DRAFT INITIAL STUDY AND
MITIGATED NEGATIVE DECLARATION
FOR THE PROPOSED
SOUTH LINE RAIL GOODS MOVEMENT PROJECT

Prepared for:
San Diego Association of Governments

Prepared by:
Kimley-Horn and Associates, Inc.

January 2010
DRAFT INITIAL STUDY AND
MITIGATED NEGATIVE DECLARATION
FOR THE PROPOSED
SOUTH LINE RAIL GOODS MOVEMENT PROJECT

Prepared for:
San Diego Association of Governments
401 B Street, Suite 800
San Diego, California 92101
(619) 699-1900

Prepared by:
Kimley-Horn and Associates, Inc.
410 B Street, Suite 600
San Diego, California 92101
(619) 234-9411

January 2010
# Table of Contents

<table>
<thead>
<tr>
<th>SECTION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Introduction</td>
<td>1-1</td>
</tr>
<tr>
<td>1.2 Purpose of the Initial Study</td>
<td>1-1</td>
</tr>
<tr>
<td>1.3 Summary of Findings</td>
<td>1-2</td>
</tr>
<tr>
<td>1.4 Summary of Mitigation Measures</td>
<td>1-2</td>
</tr>
<tr>
<td>2.1 Project Location and Environmental Setting</td>
<td>2-1</td>
</tr>
<tr>
<td>2.2 Description of the Proposed Project</td>
<td>2-6</td>
</tr>
<tr>
<td>2.3 Objectives of the Project</td>
<td>2-15</td>
</tr>
<tr>
<td>2.4 Discretionary Actions</td>
<td>2-17</td>
</tr>
<tr>
<td>3.1 Aesthetics and Visual Quality</td>
<td>3-2</td>
</tr>
<tr>
<td>3.2 Agricultural Resources</td>
<td>3-3</td>
</tr>
<tr>
<td>3.3 Air Quality</td>
<td>3-4</td>
</tr>
<tr>
<td>3.4 Biological Resources</td>
<td>3-10</td>
</tr>
<tr>
<td>3.5 Cultural Resources</td>
<td>3-11</td>
</tr>
<tr>
<td>3.6 Geology and Soils</td>
<td>3-13</td>
</tr>
<tr>
<td>3.7 Hazards and Hazardous Materials</td>
<td>3-15</td>
</tr>
<tr>
<td>3.8 Hydrology and Water Quality</td>
<td>3-17</td>
</tr>
<tr>
<td>3.9 Land Use and Planning</td>
<td>3-20</td>
</tr>
<tr>
<td>3.10 Mineral Resources</td>
<td>3-21</td>
</tr>
<tr>
<td>3.11 Noise</td>
<td>3-21</td>
</tr>
<tr>
<td>3.12 Population and Housing</td>
<td>3-26</td>
</tr>
<tr>
<td>3.13 Public Services</td>
<td>3-26</td>
</tr>
<tr>
<td>3.14 Recreation</td>
<td>3-27</td>
</tr>
<tr>
<td>3.15 Transportation/Traffic</td>
<td>3-28</td>
</tr>
<tr>
<td>3.16 Utilities and Service Systems</td>
<td>3-29</td>
</tr>
<tr>
<td>4.1 References</td>
<td>4-1</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 2-1 Vicinity Map ...........................................................................................................2-2
Figure 2-2a, Project alignment ...............................................................................................2-7
Figure 2-3 Palomar Siding ......................................................................................................2-16

LIST OF TABLES

Table 3-1 San Diego Air Basin Attainment Classification .....................................................3-5
Table 3-2 Ambient Air Quality Data (ppm unless otherwise indicated) .................................3-6
Table 3-3 Estimated Daily Maximum Operational Emissions (lbs/day) .................................3-7
Table 3-4 Estimated Annual Maximum Operational Emissions (tons/year) .........................3-8
1.0 Introduction

1.1 Introduction

This Initial Study identifies and evaluates potential environmental impacts that may result from implementation of the proposed improvements on the San Diego and Arizona Eastern (SD&AE) Railroad Mainline between the San Diego and San Ysidro Yards (e.g., South Line) to increase freight rail capacity. The South Line currently operates as a limited joint use facility with the San Diego Metropolitan Transit System (MTS) Blue Line Trolley under a waiver and operations plan approved by the Federal Rail Administration (FRA) in 2001 and amended in 2004. Currently, freight operations on the main South Line are only allowed to occur during a 2.5 hour period of time when the trolley is not in service. This “window” is typically from 1:30 a.m. to 4:00 a.m. Monday through Saturday morning, with an existing additional southbound freight move allowed beginning at approximately 12:55 am. No freight service is allowed on Sunday morning. This ‘window’, including the additional southbound move which begins just before 1:00 a.m., is currently only long enough to allow two freight trains, one in each direction, to travel between the San Diego and San Ysidro yards on the South Line each night. The proposed improvements would increase the capacity of the existing corridor to accommodate two additional freight trains, one in either direction during the operating window. A detailed description of the Project is presented in Section 2.0, Project Description, of this document.

The San Diego Association of Governments, referred to herein as SANDAG, is serving as the Lead Agency for the Project. Section 21067 of the California Environmental Quality Act (CEQA) defines a Lead Agency as the “public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect on the environment”. Pursuant to section 15074 of the CEQA Guidelines, prior to taking any official action to approve this project, SANDAG is obligated to consider the findings of this Initial Study and to either adopt a Negative Declaration, a Mitigated Negative Declaration, or to initiate preparation of an Environmental Impact Report (EIR).

1.2 Purpose of the Initial Study

As part of the environmental review process for the proposed project, SANDAG has authorized the preparation of this Initial Study. The Initial Study provides a basis for understanding whether there are environmental impacts associated with the proposed project and, if environmental impacts are likely to occur, if such impacts would be significant. The purpose of this Initial Study, as stated in section 15063 of the CEQA Guidelines, is as follows:

- To provide SANDAG with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration;
- To enable SANDAG, if necessary, to modify the Project to reduce or eliminate any adverse impacts before an EIR is prepared, thereby enabling the Project to qualify for a Mitigated Negative Declaration;
- To assist in the preparation of an EIR, if one is required, by focusing the EIR on the effects determined to be significant; identifying effects determined not to be significant; and explaining reasons for determining that potentially significant effects would not be significant;
- To identify whether a Program EIR, tiering, or another appropriate process can be used for the analysis of the Project’s environmental effects;
- To facilitate the environmental review of the Project early in its design;
1.0 Introduction

- To eliminate unnecessary EIRs; and
- To determine whether a previously prepared EIR can be used for the Project.

Based on the findings of the Initial Study, SANDAG could then determine the subsequent environmental review needed for the Project, which may take the form of a Negative Declaration or an EIR.

1.3 Summary of Findings

The proposed project would lead to changes in the existing environmental conditions at the site and the surrounding area. Based on the findings of the environmental analysis in Section 3.0 of this Initial Study, without mitigation the implementation of the proposed project would result in significant adverse environmental impacts to Air Quality, Cultural Resources, and Noise. Mitigation measures are recommended to reduce significant environmental impacts; thus, allowing for preparation and adoption of a Mitigated Negative Declaration. Mitigation measures required to be implemented as part of the Project are summarized in Section 1.4, Summary of Mitigation Measures, below. Additionally, the proposed development would be required to comply with standard Federal, State, County and City regulations to promote public health, safety, and welfare and provide the necessary facilities and adequate services needed by residents and visitors to the site. Impacts on all other issues addressed in this Initial Study were found to be less than significant.

1.4 Summary of Mitigation Measures

The environmental analysis in Section 3.0 of this document indicates that without mitigation, implementation of the proposed project would generate significant adverse impacts to Cultural Resources, and Noise. To mitigate these impacts, the following mitigation measures will be implemented as part of the Project. Implementation of these measures will reduce environmental effects associated with Project implementation to a less than significant level.

Cultural Resources

Implementation of the following mitigation measures during the construction and operation phases of the Project will ensure that environmental impacts to cultural resources remain less than significant:

Measure 3.5.B1: If during excavation or earth moving activities, the construction contractor identifies potential resources, SANDAG would be notified and a qualified archaeologist will be contacted to assess the nature and significance of the find. In the event that cultural materials are encountered, the following steps will be followed:

- All excavation and/or grading shall cease immediately.
- Additional testing and evaluation of the remains shall be completed and recommendations for treatment shall be made in accordance with standard guidelines.

Measure 3.5.B2: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resource Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner of his/her authorized representative, the MLD may inspect the site of the
discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Measure 3.5.C1: In the event that cultural materials are encountered during excavation or grading activities, the permit holder shall take all the following steps:

- All excavation and/or grading shall cease immediately.
- Additional testing and evaluation of the remains shall be completed and recommendations for treatment shall be made in accordance with standard guidelines.

Noise

Implementation of the following mitigation measures during the construction phase of the Project will reduce noise impacts to less than significant:

Construction noise associated with the project may result in a significant impact without mitigation. Significant nighttime construction noise impacts could be reduced to below the level of significance through implementation of one or more of the following measures:

- Perform higher noise generating activities during daytime hours.
- Use construction equipment with published noise levels below those identified in Table 10 and with the lowest possible acoustical height.
- Reduce nighttime construction hours. A 3 decibel noise reduction would occur for each 50% reduction in time worked between 10:00 pm and 7:00 am.

Use of temporary noise barriers consistent with the following recommendation would also be an effective method of reducing construction noise associated with the project:

- Construct a 16-foot high temporary noise barrier between the new crossover north of L Street and the residences to the east. Construct a 14-foot high temporary noise barrier between the turnout replacement south of L Street and the residences to the northeast. Construct a 14-foot high temporary noise barrier between the new turnout construction, track removal, and from north of Palomar Street to south of Anita Street and the residences to the west. Temporary barriers should be placed as close to the construction area as possible. The barrier(s) must wrap around the construction area to minimize acoustical flanking around the barrier ends.

A site-specific construction noise study should be performed using actual equipment and construction durations. The study should be submitted to SANDAG prior to the start of construction regardless of which measure or measures are selected to demonstrate how noise levels will be reduced to below a level of significance.
2.0 Project Description

2.1 Project Location and Environmental Setting

2.1.1 Regional Setting

The proposed improvements would be located on the South Line segment of the San Diego and Arizona Eastern (SD&E) Railroad Mainline between the San Diego and San Ysidro yards in San Diego, California. The South Line currently operates as a limited joint use facility with the San Diego Metropolitan Transit System (MTS) Blue Line Trolley (see Figure 2-1).

San Diego County

The County of San Diego is the southwestern most county in California and the contiguous 48 states. Bordering the United States/Mexico International Border, San Diego County contains 18 incorporated cities and covers 4,526 square miles. The County of San Diego is located along the Pacific Ocean and bordered by Orange and Riverside Counties to the north and Imperial County to the east. The population in 2000 was 2,813,834; a July 2008 estimate placed the population at 3,001,072 people, making it the third most populous county in California, just behind Orange County to the northwest. As of 2006, there were 2,941,454 people, 1,067,846 households, and 663,449 families residing within San Diego County.

City of San Diego

The City of San Diego is the most populous city in the county. The City of San Diego had a year 2006 population estimated at over 1.25 million people and an overall land area of 3,423 square miles. The city is comprised of 52 communities and 40 planning areas. The project corridor is located within the Barrio Logan/Harbor 101, Otay Mesa-Nestor and San Ysidro planning areas.

The Barrio Logan/Harbor 101 planning area is approximately 1,000 acres in size and generally located west of Interstate 5, east of San Diego Bay, north of National City and south of the San Diego Central Business District. This area includes the U.S. Navy 32nd Street Base and is comprised of a mixture of residential, commercial, industrial and government uses (Barrio Logan/Harbor 101 Community Plan, as amended, 1991).

The Otay Mesa-Nestor community planning area is located in the southern region of the City, and is bounded on the north by the City of Chula Vista, on the east by the community of Otay Mesa, on the south by the Tijuana River Valley and the San Ysidro community, and on the west by the City of Imperial Beach.

The San Ysidro Planning Area encompasses approximately 1,800 acres and is bounded by the Otay Mesa-Nestor community and State Highway 905 to the north, by the Tijuana River Valley to the west, by the Otay Mesa community to the east, and by the international border with Mexico to the south.

City of National City

National City is the second oldest city in San Diego County. National City is located 5 miles south of downtown San Diego, on San Diego Bay in southern San Diego County, and 10 miles north of international border. The city is bordered by San Diego to the north and east, Chula Vista to the south, the unincorporated areas of Lincoln Acres and Bonita to the south and southeast, and San Diego Bay to the west. It covers 9.2 square miles and was incorporated in 1887. As of July, 2008, the population was 61,115. Within National City, the project corridor runs north/south between Interstate 5 to the west and downtown (National City Boulevard) to the east. National City is nearly entirely developed with a mix of residential neighborhoods and industrial and commercial uses. The largest percentage (41 percent) of land within the City is designated for residential development (City Overview, Planning Department, July 2008).
Figure 2-1

Initial Study/Mitigated
Negative Declaration

Vicinity Map
2.0 Project Description

City of Chula Vista

Chula Vista extends from the San Diego Bay eastward to Otay Lakes and is generally bounded by the Sweetwater River to the north and Otay River to the south (City of Chula Vista General Plan, 2005). The City of Chula Vista, part of the South San Diego County region, is rooted in a long-standing Native American Indian culture, Spanish land grants, and the railroad industry. The railroad boom of the late 19th century led the transformation of ranch lands to settler communities and tract subdivisions. The name “Chula Vista” was adopted by the San Diego Land and Town Company and is a Spanish translation for “beautiful view.” The City of Chula Vista was incorporated on October 17, 1911, at a time when the community was thriving from the railroad industry and citrus farming. Today, the City of Chula Vista encompasses 51.6 square miles (33,024 acres) and has a population of 227,723. Planned and managed growth is evident in its historic downtown and master-planned communities (City Profile & Demographic Trends, 2008).

2.1.2 Project Corridor

The proposed project is located on a 12.5 mile segment of the existing SD&AE Railroad Mainline between the San Diego and San Ysidro yards. This segment, referred to as the South Line, traverses through a variety of different land uses including industrial, hotels, military facilities, commercial, retail, office, single family residential, multi-family residential, schools, park/recreation and open space, vacant land, and border facilities. The project also crosses over the Chollas Creek, Sweetwater River and Otay River. There are several rail sidings and spur tracks located along the South Line that provide rail access to businesses that ship and receive products and materials by rail car. The sidings are serviced nightly by the San Diego & Imperial Valley Railroad.

2.1.3 Applicable Plans and Policies

City of San Diego General Plan

The City of San Diego General Plan is designed to provide policy guidance necessary to balance needs caused by city growth and to enhance the quality of life of city residents (City of San Diego General Plan, 2008). The Land Use and Community Planning Element of the General Plan is intended to guide future growth and development into a sustainable citywide pattern, while maintaining or enhancing quality of life.

The City of San Diego utilizes the City of Villages strategy in implementing the goals of its general plan. The City of Villages concept guides growth into mixed-use activity centers that integrate community centers, pedestrian-friendly environments, and linkages to regional transit systems while enhancing San Diego’s economic, environmental, and social health (City of San Diego General Plan, 2008). The Village Propensity Map in the City of San Diego General Plan (2008) identifies the Barrio Logan/Harbor 101, Otay Mesa-Nestor and San Ysidro Community Planning areas, which are in proximity to the rail corridor, as having a low propensity for village development. In assessing the potential village sites, the City of Villages strategy considers several factors:

- Community plan-identified capacity for growth;
- Existing public facilities or an identified funding source for facilities;
- Existing or an identified funding source for transit service;
- Community character; and
- Environmental constraints.

Community Plans

The City of San Diego has 42 planning areas each with community plans. Community plans were established...
2.0 Project Description

to identify issues and trends that exist within each specific community and to provide guidance on
development with considerations to community features.

Barrio Logan/Harbor 101 Community Plan
The Barrio Logan/Harbor 101 Community Plan was originally adopted in 1978 and most recently amended in
1991. A community plan update is underway and at the time of this analysis, the updated plan had not been
completed. The community plan recognizes the need to balance a diverse range of uses including residential,
commercial, industrial and military. The Industrial Transportation Element of the 1991 (as amended) Barrio
Logan/Harbor 101 Community Plan states that “Industrial rail access should be continued with an efficient
use made of the existing right of way.”

Otay Mesa-Nestor Community Plan
The Otay Mesa-Nestor Planning Area was created in 1957 when the area was annexed from the County. The
first Otay Mesa-Nestor Community Plan was adopted in 1979 and updated in 1997. Otay Mesa-Nestor is an
urbanized community, with over 57 percent of the planning area (excluding the Salt Ponds) covered with
residential land uses (approximately 17,000 units). Commercial land uses comprise five percent and industrial
uses comprise three percent of the plan area. Twenty percent of the planning area consists of schools, parks,
transit and other public facilities, while vacant, undeveloped, agricultural, and mineral extraction and
processing uses comprise the remaining 15 percent (City of San Diego Planning Department Community
Profiles, 2009). The Transportation Facilities element of the Otay Mesa-Nestor Community Plan recognizes
the need for multi-modal transportation options; however, there is no specific policy guidance regarding
freight rail.

San Ysidro Community Plan
The San Ysidro area was annexed by the City of San Diego in 1957. The San Ysidro Community Plan was
adopted by the City Council in 1974, and updated in 1990 with subsequent amendments through 2000. The
San Ysidro Community Area is a mix of established residential areas characterized by older homes, urban
neighborhoods comprised of infill development, commercial uses along San Ysidro Boulevard and in the new
Las Americas Center on Camino de la Plaza. The planning area is generally fragmented by the South Line,
Interstates 5 and 805. The Transportation and Circulation element of the San Ysidro Community Plan
recognizes the need for multi-modal transportation options; however, there is no specific policy guidance regarding
freight rail.

City of San Diego Multiple Species Conservation Program Subarea Plan
Adopted in 1997, the City of San Diego’s MSCP Subarea Plan (Subarea Plan) was prepared pursuant to the
general outline developed by the United States Fish and Wildlife Service (USFWS) and the California
Department of Fish and Game (CDF&G) to meet the requirements of the California Natural Communities
Conservation Planning (NCCP) Act of 1992. This Subarea Plan forms the basis for the implementing
agreement which is the contract between the City and the wildlife agencies that ensures implementation of the
Subarea Plan and thereby allows the City to issue take permits at the local level. The South Line traverses
through a portion of the Southern Multi-Habitat Planning Area. With the exception of the Otay River Valley,
the planning area is designated as “developed” land. There is riparian habitat located in proximity to the
South Line within the Otay River Valley. No project-related improvements are planned in this area.

National City General Plan
The National City General Plan was initially adopted in September, 1996 and last amended in October, 2005.
Policy N within the Public Services and Facilities element of the General Plan states that National City “will
work with Caltrans, SANDAG and MTDB (now MTS) and other responsible agencies to identify, plan and
implement needed transportation improvements” (National City General Plan, amended 2005).
2.0 Project Description

City of Chula Vista General Plan Update - 2005
The City of Chula Vista General Plan Update was approved in December, 2005. The Land Use and Transportation Element of the General Plan guides development in accordance with the city’s vision. The Land Use and Transportation Element is built upon three themes: (1) Strong Community Character and Image; (2) Strong and Safe Neighborhoods; and (3) Improved Mobility. Chula Vista aims to “provide a wide range of convenient and affordable mobility options that allow people to go from where they are to where they want to be, in a safe; pleasant; rapid; cost-effective; and environmentally friendly manner.”

To achieve this goal, the majority of commercial development in the Chula Vista study area is located along major roadways and in the village cores to facilitate connectivity between the cores. This is evident in the Land Use Element policy to “provide roads, transit service, bike routes, and pedestrian pathways that connect activity centers to their surrounding neighborhoods, adjacent villages, and each other, such that access is safe and convenient for residents and visitors.”

Chula Vista Planning Areas

With the City of Chula Vista, the South Line runs north/south parallel to and east of I-5. The South Line is located in the Northwest and Southwest Planning Areas. The policies for both Planning Areas reflect neighborhood revitalization, compatible zoning standards, and improvements to local transportation and retail and other services (City of Chula Vista General Plan, 2005). There are no specific policy statements related to expanding capacity on the South Line within the City of Chula Vista.

City of Chula Vista Multiple Species Conservation Program

The Chula Vista MSCP Subarea Plan (2003) maintains goals focusing on conservation of covered species and their habitats; designation and development of a preserve; provision of a preserve action management program for long-term conservation of covered species; and acquisition of federal and state authorizations for 86 species to reduce or eliminate redundant federal, state, and local natural resource regulatory and environmental review of individual projects. With the exception of the Sweetwater and Otay River crossings, the South Line corridor is located within an area designated as “developed”; and thus, is not subject to specific policies regulating development within MSCP area. There are no proposed improvements in proximity to the crossings that would impact protected habitat.

Regional Comprehensive Plan

SANDAG has developed a long-term planning framework called the Regional Comprehensive Plan for the San Diego Region (2004) (RCP), which includes a chapter dedicated to San Diego’s border communities (Chapter 5). The RCP focuses on a broad range of issues that address goals and policy statements supporting development of a reliable and efficient transportation system; long-term, fiscally and environmentally sound energy and water supply; a healthy interregional and bi-national environment; strengthening the economic base and role of the area; and ensure security to the greater border region.

SANDAG 2030 Regional Transportation Plan: Pathways for the Future

The 2030 Regional Transportation Plan (RTP) was adopted by SANDAG in November 2007. Although freight rail is a relatively minor portion of the 2030 RTP, one of the main components of the RTP is Systems Management, which helps to maximize system operations so that we make the best use of our existing transportation resources. The proposed project is intended to increase the efficiency of freight movement within the South Line corridor which would reduce congestion and improve mobility on the regional highway system. The project would be generally consistent with the overall policies and goals of the 2030 RTP.
2.2 Description of the Proposed Project

2.2.1 Project Description

SANDAG is proposing to increase freight rail capacity from two to four trains per night on the South Line segment of the existing SD&E Railroad Mainline between the San Diego and San Ysidro yards in San Diego, California. As noted in Section 1 of this document, current freight operations on the South Line are only allowed to occur during a 2.5 hour period when the MTS Blue Line trolley is not in service. This “window” is typically from 1:30 a.m. to 4:00 a.m. Monday through Saturday morning, with an existing additional southbound freight move allowed beginning at approximately 12:55 am.

This limited operating window restricts Freight operations on the South Line to only two trains per night, one in each direction. The existing 2.5 hour window does not provide enough time for the first train to clear the San Ysidro yard, and a second train to be ‘built’ and travel all the way north to the San Diego yard. A larger operating window would be required to provide enough time to get additional northbound and southbound trains through the system.

Under a typical scenario, two freight trains per night operate on the South Line, with one train originating in the San Diego yard and the other in the San Ysidro yard. The locomotives pick up and drop off cars on the sidings and customer spur tracks during the operating window before proceeding to either destination yard. The number of cars comprising any given train can range from less than 10 to as many as 50. A typical train is comprised of approximately 30 cars.

The proposed improvements would increase the capacity of the existing corridor to accommodate one additional freight train in either direction per night. This increase in capacity would be achieved by expanding the operating window and allowing an early northbound freight movement during existing trolley service. By implementing the improvements proposed by this project, the freight operator will have time to ‘build’ an additional train in the San Ysidro Yard and send it northbound. The additional nightly trains leaving the San Diego and San Ysidro yards and heading north or south along the South Line corridor will allow for an increase in goods movement capacity between Mexico and US destinations east of San Diego or north through the Los Angeles to San Diego (LOSSAN) corridor.

The proposed project will not add any additional connections or sidings to serve additional adjacent businesses or properties. However, existing siding and customer spur track facilities are not being fully utilized. Localized train movements back and forth along the corridor that serve existing sidings and spur tracks, could increase significantly without any of the improvements proposed by this project.

The improvements listed below are potential project improvements currently under evaluation and are all included for the purpose of this evaluation. All improvements are anticipated to be installed within the current right of way and are intended to increase operational capacity of the South Line and improve the overall operational efficiency. No additional right-of-way is expected to be required. Improvement locations are shown on Figures 2-2a-g, and described as follows:

- **Positive Train Separation System.** Installation of this system will provide the opportunity for joint trolley and freight operations outside of the existing freight window. This is a communication-based system that is intended to enforce movement authority and speed restrictions on the entire 15.5 mile length of the South Line. Once installed, the system will provide the level of communication needed to maintain safe distances between trolleys and freight trains, enforce operating speeds and compliance with wayside signal devices. On-board systems would be installed on 134 trolley vehicles and 5 freight
Initial Study/Mitigated
Negative Declaration

Figure 2-2b
Project Alignment
South Line Rail Goods Movement Project

Legend
South Line Rail

Initial Study/Mitigated
Negative Declaration

Figure 2-2c
Project Alignment
South Line Rail Goods Movement Project

Legend
South Line Rail Improvements

Initial Study/Mitigated Negative Declaration

Figure 2-2d
Project Alignment
Initial Study/Mitigated
Negative Declaration

Figure 2-2e
Project Alignment
South Line Rail Goods Movement Project

Legend
South Line Rail

Not to Scale

Initial Study/Mitigated
Negative Declaration

Figure 2-2f
Project Alignment
South Line Rail Goods Movement Project

Legend
South Line Rail

Not to Scale

Initial Study/Mitigated
Negative Declaration

Figure 2-2g
Project Alignment
2.0 Project Description

Locomotives. Wayside systems would be installed along the South Line corridor to monitor switches, signals, and other signaling devices. The system will require updates to existing infrastructure. Improvements will not require the acquisition of additional right-of-way.

Systems are typically comprised of a dispatch segment that provides “real-time” vehicle position reports utilizing a wireless communication network; a wayside segment that provides a wireless interface to signal system devices; a communication segment that provides the means to deliver authorities and restrictions from the dispatch system and convey wayside device status; and, an on-board segment that employs a computer that interfaces with vehicle peripheral devices. The on-board computer uses Geographic Position System (GPS), wheel tachometer information and an on-board geo-referenced track database to determine the vehicles location.

- **Bi-Directional Centralized Traffic Control.** Modifications to the existing single direction Automatic Block Signal (ABS) system and installation of a Centralized Traffic Control (CTC) dispatch system will allow trolley/freight movement in either direction on either track. Using this system, the MTS control operator will be able to remotely select trolley/freight train routes. This will eliminate the current requirement for a freight train crewmember to stop, exit the locomotive, request a route locally, return to the locomotive, and then proceed on the route selected.

   In addition the CTC dispatch system enables the control operator to maintain a safe distance between trolley and freight trains. Utilizing proper signal block spacing and strategic placement of power crossover switches, the freight trains and/or trolleys can be constrained from following one another too closely. Using this system will reduce freight train occupancy time on the South Line by a minimum of 5 minutes per route request and allow freight trains to operate at a greater speed during the freight operating window. The system will require updates to existing infrastructure. Improvements will not require the acquisition of additional right-of-way.

- **Bi-Directional Grade Crossing System Train Detection.** The existing highway grade crossing warning systems are designed to detect train movements in the prevailing direction (e.g. “with the current of traffic”). If a train is required to move in the opposite direction (e.g. “against the current of traffic”), the present grade crossing system design does not activate the warning devices until the train is within a few feet of the intersection. Presently when operating “against the current of traffic”, the train must move at restricted speed (e.g. not greater than 10 MPH) and must not enter the grade crossing intersection until the warning devices have activated and the crossing gates are horizontal.

   Installation of bi-directional CTC will allow highway grade warning systems to detect trains approaching from either direction. This system will enable freight trains to operate at 40 MPH on either South Line track. Ten (10) of the twenty-five (25) grade crossings within the project limits will be modified to accommodate bi-directional operation.

   In addition to modifications to the detection system, this improvement includes the installation of two new crossovers to take advantage of the increased reverse direction travel speed allowed by grade crossing approach circuit improvements. The crossovers would be installed in the vicinity of Mile Post (MP) 3.4 (north of 32nd Street) and in the vicinity MP 8.8 (north of L Street) within the existing ROW.

- **San Diego Yard Centralized Traffic Control.** A CTC system will be installed at the San Diego freight yard entrance. This will eliminate the 5 minute delay associated with requesting a route to the South Line and allow switching movements within the yard for trolley operations without requiring a continuous route request. Installation of the pole-mounted communication equipment will not require the acquisition of additional ROW.
2.0 Project Description

- **San Ysidro Yard Centralized Traffic Control.** A CTC system at the San Ysidro freight yard entrance will eliminate the 5 minute delay associated with requesting a route to the South Line. Similar to the San Diego Yard improvements, this will not require the acquisition of additional ROW.

- **Palomar Siding Improvements.** The Palomar Siding is located between approximate MP 9 and approximate MP 10.5. Under this project, new signaling and CTC functions would be installed at the Palomar Siding as well as track improvements and modifications to the existing siding layout. The track improvements may include the addition of new turnouts and derails, and replacement of tracks, ties and ballast. New turnouts may be added on either side of Palomar Street in Chula Vista and/or a new track segment approximately 350 feet in length would be added south of Main Street to extend the siding south to a proposed mainline switch located just north of the Otay River crossing. **See Figure 2-3.** This would allow freight trains to serve customers along the siding and the opportunity to switch the siding during trolley operations. These improvements would also allow the siding to be used for temporary train storage to avoid conflicts with trolley operation or if the operating window is insufficient in length to allow the freight train to arrive at a yard within time limits. Construction would require improvements within the existing mainline fill slope; however, improvements would not require the acquisition of additional ROW. A concrete block retaining wall approximately 700 feet in length would be constructed adjacent to the proposed siding improvements. The wall height would vary between 2 and 5 feet and is intended to allow all construction improvements to occur within the existing right of way.

**Construction**

The South Line improvements would be constructed over a period of approximately 3 years. The ground disturbance associated with the improvements would be minimal and include potentially replacing or adding aggregate material within the existing track or siding areas to accommodate the improvements. Some excavation and earth moving would be required to modify the existing fill slope for construction of the Palomor Siding track extension. Construction activities would be coordinated to avoid disruption of Blue Line trolley service. Proposed improvements within existing siding areas would occur during the day since the trolley does not use these areas off of the main line. Main line improvements would occur during the night when the trolley is not in service.

2.3 Objectives of the Project

The proposed project has been designed to achieve specific project objectives. They include:

- Increase the throughput freight capacity of the south line from 2 to 4 trains per day and 10,000 to 19,600 carloads per year;
- Increase the speed of freight traffic on the South Line to reduce one-way travel times between the San Diego and San Ysidro Yards by up to 20 minutes;
- Increase the reliability of freight traffic travel times by eliminating canceled service resulting from track maintenance;
- Reduce one-way travel time variability by up to 15 minutes;
- Provide congestion relief for freight traffic and reduce delays by up to 20 minutes per train per day;
- Provide improved safety for rail workers and the general public at grade crossings (i.e., central control, automatic stop, and reverse signaling);
- Eliminate up to 31,800 annual truck trips and reduce annual truck vehicle miles traveled (VMT) by up to 3,800,000;
South Line Rail Goods Movement Project

Figure 2-3

Legend

- Existing South Line
- Proposed Siding
- Retaining Wall

Scale: 1" = 100'

Initial Study/Mitigated Negative Declaration

Palomar Siding Improvements
2.0 Project Description

- Improve mobility by reducing truck traffic on local streets and regional highways;
- Improve freight goods movement throughput capacity, efficiency, and connectivity between northern Mexico and the Los Angeles/San Diego (LOSSAN) rail corridor; and

2.4 Discretionary Actions

A discretionary decision is an action taken by a government agency that calls for the exercise of judgment in deciding whether to approve a project. Implementation of the proposed project would require the following specific discretionary approvals:

- **Initial Study / Mitigated Negative Declaration** – SANDAG would be required to adopt the Initial Study / Mitigated Negative Declaration for the project to satisfy the administrative requirements of CEQA.

- **California Coastal Act** – An exemption or waiver to a California Coastal Act consistency determination would be required by the California Coastal Commission.

- **Federal Rail Administration** - Approval of an operating waiver and operations plan.

- **National Environmental Policy Act (NEPA) Compliance** – a Categorical Exclusion is being sought from the Federal Rail Administration.

In addition, the proposed development may need to obtain the following non-discretionary permits as part of project implementation:

- **San Diego Regional Water Quality Control Board** - Notice of Intent to Comply with General Permit for Construction Activity.
This section of the Initial Study evaluates the potential environmental impacts associated with implementation of the proposed project and provides explanations of the responses to the Environmental Checklist found in Appendix A of this document. The Environmental Checklist is based on Appendix G of the CEQA Guidelines and includes a list of questions that correspond directly to the legal standards for preparing Environmental Impact Reports (EIRs), Negative Declarations, and Mitigated Negative Declarations (MNDs). The environmental issues evaluated in this Initial Study include the following:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service System

The environmental analysis provided in this section is patterned after the questions in the Environmental Checklist. Under each issue area, a general discussion of the existing conditions is provided. The Environmental Checklist questions are then stated and an answer is provided according to the environmental analysis of the project’s impacts. To each question, there are four possible outcomes:

- **No Impact.** The implementation of the proposed project will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The proposed project will have the potential for impacting the environment, although this impact will be below thresholds that may be considered significant.

- **Less Than Significant Impact with Mitigation.** The proposed project will have potentially significant adverse impacts which may exceed established thresholds, although mitigation measures or changes to the project’s physical or operational characteristics will reduce these impacts to a level that is considered less than significant. Measures that may reduce potentially significant impacts are identified.

- **Potentially Significant Impact.** The proposed project will have impacts that are considered significant and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels. When an impact is determined to be potentially significant in the preliminary analysis, the environmental issue will be subject to detailed analysis in an EIR.

The references and sources used for the analysis are also identified after each response.
3.1 Aesthetics and Visual Quality

The proposed project is located on a 12.5 mile segment of the existing SD&AE Railroad Mainline between the San Diego and San Ysidro yards. All project work would occur within the existing rail corridor ROW. The northern portion of the proposed project corridor is surrounded by industrial uses including warehousing, shipyards, a car track, freight/container storage and a U.S. Naval Station. The mid section of the proposed project corridor is surrounded by mostly office, single family residential, multi-family residential, schools, recreation centers, and a storage unit facility. The southern portion of the proposed project corridor is surrounded by vacant land, single family residential, multi-family residential, schools, parks, general commercial/retail, a golf driving range, greenhouses and border facilities. The project also crosses over the Chollas Creek, Sweetwater River and Otay River.

(Source: Site Survey)

A. Would the project have a substantial adverse effect on a scenic vista?

No Impact. The proposed project is located within the 12.5 mile segment of the existing SD&AE Railroad Mainline between the San Diego and San Ysidro yards. The existing rail corridor is visible to adjacent land uses and roadways. The rail line in some areas is elevated and visible from non-adjacent uses.

The proposed project improvements are limited to the existing rail corridor ROW; therefore, the proposed project would not change the existing views into or out of the project area. Current views from adjacent land uses into the project area are of an existing rail corridor with operating freight trains and trolleys. This view would not change with implementation of the proposed project. The project would have no impact on scenic vistas within the corridor.

A retaining wall is proposed as part of the Palomar Siding improvements. The retaining wall will be constructed of concrete blocks and will vary in height from two to five feet and be approximately 700 feet in length. The proposed retaining wall would be adjacent to an industrial land use and would be located on the side of a fill slope; thus, it would not obstruct any views along the corridor.

(Source: Site Survey)

B. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed project site is located on an existing segment of the SD&AE Railroad Mainline. No trees, rock outcroppings or scenic resources exist in the corridor, nor is the site visible from any state scenic highway, historic building or scenic viewpoint. There are sections of the existing rail line that are elevated including, bridge structures over Chollas Creek, Sweetwater River and Otay River; however, the proposed project would not change the existing views nor would it affect scenic resources.

(Source: Site Survey)

C. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. Implementation of the proposed project would not change the visual character of the project area. Improvements would be limited to the existing rail corridor. During construction, some
activities and staging may be visible from adjacent parcels. However, this change in the visual environment would be localized, short-term and considered a less than significant impact under CEQA.

(Source: Site Survey)

D. Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Substantial sources of light and glare currently exist in the project area. Sources include industrial, residential, commercial, office, and schools, which contribute light from interior and exterior lighting, street lighting, and security lighting. Glare can result from windows, painted storage tanks, silos and domed structures.

The proposed project would create minimal sources of light through the installation of lighting on rail signal system devices. Lighting from the additional trains operating on the South Line would also be visible adjacent to the track when trains pass. While the project would create intermittent sources of light, the change would not be substantial enough to adversely affect day or nighttime views. The impact would be less than significant.

(Source: Site Survey)

3.2 Agricultural Resources

The California Farmland Mapping and Monitoring Program (FMMP) develops statistical data for analyzing impacts to California’s agricultural resources. The FMMP program characterizes Prime Farmland as land with the best combination of physical and chemical characteristics that are able to sustain long term production of agricultural crops. Farmland of Statewide Importance is land with a good combination of physical and chemical characteristics for agricultural production with less ability to store soil moisture, compared to Prime Farmland. Unique Farmland is used for production of the state’s major crops on soils not qualifying for prime or statewide importance.

The FMMP also identifies Urban and Built-up Land, Other Land that is not included in any other mapping category, and Water. According to the FMMP, the South Line corridor is located on Urban and Built-up Land. Urban and Built-up Land is land characterized by a building density greater than 1-unit per 1.5 acres. Development adjacent to the corridor includes, but is not limited to, residential, industrial, commercial, and institutional land uses.

(Sources: California Farmland Mapping and Monitoring Program and Site Survey)

A. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. According to the 2006 Farmland Mapping and Monitoring Program (FMMP), the study area is designated Urban and Built-up Land. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted to non-agricultural use with the implementation of the South Line project because all improvements would occur within the existing ROW.

(Sources: Site Survey, California Farmland Mapping and Monitoring Program)
3.0 Environmental Analysis

B. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

**No Impact.** The Williamson Act is California State legislation that allows the creation of agricultural preserves. San Diego County participates in the Williamson Act and allows owners of agricultural land to pay property taxes based on the agricultural production of their properties, rather than the current market value. This act serves to encourage the continued agricultural use of lands in the County within these designated agricultural preserves.

According to the San Diego County General Plan Resources Element, the South Line corridor is not located in an existing Agricultural Preserve and is not under a Williamson Act Contract. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act Contract.

*(Sources: San Diego County General Plan, Site Survey)*

C. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

**No Impact.** As noted above, all project-related improvements would occur within existing rail ROW. The proposed project would not result in the conversion of Farmland to non-agricultural uses.

*(Sources: City of Chula Vista General Plan, Site Survey, and San Diego County General Plan)*

3.3 Air Quality

The weather of the San Diego region, as in most of southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average temperature ranges from the mid 40s to the high 90s. Most of the county’s precipitation falls from November to April, with infrequent (approximately ten percent) precipitation during the summer. The average seasonal precipitation along the coast is approximately ten inches; the amount increases with elevation as moist air is lifted over the mountains. The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east; along with local meteorology, it influences the dispersal and movement of pollutants in the basin. The mountains to the east prohibit dispersal of pollutants in that direction and help trap them in inversion layers. The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and influences the direction of prevailing winds (westerly to northwesterly). Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

**Air Quality Standards**

Air quality is measured by comparing pollutant levels in ambient air samples to National and State standards. These standards are set by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) at levels determined to be protective of public health and welfare with an adequate margin of safety. The federal Clean Air Act of 1970 first authorized National Ambient Air Quality Standards (NAAQS). California Ambient Air Quality Standards (CAAQS) were authorized by the State legislature in 1967. California standards are generally more stringent than the National standards.

Air quality is considered in "attainment" of NAAQS if pollutant levels are below or equal to the standards continuously with exceedances allowed on average no more than once each year. Thus, one violation of National
standards averaged over three years is considered consistent with the NAAQS. The definition of attainment with CAAQS is zero violations.

Attainment Status

Federal and State regulations require the development of comprehensive plans for the attainment of air quality standards. Section 107 of the 1977 CAA Amendments requires the EPA to publish the compliance status of all geographic areas within the U.S. Section 39608 of California’s Health and Safety Code (H&SC) requires CARB to designate and annually update area designations with regard to the CAAQS. Areas not in compliance with N/CAAQS are deemed nonattainment areas. Areas where there is insufficient data to make a determination are deemed “unclassifiable” and are considered in attainment until proven otherwise. Areas that were once classified as nonattainment but have since met attainment criteria are classified as “maintenance” areas. The designation of an area is based on data collected by the state monitoring network for each criteria pollutant. Based on regional monitoring data, the EPA/CARB has identified nonattainment areas in the San Diego Air Basin for each criteria pollutant and classified the nonattainment areas according to the extent of the pollution. The area’s classification status is shown in Table 3-1. San Diego County is listed as a non-attainment area for ozone. The county is in attainment or a maintenance area for all other pollutants.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Federal Designation</th>
<th>State Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone (1 hour)</td>
<td>Attainment*</td>
<td>Nonattainment</td>
</tr>
<tr>
<td>Ozone (8 hour)</td>
<td>Nonattainment (Subpart I)</td>
<td>Nonattainment</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>Attainment (Maintenance Area)</td>
<td>Attainment</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>Unclassifiable**</td>
<td>Nonattainment</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>Attainment</td>
<td>Nonattainment</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>Attainment</td>
<td>Attainment</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>Attainment</td>
<td>Attainment</td>
</tr>
<tr>
<td>Lead</td>
<td>Attainment</td>
<td>Attainment</td>
</tr>
<tr>
<td>Sulfates</td>
<td>(no federal standard)</td>
<td>Attainment</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>(no federal standard)</td>
<td>Unclassifiable</td>
</tr>
<tr>
<td>Visibility</td>
<td>(no federal standard)</td>
<td>Unclassifiable</td>
</tr>
</tbody>
</table>

Source: SDAPCD 2007.
* The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.
** At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Local Air Quality

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and drives the prevailing winds. Winds in inland mountainous areas tend to blow up the valleys during the day and down the hills and valleys at night.

In conjunction with the onshore/offshore wind patterns, there are two types of temperature inversions (i.e. increase in temperature with altitude) which occur within the region that affect atmospheric dispersion and contribute to degradation of local air quality. In the summer, a temperature inversion forms at about 1,100 to 2,500 feet (335 to 765 meters) above the ground. The inversion covers the entire coastal plain and is created when the warm air mass over land is undercut by a shallow layer of cool marine air flowing onshore. In addition to the temperature inversion, the prevailing sunshine in this region further exacerbates the smog problem by inducing additional adverse photochemical reactions. During the winter, a nightly shallow
3.0 Environmental Analysis

An inversion layer (usually at about 800 feet or 243 meters) forms between the cooled air at the ground and the warmer air above, which can trap vehicular pollutants. The highest carbon monoxide concentrations occur during the winter months.

The predominant onshore/offshore wind pattern is sometimes interrupted by “Santa Ana” conditions. This occurs when high pressure over the Nevada-Utah area overcomes the prevailing westerlies, sending strong, steady, hot, and dry winds from the east over the mountains and out to sea. Strong Santa Anas tend to blow pollutants out over the ocean, resulting in clear days. However, at the onset or breakdown of these conditions or if the Santa Ana is weak, prevailing northwesterly winds form and blow pollutants from the Los Angeles basin ashore in the San Diego Air Basin. Smog transport from the South Coast Air Basin (the metropolitan areas of Los Angeles, Orange, San Bernardino, and Riverside Counties) is a key factor on more than half the days that air standards are exceeded in San Diego (San Diego Air Pollution Control District, 2005).

The SDAPCD monitors air quality conditions at 10 locations throughout the district. For the purpose of this analysis, data from the downtown San Diego, Beardsley Street monitoring station was used to characterize existing conditions in the vicinity of the study area, and to establish a baseline for estimating future conditions. Ambient concentrations of pollutants from 2006 through 2008 are presented in Table 3-2. The state 8-hour ozone standard was exceeded in 2006, 2007, and 2008, as were the state annual and 24-hour PM10 standards and the 24-hour PM2.5 standard. Additionally, the annual PM2.5 standard was exceeded in 2006. Air quality within the project region is in compliance with both CAAQS and NAAQS for NO2, CO, and SO2.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Most Stringent Ambient Air Quality Standard</th>
<th>Monitoring Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>O3</td>
<td>8 hour</td>
<td>0.071</td>
<td>0.073</td>
<td>0.073</td>
<td>0.070</td>
<td>Downtown SD</td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>0.082</td>
<td>0.087</td>
<td>0.087</td>
<td>0.090</td>
<td>Downtown SD</td>
</tr>
<tr>
<td>PM10</td>
<td>Annual</td>
<td>34.4 μg/m³</td>
<td>31.3 μg/m³</td>
<td>29.3 μg/m³</td>
<td>20 μg/m³</td>
<td>Downtown SD</td>
</tr>
<tr>
<td></td>
<td>24 hour</td>
<td>74.0 μg/m³</td>
<td>111.0 μg/m³</td>
<td>59.0 μg/m³</td>
<td>50 μg/m³</td>
<td>Downtown SD</td>
</tr>
<tr>
<td>PM2.5</td>
<td>Annual*</td>
<td>13.1 μg/m³</td>
<td>11.7 μg/m³</td>
<td>10.7 μg/m³</td>
<td>12 μg/m³</td>
<td>Downtown SD</td>
</tr>
<tr>
<td></td>
<td>24 hour</td>
<td>63.3 μg/m³</td>
<td>71.4 μg/m³</td>
<td>42.0 μg/m³</td>
<td>35 μg/m³</td>
<td>Downtown SD</td>
</tr>
<tr>
<td>NO2</td>
<td>Annual</td>
<td>0.021</td>
<td>0.018</td>
<td>0.019</td>
<td>0.030</td>
<td>Downtown SD</td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>0.094</td>
<td>0.098</td>
<td>0.091</td>
<td>0.180</td>
<td>Downtown SD</td>
</tr>
<tr>
<td>CO</td>
<td>8 hour</td>
<td>3.27</td>
<td>3.01</td>
<td>2.60</td>
<td>9.0</td>
<td>Downtown SD</td>
</tr>
<tr>
<td></td>
<td>1 hour*</td>
<td>5.3</td>
<td>4.4</td>
<td>3.1</td>
<td>20</td>
<td>Downtown SD</td>
</tr>
<tr>
<td>SO2</td>
<td>Annual</td>
<td>0.004</td>
<td>0.003</td>
<td>0.003</td>
<td>0.030</td>
<td>Downtown SD</td>
</tr>
<tr>
<td></td>
<td>24 hour</td>
<td>0.009</td>
<td>0.006</td>
<td>0.007</td>
<td>0.040</td>
<td>Downtown SD</td>
</tr>
</tbody>
</table>

Source: CARB Air Quality Data Statistics (2009c) http://www.arb.ca.gov/adam/welcome.html, * Data were taken from EPA AirData (2009b) http://www.epa.gov/air/data/index.html
Notes: Downtown SD - Monitoring Station located at 1110 Beardsley Street, San Diego, CA
A. **Would the project conflict with or obstruct implementation of the applicable air quality plan?**

**Less than Significant Impact.** Operation of the project would produce volatile organic compounds (VOC), nitrogen oxides (NOx), carbon monoxide (CO), sulfur oxides (SOx), and particulate matter (PM$_{10}$ and PM$_{2.5}$) emissions associated with the operation of two additional trains per day on the South Line segment. Currently, two trains (each train consisting of two GP-38 locomotives) utilize the South Line segment for a 30-minute line haul cycle, and spend an additional 6 hours switching (at either the San Diego Rail Yard or the San Ysidro Rail Yard). The proposed project would add two trains to the current 30-minute line haul cycle; however, these additional trains would pass through the corridor rather than work the sidings. While the proposed project has the potential to reduce the amount of time spent in the line haul cycle, it was conservatively assumed that the additional two trains would spend 30 minutes hauling freight.

The EPA’s Emission Factors for Locomotives (EPA 2009c) was utilized to obtain emission factors for criteria pollutants. Data regarding fuel consumption, horsepower, line-haul and switching cycles, and notch settings specific to the GP-38 locomotive was obtained from Kimley-Horn and Associates (Kimley-Horn 2009). These data were used to calculate emissions for the existing condition as well as the emissions associated with the South Line after completion of the proposed project (refer to Appendix B, which includes the data and assumptions used to generate emissions).

**Table 3-3.** Estimated Daily Maximum Operational Emissions, presents the maximum daily emissions for the existing condition as well as emissions after implementation of the proposed project. Details of the emission calculations are provided in Appendix B.

<table>
<thead>
<tr>
<th>Emissions</th>
<th>VOC</th>
<th>NO$_x$</th>
<th>CO</th>
<th>SO$_x$</th>
<th>PM$_{10}$</th>
<th>PM$_{2.5}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Conditions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emissions</td>
<td>8.37</td>
<td>157.13</td>
<td>16.29</td>
<td>0.07</td>
<td>3.95</td>
<td>3.83</td>
</tr>
<tr>
<td><strong>Existing + Proposed Project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emissions</td>
<td>9.68</td>
<td>192.81</td>
<td>19.80</td>
<td>0.08</td>
<td>4.83</td>
<td>4.68</td>
</tr>
<tr>
<td><strong>Net Change in Emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emissions</td>
<td>1.32</td>
<td>35.68</td>
<td>3.51</td>
<td>0.02</td>
<td>0.88</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>Pollutant Threshold</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>250</td>
<td>550</td>
<td>250</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Threshold Exceeded?</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

As shown, the net change in daily operational emissions associated with the proposed project would not exceed the thresholds for VOC, NOx, CO, SOx, PM$_{10}$, or PM$_{2.5}$. As discussed below, the project would have an overall net benefit in air quality by reducing truck VMT by as much as 3,800,000. As such, the proposed project would result in a less than significant impact.

**General Conformity**

As indicated in Section 6.0, the relevant de minimis thresholds for the SDAB are 100 tons per year for VOC (ozone precursor), NOx (ozone precursor), and CO. **Table 3-4.** Estimated Annual Maximum Operational Emissions, presents the net change in annual emissions resulting from the proposed project.
Table 3-4
Estimated Annual Maximum Operational Emissions (tons/year)

<table>
<thead>
<tr>
<th></th>
<th>VOC</th>
<th>NOx</th>
<th>CO</th>
<th>SOx</th>
<th>PM_{10}</th>
<th>PM_{2.5}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Change in Emissions</td>
<td>0.21</td>
<td>5.57</td>
<td>0.55</td>
<td>0.00</td>
<td>0.14</td>
<td>0.13</td>
</tr>
<tr>
<td>De Minimis Threshold</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Threshold Exceeded?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Source: See Appendix B for complete results. Emissions were derived from the following data sources: EPA 2009c, Kimley-Horn 2009.

As shown in Table 3-4, the annual emissions of VOC, NOx, and CO would not exceed the de minimis thresholds. Thus, further analysis is not required for these pollutants because their emissions would be less than the de minimis thresholds. Thus, the project would be in compliance with the general conformity requirements and would not conflict with local air quality attainment or maintenance plans to achieve or maintain federal ambient air quality standards.

(Sources: Air Quality Technical Report)

B. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact with Mitigation. As discussed above, the project would not violate applicable air quality standards. Thus, the project would not adversely affect air quality. In addition to the air quality analysis summarized herein, a Health Risk Assessment was performed to determine whether diesel particulate matter (DPM) emissions resulting from the increased rail traffic on the South Line could adversely affect nearby communities. The Health Risk Assessment is provided as Appendix C to this document. Based on this analysis, the health impacts resulting from the proposed project would not exceed the SDAPCD significance threshold of an incremental cancer risk of 10 in one million since the maximum anticipated cancer risk is 0.7 in one million within 250 meters of the track. In addition, the chronic hazard indices for noncancer health impacts are below the significance threshold of 1.0 at the maximally exposed receptors.

(Source: Air Quality Technical Report and Health Risk Assessment)

C. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact. CEQA defines cumulative impact as follows (CEQA Air Quality Handbook, Page 9-11):

In analyzing cumulative impacts from the proposed project, the analysis must specifically evaluate a project’s contribution to the cumulative increase in pollutants for which the SDAB is listed as nonattainment for the NAAQS and CAAQS for ozone and the CAAQS for PM_{10} and PM_{2.5}. If the proposed project does not exceed thresholds and is determined to have less than significant project-specific impacts, it may still have a cumulatively considerable impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the project would only be considered to have a cumulative impact if the project’s contribution accounts for a significant proportion of the cumulative total emissions.
3.0 Environmental Analysis

PM$_{10}$ and PM$_{2.5}$ emissions generally result in near-field impacts. As discussed above, the emissions of all criteria pollutants, including PM$_{10}$ and PM$_{2.5}$, would be well below the significance levels. Therefore, PM$_{10}$ and PM$_{2.5}$ emissions are not anticipated to result in a cumulatively significant impact on air quality.

With regard to cumulative impacts associated with O$_3$ precursors, in general, if a project is consistent with the community and general plans, it has been accounted for in the O$_3$ attainment demonstration contained within the State Implementation Plan. The proposed project is consistent with local community plans and general plans, and is also consistent with SANDAG’s 2030 RTP. The proposed project is included in the 2030 RTP as a part of the comprehensive goods movement evaluation and action plan. As such, it would not cause a cumulatively significant impact on the ambient air quality for O$_3$. The proposed project would provide congestion relief for freight traffic and eliminate up to 31,800 annual truck trips, reducing annual truck vehicle miles traveled (VMT) by up to 3,800,000. Thus, the proposed project would have a net benefit on air quality by significantly reducing truck VMT and transporting freight more efficiently. Additionally, the reduction in truck trips would have the indirect effect of reducing congestion (and thereby improving air quality) on local streets and regional highways. Thus the proposed project would not result in a cumulatively significant impact on O$_3$ concentrations.

*(Sources: Air Quality Technical Report)*

D. Would the project expose sensitive receptors to substantial pollutant concentrations?

**Less than Significant Impact.** Sensitive receptors located near the proposed project include parks, residences, and schools. While the project would increase the number nightly freight train pass by events, the tracks would not be moved closer to any sensitive properties. As referenced in the Air Quality Technical Report, no exceedances of the N/CAAQSs are expected to occur at sensitive receptors within the study area.

*(Sources: Air Quality Technical Report)*

E. Would the project create objectionable odors affecting a substantial number of people?

**Less Than Significant Impact.** Odors are a form of air pollution that is most obvious to the general public. Odors can present significant problems for both the source and surrounding community. Although offensive odors seldom cause physical harm, they can be annoying and cause concern.

Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. The proposed project would increase freight rail capacity from two to four trains per night along an existing rail corridor, and would not consist of land uses typically associated with emitting objectionable odors. Diesel exhaust would be emitted during operation of the proposed project; however, emissions would disperse rapidly and would occur along a corridor that is already subject to diesel emissions from existing freight activity. In addition, emissions would occur during a 2.5-hour “window”—typically from 1:30 a.m. to 4:00 a.m. During this time of day, sensitive receptors are unlikely to be sensitive to odors. As a result, any increase in odors is unlikely to induce a negative response, and impacts would be less than significant.

*(Sources: Air Quality Technical Report)*
3.0 Environmental Analysis

3.4 Biological Resources

The proposed project is limited to the current South Line segment between the San Diego and San Ysidro yards. The corridor is fully developed with residential, commercial, industrial and other uses. Vegetation communities throughout the corridor consist primarily of landscaping with ruderal and barren areas. There are three water bodies that the corridor passes over, Chollas Creek, which is in the northern section of the project near I-15, the Sweetwater River which is in the central portion of the project near SR-54, and the Otay River, which is in the southern portion of the project near SR-905. These areas contain marshy vegetation as well as riparian habitat in proximity to, but not within the corridor ROW. No improvements are proposed in these areas.

(Sources: Site Survey)

A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. The project corridor is currently developed as a rail line. With the exception of sparse ruderal and adjacent landscape species, the corridor and ROW are generally void of vegetation. Minor ground disturbance is proposed along the corridor in proximity to the Palomar Siding south of Main Street and Industrial Boulevard in Chula Vista. However, this would not affect any threatened or endangered species or habitat.

(Sources: Site Survey)

B. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game (CDFG) or US Fish and Wildlife Service?

No Impact. Although Riparian habitat is present along the corridor at the Otay River and Chollas Creek, no riparian habitat or sensitive natural communities occur within the ROW within the project study area. Therefore, no riparian or sensitive habitat would be disturbed by the proposed project.

(Sources: Site Survey)

C. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. No direct removal, filling, or other hydrological interruption would occur with implementation of the proposed project. No wetlands occur within the area of proposed ground disturbance; thus, the project would not have any direct or secondary impacts on wetland resources.

(Sources: Site Survey)

D. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

(Sources: Site Survey)
3.0 Environmental Analysis

No Impact. Construction of the proposed project would not interfere with any identified wildlife corridors. The rail corridor is surrounded by existing development with the exception of a few vacant lands in the southern portion of the project. These areas are primarily located on the eastern side of the rail line and are not contiguous with other vacant lands on the west side of the rail line; and thus, would not be suitable for use as a wildlife corridor. No impact would occur.

(Sources: Site Survey)

E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The area proposed for construction improvements consists of ruderal vegetation and bare ground. As such, construction of the project would not remove any plants or trees that would be regulated under a tree preservation policy or ordinance. No impact would occur.

(Sources: Site Survey)

F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The segment of the corridor within the City of Chula Vista falls within the Multiple Species Conservation Plan and the City of San Diego Multiple Species Conservation Program Southern Subarea Plan. As noted, with the exception of the Sweetwater River and Otay River crossings, the corridor is designated as developed area. The crossings contain protected habitat; however, the project would not involve any ground disturbing activities within these areas. Thus, the project would not conflict with the provisions of an adopted MSCP.

(Sources: MSCP, City of Chula Vista Subarea Plan, MSCP, City of San Diego Subarea Plan, Site Survey, U.S. Fish and Wildlife Service – Endangered Species Program; and California Department of Fish and Game – Habitat Conservation Planning Branch)

3.5 Cultural Resources

Cultural resources, which are protected under the National Historic Preservation Act of 1966 (NHPA), American Indian Religious Freedom Act and the Archaeological Resources Protection Act of 1979, include the non-renewable remains of past human use of an area. Cultural resources can include both archaeological resources and ethnographic resources. Archaeological resources consist of architectural remains, isolated features such as rock piles, hearths (fire pits), or scatters of artifacts (pottery or rock fragments). Ethnographic resources are often less tangible, referring to materials, places, or things used by living communities. Given the scope and location of the proposed improvements, there are no anticipated impacts to cultural resources. Therefore, a technical report addressing this issue was not performed.

A. Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

No Impact. The proposed project is limited to the existing South Line corridor. The corridor and surrounding areas are heavily disturbed and composed of fill material and bare ground and all disturbances associated with construction of the improvements would be confined to the corridor. There are no historical resources that
3.0 Environmental Analysis

would be impacted by the proposed project.

(Sources: Site Survey)

B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Less than Significant Impact with Mitigation. The proposed project is limited to the South Line corridor. The corridor and surrounding areas are heavily disturbed and composed of fill material and bare ground and all disturbances associated with construction of the improvements would be confined to the corridor. Thus, the likelihood of archaeological resources remaining in the project area is considered low. Ground disturbance associated with construction is minimal and includes the replacement of tracks, ties and ballast in some areas. A cultural resources study was not prepared for the project; however, if evidence of archaeological resources is found during construction, the following mitigation would reduce impacts to less than significant levels.

Mitigation

Measure 3.5.B1: If during excavation or earth moving activities, the construction contractor identifies potential resources, SANDAG would be notified and a qualified archaeologist will be contacted to assess the nature and significance of the find. In the event that cultural materials are encountered, the following steps will be followed:

- All excavation and/or grading shall cease immediately.
- Additional testing and evaluation of the remains shall be completed and recommendations for treatment shall be made in accordance with standard guidelines.

Measure 3.5.B2: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resource Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner of his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

(Sources: State Health and Safety Code, CA Public Resources Code)

C. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation. Ground disturbance would be confined to the existing rail bed. Thus, the likelihood of encountering paleontological resources is low considering depositional processes or fill placement have likely buried any paleontological resources. However if evidence of paleontological resources are found, mitigation would reduce impacts to less than significant levels.
Mitigation

Measure 3.5.C1: In the event that cultural materials are encountered during excavation or grading activities, the permit holder shall take all the following steps:

- All excavation and/or grading shall cease immediately.
- Additional testing and evaluation of the remains shall be completed and recommendations for treatment shall be made in accordance with standard guidelines.

*(Sources: State Health and Safety Code, CA Public Resources Code)*

D. Would the project disturb any human remains, including those interred outside of formal cemeteries?

**Less than Significant Impact with Mitigation.** The proposed project is limited to the South Line corridor. The corridor and surrounding areas are heavily disturbed and composed of fill material and bare ground. Further, all disturbances associated with construction of the improvements would be confined to the corridor. Thus, no impact to buried human remains is expected to occur with the proposed project. However, implementation of mitigation measure 3.5.B2 will minimize impacts to human remains should any be discovered during construction.

*(Sources: State Health and Safety Code, CA Public Resources Code)*

3.6 Geology and Soils

**Geology**

The project study area is situated in a western portion of the Peninsular Ranges geomorphic province and lies between the coastal plain and the western foothill slopes. The project study area and near vicinity is located in the areas underlain by alluvium and slope wash undifferentiated, stream-terrace deposits, San Diego Formation, Otay Formation, and unnamed fanglomerate deposits.

**Soils and Topography**

Alluvium and slope wash undifferentiated have been mapped along Chollas Creek, the Sweetwater River, and the Otay River channels. These materials are chiefly derived from nearby sources of soil and/or decomposed bedrock and were deposited along the drainage courses by the interaction of gravity and water. Stream-terrace deposits occur very locally as thin veneer along the Otay River drainage courses. The deposits include unconsolidated sand and gravel derived locally from the sedimentary, igneous, and metamorphic rock of the area. The general configuration of the South Line corridor consists of an excavated, leveled, or raised rail bed. There are no significant grades or cut/fill slopes along the corridor.

**Seismicity**

The site is not located within an Alquist-Priolo Earthquake Study Zone as established by the State Geologist around known active faults. The nearest known fault is the Newport-Inglewood-Rose Canyon/East (NIE) that is located off-shore approximately 10 miles to the northwest of the project site. Including the NIE, there are seven known active faults within a 50-mile radius of the site. Although the subject site could experience severe ground shaking in the event of an earthquake along any of these faults, it does not possess any greater risk than that of the surrounding developments.
3.0 Environmental Analysis

(Sources: USGS and California Geological Survey)

A. Would the project expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Less Than Significant Impact. The study area is not located within an Alquist-Priolo Earthquake Study Zone as established by the State Geologist. Review of available literature and field reconnaissance revealed no active fault trace through or near the site. The nearest active fault is the Newport-Inglewood-Rose Canyon/East (NIE) Fault, located approximately 10 miles northwest of the project area.

The Newport-Inglewood-Rose Canyon Fault is classified as a Quaternary age strike-slip fault and it is unknown when it last ruptured. Rupturing from this fault is not likely to occur.

Because the proposed project would not involve the construction of building features in a recognized fault zone, the risk of loss, injury, or death involving rupture of the nearby faults would remain less than significant.

B. Would the project be subject to strong seismic groundshaking?

Less than Significant Impact. The proposed project is in a relatively inactive seismic area in Southern California. As such there is a low possibility for strong seismic ground shaking.

(Sources: USGS and California Geological Survey)

C. Would the project be subject to seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction commonly occurs in earthquake-prone areas when ground shaking causes young, loose, water-saturated soil to become fluid and lose cohesiveness. Liquefaction is not known to have occurred historically in San Diego County; however, portions of the unincorporated County would be susceptible to liquefaction from ground shaking during larger seismic events (San Diego County General Plan Update Draft EIR, 2009). The potential for liquefaction at the site is considered low because soils are relatively shallow and comprised of dense material. Further, there is no evidence of permanent, near-surface groundwater (which is needed to create liquefaction conditions) within proximity to the improvement areas.

(Sources: California Seismic Hazards Mapping Act, USGS and California Geological Survey Seismic Hazard Mapping Program)

D. Would the project be subject to landslides?

No Impact. The South Line corridor is predominantly flat and not located adjacent to cut/fill areas. There is no obvious threat of landslide along the project corridor.

(Sources: USGS and California Geological Survey Seismic Hazard Mapping Program)

E. Would the project result in substantial soil erosion or the loss of topsoil?
3.0 Environmental Analysis

Less than Significant Impact. The proposed project site is relatively flat and would remain so after project implementation. During project construction, erosion hazards would be reduced when standard dust and erosion control measures are implemented. Implementation of standard dust and erosion control measures referenced above in the Air Quality section, would reduce soil erosion hazards or the loss of topsoil. The potential for soil erosion or loss of topsoil would be less than significant with implementation of these measures.

(Sources: USGS and California Geological Survey Seismic Hazard Mapping Program)

F. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. The project is not located on a geologic unit or soil that is known to be unstable. It is unlikely that the project would result in a landslide, lateral spreading, subsidence, liquefaction or collapse.

(Sources: USGS and California Geological Survey Seismic Hazard Mapping Program)

G. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than Significant Impact. Due to the previously developed nature of the area, soils within the project corridor are primarily fill material. Based on documentation describing soil characteristics within the general project area, fill material is presumed to be underlain by sandstone and claystone. Sandstone portions of the Otay Formation are known to have low expansion and good shear strength properties; claystone portions of the Otay Formation are known to exhibit moderate to high expansion potential. The project would occur within the existing rail corridor. Excavation in proximity to the Palomar Siding would be minor and limited to the existing ROW. The new track bed would be constructed consistent with Uniform Building Code seismic criteria. Thus, the project is not expected to be affected by expansive soils.

(Sources: USGS and California Geological Survey Seismic Hazard Mapping Program)

H. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

No Impact. The project would not use septic tanks or an alternative wastewater disposal system.

(Source: Project Plans)

3.7 Hazards and Hazardous Materials

A hazardous material is defined as any substance that may be hazardous to humans, animals, or plants, and commonly include pesticides, herbicides, toxic metals and chemicals, and volatile chemicals. Small generators of hazardous materials include dry cleaners, automotive repair shops, medical facilities, and photo processing centers. Larger businesses, primarily in industrial locations, can generate large quantities of hazardous materials.
3.0 Environmental Analysis

The entire project corridor has been previously developed and currently has two sets of railroad tracks used for both local trolley and freight transportation. The proposed project does not involve any ROW acquisition and only minor ground disturbance is proposed. The discovery of any hazardous materials during project construction is not anticipated.

(Source: Site Survey)

A. Would the project create a significant hazard to the public, or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. The transport of hazardous materials is governed by Division 20, Chapter 6.5, Article 6 and 13 of the California Health and Safety Code and Title 22, Division 4.5, Chapter 13 of the California Code of Regulations and Federal Regulations Title 49 USC Chapter 51 Transportation of Hazardous Materials (as amended 1/2/2006). Trains currently using the rail corridor abide by these regulations as will trains using the corridor in the future. It is beyond the scope of this evaluation to speculate on what materials may be transported within the corridor; however, it is assumed that materials would be shipped consistent with applicable regulations which would minimize hazards to the public or environment.

(Source: Site Survey)

B. Would the project create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. The proposed project is designed to increase capacity on the existing rail line between San Ysidro and San Diego. As noted above, the transport of hazardous materials is governed by Division 20, Chapter 6.5, Article 6 and 13 of the California Health and Safety Code and Title 22, Division 4.5 and Chapter 13 of the California Code of Regulations Federal Regulations Title 49 USC Chapter 51 Transportation of Hazardous Materials (as amended 1/2/2006). The project would not create a known hazard to the public or environment or otherwise create conditions that would involve the accidental release of hazardous materials.

C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. Although several schools exist within a quarter mile of the existing rail line, the proposed project would not cause or facilitate the transport, handling or emission of hazardous materials. Trains using the corridor would only operate at night and abide by rules applicable to the transport of hazardous materials which are intended to minimize impacts to uses in proximity to the corridor. Thus, no impacts to schools related to the transport of hazardous materials are anticipated.

(Source: California Health and Safety Code and California Code of Regulations)

D. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
3.0 Environmental Analysis

No Impact. The rail corridor and existing ROW near the Palomar Siding is not included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5. Thus, proposed improvements are not expected to create a significant hazard to the public or the environment.

(Sources: Department of Toxic Substances Control Cortese Database and Site Survey)

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The nearest airport is Brown Field Municipal Airport, which is located approximately four miles east of the project corridor. The proposed project would not be exposed to airport hazards; would not affect aircraft operations; nor would it create an airport safety hazard for employees or people living or working in proximity to the corridor.

(Sources: Google Earth and Site Survey)

F. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. There are no private airstrips located adjacent to or near the project site. Thus, no adverse impacts are expected.

G. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The project would add capacity necessary to accommodate two additional freight trains within the current operating window. Thus, the project would not affect evacuation of the surrounding area. Emergency access to the proposed project site would be maintained during construction activities.

(Sources: Site Survey)

H. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than Significant Impact. According to the San Diego County Natural Hazards Disclosure Map (January, 2000), the project site is in the vicinity of a wildland area that may contain substantial forest fire risks and hazards. However, proposed improvements would be confined to the existing corridor and ROW. Risk of impact caused by wildland fires is minimal.

(Sources: San Diego County Natural Hazards Disclosure Map 2000 and Site Survey)

3.8 Hydrology and Water Quality

The project is primarily within the San Diego Bay Watershed – Lower Sweetwater River. This portion of the project area directly discharges to the San Diego Bay. The extreme southern portion of the project is within the Cottonwood-Tijuana Watershed. This portion of the project discharges indirectly into the Tijuana River,
which then discharges into the Tijuana Estuary and ultimately the Pacific Ocean.

Several rivers and waterbodies are located adjacent to or cross the project corridor including the Otay River, Sweetwater River, and Chollas Creek. The proposed project is a railroad corridor and as such is a pervious surface. The project does not propose any new impervious areas nor does it propose any excavation that could impact groundwater, surface water resources or existing stormwater management systems. Based on the scope of the proposed improvements, the overall area disturbed during construction would be less than one acre.

(Source: Site Survey)

A. Would the project violate any water quality standards or waste discharge requirements?

Less than Significant Impact. The project ultimately drains into San Diego Bay and the Pacific Ocean. Minimal construction activities will occur at the Palomar Siding, south of Main Street and Industrial Boulevard in Chula Vista. If not managed properly, grading and construction activities could cause soils and other pollutants to enter the storm drain system or surface water. During heavy rains, this could degrade stormwater quality at downstream locations. Because the existing project corridor is built out, stormwater runoff generation rates are not expected to increase. The project would not generate wastewater requiring off-site discharge and treatment.

The disturbance area would be less than one acre; thus, compliance with National Pollution Discharge Elimination System requirements would not be necessary. Standard Best Management Practices (BMPs) for stormwater/erosion control would be provided as part of project design and approved by the jurisdictions where improvements would be located. Water quality impacts are expected to remain less than significant.

B. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No Impact. The proposed project would not require any water or dewatering activities during construction or operation. No potable water would be required. No impact to groundwater is anticipated.

C. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

No Impact. The project does not propose any ground disturbance that would alter or affect the existing drainage pattern or stream course in the area. Stormwater currently percolates through the soil and base material of the existing rail line and will continue to do so after implementation of the proposed project. No erosion or siltation is anticipated to occur as a result of the proposed project. As noted, construction and post-construction BMPs would be developed during design.

D. Would the project substantially alter the existing drainage pattern of the site, or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
3.0 Environmental Analysis

No Impact. The project does not propose any ground disturbance that would alter or affect the existing drainage pattern or stream course in the area. Stormwater currently percolates through the soil and base material of the existing rail line and will continue to do so after implementation of the proposed project. No flooding is anticipated to occur as a result of the proposed project.

E. Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact. The project does not propose any new impervious surfaces; and thus, would not increase runoff volumes into the existing stormwater drainage system.

F. Would the project otherwise substantially degrade water quality?

No Impact. As noted above, the project does not propose any new impervious surfaces; and thus, would not add any runoff to the existing stormwater drainage system. As referenced above, BMP’s would be implemented to minimize construction related impacts to water quality.

G. Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. Based on the Flood Insurance Rate Maps from FEMA, areas where project improvements would occur are not within a 100-year floodplain. Regardless, the proposed project would not involve the construction of housing. No impact would occur under this threshold.

(Sources: FEMA website for Flood Insurance Rate Maps)

H. Would the project place within a 100-year flood hazard area structures, which would impede or redirect flood flows?

No Impact. As noted above, the project area is not within a 100-year floodplain. None of the proposed changes would impede or redirect major flood flows. No impact would occur under this threshold.

(Sources: FEMA website for Flood Insurance Rate Maps)

I. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, as a result of the failure of a levee or dam?

Less than Significant Impact. The project does not propose any new structures, nor would it expose people to risk involving the failure of a levee or dam. The closest levee or dam is located at the Sweetwater Reservoir which is 5 miles east of the project corridor. Although a risk is present for the failure of the dam at the Sweetwater Reservoir, the risk is no greater than what presently exists onsite and for residents and businesses along the project corridor. Therefore, risk of loss, injury, or death from either natural flooding, levee failure, or from dam inundation would be less than significant.

(Sources: Site Survey)
J. **Would the project expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?**

**No Impact.** The project site is located inland and would not be exposed to tsunami hazards from the Pacific Ocean. There are no large open water bodies in the area which may pose seiche hazards. As noted, Sweetwater Reservoir and Otay Lake are located over 5 and 9 miles, respectively, from the proposed project corridor. The site is also not located on or immediately adjacent to hillside areas that may present mudflow hazards. Implementation of the project would not expose users or the public to the risk of significant loss, injury, or death involving flooding, as a result of seiche, tsunami, or mudflow.

*(Sources: Site Survey)*

### 3.9 Land Use and Planning

The project site is located primarily within the City of Chula Vista, with portions passing through the City of San Diego as well as National City. The General Plans and related Community Plans of San Diego, National City and Chula Vista serve as the primary planning documents to regulate land use within the project area. These are summarized in Section 2 of this document.

*(Sources: National City General Plan, San Diego General Plan, Chula Vista General Plan)*

**A. Would the project physically divide an established community?**

**No Impact.** The proposed project consists of improvements to an existing rail line. No communities would be divided as a result of project implementation.

*(Sources: Site Survey)*

**B. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

**No Impact.** The proposed project is consistent with San Diego’s 2030 Regional Transportation Plan (RTP), adopted in 2007. The relevant elements of the RTP are summarized in Section 2 of this document. Although freight rail is a relatively minor portion of the 2030 RTP, one of the main components of the RTP is Systems Management, which helps to maximize system operations so that existing transportation resources can be used efficiently. The proposed project is intended to increase the efficiency of freight movement within the South Line corridor which would reduce congestion and improve mobility on the regional highway system. The project would be generally consistent with all goals and directly in support of the most important goals as defined above. Since the proposed project is occurring entirely within existing rail ROW, it is not in conflict with any other land use plans in the project area.

*(Sources: San Diego’s 2030 RTP, City of Chula Vista General Plan, City of National City General Plan, City of San Diego General Plan)*

**C. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?**
3.0 Environmental Analysis

No Impact. Although portions of the project area fall within the City of Chula Vista Multiple Species Conservation Plan and the City of San Diego Multiple Species Conservation Program, the project does not propose any ground disturbing activities within these areas. Thus, there will be no conflicts with the provisions of an adopted HCP.

(Sources: MSCP, City of Chula Vista Subarea Plan, MSCP, City of San Diego Subarea Plan, Site Survey, U.S. Fish and Wildlife Service – Endangered Species Program; and California Department of Fish and Game – Habitat Conservation Planning Branch)

3.10 Mineral Resources

According to the Department of Conservation, Division of Mines and Geology, there are no classified/designated significant mineral resource areas in the project vicinity. The Surface Mining and Reclamation Act (SMARA) Designation Report (1985) for the area does not identify significant mineral resources near the project site.

(Sources: City of San Diego General Plan, City of Chula Vista General Plan, and California Department of Conservation)

A. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The project site is not located within or adjacent to an area identified as having significant aggregate, oil, or mineral resources. There are no mining activities on or near the site. Thus, no impact to regionally valuable mineral resources would occur as a result of the proposed project.

(Sources: City of San Diego General Plan, City of Chula Vista General Plan, and California Department of Conservation)

B. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less than Significant Impact. The project site is not located within or adjacent to a locally important mineral resource recovery site. Anticipated consumption of sand, gravel, or other construction materials needed for the proposed project are not expected to represent a significant amount of mineral resources, when compared to available resources and the cumulative demand for these resources by construction activities in the region.

(Sources: City of San Diego General Plan, City of Chula Vista General Plan, and California Department of Conservation)

3.11 Noise

Noise Standards

Existing noise levels at the proposed project site are generated primarily from trolley and freight train movement within the rail corridor. While the project will be regulated by the Federal Rail Administration (FRA), the FRA specifies the use of FTA criteria to evaluate freight train noise impacts. Local ordinances and criteria are not used to assess impacts or otherwise regulate noise from construction or operation of freight rail infrastructure.
3.0 Environmental Analysis

The criteria presented in the *Transit Noise and Vibration Impact Assessment* (FTA 2006) guidance manual were used to assess existing ambient noise levels and future noise impacts related to operation of the Project. The criteria were developed using well-documented research on community reaction to noise and are based on changes in noise exposure using a sliding scale. The amount that rail projects can change the overall noise environment without exceeding the FTA impact criteria is reduced as existing noise levels increase. The noise impact methodology, findings and recommendations are defined in the Noise Analysis Report (October 2009) provided as Appendix C to this document. The information contained in the Noise Analysis Report is summarized below.

**Existing Noise Levels**

Representative noise measurements were taken at selected sensitive receptors along the corridor between August 12, 2009 and September 29, 2009. Noise measurement sites were selected to represent larger groupings of sensitive receptors, such as a city block of single-family homes. Because of the corridor length, receptors were chosen that are representative of respective areas. This is an accepted approach to noise analysis as modeling predicts noise levels for a larger area than just one home at each location. Thus, the results represent the noise exposure for a block or more of homes at each site.

A total of one long-term (24-hour) measurements and 24 short-term (one-hour) were taken. Long term systems were left overnight to record continuous hourly levels. Short-term measurements were taken during the daytime (7:00 a.m. to 7:00 p.m.), evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 to 7:00 a.m.) hours.

During the short-term measurements the meter was paused to omit freight train pass-bys. This was infrequent but was done because the observed trains consisted of less than 20 freight cars and were unlikely to be considered typical by the operator. Noise levels associated with a typical train operation were added to the monitored data to obtain existing noise levels. Existing noise levels are provided in Appendix C, Table 6. The Day-Night Average Sound Level (Ldn) values range from a high of 74.5 to a low of 53.3.

**Noise Impacts**

The FTA guidance manual provides three levels of criteria for assessment of noise impact from rail projects: No Impact, Moderate Impact and Severe Impact. Noise sensitive land-uses are grouped into three categories: Category 1, Category 2 and Category 3. The FTA noise impact thresholds are based on the increase of existing ambient noise levels associated with operations of the Project or in combination with other new planned projects (i.e., cumulative impact). The FTA guidelines specify a particular noise metric to be used depending on the specific land-use. Ldn is typically used for residential uses, whereas the energy-averaged A-weighted sound level during a measured time interval (Leq) is typically used for schools.

As referenced above, Moderate and Severe are used as criteria to assess rail-related noise impacts. These criteria are defined below:

**Moderate Impact:** Under this criterion, the change in cumulative noise level is noticeable to most people but may not be sufficient to cause strong, adverse reactions from the community. Other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation, such as the existing noise level, predicted level of increase over existing noise levels, and the types and numbers of noise-sensitive land uses affected. No mitigation is mandated or required under this criterion.
3.0 Environmental Analysis

Severe Impact: Under this criterion, a significant percentage of people would be highly annoyed by project-related noise. Conditions would generally represent an unacceptable living environment. Noise mitigation will normally be specified for severe impact areas unless there is no practical method of mitigating the noise.

As referenced in the Noise Analysis Report, the criteria use a sliding scale which is based on existing noise levels. For example, a project-related noise exposure increase of 10 dBA is allowed if the existing noise level is 42 dBA or less; a 1 dBA project-related noise increase is allowed when the existing noise level is 70 dBA. As the existing level of ambient noise increases, the allowable absolute level of project noise also increases. However, the total allowable increase in project-related noise exposure is reduced.

For residential land uses (FTA Category 2), the noise criteria are to be applied outside the building locations at noise-sensitive areas with frequent human use. These include outdoor patios, decks, pools, and play areas. If there are none, the criteria should be applied near building doors and windows. For parks or other sensitive (FTA Category 3) outdoor land uses, the criteria are to be applied at the property line. For locations where land use activities are solely indoors, noise impacts may be less significant if the outdoor-to-indoor reduction is greater than for typical buildings (approximately 25 dBA with windows closed). Therefore, if it can be demonstrated that there will only be indoor activities occurring at sensitive locations, mitigation may not be needed.

(Sources: Federal Transit Administration Transit Noise and Vibration Impact Assessment 2006 and Noise Analysis Report)

A. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. Because the proposed project would contribute additional freight trains to an existing train line, FTA guidelines are used to determine whether exposure levels are excessive. An analysis of project-related impacts was performed consistent with FTA guidelines. The impact criteria are summarized above. As noted, the complete Noise Analysis Report is provided in Appendix C of this document. The impact analysis documented existing conditions and evaluated project-related noise impacts at 25 locations representing receptors along the corridor. Of the 25 locations, 8 would experience No Impact from the Project; 17 would experience a Moderate Impact as defined by the FTA guidelines. No Severe Impacts would occur as a result of the Project. As discussed above, the FTA does not require mitigation for Moderate Impacts and the finding is not considered significant per CEQA standards. No mitigation is required.

In cases where commuter rail operations share tracks or rights-of-way with freight or intercity passenger trains that are part of the “general railroad system,” FRA safety rules apply. In particular, the rule for use of locomotive horns at highway-rail grade crossings is in effect. Train horns and crossing bells are major noise sources associated with train operations. Trains sound their horns before roadway crossings and when approaching a passenger station. The number of roadway crossings and passenger stations would not be changed as a result of the proposed project. The Ldn resulting from the train horns and crossing bells of the two additional nighttime operations is estimated to increase by less than 0.3 dBA at any given location. This would be a negligible increase in the Ldn and not considered significant.

(Sources: Federal Transit Administration Transit Noise and Vibration Impact Assessment 2006 and Noise Analysis Report, 2009)

B. Would the project result in the exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?
3.0 Environmental Analysis

**Less than Significant Impact.** The proposed project would lead to the generation of noise associated with short-term construction activities during site preparation and construction; however, this would not induce groundborne noise or vibration because the project does not require pile driving or any similar activities. Additionally, the location of future freight rail operations would remain unchanged from current conditions. Thus, a vibration analysis related to operation of the Project was not performed. No vibration impacts would occur as a result of the Project.


**C. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less than Significant Impact.** As referenced above, the proposed project would generate intermittent noise during freight train pass by events which would create Moderate Impacts at 17 of the 25 locations evaluated. No Impact would occur at the remaining 8 locations. No Severe Impacts as defined by the FTA would occur as a result of the proposed Project. As discussed above, the FTA does not require mitigation for Moderate Impacts and the finding is not considered significant per CEQA standards. No mitigation is required.


**D. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less than Significant Impact with Mitigation.** Temporary increases in ambient noise levels associated with construction would occur throughout the project corridor. Construction activity would occur on sidings during daytime hours and on the main line during nighttime hours. Track removal and installation typically requires the use of cranes, rail saws, compressors, pumps, generators, a ballast regulator (equalizer), and ballast tamper. Use of this equipment could generate an overall noise level of approximately 86 dBA at 50 feet. This noise level would generally equal 90 dBA at 30 feet, 85 dBA at 55 feet, 80 dBA at 95 feet, and 70 dBA at 175 feet. Noise levels would exceed FTA criteria within 175 feet during nighttime construction activities and within 95 feet during daytime construction activities.

Construction of the proposed crossover near 32nd Street would not exceed noise guidelines. Noise associated with crossover construction near L Street would be approximately 82 dBA at the residences to the east; noise associated with turnout replacement near L Street would be approximately 78 dBA at the residences to the northeast; and noise associated with turnout construction and track removal between north of Palomar Street to south of Anita Street would be approximately 78 dBA at the residences to the west. Construction noise associated with these three projects would exceed FTA noise guidelines.

Construction of the existing spur modification and new siding track south of Main Street would not exceed noise guidelines.

While temporary construction would exceed FTA guidelines, implementation of the following mitigation measures would attenuate the aforementioned construction noise impacts to a less than significant level:
Measure 3.11.D1: Perform higher noise generating activities during daytime hours.

Measure 3.11.D2: Use construction equipment with published noise levels below those identified in Table 10 and with the lowest possible acoustical height.

Measure 3.11.D3: Reduce nighttime construction hours. A 3 decibel noise reduction would occur for each 50% reduction in time worked between 10:00 pm and 7:00 am.

Use of temporary noise barriers consistent with the following recommendation would also be an effective method of reducing construction noise associated with the project:

Measure 3.11.D4: Construct a 16-foot high temporary noise barrier between the new crossover north of L Street and the residences to the east. Construct a 14-foot high temporary noise barrier between the turnout replacement south of L Street and the residences to the northeast. Construct a 14-foot high temporary noise barrier between the new turnout construction, track removal, and from north of Palomar Street to south of Anita Street and the residences to the west. Temporary barriers should be placed as close to the construction area as possible. The barrier(s) must wrap around the construction area to minimize acoustical flanking around the barrier ends.

A site-specific construction noise study should be performed using actual equipment and construction durations. The study should be submitted to SANDAG prior to the start of construction regardless of which measure or measures are selected to demonstrate how noise levels will be reduced to below a level of significance.

(Sources: Federal Transit Administration Transit Noise and Vibration Impact Assessment 2006 and Noise Analysis Report, 2009)

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located within an airport land use plan. The closest airport is Brown Field Municipal Airport which at its closest point, is located approximately 4 miles east of the corridor. Thus, the project would not expose people residing in the project area to excessive noise levels associated with airport activities.


F. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located within the vicinity of a private airstrip nor does it include improvements to a private airstrip. Thus, the project would not expose people residing in the project area to excessive noise levels associated with airport activities.

3.12 Population and Housing

A. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The project does not include the development of new housing, businesses or related infrastructure. Rather, the proposed project is intended to increase the South Line capacity. Much of the land in proximity to the corridor is already developed with industrial, commercial, or residential uses or included in a land use plan. The proposed project is not anticipated to induce development in excess of what is currently planned or approved.

(Source: Site Survey)

B. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project consists of rail infrastructure improvements within the existing ROW. The project would not require the acquisition of new ROW. No housing would be displaced.

(Source: Site Survey)

C. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not result in the displacement of people. Project improvements would be confined to the existing corridor. No households are currently present on the site.

(Source: Site Survey)

3.13 Public Services

Public services include those services necessary to ensure public health and safety. Services are defined as fire and police protection, schools, libraries, and parks. The proposed project improvements are not expected to change demand for public services.

A. Fire Services. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of fire protection?

No Impact. The proposed project would increase the capacity of an existing rail line from two freight trains per night to four freight trains per night. This is not anticipated to impede access or increase the demand for fire or emergency medical services within the project area.

B. Police Services. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically
altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of police protection?

No Impact. The proposed project would increase the capacity of an existing rail line from two freight trains per night to four freight trains per night. This is not anticipated to increase the demand for police services or otherwise affect police access within the project area.

C. School Services. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of school services?

No Impact. The proposed project would increase the capacity of an existing rail line from two freight trains per night to four freight trains per night. This would not increase demand for schools within the project area.

D. Park Facilities. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of parks?

No Impact. The proposed project would not generate a direct demand for park facilities nor create a significant increase in population growth whereby park services would be impacted. No new park or recreational facilities would be built or altered as a result of the project; therefore, no impact to park facilities, park service ratios or other performance objectives related to parks and recreation would occur.

E. Public Facilities. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of other public facilities?

No Impact. As noted, the proposed project would not induce significant population growth whereby an increase in demand for library services and other public facilities could occur. No new public facilities would be built or altered as a result of the project; therefore, no impact on public facilities, response times or other performance objectives related to public facilities would occur.

3.14 Recreation

There are numerous parks and recreation facilities located throughout San Diego, National City, and Chula Vista; however none of these parks or recreation facilities will be impacted by the proposed project because all work will take place along the existing rail line within existing ROW.

A. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
3.0 Environmental Analysis

No Impact. All improvements would occur within an existing rail corridor and would increase freight train capacity. It is not anticipated that use of existing neighborhood and regional parks or other recreational facilities would be affected because of the project.

B. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The project proposes to increase the freight capacity of an existing rail line. No recreational facilities are proposed for development or expansion as part of the project; therefore, there are no adverse physical effects on the environment anticipated by proposed or expanded recreational facilities.

3.15 Transportation/Traffic

A. Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Less than Significant Impact. The proposed project would not generate traffic since it is strictly a rail project designed to increase freight capacity. By installing advanced detection equipment at existing at grade crossings, trains will be able to operate more efficiently with fewer delays to existing street traffic.

B. Would the project exceed, either individually or cumulatively, a LOS standard established by the county congestion management agency for designated roads or highways?

No Impact. The project would not affect the LOS at any intersection as it is strictly a rail capacity improvement project. Short-term crossing delays may increase; however, train traffic would only occur during the early morning hours when traffic volumes are the lightest. This is not expected to impact current LOS within the study area.

C. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The area’s closest airport, Brown Field Municipal Airport, is located approximately four miles east of the site. The project would not affect air traffic patterns as it is strictly a rail project.

D. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The project is designed to add freight capacity to an existing rail line. All improvements would be designed and constructed to current standards. The project would not include design components that would increase hazards or facilitate operation of incompatible uses within the corridor.

E. Would the project result in inadequate emergency access?

No Impact. As noted, the project would not affect emergency access. All improvements are intended to increase the capacity of the existing rail line. Coordination of emergency access across the tracks during train pass by events would continue per current conditions.
3.0 Environmental Analysis

F. Would the project result in inadequate parking capacity?

No Impact. No parking would be provided or eliminated as a result of project implementation. Thus, the project would not affect parking capacity.

G. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. The proposed project would increase the freight capacity of the existing South Line and enable trolley cars and freight trains to operate more efficiently on the same track system. Thus the project would indirectly support alternative transportation.

3.16 Utilities and Service Systems

Utilities and service systems include the provision of gas, water, sewage disposal, storm water disposal, electricity, and waste management services.

A. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The proposed project is intended to improve freight rail capacity on the South Line. Wastewater would not be generated by the project; thus, it would not exceed treatment requirements of the San Diego Regional Water Quality Control Board.

B. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The Project is a transportation project and as such will not require wastewater treatment.

C. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The project would have minor ground disturbing activities for the Palomar Siding improvements located south of Main Street and Industrial Boulevard in Chula Vista. However, these improvements would not require any new storm water drainage facilities that could cause significant environmental affects.

D. Would the project have sufficient water supplies available from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. The proposed project would not require any more water than is currently used in the area.

E. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

No Impact. As noted, the proposed project would not require wastewater treatment. No will serve
commitments are required.

F. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

**Less than Significant Impact.** The proposed project will not generate any waste aside from construction debris. Construction debris will be either recycled or disposed of in a manner that complies with federal, state, and local statutes and regulations related to solid waste.

*(Sources: California Integrated Waste Management Board website)*

G. Would the project comply with federal, state, and local statutes and regulations related to solid waste?

**No Impact.** As noted, after construction the proposed project would not produce solid waste. Applicable recycling and/or disposal requirements would be complied with during construction.
4.1 References


California Farmland Mapping and Monitoring Program.


City of San Diego General Plan. 2008.


