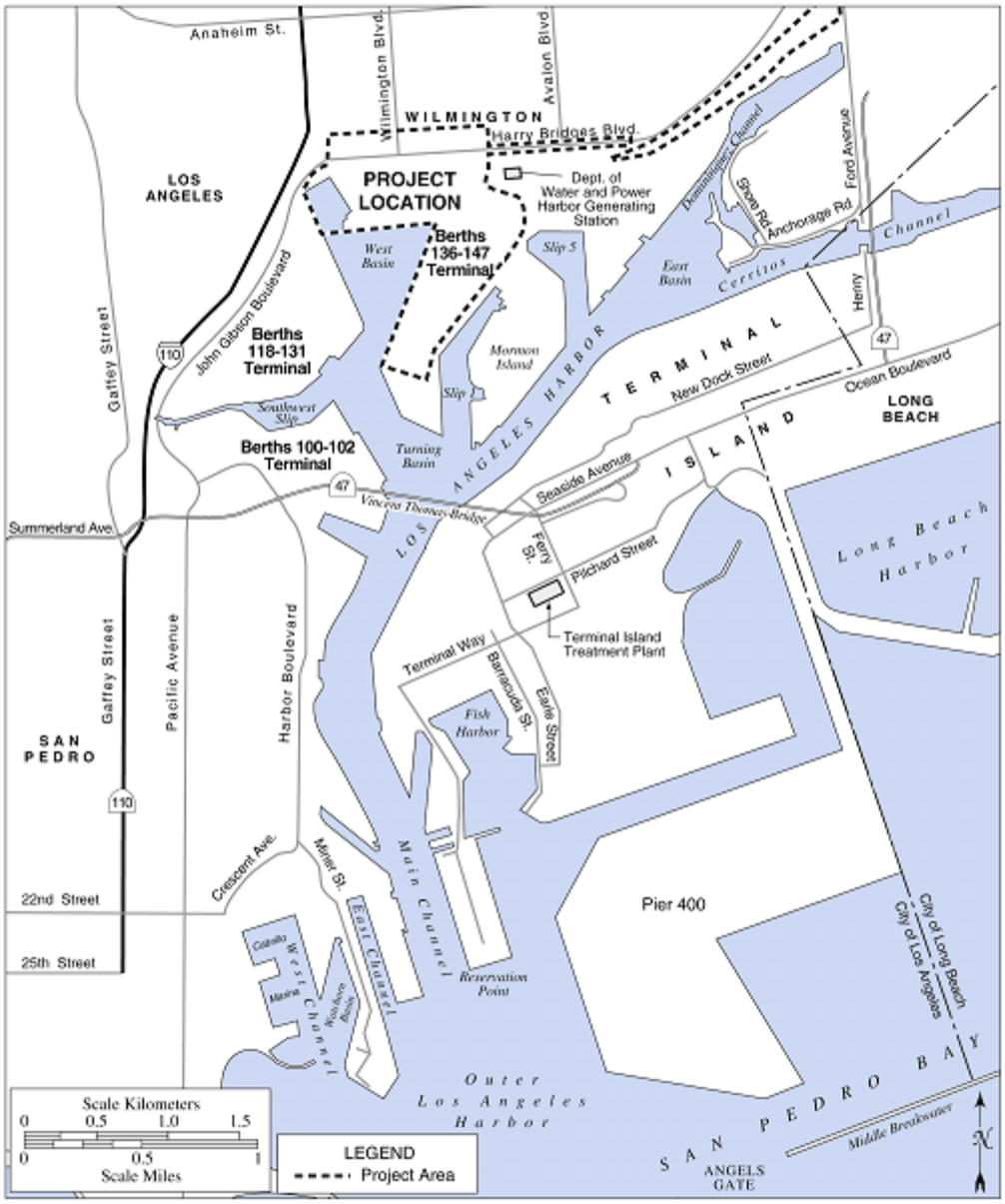
EIR Addendum
Berth 136-147 [TraPac] Container Terminal Project

[SCH No. 2003104005, ADP No. 030127-020]



Prepared by Los Angeles Harbor Department
Environmental Management Division
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I. Purpose

On December 6, 2007, the Board certified the Berths 136-147 [TraPac] Environmental Impact Report (EIR), State Clearinghouse #2003104005, and adopted a Mitigation Monitoring and Reporting Plan (MMRP), Findings of Fact and a Statement of Overriding Considerations. The LAHD has prepared an addendum to the TraPac EIR to assess the potential impacts associated with proposed project changes since the Final EIR was certified. According to Section 15164(a) of the State CEQA Guidelines, the lead agency will prepare an addendum to a previously certified EIR if changes or additions are necessary, but none of the conditions described in Section 15162 calling for the preparation of a subsequent or supplemental EIR have occurred. An addendum need not be circulated for public review but can be included in or attached to the EIR. The decision-making body considers the addendum with the EIR prior to making a subsequent decision on the project.

Section 15162 of the State CEQA Guidelines states that, for a project covered by a certified EIR, preparation of a subsequent or supplemental EIR rather than an addendum is required only if one or more of the following conditions occur:

1) Substantial changes are proposed in the project that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

2) Substantial changes occur with respect to the circumstances under which the project is undertaken that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    d) Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

II. Scope and Content

This addendum has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq.), and the State CEQA Guidelines (California Administrative Code [CAC] 1500 et seq.). This addendum describes the affected environmental resources and evaluates the potential changes in the impacts that were previously

described in the 2007 Final EIR with respect to building and operating the TraPac project. The criteria for determining the significance of environmental impacts in this addendum analysis are the same as those contained within the certified EIR. The threshold of significance for a given environmental effect is the level at which the LAHD finds a potential effect of the proposed project to be significant. Thresholds of significance can be defined as a "quantitative or qualitative standard, or set of criteria, pursuant to which significance of a given environmental effect may be determined" (CEQA Guidelines, Section 15064.7 [a]). Except as noted in particular sections of the document, the LAHD has adopted the City of Los Angeles CEQA Thresholds for purposes of this addendum, although some criteria were adapted to the specific circumstances of this project.

The analysis in this addendum focuses on the changes to the impacts that would potentially occur as a result of project modifications. The scope of analysis contained within this addendum addresses the environmental resource areas that were previously analyzed in the certified EIR. The following issues were therefore evaluated in preparation of this addendum:

- Aesthetics
- Air Quality and Meteorology
- Biological Resources
- Cultural Resources
- Geology
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Noise
- Transportation/ Circulation
- Marine Transportation
- Utilities and Public Services
- Water Quality, Sediments, and Oceanography

III. Previous Environmental Documents Incorporated by Reference

Consistent with Section 15150 of the California State CEQA Guidelines, the following documents were used in preparation of this addendum and are incorporated herein by reference:

- Berths 136-147 [TraPac] Container Terminal Draft EIS/EIR, December 2007, (SCH No. 2003104005)
- Berths 136-147 [TraPac] Container Terminal Final EIS/EIR, December 2007, (SCH No. 2003104005)
- Berths 136-147 [TraPac] Container Terminal Mitigation Monitoring Report and Program, December 2007

IV. Proposed Project Modifications

1. Substituting Rubber Tire Gantry Cranes with Rail Mounted Gantry Cranes

EIR Assumption

The EIR assumed that wharfside gantry cranes would be electric powered and rubber tired gantry (RTG) cranes would be diesel powered, and both would be used for purposes of handling containers at the redeveloped TraPac terminal. As described in the EIR, containers would be hauled by yard tractors between the vessel berths and the new rail yard. At the rail yard, containers would be lifted onto and off of railcars by diesel-fueled RTGs. Yard tractors would be used to move containers in and out of the stacks, which would be grounded. The number of RTGs to be utilized during operations was not specified in the EIR. However, the total throughput capacity analyzed in the EIR was 2,389,000 TEUs (1,277,540 containers) per year. That maximum capacity is expected to be reached by 2025 as described in Chapter 2 (Project Description) of the EIR.

Improvements associated with loading areas for the RTGs, such as reinforced concrete runways, were included in the Phase I construction activities analyzed for the on-dock rail yard and backland improvements. These improvements are not within the limits of federal jurisdiction and are not subject to federal permitting requirements by the US Army Corps of Engineers. The concrete runways would be built parallel to the wharf at Berth 142-147. Final engineering design estimates included four rows of concrete runways, approximately 14,800 linear feet per pair.

The EIR analyzed the significance of the project's air emissions, including greenhouse gas emissions, for construction and operational activities associated with the RTGs in Section 3.2 (Air Quality and Meteorology). The EIR determined that air quality impacts from both construction and operation of the project would be significant. To mitigate significant environmental impacts related to air quality, the EIR identified numerous mitigation measures (MMs AQ-1 through AQ-5 and AQ-18A for construction emissions; MMs AQ-6 through AQ-18B for operational emissions). However, even with implementation of these mitigation measures, air quality impacts from construction would be significant. Similarly, even with implementation of mitigation measures AQ-6 through AQ-18B, air quality impacts from operations would be significant. No other feasible mitigation measures were identified to further reduce these significant impacts. As such, the EIR concluded that air quality impacts from construction and operations were significant and unavoidable.

The EIR determined that the project would produce significant greenhouse gas emissions and identified mitigation measures AQ-6, AQ-9-10, AQ-14, AQ-16, and AQ-19 through AQ-24 to reduce these emissions. However, implementation of these mitigation measures would not reduce greenhouse gas emissions below the significance threshold. No other feasible mitigation measures were identified to further reduce these significant impacts. As such, the EIR concluded that greenhouse gas impacts were significant and unavoidable.

The EIR also analyzed the impacts of construction and operations of the RTGs in the backlands area on other environmental resource areas and identified applicable mitigation measures including: MM CR-1 for potential archaeological resources encountered during construction, MM GEO-1 for emergency response planning during construction, MM GW-1-2 for soil and groundwater contamination encountered during construction, MM NOI-1 for noise control measures during

construction, MM PS-1 through PS-3 for recycled materials during construction and solid waste management, and MM WQ-2-3 for pollution control and prevention during operations.

Proposed Modifications

TraPac requested that the Harbor Department modify the scope of the project to allow for rail mounted gantry (RMG) cranes rather than the originally planned RTG cranes. RMGs will be electric powered and automated, resulting in zero emissions when in operation. In addition, in place of diesel-fueled yard tractors and their associated emissions related to moving containers in and out of the stacks from the wharf side gantry cranes to the stacks and/or the intermodal container transfer facility (ICFT) rail yard, diesel electric shuttles will be used to move containers in and out of the stacks from the wharf side gantry cranes to the stacks and/or ICTF.

RMG operations require improvements and equipment that are different from those required under an RTG operation. The proposed change would require removal of the RTG-related improvements that have already been constructed to date and installation of the RMG-related improvements. According to engineering estimates, approximately 1,844 linear feet of concrete runways have been built, which is roughly 10 percent of the total RTG-related improvements originally proposed. This construction is relatively minor in comparison to overall project construction and other ongoing activities and would be replaced with approximately 20,500 linear feet of RMG runway, including rail runways and necessary electrical infrastructure to provide power to the cranes, communications, and control conduits to the Administration Building and Yard Operations building. In addition, approximately 702 new reefer plugs would be added in the RMG stacking area beyond the 458 reefer plugs that currently exist in the backlands area. The location for the RMG runways would be the same as the originally planned RTG runways parallel and perpendicular to the wharf.

Comparison of Impacts

The analysis contained herein demonstrates and provides substantial evidence that no additional significant impacts are present, nor would the severity of known significant impacts be increased by the proposed project. Below is a discussion of the resource areas that could potentially be impacted by this change in scope and a discussion of why the impact determinations made in the EIR would not be affected.

Air Quality and Meteorology

The proposed change to substitute electric-powered RMGs in place of diesel-fueled RTGs results in a beneficial change through the use of an environmentally preferred zero emission technology. Although there would be a minor increase in temporary construction activities from the removal of approximately 1,844 linear feet of concrete runways, the same mitigation measures identified in the EIR would still be required and implemented and no new significant impacts would occur as a result of this change, nor would there be any substantial increase in the severity of impacts identified in the EIR. Over the long term, terminal operations would result in a substantial reduction in emissions from the use of electric-powered RMGs in place of diesel-powered RTGs. This reduction is a beneficial change that would not cause any new significant air quality impacts or any substantial increase in the severity of impacts identified in the EIR. The mitigation requirements for operations would not change and would still be required and implemented as part of the project.

The use of RMGs in place of RTGs would increase electricity consumption compared to what was assumed in the EIR. Comparative air quality analysis was conducted to determine the change in greenhouse gas emissions with the change from RTGs to RMGs (see Appendix A). The analysis shows decreases of 68%, 93%, 82% and 68% for CO_2, CH_4, N_2O and CO_2e, respectively. This reduction is a beneficial change that would not cause any new significant greenhouse gas impacts or any substantial increase in the severity of impacts identified in the EIR.

Other Resource Areas

The RMGs would be built in the same location, would be of similar appearance and scale, and would provide essentially the same function as the originally planned RTGs. Construction of the RTG equipment would adhere to all construction-related mitigation measures outlined in the EIR to reduce impacts to various resource areas including cultural resources, groundwater and soils, noise, transportation and circulation and would also adhere to all applicable laws and Harbor Department policies for protection of resource areas. As such, switching from RTGs to RMGs would not differentially impact biological resources, cultural resources, geology, groundwater and soils, hazards and hazardous materials, land use, noise, transportation and circulation, marine transportation, utilities and public services, or water quality, sediments, and oceanography compared to what was analyzed in the EIR. Therefore, the proposed change would not result in any new significant impacts or any substantial increase in the severity of impacts identified in the EIR. Additionally, there would be no change to the mitigation measures identified in the EIR for other resource areas analyzed.

2. Update to Project Description – Rail Improvements

EIR Assumption

Figure 1-5 of the certified Final EIR shows three tracks crossing Avalon Boulevard but does not depict the rail crossings at Fries Avenue and Water Street, which are also within the project boundaries. Although the project accounted for and analyzed the relocation of the Pier A Rail Yard, the EIR did not explicitly describe the number and configuration of existing and new rail tracks that would be required to serve the TraPac container terminal and the relocated Pier A Rail Yard.

Proposed Modifications

The following modifications shown as underlined text are being added to Section 1.4.2.4 on page 1-19 of the Final EIR to describe the finalized rail configuration connecting the TraPac terminal to the relocated Pier A Rail yard:

> **Relocated Pier A Rail Yard.** The Pacific Harbor Line's (PHL) Pier A rail yard would be relocated to a 70-acre area northeast of the existing terminal, between the Consolidated Slip and Alameda Street (Figure 1-5), that is currently being used as a rail transfer facility. PHL would continue its operations out of the relocated rail yard. The new rail yard (Figure 1-5) would include 46 tracks totaling 125,630 feet of track, a locomotive service facility; a small yard office (8,000 square feet) with change areas, toilets, and showers; a track and material storage area; and 30 parking spaces for employees. The locomotive service facility would include a 5,000-square-foot diesel service shed and inspection pits, a sanding building with storage and compressed air, and a 1,000-square-

foot maintenance shed. The relocation of the rail yard would also include the construction of new rail tracks to connect the relocated yard to the TraPac terminal and the removal of some existing tracks (Attachment B). The rail track configuration between TraPac and the Pier A Rail Yard includes four tracks crossing Avalon Boulevard (one existing and three new). It also includes four tracks across Fries Avenue (one existing and three new) and three across Water Street (all new).

Comparison of Impacts

The assumptions used to calculate the rail yard capacity, which is an input variable to the transportation and air quality analyses in the EIR, is unchanged with the finalized track configuration shown in Attachment A. Specifically, the analysis accounted for a peak monthly throughput of 198,287 TEUs, thereby establishing the need for an additional rail track at the Avalon Boulevard crossing. This modification merely clarifies the project description and accurately accounts for the rail improvements at the rail crossing locations. Any construction-related traffic impacts resulting from construction of the rail tracks would be reduced through the development and implementation of a traffic management plan as required under mitigation measure TRANS-1 in the EIR. All other construction-related impacts to air quality, noise and other resource areas would be reduced by adherence to applicable construction mitigation measures for each resource area as identified in the EIR. Therefore, the finalized configuration would not result in any new significant impacts or any substantial increase in the severity of impacts identified in the EIR.

3. Other Minor Technical Changes to the Project Scope

EIR Assumption

The EIR assumed certain improvements associated with the wharf, gate complex, terminal buildings and structures, and utilities.

Proposed Modifications

During final design, minor, technical project changes have been identified for the following:

a. Wharf Specifications: A concrete pile-supported wharf has been reduced from 1,014 to 874 linear feet.
b. Main Gate: Minor changes have been made to lane configurations, truck scales, guard booths, and concrete pedestals for communications and cameras.
c. Crane Maintenance Building at B142: The building size has been reduced from 7,000 to 5,000 square feet.
d. Yard Operations Building: The building size has increased from 3,000 to 5,700 square feet.

Comparison of Impacts

The minor technical changes to building size are not substantial and would not result in any new significant environmental impacts or any substantial increase in the severity of impacts previously identified in the EIR.

Attachment A
Comparative GHG Emission Analysis

Annual RTG Usage from TraPac EIR

Analysis Year	Terminal Container Throughput (TEU/yr) [a]	RTG Work Performed (hp-hr/yr) [b]	Diesel Brake-Specific Fuel Consumption Factor (lb/hp-hr) [c]	Diesel Fuel Density (barrels/ metric ton) [d]	Diesel Fuel Consumption (gal/yr)
2003 (Baseline)	892,014	1,904,186	0.41	7.46	110,957
2007	1,091,207	2,329,404	0.41	7.46	135,734
2015	1,747,626	3,730,664	0.41	7.46	217,386
2025	2,389,088	6,267,433	0.41	7.46	365,203
2038	2,389,088	6,267,433	0.41	7.46	365,203

Notes:

a. Container throughputs for the analysis years were obtained from the TraPac EIR.

b. Consistent with the TraPac EIR, RTG work performed was scaled from 2001 actual RTG usage provided by Starcrest (11/19/2004). Equipment rated horsepower and annual hours of operation were converted to work performed (hp-hr/yr) using an average load factor of 0.43 (from TraPac EIR). Consistent with the TraPac EIR, RTG work performed in 2025 and 2038 was scaled up by an additional 23% to simulate the effects of additional equipment usage needed to handle future cargo levels within a constrained terminal space (>8,000 TEUs/acre).

c. An average brake-specific fuel consumption (BSFC) factor of 0.41 for RTGs was obtained from the CARB OFFROAD 2007 data file "Equip.csv". The BSFC factor and diesel fuel density were used to convert RTG work performed (hp-hr/yr) into diesel fuel consumption (gal/yr).

d. Diesel fuel density was obtained from the California Climate Action Registry (CCAR) *General Reporting Protocol* v. 3.1 Appendix B.

Annual RTG GHG Operational Emissions

Analysis Year	Diesel Fuel Consumption (gal/yr)	GHG Emission Factors (kg/gal) [a,b]			GHG Emissions (metric ton/yr) [c]			
		CO_2	CH_4	N_2O	CO_2	CH_4	N_2O	CO_2e
2003 (Baseline)	110,957	10.21	0.00058	0.00026	1,133	0.06	0.03	1,143
2007	135,734	10.21	0.00058	0.00026	1,386	0.08	0.04	1,398
2015	217,386	10.21	0.00058	0.00026	2,220	0.13	0.06	2,240
2025	365,203	10.21	0.00058	0.00026	3,729	0.21	0.09	3,763
2038	365,203	10.21	0.00058	0.00026	3,729	0.21	0.09	3,763

Notes:

a. CO2 emission factors are from the *2011 Climate Registry Default Emission Factors* , Table 13.1.

b. N2O and CH4 emission factors are from the *2011 Climate Registry Default Emission Factors* , Table 13.6 for diesel equipment (Other Large Utility Non-Highway Vehicles).

c. CO2e is "CO2-equivalent", which equals CO2 + (CH4 x 21) + (N2O x 310).

Annual Equivalent RMG Usage Due to RTG Replacement

Analysis Year	Terminal Container Throughput (TEU/yr) [a]	RMG Electric Motor Efficiency [b]	Electricity Consumption without Regeneration (kWh/yr) [c]	Electricity Regeneration Factor [d]	Net Electricity Consumption Including Regeneration (kWh/yr)
2007	1,091,207	90%	1,930,041	70%	579,012
2015	1,747,626	90%	3,091,062	70%	927,319
2025	2,389,088	90%	5,192,916	70%	1,557,875
2038	2,389,088	90%	5,192,916	70%	1,557,875

Notes:

a. Container throughputs were obtained from the TraPac EIR.

b. RMG electric motor efficiency is estimated from Attachment C of *Determining Electric Motor Load and Efficiency* (U.S. Department of Energy, Motor Challenge Fact Sheet, DOE/GO-10097-517, undated). A 90% efficiency is the lowest published efficiency from all load and RPM combinations for a 300-hp electric motor (the largest motor listed).

c. RMG work performed is assumed to be equivalent to RTG work performed on a per-TEU basis. Therefore, RMG electricity consumption without regeneration is assumed to be equivalent to the RTG work performed divided by the RMG electric motor efficiency (and converted to kWh/yr).

d. The 70% electricity regeneration factor is the low end of the range (70-75%) provided by the manufacturer for hoisting down (10/26/2011).

RMG GHG Operational Emissions Due to RTG Replacement

Analysis Year	Net Electricity Consumption Including Regeneration (kWh/yr)	GHG Emission Factors (lb/MWh) [a]			GHG Emissions (metric ton/yr) [b]			
		CO_2	CH_4	N_2O	CO_2	CH_4	N_2O	CO_2e
2007	579,012	1,711.72	0.02219	0.02382	450	0.01	0.01	452
2015	927,319	1,711.72	0.02219	0.02382	720	0.01	0.01	723
2025	1,557,875	1,711.72	0.02219	0.02382	1,210	0.02	0.02	1,215
2038	1,557,875	1,711.72	0.02219	0.02382	1,210	0.02	0.02	1,215

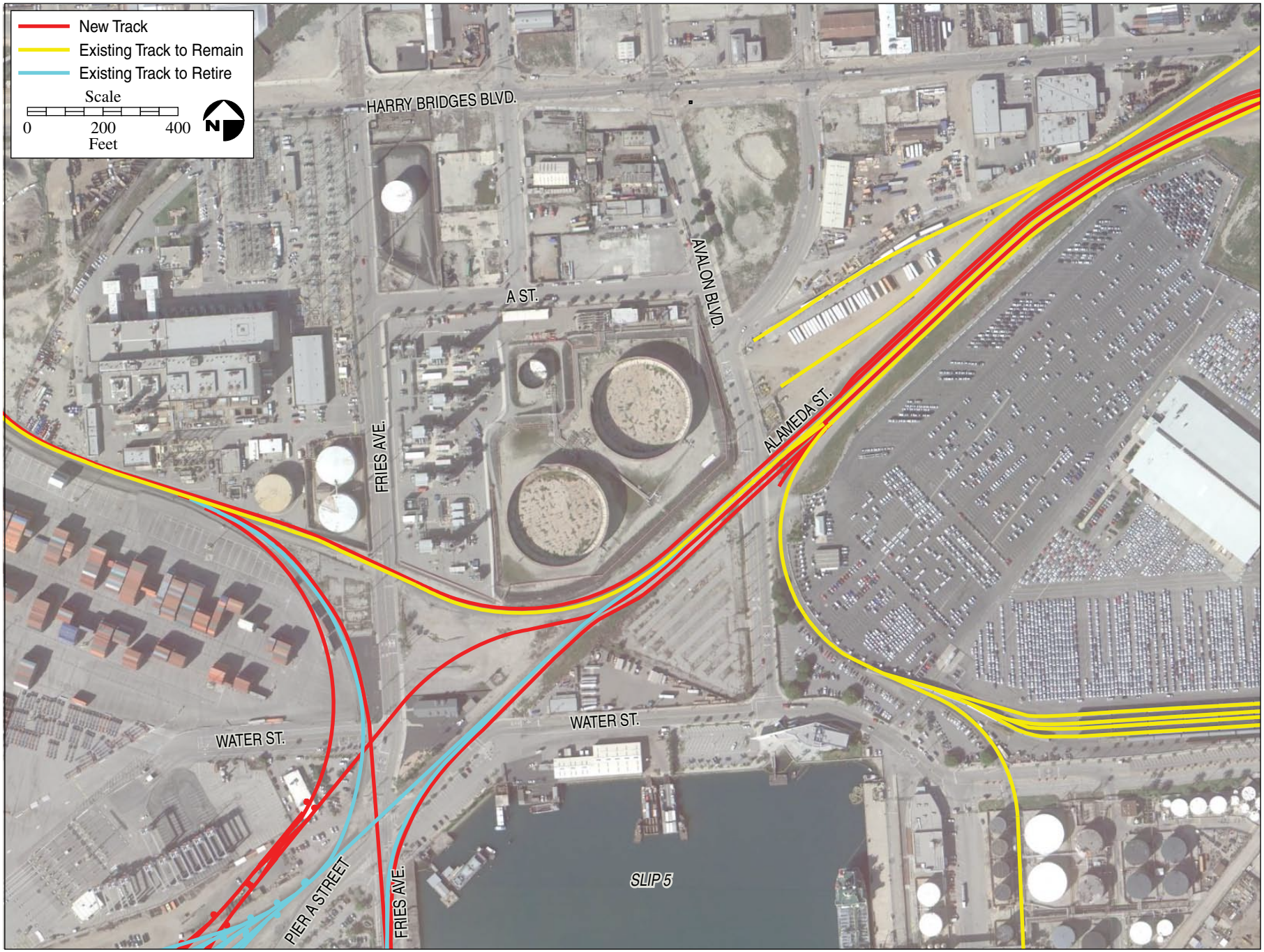
Notes:

a. GHG emission factors are LADWP-specific, and were obtained from eGRIDweb (http://cfpub.epa.gov/egridweb, EPA, December 29, 2010, "Electric Generating Company, Location (Operator)-based"). Emission factors are for the 2005 year, the most recent year available.

b. CO2e is "CO2-equivalent", which equals CO2 + (CH4 x 21) + (N2O x 310).

Change in Annual Operational GHG Emissions Due to RTG Replacement with RMGs

Analysis Year	Change in GHG Emissions (metric ton/yr)				Percent Change in RMG Emissions Relative to RTG Emissions			
	CO_2	CH_4	N_2O	CO_2e	CO_2	CH_4	N_2O	CO_2e
2007	-936	-0.07	-0.03	-947	-68%	-93%	-82%	-68%
2015	-1,500	-0.12	-0.05	-1,516	-68%	-93%	-82%	-68%
2025	-2,519	-0.20	-0.08	-2,547	-68%	-93%	-82%	-68%
2038	-2,519	-0.20	-0.08	-2,547	-68%	-93%	-82%	-68%



Attachment B