

City of Riverside

797 Palmyrita Avenue Trailer Parking Lot Project

Initial Study – Mitigated Negative Declaration



September 2016

797 Palmyrita Avenue Trailer Parking Lot Project

Initial Study – Mitigated Negative Declaration

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September 2016

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INITIAL STUDY

1. **Project Title:** 797 Palmyrita Avenue Trailer Parking Lot Project
2. **Lead Agency Name and Address:** City of Riverside
Planning Department
3900 Main Street, 3rd Floor
Riverside, CA 92522
3. **Contact Person and Phone Number:** Gaby Adame, Assistant Planner
951-826-5933
4. **Project Location:** APN 255-120-031, 255-120-007, 255-110-014, 255-120-027, as described as Parcel A in Lot Line Adjustment No. 4499
797 Palmyrita Avenue
Riverside, CA 92507
5. **Project Sponsor's Name and Address:** LBA RV-Company II, LP
Michael DeArmey
17901 Von Karman, Suite 950
Irvine, CA 92614
6. **General Plan Designation:** B/OP - Business/Office Park and OS-Open Space
7. **Zoning:** BMP-SP - Business and Manufacturing Park, Hunter Business Park Specific Plan Overlay Zone, and WC-Water Course Overlay Zone

8. Description of Project:

The project is the development of a new 42,689 square foot (0.98 acre) parking lot that will be used to store up to twenty-two (22) 53-foot trailers. The project also includes 15,000 square feet of landscaping. Onsite outdoor light would be throughout the site. The parking lot would be used for truck parking for industrial uses. The onsite drainage system would utilize a storm water retention basin with an infiltration facility at approximately 5 feet below ground surface (bgs). The site location is shown on figures 1 and 2. The proposed site plan is shown on Figure 3 and the proposed grading plan is shown on figures 4a, 4b, 4c, and 4d. The parking lot would be accessed via existing access located at 797 Palmyrita Avenue.

9. Surrounding Land Uses and Setting:

The project site is located on the perimeter of an urban setting. Surrounding uses are as follows:

North: Springbrook Wash Arroyo and residential uses

East: Canal and commercial uses

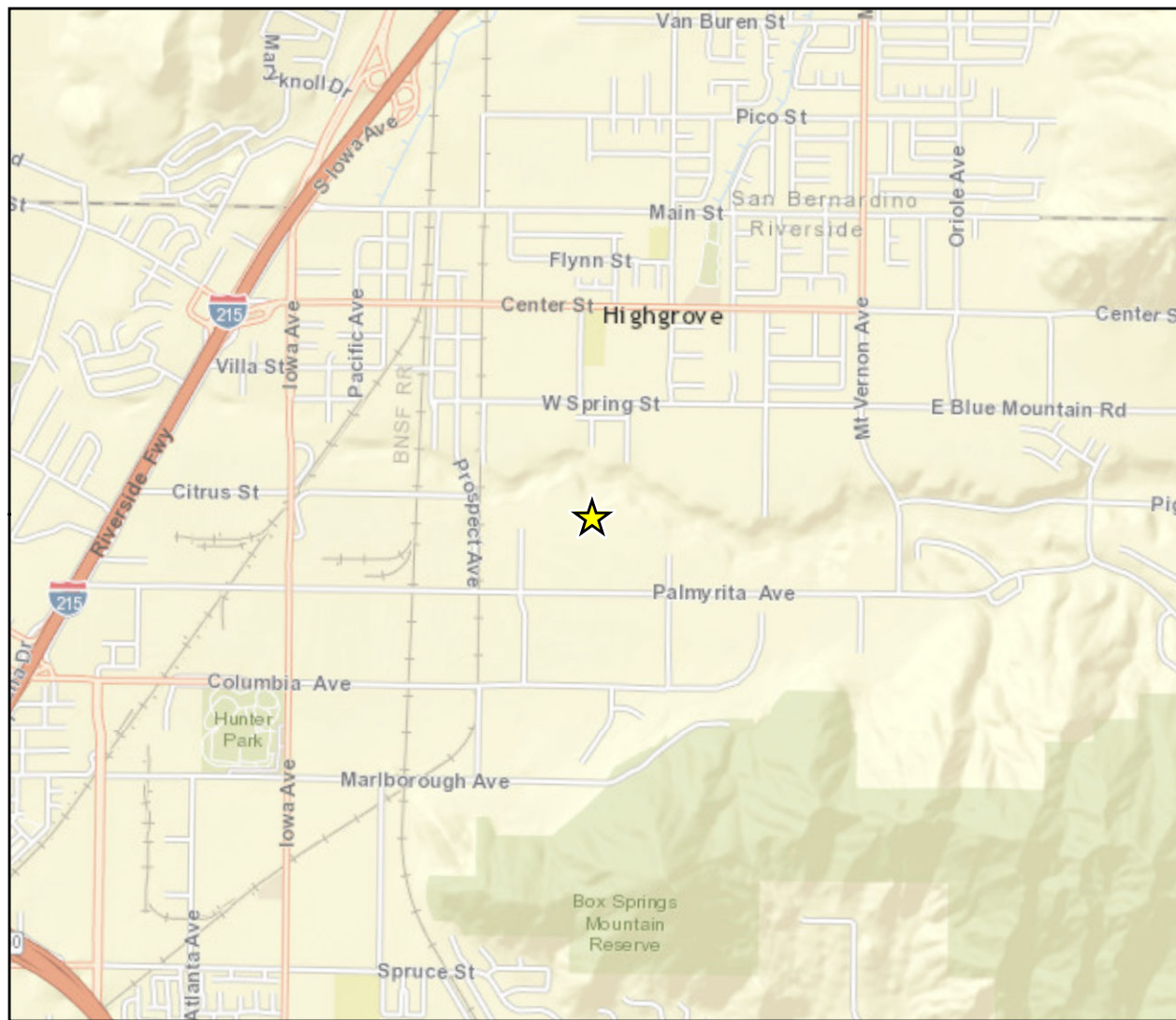
South: Commercial uses

West: Commercial uses and Palmyrita Avenue

Surrounding land uses are shown on Figure 5.

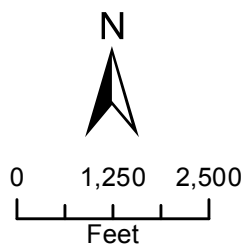


City of Riverside 797 Palmyrita Avenue Trailer Parking Lot Project
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★ Project Location



Regional Location

Figure 1

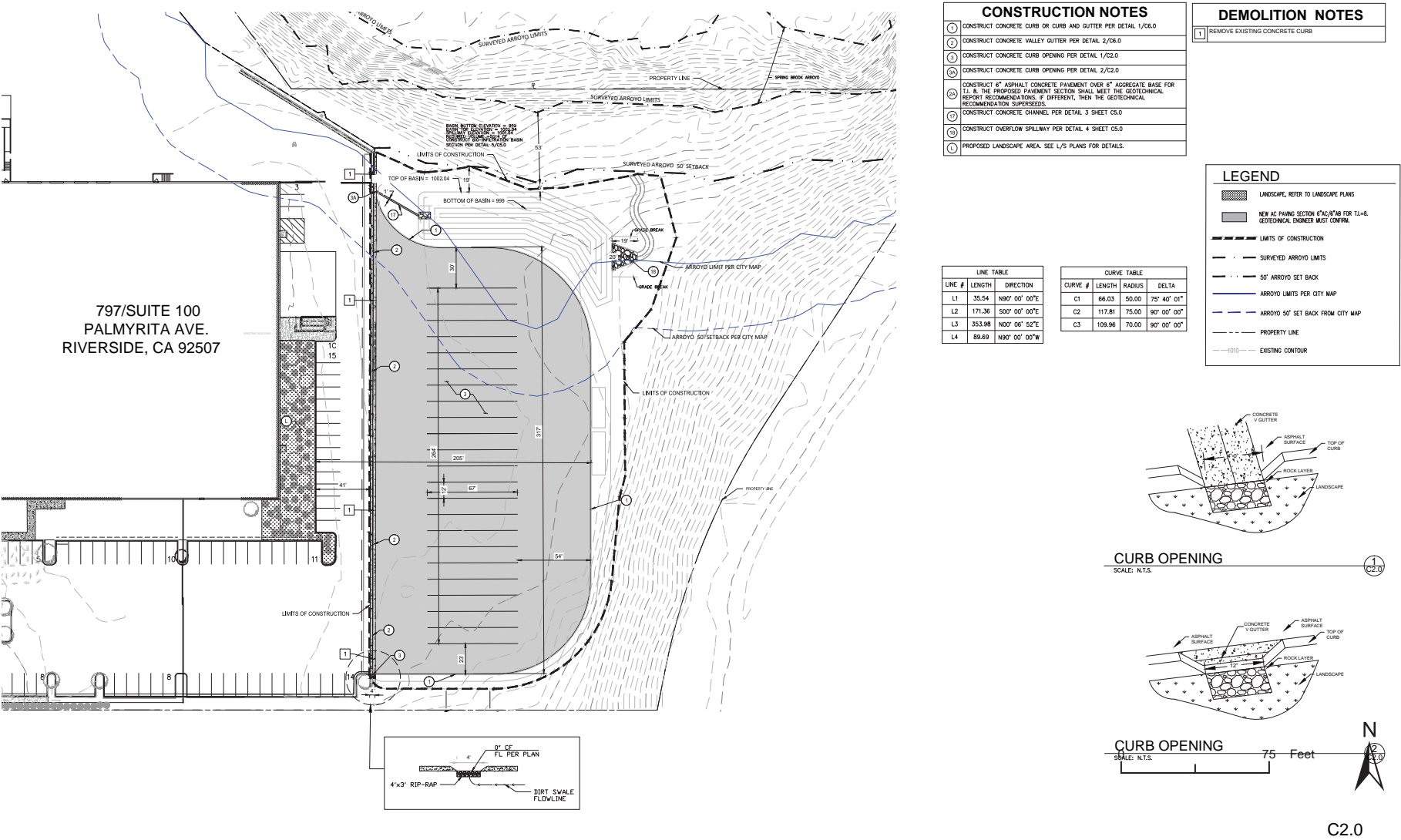


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Project Site and Vicinity

Figure 2

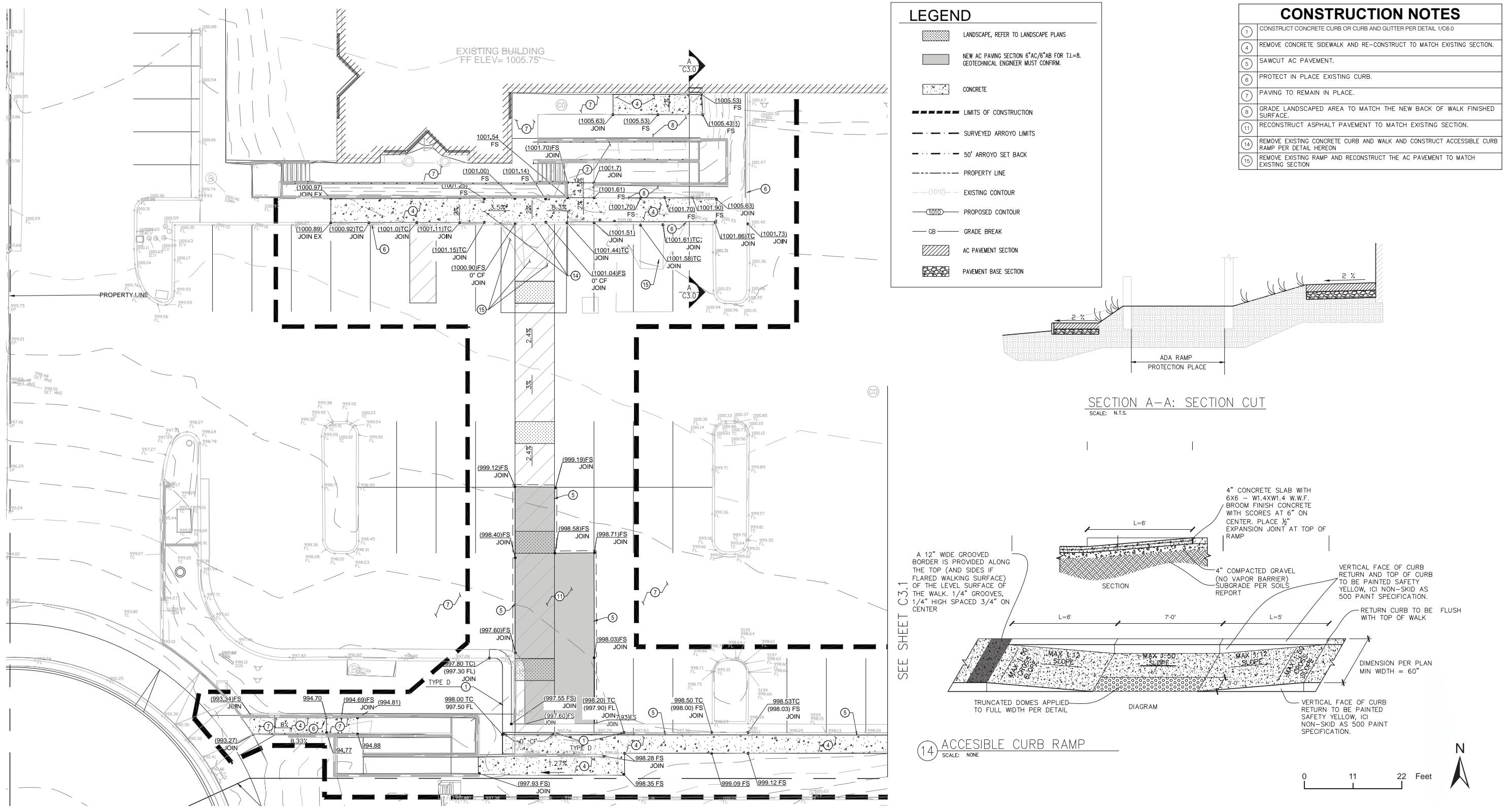
City of Riverside



Source: Ware Malcomb, 2016

Proposed Site Plan

Figure 3
City of Riverside



Source: Ware Malcomb, 2016

Figure 4a
City of Riverside



City of Riverside

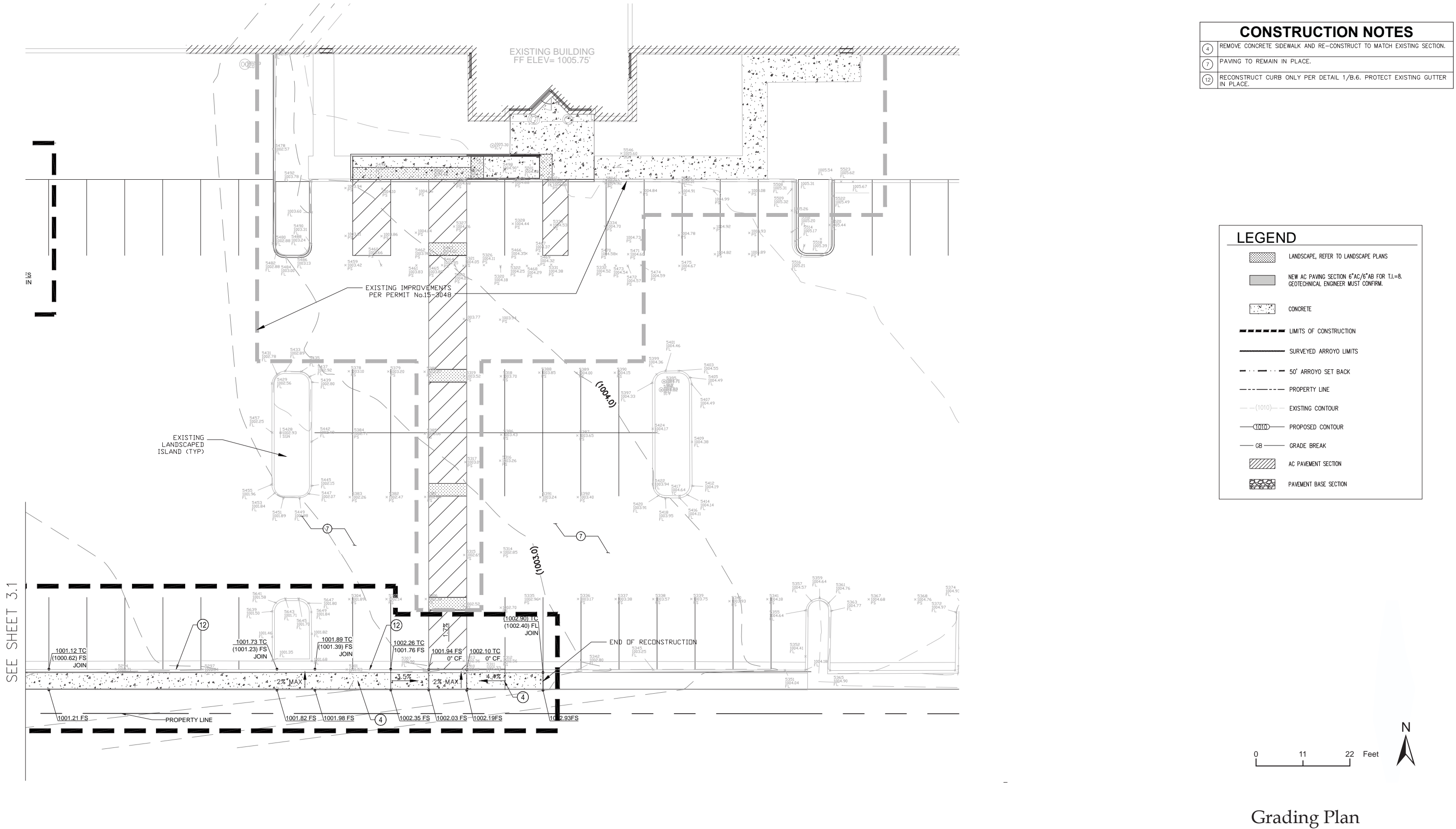




Figure 4d

City of Riverside



Surrounding Land Uses

Figure 5

Regional access to the project site is provided by Interstate 215, located approximately 1 mile to the northeast.

10. Other Public Agencies Whose Approval is Required:

No other agency approvals are required.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Potentially Significant” or “Potentially Significant Unless Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

- ☒ 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 potential 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



ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS				
-- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) The proposed project is the development of a parking lot for the storage of 53-foot trailers. The project site and the surroundings are flat with no scenic vistas on or around the site. Therefore, there would be no impact.

NO IMPACT

b) The site does not contain any scenic resources including rocks, trees, outcroppings, or historical buildings. The site is not located near a state scenic highway. Therefore, there would be no impact.

NO IMPACT

c) The project site is currently vacant. The site is surrounded by existing commercial development, the Springbrook Wash Arroyo, and the Gage Canal. The proposed parking lot would be adjacent and connected to neighboring commercial warehouses. The parking lot would change the visual character of the site from vacant to a parking lot but would not affect the Springbrook Wash Arroyo located to the north. Impacts are considered less than significant.

LESS THAN SIGNIFICANT IMPACT

d) The project site is located in an urbanized area of the City of Riverside with vacant or open space nearby. The adjacent commercial uses generate light and glare along the western side of the project site. Residential development is also in the vicinity of the site located 625 feet to the north. The project would develop a parking lot to store commercial trailers. The parking lot



would include outdoor lighting. Glare could also be generated from the trailers stored onsite. However, as the project is located in an urban environment with numerous existing sources of light and glare, proposed project would not substantially alter this condition. Additionally, the project would be required to adhere to Chapter 19.556, Lighting, of the Riverside Municipal Code. Impacts related to project lighting and glare would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY 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. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:				
a) Convert Prime Farmland, Unique Farmland, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES				
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a-e) The project site is located in an urbanized area in Riverside. The project site does not contain any agricultural land, agriculturally zoned land, land under Williamson Act contract, or forest land (City of Riverside General Plan 2025, 2007; California Department of Conservation, 2015). The project would have no effect on forestland or the conversion of farmland to non-agricultural uses.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY				
-- Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------------	--	------------------------------------	--------------

III. AIR QUALITY

-- Would the project:

emissions which exceed quantitative thresholds for ozone precursors)?

d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Air Quality Standards and Attainment

The project site is located within the South Coast Air Basin (the Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). On December 7, 2012, the SCAQMD Governing Board approved the 2012 Air Quality Management Plan (2012 AQMP), which outlines its strategies for meeting the National Ambient Air Quality Standards (NAAQS) for fine particulate matter (PM_{2.5}) and ozone (O₃). The local air quality management agency is required to monitor air pollutant levels to ensure that applicable air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether or not the standards are met or exceeded, the air basin is classified as being in "attainment" or "nonattainment." The project site is located within an area of the Basin that is in nonattainment for both the federal and state standards for ozone, particulate matter (PM₁₀ and PM_{2.5}) and lead, as well as the state standard for nitrogen dioxide (NO_x) (CARB, 2011, 2013). Thus, the Basin currently exceeds several state and federal ambient air quality standards and is required to implement strategies that would reduce the pollutant levels to recognized acceptable standards. This nonattainment status is a result of several factors, the primary being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate pollutants from the air, and the number, type, and density of emission sources within the Basin. The SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of state and federal air quality standards.

The SCAQMD has adopted the following thresholds for temporary construction-related pollutant emissions:

- 75 pounds per day reactive organic compounds (ROC)
- 100 pounds per day NO_x
- 550 pounds per day carbon monoxide (CO)
- 150 pounds per day sulfur oxides (SO_x)
- 150 pounds per day PM₁₀
- 55 pounds per day PM_{2.5}



The SCAQMD has adopted the following thresholds for operational pollutant emissions:

- 55 pounds per day ROC
- 55 pounds per day NO_x
- 550 pounds per day CO
- 150 pounds per day SO_x
- 150 pounds per day PM₁₀
- 55 pounds per day PM_{2.5}

a) Riverside is located in the South Coast Air Basin under the jurisdiction of the South Coast Air Quality Management District (AQMD). Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. The population forecasts upon which the South Coast Air Quality Management Plan (AQMP) is based are used to estimate future emissions and devise appropriate strategies to attain state and federal air quality standards. However, the project does not include residential uses that would increase population. Therefore, the project would not conflict with implementation of the AQMP and no impact would occur.

NO IMPACT

b-d) The proposed project would generate temporary construction emissions and long-term operational emissions. Emissions associated with the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2. Complete CalEEMod results and assumptions can be viewed in Appendix A.

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles, in addition to reactive organic gases (ROG) that would be released during the drying phase upon application of architectural coatings. The proposed project would be required to comply with all SCAQMD rules and regulations regarding construction emission control measures.

The grading phase involves the greatest amount of heavy equipment and the greatest generation of fugitive dust. For the purposes of construction emissions modeling, it was assumed that the project would comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the South Coast Air Basin. Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for the site preparation and grading phases of construction.

1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways to minimize fugitive

- dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day.
3. **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
 4. **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
 5. **Street Sweeping.** Construction contractors should sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Table 1 summarizes the estimated maximum daily emissions of pollutants during construction on the project site. As shown in the table, the SCAQMD thresholds would not be exceeded. Therefore, impacts would be less than significant.

Long-Term Emissions

Long-term emissions associated with project operation, as shown in Table 2, would include emissions from vehicle trips (mobile sources), natural gas and electricity use (energy sources), and landscape maintenance equipment, consumer products and architectural coating associated with on-site development (area sources).

Emissions would not exceed SCAQMD thresholds for any criteria pollutant. Consequently, the impact of the proposed project's operational emissions on regional air quality under thresholds (b) and (c) would be less than significant.

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The closest sensitive receptors are the residences located 625 feet from the project site. As discussed above, the proposed project would not exceed SCAQMD thresholds for any pollutant, and therefore, would not expose sensitive receptors to substantial pollutant concentrations. Therefore, potential impacts to surrounding sensitive receptors would be less than significant.

Table 1
Estimated Construction Maximum Daily Air Pollutant Emissions

	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO _x
Maximum Daily Emissions	2.5	25.8	16.9	6.9	4.2	<0.1
SCAQMD Thresholds	75	100	550	150	55	150
Threshold Exceeded?	No	No	No	No	No	No
On-site Construction Emissions	2.4	25.8	16.5	6.8	4.2	<0.1
LST Thresholds	--	335	4,359	67	20	--
Threshold Exceeded?	No	No	No	No	No	No

See Table 2.1 "Overall Construction-Mitigated" of winter emissions CalEEMod worksheets in Appendix A.

LST Thresholds are for a 1 acre site to sensitive receptors 625, or approximately 200 meters, away

Table 2
Estimated Project Operational Emissions

Sources	Estimated Emissions (lbs/day)					
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO _x
Area	1.2	<0.1	<0.1	<0.1	<0.1	0.0
Energy	0.0	0.0	0.0	0.0	0.0	0.0
Mobile	16.8	160	200.22	19.9	7.4	0.4
Total Emissions (lbs/day)	17.9	160	200.2	19.9	7.4	0.4
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Calculations were made in CalEEMod. See Table 2.2 "Unmitigated Operational" in CalEEMod winter emissions worksheets in Appendix A. Estimated operational emissions do not take into account emissions reductions from removal of existing uses on site, therefore, this analysis is conservative.

Note: numbers may not add up due to rounding.

LESS THAN SIGNIFICANT IMPACT

e) The project involves the development of a parking lot to store commercial trailers. The project does not include any components that would generate odors. There would be no impacts.

NO IMPACT



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based in part on a biological report prepared by Rincon Consultants in December 2015 and included in Appendix B.

a,b,c) The project site is currently vacant, undeveloped and contains vegetation. The site has previously been disturbed from grading. Additionally, the site is not identified in the City's



General Plan for having biological value or mapped by the United State Fish and Wildlife Service as containing critical habitat. (USFWS, 2015).

LESS THAN SIGNIFICANT IMPACT

d) The proposed parking lot would be located adjacent and connected to existing commercial warehouses on currently vacant land. The Springbrook Wash Arroyo is located 60 feet north of the project site. The parking lot would not extend into the limits of the Wash. The project would not interfere with the movement of any native resident or migratory fish, wildlife corridors or impede the use of native wildlife nursery sites. Therefore, no impact would occur with respect to local wildlife movement.

NO IMPACT

e) The City of Riverside does not have any adopted plans or policies for the preservation of trees other than street trees. The project does not involve the removal or planting of any street trees. Consequently, there would be no impact.

NO IMPACT

f) The City of Riverside is located within the boundary of the Stephen's Kangaroo Rat Habitat Conservation Plan, the Lake Mathews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, the El Sobrante Landfill Habitat Conservation Plan, and the Multiple Species Conservation Plan. However, the project site is not located within the limits of any of these plans (City of Riverside, 2007).

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



a-d) The proposed project would develop a parking lot on currently vacant land. Rincon Consultants completed a Cultural Resources Study of the project site in December 2015 on the project site (Appendix C). No cultural resources were identified during the survey. There are no structures or other historical resources on the project site. The Gage Canal is located directly adjacent to the project site and is eligible for listing under California Register of Historical Resources. However it is located outside of the proposed parking lot boundary and will not be directly or indirectly impacted by the proposed project.

There is no evidence that archaeological or paleontological resources or human remains are present onsite. In the unlikely event that such resources are unearthed during excavation and grading, applicable regulatory requirements pertaining to the handling and treatment of such resources would be followed. If archaeological or paleontological resources are identified, as defined by Section 2103.2 of the Public Resources Code, the site would be required to be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code as appropriate. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. With implementation of these standard requirements, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. GEOLOGY AND SOILS				
-- Would the project:				
c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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 wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.i and ii) Similar to all of Southern California, active and/or potentially active faults in the region could generate strong groundshaking on the project site. However, no known faults traverse the City or its sphere of influence. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.iii) The project site is located in an area mapped as having low potential for liquefaction on Figure P3-2, Liquefaction Zones, in the City's Public Safety Element of the General Plan. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.iv, c, d) Landslide impacts would not occur because no hillsides are located near the project site. Other than the already-identified low potential for seismically-induced liquefaction, the project site is not located on expansive soils or a geologic unit or soil that is or would become unstable. The site is not mapped as being in an area with soils with high shrink-swell potential as shown on Figure PS-3 of the City's Public Safety Element of the General Plan. There would be no impact.

NO IMPACT

b) Soil erosion is the removal of soil by water, wind, and gravity. The site is currently a vacant site. The parking lot would be 0.98 acres in size. Construction of the proposed project would involve soil-disturbing activities that could create soil erosion. However, as described in Section XI, *Hydrology and Water Quality*, the proposed storm drain system, in combination with mitigation measure HYD-1 requiring Best Management Practices (BMPs), would limit erosion.

LESS THAN SIGNIFICANT IMPACT



e) The project is the development of a parking lot. The use of septic tanks is not proposed.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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VII. GREENHOUSE GAS EMISSIONS

-- Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHGs), gases that trap heat in the atmosphere, analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆) (Cal EPA, 2015).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (Cal EPA, 2015). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Pursuant to the requirements of SB 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.



The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence on climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (State CEQA Guidelines, Section 15355).

The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). The City adopted the Riverside Restorative Growthprint – Economic Prosperity Action Plan and Climate Action Plan (Growthprint) in January of 2016. However, the Plan has not adopted GHG emissions thresholds, and no GHG emissions reduction plan with established GHG emissions reduction strategies has yet been adopted (Santa Ana, 2015b). Therefore, the proposed project is evaluated based on the SCAQMD's recommended/preferred option threshold for industrial projects of 10,000 metric tons CO₂E per year (SCAQMD, "Proposed Tier 3 Quantitative Thresholds – Option 1", September 2010).

a, b) The project's proposed construction activities, energy use, daily operational activities, and mobile sources (traffic) would generate GHG emissions. CalEEMod was used to calculate emissions resulting from project construction and long-term operation. Project-related construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project. Therefore, construction-related GHG emissions were amortized over a 30-year period to determine the annual construction-related GHG emissions over the life of the project.

GHG emissions associated with construction emissions and operational emissions from the proposed project were estimated using CalEEMod (see Appendix A for model output) and are discussed below.

Construction Emissions

As shown in Table 3, emissions of CO₂E units generated by construction of the proposed project are estimated at 26 metric tons. When amortized over a 30-year period (the assumed life of the project), CO₂E construction emissions would be approximately 0.87 metric tons CO₂E per year.

Table 3
Estimated Construction Emissions of Greenhouse Gases

	Annual Emissions (CO₂E)
Total	26 metric tons
Amortized over 30 years	0.87 metric tons per year

See Appendix A for CalEEMod Results

Operational Indirect and Stationary Direct Emissions

Operational Emissions include area sources (consumer products, landscape maintenance equipment, and painting), energy use (electricity and natural gas), solid waste, electricity to

deliver water, and transportation emissions and are shown in Table 4. In accordance with AB 939, it was assumed that the proposed project would achieve at least a 50% waste diversion rate. CalEEMod does not calculate N₂O emissions related to mobile sources. As such, N₂O emissions were calculated based on the proposed project's vehicle miles traveled (VMT) using calculation methods provided by the California Climate Action Registry General Reporting Protocol (January 2009).

As shown in Table 4, total emissions associated with the proposed project are estimated at about 5,494 metric tons per year. Thus, GHG emission associated with the project would not exceed the 10,000 metric tons CO₂E per year threshold of significance and impacts would be less than significant. It should be noted that the emissions estimates shown in Table 4 are very conservative insofar as they assume that all truck trips to the proposed parking lot are new when, in fact, these trips are in reality merely diverted from the locations in the site vicinity.

Table 4
Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO ₂ E)
Project Construction	0.87 metric tons
Project Operational Area Energy Solid Waste Water	<0.1 metric tons 23 metric tons <0.1 metric tons 3 metric tons
Project Mobile CO ₂ and CH ₄ N ₂ O	5,381 metric tons 86 metric tons
Project Total	5,494 metric tons

Sources: See Appendix A for calculations and for GHG emission factor assumptions.

The proposed project would involve the development of a parking lot for the storage of commercial trailers. The proposed project does not involve construction of any buildings or other facilities that would use water or energy or generate wastewater or solid waste. The City adopted the Riverside Restorative Growthprint – Economic Prosperity Action Plan and Climate Action Plan (Growthprint) in January of 2016. The proposed parking lot would not conflict with any plans or policies in the Growthprint. Impacts related to GHG emissions would be **less than significant**.

LESS THAN SIGNIFICANT IMPACT



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous material 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



a,b) The project would involve the development of a parking lot to store commercial 53-foot trailers. The project does not involve the use, transport or disposal of hazardous materials. Construction of the facility is not expected to use or involve storage of large quantities of hazardous materials. Potentially hazardous materials such as fuels, lubricants, and solvents could be used during grading and construction of the proposed project. However, the transport, use, and storage of hazardous materials during the construction of the project would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Compliance with all applicable laws and regulations during construction of the proposed project would reduce the potential impact associated with the routine transport, use, storage, or disposal of hazardous materials from construction to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

c) The project site is not within $\frac{1}{4}$ mile of an existing or proposed school. No impact would occur.

NO IMPACT

d) The following databases were checked on December 28, 2015 for known hazardous materials contamination at the project site:

- *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database;*
- *Environmental Protection Agency EnviroMapper database;*
- *California State Water Quality Control Board GeoTracker database; and*
- *California Department of Toxic Substances Control EnviroStor database*

The project site does not appear on any of the above lists. Therefore, no impact would occur.

NO IMPACT

e, f) The nearest airport is the Flabob Airport located approximately 4.75 miles from the project site. Additionally, the project would not involve construction of buildings or physical development which would interfere with air traffic in the area. Therefore, no impacts related to airport safety would occur.

NO IMPACT

g) The proposed project would generate vehicle trips to the project site. As described in Section XVI, *Transportation/ Traffic*, the project would minimal vehicle trips as the site would only be used to store commercial trailers. The project would not cause congestion on local roadways that would interfere with established evacuation procedures. Therefore, project impacts related to emergency access would be less than significant.

LESS THAN SIGNIFICANT IMPACT



h) The project site is not located in an area designated to be of a high fire hazard are illustrated on Figure PS-7 of the Riverside General Plan Public Safety Element.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the project:				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, c-f) The project site is located in close proximity to the Springbrook Wash Arroyo and the Gage Canal. Construction of the project would include grading and other activities that could have impacts on water quality and drainage. Hydrological impacts from operation of the project could result due to increased runoff resulting from an increase in impervious surfaces on-site. Due to the size of the site (less than 1 acre) the project is not required to comply with stormwater management requirements under the National Pollutant Discharge Elimination System (NPDES) requirements. The design of the onsite drainage system would utilize a storm water retention basin with an infiltration facility at approximately 5 feet below ground surface (bgs). According to a Limited Geotechnical Investigation performed by CHJ Consultants (see Appendix D), site soils are suitable for the facility and the proposed configuration poses no erosion control issues from a geotechnical standpoint. Nevertheless, mitigation measure HYD-1 is required to reduce potential impacts to a less than significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

b) The proposed project is the development of a 0.98 acre parking lot for the storage of commercial trailers. The parking lot would increase impervious surfaces on-site and could affect ground water recharge. However, due to the small size of the project (less than 1 acre of ground disturbance) the potential loss of groundwater recharge would be less significant.

LESS THAN SIGNIFICANT IMPACT

g, h) The proposed project does not involve the development or placement of housing. Per FEMA flood zone maps (#06065C0065G), the site is located in Zone X. The site is located in Zone X, "Other Areas", which are outside both the 100-year flood zone (the area with a 1% chance per year of flooding) and the 500-year flood zone (the area with a 0.2% chance per year of flooding). Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT



i,j) The project site is approximately 42 miles from the Pacific Ocean and is not located within a seiche, tsunami, or landslide/mudslide hazard zone (CA Department of Conservation, 2013).

NO IMPACT

Mitigation Measure

Mitigation Measure HYD-1 would be required to reduce any potential impacts to onsite drainage to a less than significant level.

HYD-1 Construction Stormwater Best Management Practices. Best management practices (BMPs) shall be implemented to control stormwater runoff and discharge from the project site, comparable to the types of BMPs that would be implemented under a Stormwater Pollution Protection Plan (SWPPP) under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. These BMPs shall be adhered to during construction in order to stabilize disturbed soils, reduce erosion and sedimentation, and prevent off-site water quality degradation. Such BMPs may include but are not limited to those described below.

- Erosion minimizing efforts such as straw wattles, water bars, covers, silt fences, and sensitive area access restrictions (for example, flagging) that would be installed before clearing and grading begins.
- Mulching, seeding, or other suitable stabilization measures would be used to protect exposed areas during construction activities.
- During construction activities, measures would be in place to ensure that contaminants are not discharged from the construction site.
- Silting basin(s) established as necessary to capture silt and other materials which might otherwise be carried from the site by rainwater surface runoff.
- Straw wattles (or comparably effective devices [as determined by the on-site Civil Engineer, in consultation with the Environmental Monitor]) shall be placed on the downslope sides of the proposed work which would direct flows into temporary sedimentation basins.
- All erosion control materials shall be biodegradable and natural fiber.

All be BMPs shall be checked and maintained regularly and after all larger storm events. All remedial work shall be done immediately after discovery so sedimentation control devices remain in good working order during the entire construction phase. Proper implementation shall be verified by the Environmental Monitor.

Implementation of Measure HYD-1 would reduce impacts related to onsite drainage to a less than significant level.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. LAND USE AND PLANNING				
-- Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) The project site within an urbanized area. Neither land use nor circulation patterns would be altered by the proposed project. There would be no impact.

NO IMPACT

b) The project site is designated Business/Office Park (B/OP) and OS-Open Space and zoned BMP-SP-Business and Manufacturing Park, Hunter Business Park Specific Plan Overlay Zone, and WC-Water Course Overlay Zone.

The B/OP land use designation is intended for research/development and related flexible space; laboratories, offices; support commercial and light industrial uses. The BMP zone is established to provide a district for low-intensity and low-impact industrial, office, and related uses. Typical uses include research and development facilities and laboratories; administrative, executive and professional offices; small-scale warehouses, light manufacturing; and support commercial.

The proposed project involves a parking lot for commercial trailers. This use is consistent with the land use and zoning as it is considered to support commercial uses. There would be no impact.

NO IMPACT

c) The City of Riverside is located within the boundary of the Stephen's Kangaroo Rat Habitat Conservation Plan, the Lake Mathews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, the El Sobrante Landfill Habitat Conservation Plan, and the Multiple Species Conservation Plan. However, the project

site is not located within the limits of any of these plans (City of Riverside, 2007). No impact would occur.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. MINERAL RESOURCES				
-- Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a,b) The project site is currently vacant. The project would develop a parking lot on the site. There are no known mineral resources on the site. There would be no impact.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. NOISE				
-- 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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XII. NOISE

-- Would the project result in:

- 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?
- 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Overview of Sound Measurement

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dBA level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If a sound's physical intensity is doubled, the sound level increases by 3 dBA, regardless of the initial sound level. For example, 60 dBA plus 60 dBA equals 63 dBA. Where ambient noise levels are high in comparison to a new noise source, the change in noise level would be less than 3 dBA. For example, 70 dBA ambient noise levels are combined with a 60 dBA noise source the resulting noise level equals 70.4 dBA.

Noise that is experienced at any receptor can be attenuated by distance or the presence of noise barriers or intervening terrain. Sound from a single source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level



attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. For acoustically absorptive, or soft, sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), ground attenuation of about 1.5 dBA per doubling of distance normally occurs. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction.

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S. The City has not adopted any thresholds or regulations addressing construction vibration.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. The vibration thresholds established by the Federal Transit Administration (FTA) are 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools). The threshold for the proposed project is 72 VdB for residences during hours when people normally sleep, and 75 VdB for institutional land uses, such as Pacific Friends School (0.3 miles from the site). In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings.

Regulatory Setting

California Government Code Section 63502(g)

The State of California Department of Health Services, Environmental Health Division, has published *Guidelines for Noise and Land Use Compatibility* (the *State Guidelines*). The *State Guidelines*, indicate that residential land uses and other noise-sensitive receptors generally should locate in areas where outdoor ambient noise levels do not exceed 65 to 70 dB(A) (CNEL or Ldn). The State Department of Housing and Community Development does require, however, that new multi-family units not be exposed to outdoor ambient noise levels in excess of 65 dB(A) (CNEL or Ldn), and that, if necessary, sufficient noise insulation be provided to reduce interior ambient levels to 45 dB(A) Ldn/CNEL.

City of Riverside Noise Standards

The City of Riverside Noise Element examines noise sources and provides information which may be used in setting land use policies to encourage noise-compatible uses and to aid in enforcement of a local noise ordinance. The Noise Element outlines noise/land use

compatibility guidelines in Figure N-10. These compatibility guidelines show a range of noise standards for various land use categories

The City's Noise Control Ordinance (Municipal Code Section 7.25.010) includes exterior sound level standards for different land uses. The standards are shown in Table 5 below.

Table 5
Riverside Exterior Noise Standards

Zone	7:00 A.M. to 10:00 P.M.	10:00 P.M. to 7:00 A.M.
Residential	55 dBA	45 dBA
Commercial/office	65 dBA	65 dBA
Industrial	70 dBA	70 dBA
Community support	60 dBA	60 dBA
Public recreation facility	65 dBA	65 dBA
Nonurban	70 dBA	70 dBA

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise sensitive land uses typically include residences, hospitals, schools, guest lodging, libraries, and parks. Noise sensitive land uses in the area are predominantly single-family residences located approximately 625 feet from the project site.

a,c) Existing uses near the project site may periodically be subject to noises associated with operation of the parking lot, including noise from trucks and trailers entering and existing the site. The closest sensitive receptors are the residences located 625 feet from the project site.

Operation of the proposed parking lot would involve commercial trucks and trailers going to and from the project site. An individual truck can generate noise of up to 85 dBA at 50 feet, or about 60-65 dBA at 625 feet. Such levels could be disruptive if they were to occur at night or in the early morning hours. However, noise generated by truck access would not adversely affect nearby sensitive receptors due to distance, the relatively low frequency of noise events, and the lower noise level sensitivity of receptors during the day when deliveries would occur. Since truck trips are anticipated to be during daytime hours and the nearest sensitive receptor is 625 feet away, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b) Operation of the proposed project would not perceptibly increase groundborne vibration or groundborne noise on the project site above existing conditions. Construction of the proposed project could potentially increase groundborne vibration on the project site, but construction effects would be temporary. Based on the information presented in Table 6, vibration levels could reach approximately 74 VdB 100 feet from the project site. At this distance, maximum vibration levels are at a level the dividing line between barely perceptible and distinctly perceptible levels for many people. The nearest sensitive receptor is 625 feet away and would experience much lower levels of groundborne vibration.

Table 6
Vibration Source Levels for
Construction Equipment

Equipment	Approximate VdB
	100 Feet
Loaded Trucks	74
Jackhammer	67
Small Bulldozer	46

Source: Federal Railroad Administration, 1998

Impacts from groundborne vibration would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d) Noise levels from construction of the proposed project would result from construction of the parking lot and traffic noise from construction vehicles. Nearby noise-sensitive land uses, including the residences 625 feet north of the project site, would be exposed to temporary construction noise during development of the proposed project. Noise impacts are a function of the type of activity being undertaken and the distance to the receptor location.

As shown in Table 7, typical construction noise levels at 100 feet from the source range from about 74 to 83 dBA, which would result in maximum noise level in the 58- 67 dBA range at the residences 625 feet from the project site.

These levels would be audible to nearby residents. The Riverside Municipal Code prohibits construction activities between the hours of 7:00 PM and 7:00 AM on weekdays, 5:00 PM and 8:00 AM on Saturdays or anytime on Sundays and federal holidays. Therefore, construction would not occur during recognized sleep hours for residences. Additionally, construction noise would be temporary and intermittent. Therefore, impacts from construction noise would be less than significant.

Table 7
Typical Noise Levels at Construction Sites

Equipment Onsite	Typical Level (dBA) 100 Feet from the Source
Air Compressor	75
Backhoe	74
Concrete Mixer	79
Crane, mobile	77
Dozer	79
Jack Hammer	82

Table 7
Typical Noise Levels at Construction Sites

Equipment Onsite	Typical Level (dBA) 100 Feet from the Source
Paver	83
Saw	70
Truck	82

Noise levels assume a noise attenuation rate of 6dBA per doubling of distance.
Source: Federal Transit Administration (FTA), May 2006

LESS THAN SIGNIFICANT IMPACT

e,f) The nearest airport is the Flabob Airport located approximately 4.75 miles from the project site. The project would not expose people residing or working in the project area to excessive noise. There would be no impact from airport noise.

NO IMPACT

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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XIII. 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)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) The proposed project consists of the development of a parking lot to store 53-foot trailers. No housing is proposed and therefore would not induce population growth.

NO IMPACT

b, c) The parking lot would be located on an area that is currently vacant land and adjacent to commercial development. The project would not displace housing or people. There would be no impact.

NO IMPACT



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a (i) & (ii) The Riverside Fire Department and the Riverside Police Department provide emergency protection services within the City.

The Operations Division of the Fire Department responds to over 30,000 emergency calls annually. Operations employs 211 full-time firefighters, housed 24/7 in 14 strategically located fire stations spanning a primary response area of over 81 square miles. In addition to firefighting and both Basic and Advanced Life Support services, Operations personnel are skilled in Heavy Rescue, Technical Rescue, Hazardous Materials Response and Water Surface Rescue specialties. The nearest fire station to the project site is Station 6 located at 1077 Orange Street.

Police protection services include emergency and non-emergency police response, routine police patrols, investigative services, traffic enforcement, traffic investigation, and the Community Services Bureau used to strengthen the relationship between the community and the police department. The police station nearest to the project site is located at 3775 Fairmount Blvd is located just over 3 miles from the project site.

The proposed project is the development of a parking lot to store 22 commercial trailers. There project would not increase the population of the City as no housing is proposed. Additionally,



the project not increase substantially increase employment in or generate activity that would generate the need for new or expanded police or fire protection facilities.

NO IMPACT

a (iii), (iv), & (v) The proposed project does not include residential development that would directly result in population increases or increased demand for schools, parks, or other facilities. The project in itself would not induce any additional population growth. For these reasons, no impact would occur

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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XV. 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?
- 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, b) The proposed project does not involve the development of residences that would result in an increase in population or additional demand for park or recreational facilities. Furthermore, the project would not directly or indirectly affect any existing parks or recreation facilities. Therefore, no impact would occur.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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XVI. TRANSPORTATION/TRAFFIC

-- Would the project:

- a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC				
-- Would the project:				
modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?				
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

a) While trucks may alter their normal routes slightly to reach the project site for storage, the parking lot would not generate new trips that would conflict with any applicable plan, ordinance or policy establishing a measure of effectiveness for the City circulation system. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b) As discussed above, the proposed project would be accessed via existing access located at 797 Palmyrita Avenue. Regional access to the project site is provided by Interstate 215, located approximately 1 mile to the northeast. Based on the City's Performance Criteria for measuring the performance level of the local circulation system, as described in the City of Riverside Circulation and Community Mobility Element, the City will strive to maintain a Level of Service (LOS) of D or better on arterial streets wherever possible. While trucks may alter their normal



routes slightly to reach the project site for storage, the parking lot would not generate new trips that would change the LOS rating of any roadways.

LESS THAN SIGNIFICANT IMPACT

c) As discussed in Section VIII, *Hazards and Hazardous Materials*, because the project site is located about located approximately 4.75 miles from the nearest airport (Flabob Airport) and the proposed project would not present any impediments to air traffic, no impact to air traffic patterns would occur.

NO IMPACT

d,e) The project site is currently accessible via Palmyrita Avenue, which would remain the access route to the project site after implementation of the project. The street does not feature hazardous design features such as sharp curves. or dangerous intersections. As described above, the project would not result in levels of traffic congestion that would impede emergency access. Therefore, the project would not create significant traffic safety hazards or adversely affect emergency access, and these impacts would be less than significant

f) The proposed project would not result in changes to the public transportation system that would conflict with adopted policies plans or programs. Additionally, as described in Section XIII, *Population and Housing*, no population increase would result from the project that would increase the burden on public transportation. Therefore, the project would have no impact in this regard.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
-- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
-- Would the project:				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a, b, e) The proposed project would not involve any physical development that would use additional wastewater. Use of the parking lot and landscaping would generate a minimal amount of wastewater. However, this minimal amount of wastewater generated by the proposed project would be treated at the City's nearby wastewater treatment and recycling facility, the Riverside Water Quality Control Plant (RWQCP) located at 5950 Acorn Street. The plant is currently being expanded and retrofitted to meet the needs of future generations. As currently constituted, the RWQCP consists of two separate treatment plants and one common tertiary filtration plant. These provide preliminary, primary, secondary and tertiary treatment for a rated capacity of 40 million gallons per day (MGD). The minimal amount of wastewater generated by the proposed project would be accommodated by the City's wastewater facility. Therefore, project impacts related to wastewater resources or facilities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c) The proposed project would involve the development of a parking lot to store commercial trailers. The project site has been previously disturbed but is currently vacant. Under the proposed project, includes onsite drainage, and as described in Section IX, *Hydrology and Water Quality*, mitigation is required to reduce potential stormwater impacts during construction to a less than significant level. Therefore, with implementation of HYD-1, potentially significant impacts would be mitigated to a less than significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED



d) The proposed project would be connected to the City's water supply system to support onsite landscaping. According to the City's General Plan Public Facilities and Infrastructure Element, the City the primary water sources for the City are groundwater, imported water, and recycled water. Several projects are planned to increase the reliability of the water supply included the John W. North Water Treatment Plant which would treat groundwater. For 2015, the total water supply was estimated to be 98,171 acre-feet. Based on the nature of the project, water demand would be minimal. The project's minimal demand for water would be accommodated by the City's yearly allocation. Therefore, project impacts related to water supply would be less than significant.

LESS THAN SIGNIFICANT IMPACT

f,g) The proposed project would involve the development and operation of a commercial trailer parking lot that would generate minimal solid waste. Trash collection and disposal in Santa Paula is performed by the City for commercial and residential customers. The nearest landfill is the Badlands Sanitary Landfill located at 31125 Ironwood Avenue in Moreno Valley CA. The landfill has a remaining capacity of 14,730,025 Cubic Yards (CalRecycle, 2015). Based on the nature of the project, solid waste generation would be minimal. Therefore, impacts of the proposed project related to generation of solid waste would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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a) As discussed under Section IV, Biological Resources, the project's impacts on sensitive species or habitat would be less than significant. As discussed under Item V, Cultural Resources, there is no evidence that that archaeological or paleontological resources or human remains are present onsite. There are no historical structures onsite. Potential impacts to important examples of the major periods of California history or prehistory would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b) The project would have impacts related to transportation/circulation that have been determined to be less than significant. Additionally, the project is consistent with the City's long-range plans as described in the City's General Plan, and cumulative impacts related to these issues are accounted for in General Plan FEIR. Cumulative impacts associated with the project would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c) The project would have impacts related to transportation/circulation that have been determined to be less than significant with incorporated mitigation. Additionally, the project is consistent with the City's long-range plans as described in the City's General Plan and analyzed in the General Plan Final EIR, and cumulative impacts related to these issues are accounted for in these documents. Cumulative impacts associated with the project would therefore be less than significant.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED



REFERENCES

Bibliography

City of Riverside, Fire Department website. Accessed at: <http://riversideca.gov/fire/>. Accessed on December 31, 2015

City of Riverside, Police Department website. Accessed at: <http://riversideca.gov/rpd/>. Accessed on December 31, 2015.

City of Riverside, General Plan 2025, 2007. Accessed at: <http://www.riversideca.gov/planning/gp2025program/general-plan.asp>

City of Riverside. Municipal Code. Accessed December 2015. Retrieved from: <https://www.riversideca.gov/municode/>

California Department of Conservation, Riverside County Important Farmland 2012, 2015. Accessed at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/riv12_w.pdf

California Department of Conservation. *Official Tsunami Inundation Maps*: 2013. Available at: http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/Pages/index.aspx

California Department of Resources Recycling and Recovery (CalRecycle). Solid Waste Information System (SWIS). Accessed December 2015.. <http://www.calrecycle.ca.gov/SWFacilities/Directory/>.

California Department of Toxic Substances Control. *Envirostor Database*. Website: <http://www.envirostor.dtsc.ca.gov/public/>. Accessed December, 2015.

California State Water Quality Control Board. *Geotracker database*. Website: <http://geotracker.waterboards.ca.gov/>. Accessed December, 2015.

Federal Railroad Administration, *Human Response to Different Levels of Groundborne Vibration*, 1993.

Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment*, May 2006.

United States Environmental Protection Agency. *CERCLIS database*. Website: <http://www.epa.gov/superfund/sites/cursites/>. Accessed December, 2015.

United States Environmental Protection Agency. *EnviroMapper database*. Website: <http://www.epa.gov/emefdata/em4ef.home>. Accessed December, 2015.

United State Fish and Wildlife Service. Critical Habitat Map.

Website: <http://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>. Accessed December, 2015.

Appendix A

CalEEMod Worksheets

797 Palmyrita Avenue Trailer Parking Lot Project
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	42.69	1000sqft	0.98	42,689.00	0
City Park	0.34	Acre	0.34	14,810.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2016
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park used for landscaping on site, approx 15000

Construction Phase - No demo necessary, no buildings to coat, more time needed for site prep20

Off-road Equipment - No architectural coating

Off-road Equipment -

Off-road Equipment -

Trips and VMT - No architectural coating

Demolition -

Architectural Coating - No buildings to coat

Vehicle Trips - No trips for landscaping

Vehicle Emission Factors - Based on Traffic Flow Breakdown from clinet

Vehicle Emission Factors - LDA 0.466361

HHD 0.040207

Swap

Vehicle Emission Factors - HHD - 0.040207

LDA - 0.466361

Area Coating - no buildings to coat

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	24137	0
tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblGrading	AcresOfGrading	7.50	1.50
tblGrading	AcresOfGrading	5.00	1.00
tblLandUse	LandUseSquareFeet	42,690.00	42,689.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.02	0.02

tblVehicleEF	HHD	9.1460e-003	0.01
tblVehicleEF	HHD	2.81	2.78
tblVehicleEF	HHD	1.45	1.70
tblVehicleEF	HHD	54.60	60.65
tblVehicleEF	HHD	566.61	576.70
tblVehicleEF	HHD	1,587.75	1,629.98
tblVehicleEF	HHD	59.71	66.79
tblVehicleEF	HHD	0.04	0.39
tblVehicleEF	HHD	4.87	5.80
tblVehicleEF	HHD	5.89	7.75
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tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.06	0.06
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tblVehicleEF	HHD	0.11	0.17
tblVehicleEF	HHD	3.0930e-003	5.0390e-003
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tblVehicleEF	HHD	8.7530e-003	8.7490e-003
tblVehicleEF	HHD	0.10	0.15
tblVehicleEF	HHD	2.5010e-003	3.9960e-003
tblVehicleEF	HHD	2.6600e-003	3.7260e-003
tblVehicleEF	HHD	0.13	0.19
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tblVehicleEF	HHD	5.6020e-003	5.5860e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5350e-003	1.7070e-003
tblVehicleEF	HHD	2.6600e-003	3.7260e-003
tblVehicleEF	HHD	0.13	0.19
tblVehicleEF	HHD	0.57	0.59
tblVehicleEF	HHD	1.4900e-003	1.9840e-003
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tblVehicleEF	HHD	0.45	0.65
tblVehicleEF	HHD	2.06	2.67
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	9.1460e-003	0.01
tblVehicleEF	HHD	2.04	2.02
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tblVehicleEF	HHD	59.71	66.79
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tblVehicleEF	HHD	5.02	5.98
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tblVehicleEF	HHD	0.11	0.17
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tblVehicleEF	HHD	1,587.75	1,629.98

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tblVehicleEF	HHD	3.0380e-003	4.3990e-003
tblVehicleEF	HHD	0.16	0.25
tblVehicleEF	HHD	0.62	0.64

tblVehicleEF	HHD	1.6650e-003	2.2590e-003
tblVehicleEF	HHD	0.23	0.30
tblVehicleEF	HHD	0.48	0.69
tblVehicleEF	HHD	1.97	2.53
tblVehicleEF	LDA	9.9610e-003	0.01
tblVehicleEF	LDA	8.4720e-003	0.01
tblVehicleEF	LDA	0.93	1.18
tblVehicleEF	LDA	1.93	2.47
tblVehicleEF	LDA	268.77	293.38
tblVehicleEF	LDA	62.09	66.78
tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.13	0.17
tblVehicleEF	LDA	1.4500e-003	1.5970e-003
tblVehicleEF	LDA	2.7160e-003	2.7190e-003
tblVehicleEF	LDA	1.3310e-003	1.4560e-003
tblVehicleEF	LDA	2.4950e-003	2.4750e-003
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.28	0.35
tblVehicleEF	LDA	0.15	0.20
tblVehicleEF	LDA	3.3140e-003	3.3310e-003
tblVehicleEF	LDA	7.6900e-004	7.7800e-004
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.05	0.05

tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.28	0.35
tblVehicleEF	LDA	0.16	0.22
tblVehicleEF	LDA	9.9610e-003	0.01
tblVehicleEF	LDA	8.4720e-003	0.01
tblVehicleEF	LDA	1.10	1.38
tblVehicleEF	LDA	1.49	1.92
tblVehicleEF	LDA	291.04	317.69
tblVehicleEF	LDA	62.09	66.78
tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.12	0.16
tblVehicleEF	LDA	1.4500e-003	1.5970e-003
tblVehicleEF	LDA	2.7160e-003	2.7190e-003
tblVehicleEF	LDA	1.3310e-003	1.4560e-003
tblVehicleEF	LDA	2.4950e-003	2.4750e-003
tblVehicleEF	LDA	0.12	0.15
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.28	0.34
tblVehicleEF	LDA	0.12	0.17
tblVehicleEF	LDA	3.5920e-003	3.6100e-003
tblVehicleEF	LDA	7.6100e-004	7.6800e-004
tblVehicleEF	LDA	0.12	0.15
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.03	0.05

tblVehicleEF	LDA	0.28	0.34
tblVehicleEF	LDA	0.13	0.18
tblVehicleEF	LDA	9.9610e-003	0.01
tblVehicleEF	LDA	8.4720e-003	0.01
tblVehicleEF	LDA	0.89	1.13
tblVehicleEF	LDA	1.90	2.43
tblVehicleEF	LDA	265.00	289.27
tblVehicleEF	LDA	62.09	66.78
tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.13	0.17
tblVehicleEF	LDA	1.4500e-003	1.5970e-003
tblVehicleEF	LDA	2.7160e-003	2.7190e-003
tblVehicleEF	LDA	1.3310e-003	1.4560e-003
tblVehicleEF	LDA	2.4950e-003	2.4750e-003
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.32	0.39
tblVehicleEF	LDA	0.14	0.20
tblVehicleEF	LDA	3.2670e-003	3.2830e-003
tblVehicleEF	LDA	7.6800e-004	7.7700e-004
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.32	0.39

tblVehicleEF	LDA	0.15	0.21
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.29	2.86
tblVehicleEF	LDT1	4.84	5.83
tblVehicleEF	LDT1	317.35	341.86
tblVehicleEF	LDT1	72.37	77.04
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.24	0.29
tblVehicleEF	LDT1	0.29	0.34
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
tblVehicleEF	LDT1	4.5710e-003	5.0010e-003
tblVehicleEF	LDT1	0.19	0.21
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	1.07	1.21
tblVehicleEF	LDT1	0.38	0.47
tblVehicleEF	LDT1	3.8390e-003	3.8580e-003
tblVehicleEF	LDT1	9.2800e-004	9.4400e-004
tblVehicleEF	LDT1	0.19	0.21
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.08	0.11
tblVehicleEF	LDT1	1.07	1.21
tblVehicleEF	LDT1	0.41	0.50

tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.65	3.28
tblVehicleEF	LDT1	3.74	4.53
tblVehicleEF	LDT1	341.98	368.23
tblVehicleEF	LDT1	72.37	77.04
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.21	0.26
tblVehicleEF	LDT1	0.27	0.32
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
tblVehicleEF	LDT1	4.5710e-003	5.0010e-003
tblVehicleEF	LDT1	0.36	0.40
tblVehicleEF	LDT1	0.37	0.41
tblVehicleEF	LDT1	0.24	0.27
tblVehicleEF	LDT1	0.06	0.09
tblVehicleEF	LDT1	1.05	1.19
tblVehicleEF	LDT1	0.32	0.39
tblVehicleEF	LDT1	4.1440e-003	4.1610e-003
tblVehicleEF	LDT1	9.0900e-004	9.2100e-004
tblVehicleEF	LDT1	0.36	0.40
tblVehicleEF	LDT1	0.37	0.41
tblVehicleEF	LDT1	0.24	0.27
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	1.05	1.19
tblVehicleEF	LDT1	0.34	0.42
tblVehicleEF	LDT1	0.02	0.03

tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.21	2.76
tblVehicleEF	LDT1	4.75	5.72
tblVehicleEF	LDT1	313.18	337.41
tblVehicleEF	LDT1	72.37	77.04
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.23	0.28
tblVehicleEF	LDT1	0.29	0.34
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
tblVehicleEF	LDT1	4.5710e-003	5.0010e-003
tblVehicleEF	LDT1	0.20	0.23
tblVehicleEF	LDT1	0.36	0.41
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	1.26	1.41
tblVehicleEF	LDT1	0.37	0.46
tblVehicleEF	LDT1	3.7870e-003	3.8060e-003
tblVehicleEF	LDT1	9.2600e-004	9.4200e-004
tblVehicleEF	LDT1	0.20	0.23
tblVehicleEF	LDT1	0.36	0.41
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.08	0.11
tblVehicleEF	LDT1	1.26	1.41
tblVehicleEF	LDT1	0.40	0.49
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02

tblVehicleEF	LDT2	1.29	1.62
tblVehicleEF	LDT2	2.76	3.47
tblVehicleEF	LDT2	385.92	413.27
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LDT2	0.26	0.34
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.17
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.46	0.52
tblVehicleEF	LDT2	0.20	0.26
tblVehicleEF	LDT2	4.5140e-003	4.5420e-003
tblVehicleEF	LDT2	1.0500e-003	1.0610e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.17
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.46	0.52
tblVehicleEF	LDT2	0.22	0.28
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	1.51	1.89

tblVehicleEF	LDT2	2.12	2.68
tblVehicleEF	LDT2	417.00	446.44
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.14	0.18
tblVehicleEF	LDT2	0.24	0.31
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.17	0.20
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.45	0.51
tblVehicleEF	LDT2	0.17	0.22
tblVehicleEF	LDT2	4.8810e-003	4.9110e-003
tblVehicleEF	LDT2	1.0390e-003	1.0480e-003
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.17	0.20
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.45	0.51
tblVehicleEF	LDT2	0.18	0.24
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	1.24	1.56
tblVehicleEF	LDT2	2.71	3.41

tblVehicleEF	LDT2	380.67	407.66
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.14	0.19
tblVehicleEF	LDT2	0.26	0.34
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.17	0.19
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.53	0.60
tblVehicleEF	LDT2	0.20	0.26
tblVehicleEF	LDT2	4.4520e-003	4.4800e-003
tblVehicleEF	LDT2	1.0490e-003	1.0600e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.17	0.19
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.53	0.60
tblVehicleEF	LDT2	0.21	0.28
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.87	1.07

tblVehicleEF	LHD1	3.63	4.04
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	1.80	2.13
tblVehicleEF	LHD1	1.00	1.04
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003
tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	2.8550e-003	3.0390e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4180e-003	1.4530e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.30	0.33
tblVehicleEF	LHD1	5.3280e-003	5.3840e-003
tblVehicleEF	LHD1	4.5600e-004	4.6000e-004
tblVehicleEF	LHD1	2.8550e-003	3.0390e-003

tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4180e-003	1.4530e-003
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.32	0.35
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.89	1.09
tblVehicleEF	LHD1	2.93	3.26
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	1.68	2.00
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003

tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	5.1220e-003	5.4790e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.8570e-003	2.9970e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.26	0.29
tblVehicleEF	LHD1	5.3280e-003	5.3850e-003
tblVehicleEF	LHD1	4.4400e-004	4.4700e-004
tblVehicleEF	LHD1	5.1220e-003	5.4790e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.8570e-003	2.9970e-003
tblVehicleEF	LHD1	0.07	0.09
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.28	0.31
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.87	1.06
tblVehicleEF	LHD1	3.38	3.76
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07

tblVehicleEF	LHD1	1.76	2.10
tblVehicleEF	LHD1	0.99	1.03
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003
tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	3.2020e-003	3.4840e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5220e-003	1.5740e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.60	0.62
tblVehicleEF	LHD1	0.28	0.32
tblVehicleEF	LHD1	5.3280e-003	5.3840e-003
tblVehicleEF	LHD1	4.5200e-004	4.5600e-004
tblVehicleEF	LHD1	3.2020e-003	3.4840e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5220e-003	1.5740e-003
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	0.60	0.62
tblVehicleEF	LHD1	0.30	0.34

tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.62	0.75
tblVehicleEF	LHD2	1.66	1.91
tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.91	3.41
tblVehicleEF	LHD2	0.51	0.52
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	1.2570e-003	1.4040e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4800e-004	6.8900e-004
tblVehicleEF	LHD2	0.07	0.08

tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.14	0.17
tblVehicleEF	LHD2	5.1460e-003	5.1750e-003
tblVehicleEF	LHD2	2.3500e-004	2.4000e-004
tblVehicleEF	LHD2	1.2570e-003	1.4040e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4800e-004	6.8900e-004
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.63	0.76
tblVehicleEF	LHD2	1.36	1.57
tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.75	3.22
tblVehicleEF	LHD2	0.49	0.50
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	2.2650e-003	2.5460e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3100e-003	1.4320e-003
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	5.1460e-003	5.1760e-003
tblVehicleEF	LHD2	2.2900e-004	2.3400e-004
tblVehicleEF	LHD2	2.2650e-003	2.5460e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3100e-003	1.4320e-003
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.62	0.75
tblVehicleEF	LHD2	1.55	1.78

tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.87	3.36
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	1.3820e-003	1.5920e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	7.4400e-004
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.25	0.27
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	5.1460e-003	5.1750e-003
tblVehicleEF	LHD2	2.3300e-004	2.3700e-004
tblVehicleEF	LHD2	1.3820e-003	1.5920e-003
tblVehicleEF	LHD2	0.05	0.05

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	7.4400e-004
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.25	0.27
tblVehicleEF	LHD2	0.15	0.17
tblVehicleEF	MCY	26.48	29.62
tblVehicleEF	MCY	9.94	9.82
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.22	1.25
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	1.12	1.14
tblVehicleEF	MCY	0.45	0.48
tblVehicleEF	MCY	0.57	0.59
tblVehicleEF	MCY	2.63	2.77
tblVehicleEF	MCY	1.39	1.60
tblVehicleEF	MCY	2.11	2.16
tblVehicleEF	MCY	2.0290e-003	2.0360e-003
tblVehicleEF	MCY	6.7200e-004	6.9100e-004
tblVehicleEF	MCY	1.12	1.14
tblVehicleEF	MCY	0.45	0.48

tblVehicleEF	MCY	0.57	0.59
tblVehicleEF	MCY	2.88	3.02
tblVehicleEF	MCY	1.39	1.60
tblVehicleEF	MCY	2.27	2.32
tblVehicleEF	MCY	26.16	29.25
tblVehicleEF	MCY	8.83	8.82
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.06	1.08
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	2.17	2.21
tblVehicleEF	MCY	0.66	0.69
tblVehicleEF	MCY	1.41	1.44
tblVehicleEF	MCY	2.56	2.69
tblVehicleEF	MCY	1.37	1.57
tblVehicleEF	MCY	1.84	1.88
tblVehicleEF	MCY	2.0220e-003	2.0280e-003
tblVehicleEF	MCY	6.4600e-004	6.6600e-004
tblVehicleEF	MCY	2.17	2.21
tblVehicleEF	MCY	0.66	0.69
tblVehicleEF	MCY	1.41	1.44

tblVehicleEF	MCY	2.81	2.94
tblVehicleEF	MCY	1.37	1.57
tblVehicleEF	MCY	1.98	2.02
tblVehicleEF	MCY	25.65	28.65
tblVehicleEF	MCY	9.58	9.47
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.18	1.21
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	1.33	1.35
tblVehicleEF	MCY	0.62	0.67
tblVehicleEF	MCY	0.58	0.60
tblVehicleEF	MCY	2.60	2.73
tblVehicleEF	MCY	1.63	1.85
tblVehicleEF	MCY	2.04	2.08
tblVehicleEF	MCY	2.0150e-003	2.0200e-003
tblVehicleEF	MCY	6.6400e-004	6.8300e-004
tblVehicleEF	MCY	1.33	1.35
tblVehicleEF	MCY	0.62	0.67
tblVehicleEF	MCY	0.58	0.60
tblVehicleEF	MCY	2.85	2.99

tblVehicleEF	MCY	1.63	1.85
tblVehicleEF	MCY	2.20	2.24
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.86	2.15
tblVehicleEF	MDV	4.27	4.89
tblVehicleEF	MDV	505.88	535.78
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.25	0.30
tblVehicleEF	MDV	0.42	0.49
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
tblVehicleEF	MDV	2.8800e-003	2.8470e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.19	0.18
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.37	0.43
tblVehicleEF	MDV	5.7500e-003	5.7720e-003
tblVehicleEF	MDV	1.3440e-003	1.3510e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.19	0.18
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.56	0.56

tblVehicleEF	MDV	0.40	0.46
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.19	2.52
tblVehicleEF	MDV	3.28	3.76
tblVehicleEF	MDV	546.16	578.32
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.22	0.27
tblVehicleEF	MDV	0.39	0.45
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
tblVehicleEF	MDV	2.8800e-003	2.8470e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.31	0.36
tblVehicleEF	MDV	6.2130e-003	6.2350e-003
tblVehicleEF	MDV	1.3270e-003	1.3310e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.33	0.38

tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.79	2.07
tblVehicleEF	MDV	4.19	4.80
tblVehicleEF	MDV	499.07	528.58
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.24	0.28
tblVehicleEF	MDV	0.42	0.49
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
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tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.64	0.65
tblVehicleEF	MDV	0.36	0.42
tblVehicleEF	MDV	5.6710e-003	5.6930e-003
tblVehicleEF	MDV	1.3430e-003	1.3490e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.64	0.65
tblVehicleEF	MDV	0.39	0.45
tblVehicleEF	MH	2.62	3.88

tblVehicleEF	MH	7.32	8.66
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.71	1.96
tblVehicleEF	MH	0.75	0.84
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	1.29	1.46
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.46	0.51
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.76	1.84
tblVehicleEF	MH	0.42	0.52
tblVehicleEF	MH	6.3750e-003	6.4790e-003
tblVehicleEF	MH	4.3300e-004	4.6500e-004
tblVehicleEF	MH	1.29	1.46
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.46	0.51
tblVehicleEF	MH	0.09	0.12
tblVehicleEF	MH	1.76	1.84
tblVehicleEF	MH	0.45	0.56

tblVehicleEF	MH	2.69	3.99
tblVehicleEF	MH	5.81	6.88
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.57	1.79
tblVehicleEF	MH	0.72	0.81
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	2.27	2.58
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.92	1.04
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.75	1.83
tblVehicleEF	MH	0.36	0.44
tblVehicleEF	MH	6.3760e-003	6.4800e-003
tblVehicleEF	MH	4.0700e-004	4.3500e-004
tblVehicleEF	MH	2.27	2.58
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.92	1.04
tblVehicleEF	MH	0.09	0.12
tblVehicleEF	MH	1.75	1.83

tblVehicleEF	MH	0.39	0.47
tblVehicleEF	MH	2.60	3.85
tblVehicleEF	MH	6.83	8.06
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.67	1.91
tblVehicleEF	MH	0.74	0.83
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	1.57	1.81
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.51	0.58
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.86	1.94
tblVehicleEF	MH	0.40	0.49
tblVehicleEF	MH	6.3740e-003	6.4780e-003
tblVehicleEF	MH	4.2500e-004	4.5500e-004
tblVehicleEF	MH	1.57	1.81
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.51	0.58
tblVehicleEF	MH	0.09	0.12

tblVehicleEF	MH	1.86	1.94
tblVehicleEF	MH	0.43	0.53
tblVehicleEF	MHD	7.4170e-003	9.1490e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
tblVehicleEF	MHD	1.82	1.98
tblVehicleEF	MHD	0.86	1.20
tblVehicleEF	MHD	17.73	21.46
tblVehicleEF	MHD	606.04	606.65
tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	6.27	7.20
tblVehicleEF	MHD	3.14	4.52
tblVehicleEF	MHD	1.72	1.95
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	4.3610e-003	5.5100e-003
tblVehicleEF	MHD	0.15	0.21
tblVehicleEF	MHD	0.16	0.20
tblVehicleEF	MHD	2.1540e-003	2.6470e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.74	0.91

tblVehicleEF	MHD	1.19	1.56
tblVehicleEF	MHD	5.9920e-003	5.8760e-003
tblVehicleEF	MHD	9.4920e-003	9.5670e-003
tblVehicleEF	MHD	9.1500e-004	1.0330e-003
tblVehicleEF	MHD	4.3610e-003	5.5100e-003
tblVehicleEF	MHD	0.15	0.21
tblVehicleEF	MHD	0.18	0.22
tblVehicleEF	MHD	2.1540e-003	2.6470e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.27	1.68
tblVehicleEF	MHD	6.9900e-003	8.6220e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
tblVehicleEF	MHD	1.33	1.44
tblVehicleEF	MHD	0.87	1.21
tblVehicleEF	MHD	14.59	18.00
tblVehicleEF	MHD	642.05	642.69
tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	6.47	7.43
tblVehicleEF	MHD	2.95	4.26
tblVehicleEF	MHD	1.65	1.87
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.02	0.03

tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	8.0000e-003	0.01
tblVehicleEF	MHD	0.18	0.24
tblVehicleEF	MHD	0.15	0.19
tblVehicleEF	MHD	4.5060e-003	5.6750e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.03	1.35
tblVehicleEF	MHD	6.3480e-003	6.2250e-003
tblVehicleEF	MHD	9.4920e-003	9.5670e-003
tblVehicleEF	MHD	8.6100e-004	9.7200e-004
tblVehicleEF	MHD	8.0000e-003	0.01
tblVehicleEF	MHD	0.18	0.24
tblVehicleEF	MHD	0.17	0.21
tblVehicleEF	MHD	4.5060e-003	5.6750e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.11	1.45
tblVehicleEF	MHD	8.0070e-003	9.8770e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
tblVehicleEF	MHD	2.51	2.73
tblVehicleEF	MHD	0.86	1.19
tblVehicleEF	MHD	16.67	20.21
tblVehicleEF	MHD	556.32	556.87
tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82

tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	5.99	6.88
tblVehicleEF	MHD	3.08	4.45
tblVehicleEF	MHD	1.70	1.93
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	5.0560e-003	6.5390e-003
tblVehicleEF	MHD	0.20	0.27
tblVehicleEF	MHD	0.17	0.21
tblVehicleEF	MHD	2.3820e-003	2.9760e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.79	0.98
tblVehicleEF	MHD	1.13	1.48
tblVehicleEF	MHD	5.5000e-003	5.3940e-003
tblVehicleEF	MHD	9.4920e-003	9.5660e-003
tblVehicleEF	MHD	8.9700e-004	1.0110e-003
tblVehicleEF	MHD	5.0560e-003	6.5390e-003
tblVehicleEF	MHD	0.20	0.27
tblVehicleEF	MHD	0.20	0.24
tblVehicleEF	MHD	2.3820e-003	2.9760e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.79	0.98

tblVehicleEF	MHD	1.21	1.59
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.0430e-003	2.2030e-003
tblVehicleEF	OBUS	2.36	2.30
tblVehicleEF	OBUS	1.74	2.18
tblVehicleEF	OBUS	11.79	12.87
tblVehicleEF	OBUS	571.35	573.90
tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
tblVehicleEF	OBUS	5.94	7.28
tblVehicleEF	OBUS	3.60	4.81
tblVehicleEF	OBUS	1.59	1.69
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.1200e-003	1.5340e-003
tblVehicleEF	OBUS	0.02	0.05
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.8700e-004	1.3140e-003
tblVehicleEF	OBUS	1.1960e-003	1.2410e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.41	0.49
tblVehicleEF	OBUS	5.5500e-004	5.5100e-004
tblVehicleEF	OBUS	0.12	0.16

tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.73	0.82
tblVehicleEF	OBUS	5.6490e-003	5.5590e-003
tblVehicleEF	OBUS	9.3080e-003	9.2020e-003
tblVehicleEF	OBUS	5.8100e-004	6.1200e-004
tblVehicleEF	OBUS	1.1960e-003	1.2410e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.5500e-004	5.5100e-004
tblVehicleEF	OBUS	0.15	0.20
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.78	0.88
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.0430e-003	2.2030e-003
tblVehicleEF	OBUS	1.72	1.67
tblVehicleEF	OBUS	1.77	2.22
tblVehicleEF	OBUS	9.56	10.52
tblVehicleEF	OBUS	605.30	607.99
tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
tblVehicleEF	OBUS	6.13	7.51
tblVehicleEF	OBUS	3.35	4.48
tblVehicleEF	OBUS	1.53	1.62
tblVehicleEF	OBUS	0.02	0.05
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
tblVehicleEF	OBUS	0.05	0.08

tblVehicleEF	OBUS	1.1200e-003	1.5340e-003
tblVehicleEF	OBUS	0.01	0.05
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.8700e-004	1.3140e-003
tblVehicleEF	OBUS	2.1240e-003	2.2230e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.39	0.46
tblVehicleEF	OBUS	1.1040e-003	1.1300e-003
tblVehicleEF	OBUS	0.12	0.16
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.64	0.72
tblVehicleEF	OBUS	5.9840e-003	5.8890e-003
tblVehicleEF	OBUS	9.3090e-003	9.2020e-003
tblVehicleEF	OBUS	5.4400e-004	5.7200e-004
tblVehicleEF	OBUS	2.1240e-003	2.2230e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	1.1040e-003	1.1300e-003
tblVehicleEF	OBUS	0.15	0.20
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.69	0.77
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.0430e-003	2.2030e-003
tblVehicleEF	OBUS	3.26	3.17
tblVehicleEF	OBUS	1.74	2.18
tblVehicleEF	OBUS	11.08	12.11

tblVehicleEF	OBUS	524.48	526.81
tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
tblVehicleEF	OBUS	5.67	6.96
tblVehicleEF	OBUS	3.53	4.72
tblVehicleEF	OBUS	1.58	1.67
tblVehicleEF	OBUS	0.02	0.07
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.1200e-003	1.5340e-003
tblVehicleEF	OBUS	0.02	0.07
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.8700e-004	1.3140e-003
tblVehicleEF	OBUS	1.2780e-003	1.3870e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.45	0.53
tblVehicleEF	OBUS	6.0100e-004	6.1100e-004
tblVehicleEF	OBUS	0.12	0.16
tblVehicleEF	OBUS	0.30	0.29
tblVehicleEF	OBUS	0.70	0.79
tblVehicleEF	OBUS	5.1850e-003	5.1030e-003
tblVehicleEF	OBUS	9.3080e-003	9.2020e-003
tblVehicleEF	OBUS	5.6900e-004	5.9900e-004
tblVehicleEF	OBUS	1.2780e-003	1.3870e-003

tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.51	0.60
tblVehicleEF	OBUS	6.0100e-004	6.1100e-004
tblVehicleEF	OBUS	0.15	0.20
tblVehicleEF	OBUS	0.30	0.29
tblVehicleEF	OBUS	0.75	0.84
tblVehicleEF	SBUS	5.4360e-003	5.3980e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	1.06	1.04
tblVehicleEF	SBUS	2.20	2.82
tblVehicleEF	SBUS	18.98	20.97
tblVehicleEF	SBUS	570.82	581.72
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	8.09	8.19
tblVehicleEF	SBUS	7.78	7.92
tblVehicleEF	SBUS	1.45	1.52
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003

tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.14	0.16
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	8.1420e-003	8.5740e-003
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.25	1.31
tblVehicleEF	SBUS	1.24	1.44
tblVehicleEF	SBUS	5.6430e-003	5.6340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6310e-003	1.6850e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.14	0.16
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	8.1420e-003	8.5740e-003
tblVehicleEF	SBUS	0.30	0.32
tblVehicleEF	SBUS	1.25	1.31
tblVehicleEF	SBUS	1.33	1.54
tblVehicleEF	SBUS	5.1230e-003	5.0870e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	0.77	0.76
tblVehicleEF	SBUS	2.23	2.82
tblVehicleEF	SBUS	16.02	17.82
tblVehicleEF	SBUS	604.73	616.28
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	8.35	8.46
tblVehicleEF	SBUS	7.31	7.44

tblVehicleEF	SBUS	1.35	1.41
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.16	0.18
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.15	1.21
tblVehicleEF	SBUS	1.10	1.26
tblVehicleEF	SBUS	5.9790e-003	5.9690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.5800e-003	1.6300e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.16	0.18
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.32
tblVehicleEF	SBUS	1.15	1.21
tblVehicleEF	SBUS	1.17	1.35

tblVehicleEF	SBUS	5.8680e-003	5.8270e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	1.46	1.44
tblVehicleEF	SBUS	2.19	2.79
tblVehicleEF	SBUS	18.77	20.75
tblVehicleEF	SBUS	523.99	533.99
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	7.73	7.83
tblVehicleEF	SBUS	7.66	7.80
tblVehicleEF	SBUS	1.46	1.52
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.18	0.21
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	9.2580e-003	0.01
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.48	1.55

tblVehicleEF	SBUS	1.24	1.43
tblVehicleEF	SBUS	5.1800e-003	5.1720e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6270e-003	1.6810e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.18	0.21
tblVehicleEF	SBUS	0.14	0.14
tblVehicleEF	SBUS	9.2580e-003	0.01
tblVehicleEF	SBUS	0.29	0.32
tblVehicleEF	SBUS	1.48	1.55
tblVehicleEF	SBUS	1.32	1.53
tblVehicleEF	UBUS	7.04	7.66
tblVehicleEF	UBUS	25.82	26.64
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.80	9.15
tblVehicleEF	UBUS	3.07	3.10
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.18	0.19
tblVehicleEF	UBUS	6.9560e-003	7.0160e-003
tblVehicleEF	UBUS	0.83	0.88
tblVehicleEF	UBUS	1.08	1.02
tblVehicleEF	UBUS	1.81	1.86

tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2590e-003	1.2770e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.18	0.19
tblVehicleEF	UBUS	6.9560e-003	7.0160e-003
tblVehicleEF	UBUS	0.93	0.97
tblVehicleEF	UBUS	1.08	1.02
tblVehicleEF	UBUS	1.93	1.99
tblVehicleEF	UBUS	7.19	7.81
tblVehicleEF	UBUS	21.44	22.16
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.20	8.52
tblVehicleEF	UBUS	2.92	2.95
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.22	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.85	0.90
tblVehicleEF	UBUS	1.05	0.99
tblVehicleEF	UBUS	1.62	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.1840e-003	1.2000e-003
tblVehicleEF	UBUS	0.02	0.02

tblVehicleEF	UBUS	0.22	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.95	0.99
tblVehicleEF	UBUS	1.05	0.99
tblVehicleEF	UBUS	1.73	1.78
tblVehicleEF	UBUS	7.05	7.65
tblVehicleEF	UBUS	24.84	25.64
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.63	8.97
tblVehicleEF	UBUS	3.04	3.08
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	7.5200e-003	7.6760e-003
tblVehicleEF	UBUS	0.84	0.88
tblVehicleEF	UBUS	1.27	1.20
tblVehicleEF	UBUS	1.77	1.82
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2420e-003	1.2600e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	7.5200e-003	7.6760e-003
tblVehicleEF	UBUS	0.93	0.97

tblVehicleEF	UBUS	1.27	1.20
tblVehicleEF	UBUS	1.89	1.95
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	ST_TR	0.00	36.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	SU_TR	0.00	14.00
tblVehicleTrips	WD_TR	1.59	0.00
tblVehicleTrips	WD_TR	0.00	58.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0372	0.3730	0.2497	2.8000e-004	0.0745	0.0204	0.0949	0.0399	0.0188	0.0587	0.0000	25.8751	25.8751	7.4300e-003	0.0000	26.0310
Total	0.0372	0.3730	0.2497	2.8000e-004	0.0745	0.0204	0.0949	0.0399	0.0188	0.0587	0.0000	25.8751	25.8751	7.4300e-003	0.0000	26.0310

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0372	0.3730	0.2497	2.8000e-004	0.0301	0.0204	0.0505	0.0158	0.0188	0.0346	0.0000	25.8751	25.8751	7.4300e-003	0.0000	26.0310
Total	0.0372	0.3730	0.2497	2.8000e-004	0.0301	0.0204	0.0505	0.0158	0.0188	0.0346	0.0000	25.8751	25.8751	7.4300e-003	0.0000	26.0310

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	59.63	0.00	46.80	60.33	0.00	41.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2125	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	22.5888	22.5888	4.9000e-004	1.0000e-004	22.6309
Mobile	2.5210	24.7805	31.4532	0.0599	2.5058	0.4771	2.9829	0.6744	0.4387	1.1131	0.0000	5,378.6526	5,378.6526	0.0887	0.0000	5,380.5153
Waste						0.0000	0.0000		0.0000	0.0000	6.0900e-003	0.0000	6.0900e-003	3.6000e-004	0.0000	0.0137
Water						0.0000	0.0000		0.0000	0.0000	0.0000	2.7063	2.7063	6.0000e-005	1.0000e-005	2.7113
Total	2.7334	24.7805	31.4538	0.0599	2.5058	0.4771	2.9829	0.6744	0.4387	1.1131	6.0900e-003	5,403.9488	5,403.9548	0.0896	1.1000e-004	5,405.8723

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2125	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	22.5888	22.5888	4.9000e-004	1.0000e-004	22.6309
Mobile	2.5210	24.7805	31.4532	0.0599	2.5058	0.4771	2.9829	0.6744	0.4387	1.1131	0.0000	5,378.6526	5,378.6526	0.0887	0.0000	5,380.5153
Waste						0.0000	0.0000		0.0000	0.0000	6.0900e-003	0.0000	6.0900e-003	3.6000e-004	0.0000	0.0137
Water						0.0000	0.0000		0.0000	0.0000	0.0000	2.7063	2.7063	6.0000e-005	1.0000e-005	2.7113
Total	2.7334	24.7805	31.4538	0.0599	2.5058	0.4771	2.9829	0.6744	0.4387	1.1131	6.0900e-003	5,403.9488	5,403.9548	0.0896	1.1000e-004	5,405.8723

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2016	1/14/2016	5	10	
2	Grading	Grading	1/15/2016	2/11/2016	5	20	
3	Paving	Paving	2/12/2016	2/18/2016	5	5	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0269	0.0000	0.0269	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0122	0.1289	0.0826	9.0000e-005		6.9900e-003	6.9900e-003		6.4300e-003	6.4300e-003	0.0000	8.0789	8.0789	2.4400e-003	0.0000	8.1301
Total	0.0122	0.1289	0.0826	9.0000e-005	0.0269	6.9900e-003	0.0339	0.0145	6.4300e-003	0.0210	0.0000	8.0789	8.0789	2.4400e-003	0.0000	8.1301

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	2.0000e-004	2.0300e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3730	0.3730	2.0000e-005	0.0000	0.3733
Total	1.4000e-004	2.0000e-004	2.0300e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3730	0.3730	2.0000e-005	0.0000	0.3733

3.2 Site Preparation - 2016**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0105	0.0000	0.0105	5.6700e-003	0.0000	5.6700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0122	0.1289	0.0826	9.0000e-005		6.9900e-003	6.9900e-003		6.4300e-003	6.4300e-003	0.0000	8.0789	8.0789	2.4400e-003	0.0000	8.1300
Total	0.0122	0.1289	0.0826	9.0000e-005	0.0105	6.9900e-003	0.0175	5.6700e-003	6.4300e-003	0.0121	0.0000	8.0789	8.0789	2.4400e-003	0.0000	8.1300

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	2.0000e-004	2.0300e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3730	0.3730	2.0000e-005	0.0000	0.3733
Total	1.4000e-004	2.0000e-004	2.0300e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3730	0.3730	2.0000e-005	0.0000	0.3733

3.3 Grading - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0460	0.0000	0.0460	0.0249	0.0000	0.0249	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.2104	0.1367	1.4000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	13.2707	13.2707	4.0000e-003	0.0000	13.3548
Total	0.0199	0.2104	0.1367	1.4000e-004	0.0460	0.0114	0.0574	0.0249	0.0105	0.0354	0.0000	13.2707	13.2707	4.0000e-003	0.0000	13.3548

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	4.0000e-004	4.0500e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7459	0.7459	3.0000e-005	0.0000	0.7467
Total	2.7000e-004	4.0000e-004	4.0500e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7459	0.7459	3.0000e-005	0.0000	0.7467

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0179	0.0000	0.0179	9.7200e-003	0.0000	9.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.2104	0.1367	1.4000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	13.2707	13.2707	4.0000e-003	0.0000	13.3548
Total	0.0199	0.2104	0.1367	1.4000e-004	0.0179	0.0114	0.0293	9.7200e-003	0.0105	0.0202	0.0000	13.2707	13.2707	4.0000e-003	0.0000	13.3548

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	4.0000e-004	4.0500e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7459	0.7459	3.0000e-005	0.0000	0.7467
Total	2.7000e-004	4.0000e-004	4.0500e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7459	0.7459	3.0000e-005	0.0000	0.7467

3.4 Paving - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0330	0.0227	3.0000e-005		2.0200e-003	2.0200e-003		1.8600e-003	1.8600e-003	0.0000	3.1036	3.1036	9.2000e-004	0.0000	3.1229
Paving	1.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.5000e-003	0.0330	0.0227	3.0000e-005		2.0200e-003	2.0200e-003		1.8600e-003	1.8600e-003	0.0000	3.1036	3.1036	9.2000e-004	0.0000	3.1229

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.6500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3030	0.3030	1.0000e-005	0.0000	0.3033
Total	1.1000e-004	1.6000e-004	1.6500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3030	0.3030	1.0000e-005	0.0000	0.3033

3.4 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0330	0.0227	3.0000e-005		2.0200e-003	2.0200e-003		1.8600e-003	1.8600e-003	0.0000	3.1036	3.1036	9.2000e-004	0.0000	3.1229
Paving	1.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.5000e-003	0.0330	0.0227	3.0000e-005		2.0200e-003	2.0200e-003		1.8600e-003	1.8600e-003	0.0000	3.1036	3.1036	9.2000e-004	0.0000	3.1229

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.6500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3030	0.3030	1.0000e-005	0.0000	0.3033
Total	1.1000e-004	1.6000e-004	1.6500e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3030	0.3030	1.0000e-005	0.0000	0.3033

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.5210	24.7805	31.4532	0.0599	2.5058	0.4771	2.9829	0.6744	0.4387	1.1131	0.0000	5,378.6526	5,378.6526	0.0887	0.0000	5,380.5153
Unmitigated	2.5210	24.7805	31.4532	0.0599	2.5058	0.4771	2.9829	0.6744	0.4387	1.1131	0.0000	5,378.6526	5,378.6526	0.0887	0.0000	5,380.5153

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	2,476.02	1,536.84	597.66	6,339,977	6,339,977
Total	2,476.02	1,536.84	597.66	6,339,977	6,339,977

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.610000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.390000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Mix Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	37566.3	22.5888	4.9000e-004	1.0000e-004	22.6309
Total		22.5888	4.9000e-004	1.0000e-004	22.6309

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	37566.3	22.5888	4.9000e-004	1.0000e-004	22.6309
Total		22.5888	4.9000e-004	1.0000e-004	22.6309

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2125	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1300e-003
Unmitigated	0.2125	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1300e-003
Total	0.2125	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1300e-003

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1300e-003
Total	0.2125	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.7063	6.0000e-005	1.0000e-005	2.7113
Unmitigated	2.7063	6.0000e-005	1.0000e-005	2.7113

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.405104	2.7063	6.0000e-005	1.0000e-005	2.7113
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.7063	6.0000e-005	1.0000e-005	2.7113

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.405104	2.7063	6.0000e-005	1.0000e-005	2.7113
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.7063	6.0000e-005	1.0000e-005	2.7113

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0900e-003	3.6000e-004	0.0000	0.0137
Unmitigated	6.0900e-003	3.6000e-004	0.0000	0.0137

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0137
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		6.0900e-003	3.6000e-004	0.0000	0.0137

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0137
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		6.0900e-003	3.6000e-004	0.0000	0.0137

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

797 Palmyrita Avenue Trailer Parking Lot Project
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	42.69	1000sqft	0.98	42,689.00	0
City Park	0.34	Acre	0.34	14,810.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2016
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park used for landscaping on site, approx 15000

Construction Phase - No demo necessary, no buildings to coat, more time needed for site prep20

Off-road Equipment - No architectural coating

Off-road Equipment -

Off-road Equipment -

Trips and VMT - No architectural coating

Demolition -

Architectural Coating - No buildings to coat

Vehicle Trips - No trips for landscaping

Vehicle Emission Factors - Based on Traffic Flow Breakdown from clinet

Vehicle Emission Factors - LDA 0.466361

HHD 0.040207

Swap

Vehicle Emission Factors - HHD - 0.040207

LDA - 0.466361

Area Coating - no buildings to coat

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	24137	0
tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblGrading	AcresOfGrading	7.50	1.50
tblGrading	AcresOfGrading	5.00	1.00
tblLandUse	LandUseSquareFeet	42,690.00	42,689.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.02	0.02

tblVehicleEF	HHD	9.1460e-003	0.01
tblVehicleEF	HHD	2.81	2.78
tblVehicleEF	HHD	1.45	1.70
tblVehicleEF	HHD	54.60	60.65
tblVehicleEF	HHD	566.61	576.70
tblVehicleEF	HHD	1,587.75	1,629.98
tblVehicleEF	HHD	59.71	66.79
tblVehicleEF	HHD	0.04	0.39
tblVehicleEF	HHD	4.87	5.80
tblVehicleEF	HHD	5.89	7.75
tblVehicleEF	HHD	3.54	3.83
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
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tblVehicleEF	HHD	3.0930e-003	5.0390e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7530e-003	8.7490e-003
tblVehicleEF	HHD	0.10	0.15
tblVehicleEF	HHD	2.5010e-003	3.9960e-003
tblVehicleEF	HHD	2.6600e-003	3.7260e-003
tblVehicleEF	HHD	0.13	0.19
tblVehicleEF	HHD	0.50	0.52
tblVehicleEF	HHD	1.4900e-003	1.9840e-003
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tblVehicleEF	HHD	0.45	0.65
tblVehicleEF	HHD	1.93	2.49

tblVehicleEF	HHD	5.6020e-003	5.5860e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5350e-003	1.7070e-003
tblVehicleEF	HHD	2.6600e-003	3.7260e-003
tblVehicleEF	HHD	0.13	0.19
tblVehicleEF	HHD	0.57	0.59
tblVehicleEF	HHD	1.4900e-003	1.9840e-003
tblVehicleEF	HHD	0.23	0.30
tblVehicleEF	HHD	0.45	0.65
tblVehicleEF	HHD	2.06	2.67
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	9.1460e-003	0.01
tblVehicleEF	HHD	2.04	2.02
tblVehicleEF	HHD	1.45	1.70
tblVehicleEF	HHD	45.51	51.86
tblVehicleEF	HHD	600.27	610.97
tblVehicleEF	HHD	1,587.75	1,629.98
tblVehicleEF	HHD	59.71	66.79
tblVehicleEF	HHD	0.04	0.39
tblVehicleEF	HHD	5.02	5.98
tblVehicleEF	HHD	5.56	7.32
tblVehicleEF	HHD	3.40	3.67
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.11	0.17
tblVehicleEF	HHD	3.0930e-003	5.0390e-003
tblVehicleEF	HHD	9.5250e-003	0.02

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7530e-003	8.7490e-003
tblVehicleEF	HHD	0.10	0.15
tblVehicleEF	HHD	2.5010e-003	3.9960e-003
tblVehicleEF	HHD	4.9950e-003	7.0560e-003
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tblVehicleEF	HHD	3.1990e-003	4.3530e-003
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tblVehicleEF	HHD	0.46	0.65
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tblVehicleEF	HHD	5.9350e-003	5.9180e-003
tblVehicleEF	HHD	0.02	0.02
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tblVehicleEF	HHD	4.9950e-003	7.0560e-003
tblVehicleEF	HHD	0.14	0.21
tblVehicleEF	HHD	0.54	0.56
tblVehicleEF	HHD	3.1990e-003	4.3530e-003
tblVehicleEF	HHD	0.23	0.30
tblVehicleEF	HHD	0.46	0.65
tblVehicleEF	HHD	1.79	2.31
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tblVehicleEF	HHD	1.45	1.70
tblVehicleEF	HHD	51.46	57.31
tblVehicleEF	HHD	520.12	529.39
tblVehicleEF	HHD	1,587.75	1,629.98

tblVehicleEF	HHD	59.71	66.79
tblVehicleEF	HHD	0.04	0.39
tblVehicleEF	HHD	4.65	5.54
tblVehicleEF	HHD	5.80	7.64
tblVehicleEF	HHD	3.50	3.79
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.11	0.17
tblVehicleEF	HHD	3.0930e-003	5.0390e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7530e-003	8.7490e-003
tblVehicleEF	HHD	0.10	0.15
tblVehicleEF	HHD	2.5010e-003	3.9960e-003
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tblVehicleEF	HHD	0.54	0.56
tblVehicleEF	HHD	1.6650e-003	2.2590e-003
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tblVehicleEF	HHD	1.84	2.36
tblVehicleEF	HHD	5.1420e-003	5.1280e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4830e-003	1.6510e-003
tblVehicleEF	HHD	3.0380e-003	4.3990e-003
tblVehicleEF	HHD	0.16	0.25
tblVehicleEF	HHD	0.62	0.64

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tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	0.09	0.11
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tblVehicleEF	LDA	2.4950e-003	2.4750e-003
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tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.28	0.35
tblVehicleEF	LDA	0.15	0.20
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tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.05	0.05

tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.28	0.35
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tblVehicleEF	LDA	8.4720e-003	0.01
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tblVehicleEF	LDA	291.04	317.69
tblVehicleEF	LDA	62.09	66.78
tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.12	0.16
tblVehicleEF	LDA	1.4500e-003	1.5970e-003
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tblVehicleEF	LDA	2.4950e-003	2.4750e-003
tblVehicleEF	LDA	0.12	0.15
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.28	0.34
tblVehicleEF	LDA	0.12	0.17
tblVehicleEF	LDA	3.5920e-003	3.6100e-003
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tblVehicleEF	LDA	0.15	0.18
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tblVehicleEF	LDA	0.03	0.05

tblVehicleEF	LDA	0.28	0.34
tblVehicleEF	LDA	0.13	0.18
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tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.13	0.17
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tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.32	0.39
tblVehicleEF	LDA	0.14	0.20
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tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.32	0.39

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tblVehicleEF	LDT1	0.02	0.03
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tblVehicleEF	LDT1	72.37	77.04
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tblVehicleEF	LDT1	0.24	0.29
tblVehicleEF	LDT1	0.29	0.34
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
tblVehicleEF	LDT1	4.5710e-003	5.0010e-003
tblVehicleEF	LDT1	0.19	0.21
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	1.07	1.21
tblVehicleEF	LDT1	0.38	0.47
tblVehicleEF	LDT1	3.8390e-003	3.8580e-003
tblVehicleEF	LDT1	9.2800e-004	9.4400e-004
tblVehicleEF	LDT1	0.19	0.21
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.08	0.11
tblVehicleEF	LDT1	1.07	1.21
tblVehicleEF	LDT1	0.41	0.50

tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.65	3.28
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tblVehicleEF	LDT1	341.98	368.23
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tblVehicleEF	LDT1	0.21	0.26
tblVehicleEF	LDT1	0.27	0.32
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
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tblVehicleEF	LDT1	0.37	0.41
tblVehicleEF	LDT1	0.24	0.27
tblVehicleEF	LDT1	0.06	0.09
tblVehicleEF	LDT1	1.05	1.19
tblVehicleEF	LDT1	0.32	0.39
tblVehicleEF	LDT1	4.1440e-003	4.1610e-003
tblVehicleEF	LDT1	9.0900e-004	9.2100e-004
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tblVehicleEF	LDT1	0.37	0.41
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tblVehicleEF	LDT1	1.05	1.19
tblVehicleEF	LDT1	0.34	0.42
tblVehicleEF	LDT1	0.02	0.03

tblVehicleEF	LDT1	0.02	0.03
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tblVehicleEF	LDT1	4.75	5.72
tblVehicleEF	LDT1	313.18	337.41
tblVehicleEF	LDT1	72.37	77.04
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.23	0.28
tblVehicleEF	LDT1	0.29	0.34
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
tblVehicleEF	LDT1	4.5710e-003	5.0010e-003
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tblVehicleEF	LDT1	0.36	0.41
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	1.26	1.41
tblVehicleEF	LDT1	0.37	0.46
tblVehicleEF	LDT1	3.7870e-003	3.8060e-003
tblVehicleEF	LDT1	9.2600e-004	9.4200e-004
tblVehicleEF	LDT1	0.20	0.23
tblVehicleEF	LDT1	0.36	0.41
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.08	0.11
tblVehicleEF	LDT1	1.26	1.41
tblVehicleEF	LDT1	0.40	0.49
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02

tblVehicleEF	LDT2	1.29	1.62
tblVehicleEF	LDT2	2.76	3.47
tblVehicleEF	LDT2	385.92	413.27
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LDT2	0.26	0.34
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.17
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.46	0.52
tblVehicleEF	LDT2	0.20	0.26
tblVehicleEF	LDT2	4.5140e-003	4.5420e-003
tblVehicleEF	LDT2	1.0500e-003	1.0610e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.17
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.46	0.52
tblVehicleEF	LDT2	0.22	0.28
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	1.51	1.89

tblVehicleEF	LDT2	2.12	2.68
tblVehicleEF	LDT2	417.00	446.44
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.14	0.18
tblVehicleEF	LDT2	0.24	0.31
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.17	0.20
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.45	0.51
tblVehicleEF	LDT2	0.17	0.22
tblVehicleEF	LDT2	4.8810e-003	4.9110e-003
tblVehicleEF	LDT2	1.0390e-003	1.0480e-003
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.17	0.20
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.45	0.51
tblVehicleEF	LDT2	0.18	0.24
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	1.24	1.56
tblVehicleEF	LDT2	2.71	3.41

tblVehicleEF	LDT2	380.67	407.66
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.14	0.19
tblVehicleEF	LDT2	0.26	0.34
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.17	0.19
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.53	0.60
tblVehicleEF	LDT2	0.20	0.26
tblVehicleEF	LDT2	4.4520e-003	4.4800e-003
tblVehicleEF	LDT2	1.0490e-003	1.0600e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.17	0.19
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.53	0.60
tblVehicleEF	LDT2	0.21	0.28
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.87	1.07

tblVehicleEF	LHD1	3.63	4.04
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	1.80	2.13
tblVehicleEF	LHD1	1.00	1.04
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003
tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	2.8550e-003	3.0390e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4180e-003	1.4530e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.30	0.33
tblVehicleEF	LHD1	5.3280e-003	5.3840e-003
tblVehicleEF	LHD1	4.5600e-004	4.6000e-004
tblVehicleEF	LHD1	2.8550e-003	3.0390e-003

tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4180e-003	1.4530e-003
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.32	0.35
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.89	1.09
tblVehicleEF	LHD1	2.93	3.26
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	1.68	2.00
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003

tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	5.1220e-003	5.4790e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.8570e-003	2.9970e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.26	0.29
tblVehicleEF	LHD1	5.3280e-003	5.3850e-003
tblVehicleEF	LHD1	4.4400e-004	4.4700e-004
tblVehicleEF	LHD1	5.1220e-003	5.4790e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.8570e-003	2.9970e-003
tblVehicleEF	LHD1	0.07	0.09
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.28	0.31
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.87	1.06
tblVehicleEF	LHD1	3.38	3.76
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07

tblVehicleEF	LHD1	1.76	2.10
tblVehicleEF	LHD1	0.99	1.03
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003
tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	3.2020e-003	3.4840e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5220e-003	1.5740e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.60	0.62
tblVehicleEF	LHD1	0.28	0.32
tblVehicleEF	LHD1	5.3280e-003	5.3840e-003
tblVehicleEF	LHD1	4.5200e-004	4.5600e-004
tblVehicleEF	LHD1	3.2020e-003	3.4840e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5220e-003	1.5740e-003
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	0.60	0.62
tblVehicleEF	LHD1	0.30	0.34

tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.62	0.75
tblVehicleEF	LHD2	1.66	1.91
tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.91	3.41
tblVehicleEF	LHD2	0.51	0.52
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	1.2570e-003	1.4040e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4800e-004	6.8900e-004
tblVehicleEF	LHD2	0.07	0.08

tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.14	0.17
tblVehicleEF	LHD2	5.1460e-003	5.1750e-003
tblVehicleEF	LHD2	2.3500e-004	2.4000e-004
tblVehicleEF	LHD2	1.2570e-003	1.4040e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4800e-004	6.8900e-004
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.63	0.76
tblVehicleEF	LHD2	1.36	1.57
tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.75	3.22
tblVehicleEF	LHD2	0.49	0.50
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	2.2650e-003	2.5460e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3100e-003	1.4320e-003
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	5.1460e-003	5.1760e-003
tblVehicleEF	LHD2	2.2900e-004	2.3400e-004
tblVehicleEF	LHD2	2.2650e-003	2.5460e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3100e-003	1.4320e-003
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.62	0.75
tblVehicleEF	LHD2	1.55	1.78

tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.87	3.36
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	1.3820e-003	1.5920e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	7.4400e-004
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.25	0.27
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	5.1460e-003	5.1750e-003
tblVehicleEF	LHD2	2.3300e-004	2.3700e-004
tblVehicleEF	LHD2	1.3820e-003	1.5920e-003
tblVehicleEF	LHD2	0.05	0.05

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	7.4400e-004
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.25	0.27
tblVehicleEF	LHD2	0.15	0.17
tblVehicleEF	MCY	26.48	29.62
tblVehicleEF	MCY	9.94	9.82
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.22	1.25
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	1.12	1.14
tblVehicleEF	MCY	0.45	0.48
tblVehicleEF	MCY	0.57	0.59
tblVehicleEF	MCY	2.63	2.77
tblVehicleEF	MCY	1.39	1.60
tblVehicleEF	MCY	2.11	2.16
tblVehicleEF	MCY	2.0290e-003	2.0360e-003
tblVehicleEF	MCY	6.7200e-004	6.9100e-004
tblVehicleEF	MCY	1.12	1.14
tblVehicleEF	MCY	0.45	0.48

tblVehicleEF	MCY	0.57	0.59
tblVehicleEF	MCY	2.88	3.02
tblVehicleEF	MCY	1.39	1.60
tblVehicleEF	MCY	2.27	2.32
tblVehicleEF	MCY	26.16	29.25
tblVehicleEF	MCY	8.83	8.82
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.06	1.08
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	2.17	2.21
tblVehicleEF	MCY	0.66	0.69
tblVehicleEF	MCY	1.41	1.44
tblVehicleEF	MCY	2.56	2.69
tblVehicleEF	MCY	1.37	1.57
tblVehicleEF	MCY	1.84	1.88
tblVehicleEF	MCY	2.0220e-003	2.0280e-003
tblVehicleEF	MCY	6.4600e-004	6.6600e-004
tblVehicleEF	MCY	2.17	2.21
tblVehicleEF	MCY	0.66	0.69
tblVehicleEF	MCY	1.41	1.44

tblVehicleEF	MCY	2.81	2.94
tblVehicleEF	MCY	1.37	1.57
tblVehicleEF	MCY	1.98	2.02
tblVehicleEF	MCY	25.65	28.65
tblVehicleEF	MCY	9.58	9.47
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.18	1.21
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	1.33	1.35
tblVehicleEF	MCY	0.62	0.67
tblVehicleEF	MCY	0.58	0.60
tblVehicleEF	MCY	2.60	2.73
tblVehicleEF	MCY	1.63	1.85
tblVehicleEF	MCY	2.04	2.08
tblVehicleEF	MCY	2.0150e-003	2.0200e-003
tblVehicleEF	MCY	6.6400e-004	6.8300e-004
tblVehicleEF	MCY	1.33	1.35
tblVehicleEF	MCY	0.62	0.67
tblVehicleEF	MCY	0.58	0.60
tblVehicleEF	MCY	2.85	2.99

tblVehicleEF	MCY	1.63	1.85
tblVehicleEF	MCY	2.20	2.24
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.86	2.15
tblVehicleEF	MDV	4.27	4.89
tblVehicleEF	MDV	505.88	535.78
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.25	0.30
tblVehicleEF	MDV	0.42	0.49
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
tblVehicleEF	MDV	2.8800e-003	2.8470e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.19	0.18
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.37	0.43
tblVehicleEF	MDV	5.7500e-003	5.7720e-003
tblVehicleEF	MDV	1.3440e-003	1.3510e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.19	0.18
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.56	0.56

tblVehicleEF	MDV	0.40	0.46
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.19	2.52
tblVehicleEF	MDV	3.28	3.76
tblVehicleEF	MDV	546.16	578.32
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.22	0.27
tblVehicleEF	MDV	0.39	0.45
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
tblVehicleEF	MDV	2.8800e-003	2.8470e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.31	0.36
tblVehicleEF	MDV	6.2130e-003	6.2350e-003
tblVehicleEF	MDV	1.3270e-003	1.3310e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.33	0.38

tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.79	2.07
tblVehicleEF	MDV	4.19	4.80
tblVehicleEF	MDV	499.07	528.58
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.24	0.28
tblVehicleEF	MDV	0.42	0.49
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
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tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.64	0.65
tblVehicleEF	MDV	0.36	0.42
tblVehicleEF	MDV	5.6710e-003	5.6930e-003
tblVehicleEF	MDV	1.3430e-003	1.3490e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.64	0.65
tblVehicleEF	MDV	0.39	0.45
tblVehicleEF	MH	2.62	3.88

tblVehicleEF	MH	7.32	8.66
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.71	1.96
tblVehicleEF	MH	0.75	0.84
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	1.29	1.46
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.46	0.51
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.76	1.84
tblVehicleEF	MH	0.42	0.52
tblVehicleEF	MH	6.3750e-003	6.4790e-003
tblVehicleEF	MH	4.3300e-004	4.6500e-004
tblVehicleEF	MH	1.29	1.46
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.46	0.51
tblVehicleEF	MH	0.09	0.12
tblVehicleEF	MH	1.76	1.84
tblVehicleEF	MH	0.45	0.56

tblVehicleEF	MH	2.69	3.99
tblVehicleEF	MH	5.81	6.88
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.57	1.79
tblVehicleEF	MH	0.72	0.81
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	2.27	2.58
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.92	1.04
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.75	1.83
tblVehicleEF	MH	0.36	0.44
tblVehicleEF	MH	6.3760e-003	6.4800e-003
tblVehicleEF	MH	4.0700e-004	4.3500e-004
tblVehicleEF	MH	2.27	2.58
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.92	1.04
tblVehicleEF	MH	0.09	0.12
tblVehicleEF	MH	1.75	1.83

tblVehicleEF	MH	0.39	0.47
tblVehicleEF	MH	2.60	3.85
tblVehicleEF	MH	6.83	8.06
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.67	1.91
tblVehicleEF	MH	0.74	0.83
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	1.57	1.81
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.51	0.58
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.86	1.94
tblVehicleEF	MH	0.40	0.49
tblVehicleEF	MH	6.3740e-003	6.4780e-003
tblVehicleEF	MH	4.2500e-004	4.5500e-004
tblVehicleEF	MH	1.57	1.81
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.51	0.58
tblVehicleEF	MH	0.09	0.12

tblVehicleEF	MH	1.86	1.94
tblVehicleEF	MH	0.43	0.53
tblVehicleEF	MHD	7.4170e-003	9.1490e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
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tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82
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tblVehicleEF	MHD	6.27	7.20
tblVehicleEF	MHD	3.14	4.52
tblVehicleEF	MHD	1.72	1.95
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	4.3610e-003	5.5100e-003
tblVehicleEF	MHD	0.15	0.21
tblVehicleEF	MHD	0.16	0.20
tblVehicleEF	MHD	2.1540e-003	2.6470e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.74	0.91

tblVehicleEF	MHD	1.19	1.56
tblVehicleEF	MHD	5.9920e-003	5.8760e-003
tblVehicleEF	MHD	9.4920e-003	9.5670e-003
tblVehicleEF	MHD	9.1500e-004	1.0330e-003
tblVehicleEF	MHD	4.3610e-003	5.5100e-003
tblVehicleEF	MHD	0.15	0.21
tblVehicleEF	MHD	0.18	0.22
tblVehicleEF	MHD	2.1540e-003	2.6470e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.27	1.68
tblVehicleEF	MHD	6.9900e-003	8.6220e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
tblVehicleEF	MHD	1.33	1.44
tblVehicleEF	MHD	0.87	1.21
tblVehicleEF	MHD	14.59	18.00
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tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	6.47	7.43
tblVehicleEF	MHD	2.95	4.26
tblVehicleEF	MHD	1.65	1.87
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.02	0.03

tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	8.0000e-003	0.01
tblVehicleEF	MHD	0.18	0.24
tblVehicleEF	MHD	0.15	0.19
tblVehicleEF	MHD	4.5060e-003	5.6750e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.03	1.35
tblVehicleEF	MHD	6.3480e-003	6.2250e-003
tblVehicleEF	MHD	9.4920e-003	9.5670e-003
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tblVehicleEF	MHD	8.0000e-003	0.01
tblVehicleEF	MHD	0.18	0.24
tblVehicleEF	MHD	0.17	0.21
tblVehicleEF	MHD	4.5060e-003	5.6750e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.11	1.45
tblVehicleEF	MHD	8.0070e-003	9.8770e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
tblVehicleEF	MHD	2.51	2.73
tblVehicleEF	MHD	0.86	1.19
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tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82

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tblVehicleEF	MHD	3.08	4.45
tblVehicleEF	MHD	1.70	1.93
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	5.0560e-003	6.5390e-003
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tblVehicleEF	MHD	0.17	0.21
tblVehicleEF	MHD	2.3820e-003	2.9760e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.79	0.98
tblVehicleEF	MHD	1.13	1.48
tblVehicleEF	MHD	5.5000e-003	5.3940e-003
tblVehicleEF	MHD	9.4920e-003	9.5660e-003
tblVehicleEF	MHD	8.9700e-004	1.0110e-003
tblVehicleEF	MHD	5.0560e-003	6.5390e-003
tblVehicleEF	MHD	0.20	0.27
tblVehicleEF	MHD	0.20	0.24
tblVehicleEF	MHD	2.3820e-003	2.9760e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.79	0.98

tblVehicleEF	MHD	1.21	1.59
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.0430e-003	2.2030e-003
tblVehicleEF	OBUS	2.36	2.30
tblVehicleEF	OBUS	1.74	2.18
tblVehicleEF	OBUS	11.79	12.87
tblVehicleEF	OBUS	571.35	573.90
tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
tblVehicleEF	OBUS	5.94	7.28
tblVehicleEF	OBUS	3.60	4.81
tblVehicleEF	OBUS	1.59	1.69
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.1200e-003	1.5340e-003
tblVehicleEF	OBUS	0.02	0.05
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.8700e-004	1.3140e-003
tblVehicleEF	OBUS	1.1960e-003	1.2410e-003
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tblVehicleEF	OBUS	0.41	0.49
tblVehicleEF	OBUS	5.5500e-004	5.5100e-004
tblVehicleEF	OBUS	0.12	0.16

tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.73	0.82
tblVehicleEF	OBUS	5.6490e-003	5.5590e-003
tblVehicleEF	OBUS	9.3080e-003	9.2020e-003
tblVehicleEF	OBUS	5.8100e-004	6.1200e-004
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tblVehicleEF	OBUS	5.5500e-004	5.5100e-004
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tblVehicleEF	OBUS	0.78	0.88
tblVehicleEF	OBUS	0.02	0.02
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tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
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tblVehicleEF	OBUS	1.53	1.62
tblVehicleEF	OBUS	0.02	0.05
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
tblVehicleEF	OBUS	0.05	0.08

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tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
tblVehicleEF	OBUS	0.05	0.07
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tblVehicleEF	OBUS	2.0430e-003	2.2030e-003
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tblVehicleEF	OBUS	1.74	2.18
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tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
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tblVehicleEF	OBUS	1.58	1.67
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tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
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tblVehicleEF	OBUS	1.1200e-003	1.5340e-003
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tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
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tblVehicleEF	OBUS	1.2780e-003	1.3870e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.45	0.53
tblVehicleEF	OBUS	6.0100e-004	6.1100e-004
tblVehicleEF	OBUS	0.12	0.16
tblVehicleEF	OBUS	0.30	0.29
tblVehicleEF	OBUS	0.70	0.79
tblVehicleEF	OBUS	5.1850e-003	5.1030e-003
tblVehicleEF	OBUS	9.3080e-003	9.2020e-003
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tblVehicleEF	OBUS	1.2780e-003	1.3870e-003

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tblVehicleEF	OBUS	0.51	0.60
tblVehicleEF	OBUS	6.0100e-004	6.1100e-004
tblVehicleEF	OBUS	0.15	0.20
tblVehicleEF	OBUS	0.30	0.29
tblVehicleEF	OBUS	0.75	0.84
tblVehicleEF	SBUS	5.4360e-003	5.3980e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	1.06	1.04
tblVehicleEF	SBUS	2.20	2.82
tblVehicleEF	SBUS	18.98	20.97
tblVehicleEF	SBUS	570.82	581.72
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	8.09	8.19
tblVehicleEF	SBUS	7.78	7.92
tblVehicleEF	SBUS	1.45	1.52
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
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tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003

tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.14	0.16
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	8.1420e-003	8.5740e-003
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.25	1.31
tblVehicleEF	SBUS	1.24	1.44
tblVehicleEF	SBUS	5.6430e-003	5.6340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6310e-003	1.6850e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.14	0.16
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	8.1420e-003	8.5740e-003
tblVehicleEF	SBUS	0.30	0.32
tblVehicleEF	SBUS	1.25	1.31
tblVehicleEF	SBUS	1.33	1.54
tblVehicleEF	SBUS	5.1230e-003	5.0870e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	0.77	0.76
tblVehicleEF	SBUS	2.23	2.82
tblVehicleEF	SBUS	16.02	17.82
tblVehicleEF	SBUS	604.73	616.28
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	8.35	8.46
tblVehicleEF	SBUS	7.31	7.44

tblVehicleEF	SBUS	1.35	1.41
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.16	0.18
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.15	1.21
tblVehicleEF	SBUS	1.10	1.26
tblVehicleEF	SBUS	5.9790e-003	5.9690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.5800e-003	1.6300e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.16	0.18
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.32
tblVehicleEF	SBUS	1.15	1.21
tblVehicleEF	SBUS	1.17	1.35

tblVehicleEF	SBUS	5.8680e-003	5.8270e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	1.46	1.44
tblVehicleEF	SBUS	2.19	2.79
tblVehicleEF	SBUS	18.77	20.75
tblVehicleEF	SBUS	523.99	533.99
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	7.73	7.83
tblVehicleEF	SBUS	7.66	7.80
tblVehicleEF	SBUS	1.46	1.52
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.18	0.21
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	9.2580e-003	0.01
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.48	1.55

tblVehicleEF	SBUS	1.24	1.43
tblVehicleEF	SBUS	5.1800e-003	5.1720e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6270e-003	1.6810e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.18	0.21
tblVehicleEF	SBUS	0.14	0.14
tblVehicleEF	SBUS	9.2580e-003	0.01
tblVehicleEF	SBUS	0.29	0.32
tblVehicleEF	SBUS	1.48	1.55
tblVehicleEF	SBUS	1.32	1.53
tblVehicleEF	UBUS	7.04	7.66
tblVehicleEF	UBUS	25.82	26.64
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.80	9.15
tblVehicleEF	UBUS	3.07	3.10
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.18	0.19
tblVehicleEF	UBUS	6.9560e-003	7.0160e-003
tblVehicleEF	UBUS	0.83	0.88
tblVehicleEF	UBUS	1.08	1.02
tblVehicleEF	UBUS	1.81	1.86

tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2590e-003	1.2770e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.18	0.19
tblVehicleEF	UBUS	6.9560e-003	7.0160e-003
tblVehicleEF	UBUS	0.93	0.97
tblVehicleEF	UBUS	1.08	1.02
tblVehicleEF	UBUS	1.93	1.99
tblVehicleEF	UBUS	7.19	7.81
tblVehicleEF	UBUS	21.44	22.16
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.20	8.52
tblVehicleEF	UBUS	2.92	2.95
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.22	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.85	0.90
tblVehicleEF	UBUS	1.05	0.99
tblVehicleEF	UBUS	1.62	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.1840e-003	1.2000e-003
tblVehicleEF	UBUS	0.02	0.02

tblVehicleEF	UBUS	0.22	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.95	0.99
tblVehicleEF	UBUS	1.05	0.99
tblVehicleEF	UBUS	1.73	1.78
tblVehicleEF	UBUS	7.05	7.65
tblVehicleEF	UBUS	24.84	25.64
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.63	8.97
tblVehicleEF	UBUS	3.04	3.08
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	7.5200e-003	7.6760e-003
tblVehicleEF	UBUS	0.84	0.88
tblVehicleEF	UBUS	1.27	1.20
tblVehicleEF	UBUS	1.77	1.82
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2420e-003	1.2600e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	7.5200e-003	7.6760e-003
tblVehicleEF	UBUS	0.93	0.97

tblVehicleEF	UBUS	1.27	1.20
tblVehicleEF	UBUS	1.89	1.95
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	ST_TR	0.00	36.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	SU_TR	0.00	14.00
tblVehicleTrips	WD_TR	1.59	0.00
tblVehicleTrips	WD_TR	0.00	58.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.4734	25.8080	16.9681	0.0182	5.4648	1.3990	6.8638	2.9316	1.2871	4.2187	0.0000	1,869.8538	1,869.8538	0.5411	0.0000	1,881.2162
Total	2.4734	25.8080	16.9681	0.0182	5.4648	1.3990	6.8638	2.9316	1.2871	4.2187	0.0000	1,869.8538	1,869.8538	0.5411	0.0000	1,881.2162

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.4734	25.8080	16.9681	0.0182	2.1858	1.3990	3.5849	1.1578	1.2871	2.4449	0.0000	1,869.8538	1,869.8538	0.5411	0.0000	1,881.2162
Total	2.4734	25.8080	16.9681	0.0182	2.1858	1.3990	3.5849	1.1578	1.2871	2.4449	0.0000	1,869.8538	1,869.8538	0.5411	0.0000	1,881.2162

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.00	0.00	47.77	60.51	0.00	42.05	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	16.2671	154.8264	190.2386	0.4019	16.7042	3.1249	19.8291	4.4895	2.8731	7.3626		39,699.4456	39,699.4456	0.6393		39,712.8713
Total	17.4316	154.8264	190.2431	0.4019	16.7042	3.1249	19.8291	4.4895	2.8731	7.3626		39,699.4550	39,699.4550	0.6394	0.0000	39,712.8813

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	16.2671	154.8264	190.2386	0.4019	16.7042	3.1249	19.8291	4.4895	2.8731	7.3626		39,699.4456	39,699.4456	0.6393		39,712.8713
Total	17.4316	154.8264	190.2431	0.4019	16.7042	3.1249	19.8291	4.4895	2.8731	7.3626		39,699.4550	39,699.4550	0.6394	0.0000	39,712.8813

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2016	1/14/2016	5	10	
2	Grading	Grading	1/15/2016	2/11/2016	5	20	
3	Paving	Paving	2/12/2016	2/18/2016	5	5	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3754	0.0000	5.3754	2.9079	0.0000	2.9079			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866		1,781.087 2	1,781.087 2	0.5372		1,792.369 3
Total	2.4428	25.7718	16.5144	0.0171	5.3754	1.3985	6.7739	2.9079	1.2866	4.1945		1,781.087 2	1,781.087 2	0.5372		1,792.369 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469
Total	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469

3.2 Site Preparation - 2016**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0964	0.0000	2.0964	1.1341	0.0000	1.1341			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866	0.0000	1,781.087 2	1,781.087 2	0.5372		1,792.369 3
Total	2.4428	25.7718	16.5144	0.0171	2.0964	1.3985	3.4949	1.1341	1.2866	2.4207	0.0000	1,781.087 2	1,781.087 2	0.5372		1,792.369 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469
Total	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5961	0.0000	4.5961	2.4913	0.0000	2.4913			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494		1,462.8468	1,462.8468	0.4413		1,472.1130
Total	1.9908	21.0361	13.6704	0.0141	4.5961	1.1407	5.7368	2.4913	1.0494	3.5407		1,462.8468	1,462.8468	0.4413		1,472.1130

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469
Total	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7925	0.0000	1.7925	0.9716	0.0000	0.9716			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130
Total	1.9908	21.0361	13.6704	0.0141	1.7925	1.1407	2.9332	0.9716	1.0494	2.0210	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469
Total	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469

3.4 Paving - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.5135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.8007	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0498	0.0588	0.7372	1.7400e-003	0.1453	9.1000e-004	0.1462	0.0385	8.4000e-004	0.0394		144.2456	144.2456	6.2200e-003		144.3763
Total	0.0498	0.0588	0.7372	1.7400e-003	0.1453	9.1000e-004	0.1462	0.0385	8.4000e-004	0.0394		144.2456	144.2456	6.2200e-003		144.3763

3.4 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.5135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.8007	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0498	0.0588	0.7372	1.7400e-003	0.1453	9.1000e-004	0.1462	0.0385	8.4000e-004	0.0394		144.2456	144.2456	6.2200e-003		144.3763
Total	0.0498	0.0588	0.7372	1.7400e-003	0.1453	9.1000e-004	0.1462	0.0385	8.4000e-004	0.0394		144.2456	144.2456	6.2200e-003		144.3763

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.2671	154.8264	190.2386	0.4019	16.7042	3.1249	19.8291	4.4895	2.8731	7.3626		39,699.44 56	39,699.44 56	0.6393		39,712.87 13
Unmitigated	16.2671	154.8264	190.2386	0.4019	16.7042	3.1249	19.8291	4.4895	2.8731	7.3626		39,699.44 56	39,699.44 56	0.6393		39,712.87 13

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	2,476.02	1,536.84	597.66	6,339,977	6,339,977
Total	2,476.02	1,536.84	597.66	6,339,977	6,339,977

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.610000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.390000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Unmitigated	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1385					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4000e-004	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Total	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1385					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4000e-004	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Total	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003

7.0 Water Detail

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

797 Palmyrita Avenue Trailer Parking Lot Project
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	42.69	1000sqft	0.98	42,689.00	0
City Park	0.34	Acre	0.34	14,810.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2016
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - City Park used for landscaping on site, approx 15000

Construction Phase - No demo necessary, no buildings to coat, more time needed for site prep20

Off-road Equipment - No architectural coating

Off-road Equipment -

Off-road Equipment -

Trips and VMT - No architectural coating

Demolition -

Architectural Coating - No buildings to coat

Vehicle Trips - No trips for landscaping

Vehicle Emission Factors - Based on Traffic Flow Breakdown from clinet

Vehicle Emission Factors - LDA 0.466361

HHD 0.040207

Swap

Vehicle Emission Factors - HHD - 0.040207

LDA - 0.466361

Area Coating - no buildings to coat

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	24137	0
tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	10.00
tblGrading	AcresOfGrading	7.50	1.50
tblGrading	AcresOfGrading	5.00	1.00
tblLandUse	LandUseSquareFeet	42,690.00	42,689.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.02	0.02

tblVehicleEF	HHD	9.1460e-003	0.01
tblVehicleEF	HHD	2.81	2.78
tblVehicleEF	HHD	1.45	1.70
tblVehicleEF	HHD	54.60	60.65
tblVehicleEF	HHD	566.61	576.70
tblVehicleEF	HHD	1,587.75	1,629.98
tblVehicleEF	HHD	59.71	66.79
tblVehicleEF	HHD	0.04	0.39
tblVehicleEF	HHD	4.87	5.80
tblVehicleEF	HHD	5.89	7.75
tblVehicleEF	HHD	3.54	3.83
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.11	0.17
tblVehicleEF	HHD	3.0930e-003	5.0390e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7530e-003	8.7490e-003
tblVehicleEF	HHD	0.10	0.15
tblVehicleEF	HHD	2.5010e-003	3.9960e-003
tblVehicleEF	HHD	2.6600e-003	3.7260e-003
tblVehicleEF	HHD	0.13	0.19
tblVehicleEF	HHD	0.50	0.52
tblVehicleEF	HHD	1.4900e-003	1.9840e-003
tblVehicleEF	HHD	0.20	0.26
tblVehicleEF	HHD	0.45	0.65
tblVehicleEF	HHD	1.93	2.49

tblVehicleEF	HHD	5.6020e-003	5.5860e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5350e-003	1.7070e-003
tblVehicleEF	HHD	2.6600e-003	3.7260e-003
tblVehicleEF	HHD	0.13	0.19
tblVehicleEF	HHD	0.57	0.59
tblVehicleEF	HHD	1.4900e-003	1.9840e-003
tblVehicleEF	HHD	0.23	0.30
tblVehicleEF	HHD	0.45	0.65
tblVehicleEF	HHD	2.06	2.67
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	9.1460e-003	0.01
tblVehicleEF	HHD	2.04	2.02
tblVehicleEF	HHD	1.45	1.70
tblVehicleEF	HHD	45.51	51.86
tblVehicleEF	HHD	600.27	610.97
tblVehicleEF	HHD	1,587.75	1,629.98
tblVehicleEF	HHD	59.71	66.79
tblVehicleEF	HHD	0.04	0.39
tblVehicleEF	HHD	5.02	5.98
tblVehicleEF	HHD	5.56	7.32
tblVehicleEF	HHD	3.40	3.67
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.11	0.17
tblVehicleEF	HHD	3.0930e-003	5.0390e-003
tblVehicleEF	HHD	9.5250e-003	0.02

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7530e-003	8.7490e-003
tblVehicleEF	HHD	0.10	0.15
tblVehicleEF	HHD	2.5010e-003	3.9960e-003
tblVehicleEF	HHD	4.9950e-003	7.0560e-003
tblVehicleEF	HHD	0.14	0.21
tblVehicleEF	HHD	0.47	0.49
tblVehicleEF	HHD	3.1990e-003	4.3530e-003
tblVehicleEF	HHD	0.20	0.26
tblVehicleEF	HHD	0.46	0.65
tblVehicleEF	HHD	1.67	2.15
tblVehicleEF	HHD	5.9350e-003	5.9180e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.3850e-003	1.5590e-003
tblVehicleEF	HHD	4.9950e-003	7.0560e-003
tblVehicleEF	HHD	0.14	0.21
tblVehicleEF	HHD	0.54	0.56
tblVehicleEF	HHD	3.1990e-003	4.3530e-003
tblVehicleEF	HHD	0.23	0.30
tblVehicleEF	HHD	0.46	0.65
tblVehicleEF	HHD	1.79	2.31
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	9.1460e-003	0.01
tblVehicleEF	HHD	3.87	3.83
tblVehicleEF	HHD	1.45	1.70
tblVehicleEF	HHD	51.46	57.31
tblVehicleEF	HHD	520.12	529.39
tblVehicleEF	HHD	1,587.75	1,629.98

tblVehicleEF	HHD	59.71	66.79
tblVehicleEF	HHD	0.04	0.39
tblVehicleEF	HHD	4.65	5.54
tblVehicleEF	HHD	5.80	7.64
tblVehicleEF	HHD	3.50	3.79
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.11	0.17
tblVehicleEF	HHD	3.0930e-003	5.0390e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7530e-003	8.7490e-003
tblVehicleEF	HHD	0.10	0.15
tblVehicleEF	HHD	2.5010e-003	3.9960e-003
tblVehicleEF	HHD	3.0380e-003	4.3990e-003
tblVehicleEF	HHD	0.16	0.25
tblVehicleEF	HHD	0.54	0.56
tblVehicleEF	HHD	1.6650e-003	2.2590e-003
tblVehicleEF	HHD	0.20	0.26
tblVehicleEF	HHD	0.48	0.69
tblVehicleEF	HHD	1.84	2.36
tblVehicleEF	HHD	5.1420e-003	5.1280e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.4830e-003	1.6510e-003
tblVehicleEF	HHD	3.0380e-003	4.3990e-003
tblVehicleEF	HHD	0.16	0.25
tblVehicleEF	HHD	0.62	0.64

tblVehicleEF	HHD	1.6650e-003	2.2590e-003
tblVehicleEF	HHD	0.23	0.30
tblVehicleEF	HHD	0.48	0.69
tblVehicleEF	HHD	1.97	2.53
tblVehicleEF	LDA	9.9610e-003	0.01
tblVehicleEF	LDA	8.4720e-003	0.01
tblVehicleEF	LDA	0.93	1.18
tblVehicleEF	LDA	1.93	2.47
tblVehicleEF	LDA	268.77	293.38
tblVehicleEF	LDA	62.09	66.78
tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.13	0.17
tblVehicleEF	LDA	1.4500e-003	1.5970e-003
tblVehicleEF	LDA	2.7160e-003	2.7190e-003
tblVehicleEF	LDA	1.3310e-003	1.4560e-003
tblVehicleEF	LDA	2.4950e-003	2.4750e-003
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.28	0.35
tblVehicleEF	LDA	0.15	0.20
tblVehicleEF	LDA	3.3140e-003	3.3310e-003
tblVehicleEF	LDA	7.6900e-004	7.7800e-004
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.05	0.05

tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.28	0.35
tblVehicleEF	LDA	0.16	0.22
tblVehicleEF	LDA	9.9610e-003	0.01
tblVehicleEF	LDA	8.4720e-003	0.01
tblVehicleEF	LDA	1.10	1.38
tblVehicleEF	LDA	1.49	1.92
tblVehicleEF	LDA	291.04	317.69
tblVehicleEF	LDA	62.09	66.78
tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.12	0.16
tblVehicleEF	LDA	1.4500e-003	1.5970e-003
tblVehicleEF	LDA	2.7160e-003	2.7190e-003
tblVehicleEF	LDA	1.3310e-003	1.4560e-003
tblVehicleEF	LDA	2.4950e-003	2.4750e-003
tblVehicleEF	LDA	0.12	0.15
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.28	0.34
tblVehicleEF	LDA	0.12	0.17
tblVehicleEF	LDA	3.5920e-003	3.6100e-003
tblVehicleEF	LDA	7.6100e-004	7.6800e-004
tblVehicleEF	LDA	0.12	0.15
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.03	0.05

tblVehicleEF	LDA	0.28	0.34
tblVehicleEF	LDA	0.13	0.18
tblVehicleEF	LDA	9.9610e-003	0.01
tblVehicleEF	LDA	8.4720e-003	0.01
tblVehicleEF	LDA	0.89	1.13
tblVehicleEF	LDA	1.90	2.43
tblVehicleEF	LDA	265.00	289.27
tblVehicleEF	LDA	62.09	66.78
tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.13	0.17
tblVehicleEF	LDA	1.4500e-003	1.5970e-003
tblVehicleEF	LDA	2.7160e-003	2.7190e-003
tblVehicleEF	LDA	1.3310e-003	1.4560e-003
tblVehicleEF	LDA	2.4950e-003	2.4750e-003
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.32	0.39
tblVehicleEF	LDA	0.14	0.20
tblVehicleEF	LDA	3.2670e-003	3.2830e-003
tblVehicleEF	LDA	7.6800e-004	7.7700e-004
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.15	0.18
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.32	0.39

tblVehicleEF	LDA	0.15	0.21
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.29	2.86
tblVehicleEF	LDT1	4.84	5.83
tblVehicleEF	LDT1	317.35	341.86
tblVehicleEF	LDT1	72.37	77.04
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.24	0.29
tblVehicleEF	LDT1	0.29	0.34
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
tblVehicleEF	LDT1	4.5710e-003	5.0010e-003
tblVehicleEF	LDT1	0.19	0.21
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	1.07	1.21
tblVehicleEF	LDT1	0.38	0.47
tblVehicleEF	LDT1	3.8390e-003	3.8580e-003
tblVehicleEF	LDT1	9.2800e-004	9.4400e-004
tblVehicleEF	LDT1	0.19	0.21
tblVehicleEF	LDT1	0.31	0.34
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.08	0.11
tblVehicleEF	LDT1	1.07	1.21
tblVehicleEF	LDT1	0.41	0.50

tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.65	3.28
tblVehicleEF	LDT1	3.74	4.53
tblVehicleEF	LDT1	341.98	368.23
tblVehicleEF	LDT1	72.37	77.04
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.21	0.26
tblVehicleEF	LDT1	0.27	0.32
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
tblVehicleEF	LDT1	4.5710e-003	5.0010e-003
tblVehicleEF	LDT1	0.36	0.40
tblVehicleEF	LDT1	0.37	0.41
tblVehicleEF	LDT1	0.24	0.27
tblVehicleEF	LDT1	0.06	0.09
tblVehicleEF	LDT1	1.05	1.19
tblVehicleEF	LDT1	0.32	0.39
tblVehicleEF	LDT1	4.1440e-003	4.1610e-003
tblVehicleEF	LDT1	9.0900e-004	9.2100e-004
tblVehicleEF	LDT1	0.36	0.40
tblVehicleEF	LDT1	0.37	0.41
tblVehicleEF	LDT1	0.24	0.27
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	1.05	1.19
tblVehicleEF	LDT1	0.34	0.42
tblVehicleEF	LDT1	0.02	0.03

tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	2.21	2.76
tblVehicleEF	LDT1	4.75	5.72
tblVehicleEF	LDT1	313.18	337.41
tblVehicleEF	LDT1	72.37	77.04
tblVehicleEF	LDT1	0.07	0.00
tblVehicleEF	LDT1	0.23	0.28
tblVehicleEF	LDT1	0.29	0.34
tblVehicleEF	LDT1	3.2680e-003	3.8410e-003
tblVehicleEF	LDT1	4.9630e-003	5.4650e-003
tblVehicleEF	LDT1	3.0070e-003	3.5130e-003
tblVehicleEF	LDT1	4.5710e-003	5.0010e-003
tblVehicleEF	LDT1	0.20	0.23
tblVehicleEF	LDT1	0.36	0.41
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	1.26	1.41
tblVehicleEF	LDT1	0.37	0.46
tblVehicleEF	LDT1	3.7870e-003	3.8060e-003
tblVehicleEF	LDT1	9.2600e-004	9.4200e-004
tblVehicleEF	LDT1	0.20	0.23
tblVehicleEF	LDT1	0.36	0.41
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.08	0.11
tblVehicleEF	LDT1	1.26	1.41
tblVehicleEF	LDT1	0.40	0.49
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02

tblVehicleEF	LDT2	1.29	1.62
tblVehicleEF	LDT2	2.76	3.47
tblVehicleEF	LDT2	385.92	413.27
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LDT2	0.26	0.34
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.17
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.46	0.52
tblVehicleEF	LDT2	0.20	0.26
tblVehicleEF	LDT2	4.5140e-003	4.5420e-003
tblVehicleEF	LDT2	1.0500e-003	1.0610e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.17
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.46	0.52
tblVehicleEF	LDT2	0.22	0.28
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	1.51	1.89

tblVehicleEF	LDT2	2.12	2.68
tblVehicleEF	LDT2	417.00	446.44
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.14	0.18
tblVehicleEF	LDT2	0.24	0.31
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.17	0.20
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.45	0.51
tblVehicleEF	LDT2	0.17	0.22
tblVehicleEF	LDT2	4.8810e-003	4.9110e-003
tblVehicleEF	LDT2	1.0390e-003	1.0480e-003
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.17	0.20
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.45	0.51
tblVehicleEF	LDT2	0.18	0.24
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	1.24	1.56
tblVehicleEF	LDT2	2.71	3.41

tblVehicleEF	LDT2	380.67	407.66
tblVehicleEF	LDT2	87.85	92.96
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.14	0.19
tblVehicleEF	LDT2	0.26	0.34
tblVehicleEF	LDT2	1.5080e-003	1.6530e-003
tblVehicleEF	LDT2	2.7860e-003	2.7330e-003
tblVehicleEF	LDT2	1.3860e-003	1.5090e-003
tblVehicleEF	LDT2	2.5660e-003	2.5010e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.17	0.19
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.53	0.60
tblVehicleEF	LDT2	0.20	0.26
tblVehicleEF	LDT2	4.4520e-003	4.4800e-003
tblVehicleEF	LDT2	1.0490e-003	1.0600e-003
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.17	0.19
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.53	0.60
tblVehicleEF	LDT2	0.21	0.28
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.87	1.07

tblVehicleEF	LHD1	3.63	4.04
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	1.80	2.13
tblVehicleEF	LHD1	1.00	1.04
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003
tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	2.8550e-003	3.0390e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4180e-003	1.4530e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.30	0.33
tblVehicleEF	LHD1	5.3280e-003	5.3840e-003
tblVehicleEF	LHD1	4.5600e-004	4.6000e-004
tblVehicleEF	LHD1	2.8550e-003	3.0390e-003

tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4180e-003	1.4530e-003
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.32	0.35
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.89	1.09
tblVehicleEF	LHD1	2.93	3.26
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	1.68	2.00
tblVehicleEF	LHD1	0.97	1.00
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003

tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	5.1220e-003	5.4790e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.8570e-003	2.9970e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.26	0.29
tblVehicleEF	LHD1	5.3280e-003	5.3850e-003
tblVehicleEF	LHD1	4.4400e-004	4.4700e-004
tblVehicleEF	LHD1	5.1220e-003	5.4790e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.8570e-003	2.9970e-003
tblVehicleEF	LHD1	0.07	0.09
tblVehicleEF	LHD1	0.56	0.58
tblVehicleEF	LHD1	0.28	0.31
tblVehicleEF	LHD1	1.1720e-003	1.1790e-003
tblVehicleEF	LHD1	8.6470e-003	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	0.87	1.06
tblVehicleEF	LHD1	3.38	3.76
tblVehicleEF	LHD1	8.64	8.82
tblVehicleEF	LHD1	522.14	538.23
tblVehicleEF	LHD1	37.65	38.15
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.07	0.07

tblVehicleEF	LHD1	1.76	2.10
tblVehicleEF	LHD1	0.99	1.03
tblVehicleEF	LHD1	7.3400e-004	7.4100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4820e-003	9.4870e-003
tblVehicleEF	LHD1	8.8810e-003	0.01
tblVehicleEF	LHD1	9.6700e-004	1.1530e-003
tblVehicleEF	LHD1	6.7500e-004	6.8200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3710e-003	2.3720e-003
tblVehicleEF	LHD1	8.1730e-003	9.2330e-003
tblVehicleEF	LHD1	8.8900e-004	1.0570e-003
tblVehicleEF	LHD1	3.2020e-003	3.4840e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5220e-003	1.5740e-003
tblVehicleEF	LHD1	0.06	0.07
tblVehicleEF	LHD1	0.60	0.62
tblVehicleEF	LHD1	0.28	0.32
tblVehicleEF	LHD1	5.3280e-003	5.3840e-003
tblVehicleEF	LHD1	4.5200e-004	4.5600e-004
tblVehicleEF	LHD1	3.2020e-003	3.4840e-003
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5220e-003	1.5740e-003
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	0.60	0.62
tblVehicleEF	LHD1	0.30	0.34

tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.62	0.75
tblVehicleEF	LHD2	1.66	1.91
tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.91	3.41
tblVehicleEF	LHD2	0.51	0.52
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	1.2570e-003	1.4040e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4800e-004	6.8900e-004
tblVehicleEF	LHD2	0.07	0.08

tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.14	0.17
tblVehicleEF	LHD2	5.1460e-003	5.1750e-003
tblVehicleEF	LHD2	2.3500e-004	2.4000e-004
tblVehicleEF	LHD2	1.2570e-003	1.4040e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4800e-004	6.8900e-004
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.63	0.76
tblVehicleEF	LHD2	1.36	1.57
tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.75	3.22
tblVehicleEF	LHD2	0.49	0.50
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	2.2650e-003	2.5460e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3100e-003	1.4320e-003
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	5.1460e-003	5.1760e-003
tblVehicleEF	LHD2	2.2900e-004	2.3400e-004
tblVehicleEF	LHD2	2.2650e-003	2.5460e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3100e-003	1.4320e-003
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.23	0.25
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	8.0200e-004	8.0700e-004
tblVehicleEF	LHD2	5.7890e-003	6.6850e-003
tblVehicleEF	LHD2	8.1880e-003	9.5610e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.62	0.75
tblVehicleEF	LHD2	1.55	1.78

tblVehicleEF	LHD2	9.72	9.92
tblVehicleEF	LHD2	512.27	525.66
tblVehicleEF	LHD2	19.73	20.16
tblVehicleEF	LHD2	7.3990e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	2.87	3.36
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.4260e-003	1.4300e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.6200e-004	6.0800e-004
tblVehicleEF	LHD2	1.3120e-003	1.3150e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6910e-003	2.6940e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1500e-004	5.4000e-004
tblVehicleEF	LHD2	1.3820e-003	1.5920e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	7.4400e-004
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.25	0.27
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	5.1460e-003	5.1750e-003
tblVehicleEF	LHD2	2.3300e-004	2.3700e-004
tblVehicleEF	LHD2	1.3820e-003	1.5920e-003
tblVehicleEF	LHD2	0.05	0.05

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	7.4400e-004
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.25	0.27
tblVehicleEF	LHD2	0.15	0.17
tblVehicleEF	MCY	26.48	29.62
tblVehicleEF	MCY	9.94	9.82
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.22	1.25
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	1.12	1.14
tblVehicleEF	MCY	0.45	0.48
tblVehicleEF	MCY	0.57	0.59
tblVehicleEF	MCY	2.63	2.77
tblVehicleEF	MCY	1.39	1.60
tblVehicleEF	MCY	2.11	2.16
tblVehicleEF	MCY	2.0290e-003	2.0360e-003
tblVehicleEF	MCY	6.7200e-004	6.9100e-004
tblVehicleEF	MCY	1.12	1.14
tblVehicleEF	MCY	0.45	0.48

tblVehicleEF	MCY	0.57	0.59
tblVehicleEF	MCY	2.88	3.02
tblVehicleEF	MCY	1.39	1.60
tblVehicleEF	MCY	2.27	2.32
tblVehicleEF	MCY	26.16	29.25
tblVehicleEF	MCY	8.83	8.82
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.06	1.08
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	2.17	2.21
tblVehicleEF	MCY	0.66	0.69
tblVehicleEF	MCY	1.41	1.44
tblVehicleEF	MCY	2.56	2.69
tblVehicleEF	MCY	1.37	1.57
tblVehicleEF	MCY	1.84	1.88
tblVehicleEF	MCY	2.0220e-003	2.0280e-003
tblVehicleEF	MCY	6.4600e-004	6.6600e-004
tblVehicleEF	MCY	2.17	2.21
tblVehicleEF	MCY	0.66	0.69
tblVehicleEF	MCY	1.41	1.44

tblVehicleEF	MCY	2.81	2.94
tblVehicleEF	MCY	1.37	1.57
tblVehicleEF	MCY	1.98	2.02
tblVehicleEF	MCY	25.65	28.65
tblVehicleEF	MCY	9.58	9.47
tblVehicleEF	MCY	147.70	146.18
tblVehicleEF	MCY	43.40	46.13
tblVehicleEF	MCY	6.4460e-003	0.00
tblVehicleEF	MCY	1.18	1.21
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.9100e-004	6.8400e-004
tblVehicleEF	MCY	1.3570e-003	1.8270e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	4.0100e-004	5.5000e-004
tblVehicleEF	MCY	1.0940e-003	1.4460e-003
tblVehicleEF	MCY	1.33	1.35
tblVehicleEF	MCY	0.62	0.67
tblVehicleEF	MCY	0.58	0.60
tblVehicleEF	MCY	2.60	2.73
tblVehicleEF	MCY	1.63	1.85
tblVehicleEF	MCY	2.04	2.08
tblVehicleEF	MCY	2.0150e-003	2.0200e-003
tblVehicleEF	MCY	6.6400e-004	6.8300e-004
tblVehicleEF	MCY	1.33	1.35
tblVehicleEF	MCY	0.62	0.67
tblVehicleEF	MCY	0.58	0.60
tblVehicleEF	MCY	2.85	2.99

tblVehicleEF	MCY	1.63	1.85
tblVehicleEF	MCY	2.20	2.24
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.86	2.15
tblVehicleEF	MDV	4.27	4.89
tblVehicleEF	MDV	505.88	535.78
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.25	0.30
tblVehicleEF	MDV	0.42	0.49
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
tblVehicleEF	MDV	2.8800e-003	2.8470e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.19	0.18
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.37	0.43
tblVehicleEF	MDV	5.7500e-003	5.7720e-003
tblVehicleEF	MDV	1.3440e-003	1.3510e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.19	0.18
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.56	0.56

tblVehicleEF	MDV	0.40	0.46
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.19	2.52
tblVehicleEF	MDV	3.28	3.76
tblVehicleEF	MDV	546.16	578.32
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.22	0.27
tblVehicleEF	MDV	0.39	0.45
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
tblVehicleEF	MDV	2.8800e-003	2.8470e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.31	0.36
tblVehicleEF	MDV	6.2130e-003	6.2350e-003
tblVehicleEF	MDV	1.3270e-003	1.3310e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.33	0.38

tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.79	2.07
tblVehicleEF	MDV	4.19	4.80
tblVehicleEF	MDV	499.07	528.58
tblVehicleEF	MDV	114.16	119.36
tblVehicleEF	MDV	0.17	0.00
tblVehicleEF	MDV	0.24	0.28
tblVehicleEF	MDV	0.42	0.49
tblVehicleEF	MDV	1.7170e-003	1.8140e-003
tblVehicleEF	MDV	3.1190e-003	3.0910e-003
tblVehicleEF	MDV	1.5820e-003	1.6670e-003
tblVehicleEF	MDV	2.8800e-003	2.8470e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.64	0.65
tblVehicleEF	MDV	0.36	0.42
tblVehicleEF	MDV	5.6710e-003	5.6930e-003
tblVehicleEF	MDV	1.3430e-003	1.3490e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.64	0.65
tblVehicleEF	MDV	0.39	0.45
tblVehicleEF	MH	2.62	3.88

tblVehicleEF	MH	7.32	8.66
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.71	1.96
tblVehicleEF	MH	0.75	0.84
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	1.29	1.46
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.46	0.51
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.76	1.84
tblVehicleEF	MH	0.42	0.52
tblVehicleEF	MH	6.3750e-003	6.4790e-003
tblVehicleEF	MH	4.3300e-004	4.6500e-004
tblVehicleEF	MH	1.29	1.46
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.46	0.51
tblVehicleEF	MH	0.09	0.12
tblVehicleEF	MH	1.76	1.84
tblVehicleEF	MH	0.45	0.56

tblVehicleEF	MH	2.69	3.99
tblVehicleEF	MH	5.81	6.88
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.57	1.79
tblVehicleEF	MH	0.72	0.81
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	2.27	2.58
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.92	1.04
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.75	1.83
tblVehicleEF	MH	0.36	0.44
tblVehicleEF	MH	6.3760e-003	6.4800e-003
tblVehicleEF	MH	4.0700e-004	4.3500e-004
tblVehicleEF	MH	2.27	2.58
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.92	1.04
tblVehicleEF	MH	0.09	0.12
tblVehicleEF	MH	1.75	1.83

tblVehicleEF	MH	0.39	0.47
tblVehicleEF	MH	2.60	3.85
tblVehicleEF	MH	6.83	8.06
tblVehicleEF	MH	620.41	641.58
tblVehicleEF	MH	29.47	30.89
tblVehicleEF	MH	3.2370e-003	0.00
tblVehicleEF	MH	1.67	1.91
tblVehicleEF	MH	0.74	0.83
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7230e-003	8.7310e-003
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.0850e-003	1.5190e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1810e-003	2.1830e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	9.6600e-004	1.3260e-003
tblVehicleEF	MH	1.57	1.81
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.51	0.58
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	1.86	1.94
tblVehicleEF	MH	0.40	0.49
tblVehicleEF	MH	6.3740e-003	6.4780e-003
tblVehicleEF	MH	4.2500e-004	4.5500e-004
tblVehicleEF	MH	1.57	1.81
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.51	0.58
tblVehicleEF	MH	0.09	0.12

tblVehicleEF	MH	1.86	1.94
tblVehicleEF	MH	0.43	0.53
tblVehicleEF	MHD	7.4170e-003	9.1490e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
tblVehicleEF	MHD	1.82	1.98
tblVehicleEF	MHD	0.86	1.20
tblVehicleEF	MHD	17.73	21.46
tblVehicleEF	MHD	606.04	606.65
tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	6.27	7.20
tblVehicleEF	MHD	3.14	4.52
tblVehicleEF	MHD	1.72	1.95
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	4.3610e-003	5.5100e-003
tblVehicleEF	MHD	0.15	0.21
tblVehicleEF	MHD	0.16	0.20
tblVehicleEF	MHD	2.1540e-003	2.6470e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.74	0.91

tblVehicleEF	MHD	1.19	1.56
tblVehicleEF	MHD	5.9920e-003	5.8760e-003
tblVehicleEF	MHD	9.4920e-003	9.5670e-003
tblVehicleEF	MHD	9.1500e-004	1.0330e-003
tblVehicleEF	MHD	4.3610e-003	5.5100e-003
tblVehicleEF	MHD	0.15	0.21
tblVehicleEF	MHD	0.18	0.22
tblVehicleEF	MHD	2.1540e-003	2.6470e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.27	1.68
tblVehicleEF	MHD	6.9900e-003	8.6220e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
tblVehicleEF	MHD	1.33	1.44
tblVehicleEF	MHD	0.87	1.21
tblVehicleEF	MHD	14.59	18.00
tblVehicleEF	MHD	642.05	642.69
tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	6.47	7.43
tblVehicleEF	MHD	2.95	4.26
tblVehicleEF	MHD	1.65	1.87
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.02	0.03

tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	8.0000e-003	0.01
tblVehicleEF	MHD	0.18	0.24
tblVehicleEF	MHD	0.15	0.19
tblVehicleEF	MHD	4.5060e-003	5.6750e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.03	1.35
tblVehicleEF	MHD	6.3480e-003	6.2250e-003
tblVehicleEF	MHD	9.4920e-003	9.5670e-003
tblVehicleEF	MHD	8.6100e-004	9.7200e-004
tblVehicleEF	MHD	8.0000e-003	0.01
tblVehicleEF	MHD	0.18	0.24
tblVehicleEF	MHD	0.17	0.21
tblVehicleEF	MHD	4.5060e-003	5.6750e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.74	0.91
tblVehicleEF	MHD	1.11	1.45
tblVehicleEF	MHD	8.0070e-003	9.8770e-003
tblVehicleEF	MHD	4.5320e-003	6.8430e-003
tblVehicleEF	MHD	2.51	2.73
tblVehicleEF	MHD	0.86	1.19
tblVehicleEF	MHD	16.67	20.21
tblVehicleEF	MHD	556.32	556.87
tblVehicleEF	MHD	956.11	983.19
tblVehicleEF	MHD	57.95	63.82

tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	5.99	6.88
tblVehicleEF	MHD	3.08	4.45
tblVehicleEF	MHD	1.70	1.93
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.10	0.14
tblVehicleEF	MHD	3.2510e-003	5.0040e-003
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.09	0.13
tblVehicleEF	MHD	2.7420e-003	4.1210e-003
tblVehicleEF	MHD	5.0560e-003	6.5390e-003
tblVehicleEF	MHD	0.20	0.27
tblVehicleEF	MHD	0.17	0.21
tblVehicleEF	MHD	2.3820e-003	2.9760e-003
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.79	0.98
tblVehicleEF	MHD	1.13	1.48
tblVehicleEF	MHD	5.5000e-003	5.3940e-003
tblVehicleEF	MHD	9.4920e-003	9.5660e-003
tblVehicleEF	MHD	8.9700e-004	1.0110e-003
tblVehicleEF	MHD	5.0560e-003	6.5390e-003
tblVehicleEF	MHD	0.20	0.27
tblVehicleEF	MHD	0.20	0.24
tblVehicleEF	MHD	2.3820e-003	2.9760e-003
tblVehicleEF	MHD	0.13	0.19
tblVehicleEF	MHD	0.79	0.98

tblVehicleEF	MHD	1.21	1.59
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.0430e-003	2.2030e-003
tblVehicleEF	OBUS	2.36	2.30
tblVehicleEF	OBUS	1.74	2.18
tblVehicleEF	OBUS	11.79	12.87
tblVehicleEF	OBUS	571.35	573.90
tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
tblVehicleEF	OBUS	5.94	7.28
tblVehicleEF	OBUS	3.60	4.81
tblVehicleEF	OBUS	1.59	1.69
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.1200e-003	1.5340e-003
tblVehicleEF	OBUS	0.02	0.05
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.8700e-004	1.3140e-003
tblVehicleEF	OBUS	1.1960e-003	1.2410e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.41	0.49
tblVehicleEF	OBUS	5.5500e-004	5.5100e-004
tblVehicleEF	OBUS	0.12	0.16

tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.73	0.82
tblVehicleEF	OBUS	5.6490e-003	5.5590e-003
tblVehicleEF	OBUS	9.3080e-003	9.2020e-003
tblVehicleEF	OBUS	5.8100e-004	6.1200e-004
tblVehicleEF	OBUS	1.1960e-003	1.2410e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.47	0.56
tblVehicleEF	OBUS	5.5500e-004	5.5100e-004
tblVehicleEF	OBUS	0.15	0.20
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.78	0.88
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.0430e-003	2.2030e-003
tblVehicleEF	OBUS	1.72	1.67
tblVehicleEF	OBUS	1.77	2.22
tblVehicleEF	OBUS	9.56	10.52
tblVehicleEF	OBUS	605.30	607.99
tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
tblVehicleEF	OBUS	6.13	7.51
tblVehicleEF	OBUS	3.35	4.48
tblVehicleEF	OBUS	1.53	1.62
tblVehicleEF	OBUS	0.02	0.05
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
tblVehicleEF	OBUS	0.05	0.08

tblVehicleEF	OBUS	1.1200e-003	1.5340e-003
tblVehicleEF	OBUS	0.01	0.05
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.8700e-004	1.3140e-003
tblVehicleEF	OBUS	2.1240e-003	2.2230e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.39	0.46
tblVehicleEF	OBUS	1.1040e-003	1.1300e-003
tblVehicleEF	OBUS	0.12	0.16
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.64	0.72
tblVehicleEF	OBUS	5.9840e-003	5.8890e-003
tblVehicleEF	OBUS	9.3090e-003	9.2020e-003
tblVehicleEF	OBUS	5.4400e-004	5.7200e-004
tblVehicleEF	OBUS	2.1240e-003	2.2230e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.44	0.53
tblVehicleEF	OBUS	1.1040e-003	1.1300e-003
tblVehicleEF	OBUS	0.15	0.20
tblVehicleEF	OBUS	0.28	0.27
tblVehicleEF	OBUS	0.69	0.77
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.0430e-003	2.2030e-003
tblVehicleEF	OBUS	3.26	3.17
tblVehicleEF	OBUS	1.74	2.18
tblVehicleEF	OBUS	11.08	12.11

tblVehicleEF	OBUS	524.48	526.81
tblVehicleEF	OBUS	927.15	933.78
tblVehicleEF	OBUS	36.08	37.90
tblVehicleEF	OBUS	9.7000e-004	0.00
tblVehicleEF	OBUS	5.67	6.96
tblVehicleEF	OBUS	3.53	4.72
tblVehicleEF	OBUS	1.58	1.67
tblVehicleEF	OBUS	0.02	0.07
tblVehicleEF	OBUS	0.08	0.08
tblVehicleEF	OBUS	0.01	9.9180e-003
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.1200e-003	1.5340e-003
tblVehicleEF	OBUS	0.02	0.07
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	2.5080e-003	2.4800e-003
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.8700e-004	1.3140e-003
tblVehicleEF	OBUS	1.2780e-003	1.3870e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.45	0.53
tblVehicleEF	OBUS	6.0100e-004	6.1100e-004
tblVehicleEF	OBUS	0.12	0.16
tblVehicleEF	OBUS	0.30	0.29
tblVehicleEF	OBUS	0.70	0.79
tblVehicleEF	OBUS	5.1850e-003	5.1030e-003
tblVehicleEF	OBUS	9.3080e-003	9.2020e-003
tblVehicleEF	OBUS	5.6900e-004	5.9900e-004
tblVehicleEF	OBUS	1.2780e-003	1.3870e-003

tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.51	0.60
tblVehicleEF	OBUS	6.0100e-004	6.1100e-004
tblVehicleEF	OBUS	0.15	0.20
tblVehicleEF	OBUS	0.30	0.29
tblVehicleEF	OBUS	0.75	0.84
tblVehicleEF	SBUS	5.4360e-003	5.3980e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	1.06	1.04
tblVehicleEF	SBUS	2.20	2.82
tblVehicleEF	SBUS	18.98	20.97
tblVehicleEF	SBUS	570.82	581.72
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	8.09	8.19
tblVehicleEF	SBUS	7.78	7.92
tblVehicleEF	SBUS	1.45	1.52
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003

tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.14	0.16
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	8.1420e-003	8.5740e-003
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.25	1.31
tblVehicleEF	SBUS	1.24	1.44
tblVehicleEF	SBUS	5.6430e-003	5.6340e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6310e-003	1.6850e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.14	0.16
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	8.1420e-003	8.5740e-003
tblVehicleEF	SBUS	0.30	0.32
tblVehicleEF	SBUS	1.25	1.31
tblVehicleEF	SBUS	1.33	1.54
tblVehicleEF	SBUS	5.1230e-003	5.0870e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	0.77	0.76
tblVehicleEF	SBUS	2.23	2.82
tblVehicleEF	SBUS	16.02	17.82
tblVehicleEF	SBUS	604.73	616.28
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	8.35	8.46
tblVehicleEF	SBUS	7.31	7.44

tblVehicleEF	SBUS	1.35	1.41
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.16	0.18
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.15	1.21
tblVehicleEF	SBUS	1.10	1.26
tblVehicleEF	SBUS	5.9790e-003	5.9690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.5800e-003	1.6300e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.16	0.18
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.30	0.32
tblVehicleEF	SBUS	1.15	1.21
tblVehicleEF	SBUS	1.17	1.35

tblVehicleEF	SBUS	5.8680e-003	5.8270e-003
tblVehicleEF	SBUS	7.5750e-003	7.2840e-003
tblVehicleEF	SBUS	1.46	1.44
tblVehicleEF	SBUS	2.19	2.79
tblVehicleEF	SBUS	18.77	20.75
tblVehicleEF	SBUS	523.99	533.99
tblVehicleEF	SBUS	1,108.33	1,135.42
tblVehicleEF	SBUS	125.07	129.31
tblVehicleEF	SBUS	8.9300e-004	0.00
tblVehicleEF	SBUS	7.73	7.83
tblVehicleEF	SBUS	7.66	7.80
tblVehicleEF	SBUS	1.46	1.52
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.55	0.56
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.6760e-003	3.7230e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7300e-003	2.7360e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	2.3500e-003	3.1720e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.18	0.21
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	9.2580e-003	0.01
tblVehicleEF	SBUS	0.26	0.28
tblVehicleEF	SBUS	1.48	1.55

tblVehicleEF	SBUS	1.24	1.43
tblVehicleEF	SBUS	5.1800e-003	5.1720e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6270e-003	1.6810e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.18	0.21
tblVehicleEF	SBUS	0.14	0.14
tblVehicleEF	SBUS	9.2580e-003	0.01
tblVehicleEF	SBUS	0.29	0.32
tblVehicleEF	SBUS	1.48	1.55
tblVehicleEF	SBUS	1.32	1.53
tblVehicleEF	UBUS	7.04	7.66
tblVehicleEF	UBUS	25.82	26.64
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.80	9.15
tblVehicleEF	UBUS	3.07	3.10
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.18	0.19
tblVehicleEF	UBUS	6.9560e-003	7.0160e-003
tblVehicleEF	UBUS	0.83	0.88
tblVehicleEF	UBUS	1.08	1.02
tblVehicleEF	UBUS	1.81	1.86

tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2590e-003	1.2770e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.18	0.19
tblVehicleEF	UBUS	6.9560e-003	7.0160e-003
tblVehicleEF	UBUS	0.93	0.97
tblVehicleEF	UBUS	1.08	1.02
tblVehicleEF	UBUS	1.93	1.99
tblVehicleEF	UBUS	7.19	7.81
tblVehicleEF	UBUS	21.44	22.16
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.20	8.52
tblVehicleEF	UBUS	2.92	2.95
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.22	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.85	0.90
tblVehicleEF	UBUS	1.05	0.99
tblVehicleEF	UBUS	1.62	1.67
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.1840e-003	1.2000e-003
tblVehicleEF	UBUS	0.02	0.02

tblVehicleEF	UBUS	0.22	0.23
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.95	0.99
tblVehicleEF	UBUS	1.05	0.99
tblVehicleEF	UBUS	1.73	1.78
tblVehicleEF	UBUS	7.05	7.65
tblVehicleEF	UBUS	24.84	25.64
tblVehicleEF	UBUS	1,539.69	1,579.79
tblVehicleEF	UBUS	77.01	78.93
tblVehicleEF	UBUS	1.0600e-003	0.00
tblVehicleEF	UBUS	8.63	8.97
tblVehicleEF	UBUS	3.04	3.08
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.1790e-003	1.3550e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.0930e-003	1.2350e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	7.5200e-003	7.6760e-003
tblVehicleEF	UBUS	0.84	0.88
tblVehicleEF	UBUS	1.27	1.20
tblVehicleEF	UBUS	1.77	1.82
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2420e-003	1.2600e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.23
tblVehicleEF	UBUS	7.5200e-003	7.6760e-003
tblVehicleEF	UBUS	0.93	0.97

tblVehicleEF	UBUS	1.27	1.20
tblVehicleEF	UBUS	1.89	1.95
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	ST_TR	0.00	36.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	SU_TR	0.00	14.00
tblVehicleTrips	WD_TR	1.59	0.00
tblVehicleTrips	WD_TR	0.00	58.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.4720	25.8104	16.9054	0.0181	5.4648	1.3990	6.8638	2.9316	1.2871	4.2187	0.0000	1,862.2062	1,862.2062	0.5411	0.0000	1,873.5686
Total	2.4720	25.8104	16.9054	0.0181	5.4648	1.3990	6.8638	2.9316	1.2871	4.2187	0.0000	1,862.2062	1,862.2062	0.5411	0.0000	1,873.5686

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.4720	25.8104	16.9054	0.0181	2.1858	1.3990	3.5849	1.1578	1.2871	2.4449	0.0000	1,862.206 2	1,862.206 2	0.5411	0.0000	1,873.568 6
Total	2.4720	25.8104	16.9054	0.0181	2.1858	1.3990	3.5849	1.1578	1.2871	2.4449	0.0000	1,862.206 2	1,862.206 2	0.5411	0.0000	1,873.568 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.00	0.00	47.77	60.51	0.00	42.05	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	16.7837	160.0003	200.2206	0.3913	16.7042	3.1470	19.8512	4.4895	2.8934	7.3829		38,731.0209	38,731.0209	0.6464		38,744.5953
Total	17.9482	160.0003	200.2251	0.3913	16.7042	3.1470	19.8512	4.4895	2.8934	7.3830		38,731.0303	38,731.0303	0.6464	0.0000	38,744.6053

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	16.7837	160.0003	200.2206	0.3913	16.7042	3.1470	19.8512	4.4895	2.8934	7.3829		38,731.0209	38,731.0209	0.6464		38,744.5953
Total	17.9482	160.0003	200.2251	0.3913	16.7042	3.1470	19.8512	4.4895	2.8934	7.3830		38,731.0303	38,731.0303	0.6464	0.0000	38,744.6053

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2016	1/14/2016	5	10	
2	Grading	Grading	1/15/2016	2/11/2016	5	20	
3	Paving	Paving	2/12/2016	2/18/2016	5	5	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3754	0.0000	5.3754	2.9079	0.0000	2.9079			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866		1,781.087 2	1,781.087 2	0.5372		1,792.369 3
Total	2.4428	25.7718	16.5144	0.0171	5.3754	1.3985	6.7739	2.9079	1.2866	4.1945		1,781.087 2	1,781.087 2	0.5372		1,792.369 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994
Total	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994

3.2 Site Preparation - 2016**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0964	0.0000	2.0964	1.1341	0.0000	1.1341			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866	0.0000	1,781.087 2	1,781.087 2	0.5372		1,792.369 3
Total	2.4428	25.7718	16.5144	0.0171	2.0964	1.3985	3.4949	1.1341	1.2866	2.4207	0.0000	1,781.087 2	1,781.087 2	0.5372		1,792.369 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994
Total	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5961	0.0000	4.5961	2.4913	0.0000	2.4913			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494		1,462.8468	1,462.8468	0.4413		1,472.1130
Total	1.9908	21.0361	13.6704	0.0141	4.5961	1.1407	5.7368	2.4913	1.0494	3.5407		1,462.8468	1,462.8468	0.4413		1,472.1130

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994
Total	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7925	0.0000	1.7925	0.9716	0.0000	0.9716			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130
Total	1.9908	21.0361	13.6704	0.0141	1.7925	1.1407	2.9332	0.9716	1.0494	2.0210	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994
Total	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994

3.4 Paving - 2016**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.5135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.8007	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0627	0.6352	1.5900e-003	0.1453	9.1000e-004	0.1462	0.0385	8.4000e-004	0.0394		131.8183	131.8183	6.2200e-003		131.9490
Total	0.0475	0.0627	0.6352	1.5900e-003	0.1453	9.1000e-004	0.1462	0.0385	8.4000e-004	0.0394		131.8183	131.8183	6.2200e-003		131.9490

3.4 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.5135					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.8007	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0627	0.6352	1.5900e-003	0.1453	9.1000e-004	0.1462	0.0385	8.4000e-004	0.0394		131.8183	131.8183	6.2200e-003		131.9490
Total	0.0475	0.0627	0.6352	1.5900e-003	0.1453	9.1000e-004	0.1462	0.0385	8.4000e-004	0.0394		131.8183	131.8183	6.2200e-003		131.9490

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.7837	160.0003	200.2206	0.3913	16.7042	3.1470	19.8512	4.4895	2.8934	7.3829		38,731.0209	38,731.0209	0.6464		38,744.5953
Unmitigated	16.7837	160.0003	200.2206	0.3913	16.7042	3.1470	19.8512	4.4895	2.8934	7.3829		38,731.0209	38,731.0209	0.6464		38,744.5953

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	2,476.02	1,536.84	597.66	6,339,977	6,339,977
Total	2,476.02	1,536.84	597.66	6,339,977	6,339,977

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.610000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.390000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Unmitigated	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1385					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4000e-004	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Total	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1385					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4000e-004	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003
Total	1.1645	4.0000e-005	4.5100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		9.4200e-003	9.4200e-003	3.0000e-005		9.9800e-003

7.0 Water Detail

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Appendix B

Biological Resources Report



Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003

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December 22, 2015
Rincon Job No. 14-00162

Project Number 15-02222

Mr. Adrian Troncoso
Senior Project Manager
Ware Malcomb
10 Edelman
Irvine, California 92618
949.660.9128
Via email: atroncoso@waremalcomb.com

**Subject: Letter Report for a Biological Site Visit for the 797 Palmyrita Avenue
Trailer Parking Lot Project, Riverside, Riverside County, California**

Dear Mr. Troncoso:

This letter documents the results of a Biological Site Visit performed for the 797 Palmyrita Avenue Trailer Parking Lot Project in the City of Riverside (City), Riverside County, California. The purpose of this letter report is to verify that a biologist flagged and demarcated the perimeter of the Springbrook Wash Arroyo located approximately 60 feet north of the project site boundary. In particular, we have sought to confirm that Springbrook Wash Arroyo is not located within the grading limits of the project.

PROJECT LOCATION AND DESCRIPTION

The project site is located in the northern portion of the City of Riverside, which is bordered by Belltown to the north, Moreno Valley to the east, Eastvale to the west, and Woodcrest to the south. Specifically, the project site is located on the north side of Palmyrita Avenue, west of Northgate Street.

The project site is a rectangle-shaped undeveloped dirt lot with an elevation of approximately 1,005 feet above mean sea level (MSL). Existing development surrounding the project site includes commercial development to the south and west, residential to the northeast, and Springbrook Wash Arroyo to the north. The proposed development involves a parking lot for trailer trucks.



Due to differences in the City's and Ware Malcomb's demarcation of Springbrook Wash Arroyo, the City conditioned the project to have a qualified Biologist flag and confirm the limits of Springbrook Wash Arroyo.

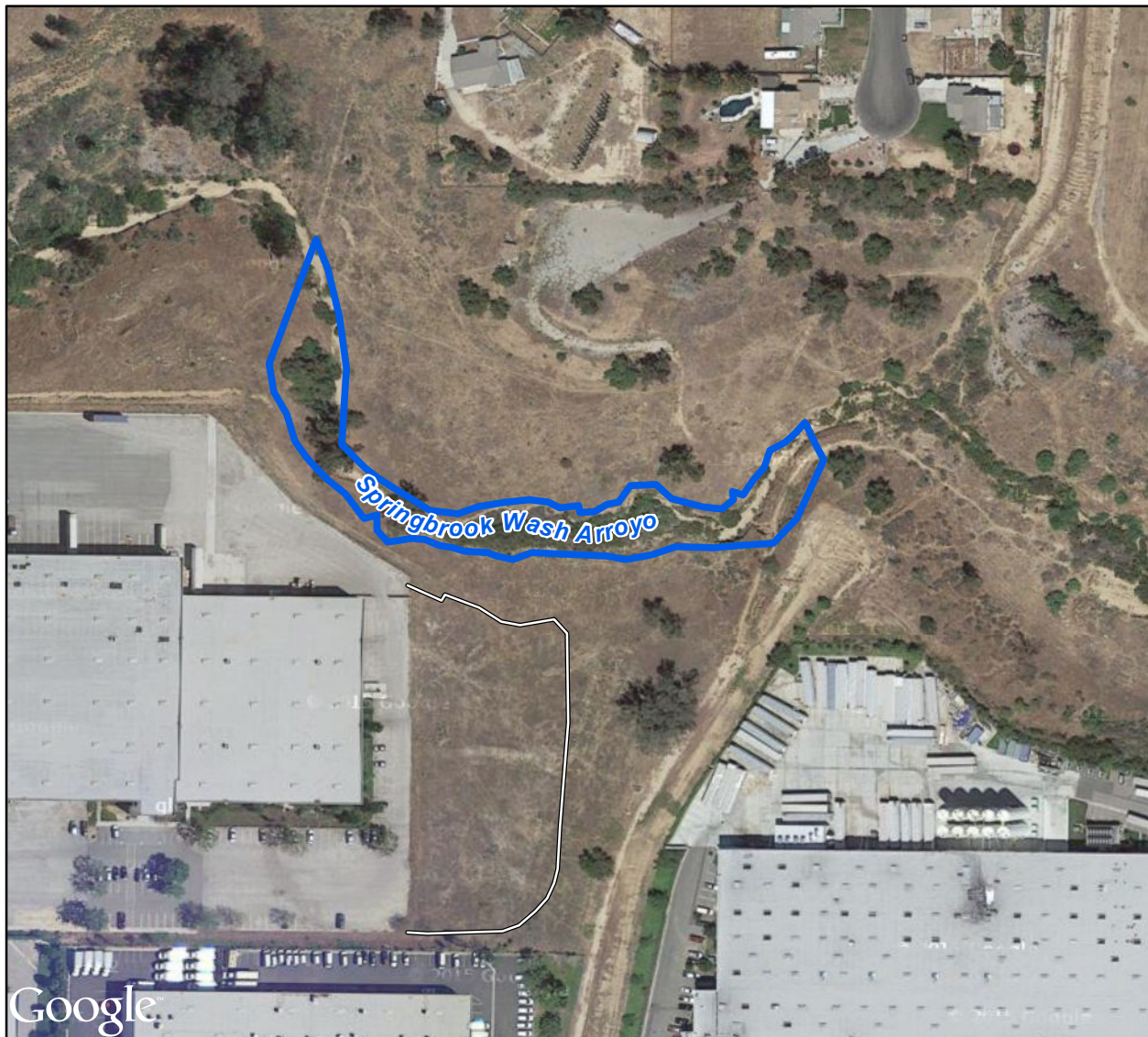
METHODOLOGY

Rincon Biologist Jennifer Kendrick conducted the field reconnaissance survey on December 8, 2015 between the hours of 1000-1400. Ms. Kendrick surveyed the project site and Springbrook Wash Arroyo on foot from approximately 34° 0'28.59"N, 117°19'23.42"W to 34° 0'33.37"N, 117°19'35.57"W. The perimeter was recorded by walking along the edge of the wash. Ms. Kendrick marked the limits by flagging riparian vegetation along the edge of the wash with red flagging tape approximately every ten feet. The limits of the wash were mapped according to the most accepted guidelines of California Department of Fish and Wildlife (CDFW). The edge of riparian habitat marked the extent the Springbrook Wash Arroyo. Where riparian habitat did not exist, the edge of bank represents the furthest extent.

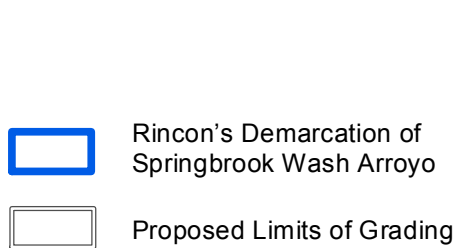
Weather conditions during the survey included an average temperature of 74 degrees Fahrenheit, winds of approximately 5 miles per hour, and 10 percent cloud cover.

RESULTS

The results of the field reconnaissance survey demonstrate that Springbrook Wash Arroyo does not occur within the proposed limits of grading (Figure 1). The Springbrook Wash Arroyo was found to be located approximately 60 feet north of the project site boundary. The approximate width of the channel ranges from 35 to 85 feet. Riparian vegetation was present throughout the majority of the drainage feature. Vegetation was dominated by willow species (*Salix* sp.) and mulefat (*Baccharis salicifolia*). Where riparian vegetation did not occur, bed, bank, and channel widths were identified by a deep incised channel and sediment deposit. The findings conveyed in this analysis are based on the PDF document exhibiting the proposed limits of grading provided by Ware Malcomb and the field reconnaissance survey. Although Rincon believes that the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources provided.



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0 100 200 Feet
1:24,000



Project Location Map

Figure 1



Thank you for selecting Rincon Consultants to provide this service. Please call if you have questions, or if we can be of further assistance.

Sincerely,

RINCON CONSULTANTS, INC.

Jennifer Kendrick
Associate Biologist

Joe Power
Principal Biologist



Site Photos



Flagging along Springbrook Wash Arroyo.



View of Springbrook Wash Arroyo facing north from project area.

Appendix C

Cultural Resources Report

Ware Malcomb

797 Palmyrita Trailer Parking Lot Project

Cultural Resources Study

U.S.G.S. *San Bernardino South* quadrangle

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December 22, 2015



Keywords: San Bernardino South, CA quadrangle; Riverside County;
intensive pedestrian survey; positive results

H. Haas, B. Campbell, and C. Duran

2015 *Phase I Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project, Riverside, Riverside County, California.* Rincon Consultants Project No. 15-02222. Report on file at the Eastern Information Center, Riverside, California.

797 Palmyrita Trailer Parking Lot Project

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Appendix A Native American Correspondence	
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EXECUTIVE SUMMARY

Ware Malcomb retained Rincon Consultants, Inc. to conduct a cultural resources study for the 797 Palmyrita Project located within the city of Riverside, Riverside County, California. The proposed project is subject to the California Environmental Quality Act. This cultural resources study includes a records search, Native American consultation, an intensive pedestrian survey of the project site, and preparation of this report.

The records search, Native American scoping, and intensive pedestrian survey identified no cultural resources within the project site. The CRHR eligible Gage Canal is located directly adjacent to the proposed project, but is outside of the proposed parking lot boundary and will not be directly or indirectly impacted by the proposed project. The project site is located within an industrial area. The installation of the parking lot will allow for the continued use of the area for its current and intended purpose without altering the local setting. Therefore, Rincon recommends that no additional work be required for the current project. The following measures are recommended in the case of unanticipated discoveries.

UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's *Professional Qualifications Standards* for archaeology (National Park Service [NPS] 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA or Section 106, additional work such as data recovery excavation may be warranted.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California 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 Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human 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). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.



1.0 INTRODUCTION

Rincon Consultants, Inc. (Rincon) was retained by Ware Malcomb to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project located within the city of Riverside, Riverside County, California. The proposed project is subject to the California Environmental Quality Act (CEQA) statutes and guidelines. This cultural resources study includes a records search, Native American consultation, an intensive pedestrian survey of the project site, and preparation of this report.

1.1 PROJECT DESCRIPTION

The proposed project is located in the City of Riverside and at 797 Palmyrita Avenue. The project site is depicted on the San Bernardino South, United States Geological Survey (USGS) 7.5-minute topographic map, within Section 8, Township 2 South, Range 4 West. Land use immediately adjacent to the project site to the east, west and south includes industrial; a natural arroyo is located to the north. Residential development is located further north across the arroyo, with vacant land to the northeast and northwest. The project proposes to construct a parking lot on an undeveloped dirt lot adjacent to an existing parking lot.

1.2 REGULATORY SETTING

1.2.1 State

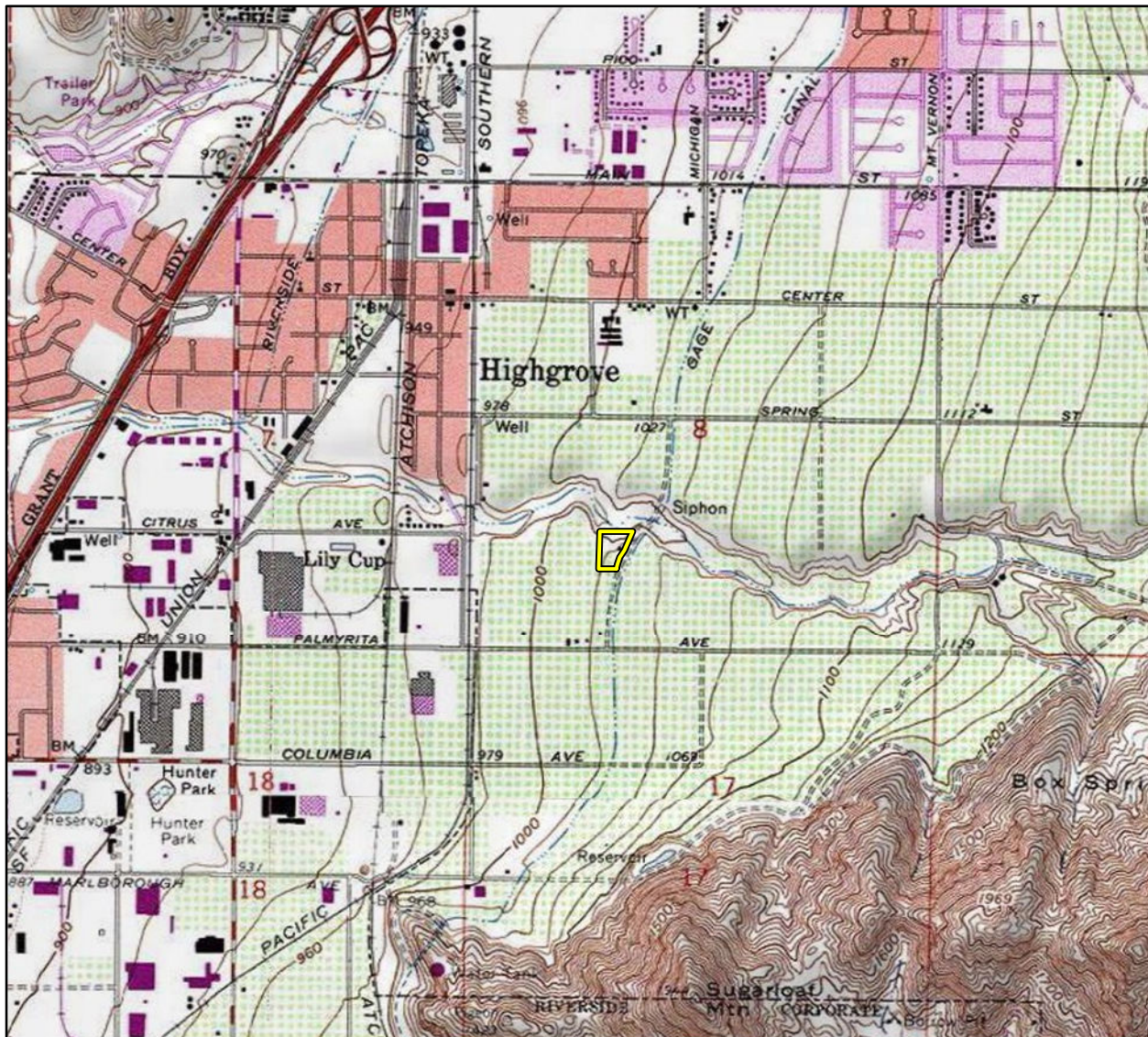
CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A *historical resource* is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be *historically significant* (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered *historically significant* if it meets any of the following criteria:

- 1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- 2) Is associated with the lives of persons important in our past;
- 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- 4) Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project will cause damage to a *unique archaeological resource*, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and PRC, Section 21083.2(g) defines a *unique archaeological resource* as an archaeological artifact,





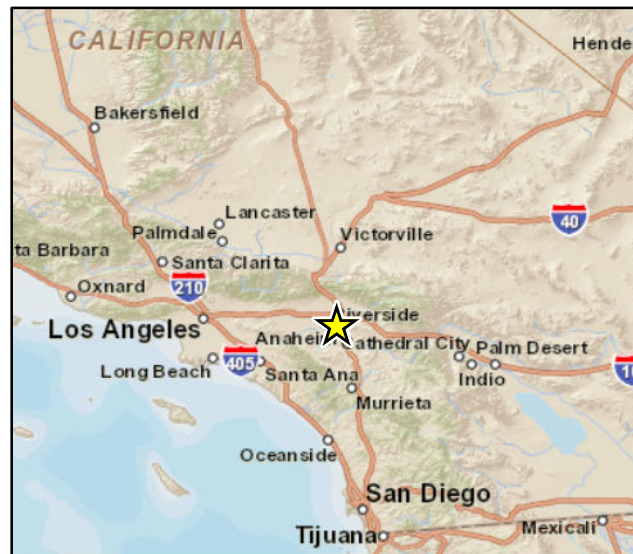
Imagery provided by National Geographic Society, ESRI and its licensors © 2015. San Bernardino South Quadrangle. T2S R4W S8. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



 Project Site

0 1,000 2,000
Feet

1:24,000



Project Location Map

Figure 1

object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

1.2.2 Local

The City of Riverside General Plan 2025 includes cultural resource regulations in its Historic Preservation Element (HP) and Land Use Element (LU).

Historic Preservation Element Policies:

Policy HP-1.1: The City shall promote the preservation of cultural resources to ensure that citizens of Riverside have the opportunity to understand and appreciate the City's unique heritage.

Policy HP-1.3: The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable State and federal cultural resources protection and management laws in its planning and project review process.

Policy HP-2.1: The City shall actively pursue a comprehensive program to document and preserve historic buildings, structures, districts, sites (including archaeological sites), objects, landscapes, and natural resources.

Policy HP-2.3: The City shall provide information to citizens, and the building community about what to do upon the discovery of archaeological resources and burial sites, as well as, the treatment, preservation, and repatriation of such resources.

Land Use Element Policies:

Policy LU-4.6: Ensure protection of prehistoric resources through consultations with the Native American tribe(s) identified by the Native American Heritage Commission pursuant to Government Code § 65352.3 and as required by the California Environmental Quality Act.

1.3 PERSONNEL

Rincon archaeologists Hannah Haas conducted the records search at the Eastern Information Center, conducted an intensive pedestrian survey of the project site, and served as the primary authors of this report. Rincon archaeologist Breana Campbell served as the co-author of this report. Rincon Cultural Resources Principal Investigator Christopher Duran, M.A., Registered Professional Archaeologist (RPA), served as principal investigator for the study and assisted



with the preparation of this report. Mr. Duran meets the Secretary of the Interior's *Professional Qualification Standards* for prehistoric and historic archaeology (NPS 1983). Rincon Cultural Resources Program Manager Kevin Hunt, B.A., managed this cultural resources study and provided program-level oversight. Rincon GIS Analyst Katherine Warner prepared the figures found in the report. Rincon Vice President Duane Vander Pluym, D. Env., reviewed this report for quality control.

2.0 ENVIRONMENTAL SETTING

The project site is located within the corporate limits of the city of Riverside at an approximate elevation of 305 meters (1,000 feet) above mean sea level. Riparian vegetation was identified throughout the project site. An arroyo traverses east-west adjacent to the northern boundary of the project site.

3.0 CULTURAL SETTING

3.1 PREHISTORY

During the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes within all or portions of southern California (c.f., Jones and Klar 2007; Moratto 1984). Wallace (1955, 1978) devised a prehistoric chronology for the southern California coastal region based on early studies and focused on data synthesis that included four horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Though initially lacking the chronological precision of absolute dates (Moratto 1984:159), Wallace's (1955) synthesis has been modified and improved using thousands of radiocarbon dates obtained by southern California researchers over recent decades (Byrd and Raab 2007:217; Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994). The prehistoric chronological sequence for southern California presented below is a composite based on Wallace (1955) and Warren (1968) as well as later studies, including Koerper and Drover (1983).

3.1.1 Early Man Horizon (ca. 10,000 – 6,000 B.C.)

Numerous pre-8000 B.C. sites have been identified along the mainland coast and Channel Islands of southern California (c.f., Erlandson 1991; Johnson et al. 2002; Jones and Klar 2007; Moratto 1984; Rick et al. 2001:609). The Arlington Springs site on Santa Rosa Island produced human femurs dated to approximately 13,000 years ago (Arnold et al. 2004; Johnson et al. 2002). On nearby San Miguel Island, human occupation at Daisy Cave (SMI-261) has been dated to nearly 13,000 years ago and included basketry greater than 12,000 years old, the earliest on the Pacific Coast (Arnold et al. 2004).

Although few Clovis or Folsom style fluted points have been found in southern California (e.g., Dillon 2002; Erlandson et al. 1987), Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons. Recent data indicate that the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas (e.g., Jones et al. 2002) and on inland Pleistocene lakeshores



(Moratto 1984). A warm and dry 3,000-year period called the Altithermal began around 6000 B.C. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns at this time, including a greater emphasis on plant foods and small game.

3.1.2 Milling Stone Horizon (6000–3000 B.C.)

Wallace (1955:219) defined the Milling Stone Horizon as “marked by extensive use of milling stones and mullers, a general lack of well-made projectile points, and burials with rock cairns.” The dominance of such artifact types indicate a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources were consumed including small and large terrestrial mammals, sea mammals, birds, shellfish and other littoral and estuarine species, near-shore fishes, yucca, agave, and seeds and other plant products (Kowta 1969; Reinman 1964). Variability in artifact collections over time and from the coast to inland sites indicates that Milling Stone Horizon subsistence strategies adapted to environmental conditions (Byrd and Raab 2007:220). Lithic artifacts associated with Milling Stone Horizon sites are dominated by locally available tool stone and in addition to ground stone tools, such as manos and metates, chopping, scraping, and cutting tools, are very common. Kowta (1969) attributes the presence of numerous scraper-plane tools in Milling Stone Horizon collections to the processing of agave or yucca for food or fiber. The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Warren 1968).

Two types of artifacts that are considered diagnostic of the Milling Stone period are the cogged stone and discoidal, most of which have been found within sites dating between 4,000 and 1,000 B.C. (Moratto 1984:149), though possibly as far back as 5,500 B.C. (Couch et al. 2009). The cogged stone is a ground stone object that has gear-like teeth on the perimeter and is produced from a variety of materials. The function of cogged stones is unknown, but many scholars have postulated ritualistic or ceremonial uses (c.f., Dixon 1968:64-65; Eberhart 1961:367) based on the materials used and their location near to burials and other established ceremonial artifacts as compared to typical habitation debris. Similar to cogged stones, discoidals are found in the archaeological record subsequent to the introduction of the cogged stone. Cogged stones and discoidals were often purposefully buried, or “cached.” They are most common in sites along the coastal drainages from southern Ventura County southward and are particularly abundant at some Orange County sites, although a few specimens have been found inland as far east as Cajon Pass (Dixon 1968:63; Moratto 1984:149). Discoidals and cogged stones have been found together at some Orange County sites, such as CA-ORA-83/86/144 (Van Bueren et al. 1989:772) and Los Cerritos Ranch (Dixon 1975). Cogged stones have been collected in Riverside County and their distribution appears to center on the Santa Ana River basin (Eberhart 1961).

3.1.3 Intermediate Horizon (3,000 B.C. – A.D. 500)

Wallace’s Intermediate Horizon dates from approximately 3,000 B.C. - A.D. 500 and is characterized by a shift toward a hunting and maritime subsistence strategy, as well as greater use of plant foods. During the Intermediate Horizon, a noticeable trend occurred toward greater adaptation to local resources including a broad variety of fish, land mammal, and sea mammal remains along the coast. Tool kits for hunting, fishing, and processing food and materials reflect

this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. Many archaeologists believe this change in milling stones signals a change from the processing and consuming of hard seed resources to the increasing reliance on acorn (e.g., Glassow et al. 1988; True 1993). Mortuary practices during the Intermediate typically included fully flexed burials oriented toward the north or west (Warren 1968:2-3).

3.1.4 Late Prehistoric Horizon (A.D. 500–Historic Contact)

During Wallace's (1955, 1978) Late Prehistoric Horizon the diversity of plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon. More classes of artifacts were observed during this period and high quality exotic lithic materials were used for small finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955:223).

Warren (1968) attributes this dramatic change in material culture, burial practices, and subsistence focus to the westward migration of desert people he called the Takic, or Numic, Tradition in Los Angeles, Orange, and western Riverside counties. This Takic Tradition was formerly referred to as the "Shoshonean wedge" (Warren 1968), but this nomenclature is no longer used to avoid confusion with ethnohistoric and modern Shoshonean groups (Heizer 1978:5; Shipley 1978:88, 90). Modern Gabrielino/Tongva in western Riverside County are generally considered by archaeologists to be descendants of these prehistoric Uto-Aztecan, Takic-speaking populations that settled along the California coast during the Late Prehistoric Horizon.

3.2 ETHNOGRAPHIC OVERVIEW

The project site is situated within a region historically occupied by a Native American group known as the Cahuilla, though near the boundary with the Juaneño and Luiseño (Bean 1978, Kroeber 1925). The term Cahuilla likely derived from the native word *káwiya*, meaning "master" or "boss" (Bean 1978:575). Traditional Cahuilla ethnographic territory extended west to east from the present-day city of Riverside to the central portion of the Salton Sea in the Colorado Desert, and south to north from the San Jacinto Valley to the San Bernardino Mountains.

The Cahuilla, like their neighbors to west, the Luiseño and Juaneño, and the Cupeño to the south, are speakers of a Cupan language. Cupan languages are part of the Takic linguistic subfamily of the Uto-Aztecan language family. It is thought that the Cahuilla migrated to southern California approximately 2,000 to 3,000 years ago, most likely from the southern Sierra Nevada mountain ranges of east-central California with other Takic speaking social groups (Moratto 1984:559).



Cahuilla social organization was hierarchical and contained three primary levels (Bean 1978:580). The highest level was the cultural nationality, encompassing everyone speaking a common language. The next level included the two patrimoieties of the Wildcats (*tuktum*) and the Coyotes (*'istam*). Every clan of the Cahuilla fell into one or the other of these moieties. The lowest level consisted of the numerous political-ritual-corporate units called sibs, or a patrilineal clan (Bean 1978:580).

Cahuilla villages were usually located in canyons or on alluvial fans near a source of accessible water. Each lineage group maintained their own houses (*kish*) and granaries, and constructed ramadas for work and cooking. Sweat houses and song houses (for non-religious music) were also often present. Each community also had a separate house for the lineage or clan leader. A ceremonial house, or *kíš ?ámnavet*, associated with the clan leader was where major religious ceremonies were held. Houses and ancillary structures were often spaced apart, and a "village" could extend over a mile or two. Each lineage had ownership rights to various resource collecting locations, "including food collecting, hunting, and other areas. Individuals also owned specific areas or resources, e.g., plant foods, hunting areas, mineral collecting places, or sacred spots used only by shamans, healers and the like" (Bean 1990:2).

The Cahuilla hunted a variety of game, including mountain sheep, cottontail, jackrabbit, mice, and wood rats, as well as predators such as mountain lion, coyote, wolf, bobcat, and fox. Various birds were also consumed, including quail, duck, and dove, plus various types of reptiles, amphibians, and insects. A wide variety of tools and implements were employed by the Cahuilla to gather and collect food resources. For the hunt, these included the bow and arrow, traps, nets, slings and blinds for hunting land mammals and birds, and nets for fishing. Rabbits and hares were commonly brought down by the throwing stick; however when communal hunts were organized for these animals, the Cahuilla often utilized clubs and very large nets.

Foodstuffs were processed using a variety of tools, including portable stone mortars, bedrock mortars and pestles, basket hopper mortars, manos and metates, bedrock grinding slicks, hammerstones and anvils, and many others. Food was consumed from a number of woven and carved wood vessels and pottery vessels. The ground meal and unprocessed hard seeds were stored in large finely woven baskets, and the unprocessed mesquite beans were stored in large granaries woven of willow branches and raised off the ground on platforms to keep it from vermin. Pottery vessels were made by the Cahuilla, and also traded from the Yuman-speaking groups across the Colorado River and to the south.

The Cahuilla had adopted limited agricultural practices by the time Euro-Americans traveled into their territory. Bean (1978:578) has suggested that their "proto-agricultural techniques and a marginal agriculture" consisting of beans, squash and corn may have been adopted from the Colorado River groups to the east. Certainly by the time of the first Romero Expedition in 1823-24, they were observed growing corn, pumpkins, and beans in small gardens localized around springs in the Thermal area of the Coachella Valley (Bean and Mason 1962:104). The introduction of European plants such as barley and other grain crops suggest an interaction with the missions or local Mexican rancheros. Despite the increasing use and diversity of crops,



no evidence indicates that this small-scale agriculture was anything more than a supplement to Cahuilla subsistence, and it apparently did not alter social organization.

By 1819, several Spanish mission outposts, known as *assistencias*, were established near Cahuilla territory at San Bernardino and San Jacinto. Cahuilla interaction with Europeans at this time was not as intense as it was for native groups living along the coast. This was likely due to the local topography and lack of water, which made the area less attractive to colonists. By the 1820s, however, European interaction increased as mission ranchos were established in the region and local Cahuilla were employed to work on them.

The Bradshaw Trail was established in 1862 and was the first major east-west stage and freight route through the Coachella Valley. Traversing the San Geronimo Pass, the trail connected gold mines on the Colorado River with the coast. Bradshaw based his trail on the Cocomaricopa Trail, with maps and guidance provided by local Native Americans. Journals by early travelers along the Bradshaw Trail told of encountering Cahuilla villages and walk-in wells during their journey through the Coachella Valley. The continued influx of immigrants into the region introduced the Cahuilla to European diseases. The single worst recorded event was a smallpox epidemic that swept through Southern California in 1862-63, significantly reducing the Cahuilla population. By 1891, only 1,160 Cahuilla remained within what was left of their territory, down from an aboriginal population of 6,000–10,000 (Bean 1978:583-584). By 1974, approximately 900 people claimed Cahuilla descent, most of whom resided on reservations.

Between 1875 and 1891, the United States established ten reservations for the Cahuilla within their traditional territory. These reservations include: Agua Caliente, Augustine, Cabazon, Cahuilla, Los Coyotes, Morongo, Ramona, Santa Rosa, Soboba, and Torres-Martinez (Bean 1978:585). Four of the reservations are shared with other groups, including the Chemehuevi, Cupeño, and Serrano. The Soboba Reservation, which includes people of both Luiseño and Cahuilla descent, is closest to the project site.

3.3 HISTORIC OVERVIEW

Post-European contact history for the state of California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present).

3.3.1 Spanish Period (1769–1822)

Spanish exploration of what was then known as Alta (upper) California began when Juan Rodriguez Cabrillo led the first European expedition into the region in 1542. For more than 200 years after his initial expedition, Spanish, Portuguese, British, and Russian explorers sailed the Alta California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). Spanish entry into what was to become Riverside County did not occur until 1774 when Juan Bautista de Anza led an expedition from Sonora, Mexico to Monterey in northern California (Lech 1998).



In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. The establishment of the missions marks the first sustained occupation of Alta California by the Spanish. In addition to the missions, four presidios and three pueblos (towns) were established throughout the state (State Lands Commission 1982).

During this period, Spain also deeded ranchos to prominent citizens and soldiers, though very few in comparison to the subsequent Mexican Period. To manage and expand their herds of cattle on these large ranchos, colonists enlisted the labor of the surrounding Native American population (Engelhardt 1927a). The missions were responsible for administering to the local Indians as well as converting the population to Christianity (Engelhardt 1927b). The influx of European settlers brought the local Native American population in contact with European diseases which they had no immunity against, resulting in catastrophic reduction in native populations throughout the state (McCawley 1996).

3.3.2 Mexican Period (1822-1848)

The Mexican Period commenced when news of the success of the Mexican War of Independence (1810-1821) reached California in 1822. This period saw the federalization of mission lands in California with the passage of the Secularization Act of 1833. This Act enabled Mexican governors in California to distribute former mission lands to individuals in the form of land grants. Successive Mexican governors made more than 700 land grants between 1822 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). About 15 land grants (ranchos) were located in Riverside County. The nearest, Rancho Jurupa, included the western portion of the city of Riverside, approximately 1 mile west of the current project site (Shumway 2007).

3.3.3 American Period (1848-Present)

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for ceded territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming, and pay an additional \$3.25 million to settle American citizens' claims against Mexico. Settlement of southern California increased dramatically in the early American Period. Many ranchos in the county were sold or otherwise acquired by Americans, and most were subdivided into agricultural parcels or towns.

The discovery of gold in northern California in 1848 led to the California Gold Rush, despite the first California gold being previously discovered in southern California at Placerita Canyon in 1842 (Guinn 1977; Workman 1935:26). Southern California remained dominated by cattle ranches in the early American period, though droughts and increasing population resulted in farming and more urban professions supplanting ranching through the late nineteenth century. In 1850, California was admitted into the United States and by 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to move into the state, particularly after completion of the transcontinental railroad in 1869.



3.3.4 Local

In 1870, investors from the Southern California Colony Association, solicited by John W. North, laid out a mile-square town site. The town was originally called Jurupa, but was changed to Riverside in 1871. A stream of agriculturalists, investors, and immigrants into the area was driven by the success of citrus crops. The California Fruit Growers Exchange, later Sunkist, was founded in the late 1800s along with the Citrus Experimentation Station, making Riverside a key center of citrus machinery production.

Riverside became a charter city in 1907, with a Mayor-Council form of government. A new City Charter was established in 1950, incited by population growth and city operating problems. A City Board of Freeholders was elected and a new Charter employing a Council-Manager form of government was implemented in 1952. Since the city's founding, Riverside has grown immensely and its economy has grown more diverse and multifaceted. Today, the Riverside-San Bernardino Metropolitan Area (the Inland Empire) is one of the most populous metropolitan areas in the country (City of Riverside 2011).

4.0 BACKGROUND RESEARCH

4.1 CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

Rincon archaeologist Hannah Haas conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Eastern Information Center (EIC) located at the University of California, Riverside on December 4, 2015. The search was conducted to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site. The CHRIS search included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5- and 15-minute quadrangle maps.

The EIC did not list any historic addresses near the project site.

4.1.1 Previous Studies

The EIC records search identified 24 previous studies within a 0.5-mile radius of the project site, two of which included the project site (RI-4225, and RI-5748; Table 1). The National Archaeological Database listings for these studies are presented in Appendix A.



Table 1
Previously Studies Within a One-Mile Radius of the Project Site

Report No.	Author	Year	Study	Proximity to Project Site
RI-01698	Drover, C.	1983	An Archaeological Assessment of Tentative Tract 12649 in Highgrove, California	Outside
RI-03491	Hallaran, K.	1991	The Gage Canal: A Narrative History [Excerpt from Draft HAER Report, pp. 108-180]	Outside
RI-03633	Jackson, A. L.	2000	Cultural Resource Phase I Inventory: An Archaeological Assessment of a Portion of Spring Mountain Ranch in Highgrove, Riverside County, California	Outside
RI-03851	Keller, J. A.	1994	A Phase I Cultural Resources Assessment of Tentative Parcel Map 28040	Outside
RI-04225	Keller, J. A.	1998	A Phase I Cultural Resources Assessment of MP-002-989 (Western Door)	Within
RI-04391	Keller, J. A.	2000	A Phase I Cultural Resources Assessment of Palmyrita 4 (MP-002-923) 6.13 Acres of Land Located in the City of Riverside, Riverside County, California	Outside
RI-04652	Keller, J. A.	2002	A Phase I Cultural Resources Assessment of DR-096-012, 19.6 Acres of Land in the City of Riverside, Riverside County, California	Outside
RI-04653	Keller, J. A.	2002	A Phase I Cultural Resources Assessment of the Columbia/Ridge Project, 13.75 Acres of Land in the City of Riverside, Riverside County, California	Outside
RI-04813	National Park Service, HAER	1993	California Citrus Heritage Recording Project: Photographs, Written Historical and Descriptive Data, Reduced Copies of Measured Drawings for: Arlington Height Citrus Landscape, Gage Irrigation Canal, National Orang Company Packing House, Victoria Bridge, and Union Pacific Railroad Bridge	Outside
RI-0511	McKenna Et Al.	2001	A Phase I Cultural Resources Investigation of the Proposed Columbia Business Center near Highgrove, Riverside County, California	Outside
RI-05056	McKenna Et Al.	2003	A Phase I Cultural Resources Investigation for the Proposed Corona Feeder Master Plan Project Area, Riverside County, California	Outside
RI-05238	Dice, M.	2004	Archaeological Resources Assessment of the Springbrook Estates Project: A 183.95 Acre Site Located in the Community of Highgrove, County of Riverside, California	Outside
RI-05747	White, L. S., D. Van Horn, and R. S. White	2002	Historical Investigations at the Vivienda and Eureka Ranches, Spring Mountain Ranch Project, Highgrove Area of Unincorporated Riverside County	Outside
RI-05748	Doan, U. K., M. Hogan, and B. Tang	2003	Archaeological Sensitivity Assessment: Hunter Park Redevelopment Plan Amendment, City of Riverside, Riverside County, California	Within



Table 1
Previously Studies Within a One-Mile Radius of the Project Site

Report No.	Author	Year	Study	Proximity to Project Site
RI-07352	Tibbet, C., G. Austerman, and B. Bell	2007	Cultural Resources Assessment: Columbia Avenue/Iowa Avenue Roadway Improvements, City of Riverside, Riverside County, California	Outside
RI-07355	Formica, T. H. and P. Beedle	2007	Cultural Resources Report for the San Bernardino Transmission Main Replacement Project, San Bernardino and Riverside Counties, California	Outside
RI-07503	McKenna, J. A.	2007	Addendum Report: A Phase I Cultural Resources Investigation of the Proposed Columbia Business Center near Highgrove, Riverside County, California	Outside
RI-08093	Sanka, J. A.	2008	Phase I Cultural Resources Assessment Highgrove Business Center Project, Highgrove, Riverside County, California	Outside
RI-08196	Kessler, J. S.	2007	Confidential Archaeological Letter for the Barras Forest Fire Prevention Exemption, San Bernardino County, California	Outside
RI-08270	Dover, C. E.	2000	A Cultural Resources Inventory: An Archaeological Assessment of Sabert Corporation- A Commercial Parcel in Highgrove, Riverside County, California	Outside
RI-08562	Hogan, M.	2011	Letter Report: Addendum to the Identification and Evaluation of Historic Properties Report for the Indio Water Authority Wastewater Treatment Project, Cities of Indio and La Quinta, Riverside, CA CRM TECH Contract No. 2451 B	Outside
RI-08771	Tang, B. T.	2010	Preliminary Historical/Archaeological Resource Study Southern California Regional Rail Authority (SCRRA) Perris Valley Line Positive Train Control (PTC) Project	Outside
RI-08913	Laylander, D.	2004	Extended Phase I Testing at a Portion of Site CA-RIV-45 for the Balardo Bridge and Roadway Project, Palm Springs, Riverside County, California	Outside
RI-09414	Smith, B. F., and K. J. Coulter	2013	Phase I Cultural Resources Survey for the Bixby Highgrove Project TTM 36668 County of Riverside	Outside

Source: Eastern Information Center, December 2015

4.1.1.1 RI-4225

Study RI-4225, *A Phase I Cultural Resources Assessment of MP-002-989 (Western Door)*, was prepared by Jean A. Keller in August of 1998. The study included a cultural resources records search and survey which covered approximately 10.04 acres of land, including a portion of the current project site. The study did not identify any cultural resources.

4.1.1.1 RI-5748

Study RI-5748, an *Archaeological Sensitivity Assessment of the Hunter Park Redevelopment Plan Amendment*, was prepared by Uyen K. Doan in February of 2003. The study consisted of a



cultural resources records search which covered approximately 2,625 acres of land, including the entirety of the current project site. The study did not identify any cultural resources within the current project site.

4.1.2 Previously Recorded Sites

The EIC records search identified 15 previously recorded cultural resources within 0.5 mile of the project site, none of which are within the project site (Table 2).

Table 2
Previously Recorded Cultural Resources a Within One-Mile Radius of the Project Site

Resource Designation	Description	CRHR Eligibility Status	Recorded By and Year	Proximity to Project Site
33-004768	Gage Canal	Eligible for CRHR; listed as City of Riverside Cultural Heritage Landmark	R. Wlodarski 1992; S. Ashkar 1999	Adjacent
33-006923	Talbert House	5S2: Eligible for local listing only- likely to become eligible under Local Ordinance	J. Warner 1982; J. Sanka 2007	Outside
33-006953	422 Prospect Avenue	5: Ineligible for the NR[HP] but still of local interest	T. Newman 1982	Outside
33-006954	430 Prospect Avenue	5: Ineligible for the NR[HP] but still of local interest	T. Newman 1982	Outside
33-006955	456 Prospect Avenue	5D: Eligible for local listing as contributor only	T. Newman 1982	Outside
33-006956	466 Prospect Avenue	3: Appears eligible for NR[HP] to person completing or reviewing form	T. Newman 1982	Outside
33-006957	474 Prospect Avenue	5: Ineligible for the NR[HP] but still of local interest	T. Newman 1982	Outside
33-006958	484 Prospect Avenue	5: Ineligible for the NR[HP] but still of local interest	M. Gayk 1982	Outside
33-006959	510 Prospect Avenue	3: Appears eligible for NR[HP] to person completing or reviewing form	J. Warner 1982	Outside
33-006960	558 Prospect Avenue	4: Might become eligible for listing on NR[HP]	J. Warner 1982	Outside
33-006963	513 Transit Avenue	5: Ineligible for the NR[HP] but still of local interest	T. Newman 1982	Outside
33-006964	536 Transit Avenue	5: Ineligible for the NR[HP] but still of local interest	T. Newman 1982	Outside



Table 2
Previously Recorded Cultural Resources a Within One-Mile Radius of the Project Site

Resource Designation	Description	CRHR Eligibility Status	Recorded By and Year	Proximity to Project Site
33-015743	San Jacinto Railroad Line	3: Appears eligible for NR[HP] to person completing or reviewing form	P. Beedle 2005; P. Beedle 2006; T. Cooley 2007; A. Craft 2007; D. Ballester 2008; M. C. Hamilton 2009; S. Justus and A. Giacinto 2010; C. Cotterman and E. Denniston 2012	Outside
33-016644	Historical citrus grove	Insufficient information	R. Lichtenstein and D. Largo 2007	Outside
33-016650	Burlington Northern Santa Fe Railroad	6Z: Found ineligible for NR[HP]	G. Austerman 2007	Outside

Source: Eastern Information Center, February 2015

4.2 NATIVE AMERICAN HERITAGE COMMISSION

Rincon Consultants contacted the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File (SLF) on December 4, 2015. In anticipation of NAHC response and using Rincon listings for Native American contacts in the region, Rincon sent letters to 18 individuals or tribal organizations that may have knowledge of cultural resources in or near the project site on December 4, 2015.

As of December 23, 2015, no responses from the NAHC or contacts have been received.

4.3 HISTORIC MAP AND AERIAL REVIEW

Rincon reviewed historic aerials and topographic maps from internet sources and from the EIC to better understand the land use history of the project site.

A review of historic aerial images dating between 1938 and 2012 (Historic Aerials 2015) depict citrus orchards within the project site from 1938 to ca. 1978, vacant land from ca. 1980 to 1995. Beginning with the 2002 aerial, the adjacent building and parking lot are present. In addition, Rincon reviewed GLO maps from 1877 and 1880 that included the project site. Both maps show the project site location as platted, however no buildings or structures were depicted on either map. The 1967 San Bernardino, CA 30-minute topographic quadrangle, on file at the EIC, depicts the project site as undeveloped terrain.



5.0 FIELDWORK

5.1 SURVEY METHODS

Rincon archaeologist Hannah Haas conducted a cultural resources survey of the project site on December 4, 2015. The survey consisted of walking transects oriented east-west and spaced no greater than 15 meters across the project site. During survey, the archaeologist examined all areas of exposed ground surface for prehistoric artifacts (e.g., chipped stone tools and production debris, stone milling tools, ceramics), historic debris (e.g., metal, glass, ceramics), or soil discoloration that might indicate the presence of a cultural midden. The archaeologist recorded site characteristics and survey conditions using a field notebook and a digital camera. Copies of the field notes and digital photographs are on file with Rincon's Carlsbad office.

5.2 FINDINGS

Bare ground visibility was excellent (Photographs 1 and 2) with minor limitations caused by vegetation. Vegetation within the project site was dominated by willow species (*Salix* sp.) and mulefat (*Baccharis salicifolia*). Modern refuse was noted within the project site. No cultural resources were identified during the survey.



Photograph 1. View of portion of project site, facing north.



Photograph 2. View of portion of project site, facing southwest.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The records search, Native American scoping, and intensive pedestrian survey identified no cultural resources within the project site. The CRHR eligible Gage Canal is located directly adjacent to the proposed project, but is outside of the proposed parking lot boundary and will not be directly or indirectly impacted by the proposed project.

The project site is located within an industrial area. The installation of the parking lot will allow for the continued use of the area for its current and intended purpose without altering the local setting with respect to cultural resources. Therefore, Rincon recommends that no additional work be required for the current project. The following measures are recommended in the case of unanticipated discoveries.

6.1 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's *Professional Qualifications Standards* for archaeology (National Park Service [NPS] 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA or Section 106, additional work such as data recovery excavation may be warranted.

6.2 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California 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 Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human 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). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.



7.0 REFERENCES

- Arnold, Jeanne E., Michael R. Walsh, and Sandra E. Hollimon
2004 The Archaeology of California. *Journal of Archaeological Research* Vol. 12, No. 1.
- Bean, Walton
1968 *California: An Interpretive History*. McGraw-Hill Book Company, New York.
- Byrd, Brian F., and L. Mark Raab
2007 Prehistory of the Southern Bight: Models for a New Millennium. In *California Prehistory*, edited by T. L. Jones and K. A. Klar, pp. 215-228. Altimira Press, New York.
- Couch, Jeffrey S., Joanne S. Couch, and Nancy Anastasia Wiley
2009 Saved by the Well: The Keystone Cache at CA-ORA-83, the Cogged Stone Site. *Proceedings of the Society for California Archaeology* 21:147-156.
- Dillon, Brian D.
2002 California Paleo-Indians: Lack of Evidence, or Evidence of a Lack? In *Essays in California Archaeology: A Memorial to Franklin Fenenga*, edited by W. J. Wallace and F. A. Riddell, pp. 110-128. Contributions of the University of California Archaeological Research Facility, No. 60, Berkeley.
- Dixon, Keith A.
1968 Cogged Stones and Other Ceremonial Cache Artifacts in Stratigraphic Context at ORA-58, a Site in the Lower Santa Ana River Drainage, Orange County. *Pacific Coast Archaeological Society Quarterly* 4(3):57-68.
1975 New Evidence for the Most Important Archaeological Discovery in Long Beach: the Cogged Stones and Discs of Rancho Los Cerritos. *Los Fierros* 12(2):20-31.
- Eberhart, Hal
1961 The Cogged Stones of Southern California. *American Antiquity* 26(3):361-370.
- Engelhardt, Zephyrin, O.F.M.
1927a *San Fernando Rey, the Mission of the Valley*. Franciscan Herald Press, Chicago.
1927b *San Gabriel Mission and the Beginning of Los Angeles*. Mission San Gabriel, San Gabriel, California.
- Erlandson, Jon M.
1991 Early Maritime Adaptations on the Northern Channel Islands. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by J. M. Erlandson and R. Colten. Perspectives in California Archaeology, Vol. 1. Institute of Archaeology, University of California, Los Angeles.
- Erlandson, Jon M., Theodore Cooley, and Richard Carrico
1987 A Fluted Projectile Point Fragment from the Southern California Coast: Chronology and Context at CA-SBA-1951. *Journal of California and Great Basin Anthropology* 9:120-128.



Glassow, Michael A, L. Wilcoxon, and J. M. Erlandson

- 1988 Cultural and Environmental Change during the Early Period of Santa Barbara Channel Prehistory. In *The Archaeology of Prehistoric Coastlines*, edited by G. Bailey and J. Parkington pp. 64–77. Cambridge University Press, Cambridge, England.

Guinn, J.M.

- 1977 Gold! Gold! Gold! from San Francisquito! In *Los Angeles Biography of a City*, edited by John Caughey and LaRee Caughey. University of California Press, Berkeley.

Heizer, Robert F.

- 1978 Introduction. In *California*, edited by R. F. Heizer, pp. 1–6. Handbook of North American Indians, Vol. 8, W.C. Sturtevant, general editor, Smithsonian Institution, Washington D.C.

Historic Aerials

- 2015 Woodcrest. Available online, historicaerials.com. Accessed March 10, 2015.

Johnson, J. R., T. W. Stafford, Jr., H. O. Ajie, and D. P. Morris

- 2002 Arlington Springs Revisited. In *Proceedings of the Fifth California Islands Symposium*, edited by D. Browne, K. Mitchell, and H. Chaney, pp. 541–545. USDI Minerals Management Service and the Santa Barbara Museum of Natural History, Santa Barbara, California.

Jones, Terry L., Richard T. Fitzgerald, Douglas J. Kennett, Charles Miksicek, John L. Fagan, John Sharp, and Jon M. Erlandson

- 2002 The Cross Creek Site and Its Implications for New World Colonization. *American Antiquity* 67:213–230.

Jones, Terry L. and Kathryn A. Klar

- 2007 *California Prehistory: Colonization, Culture, and Complexity*. AltaMira Press, Berkeley, California.

Koerper, Henry C., and Christopher E. Drover

- 1983 Chronology Building for Coastal Orange County: The Case from CA-ORA-119-A. *Pacific Coast Archaeological Society Quarterly* 19(2):1–34.

Koerper, Henry C., Roger D. Mason, and Mark L. Peterson

- 2002 Complexity, Demography, and Change in Late Holocene Orange County. In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 63–81. Perspectives in California Archaeology, Vol. 6, Costen Institute of Archaeology, University of California, Los Angeles.

Kowta, Makoto

- 1969 The Sayles Complex, A Late Milling Stone Assemblage from the Cajon Pass and the Ecological Implications of its Scraper Planes. *University of California Publications in Anthropology* 6:35–69. Berkeley, California.

Kroeber, Alfred J.

- 1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78. Originally published 1925, Smithsonian Printing Office, Washington, D.C. Unabridged reprint 1976, Dover Publications, Inc. New York.



Lech, Steve

- 1998 The History of Riverside County. Electronic document, <http://www.usgennet.org/usa/ca/county/riverside/>. Accessed April 10, 2013.

McCawley, William

- 1996 *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki Museum/Ballena Press Cooperative Publication, Banning or Novato, California.

Mason, Roger D., and Mark L. Peterson

- 1994 *Newport Coast Archaeological Project: Newport Coast Settlement Systems—Analysis and Discussion*, Volume 1, part 1 of 2. Prepared by The Keith Companies. On file, South Central Coastal Information Center, California State University, Fullerton.

Moratto, Michael

- 1984 *California Archaeology*. Academic Press, New York.

National Park Service [NPS]

- 1983 *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. Electronic document accessed December 6, 2011. Online at http://www.nps.gov/history/local-law/Arch_Standards.htm.

Reinman, Fred M.

- 1964 Maritime Adaptations on San Nicolas Island, California. *University of California Archaeological Survey Annual Report 1963–1964*:47–80.

Rick, Torben C., Jon M. Erlandson, and René Vellanoweth

- 2001 Paleocoastal Marine Fishing on the Pacific Coast of the Americas: Perspectives from Daisy Cave, California. *American Antiquity* 66:595–613.

Rolle, Andrew

- 2003 *California: A History*. Revised and expanded sixth edition. Harlan Davidson, Inc., Wheeling, Illinois.

State Lands Commission

- 1982 *Grants of Land in California Made by Spanish or Mexican Authorities*. Office of the State Lands Commission, Sacramento, California.

Shipley, William F.

- 1978 Native Languages of California. In *California*, edited by R. F. Heizer, pp. 80–90. Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor, Smithsonian Institution, Washington D.C.

Shumway, Burgess McK.

- 2007 *California Ranchos*. Second Edition. The Borgos Press.

True, Delbert L.

- 1993 Bedrock Milling Elements as Indicators of Subsistence and Settlement Patterns in Northern San Diego County, California. *Pacific Coast Archaeological Society Quarterly* 29(2):1–26.



Van Bueren, Thad M., Susan K. Goldberg, Michael J. Moratto, Portia Lee, and Jerrel H. Sorrenson

- 1989 *Inventory and Evaluation of Cultural Resources: Bolsa Chica Mesa and Huntington Beach Mesa, Orange County, California*. Prepared by Infotech Research, Inc. Report on file at the South Central Coastal Information Center, California State University, Fullerton.

Wallace, William

- 1955 Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214-230.
- 1978 Post-Pleistocene Archaeology, 9000 to 2000 B.C. In *California*, edited by R. F. Heizer, pp. 25-36. Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor, Smithsonian Institution, Washington D.C.

Warren, Claude N.

- 1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Workman, Boyle

- 1935 *The City that Grew*. Southland Publication Co., Los Angeles.



Appendix A

Native American Correspondence



Rincon Consultants, Inc.

5005 La Mart Drive, Suite 201

Riverside, California 92507

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FAX 782 0097

info@rinconconsultants.com

www.rinconconsultants.com

December 4, 2015

Shasta Gaughen
Pala Band of Mission Indians
12196 Pala Mission Road
Pala, CA 92059

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Ms. Gaughen:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. The SLF search was negative for the project area but recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

If you have knowledge of cultural resources that may exist within or near the project site, please contact me in writing at the above address, via email at cduran@rinconconsultants.com, or by telephone at (805) 644-4455, ext. 22. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher Duran", written in a cursive style.

Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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December 4, 2015

Randall Majel
Pauma and Yuima Reservation
P.O. Box 369
Pauma Valley, CA 92061

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Majel:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Sincerely,

A handwritten signature in black ink, appearing to read "CDuran", is written over a light blue horizontal line.

Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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December 4, 2015

Paul Macarro
Pechanga Band of Mission Indians
P.O. Box 1477
Temecula, CA 92593

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Macarro:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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December 4, 2015

Vincent Whipple
Rincon Band of Mission Indians
1 West Tribal Road
Valley Center, CA 92082

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Whipple:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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December 4, 2015

Rosemary Morillo
Attn: Carrie Garcia
Soboba Band of Mission Indians
P.O. Box 487
San Jacinto, CA 92581

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Ms. Morillo:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. The SLF search was negative for the project area but recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

If you have knowledge of cultural resources that may exist within or near the project site, please contact me in writing at the above address, via email at cduran@rinconconsultants.com, or by telephone at (805) 644-4455, ext. 22. Thank you for your assistance.

Sincerely,

Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



Rincon Consultants, Inc.

5005 La Mart Drive, Suite 201

Riverside, California 92507

951 782 0061

FAX 782 0097

info@rinconconsultants.com

www.rinconconsultants.com

December 4, 2015

Bennae Calac
Pauma Valley Band of Luiseno Indians
P.O. Box 369
Pauma Valley, CA 92061

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Ms. Calac:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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Riverside, California 92507

951 782 0061

FAX 782 0097

info@rinconconsultants.com

www.rinconconsultants.com

December 4, 2015

Pauma and Yuima
Attn: EPA
P.O. Box 369
Pauma Valley, CA 92061

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

To Whom It May Concern:

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Christopher Duran
Cultural Resources Principal Investigator

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www.rinconconsultants.com

December 4, 2015

Bo Mazzetti
Rincon Band of Mission Indians
1 West Tribal Road
Valley Center, CA 92082

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Mazzetti:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



Rincon Consultants, Inc.

5005 La Mart Drive, Suite 201

Riverside, California 92507

951 782 0061

FAX 782 0097

info@rinconconsultants.com

www.rinconconsultants.com

December 4, 2015

San Luis Rey Band of Mission Indians
Tribal Council
1889 Sunset Drive
Vista, CA 92081

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

To Whom It May Concern:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



Rincon Consultants, Inc.

5005 La Mart Drive, Suite 201

Riverside, California 92507

951 782 0061

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www.rinconconsultants.com

December 4, 2015

San Luis Rey Band of Mission Indians
Cultural Department
1889 Sunset Drive
Vista, CA 92081

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

To Whom It May Concern:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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Riverside, California 92507

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www.rinconconsultants.com

December 4, 2015

Shasta Gaughen
Kupa Cultral Center (Pala Band)
35008 Paula-Temecula Rd, PMB 50
Pala, CA 92059

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Ms. Gaughen:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

As part of the process of identifying cultural resources issues for this project, Rincon contacted the Native American Heritage Commission and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. The SLF search was negative for the project area but recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

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Sincerely,

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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5005 La Mart Drive, Suite 201

Riverside, California 92507

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December 4, 2015

Mark Macarro
Pechanga Band of Mission Indians
P.O. Box 1477
Temecula, CA 92593

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Macarro:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Sincerely,

Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



Rincon Consultants, Inc.

5005 La Mart Drive, Suite 201

Riverside, California 92507

951 782 0061

FAX 782 0097

info@rinconconsultants.com

www.rinconconsultants.com

December 4, 2015

William Pink
48310 Pechanga Road
Temecula, CA 92592

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Pink:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Sincerely,

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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Riverside, California 92507

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www.rinconconsultants.com

December 4, 2015

Lavonne Peck
La Jolla Band of Mission Indians
22000 Highway 76
Pauma Valley, CA 92061

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Ms. Peck:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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Riverside, California 92507

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www.rinconconsultants.com

December 4, 2015

Charles Devers
Pauma and Yuima Reservation
P.O. Box 369
Pauma Valley, CA 92061

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Devers:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



Rincon Consultants, Inc.

5005 La Mart Drive, Suite 201

Riverside, California 92507

951 782 0061

FAX 782 0097

info@rinconconsultants.com

www.rinconconsultants.com

December 4, 2015

Anna Hoover
Pechanga Cultural Resources Department
P.O. Box 2183
Temecula, CA 92593

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Ms. Hoover:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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5005 La Mart Drive, Suite 201

Riverside, California 92507

951 782 0061

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info@rinconconsultants.com

www.rinconconsultants.com

December 4, 2015

Joseph Ontiveros
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, CA 92581

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Ontiveros:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map



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Riverside, California 92507

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www.rinconconsultants.com

December 4, 2015

Robert H. Smith
Pala Band of Mission Indians
35008 Pala-Temecula Rd, PMB 50
Pala, CA 92059

**RE: Cultural Resources Study for the 797 Palmyrita Trailer Parking Lot Project,
Riverside County, California**

Dear Mr. Smith:

Rincon Consultants has been retained to conduct a cultural resources study for the 797 Palmyrita Trailer Parking Lot Project in Riverside, California. The project proposes to develop a parking lot for 53-foot trailer trucks on less than one acre located on 797 Palmyrita in the City of Riverside, California. The project is subject to the California Environmental Quality Act (CEQA).

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Sincerely,

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Christopher Duran
Cultural Resources Principal Investigator

Enclosure: Project Location Map

Appendix D

Initial Geotechnical Investigation



CHJ Consultants

1355 E. Cooley Drive, Suite C, Colton, CA 92324 ♦ Phone (909) 824-7311 ♦ Fax (909) 503-1136
15345 Anacapa Road, Suite D, Victorville, CA 92392 ♦ Phone (760) 243-0506 ♦ Fax (760) 243-1225
77-564A Country Club Drive, Suite 122, Palm Desert, CA 92211 ♦ Phone (760) 772-8234 ♦ Fax (909) 503-1136

August 31, 2016

LBA Realty
3347 Michelson Drive
Irvine, California 92612
Attention: Mr. Michael DeArmey

Job No. 15474-2A

Subject: Infiltration Testing and Erosion
Trailer Parking Lot
797 and 799 Palmyrita Avenue
Riverside, California

Reference: Limited Geotechnical Investigation
Trailer Parking Lot
797 and 799 Palmyrita Avenue
Riverside, California
Report Prepared by CHJ Consultants
Dated October 16, 2015, Job No. 15474-3

Dear Mr. DeArmey:

Per your authorization, we are providing this report, which presents the results of our infiltration testing and test data and provides our comments with respect to erosion concerns of the proposed spillway and riprap stream. The site location is shown on Enclosure "A-1".

Infiltration Testing

During the geotechnical investigation for the project, underground storage chambers were planned for storm water abatement, and percolation testing was performed at approximately 10 feet below the existing ground surface (bgs). The design has now changed to utilize a storm water retention basin with an infiltration surface at approximately 5 feet bgs. Therefore, two double-ring infiltration tests were performed at a depth of approximately 5 feet bgs to evaluate the infiltration potential of the



retention basin. The test locations are indicated on Enclosure "A-2". The testing was performed on August 29, 2016.

A staff geologist from our firm performed the infiltration testing on site. A rubber-tire backhoe was used for the excavation of the test pits to reach the anticipated retention basin bottom.

Materials encountered during our excavation generally consisted of fine to coarse silty sands (SM) and sand (SP-SM).

The depth to the historical groundwater was reviewed from the referenced report. The referenced report indicated that the depth to groundwater could be on the order of 120 feet bgs.

The tests were performed in general conformance with ASTM D3385. During the test period, the water in the inner and annular rings was generally maintained at a constant level using a float valve and individual water source for each ring. The volume of water added to the inner and annular rings was measured using graduated cylinders and recorded at timed intervals. The graduated cylinder corresponding to the inner ring is readable to increments of 25 milliliters.

The data collected were used to calculate the infiltration rate of the soil. The infiltration test was performed until a steady-state infiltration velocity was reached. The steady-state infiltration velocity is presented as the infiltration rate.

The County of Riverside (2011) provides guidelines for estimating the drawdown time of retained surface water in an infiltration facility based on measurement of vertical infiltration rates. These measurements are obtained by one or more test methods using near-surface or deeper subsurface methods. Factors of safety (FS) are applied to the measured rates to account for test type, number of tests and/or infiltration facility types. The Riverside County Low Impact Development BMP Design Handbook provides a matrix for infiltration testing requirements. For infiltration basins, use of two ring infiltrometer tests and one boring or test pit exploration per basin results in application of an FS of 3.



The measured infiltration rates are presented in the following table and do not include safety factors. The relevant field test data for the double-ring infiltrometer tests are included in Enclosure "B".

Test Location	Depth (ft. bgs)	Measured Infiltration Rate		Soil Type
		cm. / hr.	in. / hr.	
DR-1	6.0	5.0	2.0	SM
DR-2	4.0	63.0	24.8	SP-SM

The infiltration rates determined during this investigation by the double-ring method are based on field tests utilizing clear water. Infiltration rates can be affected by silt buildup, presence of debris, degree of soil saturation, soil variability and other factors. The rates were obtained at specific locations and depths, are representative of the locations and depths tested and may not be representative of an entire site. The rates presented are measured field rates, do not reflect application of factors of safety and should not be considered design infiltration rates.

Because of the wide variation in rates obtained, for preliminary planning purposes the designer of the retention basins should consider a design infiltration rate of 0.6 inch per hour to estimate the probable drawdown time/capacity of the investigated basin. Application of an appropriate safety factor is intended to account for subsoil inconsistencies, possible compaction related to site grading and potential silting of the percolating soils.

The locations tested indicate a lithology change from silty sand to sand with silt near the proposed basin bottom. The silty sand layer tested had a slower measured infiltration rate and was therefore used to provide the design infiltration rate.

The site soils are suitable for the construction and operation of the proposed infiltration basin. The basin bottom should be founded in competent native materials. No loose soils or debris is acceptable for the basin construction.



Erosion Concerns

As depicted in Enclosure "A-2", the proposed spillway will be located on the east side of the retention basin. The spillway will be connected to a riprap stream that will be surrounded by landscaped areas. We have reviewed the configuration provided to us and we take no exception to the proposed spillwall location or the riprap water stream and landscaped area for the purposes of erosion control from a geotechnical standpoint.

Additional recommendations regarding erosion should be referred to the referenced geotechnical investigation report.

We appreciate this opportunity to be of service and trust this report provides the information desired at this time. Additional information should be referred to the referenced geotechnical investigation report. Should questions arise, please do not hesitate to contact this office.

Respectfully submitted,
CHJ CONSULTANTS



Maihan Noorzay, R.C.E. 77901
Project Engineer

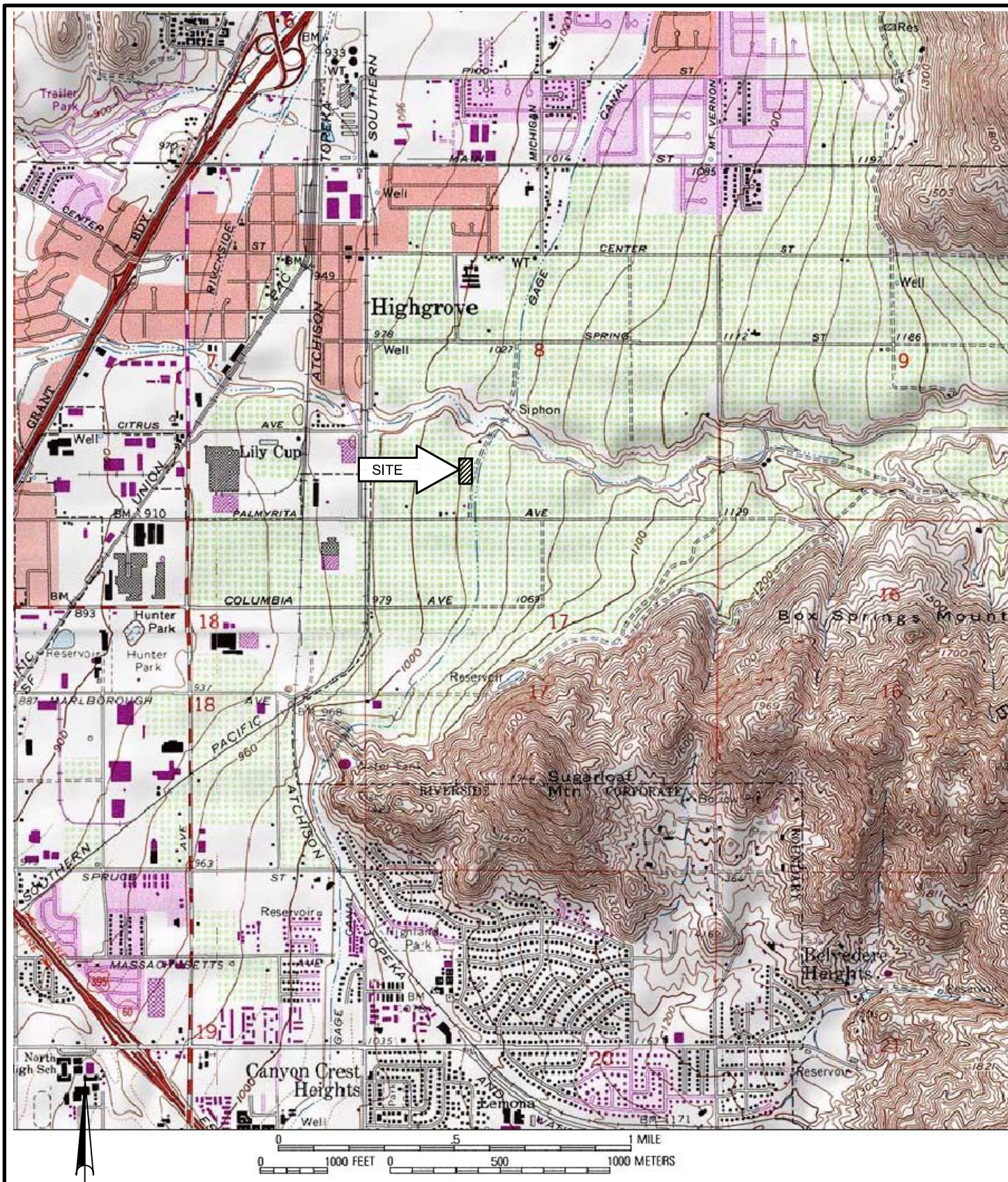


James F. Cooke, G.E. 3012
Managing Engineer

Robert J. Johnson, G.E.
President

Enclosures: "A-1" - Index Map
 "A-2" - Site Map
 "B-1" - "B-2" - Double-Ring Infiltration Test Data Logs
 "C-1" - Particle Size Distribution (ASTM D6913)

Distribution: LBA Realty (2 copies and electronic)



INDEX MAP

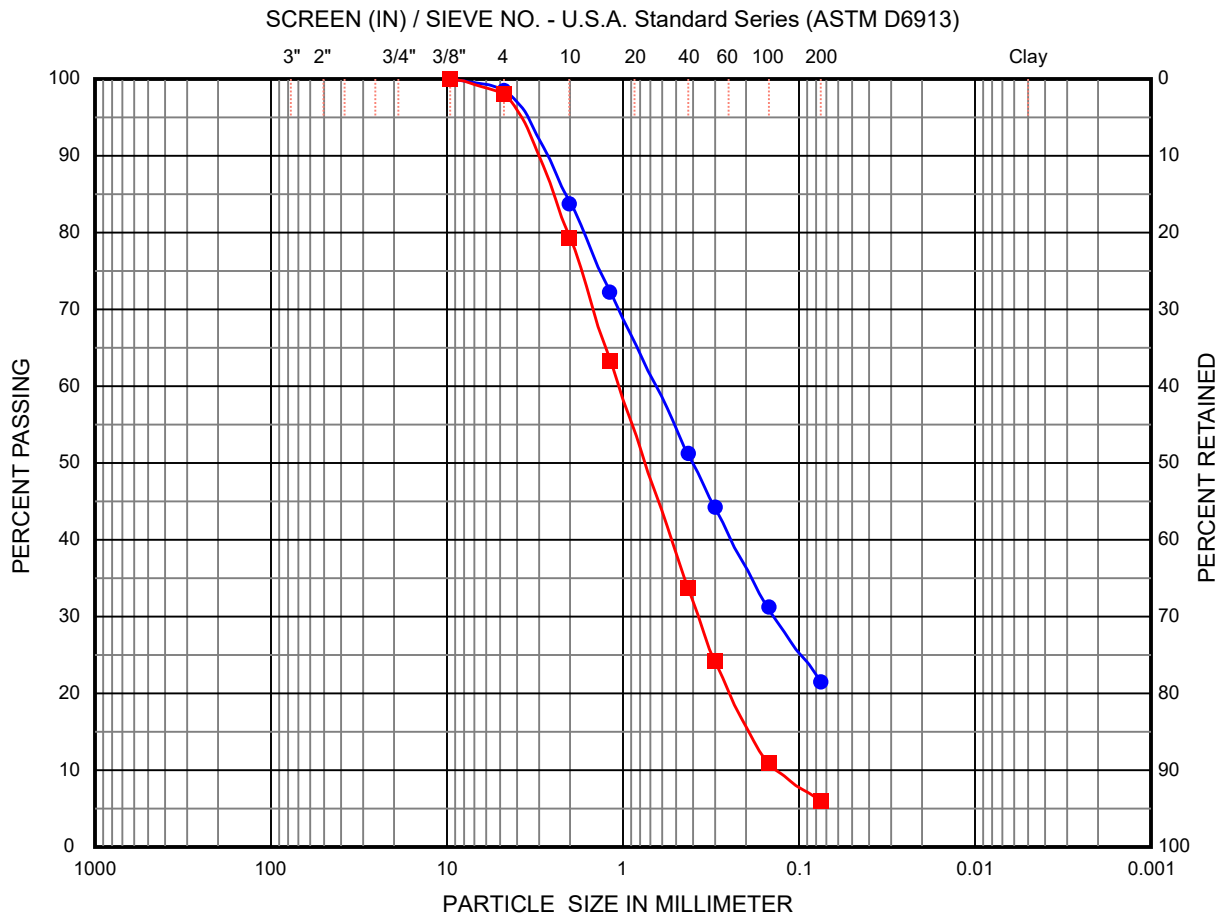
FOR:
LBA REALTY
DATE: AUGUST &
SEPTEMBER, 2016

INFILTRATION INVESTIGATION
TRAILER PARKING LOT
797 AND 799 PALMYRITA AVENUE
RIVERSIDE, CALIFORNIA

ENCLOSURE
"A-1"
JOB NUMBER
15474-2A

Double Ring Infiltrometer Test Data Log											
Job No.	15474-2B		Test Location:	DR-1	Date	8/29/2016	Tested by:	GA			
Interval No.	Start or End	Time	Elapsed Time (min)	Total Time (min)	Inner Ring Level (cm ³)	Annular Space (cm ³)	Time (hr)	Incremental Infiltration (cm/hr)	Incremental Infiltration (in/hr)	Annular Space Incremental Infiltration (cm/hr)	Annular Space Incremental Infiltration (in/hr)
1	Start	8:15 AM	15	15	0	0	0.25	8.50	3.35	3.65	1.44
	End	8:30 AM			1550	2000					
2	Start	8:30 AM	15	30	0	0	0.25	6.03	2.37	9.59	3.78
	End	8:45 AM			1100	5250					
3	Start	8:45 AM	15	45	0	0	0.25	5.48	2.16	9.78	3.85
	End	9:00 AM			1000	5350					
4	Start	9:00 AM	15	60	0	0	0.25	5.48	2.16	8.77	3.45
	End	9:15 AM			1000	4800					
5	Start	9:15 AM	30	90	0	0	0.50	5.14	2.02	7.95	3.13
	End	9:45 AM			1875	8700					
6	Start	9:45 AM	30	120	0	0	0.50	4.80	1.89	7.45	2.93
	End	10:15 AM			1750	8150					
7	Start	10:15 AM	30	150	0	0	0.50	5.07	2.00	7.81	3.08
	End	10:45 AM			1850	8550					
8	Start	10:45 AM	30	180	0	0	0.50	5.14	2.02	7.86	3.09
	End	11:15 AM			1875	8600					
9	Start	11:15 AM	30	210	0	0	0.50	5.07	2.00	7.81	3.08
	End	11:45 AM			1850	8550					
10	Start	11:45 AM	30	240	0	0	0.50	5.21	2.05	7.04	2.77
	End	12:15 PM			1900	7700					
11	Start	12:15 PM	30	270	0	0	0.50	4.93	1.94	6.62	2.61
	End	12:45 PM			1800	7250					
12	Start	12:45 PM	30	300	0	0	0.50	5.07	2.00	6.35	2.50
	End	1:15 PM			1850	6950					
13	Start	1:15 PM	30	330	0	0	0.50	4.80	1.89	6.08	2.39
	End	1:45 PM			1750	6650					
14	Start	1:45 PM	30	360	0	0	0.50	5.07	2.00	6.26	2.46
	End	2:15 PM			1850	6850					
			Average Rate:	2.0	(Inches/hour)						
			Average Rate:	5.0	(cm/hour)						

Double Ring Infiltrometer Test Data Log											
Job No.	15474-2B		Test Location:	DR-2		Date	8/29/2016		Tested by:	GA	
Interval No.	Start or End	Time	Elapsed Time (min)	Total Time (min)	Inner Ring Level (cm ³)	Annular Space (cm ³)	Time (hr)	Incremental Infiltration (cm/hr)	Incremental Infiltration (in/hr)	Annular Space Incremental Infiltration (cm/hr)	Annular Space Incremental Infiltration (in/hr)
1	Start	8:18 AM	4	4	0	0	0.07	88.40	34.80	85.66	33.72
	End	8:22 AM			4300	12500					
2	Start	8:23 AM	5	9	0	0	0.08	74.01	29.14	65.78	25.90
	End	8:28 AM			4500	12000					
3	Start	8:33 AM	5	14	0	0	0.08	78.94	31.08	67.98	26.76
	End	8:38 AM			4800	12400					
4	Start	8:43 AM	5	19	0	0	0.08	73.18	28.81	58.11	22.88
	End	8:48 AM			4450	10600					
5	Start	8:52 AM	5	24	0	0	0.08	63.32	24.93	50.43	19.86
	End	8:57 AM			3850	9200					
6	Start	8:59 AM	5	29	0	0	0.08	69.07	27.19	54.82	21.58
	End	9:04 AM			4200	10000					
7	Start	9:06 AM	5	34	0	0	0.08	64.96	25.58	50.98	20.07
	End	9:11 AM			3950	9300					
8	Start	9:12 AM	5	39	0	0	0.08	62.91	24.77	52.08	20.50
	End	9:17 AM			3825	9500					
9	Start	9:50 AM	5	44	0	0	0.08	65.78	25.90	48.79	19.21
	End	9:55 AM			4000	8900					
10	Start	9:56 AM	5	49	0	0	0.08	69.07	27.19	47.69	18.78
	End	10:01 AM			4200	8700					
11	Start	10:02 AM	5	54	0	0	0.08	64.96	25.58	48.52	19.10
	End	10:07 AM			3950	8850					
12	Start	10:08 AM	5	59	0	0	0.08	65.78	25.90	47.97	18.88
	End	10:13 AM			4000	8750					
13	Start	10:26 AM	5	64	0	0	0.08	62.49	24.60	48.24	18.99
	End	10:31 AM			3800	8800					
14	Start	10:33 AM	5	69	0	0	0.08	57.56	22.66	46.87	18.45
	End	10:38 AM			3500	8550					
15	Start	10:39 AM	5	74	0	0	0.08	55.09	21.69	46.05	18.13
	End	10:44 AM			3350	8400					
			Average Rate:	24.8	(Inches/hour)						
			Average Rate:	63.0	(cm/hour)						



Cobbles & Boulders	Gravel		Sand			Silt	Clay
	Coarse	Fine	Coarse	Medium	Fine		

	Boring No.	Depth	Gravel	Sand	Fines	Clay	D ₁₀	D ₃₀	D ₅₀	D ₆₀	C _u	C _c
●	DR-1	6	1.5	76.9	21.6			0.139	0.400	0.652		
	(SM) Silty sand, fine to coarse											
■	DR-2	4	2.1	91.9	6.1		0.1357	0.374	0.751	1.058	7.8	1.0
	(SP-SM) Poorly-graded sand with silt, fine to coarse											

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PARTICLE SIZE DISTRIBUTION (ASTM D6913)

Project:	Trailer Parking Lot					
Location:	797 and 799 Palmyrita Avenue, Riverside, California					
Job Number:	15474-2A	Engineer:	M.Noorzay	Enclosure:	C-1	