

Chapter 3. Project Description

3.1 Introduction

The Metro Gold Line Foothill Extension Construction Authority (the “Authority”) prepared an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Gold Line Foothill Extension Project (the “Project”). The Gold Line Foothill Extension is referred to as Phase 2 of the overall Gold Line Foothill Extension Project and, at complete build out, would span from the cities of Pasadena to Montclair. The Foothill Extension Project was divided into two subsequent phases: Phase 2A, spanning from Pasadena to Azusa, and Phase 2B, spanning from Azusa to Montclair. In conjunction with [the](#) Authority’s decision to proceed with Phase 2A, a Final EIR was prepared based on the Draft EIS/EIR and was certified in 2007, though only for the purposes of extension’s Phase 2A. The portion of the Phase 2A from Pasadena to Azusa includes 11.5 miles of track through six cities (Pasadena, Arcadia, Monrovia, Duarte, Irwindale, and Azusa), six stations, and the construction of a new Maintenance and Operation Facility (M&O Facility).

The 2007 *Gold Line Phase II Pasadena to Montclair-Foothill Extension Final Environmental Impact Report* (2007 Final EIR) previously analyzed the M&O Facility at a different location, and construction was planned to be part of Phase 2B. However, current planning calls for completion and operation of the M&O Facility as part of Phase 2A, with a potential site in the City of Monrovia having been identified. Nonetheless, the previously identified Coors-Miller Brewery Company, Irwindale site is analyzed as an alternative to the Monrovia site, as part of the alternatives analysis required by CEQA.

In addition to the M&O Facility relocation, other Phase 2A refinements have been identified after certification of the 2007 Final EIR. This includes the realignment of Mountain Avenue at Duarte Road, the relocation of parking structures at the Monrovia and Irwindale LRT stations, replacement of the North Colorado Boulevard Bridge, and the replacement of the San Gabriel River Bridge. Since only minor additions or changes to the 2007 Final EIR would occur as a result of the proposed project revisions, a Supplemental Environmental Impact Report (SEIR) to the 2007 Final EIR will be prepared to provide environmental clearance for the M&O Facility and other Phase 2A refinements.

According to Section 15163 (b) of the 2010 CEQA Guidelines, “the supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.” Accordingly, this supplement to the Gold Line Foothill Extension Final EIR analyzes the potential environmental impacts of the currently proposed M&O Facility and Phase 2A refinements.

This project description is intended, among other things, to serve as a general description of the project’s technical, economic, and environmental characteristics (CEQA Guidelines Section 15124(c)).



3.2 Project Objectives

This project is being developed by the Authority to support operations of the Metro Gold Line and other Metro light rail transit (LRT) lines. All applicable Metro Design criteria will be adhered to for the design of each project refinement. Specific objectives of the project include:

M&O Facility refinements:

- Develop a maintenance and operations facility yard to accommodate LRT system capacity and storage requirements,
- Provide facilities to perform routine and special maintenance for Light Rail Vehicles (LRVs),
- Provide facilities to perform light and heavy duty LRV fleet repairs, and
- Provide storage facilities for LRVs including facilities to house the trains overnight.

Other refinements:

- Realign the Mountain Ave./Duarte Rd. intersection to improve safety,
- Relocate parking at Monrovia Station to better accommodate the City of Monrovia's future transit oriented development (TOD),
- Relocate parking location and configuration at Irwindale station and improve safety and constructability at the Irwindale Station,
- Replace the Colorado Boulevard Bridge to address structural issues and minimize property requirements, and
- Replace the San Gabriel River Bridge design.

Furthermore, the Authority strives for the M&O Facility in Monrovia to be designed and constructed to meet Leadership in Energy and Environmental Design (LEED[®]) Silver Certification. The LEED[®] certification program encourages and accelerates global adoption of sustainable “green” buildings and development practices, recognizing projects that implement strategies for better environmental and health performance. As such, these facilities will be constructed to minimize environmental impacts.

3.3 Regional Project Location and Setting

All proposed construction and improvements would occur within the Pasadena to Azusa portion of the Gold Line Foothill Extension (Figure 3–1).

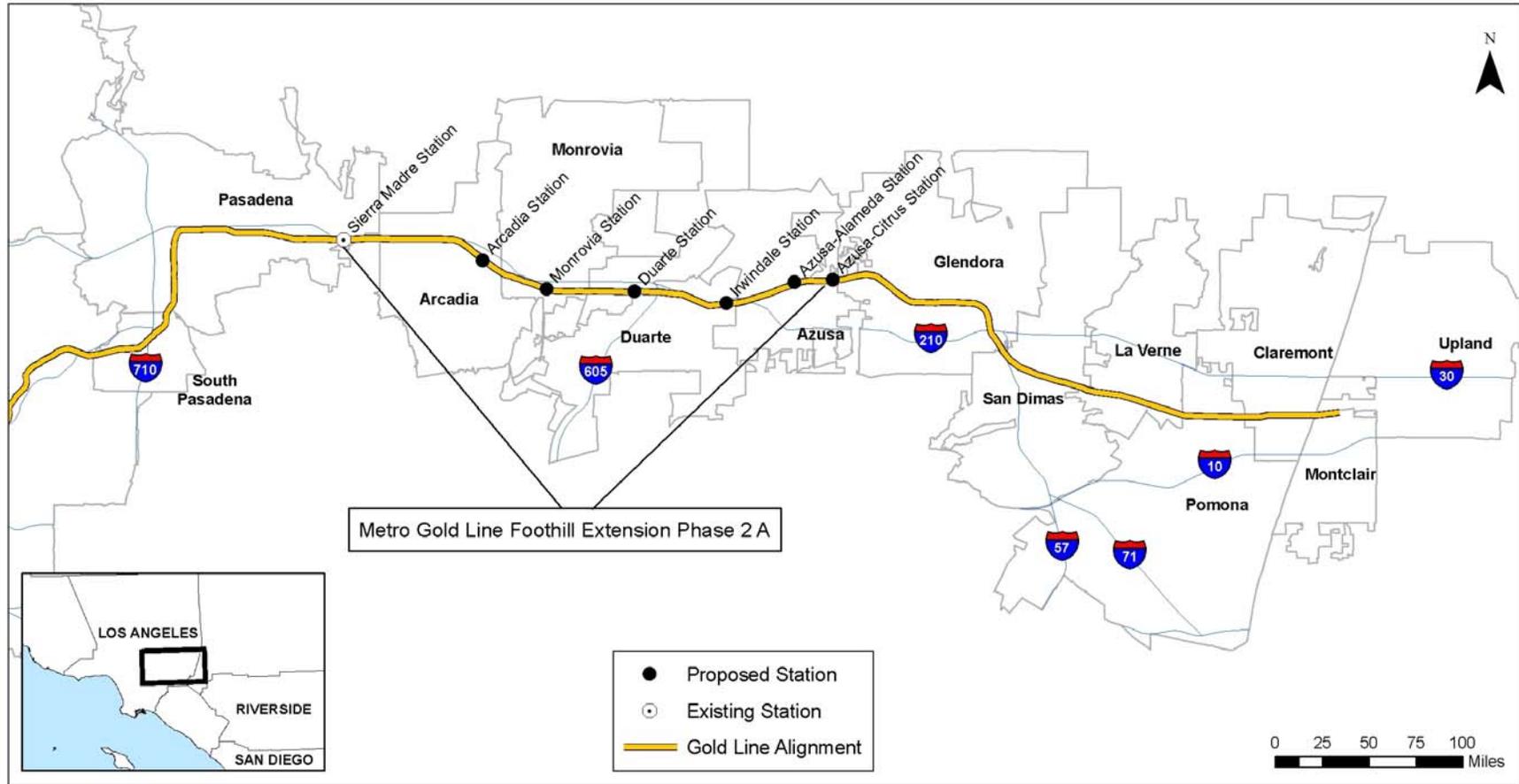
The 2007 Final EIR included analysis of a M&O Facility in Irwindale. A new site has been identified. As shown in Figure 3-1 above the M&O Facility would be located in the City of Monrovia on a 27 acre tract of land. At present, two options (Option A and B) for the M&O Facility design are being considered for the Monrovia site. Option A would occupy 27 acres, whereas Option B would occupy 24 acres. The primary difference between the two options is that Option B would not require a 3.0 acre tract of land located in the southeast portion of the study area, which is currently



put to an industrial use, and would reduce project costs. Although the 2007 Final EIR included analysis of parking for each LRT station, relocation of the parking facilities are currently being proposed at the Monrovia and Irwindale LRT stations due to site constraints at the previously identified locations. The realignment of Mountain Avenue at Duarte Road, the replacement of the North Colorado Boulevard Bridge, and replacement of the San Gabriel River Bridge are also proposed due to design constraints discovered since the 2007 Final EIR was certified. Each of these additional elements will be analyzed accordingly in this SEIR.



Figure 3-1: Project Location



Source: ESRI 2008 Data, Jacobs Engineering 2010



3.4 Project Refinements and Construction Activity Analyzed in the SEIR

3.4.1 Project Refinements

The following six refinements are analyzed regarding the refinement's location; existing land use (LU) and zoning; project characteristics; access, parking, and circulation; landscaping; and utilities. As proposed in the 2007 Final EIR, the Phase 2A Gold Line Foothill Extension Project will utilize a Design-Build method of project delivery that combines the architectural/engineering design services and construction services under one contract or a single entity.

3.4.1.1 M&O Facility in Monrovia (Option A)

Location

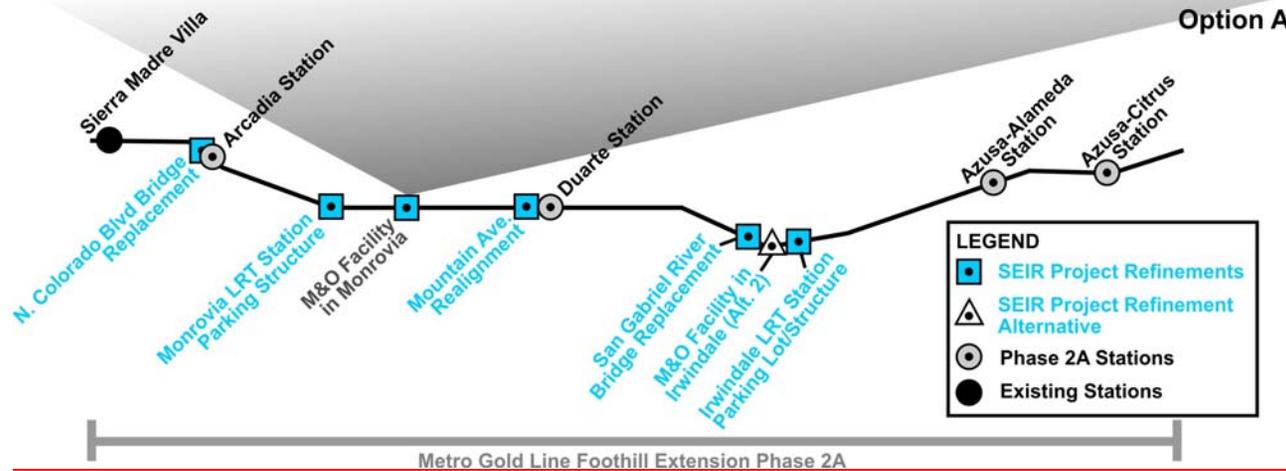
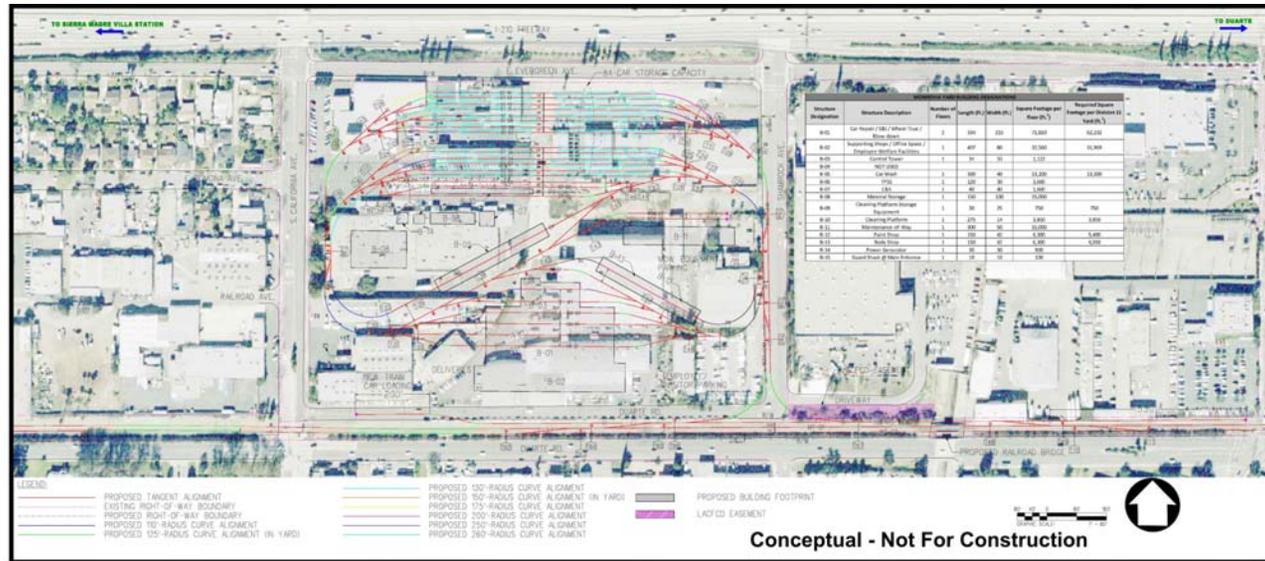
The proposed M&O Facility in Monrovia site is bounded by South California Avenue to the west, East Evergreen Avenue to the north, South Shamrock Avenue to the east, and East Duarte Road to the south. Adjacent properties include a Home Depot and other commercial facilities to the east; industrial, commercial, and residential uses to the west; the I-210 freeway to the north; commercial, industrial, and residential uses to the south; and residential uses across California Avenue at the north-west corner and across Duarte Road at the south-west corner of the site. There are two options (Option A and B) currently being considered for the M&O Facility. Option A occupies approximately 27 acres (Figure 3-2), and Option B occupies approximately 24 acres (Figure 3-3). The differences in Option A and B is the use of/avoidance of a 3.0-acre (approximate) property located in the southeast corner of the proposed M&O Facility study area. Further differences are discussed in Section 3.4.1.2 M&O Facility -Option B, which primarily identifies layout differences between Option A and B.

Existing Land Use (LU) and Zoning

2008 General Plan land use designations and zoning are the same for the City of Monrovia. The proposed M&O Facility is designated and zoned as a Planned Development Area 12 (PD-12). The Planned Development Area (PD-12) Station Square Transit Village land use designation allows flexibility in land use types, location, and development intensities that will allow development to respond to changes in the marketplace over time. PD-12 is located south of I-210 Freeway; the Station Square Transit Village boundaries are Magnolia Avenue to the west, Evergreen Avenue to the north, Shamrock Avenue to the east, and Duarte Road to the south. Therefore, the proposed M&O Facility is located entirely within the PD-12 Station Transit Village boundary.



Figure 3-2: M&O Facility in Monrovia (Option A)¹



¹ The green shading on Figure 3-2 through 3-9 denote the M&O Facility in Irwindale (Alternative 2), which is discussed in Chapter 5.

Figure 3-2: M&O Facility in Monrovia (Option A)

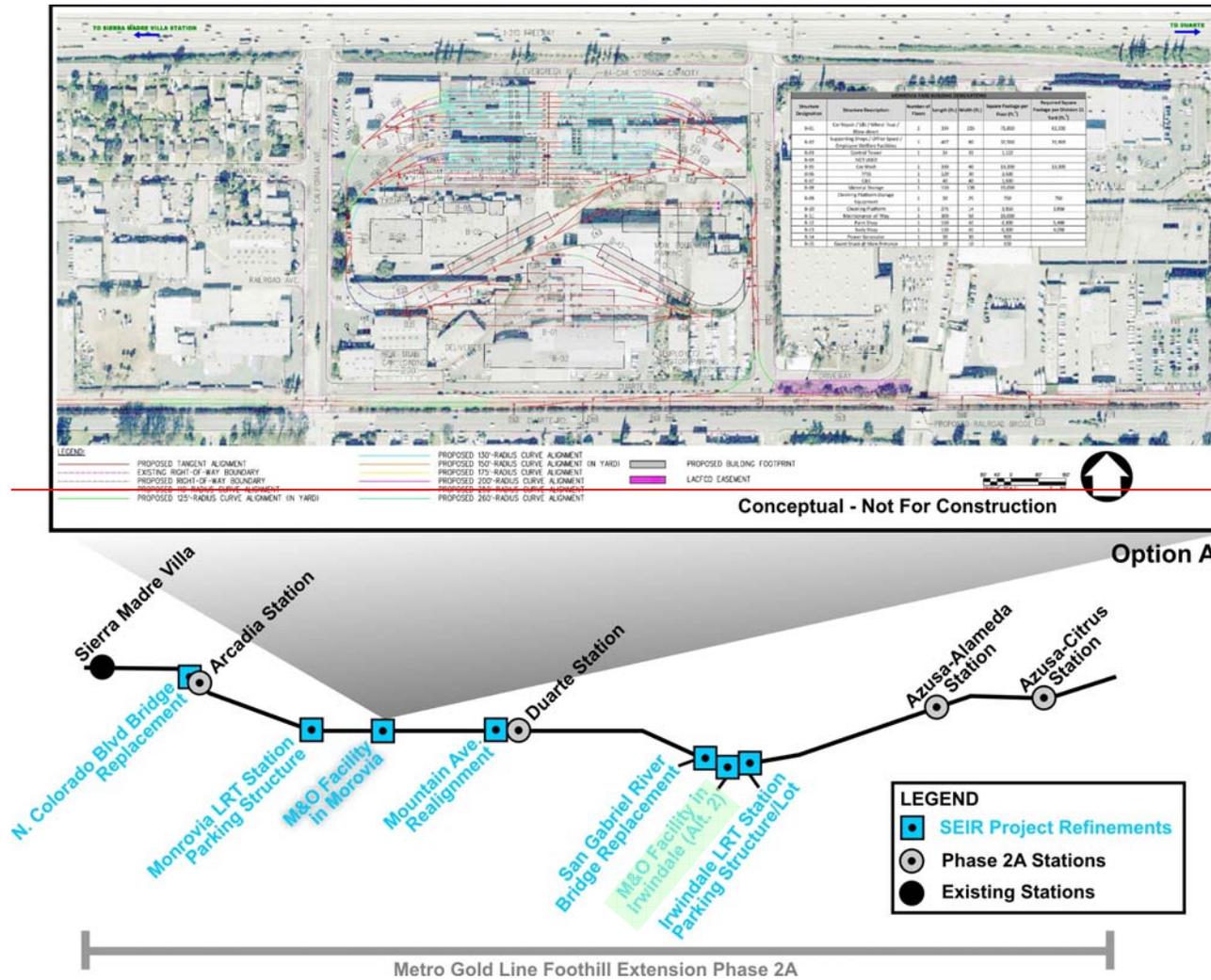


Figure 3-3: M&O Facility in Monrovia (Option B)

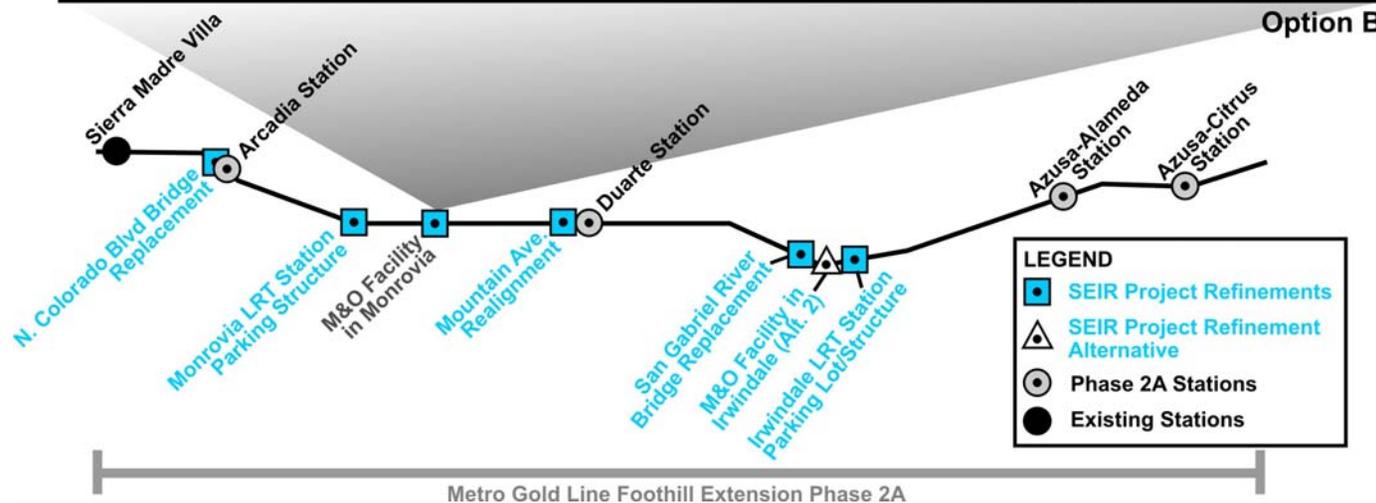
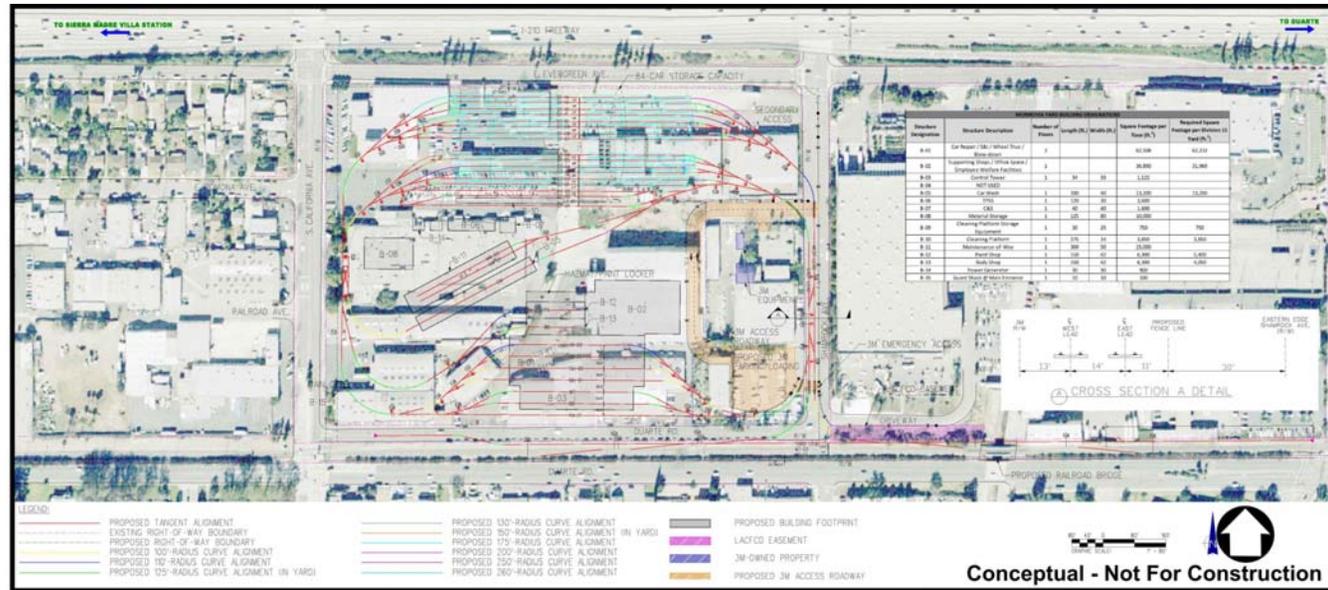
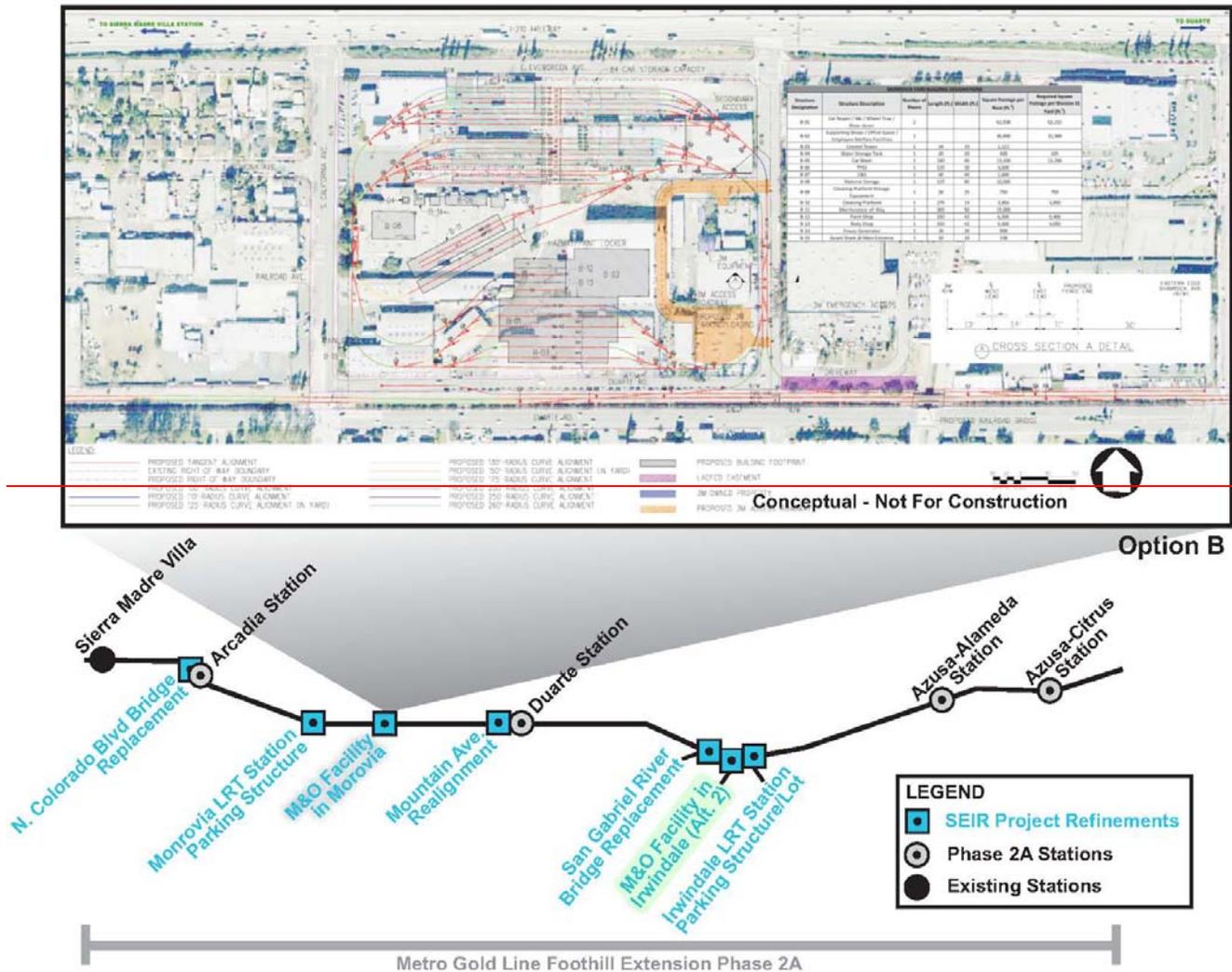


Figure 3-3: M&O Facility in Monrovia (Option B)



The City of Monrovia Planning Commission on February 10, 2010 recommended approval to the City Council for Phase II of Station Square Transit Village. A General Plan Amendment (GPA2010-01), Zoning Code Amendment (ZC2010-01) and a Specific Plan - encompassing 80 acres of industrial property bound by Evergreen Avenue, Shamrock Avenue, Duarte Road and California Avenue - were forwarded to the City Council with three development scenario recommendations:

- Scenario one would be to develop the property with a METRO Gold Line operations and maintenance facility.
- Scenario Two would be to develop the property with a mix of office, light manufacturing and research and development uses. This scenario would allow uses identified in the O/RD/LM Zone.
- Scenario Three would allow for a combination of the METRO Gold Line operations and maintenance facility and office, research and development and light manufacturing uses if METRO does not require use of the entire site.

As of August 2010 the Monrovia City Council has not taken action on Phase III of the Station Square Transit Village.

Project Characteristics

The M&O Facility design is based on fleet size and yard capacity requirements, which specify a maximum storage capacity of 84 cars plus additional storage for 20 cars in the shop. The requirements also include cleaning facility tracks. According to the Construction Authority Metro Operations, approximately 72 cars per day would access the M&O Facility. The M&O Facility will be comprised of multiple buildings/functions as described below. At this time an approximate total square footage for all building is anticipated to be approximately 170,000 square feet (sq. ft.), and conceptual site layouts are shown in Figure 3-2 and 3-3 for Option A and B respectively. Further, the M&O Facility would include the following components:

Access, Circulation, and Storage Tracks. Storage tracks are proposed in the northern portion of the site. The yard would be designed as a double-ended configuration to allow for efficient storage of maximum-length trains. The yard would incorporate two distinct sets of storage areas, directly adjacent to one another, with arrival and departure yard leads on both ends. These tracks would serve as mid-day layover and overnight storage, allow for pre-departure vehicle inspections to occur, and provide easy access to and from the parked trains. Storage tracks would have direct access to mainline connecting track work, utilizing alternating track centers to provide adequate space for overhead contact system (OCS) poles and paved walkways. At-grade walkways would provide access to the trains for cleaning and light maintenance. The storage yard would be designed to hold up to 84 cars. Storage tracks would be designed to have access to any circulation track, the cleaning platform, vehicle car wash, and the maintenance buildings. These tracks would also be designed to allow easy access to the maintenance shop for scheduled LRV inspection and light and/or heavy vehicle maintenance. Track centers in the storage yards would be staggered to allow easier access to operators and maintenance personnel.

Rail access to the yard or facility would be by two yard leads from the LRT mainline and would be located on the east side of the facility along Shamrock Avenue. The access and circulation tracks,



located throughout the site between the LRT mainline and the M&O Facility, would be designed so that each grouping of yard tracks has access to a separate mainline lead. This would allow access to both mainline leads via crossover(s) and connections to the maintenance facility and body/paint shop track leads.

Rail car repair, service and inspection facilities (B-01). The primary maintenance building containing rail car repair facilities would be located at the southern end of the site north of East Duarte Road. This main maintenance facility would be on the first floor of the building that would also house the administrative offices/shop/employee facilities (B-02) and control tower (B-03) and would include:

- Light maintenance and inspection facilities;
- Two heavy repair tracks that can accommodate two car hoists;
- Two service & inspection tracks with full length pits and with a three car capacity;
- One wheel truing track; and
- One blowdown track.

Light maintenance/inspection would include preventive and corrective maintenance activities. Periodic preventive maintenance activities, consisting of the lubrication and servicing of vehicle components as well as daily and periodic inspection, would be performed regularly on all vehicles. Preventive maintenance schedules are mileage and/or calendar based in accordance with manufacturer recommendations. They are designed to reduce service failures and prolong equipment life. Heavy maintenance would involve as-needed substantial repairs and rebuild of vehicles due to accidents, vandalism, or overhaul of components. This includes the removal and replacement of major vehicle subsystems and components, including HVAC, wheel/axle assemblies (trucks), traction motors.

The delivery area space (loading and unloading) will be located in the southwest portion of the site and will be designed to accommodate road access and loading areas to enable efficient delivery and dispatch. These spaces will be adjacent to the materials management area of the maintenance facility (B-01 and B-02) and the material storage building (B-08). All spare parts, replacement equipment, suppose, and consumables will be stored with the respective building sat this facility.

Administrative Offices/Shops/Employee Facilities (B-02). Administrative office space including supervisory offices, supporting shops, lockers, restrooms, lunch rooms, conference/training rooms, first aid supplies, and archive storage would be constructed in an attached building, directly south of the rail car repair and inspection facility. An electronic test & repair shop and a small component repair shop would be included. These shops would have equipment repair capabilities for vehicle electronic and mechanical components that can be repaired readily after removal from the vehicle. These shops would be provided with HVAC systems, individual workstations, workbenches, electrical power and compressed air outlets, open shelves, and storage lockers for materials and tools. A battery repair room would also be provided to support the charging, servicing, testing, and storage of batteries. This area would be properly ventilated, have explosion-proof electrical fixtures, and be equipped with eyewash stations, shower,



and a floor drain for possible acid spills and cleanup. Racks for storing various batteries, electrolyte storage facilities conforming to applicable safety standards, battery charging equipment, appropriate cables, and fresh water would be provided.

Cleaning Facilities (B-05, B-09, and B-10). A car wash facility (B-05) would be located in the northwestern portion of the site, directly south of the rail car storage area. The vehicle washing system would be used for exterior cleaning. A fully enclosed, automated LRV washing system with blow dry capabilities, including a drainage and water recycling system, would be located at the facility. The vehicle wash would have a thru-track as access to storage tracks and the mainline. The vehicle washer would include storage and mixing tanks for water and green cleaning solutions, brushes, water and cleaning application arches with splash shields, power outlets, hose bibs, and lighting. The car wash would be contained within a closed building (entrance and exits to remain open) to reduce noise from its operation. The wash operation would be initiated by the train operator at a control panel located at the entrance to the washer. A storage area (B-09) for cleaning supplies would be located immediately adjacent to the cleaning platforms with restrooms. A cleaning platform (B-10) on two separate thru-tracks would be located in the center of the site. This facility would be an interior car-cleaning platform with canopy. Provisions would include hot water supply outlet, floor sinks, and central vacuum system. Power outlets, hose bibs, and lighting would be provided along the cleaning platform. The platform would be designed to accommodate at least three vehicles on each side and equipped with an access ramp and stairs.

Vehicle Paint (B-12) and Body Shop (B-13). A vehicle paint and body shop would be constructed in the central eastern portion of the site between the Maintenance of Way facility (B-11) and the car repair and inspection facilities (B-01). Major car body repairs and painting, decaling, and wrapping would be performed in this separate body shop and paint shop building. Any equipment that cannot be repaired in the vehicle repair areas would be shipped to the appropriate repair location (i.e., a contractor maintenance location or the manufacturer). All materials required for car body repair and painting would be kept at the appropriate facility inside designated storage areas. Section 3.4.1.2 M&O Facility–Option B identifies layout differences between Option A and B.

Control Tower (B-03) and Communications Facilities (B-07). The M&O Control Tower (B-03) would be located in the southern portion of the site and would be used by the yard controller for the coordination and monitoring of all LRV movements within the yard. The M&O control room would be located in the control tower northwest corner of the maintenance building (B-01 and B-02) on the second floor and would be staffed at all times. The control room would be designed to accommodate space for desks, computer terminals, and a yard track work schematic. This room would be designed to provide an unrestricted view of the yard tracks. The yard control room would contain large windows that are tinted and sloped to reduce glare and the transmission of heat.

A communications equipment room (B-07) designed to store radio, public address, and emergency communications equipment would also be located within the maintenance facility. There would be a fire detection, alarm, and suppression system in place for the entire maintenance facility. Where traction power is installed, an interlock would be provided to de-energize traction power when and where sprinklers are active. Power switches for the M&O Facility buildings would be remotely controlled by the Yard Controller, or may be taken off of power for manual control. Shop track



switches would be manual operation only. Switches would be protected by point position signals, and powered switches would have detection devices to prevent the switches from being thrown while occupied.

Telephones and public address speakers would be provided in the yard areas to enable Yard Supervisors to communicate efficiently with personnel anywhere in the yard. Signs and graphics would be provided throughout the yard to provide directions, convey operating instructions and restrictions identify tracks and rooms, and provide other relevant information. The signage and graphics would be consistent with those provided at existing Metro maintenance facilities.

Traction Power Substation Supply (TPSS) (B-06). A TPSS is proposed to provide the necessary switch gear and control equipment for traction electrification of the M&O Facility running and storage tracks, as well as the shop and light rail vehicle (LRV) servicing tracks. A TPSS at this location would also provide traction electrification for the mainline in this area, but configured for the appropriate isolation between the yard and mainline systems. The TPSS is accessible for road vehicles for installation, repair, maintenance, and Fire Department needs. An auxiliary power section of the TPSS would be used to provide electrical power for the facility, with electrical power fed from the DC switchgear to be used for traction power distributed via the overhead contact system (OCS). Auxiliary power would include voltages and capacities needed to operate overhead full area facility lighting, electric-motored equipment, battery chargers, welding equipment, Heating Ventilation and Air Conditioning (HVAC) systems, and other associated maintenance equipment.

Emergency Power Generator (B-14). An emergency power generator for the maintenance facility would be provided with capacity sufficient to supply power for all emergency egress lighting, yard control room functions, security lighting in the yard, and 25 percent of the total equipment load. Based on conceptual engineering load calculations, a 750 kW diesel generator would be required. The generator will be tested once per month to maintain its readiness if emergency power is needed. In conjunction with the emergency generator provision, uninterruptible power supply (UPS) systems would be provided for back-up power of the emergency lighting, communications, signaling and other equipment loads.

Material Storage Facility (B-08). A material storage facility would be located in the central western portion of the site along California Avenue. Storage space within the maintenance facility includes areas designated for the storage of general parts, vehicle cleaning supplies, secured parts, tools, tool carts, and forklift/electric carts. There would also be a parts office for supervisory personnel and record archives. Storage space requirements for both light and heavy maintenance parts and tools would be provided. A tool crib would be provided for storage and issuance of tools. A computerized materials management system would be used to efficiently track shipments to and from the facility, track warranties, inventories and enable e-commerce initiatives. Hazardous Materials storage would be in designated areas within the maintenance facility building until proper disposal methods per local, state, and federal standards can be complied with. No hazardous materials would be stored outdoors unless the materials present a hazard to employees working within the facility. In this case, immediate disposition of the material would be required. The delivery area space (loading and unloading) will be located in the southwest portion of the site and will be designed to accommodate road access and loading areas to enable efficient delivery and



dispatch. These spaces will be adjacent to the materials management area of the maintenance facility (B-01 and B-02) and the material storage building (B-08). All spare parts, replacement equipment, supplies, and consumables will be stored with the respective building at this facility.

Maintenance of Way Facility (B-11). A Maintenance of Way (MOW) facility would be located in the central eastern portion of the site along Shamrock Avenue. The MOW facility would contain two stub-end equipment storage tracks. The primary function of the MOW facility is to support the required maintenance and repair of the systems mainline track components. Equipment such as ballast tampers, ballast regulators, and other rail mounted equipment would be stored on the stub-end tracks. The shop would also house spare track components such as ties, rail, anchor assemblies, and switch equipment. Section 3.4.1.2 M&O Facility—Option B identifies layout differences between Option A and B.

Access, Parking and Circulation

A network of access roadways to and within the yard will be provided. These roads will be paved and designed to enable material delivery and component transport vehicles to maneuver, load and unload materials within the yard at the designated areas. Access to the proposed M&O Facility yard would be from South California Avenue, where the main gate and guard house (B-15) would be located. This main entrance is large enough to accommodate delivery vehicles, most likely 18-wheel tractor trailers and waste disposal equipment. The main entrance to the facility would be protected by a guard house that would be staffed twenty-four hours a day and seven days a week with security personnel. The overall site would be completely enclosed by security fencing and retaining walls.

Secondary access for fire response, police, and other emergency vehicles would be located on the north east quadrant of the facility exiting to Shamrock Avenue. A network of access roadways to and within the yard would be constructed. These roads would be paved and designed to enable material delivery and component transport vehicles to maneuver, load, and unload materials within the yard at the designated areas. Employee, visitor, and emergency vehicles would also use the access roads. A service road would cross the body of the storage tracks at grade to provide a fire access road. Minimum road widths have been designed to meet with the requirements of the fire department and local codes, and to allow adequate space to accommodate and turn freight delivery trucks.

The delivery area, located to the west of the rail car repair, service, and inspection facilities, would be coordinated with road access and loading areas to enable efficient delivery and dispatch of materials to and from the maintenance facility (B-1). All spare parts, replacement equipment, supplies, and consumables would be stored within the respective buildings at this facility.

The M&O Facility yard would include approximately 80 to 100 parking spaces at the maintenance building and the paint and body shop building for maintenance equipment parking. ADA accessible spaces would also be provided adjacent to entrances to the maintenance facility (B-1).

Landscaping and Tree Removal

As part of site preparation, approximately 35 to 40 existing trees would be either left in place or removed prior to project construction. A majority of the trees located with the M&O Facility study



area are volunteer or weed trees that are not desirable species, and therefore will be replaced during the landscaping phase. After construction, landscaping and a small park-like area would be developed on the northwest corner of the site to enhance the visual aesthetics of the M&O Facility and surrounding neighborhood. [Metro Environmental Policy & Water Use and Conservation Policy provisions would be considered in selecting and maintaining plant materials.](#) Authority guidelines for tree removal and landscaping are included in Volume 2.F of the SEIR.

Utilities

Impacts to utilities cannot be accurately defined since only conceptual-level design is available (as of August 2010). Construction of the M&O Facility would require relocating, abandoning, or otherwise avoiding aboveground and underground utilities from the proposed M&O Facility site. Utility providers for the area are as follows:

- Storm drain - City of Monrovia,
- Water - City of Monrovia,
- Gas - Southern California Gas,
- Electric - Edison,
- Cable TV - Charter, and
- Telephone -Verizon.

Both aboveground and underground utilities on site may need to be relocated or protected during construction. At this time the following utilities will require relocation.

- Relocate an 8-inch sewer and 8-inch water line in Shamrock Ave.
- Abandon/Remove an 8-inch water, relocate an 8-inch sewer and relocate overhead utilities along East Duarte north of the railroad tracks.

No other utilities are known to exist within the construction area. Most of this work would be completed prior to construction. Utility relocation, including relocation of the utilities identified above, would take approximately three (3) months to complete ahead of rail, street, and M&O Facility construction in the area. Utilities infrastructure development at the project site including water, sewer, stormwater, electrical, and telephone lines would occur during or immediately after the grading phase of the project.

3.4.1.2 M&O Facility in Monrovia (Option B)

Location

M&O Facility in Monrovia (Option B) (see Figure 3-3) would occupy the same location as the proposed M&O Facility in Monrovia (Option A) described above. The primary difference between the two options is that Option B would not include an approximate 3.0-acre tract of land in the southeast corner of the block along Shamrock Avenue to the east and East Duarte to the south. However, all other site location information and adjacent uses would be the same as described



above. Furthermore, the subsequent section will describe the differences that exist in Option B when compared against Option A.

Project Characteristics

Option B for the M&O Facility layout would occupy 24 acres of the M&O Facility site within the California, Shamrock, Evergreen and Duarte block. The proposed site layout shown in Figure 3-3 would not include the tract of land located in the southeast corner of the block. This reduction in area would shift the southern portion of the M&O Facility slightly to the west. The paint and body shop (B-12 and B-13) would be shifted to the west and constructed within the inspection facility (B-1) and the administrative facilities (B-2). The MOW facility (B-11) will be located immediately north of and adjacent to the car wash facility (B-05). Rail car storage, as with Option A, would be located in the north-central portion of the site. Therefore, to accommodate a smaller footprint (24-acres) the same facilities are proposed as under Option A. However, the Administrative Offices/Shops/Employee facilities (B-02) have been reconfigured to accommodate the paint (B-12) and body (B-13) shop. The MOW facility (B-11) has shifted to the northwest adjacent to the car wash. As with Option A, this option would also accommodate a maximum of 84 rail cars plus additional storage for 20 vehicles in the maintenance shop (B-1) and cleaning facility tracks.

There are no additional differences between Option A and B.

3.4.1.3 Mountain Avenue Realignment

Location

The proposed realignment of Mountain Avenue (Figure 3-4) is located at the East Duarte Road intersection. This intersection is located at the easternmost border of the City of Monrovia and the westernmost border of the City of Duarte. This intersection is located approximately a quarter mile south of the I-210 freeway. Nearby major streets include East Evergreen Avenue to the north and Shamrock Avenue to the west. Land use immediately adjacent to this intersection includes residential, commercial, and retail use along with associated parking.

Existing Land Use (LU) and Zoning

The City of Monrovia 2008 General Plan and corresponding zoning designate the lands adjacent to the intersection and roadways as a Planned Development area. The Planned Development land use designation is for areas that are suitable for more than one type of land use. As such, no specific land use classification is applied to this intersection. The City of Duarte 2007 General Plan designates the north side of Duarte Road at Mountain Avenue as General Commercial, which allows general retail service and office uses. According to the City of Duarte 2009 Municipal Code, the C-2 zoning district corresponds with this land use designation, and it includes expanded retail and service uses. The south side of Duarte Road along Mountain Avenue is designated as Very Low Density Residential, which allow detached homes on large lots. Zoning Districts that correspond with this land use designation are: R-1F (80,000 sq. ft. lots), R-1D (20,000 sq. ft. lots), and R-1B (10,000 sq. ft. lots).



Project Characteristics

The LRT crossing of Mountain Avenue and the Mountain Avenue intersection with Duarte Road in the cities of Monrovia and Duarte is proposed for realignment. The existing Mountain Avenue roadway includes two lanes of traffic in each direction, with an offset between the north and south legs of the intersection. The proposed realignment is safety related and would improve the flow of traffic from/to the north and south. A new exclusive right turn lane is included on the southern leg of East Duarte Road turning onto Mountain Avenue. As shown in Figure 3-4, the proposed realignment would entail development of three lanes of traffic in each direction (left, through and right). The proposed Mountain Avenue Realignment would also require additional right-of-way on both the southeast corner (residential) and the northwest corner (commercial).

Access, Parking and Circulation

Regional access to Mountain Avenue is provided by the I-210 and I-605 freeways. Local access to this intersection is provided by East Duarte Road, Mountain Avenue, East Shamrock Avenue, Evergreen Avenue, and Hamilton Road.

Landscaping and Tree Removal

As part of site preparation, approximately eight existing trees (five trees northwest corner and three trees southeast corner) may be removed prior to Project construction. The design-build contractor will prepare a construction management plan and evaluate landscaping needs to enhance the visual aesthetics of the intersection. Authority guidelines for tree removal and landscaping are included in Volume 2.F of the SEIR.



Figure 3-4: Mountain Avenue Realignment

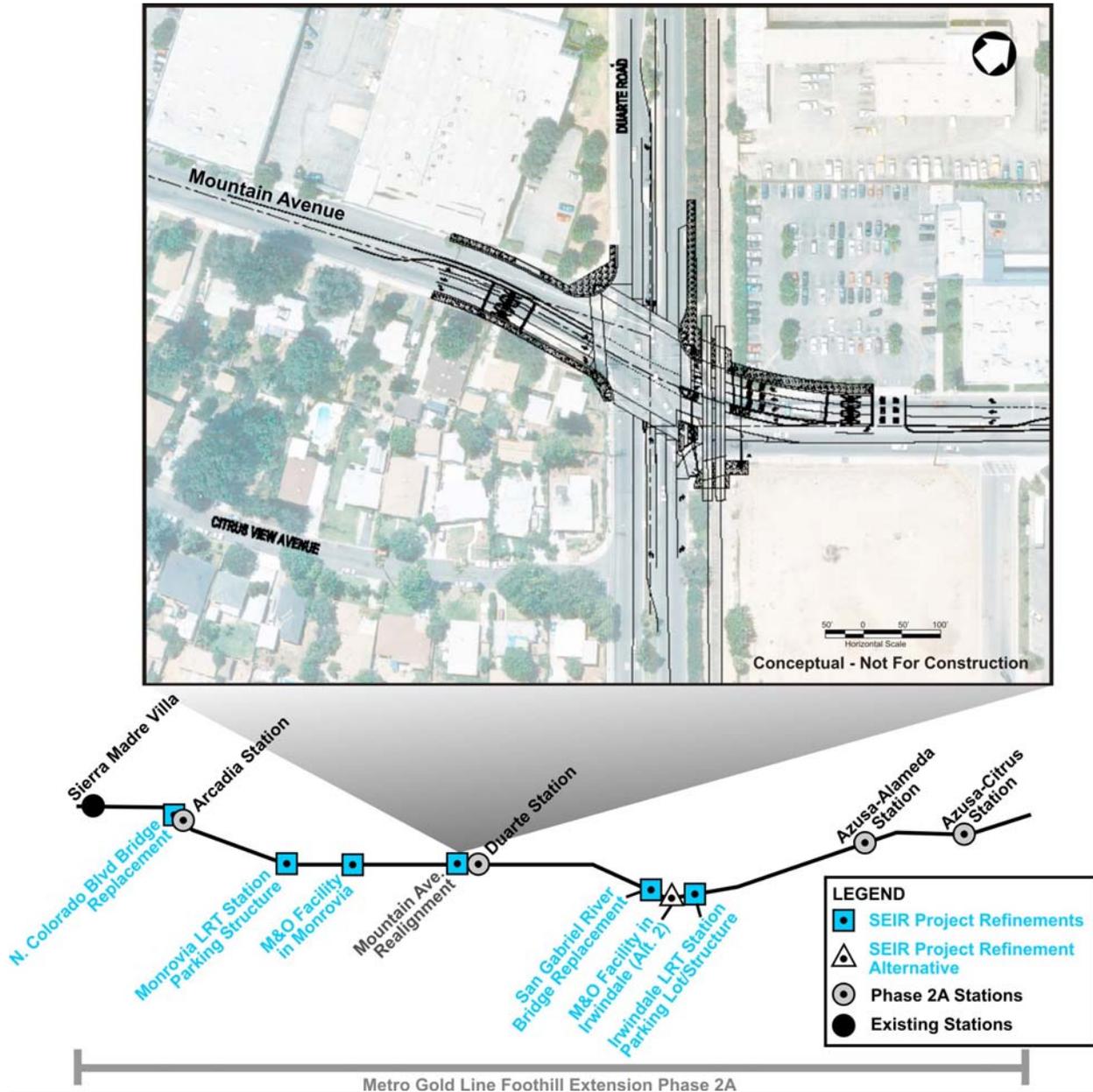
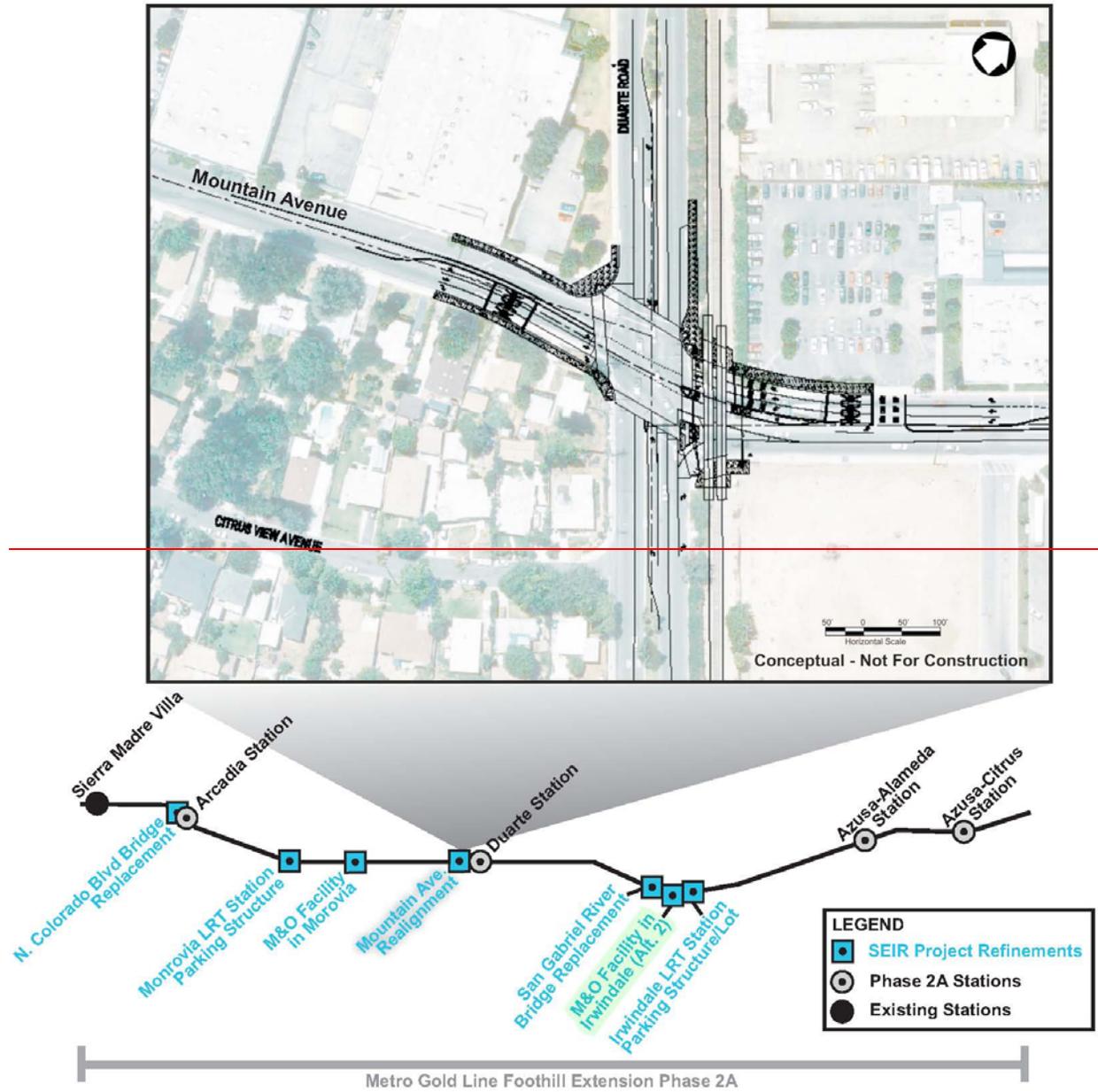


Figure 3-4: Mountain Avenue Realignment



Utilities

Impacts to utilities cannot be accurately defined since only conceptual-level design is available (as of August 2010). Utility providers for the City of Monrovia are as follows:

- Storm drain - City of Monrovia,
- Water - City of Monrovia,
- Gas - Southern California Gas,
- Electric - Edison,
- Cable TV - Charter, and
- Telephone -Verizon.

Utility providers for the City of Duarte are:

- Storm drain - City of Duarte,
- Water - California American Water Co.,
- Gas - Southern California Gas,
- Electric - Edison,
- Cable TV - Charter, and
- Telephone -Verizon.

The realignment of the Mountain Avenue at the Duarte Road intersection ~~will would~~ require the relocation of ~~overhead utilities and underground~~ utilities, including SCE transmission and distribution lines. No other utilities are known to exist within the construction area. Most of this work would be completed prior to the construction phase of the project. Utility relocation would take approximately two (2) to four (4) months to complete prior to intersection realignment construction.

3.4.1.4 Monrovia LRT Station Parking Structure

Location

The Monrovia LRT Station parking structure (Figure 3-5) is proposed at the northwestern corner of Primrose Avenue and the LRT alignment, adjacent to the Monrovia LRT station. This parking structure site is currently undeveloped and vacant. Nearby major streets include West Evergreen Avenue, South Magnolia Avenue, South Myrtle Avenue, and West Pomona Avenue.



Figure 3-5: Monrovia LRT Station Parking Structure

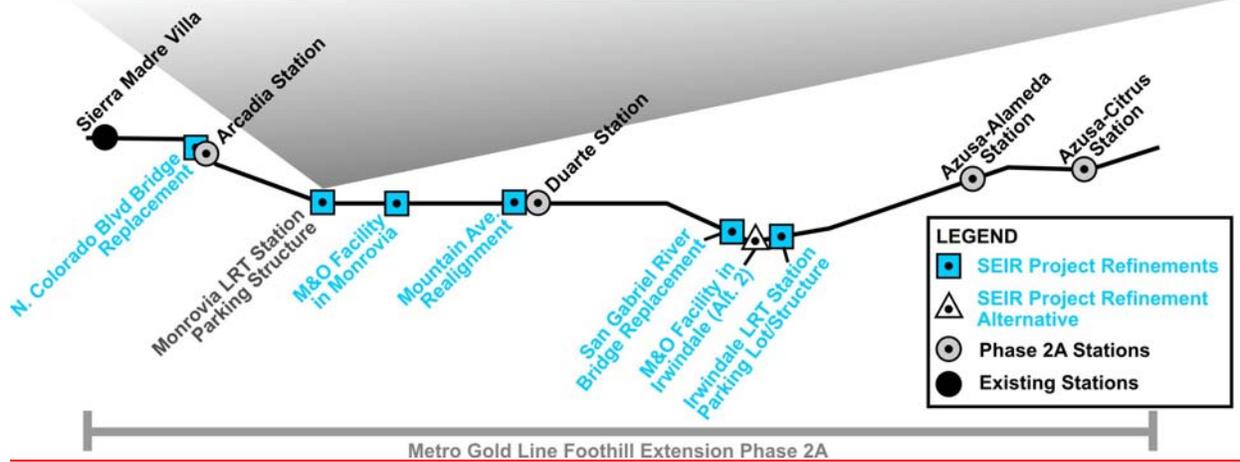
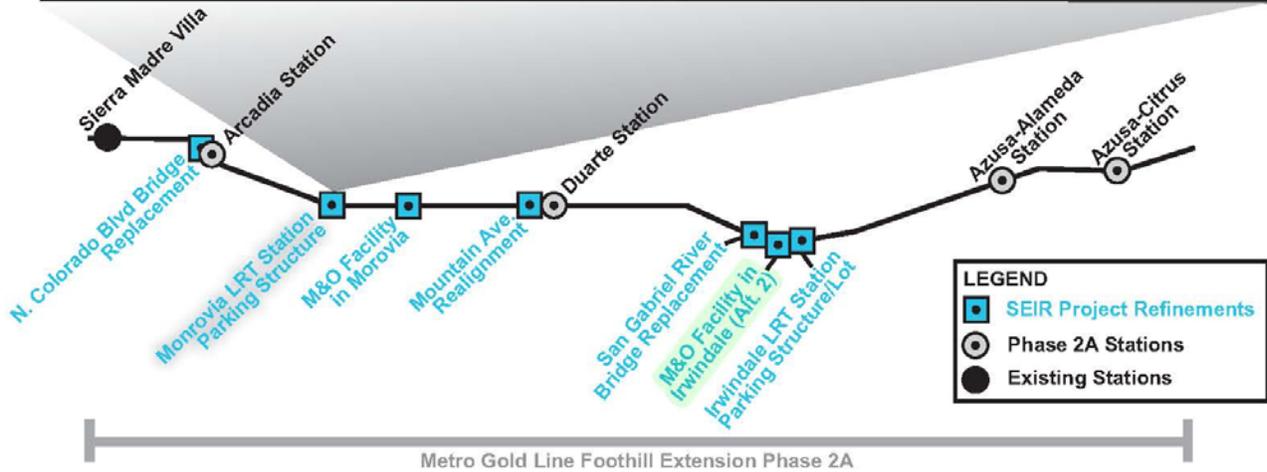
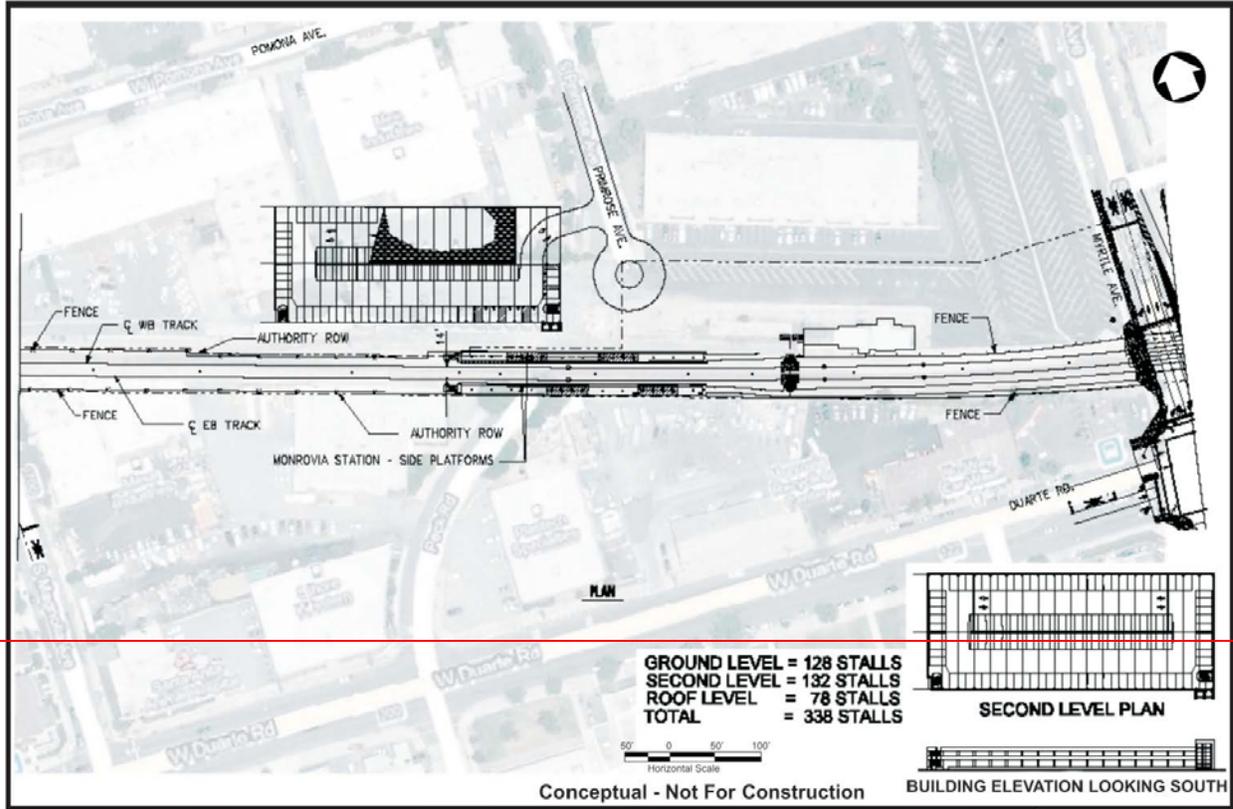


Figure 3-5: Monrovia LRT Station Parking Structure



Existing Land Use (LU) and Zoning

The City of Monrovia 2008 General Plan land use map and zoning designation map are the same. The proposed parking structure is designated and zoned as a Planned Development Area 12 (PD-12). The Planned Development Area (PD-12) Station Square Transit Village land use designation allows flexibility in land use types, location, and development intensities that will allow development to respond to changes in the marketplace over time. PD-12 is located south of I-210 Freeway. The boundaries for PD-12 are California Avenue to the west, Evergreen Avenue to the north, Shamrock Avenue to the east, and Duarte Road to the south. Therefore, the Monrovia LRT parking structure is located entirely within the PD-12 Station Transit Village boundary. For a complete discussion on land use see Chapter 4 Section 4.2.

Project Characteristics

The surface parking lot that was proposed in the 2007 Final EIR at the corner of Myrtle Avenue and Pomona Avenue is now proposed as a City of Monrovia transit oriented development (TOD), and the site is no longer available for LRT station parking. Therefore, a parking structure is now proposed at the northwestern corner of Primrose Avenue and the LRT alignment, adjacent to the Monrovia LRT station. As shown in Figure 3-5 a two story parking structure is proposed and is located on the north side of the LRT tracks. The proposed two level parking structure would accommodate ~~338~~³⁵⁰ parking spaces on opening day.

Access and Circulation

Regional access to the proposed Monrovia LRT station parking lot would be provided by the I-210 freeway. Direct access to the parking structure would be from Primrose Avenue. Other local access streets include West Pomona Avenue and Genoa Street.

Landscaping and Tree Removal

The proposed site location has been cleared and graded. Therefore, no existing landscaping or trees would be removed prior to project construction. The proposed site plan will identify landscaping that will be added to enhance the visual aesthetics of the proposed parking structure. The parking facility perimeter would be surrounded by landscaping.

Utilities

As noted above, the site has been cleared and graded by the City of Monrovia. In the clearing phase of the property, all on-site utilities have been removed. No other utilities are known to exist within the construction area. Utility providers for the area are as follows:

- Storm drain - City of Monrovia,
- Water - City of Monrovia,
- Gas - Southern California Gas,
- Electric - Edison,
- Cable TV - Charter, and



- Telephone - Verizon.

Utilities infrastructure development at the project site including water, stormwater, electrical, and telephone lines would occur immediately after final site grading is complete.

3.4.1.5 Irwindale LRT Station Parking Lot/Structure

Location

The proposed Irwindale LRT Station parking lot (Figure 3–6)/structure (Figure 3–7) would be located at the southwest corner of Irwindale Avenue and Avenida Padilla, adjacent to the Irwindale LRT station. This parking lot/structure would be located below and immediately west of Irwindale Avenue. This site is located approximately a quarter mile southeast of the I-210 freeway and a quarter mile east of North Irwindale Avenue on property currently owned by Miller-Coors Brewing Company.

Existing Land Use (LU) and Zoning

The City of Irwindale designated the proposed parking structure area for Industrial/Business Park land uses in its 2008 General Plan, which corresponds to the CM (Commercial Manufacturing), M-1 (Light Manufacturing), and M-2 (Heavy Manufacturing) zones.

Project Characteristics

A surface parking lot was identified and environmentally cleared in the 2007 Final EIR adjacent to the I-210 freeway, just north of the LRT alignment. Due to design constraints, the formerly proposed site is now considered infeasible. Therefore, a 350 space parking facility is now proposed west of Irwindale Avenue, just south of Avenida Padilla. This relocation is still in close proximity to the Irwindale LRT station. As shown in Figures 3–6, 3–7, the proposed facility would be either a 326 space surface lot or a 378 space parking structure at opening day.

Future expansion would include two possibilities to accommodate up to 700 total parking spaces by 2025. The first option is that the surface lot would be converted to a parking structure in a phased construction manner, so as to minimize impacts to the existing parking. The second option for the parking structure expansion is noted in Figure 3-7. Irwindale LRT Station Parking Lot/Structure would occur in the area available to the south of the proposed structure. This may require closure of the southern access to Irwindale Avenue.



Figure 3-6: Irwindale LRT Station Parking Lot

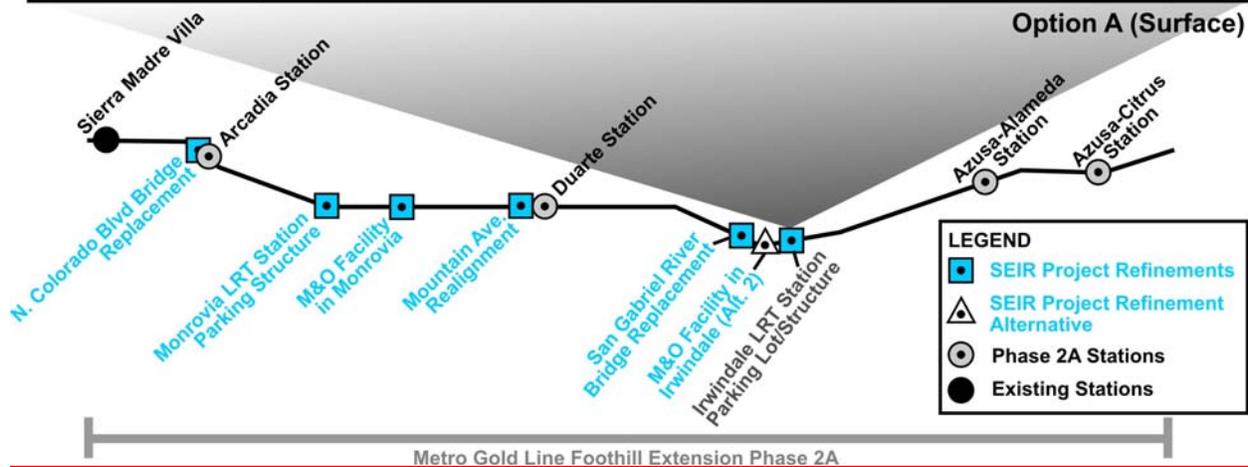
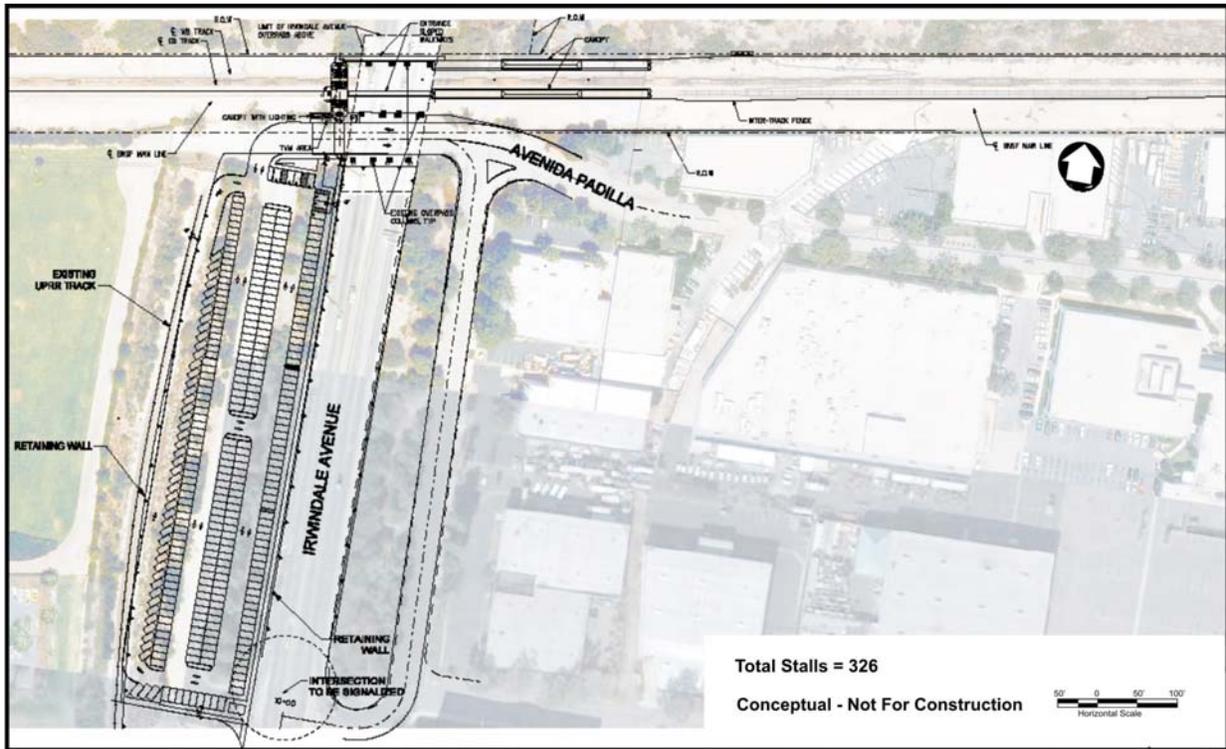


Figure 3-6: Irwindale LRT Station Parking Lot

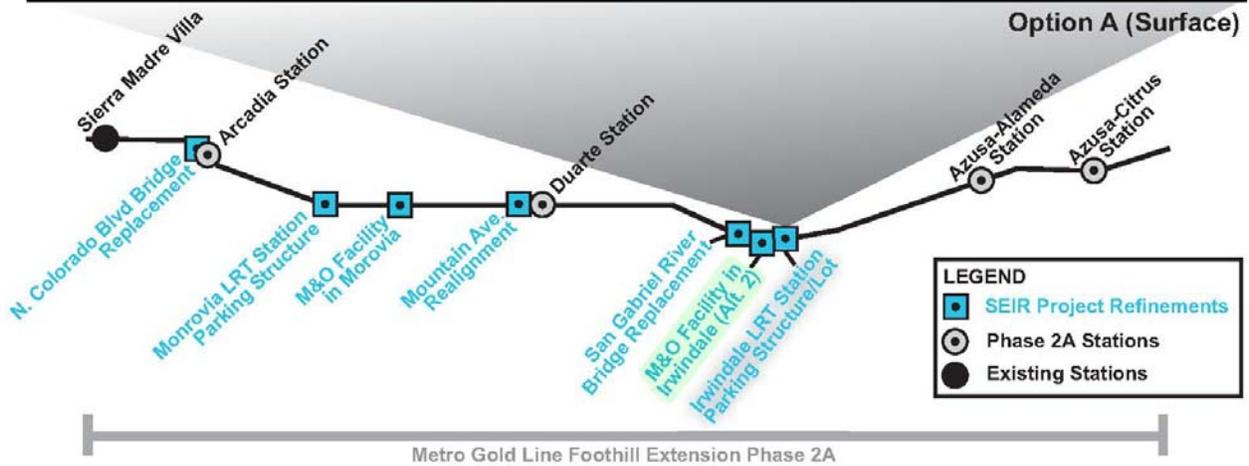
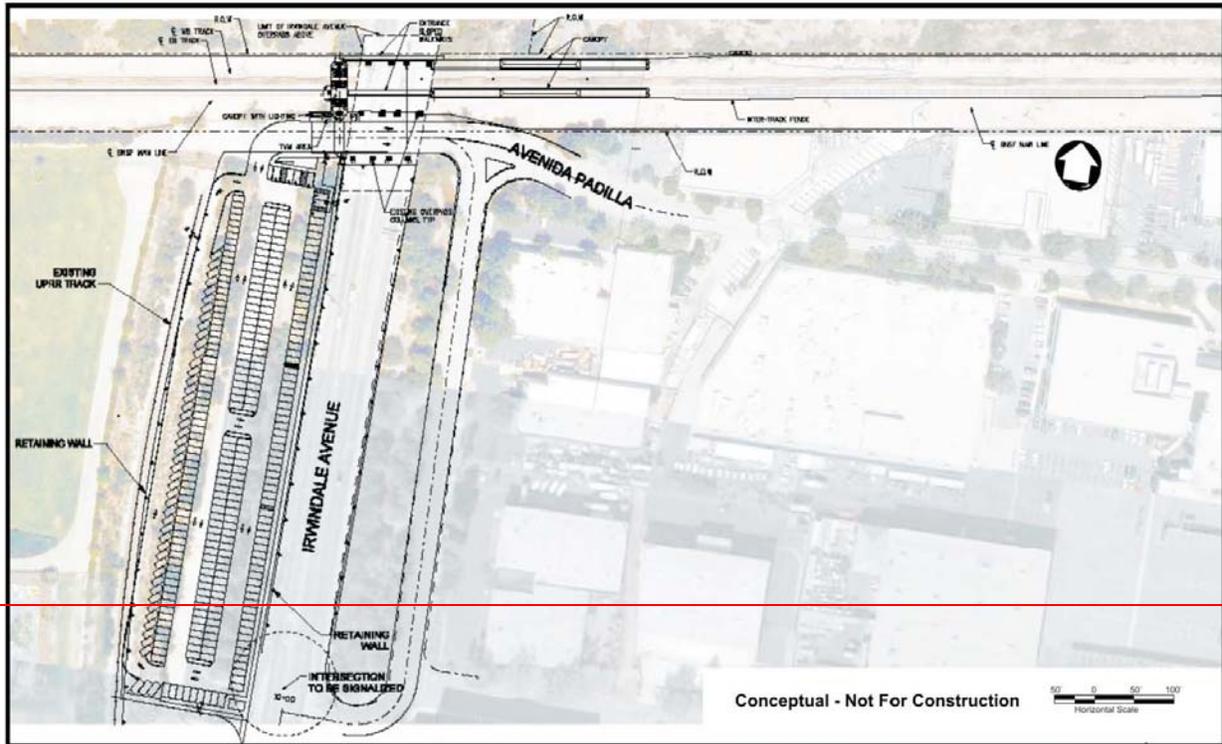


Figure 3-7: Irwindale LRT Station Parking Structure

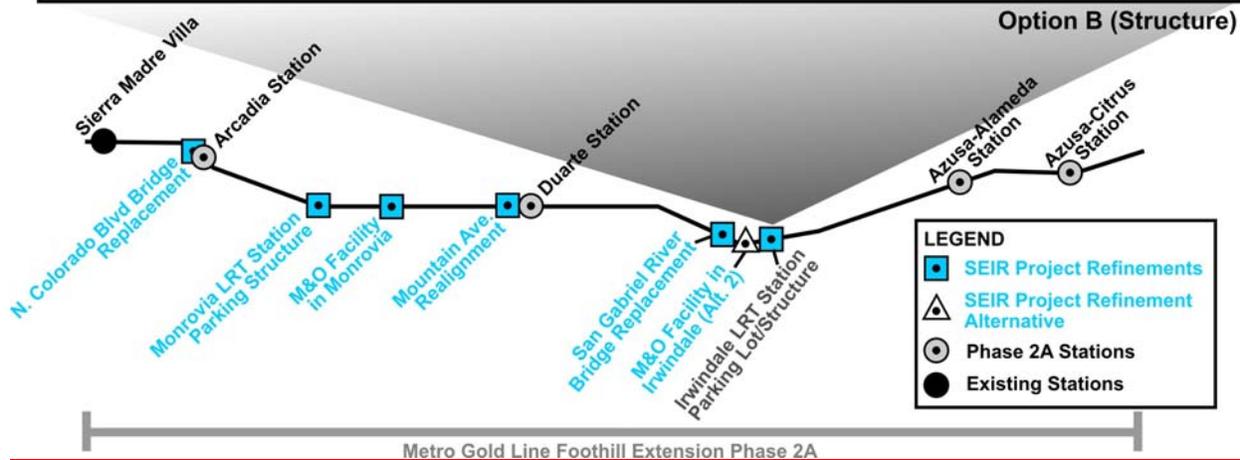
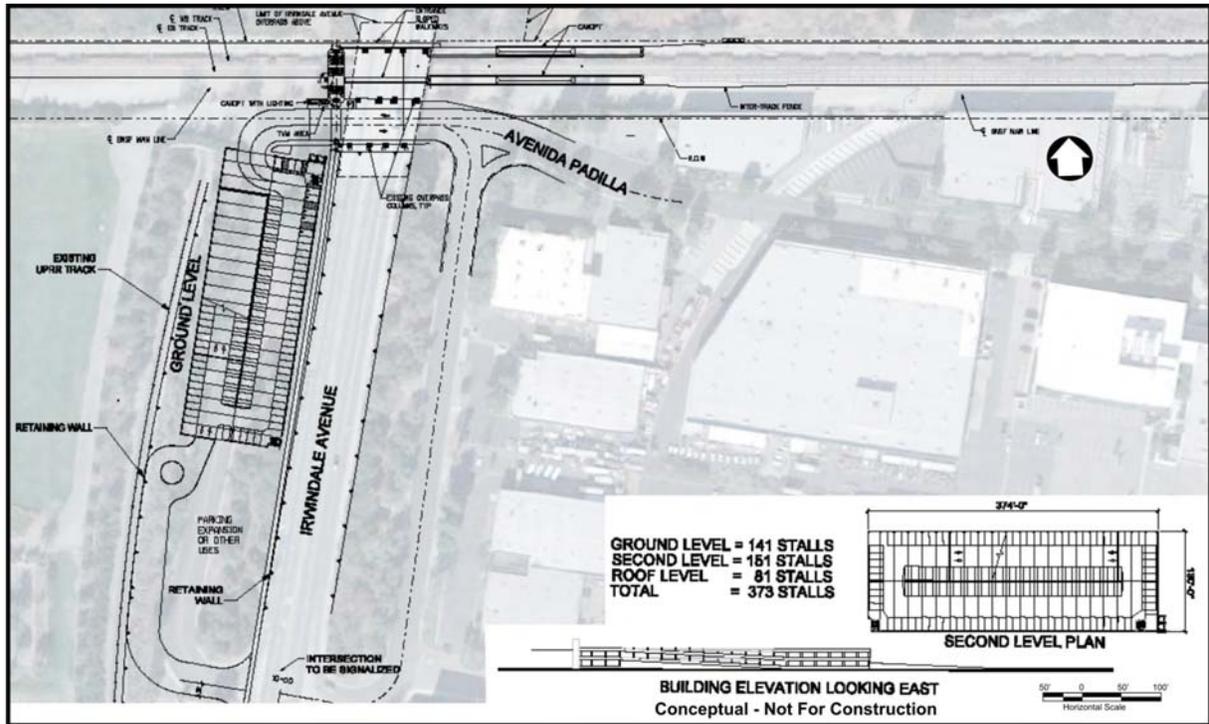
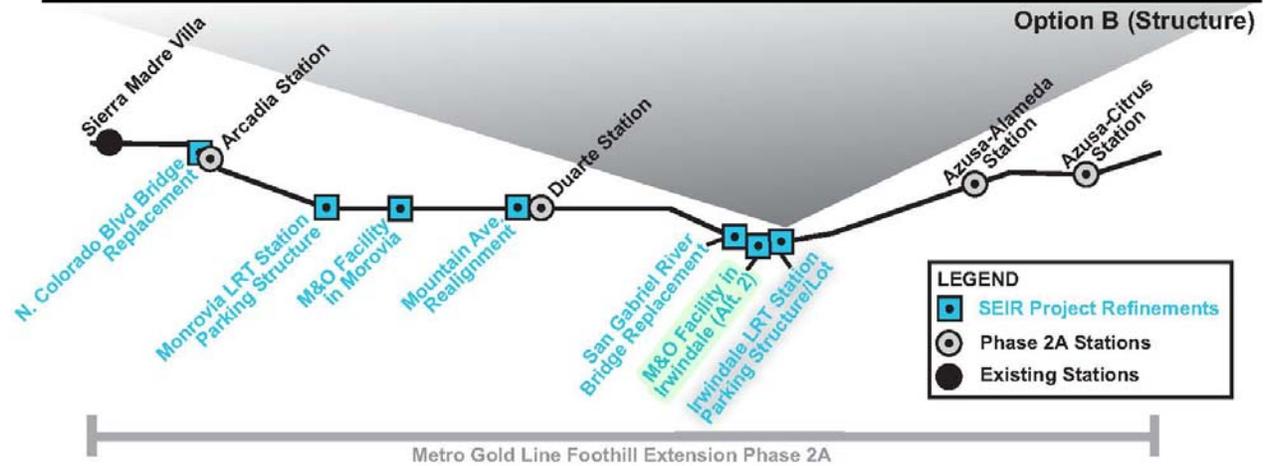
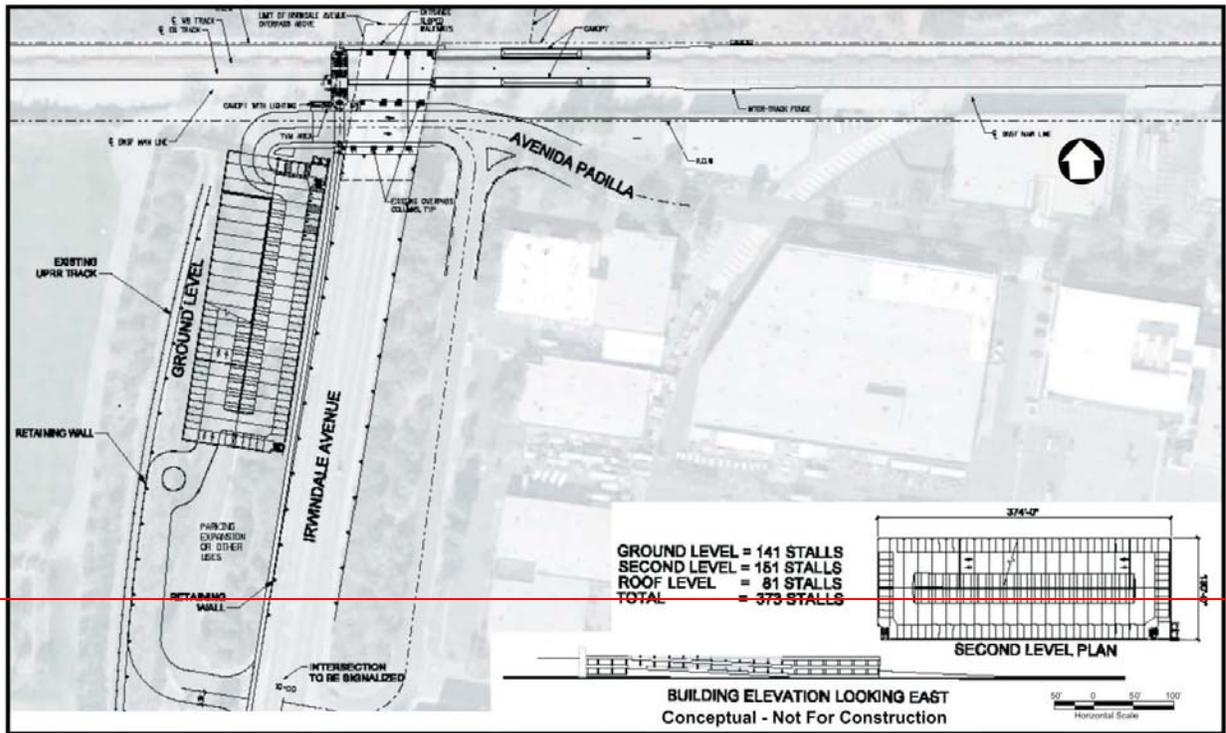


Figure 3-7: Irwindale LRT Station Parking Structure



Access and Circulation

Regional access to the Irwindale parking lot would be provided from the I-210 and I-605 freeways as well as from Irwindale Avenue. Local access streets are Avendia Padilla (primary access), Adelante Street, and West Optical Drive. As currently proposed the Avendia Padilla and Irwindale intersection will be signalized.

Landscaping and Tree Removal

As part of site preparation 30 to 40 existing trees would be removed prior to project construction. The site plan will identify landscaping that would be added to enhance the visual aesthetics of the proposed parking lot or structure. The parking facility perimeter would be surrounded by landscaping. Authority guidelines for tree removal and landscaping are included in Volume 2.F of the SEIR.

Utilities

Impacts to utilities cannot be accurately defined since only conceptual-level design is available (as of August 2010). Utility providers for the area are as follows:

- Storm drain - City of Irwindale,
- Water - Azusa Light and Water,
- Gas - Southern California Gas,
- Electric - Edison,
- Cable TV - Charter, and
- Telephone -Verizon.

At this time the construction of the Irwindale LRT Station Parking Lot/Structure would require the relocation of overhead utilities outside of the development area. No other utilities are known to exist within the construction area. Most of this work would be completed prior to construction. Utility relocation, including the relocation of overhead utilities, would take approximately one (1) to two (2) months to complete prior to constructing the parking lot or structure. Utilities infrastructure development at the project site, including water, stormwater, electrical, and telephone lines, would occur during or immediately after the grading phase of the project.

3.4.1.6 North Colorado Boulevard Bridge Replacement

Location

This existing bridge crosses North Colorado Boulevard (Figure 3-8) west of Santa Anita Avenue and just north of Rolyn Place Cul-de-sac in the City of Arcadia.

Existing Land Use (LU) and Zoning.

The Construction Authority property has no zoning designation because it is right-of-way (50 ft) designated for transportation purposes. The City of Arcadia's April 2010 Draft General Plan - Land Use Plan Map designates the North Colorado Bridge area with the following land uses categories.



The lands immediately north of the bridge and LRT tracks are designated for high density residential land uses. The southwest corner of the bridge area is designated for low density residential land use, and the southeast corner is designated as downtown mixed use land uses.

Project Characteristics

The existing North Colorado Bridge is located in the center of the Gold Line Foothill Extension 50 ft. wide right-of-way. The 2007 Final EIR proposed retaining this bridge and constructing a parallel bridge to the southwest. However, this option was rendered infeasible during the project design phase. Under the proposed project, the existing structure would be demolished and replaced with a single dual-track bridge, centered in the existing Gold Line Foothill Extension right-of-way. The bridge would be approximately 34 feet wide, 140-150 feet long (including approach retaining walls), and 15 to 20 feet above the existing road.

Landscaping and Tree Removal

As part of site preparation, no existing trees would be removed prior to project construction. As currently proposed no landscaping will be provided for the bridge replacement.

Utilities

Impacts to utilities cannot be accurately defined since only conceptual-level design is available (as of August 2010). Utility providers for the area are as follows:

- Storm drain - City of Arcadia,
- Water - City of Arcadia,
- Gas - Southern California Gas,
- Electric - Edison,
- Cable TV - Time Warner and Champion, and
- Telephone - AT&T.



Figure 3-8: North Colorado Boulevard Bridge Replacement

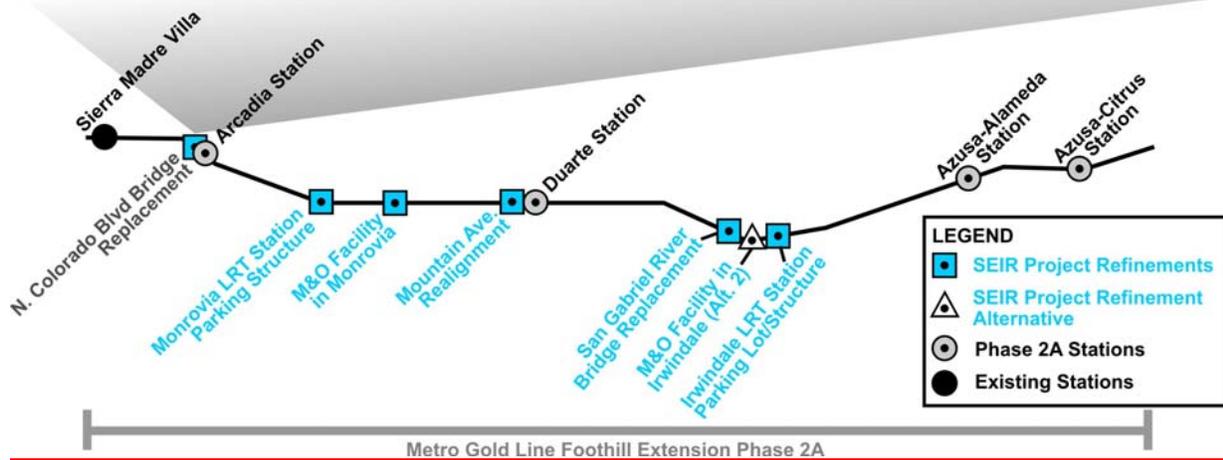
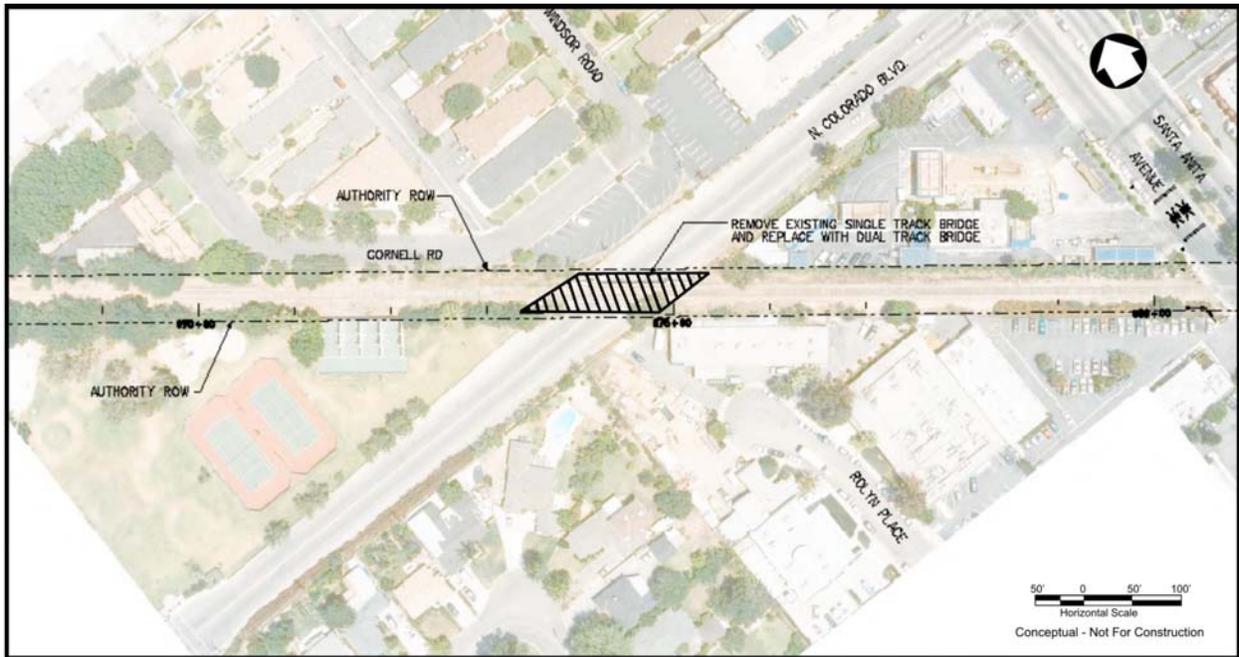
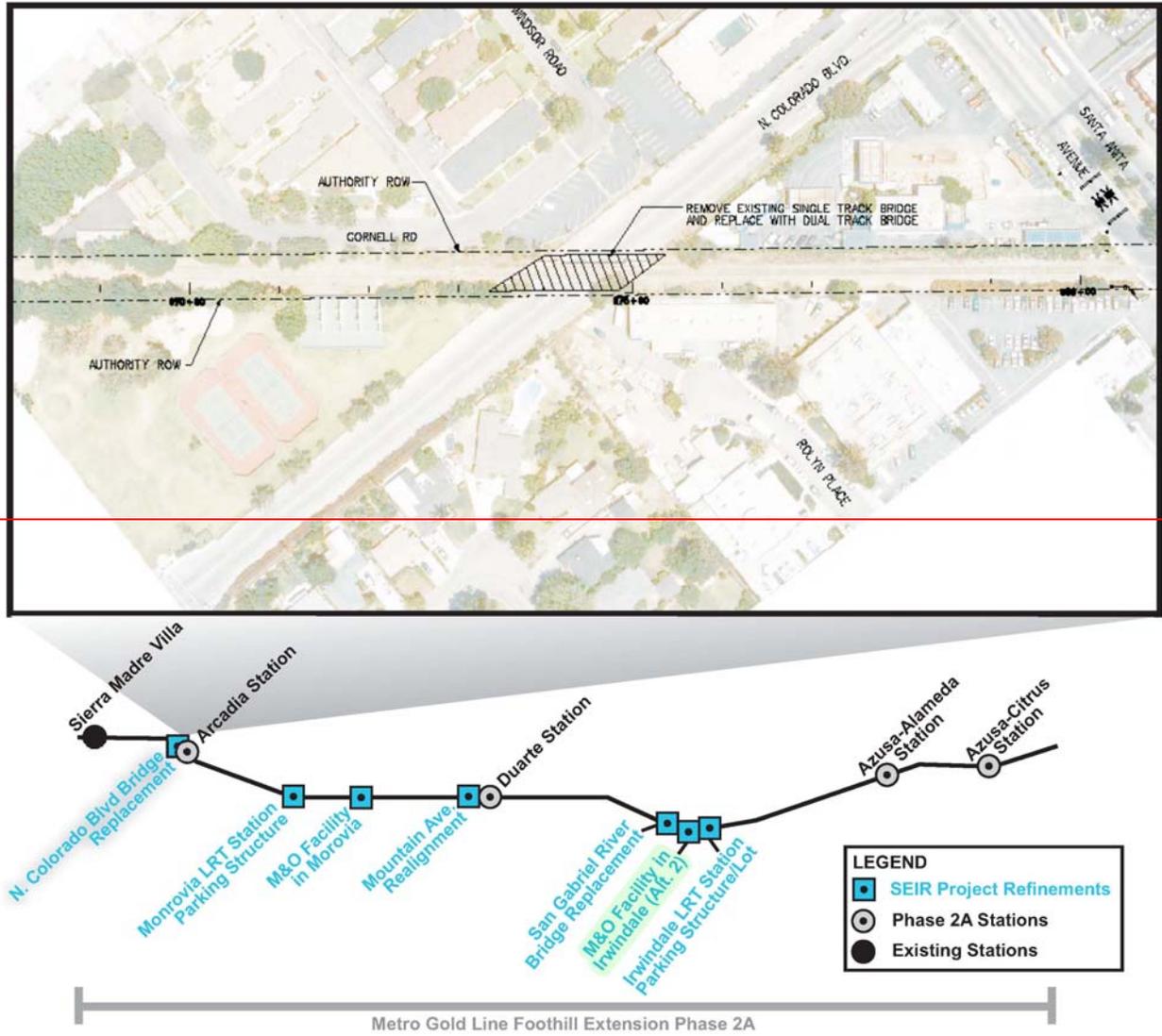


Figure 3-8: North Colorado Boulevard Bridge Replacement



At this time utility infrastructure development at the bridge site may require the relocation of a 21-inch storm drain, a 12-inch water line, and a 4-inch gas line. No other utilities are known to exist within the construction area. Impacts will be determined when the footing design of the bridge is determined. This work would be completed prior to construction. Utility relocation would take approximately one (1) to two (2) months to complete prior to constructing the new bridge crossing over North Colorado Boulevard.

3.4.1.7 San Gabriel River Bridge Replacement

Location

The San Gabriel River Bridge (Figure 3-9) is located within the City of Irwindale, just south of the I-210 freeway and west of the Miller-Coors Brewing Company property.

Existing Land Use (LU) and Zoning

The Construction Authority property has no zoning designation because it is right-of-way (50 ft) designated for transportation purposes. The City of Irwindale designates the area around the proposed San Gabriel River Bridge replacement area for Open/Space Easement land uses, which applies exclusively to all open space areas used for flood control. The area required to reconstruct the bridge is within the U.S. Army Corp of Engineers jurisdiction. A temporary easement for ingress and egress for construction equipment may be required.

Project Characteristics

The existing San Gabriel river bridge structure is a riveted steel plate thru girder with seven 100 ft spans (six (6) piers and two (2) abutments). This bridge was analyzed in the 2007 Final EIR, which concluded that the bridge construction would not occur within the river bed. Since publication of the 2007 Final EIR, substructure work was determined to be required to meet seismic bridge requirements. Therefore, construction of a new bridge has been proposed. The bridge would be approximately 34 feet wide and 700 feet long, with the bottom of the deck at least two (2) feet above flood level.

The construction of the new bridge would require work within the river bed. The bridge substructure would be composed of new abutments and piers. As currently proposed the new bridge will have no more than six (6) piers that will add no further obstruction than the existing bridge. The design-build contractor will be responsible to determine the exact number of piers. The bridge superstructure would consist of girders, deck, duct banks, and OCS foundations, as well as parapets and safety railings. All requirements of the permitting agencies would be followed, including not increasing the water surface elevation of the river above the existing condition.

Landscaping and Tree Removal

As part of site preparation it is currently envisioned that no existing trees would be removed prior to project construction. There is no landscaping proposed for the bridge replacement.



Figure 3-9: San Gabriel River Bridge Replacement

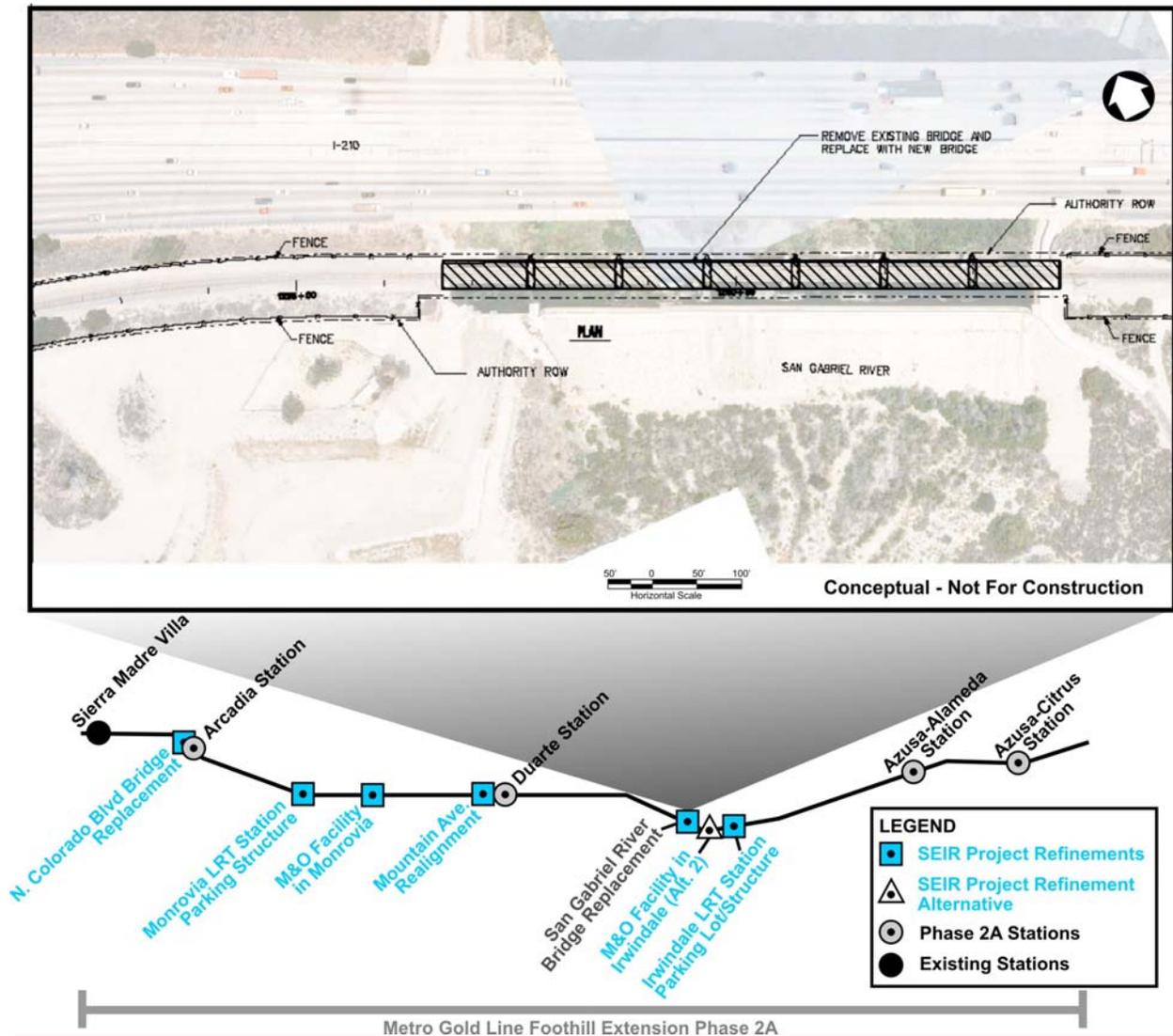
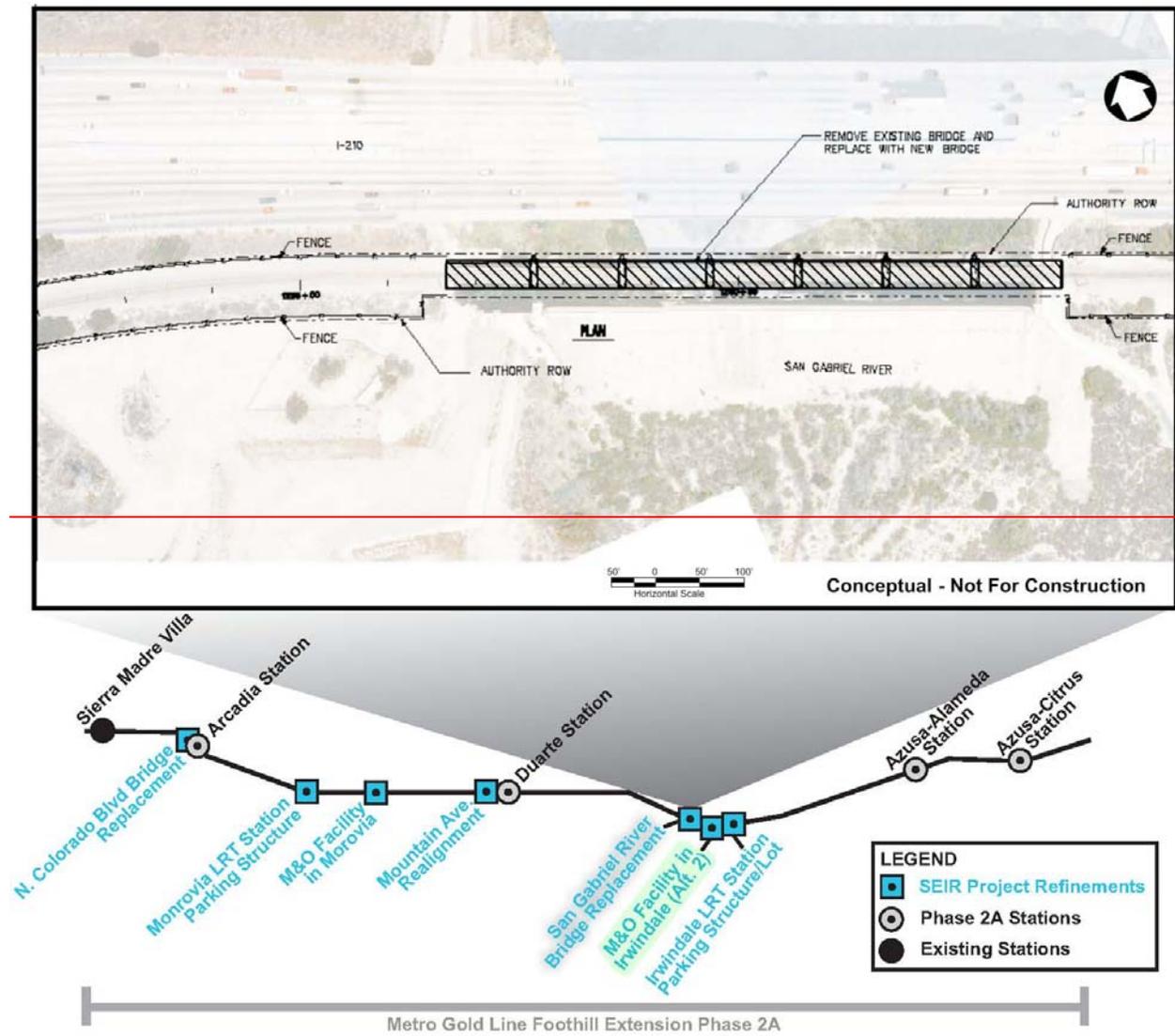


Figure 3-9: San Gabriel River Bridge Replacement



Utilities

Impacts to utilities cannot be accurately defined since only conceptual-level design is available (as of August 2010). Utility providers for the area are as follows:

- Storm drain - City of Irwindale,
- Water - Azusa Light and Water,
- Gas - Southern California Gas,
- Electric - Edison,
- Cable TV - Charter, and
- Telephone - Verizon.

At this time the only known utility is the old railroad communication/power lines that will be removed during construction. There is no need for replacement. No other utilities are known to exist within the construction area.

3.4.2 Construction Activity and Schedule

The proposed project refinements would be constructed in phases with construction estimated to begin in mid to late 2011. The project completion date is presently scheduled for December 2014. Therefore, for purposes of this document, the build-out year or date of completion is assumed to be 2014. During construction, four basic types of activities would be expected, and some activities could occur simultaneously. The first step would be demolition of existing structures if present on the site location. Second, the site would be prepared, excavated, and graded to accommodate the new building foundations. Thirdly, the proposed refinement would then be constructed, including the maintenance and operations facilities, parking structures/lot, and project-related infrastructure. Finally, the new facilities and the development would be readied for use, including the application of architectural coatings and paving. The design build contractor will be responsible for the preparation of a comprehensive schedule for all activities. Additionally, the design build contractor will be responsible for the preparation of a construction management plan that is acceptable to the Authority to address construction related mitigation commitments such as noise, lighting, construction air quality, and permitting requirements. The construction activity and schedule for each refinement is discussed below.

M&O Facility in Monrovia

The proposed M&O Facility in Monrovia would be constructed as part of the overall Gold Line Foothill Extension Project – Phase 2A. At this time Project construction is anticipated to start in mid to late 2011. The Project completion date is presently scheduled for December 2014. It is anticipated that the M&O Facility will take approximately 24 months to construct.

During construction, four basic types of activities would be expected, and some activities could occur simultaneously. The first step would be demolition of existing structures within the M&O Facility study area. Second, the site would be prepared, excavated, and graded to accommodate the new building foundations and storage tracks. The exact amount of excavation will be determined in



the final design phase. At this level of design a preliminary estimate for excavation is approximately 100,000 cubic yards (CY). Approximately two-thirds of the excavation (67,000 CY) will be removed from the site and placed elsewhere within the Phase 2A limits at locations between the San Gabriel River and Colorado Boulevard. The exact amounts and locations will be determined by the design-builder. It is anticipated that the excavated material will be utilized to form the additional embankment required to expand the trackway from a single track to double track. The majority of required additional embankment is within the project right-of-way from Magnolia Avenue in Monrovia to Santa Clara Avenue in Arcadia. The design-build contractor will determine the means and methods of hauling the material. It is likely to be hauled either over-the-road or through the right-of-way with flagging protection at the street intersections. A conservative approach is to assume the over-the-road option, utilizing tandem bottom dump trailers. Each twin unit hauls approximately 25 CY of material. The following analysis is exemplary of the earth moving effort:

$$100,000 \text{ CY} / 25 \text{ CY/truck} = 4,000 \text{ trucks}$$

A typical excavation/moving process would generate 10 trucks/hr at a 10 hr day that would produce 100 trucks per day to move the required amount of material that equates to 40 days. If material is hauled by larger off-road equipment within the right-of-way, the required duration of hauling would be reduced. Third, the proposed M&O structures would be constructed, including the maintenance and operation facilities, storage tracks, parking, and project-related infrastructure. Fourth and finally, the new facilities and the development would be readied for use.

Mountain Avenue Realignment

The proposed Mountain Avenue realignment would be constructed as part of the overall Gold Line Foothill Extension Project. The contractor will prepare a comprehensive schedule for all activities. At this time Project construction is anticipated to start in mid to late 2011. The Project completion date is presently scheduled for December 2014. It is anticipated that the Mountain Avenue Realignment will take approximately eight months to construct. During construction, two basic types of activities would be expected, and some activities could occur simultaneously. The first step would be demolition of the existing grade crossing. Second, new roadway will be reprofiled, and the construction will be implemented to minimize traffic congestion. The exact amount of excavation will be determined in the final design phase. At this level of design it is believed the majority of the excavation will be removed from the site and placed elsewhere within the overall limits of the Project.

Monrovia LRT Station Parking Structure

The proposed Monrovia LRT Parking Structure would be constructed as part of the overall Gold Line Foothill Extension Project. The contractor will prepare a comprehensive schedule for all activities. At this time Project construction is anticipated to start in mid to late 2011. The Project completion date is presently scheduled for December 2014. It is anticipated that the Monrovia LRT Station Parking Structure will take approximately ten months to construct. During construction, two basic types of activities would be expected, and some activities could occur simultaneously. The first step would be site preparation, excavation, and grading to accommodate the new building foundations. This type of construction requires a minimal amount of grading. It is assumed that the small amount of grading would be substantially balanced, meaning that no significant quantity of soil would be transported off-site for disposal, nor would soil be transported on-site for use in



construction activities. Second, the proposed parking structure would then be constructed, including the application of architectural coatings and paving.

Irwindale LRT Station Parking Lot/Structure

The proposed Irwindale LRT Station Parking Lot/Structure would be constructed as part of the overall Gold Line Foothill Extension Project. The contractor will prepare a comprehensive schedule for all activities for either the surface lot or structure. At this time Project construction is anticipated to start in mid to late 2011. The Project completion date is presently scheduled for December 2014. It is anticipated that the Irwindale LRT Station Parking Lot/Structure will take approximately ten months for the surface lot and fifteen months for the structure to construct. During construction of the surface lot, two basic types of activities would be expected, and some activities could occur simultaneously. The first step would be construction of retaining walls to support Irwindale Road and the western perimeter of the parking lot adjacent to the Union Pacific Railroad (UPRR) tracks. Second, the site would be excavated and graded to accommodate the new surface parking lot. A preliminary estimate of the required embankment behind the western wall adjacent to UPRR is 20,000 CY. The excavation generated from removing the earth adjacent to the Irwindale wall is approximately 15,000 CY. Therefore a total of 5,000 CY of material will need to be imported into the site. This material will be hauled over-the-road from a nearby quarry at 15 CY per truck, equating to 333 trucks. Assuming a rate of 10 trucks/hr and a 10 hour work day that will require just over 3 days to import the required material. For the parking structure option a third step is necessary. The proposed parking structure would be constructed, including the application of architectural coatings and paving.

North Colorado Boulevard Bridge Replacement

The proposed North Colorado Boulevard Bridge Replacement would be constructed as part of the overall Gold Line Foothill Extension Project. The contractor will prepare a comprehensive schedule for all activities. At this time, Project construction is anticipated to start in mid to late 2011. The Project completion date is presently scheduled for December 2014. It is anticipated that the North Colorado Boulevard Bridge Replacement will take approximately thirteen months, which accounts for removing the existing bridge and constructing the new bridge. Construction for this project element would consist of demolition of the existing bridge structure and abutments, site preparation and grading, and development of the new bridge and supporting infrastructure. The exact amount of excavation will be determined in the final design phase. At this level of design it is believed that the excavated earth will be stored on/near the site and replaced after the new bridge is constructed.

San Gabriel River Bridge Replacement

The proposed San Gabriel River Bridge Replacement would be constructed as part of the overall Gold Line Foothill Extension Project. The contractor will prepare a comprehensive schedule for all activities. At this time Project construction is anticipated to start in mid to late 2011. The Project completion date is presently scheduled for December 2014. It is anticipated that the San Gabriel River Bridge Replacement will take approximately thirty-six months, which accounts for removing the existing bridge and constructing the new bridge. Bridge construction would include demolition of the existing bridge, pile driving for pile supports and pile caps for the new piers and abutments, and construction of the new superstructure (girders, deck, parapet walls, etc.). Temporary supports



would also be installed during construction. It is assumed that grading would be substantially balanced, meaning that no significant quantity of soil would be transported off-site for disposal, nor would soil be transported on-site for use in construction activities. The elevated structure itself could be constructed using either cast-in-place concrete or precast concrete elements that would be erected and installed at the site. Under either scenario, multiple construction activities would be simultaneously occurring along the length of the elevated structure.

3.5 Responsible and Trustee Agencies

In addition to compliance with CEQA, the Project refinements would be subject to additional permitting requirements under state and federal regulations. Anticipated permitting requirements for the Project are described in Table 3-1 (Permitting Requirements).

Table 3-1: Permitting Requirements

Agency	Type of Permit/Authority
U.S. Army Corps of Engineers	Clean Water Act, Section 404
Regional Water Quality Control Board	Clean Water Act, Section 401 Porter Cologne Water Quality Control Act
Regional Water Quality Control Board	Clean Water Act, Section 402 Porter Cologne Water Quality Control Act
Regional Water Quality Control Board	Clean Water Act, Section 404 Porter Cologne Water Quality Control Act
Regional Water Quality Control Board	National Pollutant Discharge Elimination System Permits
Office of Historic Preservation	National Historic Preservation Act, Section 106
California Department of Fish and Game	Fish and Game Code, Section 1602 California Endangered Species Act, Section 2081

