INITIAL STUDY AND PROPOSED NEGATIVE DECLARATION FOR COMPRESSED NATURAL GAS FUELING FACILITY IRVINE SAND CANYON BUS BASE

PREPARED FOR:

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SECTION 1 – INTRODUCTION

1.1 INTRODUCTION

The purpose of this Project is for the Orange County Transportation Authority (Authority) to construct and operate a compressed natural gas (CNG) Facility (Facility) at the existing Irvine Sand Canyon Bus Base (Base). This Facility is necessary to fuel a new generation of CNG powered buses that will eventually replace the Authority's existing diesel buses. This Initial Study (IS) has been prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines to evaluate the potential environmental effects associated with the Facility construction and operation.

1.2 SUMMARY OF FINDINGS

The analysis of the proposed project through the use of the environmental checklist process has determined the following environmental issue areas to have no impacts or less than significant impacts:

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

1.3 PROJECT REVIEW PROCESS

The IS, Notice of Availability and the Notice of Intent to Adopt a Negative Declaration (ND) have been distributed to the affected agencies and individuals. The Notice of Intent has been filed with the County Clerk of Orange County and has been published in the Orange County Register. The IS and ND are also available through the Authority's web site (www.octa.net/CNGfacilities)

The environmental documentation is also available for review at the following location:

Orange County Transportation Authority OCTA Planning and Analysis Department 600 South Main Street, Second Floor Orange, CA 92868

1.4 ORGANIZATION OF THE INITIAL STUDY

The IS is organized into the following sections:

- **Section 1 Introduction.** This section provides an introduction and overview describing the conclusions of the IS.
- Section 2 Project Description. This section describes the proposed project objectives, location and setting, description of the proposed construction and operation of the facility and project design features incorporated into project design.
- Section 3 Environmental Evaluation. This section provides the CEQA checklist and responses to the checked items.
- **Section 4 Determination.** A statement on the determination that a ND is the appropriate document is included in this section.
- **Section 5 Preparers.** This section identifies those individuals responsible for preparing and contributing to the IS and proposed ND.
- **Section 6 References.** This section identifies those references used in preparation of the IS.

SECTION 2 – PROJECT DESCRIPTION

2.1 PROJECT OBJECTIVE

The Orange County Transportation Authority (Authority) proposes to construct and operate a Compressed Natural Gas (CNG) Fueling Facility (Facility) at its Irvine Sand Canyon Bus Base. This new facility is required to provide fuel to existing and new buses powered by CNG. These new buses are replacing existing diesel-powered buses, reducing air pollutants associated with the diesel engines. The Base will ultimately fuel up to 200 buses.

2.2 PROJECT LOCATION AND SURROUNDING ENVIRONMENT

Construction activities will take place entirely within the boundaries of the 13.2 acre Irvine Bus Base (Base) located at 14736 Sand Canyon Avenue in the City of Irvine. The proposed project site is located east of the Santa Ana Freeway (Interstate 5) and Marine Way. Access to the site is via a driveway from Sand Canyon Avenue. Figure 1 provides a location map for the proposed project and Figure 2 provides an aerial photo of the facility.

The proposed project site is operated by a contractor to the Authority and houses approximately 350 primarily small (20 to 30 foot long) buses. These buses are parked, fueled, and maintained at this facility. The facility is operated 24 hours per day/seven days per week. The facility currently has fueling facilities for diesel fuel, propane, and gasoline.

The Base is located on an industrial site. The Irvine Unified School District's Bus facility is located to the east of the site. The Authority's operation center is located to the east of the site. A building used by the California Department of Transportation and the Irvine Community Church is located to the south of the site. Land to the west of the site is vacant, but is proposed for future industrial and commercial development.

2.3 PROJECT DESCRIPTION

2.3.1 On-site Facilities

Implementation of the proposed project requires the installation of new equipment on an approximately 4,500 square foot portion of the 13.2 acre Base. Figure 3 provides a conceptual site plan depicting the location of the new equipment. The proposed equipment area for the CNG facility would be placed in the southeastern portion of the bus base replacing bus-parking stalls. An equipment compound to house the CNG compression equipment would be constructed in the bus parking area and would provide from 2 to 4 compressors (depending on the size of each compressor), a gas dryer, small buffer storage tanks, emergency back up generator(s), electrical equipment and parts storage building.

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08/09/07

APPROVED BY:

SITE VICINITY MAP

OCTA BUS MAINTENANCE FACILITY
14736 SAND CANYON AVENUE
IRVINE, CALIFORNIA

PROJECT NO. 86216 FILE NAME: 86216p1.dwg

DRAWN BY: D. FAHRNEY

REVISED BY: D. FAHRNEY

CHECKED BY: JW

FIGURE

1

ATTACHED IMAGES: Images: 86216p1,jpg ATTACHED XREFS: DB-L:\2007\CADD CAD FILE:

DRAWN:

CAD FILE: L:\2007\CADD\86216\ LAYOUT: Layout1



DRAWN BY:	D. FAHRNEY	
REVISED BY:	D. FAHRNEY	
CHECKED BY:	JW	
DATE:	APPROVED BY:	
08/09/07		
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AERIAL PHOTO

OCTA BUS MAINTENANCE FACILITY 14736 SAND CANYON AVENUE IRVINE, CALIFORNIA PROJECT NO. 86216 FILE NAME: 86216p2.dwg

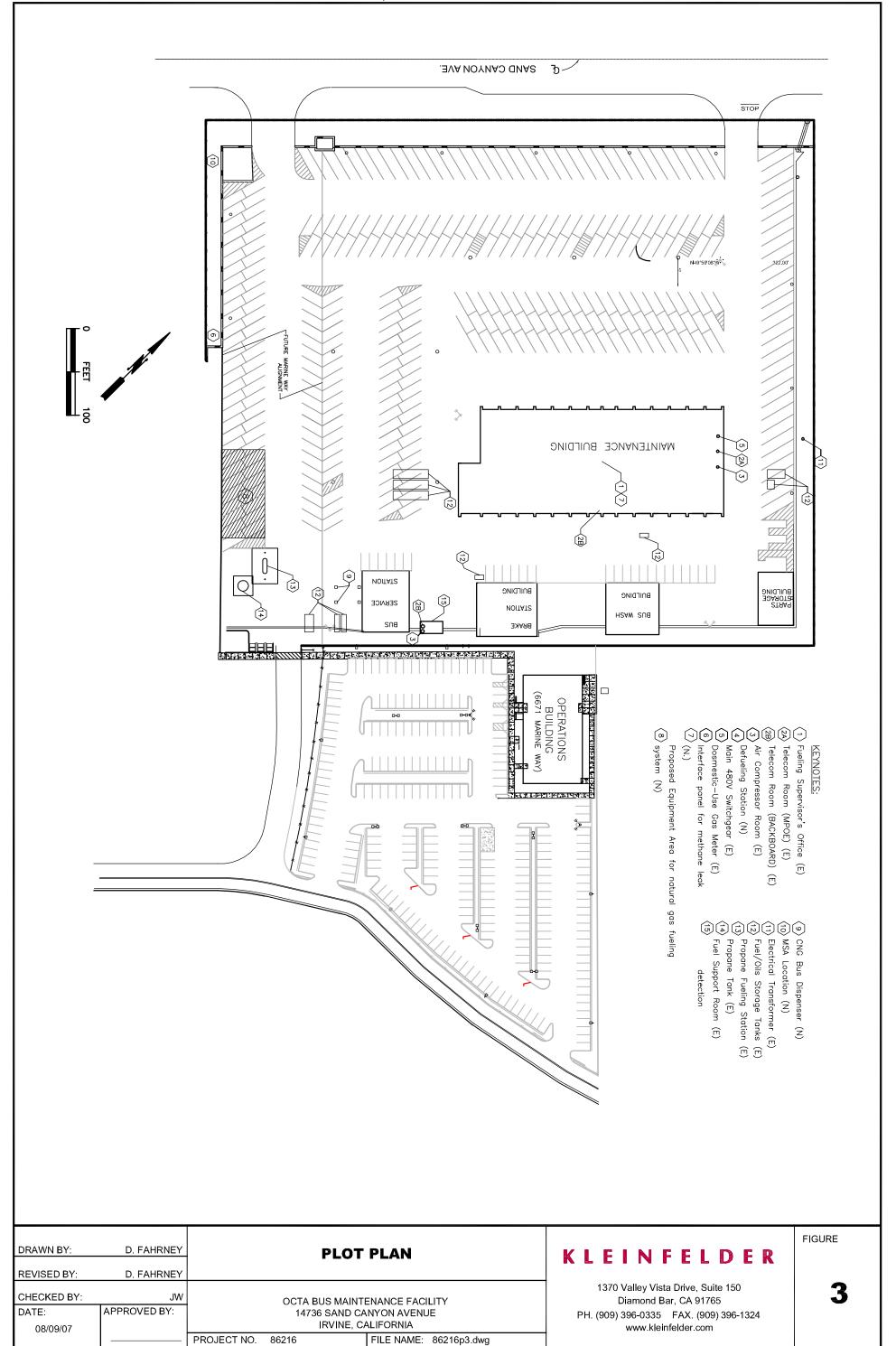
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1370 Valley Vista Drive, Suite 150 Diamond Bar, CA 91765 PH. (909) 396-0335 FAX. (909) 396-1324 www.kleinfelder.com FIGURE

2

PROJECT NO.

86216



A defueling system is proposed near the location of the equipment area. This system will allow CNG from the bus fuel tanks to be discharged back into the CNG fueling system to avoid releasing the gas into the atmosphere.

A CNG fueling system will be constructed outside of the existing Fuel and Vacuum Building. The fueling system will dispense CNG through two single hose CNG dispensers for high capacity fast fill bus fueling.

The proposed project will also involve the construction of approximately 500 feet of gas pipelines adjacent to and within the bus base. These pipes will include extension of the gas pipeline from a stub pipeline placed at the Base boundary near Sand Canyon Avenue along an existing block wall, under the wall and through the Base to the proposed equipment area and pipelines from the proposed equipment area to fueling facility outside of the fuel and vacuum building. Portions of the pipeline along the block wall will be above ground to allow for placement of metering equipment. The Gas Company provides the gas pipeline to the Base.

The proposed project will also require the upgrade of the existing electrical service to the Base and placement of a new underground conduit across the Base to the equipment area.

Construction of the CNG facility is estimated to take up to nine months. Construction will take place entirely within the bus base boundaries and will include the following activities:

- Cutting and removal of existing pavement for equipment pad and pipeline construction.
- Extension of electrical service to the facilities.
- Excavation for internal pipeline and equipment pad construction.
- Construction of foundations and pads for the manufactured CNG equipment.
- Placement of equipment on the constructed pads.
- Construction of fueling facilities near the existing Fuel and Vacuum Building.

It is anticipated that equipment used on the site will be limited and would include a backhoe, concrete cutting equipment, cranes and forklifts for installing the equipment. Ready-mixed concrete trucks will deliver concrete for the pads. Construction is anticipated to take place during daytime hours Monday through Friday.

2.3.2 Off-site Supply Line

The project also includes the construction of a natural gas supply line to the Base by The Gas Company (Sempra Utilities). The Authority anticipates entering into an agreement with The Gas Company to supply the Base with the required quantity of gas.

The Gas Company is planning to construct a new natural gas supply pipeline in Sand Canyon Avenue in the next 6 to 12 months to supply the Great Park Project and associated development It is planned that a supply line for the CNG facility will be stubbed off from that pipeline and brought to the Base property line during that pipeline construction.

2.4 PROJECT DESIGN FEATURES (PDF)

The following project design features have been incorporated into project to (1) reduce potential hazards and hazardous materials impacts relating to the use of CNG at the bus base, (2) reduce potential geology and soils impacts that could result from future seismic activity, (3) reduce erosion and dust generated during construction activities and (4) properly dispose of toxic and hazardous materials generated by the proposed project. These features will be incorporated into the project design and will ensure that these impacts are reduced to less than significant levels.

Geology and Soils

PDF-1 The Authority shall construct all facilities in a manner that reduces or eliminates the risk of seismic hazards, including liquefaction and/or earthquake induced settlement through compliance with the seismic safety and all applicable provisions of the California Building Code (Title 24, California Code of Regulations). The Authority shall implement this project design feature through development of a design level geotechnical evaluation prepared by a licensed geotechnical engineer.

CNG Handling procedures

PDF-2 The Authority shall incorporate specific safety measures into the project design and facility operation to reduce the hazards associated with the use of CNG on site. These measures include measures to reduce potential release of CNG, reduce the amount released and control any ignition sources.

- Methane Detectors will be placed at the equipment area. If methane levels reach a prescribed concentration level, the equipment will automatically be shut down.
- Bus fueling will only be conducted by Authority or contractor personnel who have been specifically trained for this task.
- No Smoking/No Cell Phones postings are made around the fueling station and equipment area.
- A back-up generator is proposed to provide power to the CNG Fueling system in the event of an electrical power failure.

Erosion/Dust Control

PDF-3 The Authority shall construct the project in a manner that avoids erosion (dust) and prevents accumulation of silt in drains through the use of containment structures for storage of construction materials and use of sand bags to prevent sedimentation from construction areas. The PDF shall be implemented through the development of a storm water pollution prevention plan that will identify such measures for erosion control and accidental spills during construction. The

contractor shall water exposed areas will also be watered during grading and excavation to reduce fugitive dust from these operations.

Disposal of Hazardous and Toxic Materials

PDF-4 Conversion of the uncompressed natural gas to CNG will produce by products that may be hazardous or toxic. This material is primarily water from water vapors within the gas, but may also include mercaptens, butane and propane. Lubricating oils will also require disposal. These materials will be stored in on-site tanks and will be picked up by licensed firms for recycling and/or disposal in accordance with applicable federal, state and local regulations related to storage, use and transportation of these materials.

2.5 PROJECT APPROVALS

The proposed project will require the following permits or approvals:

- Approval of the project by the Orange County Transportation Authority, Board of Directors.
- Approval of the project by the Federal Transit Administration if the Authority applies for federal funds for construction.
- Approval of plans and specifications, inspection and approval by the City of Irvine, Department of Building and Safety.
- Inspection/Approval of the new facility by the Orange County Fire Authority which contacts with the City of Irvine to provide fire protection services..
- Permit for construction and operation of the standby generator by the South Coast Air Quality Management District.

SECTION 3 – ENVIRONMENTAL EVALUATION

This section provides the CEQA checklist and the responses to the environmental checklist.

3.1 ENVIRONMENTAL CHECKLIST AND RESPONSES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?				Х
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				Х

EXISTING CONDITIONS

The proposed project site is located within an existing bus base. The area is used for storage and maintenance of buses and appears industrial in nature. The bus base is lighted and much of the maintenance of buses occurs during nighttime hours.

RESPONSE TO QUESTIONS

a) No Impact. The project site is fully developed and located within an industrial area and does not contain scenic vistas. The Gas Company pipeline in Sand Canyon Avenue would also be within an existing street within an urban setting.

- **b) No Impact.** The site is fully developed and does not contain scenic resources including trees, rock outcroppings, and historic buildings within a state scenic highway.
- c) No Impact. The proposed project will involve placement of additional industrial equipment within an industrial area. It will not further degrade the existing visual character or quality of the site and its surroundings.
- **d) No Impact.** The site is currently lighted for operational and security purposes. No new source of light and glare is anticipated.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) 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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				Х
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				Х

The proposed project site is an existing bus base and is not used for agriculture. Agricultural operations are currently underway in areas to the north of the project site. These areas are currently proposed for residential and/or mixed use developments.

- a) No Impact. The proposed project site is not classified as prime farmland, unique farmland or Farmland of Statewide Importance (Source: Maps of California Resources Agency).
- **b) No Impact.** The proposed project site is zoned for industrial uses and is not zoned for agricultural uses and is not under a Williamson Act contract.
- **c) No Impact.** The implementation of the proposed project will not involve other changes in the existing environmental that would result in conversion of farmland to non-agricultural uses.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			Х	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) 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			X	

exceed quantitative thresholds for ozone precursors)?			
d) Expose sensitive receptors to substantial pollutant concentrations?			Х
e) Create objectionable odors affecting a substantial number of people?		Х	

The proposed project site is located within the South Coast Air Quality Basin (Basin) and is subject to the rules and regulations of the South Coast Air Quality Management District (SCAQMD). The Basin is currently in non-attainment for ozone, nitrogen dioxide, carbon monoxide and fine particulates. The existing bus base generates pollutant emissions from operation of existing diesel and gasoline buses, other vehicles and from general maintenance activities.

RESPONSE TO QUESTIONS

a) Less than Significant Impact. The proposed project will only generate temporary short-term emissions from heavy equipment including cranes, backhoes and other equipment associated with construction of pipelines within the facility, construction of equipment pads and installation of the CNG equipment. The overall construction period could last up to nine months, but the period of heavy construction would be much less. An estimate of pollutant emissions based on modeling of the one-day worst case construction emissions are provided below:

This will be a minor construction project with construction limited to approximately 6,000 square feet of an existing paved area. It is believed that the worst case emissions during construction will relate to the cutting of concrete, removal of concrete and trenching for a building pad. This will include:

- Use of Compressor and truck for concrete sawing-4 hours
- Use of a diesel powered backhoe for concrete breaking and removal-6 hours
- Operation of two dump trucks-total of 4 trips to recycling center-8 miles round trip
- Four employee vehicles used on site.

Maximum Daily Construction Emissions (In Pounds/day)

	Pollutant				
Source Category	Carbon Monoxide (CO)	Reactive Organic Compounds (ROG)	Oxides of Nitrogen (NOx)	Oxides of Sulfur (SOx)	Particulates (PM10)
Excavation					46
Diesel Equipment	16	6	43	4	4
Trucks	6	2	14	4	4
Employee Vehicles	9	1	0.5	-	-
Maximum Daily Construction Emissions	31	9	57.5	8	54
SCAQMD Significance Thresholds for Construction	550 lb/day	75 lb/day	100 lb/day	150 lb/day	150 lb/day
Significant?	No	No	No	No	No

The only long-term pollutant emissions will be associated with the testing and infrequent operation of the emergency generator. The generator will be permitted by the SCAQMD. However, these pollutant emissions will be offset by the significant reduction in pollutant emissions that will be achieved from the CNG facility. This facility will provide a fuel source for the Authorities new CNG fueled buses. Replacing diesel buses with CNG fueled buses will improve air quality within the Basin and will help achieve the goals and objectives of the SCAQMD's most recently adopted Air Quality Management Plan.

Emissions for the gas pipeline in Sand Canyon Avenue will be associated with the overall pipeline construction for the Great Park project.

- b) Less than Significant Impact. As noted in subsection (a); proposed project will only generate temporary short-term air pollutant emissions associated with placement of pipelines within the facility, construction of equipment pads and foundations, and installation of equipment. Operational emissions will be limited to the testing and emergency operation of the emergency generators and will be offset by the significant reduction in pollutant emissions that will be achieved by the replacement of diesel-fueled buses. Therefore, neither short-term construction emissions and or long-term pollutant emissions will result in violation of any air quality standards.
- c) Less than Significant Impact. As discussed in subsections (a) and (b), the project will generate minor pollutant emissions during construction and will have a net benefit on long term air quality due to the ongoing replacement of diesel the Authority's diesel buses with CNG fueled buses. The use of CNG fueled buses instead of diesel-powered buses will result in a long-term net decrease in emissions associated with diesel powered buses. Therefore, the project's pollutant emissions would not be cumulatively considerable.

- **d) No Impact.** The proposed project site is located within an industrial area. Furthermore, the proposed project is not expected to result in generation of substantial concentrations of pollutants.
- e) Less than Significant Impact. Implementation of the proposed project is not anticipated to result in activities that will create objectionable odors.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IV.BIOLOGICAL RESOURCES – Would the project:				
a) 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?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				Х
c) 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?				X
d) Interfere substantially with the movement of any native resident or			Х	

migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		Х	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			Х

The proposed project site is located within an existing bus base. This is an industrial area and contains no biological resources. The gas pipeline route into the facility along the block wall will pass turf areas with relatively mature jacaranda and pine trees.

- a) Less than Significant Impact. The site is an industrial project and contains only a small amount of landscaped areas
- **b)** No Impact. The site contains no riparian or other sensitive biological habitats.
- c) No Impact. The site contains no wetlands or other sensitive habitats.
- **d)** Less than Significant Impact. The site is an industrial site and contains little wildlife habitat and is not a movement or migratory path for wildlife.
- **e)** Less than Significant Impact. The only trees in the area are near the block wall adjacent to pipeline alignment. Impact to the trees and their root zones will be avoided to the extent possible.
- f) No Impact. The site is not located within an adopted Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, the proposed project will not conflict with such a plan.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				Х
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				Х
d) Disturb any human remains, including those interred outside of formal cemeteries?				Х

The proposed project site and pipeline alignment are located in a previously developed site that has been substantially graded, paved and structures constructed. The site would not be expected to contain any archaeological or paleontological resources within a scientific context. Additionally, there are no structures on the site 50 years old or older that could be considered of historical significance. No cultural or paleontological resources are expected to occur along the gas supply line alignment since the alignment is located in city streets.

- a) No Impact. Implementation of the proposed project will not impact any known historical resources at the project site. Buildings on the site are of recent vintage and do not possess historical significance. The supply pipeline would be in city streets and would not contain historical resources.
- **b) No impact.** The site and pipeline alignment have been substantially disturbed through the construction of the bus base and city street construction. No resources would remain in the zone of construction.

- **c) No Impact.** The project site and potential supply pipeline alignment have been impacted by the previous construction so any resources contained in the area would be devoid of their historical context and not of scientific value.
- **d) No Impact.** Because the site and supply pipeline alignment have been previously disturbed by construction, it is highly unlikely that human remains are located on the proposed project site.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VI.GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			Х	
iv) Landslides?				Х
b) Result in substantial soil erosion or the loss of topsoil?			Х	
c) 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			X	

landslide, lateral spreading, subsidence, liquefaction or collapse?			
d) 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?		X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X

The proposed project site is located on a developed portion of the Irvine Bus Base. The location for the new facilities and supply pipeline alignment is within paved areas. The site is relatively flat, containing no slopes or similar structures.

RESPONSE TO QUESTIONS

a) See Below

- i. Less than Significant Impact. The proposed project site is not located within an Alquist Priolo Earthquake Fault Zone and no known active faults cross the project site. (Divisions of Mines and Geology Special Publication 42).
- ii. Less than Significant Impact. Given the location of the proposed project site within earthquake prone Southern California, the proposed project site may experience strong seismic ground shaking during a seismic event. Accordingly and as part of the Authority's standard construction practices, all structures and pipelines will be constructed in a manner that reduces or eliminates the risk of seismic hazards, including liquefaction and/or earthquake induced settlement through compliance with the seismic safety and all applicable provisions of the California Building Code (Title 24, California Code of Regulations). These standard construction practices will be incorporated into the project design as noted in PDF-1. As discussed in PDF-1, compliance with the CBC will be verified and confirmed in a final geotechnical report that will be prepared for the project. The report will include recommendations on foundation design and other design parameters that are consistent with the CBC and standard engineering practices to reduce damage from severe ground shaking. This design feature will reduce impacts to less than significant levels.

- iii. **Less than Significant Impact.** As discussed in subsection (ii), PDF-1 has been incorporated into the project to ensure that liquefaction will be reduced to a less than significant level ground failure.
- iv. **No Impact.** The proposed project site is relatively level and not prone to land slides.
- b) Less than Significant Impact. The proposed project site is relatively level and only approximately 6,500 square feet of land will be disturbed. Therefore, substantial soil erosion is not anticipated. The supply pipeline will be constructed within city streets and not be prone to significant erosion. PDF-3 has been incorporated into project design to further reduce erosion potential.
- c) Less than Significant Impact. As discussed in subsection (ii) PDF-1 has been incorporated into the project to ensure that any potential risk from lateral spreading, subsidence, liquefaction or collapse will be reduced to less than significant levels.
- **d)** Less than Significant Impact. As discussed in subsection (ii) PDF-1 has been incorporated into the project to ensure that any potential risk from expansive soils will be reduced to less than significant levels.
- **e) No Impact.** Sewers are available at the site and the project will not require septic tanks.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VII.HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous			Х	

materials, substances, or waste within one-quarter mile of an existing or proposed school?		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X
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?		X
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?		X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		X
h) 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?		Х

The proposed project site is within an existing Irvine Bus Base. This bus base is located within an industrial area with no adjacent residential or other sensitive receptor areas. The bus base currently handles a number of hazardous materials

including diesel fuel, propane, gasoline, lubricating oils, solvents and other chemicals.

Materials are stored and handled according to local, state and federal regulations. The primary agency responsible for inspection and compliance with these regulations is the Orange County Fire Authority. Transport of hazardous materials is conducted under the requirements of the Department of Transportation. The Orange County Health Services Agency reviews and approves the Hazardous Materials Management Plan and the Hazardous Materials Risk Management Plan. Personnel are trained in the handling and use of the materials. Spill containment structures; spill contingency plans, fire control systems and methane detectors are installed at specific locations.

Fueling of vehicles takes place in a covered building. Trained personnel are the only personnel allowed to conduct the refueling operation. The entire area is paved with the appropriate containment equipment and methane detection system.

- a) Less than Significant Impact. Implementation of the proposed project will not require transportation or disposal of hazardous materials. Construction activities may require the use of fuels, solvents and lubricants, however this quantity will be small and not substantially different from the material already in use and transported to the site. The compression of natural gas will result in the generation of wastewater, small quantities of mercaptens, propane and butane. This material as well as lubricating oil for the compressor will be stored in designated tanks on site and transported via a licensed waste hauler for treatment and disposal. As noted in Section 2.4, PDF-2 has been incorporated into the project to ensure that any potential risk from the transmission, storage, and use of CNG fuel at the facility will be reduced to a less than significant level.
- b) Less than Significant Impact. Implementation of the proposed project will result in the construction and operation of a CNG facility on the site. Natural gas will be provided to the site via The Gas Company Service System and compressed on site. Buses and other vehicles will be fueled by dispensing the compressed gas directly into the vehicle fuel tank. There is a potential that a leak in the system or operator error may release a natural gas vapor cloud into the atmosphere. If this gas cloud is in an explosive concentration and encounters an ignition source (open flame, spark, etc), this could create an explosion and/or fire. PDF-1 and PDF-2 have been incorporated into the project design to reduce this impact to less than significant levels. This feature describes standard safety procedures for reducing the potential for releases, early detection of leaks to prevent buildup of gas clouds and other measures to reduce the potential for ignition of any vapors.
- c) Less than Significant Impact. The proposed project Facility is located adjacent to a building used by the California Department of Transportation and a small church building, the Irvine Community Church. The compressor station and refueling areas are adjacent to the California Department of Transportation building and are separated by a block wall. The church is located further to the north of these facilities. The church does not have a school or preschool or day care facilities. The safety features outlined in PDF-

- 1 and PDF-2 will reduce any potential impacts to the California Department of Transportation building and the church to less than significant levels.
- **d) No Impact.** The proposed project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would not create a significant hazard to the public or the environment.
- **e) No Impact.** The proposed project site is not located within an airport land use plan.
- f) No Impact. The proposed project site is not located within the vicinity of a private airstrip.
- **g) No Impact.** The proposed project will not interfere with an adopted emergency response plan or emergency evacuation plans. It use will not change for current activities.
- h) No Impact. The proposed project site is not located within or adjacent to wildland areas.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?			Х	
b) 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)?				X
c) 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				Х

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manner which would result in substantial erosion or siltation on- or off-site?				
d) 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 onor off-site?				X
e) 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?				X
f) Otherwise substantially degrade water quality?			Х	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				Х
j) Inundation by seiche, tsunami, or mudflow?				Х

The proposed project site is located within a paved industrial site. Runoff from the site is discharged into to storm drain system.

- a) Less than Significant Impact. Implementation of the proposed project will result in disturbance to existing paved areas. This could create short-term sedimentation impacts. Normal construction techniques including erosion control and sweeping would assure that these impacts would not reach significant levels. This is outlined in PDF-3.
- **b) No Impact.** The proposed project will not use groundwater nor will excavations be deep enough to reach the aquifer.
- **c) No Impact.** The proposed project will not change current drainage or water quality treatment of on-site runoff. It will be accommodated within the existing facility.
- **d) No Impact.** The proposed project will not alter site drainage.
- **e) No Impact.** The proposed project will not increase the amount of impervious surfaces since the entire site is currently paved.
- f) Less than Significant Impact. As discussed under "a" above: the construction of the site has short term potential for sedimentation during construction.
- **g) No Impact.** The site is not within a 100-year flood plain.
- **h) No Impact.** The site is not within a 100-year flood plain.
- i) No Impact. The site is not located within a 100-year flood plain nor is it located within an inundation zone.
- j) No Impact. The site is level and contains no water bodies prone to seiche. Therefore, there would be not potential for inundation from seiche or from mud flows.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX.LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?				Х
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including,				Х

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?		
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?		X

The proposed project site is an industrial facility used to store and maintain buses and other vehicles. The I-5 Freeway is located to the west of the site. According the City of Irvine GIS mapping system, the site is designated on the general plan for industrial use and is zoned for industrial uses. The area east of the site is used as a bus facility for the Irvine Unified School District. The area to the south is the OCTA operations center and areas to the west include a facility used by the California Department of Transportation and the sanctuary and offices of the Irvine Community Church. The areas surrounding the site to the north and east are presently in agriculture. These areas are within the City of Irvine's Planning areas 12 and 40 which includes proposals for multi-use, medium and medium high residential uses. This proposed project is currently under environmental review and may include the realignment of Marine Way into the proposed project site.

RESPONSE TO QUESTIONS

- a) No Impact. Implementation of the proposed project will not substantially alter the current use of the site and will not result in any division of an established community.
- **b) No Impact.** The site is currently designated for industrial use and the implementation of the proposed project is consistent with those uses.
- **c) No Impact.** The proposed project site is not governed by any habitat conservation plan or by a natural community conservation plan.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known				Х

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mineral resource that would be of value to the region and the residents of the state?		
b) 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?		X

The proposed project site is a developed industrial site and contains no known mineral resources.

- a) No Impact. Because the site is currently paved and developed for industrial uses and contains no known mineral resources, there would be no loss of availability of known mineral resources.
- **b) No Impact.** The site is not listed as a locally important mineral site either by the City of Irvine or the State of California Department of Conservation.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XI.NOISE B Would the project result in:				
a) 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?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise			Х	

levels in the project vicinity above levels existing without the project?			
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X	
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?			X
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?			Х

The proposed project site is an operating bus base that creates noise from operation and maintenance of buses being driven in and out of the facility as well as from buses being operated within the facility. Maintenance activities are ongoing on a 24-hour seven days a week basis. Freeway uses and other noise producing uses in the area subject the site to relatively high noise levels. The proposed project site is located within an industrial area where many of these industries also produce substantial noise levels. With the exception of the adjacent Irvine Community Church, no sensitive receptors are in the vicinity of the proposed project.

RESPONSE TO QUESTIONS

a) Less than Significant Impact. The proposed project will primarily result in a temporary increase in ambient noise levels during the construction period. Construction will be confined to daytime periods in accordance with the City of Irvine Noise Ordinance. The City of Irvine requires that noise sources associated with construction, repair, remodel or grading of any real property be confined to the hours of 7:00 AM and 8:00 PM only on weekdays and on Saturday. No construction activity may occur on Sunday or a Federal Holiday. In addition, there are no sensitive receptors, such as residential uses, hotels or hospitals located in the vicinity of the site that would be subjected to these activities. Due to the limited duration of construction activity, few of the sensitive receptors proximal to the project site and the

restriction contained in the City's noise ordinance temporary construction noise levels would not violate applicable noise standards and would be less than significant.

Long term operation noise sources associated with the proposed project include electrical compressors and the occasional testing of the emergency generator. The noise sources are not anticipated to significantly increase existing noise levels that are currently generated by the 24-7 operations of the bus base. Although the brand of compressors have not been determined, a performance standard will require that the noise level will not exceed 75 dB (A) at the property line. The noise level will be further reduced though the presence of the existing block wall. Furthermore, most refueling will be conducted during night time hours when the California Department of Transportation and Church are not occupied. Since the long-term operational noise source will likely be consistent with the existing bus base operations and given the current land use character of the area, it is not anticipated that noise levels will be excessive or violate any noise standards.

Construction of the supply pipeline will result in short-term noise impacts along the pipeline alignment. The impact will be temporary in nature, the impacts will not reach significant levels.

- b) Less than Significant Impact. Implementation of the proposed project is not anticipated to generate substantial ground vibrations during construction or operation of the facility. No pile driving or other high impact construction operations are associated with the proposed project.
- c) Less than Significant Impact. Please see the discussion in subsection (a).
- d) Less than Significant Impact. Please see the discussion in subsection (a).
- **e) No Impact.** The proposed project site is not within an airport land use zone.
- **f) No Impact.** The proposed project site is not located within the vicinity of a private airstrip.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING – Would the project:				
a) 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)?				X

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?		Х
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?		Х

The proposed project site is within an industrial area and has no housing in close proximity.

- a) No Impact. The proposed project is merely intended to provide a fuel source for a new type of bus. It will not generate any additional population growth.
- **b) No Impact.** No houses exist on the site.
- **c) No Impact.** No people reside at the proposed project site.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES				
a) 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 for any of the public services:				
Fire protection?			X	

Police protection?		X
Schools?		Х
Parks?		Х
Other public facilities?		Х

Public services to the site are provided by the City of Irvine either directly or through contract with the County of Orange. They include fire protection and police protection services.

RESPONSE TO QUESTIONS a)

Fire Protection. Less than Significant Impact. The new facility will require additional fire inspection services both during construction and during operation. Since the fire department currently conducts inspection of the site, no new manpower or facilities are anticipated to be required.

Police Protection. **No Impact.** Because the proposed project will be placed within an existing facility, no additional police protection services are anticipated.

Schools. **No Impact.** The proposed project will not generated additional students.

Parks. **No Impact.** The industrial project will not require additional park facilities since it is an industrial project.

Other Public Facilities. **No Impact.** The proposed project will not require any additional public services.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. RECREATION				
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?				X
b) Does the project include recreational facilities or				X

require the construction or expansion of recreational facilities, which might have an adverse physical effect		
on the environment?		

The proposed project site is an industrial site that generates no demand for parks nor contains any parks.

- a) No Impact. The proposed project will not create increased use of neighborhood and regional parks because of the industrial nature of the use.
- **b) No Impact.** The proposed project would not include recreational facilities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XV. TRANSPORTATION/ TRAFFIC – Would the project:				
a) 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)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) 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?				Х
d) Substantially increase				X

hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			
e) Result in inadequate emergency access?		Х	
f) Result in inadequate parking capacity?		X	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			Х

The existing bus facility currently operates approximately 200 buses from the site. Access is via Sand Canyon Avenue. A traffic signal is located at the entrance to the facility to allow both left and right turns.

RESPONSE TO QUESTIONS

a) Less than Significant Impact. Implementation of the proposed project will temporarily increase traffic due to construction workers. It is anticipated that this traffic will be less than 50 trips per day over the construction period and only a portion of these trips will be during the peak AM and PM periods. This increase is not considered significant.

On an operational basis, there will not be an increase in traffic, merely a gradual change in the type of buses being operated. Once the CNG facility is constructed, the non CNG buses that are based and serviced at the Base will be gradually replaced with CNG buses. Therefore the project would not result in any net increase in buses and corresponding traffic trips and would not decrease the level of service (LOS) at any nearby intersections.

Construction of the pipeline would have a potential to impact traffic during the construction period. It is anticipated that normal traffic control plans will reduce any impact to less than significant levels. These plans will include signage, barriers, detours and traffic direction.

- **b) No Impact.** The small change in short-term construction traffic is not expected to change the level of service for the area intersections.
- **c) No Impact.** The project will not involve any aircraft or airport related issues.
- **d) No Impact.** The proposed project will not alter any roadways or access points.

- **e)** Less than Significant Impact. The proposed project will not alter any emergency access to the site. Construction of the pipeline is not expected to result in potential changes in emergency access.
- f) Less than Significant Impact. The proposed project will result in the loss of bus parking spaces. The bus parking will be accommodated by operational changes within the Authority's system.
- **g) No Impact.** The proposed project will actually contribute to alternative transportation because it will provide buses with cleaner burning fuel.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) 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?				X
c) 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?				Х
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				Х
e) Result in a determination by the wastewater treatment provider which				Х

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?		
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?		X
g) Comply with federal, state, and local statutes and regulations related to solid waste?		Х

The proposed project site is served by existing utility infrastructure including potable water, sanitary sewer and storm drains.

- **a) No Impact.** The proposed project will not require additional wastewater treatment or discharge than those currently occurring at the site.
- **b) No Impact.** The proposed project will not require new water or wastewater treatment facilities since there will not be any change in wastewater generation or water use is associated with the proposed project.
- **c) No Impact.** No additional storm water drainage systems are needed because the entire site is currently paved and the proposed project will not increase impermeable surfaces.
- d) No Impact. No new water supplies will be needed for the proposed project.
- **e) No Impact.** The proposed project will not generate additional wastewater above the current levels.
- **f) No Impact.** The operation of the proposed project is not anticipated to generate additional solid waste.
- **g) No Impact.** The proposed project will comply with federal, state and local regulations related to solid waste.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				X
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?			Х	

- **a) No Impact.** The proposed project is constructing a CNG fueling facility within an existing developed bus base. It is not expected to substantially degrade the quality of the environment.
- **b) No Impact.** The proposed project involves the construction of new facilities within an existing facility within existing streets and will not result in cumulatively considerable impacts.
- **c)** Less than Significant Impact. The proposed project is not expected to have substantial environmental adverse environmental effects.

SECTION 4 – DETERMINATION

On the basis of this initial evaluation: Χ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. Signature Date

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SECTION 5 – PREPARERS

5.1 ORANGE COUNTY TRANSPORTATION AUTHORITY

Alison Army-Senior - Transportation Analyst

James J. Kramer - Principal Civil Engineer

5.2 KLEINFELDER WEST, INC

John Westermeier - Project Manager Herbert Vogler - Principal in Charge

Eric Carlson - Safety/Air Quality

SECTION 6 – REFERENCES

California Department of Conservation, Important Mineral Areas of California

California Division of Mines and Geology, Map of Alquist Priolo Study Areas, Special Publication 42

City of Irvine, GIS Land Use Data Base.