprint. Preconstruction bat surveys will be conducted by a qualified biologist to determine if bats are present prior to removing trees or structures that potentially provide suitable habitat. If bats are discovered in or near active construction, a protective buffer zone will be established by the biologist.</p>	
Cultural Resources			
<p><i>Cultural Resources: Historic Resources</i> <i>Permanent Impacts (Operations)</i> The Build Alternative will require removal of the FMC building Plant 1 and depending on design option selected, may require removal of the 12th Street and/or Ninth Street neighborhood residences. Demolition of historic structures may indirectly impact the Eastside Neighborhood’s integrity of setting and association.</p>	<p>The Build Alternative design options will require the demolition or removal of the following structures:</p> <ul style="list-style-type: none">Design Option 1A: FMC Complex and 12th Street residencesDesign Option 1B: FMC ComplexDesign Option 2A: FMC Complex, 12th Street and Ninth Street Neighborhood Conservation Area residencesDesign Option 2B: FMC Complex and Ninth Street Neighborhood Conservation Area residencesDesign Option 3A: FMC Complex and 12th Street residencesDesign Option 3B: FMC Complex	<p><i>Historic Resources</i> CUL-1 Historical Resources and Build Alternative with Design Options 1A and 1B <i>Former FMC Plant 1 Building</i></p> <ul style="list-style-type: none">Potential mitigation/minimization measures for the demolition of Plant 1 and associated impacts to Plant 2 would include HABS-like documentation/recordation of both buildings. Additionally, it would be appropriate to salvage building materials (e.g., station signage for the historic site) for reuse at the station and/or donate the materials to a local building salvage company. Additional measures may be identified during public involvement and ongoing consultation with interested parties and with the SHPO. <p><i>12th Street Residences and Worker’s Houses</i></p> <ul style="list-style-type: none">To minimize impacts to residences from proposed design options, fences and/or vegetated screening could be placed between the houses on 12th Street, the proposed noise barrier, and the proposed passenger station and parking lot. For the four houses on Howard Avenue, vegetated screening could be placed between the parking lot and Howard Avenue. Streetscape enhancements (street trees and sidewalks) would lessen the overall change to the setting caused by the demolition of Plant 1.	<p>CEQA: Potentially Significant Impact NEPA: Adverse Effects</p>

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
<p><i>Cultural Resources: Archaeological Resources</i> <i>Temporary Impacts (Construction)</i> Although no impacts are anticipated, there is a potential for encountering undiscovered archaeological resources in a subsurface context during ground disturbing activities that would result in a less than significant impact to archaeological resources.</p>	<p>Potential temporary construction related impacts resulting from the construction and of the Build Alternative and all design options are similar.</p>	<p>CUL-2 Historical Resources and Build Alternative with Design Options 2A and 2B <i>Former FMC Plant 1 Building</i></p> <ul style="list-style-type: none">Potential mitigation/minimization measures for the demolition of Plant 1 and associated impacts to Plant 2 would include HABS-like documentation/recordation of both buildings. Additionally, it would be appropriate to salvage building materials (e.g., station signage for the historic site) for reuse at the station and/or donate the materials to a local building salvage company. Additional measures may result as part of the public involvement and ongoing consultation with interested parties and the SHPO. <p><i>12th Street Residences and Ninth Street Neighborhood Conservation Area Residences</i></p> <ul style="list-style-type: none">To minimize potential impacts to residences from proposed design options, fences and/or vegetated screening could be placed between the houses on 12th Street, the proposed noise barrier, the proposed passenger station and parking lot, and Howard Avenue. Impacts can be further minimized through streetscape enhancements (already proposed as part of the Project).For the 9th Street residences that would be demolished as a result of Design Options 2A and 2B (3006 9th Street and 2994 9th Street), mitigation measures would include HABS-like documentation/recordation of both buildings. <p>CUL-3 Historical Resource and Build Alternative with Options 3A and 3B <i>Former FMC Plant 1 Building</i></p> <ul style="list-style-type: none">Potential mitigation/minimization measures for the demolition of Plant 1 and associated impacts to Plant 2 would include HABS-like documentation/recordation of both buildings. Additionally, it would be appropriate to salvage building materials (e.g., station signage for the historic site) for reuse at the station and/or donate to a local building salvage company. Additional measures may result as part of the public involvement and ongoing consultation with interested parties and with the SHPO. <p><i>12th Street Residences, Howard Avenue Worker’s Houses</i></p> <ul style="list-style-type: none">To minimize impacts to residences from proposed design options, fences and/or vegetated screening could be placed between the houses on 12th Street, the proposed noise barrier, and the proposed passenger station and parking lot. For the four houses on Howard Avenue, vegetated screening could be placed between the parking lot and Howard Avenue. Streetscape enhancements (street trees and sidewalks) will lessen the overall change to the setting caused by the demolition of Plant 1.	<p>CEQA: Historic Resources: Potentially Significant Impact Archaeological Resources: Less than Significant with Mitigation Incorporated NEPA: Adverse Effects</p>

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
		<p><i>Ninth Street Neighborhood Conservation Area</i></p> <ul style="list-style-type: none">The Howard Avenue extension will feature new lighting, and planting strips and street trees that would soften the edge between the historic residences in the Ninth Street Neighborhood Conservation Area (9th Street and Howard Avenue) and the new roadway, which would minimize changes to the setting of the residences adjacent to the new roadway. <p>CUL-4 Archaeological Resources</p> <ul style="list-style-type: none">All ground-disturbing activities including grading will be monitored by a qualified archaeologist and Native American monitor. If archaeological resources are encountered, the monitor would have the authority to temporarily halt or redirect grading and other ground disturbing activity in the immediate area of the find (50-foot radius).In the course of monitoring, when ground-disturbing activities have reached a point that the monitors are reasonably certain that no additional cultural material would be encountered, monitoring could be halted after conferring with RCTC staff. <p>CUL-5 Human Remains</p> <p>If human remains are discovered, the County Coroner will be contacted. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, will be contacted to determine proper treatment and disposition of the remains. All requirements of Health and Safety Code §7050.5 and PRC §5097.98 will be followed.</p> <p>AES-4 and AES-5: See Aesthetics/Visual section above for further details on this measure.</p>	
Cumulative			
<p><i>Cumulative:</i> <i>Temporary Impacts (Construction)</i> Construction-related activities that overlap with adjacent projects may result in temporary cumulative impacts due to noise, dust, and traffic congestion. Construction of the Project and other developments may temporarily reduce on-street parking during overlap periods. The impacts during construction are temporary and indirect.</p>	<p>If construction activities overlap with adjacent projects, potential, temporary noise impacts resulting from the construction of the Build Alternative with Design Options 1B, 2B, and 3B (if selected) would result in a cumulatively considerable noise impact due to the proximity of construction activities relative to the residences immediately adjacent to the Prism Aerospace building at 3021 12th Street. Design Options 1A, 2A, and 3A would result in less significant or no adverse effects.</p>	<p>CUM-1: Coordinate construction activities so construction activities do not overlap with other projects in close proximity as feasible.</p>	<p>CEQA: Potentially Significant NEPA: Adverse Effect</p>
<p><i>Cumulative:</i> <i>Permanent Impacts (Operations)</i> Potential traffic-related impacts from other projects may cause cumulative impacts to circulation; however, with implementation of project features to improve traffic flow no substantial impacts are anticipated.</p> <p>The Build Alternative will require removal of the FMC Plant 1 building and result in a significant and adverse effect to historic resources. Removal of historic structures may indirectly impact the Eastside Neighborhood’s integrity of setting and association.</p>	<p>Permanent impacts resulting from the operations of the Build Alternative and all design options are similar</p>		

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
Energy			
Energy: <i>Temporary Impacts (Construction)</i> Increased energy consumption is anticipated during construction for the operation of construction equipment.	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	E-1: Energy efficient lighting, such as LED with a longer lifespan would be used at the station to reduce future maintenance needs.	CEQA: Less Than Significant Impact NEPA: No Impact
Energy: <i>Permanent Impacts (Operations)</i> Operation of the Project is expected to lower regional energy demands due to reduction in train idling and regional vehicle miles traveled.			
Geology and Soils			
Geology and Soils: <i>Temporary Impacts (Construction)/</i> <i>Permanent Impacts (Operations)</i> The Project is within a region susceptible to earthquakes but is not within an earthquake fault zone. A low to moderate liquefaction potential is present at the project site. Impacts to geology and soils are associated with potential ground shaking and minor on-site soils subsidence. The project site is not located on a geologic unit or soil that is unstable or within an area associated with landslides.	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	GEO-1: Prior to grading, the proposed structural improvement areas (i.e. all-structural fill areas, pavement, buildings, etc.) will be cleared of surface and subsurface pipelines and obstructions. Heavy vegetation, roots, and debris will be disposed of off-site. Any on-site wells or septic waste will be removed or abandoned in accordance with the Riverside Country Department of Environmental Health. Voids created by removal of buried/unsuitable materials will be backfilled with properly compacted soil in general accordance with the recommendations of the Geotechnical Exploration Report (HNTB, Inc., 2020). GEO-2: Import soils and/or borrow sites, if needed, will be evaluated prior to import. Import soils will be uncontaminated, granular in nature, free of organic material and have very low expansion potential and a low corrosion impact to the proposed improvements. GEO-3: To support the completion of final design plans, a site-specific investigation and subsurface data liquefaction screening and analysis will be performed to evaluate the potential stability and settlement characteristics for the proposed improvements. Information gathered from the subsurface data will allow structures to be designed to withstand a defined level of ground acceleration and fault offset, where applicable. GEO-4: In the event of unanticipated paleontological resource discoveries during project-related activities, work in the immediate vicinity of the discovery will be halted, until the unanticipated discovery can be evaluated by a qualified paleontologist.	CEQA: Less Than Significant Impact NEPA: No Adverse Effect

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
Climate Change and Greenhouse Gas Emissions			
Climate Change and Greenhouse Gas Emissions: Temporary Impacts (Construction) Temporary construction activities would result in a temporary increase in greenhouse gas emissions.	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	No mitigation is required.	CEQA: Less Than Significant Impact NEPA: No Impact
Climate Change and Greenhouse Gas Emissions: Permanent Impacts (Operations) Permanent impacts associated with train operations and service improvements and potential traffic pattern alterations would not result in an increase in GHGs. It is anticipated that the Build Alternative would result in a net benefit by reducing regional VMT and associated GHG emissions.			
Hazards and Hazardous Materials			
Hazards and Hazardous Materials: Temporary Impacts (Construction) Temporary impacts associated with the Project includes the use of construction equipment with the potential for release of construction oils, grease, paint chips, etc. on-site. Additionally, the Prism Aerospace property contains contaminated soils that are considered as hazardous materials. The transport, use, and disposal of on-site contaminated soils may potentially result in temporary exposure to workers and surrounding community. Hazards and Hazardous Materials: Permanent Impacts (Operations) Permanent Impacts associated with potential release of hazardous materials during operations will be the same as existing. However, the Build Alternative would effectively cover exposed contaminated soils to prevent off-site migration through the construction of a parking lot.	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	HAZ-1: Prior to subsurface disturbance activities, an SMP will be prepared to address the possibility of encountering localized areas containing contaminants of potential concern, including VOCs, petroleum hydrocarbons, SVOCs, and metals. The plan will be prepared by a qualified environmental consultant and will be implemented during soil disturbance activities under the oversight of an environmental professional. The plan will address monitoring excavated soil; community and worker health and safety; and soil handling, stockpiling, characterization, on-site reuse, export, and disposal protocols. HAZ-2: For areas with the potential for encountering soil contamination (e.g., near areas of known or suspected contamination), appropriate worker and community health and safety measures (e.g., dust control, air monitoring, and stockpile management) will be implemented by the contractor, under the oversight of a qualified environmental professional. HAZ-3: A hazardous waste management plan will be prepared before disturbing utilities (e.g., cementitious pipelines), electrical/lighting equipment, and hazardous building materials such as ACM, LBP, treated wood, and other materials falling under UWR requirements. The plan will address testing protocols, handling, and disposal requirements, and will be implemented by a California Department of Public Health Certified Lead Inspector/Assessor, California Division of Occupational Safety and Health Certified Asbestos Consultant, and/or professionals appropriately qualified in their field, in accordance with applicable local, state, and federal guidelines and regulations. HAZ-4: An ACM survey will be conducted in accordance with the local SCAQMD Rule 1403 requirements for all buildings planned for demolition. Handling and disposal of lead-containing surfaces that may be present in buildings will be conducted in accordance with 17 CCR and 8 CCR, Division of Occupational Safety and Health Lead in Construction Standard § 1532.1. Clean up handling, and/or disposal of other hazardous materials that may be	CEQA: Less Than Significant with Mitigation Incorporated NEPA: No Adverse Effects

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
		<p>present within structures planned for removal will also be conducted in accordance with UWR, if planned for removal.</p> <p>HAZ-5: Consideration will be given to placement of a high-visibility geomembrane at the base of excavation in areas of impacted soil or soil vapor to advise excavators of potential underlying exposure to chemicals detected below the membrane.</p> <p>HAZ-6: Arsenic levels exceeding DTSC’s Southern California Regional Background Arsenic Concentration of 12 mg/kg in soil samples collected in the upper 1 to 2 feet of soil along the former railroad tracks in Area C are considered as hazardous material. Soil within the width of the railroad tracks to a depth of 2 feet will be separately stockpiled for off-site disposal at a licensed facility that will accept soil with elevated arsenic levels.</p> <p>HAZ-7: Soil disturbance activities will not be allowed on the So. Cal Gas property (Area A and C) without approval of the SMP by the DTSC and prior notification. Any soil removal in the property will be managed in accordance with all applicable state and federal provisions.</p> <p>HAZ-8: Activities that may disturb, alter, damage, or destroy groundwater monitoring wells on the So. Cal Gas property (Area A and C) are prohibited unless given authorization by the DTSC and the RWQCB. The use of the property will preserve the integrity and physical accessibility of the groundwater monitoring wells. DTSC will be notified about any damage caused to the groundwater monitoring wells.</p> <p>HAZ-9: Dust control measures to minimize fugitive dust emissions during construction and demolition activities will be implemented. Dirt tracked onto paved roads from unpaved areas will be minimized. Trucks hauling excavated materials to the disposal site will be covered and haul routes to the disposal site will avoid the proposed Eastside Neighborhood school.</p>	
Hydrology and Water Quality			
<p>Hydrology and Water Quality: Temporary Impacts (Construction) Temporary construction activities, including the use of construction equipment, may result in the release of construction materials, oils, concrete, sediment runoff from exposed soils, and other pollutants into surface and ground water. On-site best management practices will be implemented to prevent potential release of contaminants into surface and ground water. On-site drainage patterns will be minimally impacted.</p>	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	<p>WQ-1: Proposed grades will remain similar to existing grades and maintain existing flow paths/patterns.</p> <p>WQ-2: The construction of the paved surface parking lot (under all design options) and implementation of non-infiltration BMPs will be implemented to avoid worsening the existing contamination within the project site. In addition, RCTC will implement the Final Soil Management Plan (as approved by DTSC) to ensure contaminated soils are handled appropriately and avoid potential impacts to groundwater.</p> <p>WQ-3: Design the on-site storm drain system to connect with the existing 42-inch storm drain system to minimize the amount of flow draining to the low point at Howard Ave/11th Street.</p> <p>WQ-4: To the greatest extent feasible, maintain existing grades at the project site to allow the floodplain to utilize its current storage area and avoid altering the footprint of the 100-year floodplain. Reduce barriers to flow in floodplain by demolishing Prism</p>	<p>CEQA: Less Than Significant Impact NEPA: No Adverse Effect</p>
<p>Hydrology and Water Quality: Permanent Impacts (Operations) The Build Alternative is expected to increase the volume of downstream flow due to the addition of impervious surface area; however, construction of the proposed parking lot will cap contaminated soils resulting in less contaminant seep into the underlying groundwater. The Build Alternative will be designed to follow the existing ground and drainage patterns.</p>			

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Build Alternative	Design Option		
		<p>Aerospace building and placing noise barrier in line with flow direction.</p> <p>Design of station improvements will follow RCTC design standard requirements within floodplains and coordinated with the City of Riverside and County of Riverside Flood Control.</p> <p>Certain items such as underground conduits and the elevator system should be designed to be sealed from infiltration of flood water during the final design phase.</p> <p>The inclusion of flood warning devices may also be required.</p> <p>The City of Riverside is the Flood Plain Coordinator for this site. Therefore, coordination with the City will be required during the final design phase of the project. During design, a hydraulic study showing the proposed improvements and the impacts to the overall BFE will be required.</p> <p>WQ-5: During construction of the station improvements, BMPs such as fiber rolls, inlet protection, etc., will be implemented to comply with CGP requirements. Other construction BMPs, as required by local and regulatory agencies, will be implemented by the construction contractor.</p> <p>As directed by RCTC and/or regulatory agencies, non-infiltration BMPs will be implemented to address additional runoff due to the creation of additional impervious surfaces.</p>	
Land Use and Planning			
<p>Land Use and Planning: Temporary Impacts (Construction) TCEs from adjacent industrial land uses may be required to construct the proposed Project. Preliminary design plans indicate that approximately 0.04 acre from the Solar Max property may be required to accommodate construction of station improvements under the Build Alternative and all design options. TCEs from nearby transportation land uses within the City of Riverside’s ROW along Howard Avenue, Commerce Street, 12th Street, 10th Street, and 9th Street may be required to construct the Project. If TCEs are required, RCTC will request TCEs from the City of Riverside to construct within local roadways and may require intermittent lane closures; however, access to these local roadways, residences and businesses will be maintained throughout the duration of construction.</p>	<p>Potential temporary impacts resulting from the construction of the Build Alternative and all design options are similar.</p>	<p>No mitigation is required to address temporary and permanent impacts.</p>	<p>CEQA: Less Than Significant Impact NEPA: No Impact</p>
<p>Land Use and Planning: Permanent Impacts (Operation) The Build Alternative will require the conversion of existing industrial and may require residential land uses to transportation uses.</p> <p>The conversion to transportation uses is consistent with the permitted uses identified in the Riverside Marketplace Specific Plan. In addition to the conversion of industrial uses, existing residential properties would be converted to a public facility (parking lot); two existing residential properties at the intersection of Howard Avenue and 12th Street and two existing</p>	<p>Design Options would require conversion of existing land use to transportation use and incorporated into the Riverside-Downtown Station as follows:</p> <ul style="list-style-type: none">Design Option 1A:<ul style="list-style-type: none">Single-family Residential: 0.37 acreIndustrial: 6.9 acresDesign Option 1B:<ul style="list-style-type: none">Single-family Residential: 0.05 acreIndustrial: 6.9 acresDesign Option 2A:		

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Build Alternative	Design Option		
multi-family units located along 9 th Street are inconsistent with the City of Riverside’s land use plan as these residential properties are located in an area designated for industrial uses. These existing homes were constructed prior to the adoption of the current City of Riverside General Plan and Marketplace Specific Plan and are currently considered as non-conforming land uses.	<ul style="list-style-type: none">— Single-family Residential: 0.37 acre— Multi-family Residential: 0.37 acre— Industrial: 7.67 acres— Transportation: 0.77 acre• Design Option 2B:<ul style="list-style-type: none">— Single-family Residential: 0.05 acre— Multi-family Residential: 0.37 acre— Industrial: 7.67 acres— Transportation: 0.77 acre• Design Option 3A:<ul style="list-style-type: none">— Single-family Residential: 0.37 acre— Industrial: 6.9 acres— Transportation: 0.61 acre— Public Facilities: 0.65 acre• Design Option 3B:<ul style="list-style-type: none">— Single-family Residential: 0.05 acre— Industrial: 6.9 acres— Transportation: 0.61 acre— Public Facilities: 0.65 acre		
Noise			
<p>Noise: Temporary Impacts (Construction) Temporary construction vibration and noise impacts are anticipated due to the operation of on-site construction equipment. Construction noise near noise-sensitive land use, such as residences, would be 67.4 dBA L_{EQ} (8-hour) at 250 feet. Demolition activities within 10 feet of 12th Street residences are anticipated to result in temporary significant impacts. Noise generated by construction equipment is not anticipated to exceed 80 dBA L_{EQ} (8-hour) or 70 dBA L_{EQ} (8-hour) at night.</p>	<p>Design options 1B, 2B and 3B if selected, would result in significant vibration and noise impacts during construction. Mitigation measures are required to reduce vibration and noise impacts. If residents will not accept temporary accommodations (Measure N-4) during construction, vibration and noise impacts during construction and demolition activities would remain significant.</p> <p>Design Options 1A, 2A, 3A would result in less significant or no adverse effects to vibration and noise.</p>	<p>N-1: Under the Build Alternative and all design options, a barrier would be constructed along the eastern edge of the existing warehouse structure with a length of approximately 500 feet. The barrier height for this wall would be at least 12 feet high to reduce severe noise impacts to at least moderate levels. The noise barriers would be required to meet a minimum STC rating of 22 to 23 to adequately ensure noise reduction. It can be constructed of masonry, wood, plastic, fiberglass, plexiglass, steel, or a combination of those materials, if it meets the STC rating described above and there are no cracks or gaps through or below the wall. Any seams or cracks must be filled or caulked.</p> <p>N-2: Under the Build Alternative and for Design Options 2A and 2B only, a noise barrier would be constructed along the entirety of the existing western property wall of 2982 9th Street. The barrier would be at least 8 feet high to reduce severe noise impacts to at least moderate levels. The noise barriers would be required to meet a minimum STC rating of 22 to 23 to adequately ensure noise reduction. It can be constructed of masonry, wood, plastic, fiberglass, plexiglass, steel, or a combination of those materials, if it meets the STC rating described above and there are no cracks or gaps through or below the wall. Any seams or cracks must be filled or caulked.</p> <p>N-3: A construction Noise Management Plan will be prepared by the contractor who describes the measures to be included in the construction plans to ensure compliance with noise and vibration limits and submitted for approval by RCTC. The following measures will be included as feasible to reduce construction noise:</p>	<p>CEQA: Design Option: 1A, 2A, 3A Less Than Significant with Mitigation Incorporated Design Option: 1B, 2B, 3B Potentially Significant Impact NEPA: No Adverse Effects</p>
<p>Noise: Permanent Impacts (Operations) The Build Alternative would result in permanent impacts as noise level increases are anticipated at multiple receivers for each design option. Noise levels would increase primarily due to the removal of the existing Prism Aerospace building which provides noise attenuation for multiple residential receivers in the area.</p>	<p>Noise impacts associated with each Design Option include:</p> <ul style="list-style-type: none">• Design Option 1A: 15 residential receivers with a moderate impact and 9 residential receivers with a severe impact.• Design Option 1B: 15 residential receivers with a moderate impact and 9 residential receivers with a severe impact.• Design Option 2A: 19 residential receivers with a moderate impact and 11 residential receivers with a severe impact.• Design Option 2B: 19 residential receivers with a moderate impact and 11 residential receivers with a severe impact.• Design Option 3A: 15 residential receivers with a moderate impact and 9 residential receivers with a severe impact.• Design Option 3B: 15 residential receivers with a moderate impact and 9 residential receivers with a severe impact.		

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
		<ul style="list-style-type: none">• Construction equipment to be properly outfitted and maintained with manufacturer-recommended noise-reduction devices.• Diesel equipment to be operated with closed engine doors and equipped with factory-recommended mufflers.• Mobile or fixed “package” equipment (e.g., arc welders and air compressors) equipped with shrouds and noise control features readily available and specific to the type of equipment being used.• Electrically powered equipment to be used instead of pneumatic or internal-combustion powered equipment, where feasible.• Unnecessary idling of internal combustion engines (e.g., in excess of 5 minutes) to be prohibited.• Material stockpiles and mobile equipment staging, parking, and maintenance areas to be located as far as practicable from noise sensitive receptors.• The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.• No project-related public address or music system(s) shall be audible at any adjacent sensitive receptor.• Temporary sound barriers or sound blankets shall be installed between construction operations and adjacent noise-sensitive receptors. Due to equipment exhaust pipes being approximately 7 to 8 feet above ground, temporary sound barriers at least 10 feet high above grade may be utilized. To effectively reduce noise levels, the temporary sound barrier shall be constructed of a material with a minimum weight of 2 pounds per square foot with no gaps or perforations and shall remain in place until the conclusion of demolition, grading, and construction activities.• The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process for the affected resident shall be established prior to construction commencement to allow for resolution of noise problems that cannot be immediately solved by the site supervisor.• RCTC shall notify residences within 100 feet of the project’s property line in writing within two weeks of any construction activity, such as demolition, asphalt removal, and/or heavy grading operations. The notification to residences shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of a complaint and response procedure. <p>N-4: If Design Option 1B, 2B, or 3B is selected for construction, RCTC will provide temporary but similar housing accommodations within the city of Riverside to the residents of 3021 12th Street during periods of construction where significant noise is generated such as during the demolition work to remove the existing Prism Aerospace building walls or if construction</p>	

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
		work exceeds the following thresholds: daytime construction work exceeds 80 dBA L _{EQ} (8-hour) or if nighttime project construction work exceeds 70 dBA L _{EQ} (8-hour) at nearby residences. AES-4: See Aesthetics/Visual section above for further details on this measure.	
Population and Housing			
Population and Housing: Temporary Impacts (Construction) The Build Alternative would not displace a substantial number of people or existing housing during construction.	Temporary Impacts: Temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	No mitigation is required to address temporary and permanent impacts.	CEQA: Less Than Significant Impact NEPA: No Adverse Effects
Population and Housing: Permanent Impacts (Operations) The Build Alternative will require up to 10 residential unit (single family and multifamily combined) displacements and up to 2 non-residential displacements. Suitable and comparable replacement properties for housing and business relocations are available within a 10-mile radius of the project study area.	The following number of displacements would occur under each design option: <ul style="list-style-type: none">Design Option 1/Design Option 1A:<ul style="list-style-type: none">Residential Unit Displacements: 2Non-Residential Displacements: 1Design Option 1B:<ul style="list-style-type: none">Residential Unit Displacements: 0Non-Residential Displacements: 1Design Option 2A:<ul style="list-style-type: none">Residential Unit Displacements: 10Non-Residential Displacements: 2Design Option 2B:<ul style="list-style-type: none">Residential Unit Displacements: 8Non-Residential Displacements: 2Design Option 3A:<ul style="list-style-type: none">Residential Unit Displacements: 2Non-Residential Displacements: 1Design Option 3B:<ul style="list-style-type: none">Residential Unit Displacements: 0Non-Residential Displacements: 1		

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
Public Services			
Public Services: Temporary Impacts (Construction)/Permanent Impacts (Operations) The Build Alternative will not result in the acquisition or displacement of any police, fire stations, schools, parks, or other public facilities.	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	No mitigation is required to address temporary and permanent impacts.	CEQA: No Impact NEPA: No Impact
Recreation			
Recreation: Temporary Impacts (Construction) Construction would result in short-term, temporary impacts to Lincoln Park including increases in noise, dust, visual effects, and traffic. Construction would not result in the loss of access to or use of adjacent parks or recreational resources. Recreation: Permanent Impacts (Operations) Permanent impacts are not anticipated; however, noise levels may increase due to the removal of the FMC Complex Plant 1. A 12-foot noise barrier is proposed to reduce noise levels due to the removal of the FMC Complex Plant 1.	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	REC-1: Implementation of construction BMPs to minimize dust, odors, and noise would ensure that park activities and amenities would not be substantially affected. In addition, temporary, localized, site-specific disruptions to the local roadways serving Lincoln Park in the project study area may occur during various stages of construction. To avoid access related impacts to Lincoln Park during construction, RCTC must coordinate with the construction contractor and the City of Riverside to maintain access to Lincoln Park.	CEQA: Less than Significant Impact NEPA: No Impact
Transportation			
Transportation: Temporary Impacts (Construction) The Build Alternative may temporarily affect local circulation and access due to short-term street or lane closures.	Potential temporary impacts resulting from the construction of the Build Alternative and all design options are similar.	T-1: A TMP would be developed in coordination with the City of Riverside and emergency responders during the final design phase and would be implemented prior to and during construction to ensure traffic safety, minimize construction-related traffic congestion, detour routes, and minimize inconveniences to commuters, local residences, and businesses. At a minimum, the TMP would include appropriate signage, identification of alternate/detour routes, incident management, construction strategies, on- and off-site street circulation, and anticipated temporary traffic lane closures.	CEQA: Less Than Significant Impact NEPA: No Adverse Effect
Transportation: Permanent Impacts (Operations) The Project would improve train service and operational efficiencies which would have an overall beneficial impact of reducing freeway congestion and VMT in the region.	Under Design Options 1A and 2A study area intersections would operate at acceptable LOS and maintain the same roadway configuration. Design Options 2A, 2B, 3A, or 3B would vacate Commerce Street and provide a new north-south connection via the proposed Howard Avenue extension. All study area intersections for Opening Year (2025) and Build-out (2045), the LOS for the traffic study area intersections would either remain the same or stay at above acceptable LOS D threshold, as established by the City of Riverside. The Build Alternative and all design options would not increase regional VMT.		

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
Tribal and Cultural Resources			
<p><i>Tribal and Cultural Resources:</i> <i>Temporary Impacts (Construction)/Permanent Impacts (Operations)</i> Although no impacts are anticipated, there is a potential for encountering undiscovered tribal cultural resources in a subsurface context during development of the Build Alternative.</p>	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	<p>TCR-1 Pre-construction Activities: Prior to construction, RCTC will establish the notification protocol with Tribes that have requested consultation as part of the Assembly Bill 52 process. This consultation will address the evaluation of the newly discovered resources and avoidance and/or mitigation measures, as appropriate, and a pre-construction meeting will be held with the construction contractor (for ground-disturbing activities) and include the qualified Native American tribal cultural monitor.</p> <p>TCR-2 Construction Monitoring: Construction related ground-disturbing activities such as grading, and other activity will be monitored during construction by a qualified Native American tribal cultural monitor.</p> <p>TCR-3 Inadvertent Discovery of Tribal Cultural Resources during Construction: In the event that tribal cultural resources are encountered, the Native American tribal cultural monitor would have the authority to temporarily halt or redirect grading and other ground-disturbing activity within a 50-foot radius of the find, and these materials and their context will be avoided, until the archaeological principal investigator and RCTC have been notified and notice has been given to the consulting Tribes. Project personnel will not collect or retain cultural resources. Prehistoric resources include, but are not limited to, flaked stone tools and debitage; projectile points; mortars and pestles; dark, friable soil containing shell and bone; dietary debris; heat-affected rock; or human burials. Pursuant to California PRC § 21083.2(b), avoidance is the preferred method of preservation for archaeological resources.</p> <p>TCR-4 Tribal Cultural Resources that may be Eligible for NRHP or CRHR: If cultural material is encountered that appears to be eligible for CRHR, the monitors will coordinate with RCTC staff to develop and implement appropriate mitigation measures. Anticipated mitigation measures include documentation and collection of cultural material, as well as controlled excavation, if necessary. Cataloging and analysis methods will be agreed upon among the parties but will not delay project construction.</p>	<p>CEQA: Less Than Significant Impact with Mitigation Incorporated</p> <p>NEPA: No Adverse Effects</p>
Utilities and Service Systems			
<p><i>Utilities and Service Systems:</i> <i>Temporary Impacts (Construction)</i> The Build Alternative will require the temporary relocation of gas, water, electric, storm drain, sewer, fiber optic, or cable TV utilities.</p>	<p><i>Temporary/Permanent Impacts:</i> Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.</p>	UTIL-1: RCTC will protect in place or relocate affected utilities with minimal disruption to services and provide advanced notification. RCTC would develop a plan for public outreach to inform customers of construction schedules and potential short-term disruptions to service systems, as needed.	<p>CEQA: Less Than Significant with Mitigation Incorporated.</p> <p>NEPA: No Adverse Effects</p>
<p><i>Utilities and Service Systems:</i> <i>Permanent Impacts (Operations)</i> The Build Alternative will require the permanent relocation of gas, water, electric, storm drain, sewer, fiber optic, or cable TV utilities. A municipal well will be permanently removed from the project site.</p>		UTIL-2: RCTC would continue coordination with Riverside Public Utilities to provide compensation to rehabilitate an existing well located offsite.	

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
Wildfire			
Wildfire: Temporary Impacts (Construction)/Permanent Impacts (Operations) The Build Alternative is not located in a high fire hazard zone and would not exacerbate or increase wildfire risk.	Temporary/Permanent Impacts: N/A.	N/A	CEQA: No Impact NEPA: N/A
NEPA Only Environmental Topics			
Environmental Justice			
Access and Circulation: Temporary Impacts (Construction) Existing roadways and intersections may be subject to temporary detours and lane blockages adjacent to the Riverside-Downtown Station at multiple locations throughout the traffic study area. Local roadways may be subject to temporary lane and/or street closures that could be intermittently occupied by construction equipment. Access and Circulation: Permanent Impacts (Operations) EJ populations would not experience permanent disproportionately high and adverse effects on access and circulation.	See the CEQA Transportation section of this table for impacts to access and circulation by design option.	Refer to Transportation Measure: T-1	NEPA: No Adverse Effect
Noise: Temporary Impacts (Construction) The use of on-site construction equipment will result in temporarily increased noise levels. Noise: Permanent Impacts (Operations) The Build Alternative would remove an existing building that is effectively abating existing noise from the surrounding area. Noise impacts are anticipated at existing residences and at a park. It is anticipated that first row homes near the station would experience severe noise impacts under FTA guidelines.	See the CEQA Noise section of this table for noise impacts by design option.	Refer to Noise Measures N-1 to N-4	
Community Character and Cohesion: Temporary/Permanent Impacts EJ populations would not experience permanent or temporary disproportionately high and adverse effects on community character and cohesion.	See the CEQA Land Use Planning, CEQA Population, and CEQA Public Services sections of this table for community character and cohesion impacts by design option.	N/A	
Relocations: Temporary Impacts (Construction) No property in addition to what would be acquired for permanent use may be required for TCEs. Relocations: Permanent Impacts (Operations) The Build Alternative and all Design Options would require the displacement and relocation of adjacent properties.	See the CEQA Recreation section of this table for parks and recreation impacts by design option.	N/A	

CEQA/NEPA Potential Environmental Impacts		Proposed Avoidance, Minimization, Mitigation Measures ¹	CEQA/NEPA Level of Impact
Build Alternative	Design Option		
<i>Parks and Recreation:</i> <i>Temporary/Permanent Impacts</i> EJ populations would not experience permanent or temporary disproportionately high and adverse effects on parks and recreation.	See the CEQA Population and Housing section of this table for relocation impacts by design option.	Refer to Recreation Measure: REC-1	NEPA: No Adverse Effect
<i>Utilities and Service Systems:</i> <i>Temporary/Permanent Impacts</i> EJ populations would not experience permanent or temporary disproportionately high and adverse effects on utilities and public services.	Potential temporary and permanent impacts resulting from the construction and operations of the Build Alternative and all design options are similar.	Refer to Utilities and Service System Measures UTIL-1 and UTIL-2	
<i>Safety and Security</i>	No Impact	No Impact	NEPA: No Impact
Section 4f			
<i>Section 4(f): Historic Sites</i> <i>Temporary/Permanent Impacts</i> The FMC Plant 1 and 2 and Worker’s Houses on Howard Avenue are considered historic sites of national, state, or local significance because they are eligible for listing in the National Registry. The Worker’s House are a multi-component resource located on a single parcel (4110 through 4140 Howard Avenue) (4). The historic resource comprises four dwellings located on one parcel. Collectively, they represent early iterations of Worker’s Houses, two of which take on the form of a Shotgun House.	Potential permanent impacts resulting from the operations of the Build Alternative and all design options are similar. The Project Design Options will require the demolition or removal of the following structures: <ul style="list-style-type: none">• Design Option 1A: FMC Complex and 12th Street residences• Design Option 1B: FMC Complex• Design Option 2A: FMC Complex, 12th Street residences, and Ninth Street Neighborhood Conservation Area residences• Design Option 2B: FMC Complex and Ninth Street Neighborhood Conservation Area residences• Design Option 3A: FMC Complex and 12th Street residences• Design Option 3B: FMC Complex	Refer to Cultural Resources CUL-1 to CUL-3	NEPA: Use/Adverse Effect
<i>Section 4(f): Public Parks, Recreation Areas, Waterfowl and Wildlife Refuges.</i> Lincoln Park – No Use	Lincoln Park - No Use	Refer to Recreation Measure: REC-1	NEPA: No Use

ACM = asbestos containing material
BMP = best management practice
CDFW = California Department of Fish and Wildlife
CRHR = California Register of Historical Resources
dBA = A-weighted decibels
DTSC = Department of Toxic Substances Control
EJ = environmental justice
FMC = Food Machinery Corporation
GHG = greenhouse gas
HABS = Historic American Buildings Survey
LBP = lead-based paint
LEQ = peak hour noise equivalent level
LOS = level of service
NAHC = Native American Heritage Commission
NRHP = National Register of Historic Places
O₃ = ozone
PM_{2.5} = fine particles of 2.5 micrometers or smaller
RWQCB = Regional Water Quality Control Boards
SCAQMD = South Coast Air Quality Management District

STC = Sound Transmission Class
SMP = Site Management Plan
TCE = temporary construction easements
TMP = Traffic Management Plan
URA = Uniform Relocation Assistance and Real Property Acquisition Act
USFWS = United States Fish and Wildlife Service
UWR = Universal Waste Rules
VMT = vehicle miles traveled
WEAT = worker environmental awareness training

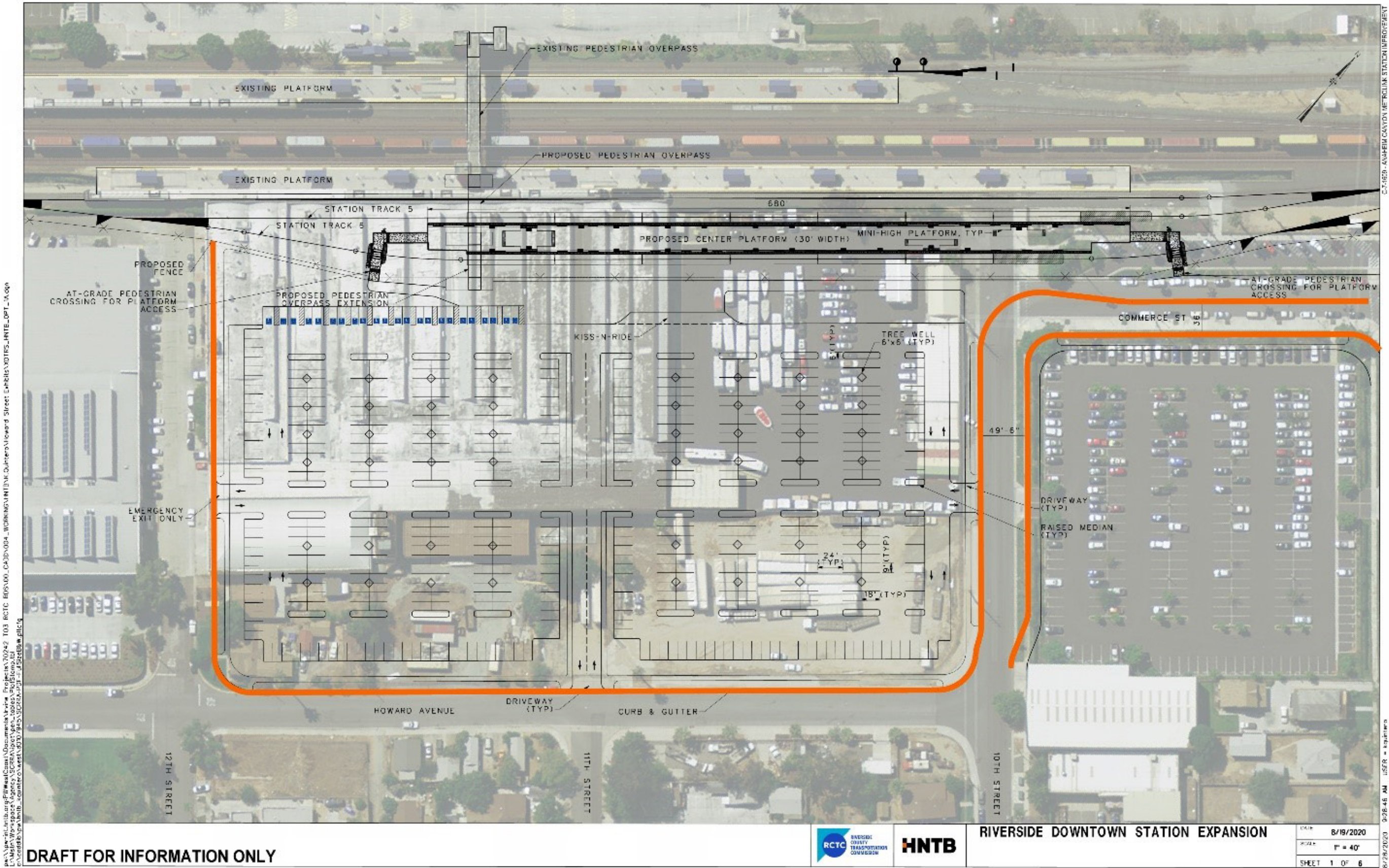


Figure ES-4. Build Alternative with Parking Design Option 1A

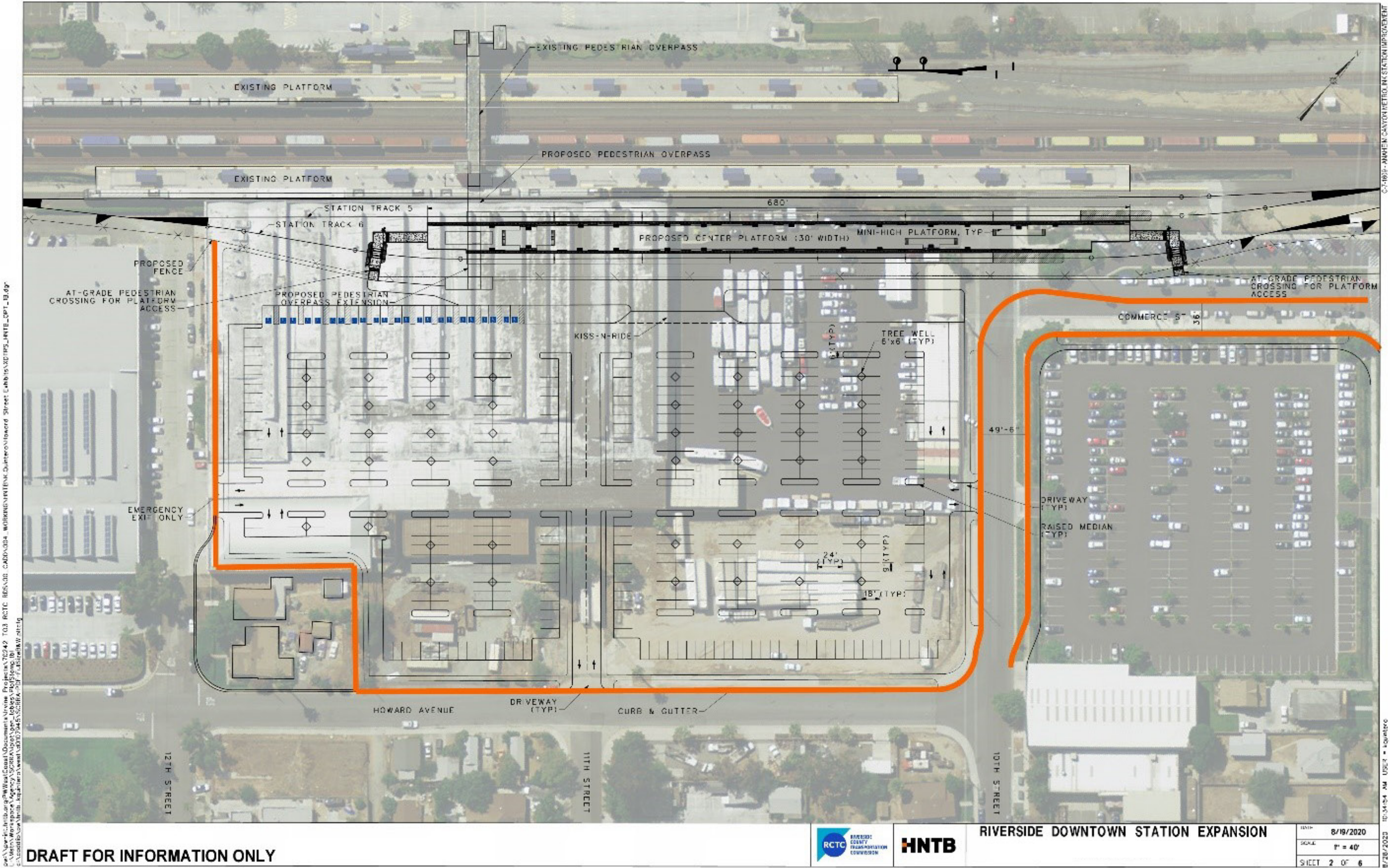


Figure ES-5. Build Alternative with Parking Design Option 1B

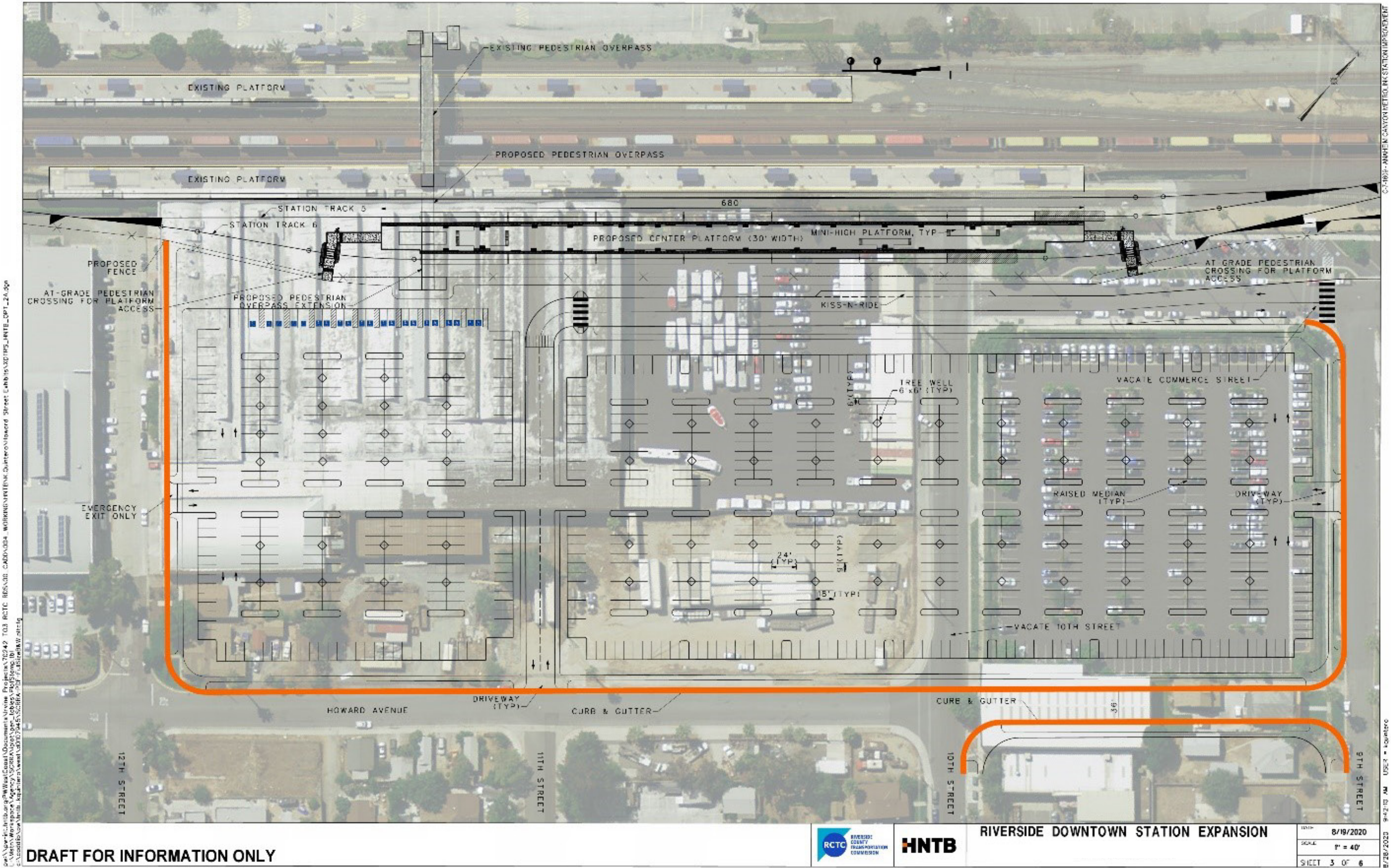


Figure ES-6. Build Alternative with Parking Design Option 2A

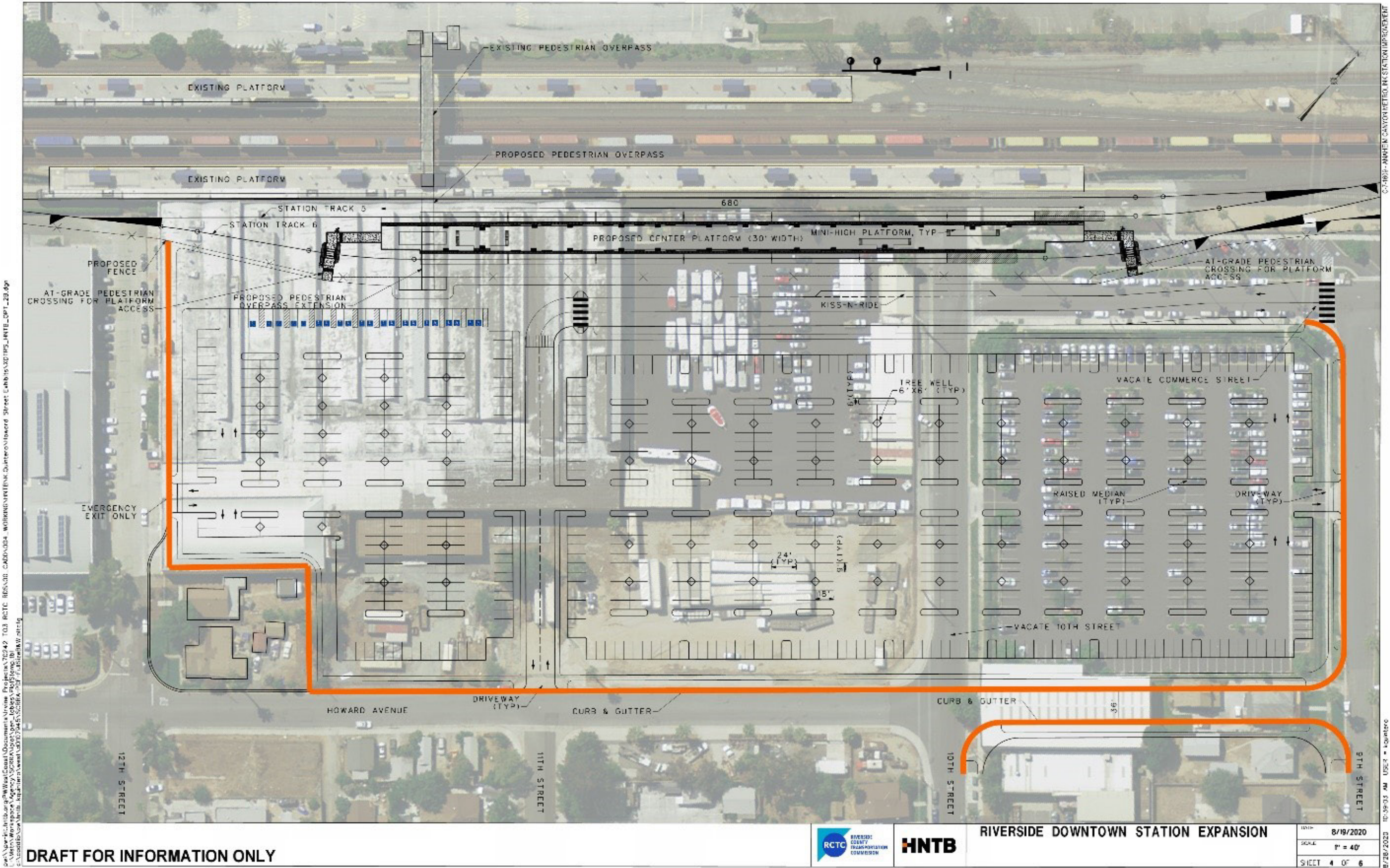


Figure ES-7. Build Alternative with Parking Design Option 2B

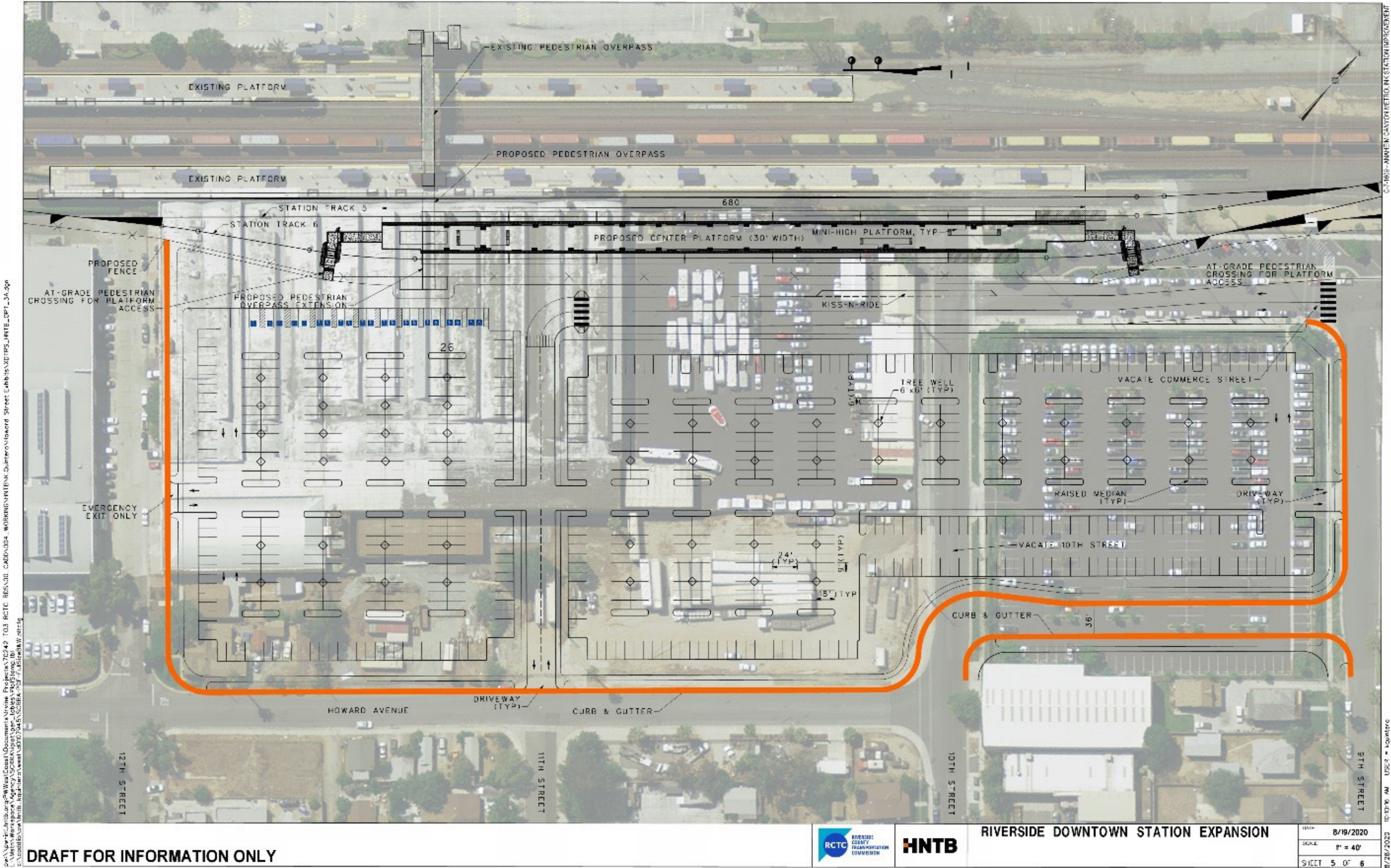


Figure ES-8. Build Alternative with Parking Design Option 3A

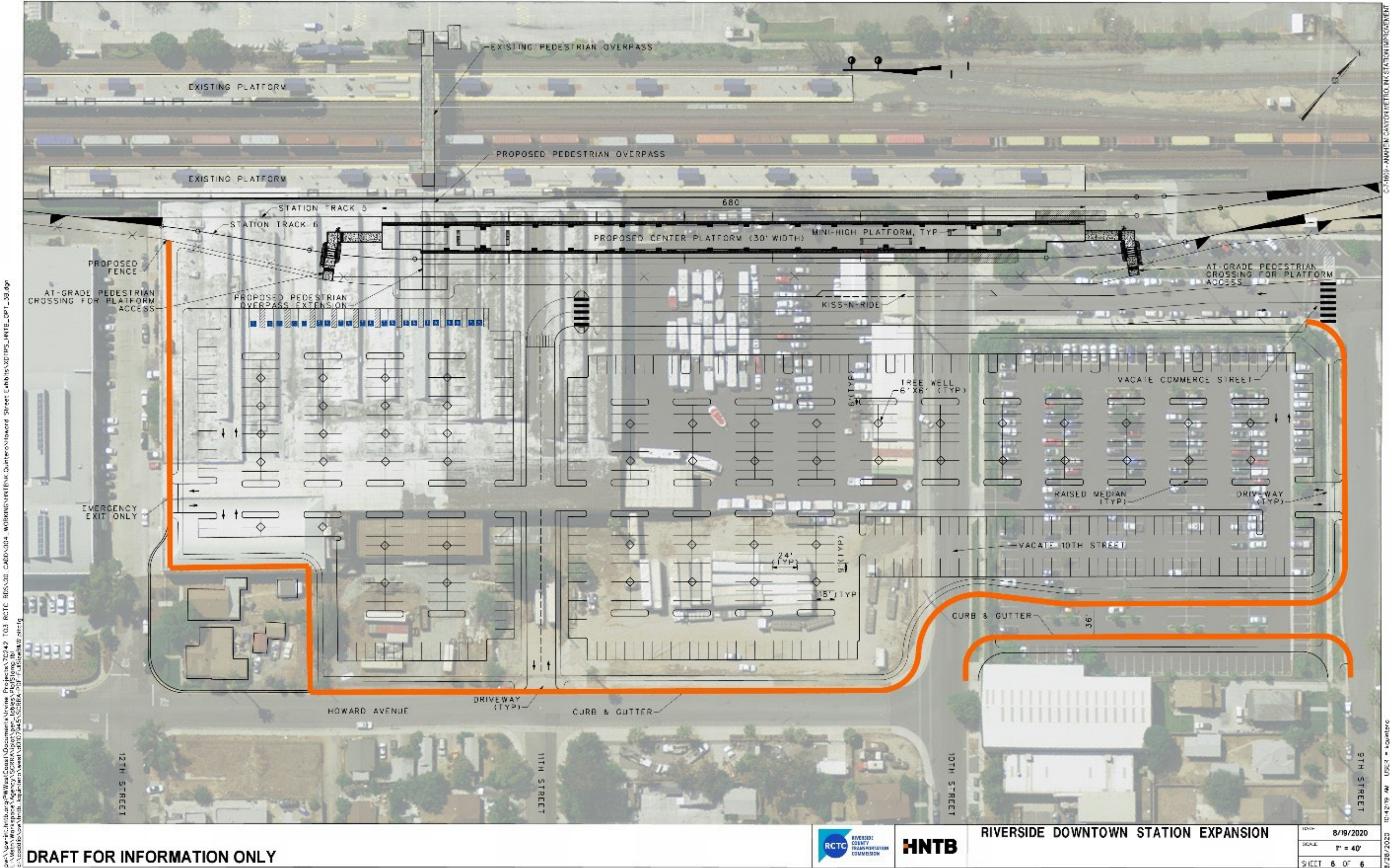


Figure ES-9. Build Alternative with Parking Design Option 3B