

3.0 ERRATA TO THE DRAFT EIR

3.1 INTRODUCTION

The responses included in Final Environmental Impact Report (“Final EIR”) **Section 2.0: Comments and Responses**, may include text revisions to clarify or amplify information in the Draft Environmental Impact Report (“Draft EIR”), as initiated by the City or due to environmental issues raised in the comment letters. These text revisions are presented below in **Section 3.2: Changes to the Draft EIR** according to Draft EIR Section. Where responses require Draft EIR revisions, the relevant Draft EIR text is presented in a box, with text deleted from the Draft EIR indicated by ~~strike through~~ and text added to the Draft EIR indicated by double underlining, as shown in the following examples:

~~Text deleted from the Draft EIR~~

Text added to the Draft EIR

It is noted, none of the revisions/clarifications identified in this Final EIR and summarized in this section constitute “significant new information” pursuant to State CEQA Guidelines § 15088.5. The revisions/clarifications merely clarify/amplify and make insignificant modifications to the Draft EIR. The revisions/clarifications do not involve changes in the Project or environmental setting, or significant new information.

3.2 CHANGES TO THE DRAFT EIR

Section 1.0: Executive Summary

Pages 1-1 and 1-2 have been revised as follows:

The proposed Project also includes two proposed Local Agency Formation Commission for San Bernardino County (SBLAFCO) Actions (SBLAFCO Actions A and B) that involve reorganizations to include annexations, and detachments, and reorganizations. “Annexation” refers to the process where a city boundary is extended to include certain property, or the service boundary for a utility or public service (e.g., police, fire) is ~~extended~~ expanded to include a certain property. “Detachment” refers to the exclusion, deletion, or removal from a city or district of any portion of the territory of that city or district.

The proposed SBLAFCO Action A consists of 2,676 acres that are part of the proposed BIG Specific Plan area and an additional approximately 10-acre parcel; SBLAFCO Action B comprises six parcels totaling 99 acres. Each of these is described in greater detail in Section 3.7.3. For the proposed Project, a single SBLAFCO Action can include multiple requests (bringing a property into City limits could also include removing a property from the County of San Bernardino [County] Fire Protection District ~~fire service jurisdiction~~ and bringing the property into the City of Barstow Fire Protection District for fire service jurisdiction), which is referred to as a “Reorganization.” Although the City is responsible for assigning a zone district in advance of a SBLAFCO application (i.e., “prezoning”), as well as completing the environmental analysis for the SBLAFCO reorganization and associated LAFCO actions (~~SBLAFCO Actions A and B~~), SBLAFCO will independently evaluate and determine ~~consider~~ whether to approve the requested actions.

Page 1-3 has been revised as follows:

The proposed Project also includes two proposed ~~San Bernardino County Local Agency Formation Commission (SBLAFCO)~~ actions (SBLAFCO Actions A and B) (reorganizations to include annexations, and detachments, and reorganizations). Two separate application requests of the two areas within the City's SOI for SBLAFCO Actions A and B would be submitted to SBLAFCO; SBLAFCO Action A includes a portion of the BIG Specific Plan area currently within the SOI.

Page 1-10 has been revised as follows:

Although the development presented in the table is allowed, it is highly unlikely that this area would be developed to this maximum capacity within the Horizon Year (2048) based on **Appendix 8.0 BIG-1: Alternative Market Analysis ("Market Analysis")** the Market Analysis that was conducted.

Pages 1-15 through 1-20 have been revised as follows:

Table 3-1: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.3 AIR QUALITY			
Impact 5.3-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant	MM GP AQ-1: Reduce Emissions from Construction Activities: Prior to issuance of any construction permits for development projects subject to CEQA review (i.e., non-exempt projects), development project applicants shall prepare and submit to the City of Barstow (City) Planning Division a technical assessment evaluating potential project construction-related air quality impacts. The evaluation shall be prepared in conformance with the Mojave Desert Air Quality Management District methodology and guidelines for projects in the Mojave Desert Air Basin. If construction-related criteria air pollutants are determined to have the potential to exceed the adopted thresholds of significance of the applicable air district, the City Planning Division shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities to below these thresholds, to the extent feasible. These identified measures shall be incorporated into appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City Public Works Division. Mitigation measures to reduce construction-related emissions could include, but are not limited to: a. Use of construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower. A list of construction equipment by type and model year shall be maintained by the construction contractor on-site and available for City review upon request. b. Ensure construction equipment is properly serviced and maintained to the manufacturer's standards. c. Use of alternative-fueled or catalyst-equipped diesel construction equipment, if available and feasible.	Significant and Unavoidable

Table 3-1: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		d. Clearly posted signs that require operators of trucks and construction equipment to minimize idling time (e.g., five minute maximum). e. Preparation and implementation of a fugitive dust control plan that may include the following measures: f. Disturbed areas (including storage piles) that are not being actively utilized for construction purposes shall be effectively stabilized using water or chemical stabilizer/suppressant, or covered with a tarp or other suitable cover (e.g., revegetated). g. On-site unpaved roads and off-site unpaved access roads shall be effectively stabilized using water or chemical stabilizer/suppressant. h. Land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled utilizing application of water or by presoaking. i. Material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained when materials are transported off-site. j. Operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.) k. Following the addition of materials to or the removal of materials from the surface of outdoor storage piles, said piles shall be effectively stabilized to prevent fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. l. Within urban areas, track out shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.	

Table 3-1: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

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		m. Any site with 150 or more vehicle trips per day shall prevent carryout and track out. n. Limit traffic speeds on unpaved roads to 15 mph. o. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. p. Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the project area. q. <u>Require electrical hookups for battery/electric tools.</u> r. <u>Require battery-electric or plug-in electric power where feasible for off-road equipment under 19 kW (e.g., compactors, pressure washers).</u> s. <u>Require model-year 2014 or newer heavy-duty trucks for construction access meeting CARB's lowest optional NOx standard.</u> MM GP AQ-2: Reduce Emissions from Operation. Prior to discretionary approval by the City of Barstow (City) Planning Division for development projects subject to CEQA review (i.e., nonexempt projects), project applicants shall prepare a technical assessment evaluating potential air quality impacts related to the project operation phase and submit it to the City Planning Division for review and approval. The evaluation shall be prepared in conformance with the Mojave Desert Air Quality Management District (MDAQMD) methodology and guidelines for projects in the Mojave Desert Air Basin. If operation-related air pollutants are determined to have the potential to exceed the MDAQMD-adopted thresholds of significance, the City Planning Division shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions <u>to below these thresholds</u>, to the extent feasible during operational activities. The identified measures shall be included as part of the conditions of approval. Possible Mitigation measures to reduce long-term emissions can include, but are not limited to: a. For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an	

Table 3-1: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions. b. Applicants for manufacturing and light industrial uses shall utilize energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. c. Applicants for non-residential developments with over 50 employees shall provide changing/shower facilities as specified, at minimum, or greater than in the California Green Building Standards (CALGreen) Code (Non-residential Voluntary Measures). d. Applicants for multifamily, hotel, and motel developments shall provide bicycle parking facilities equivalent to or greater than as specified in the Residential Voluntary Measures of the CALGreen Code. e. Applicants for non-residential developments with 50 or more parking spaces shall provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles equivalent to or greater than the CALGreen Code (Non-residential Voluntary Measures). f. Applicants for non-residential developments and multi-family residential developments shall provide facilities to support electric charging stations identified in the Non-residential Voluntary Measures and Residential Voluntary Measures of the CALGreen Code, respectively. g. Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by Building & Safety during plan check. h. Applicants for future development projects along existing and planned transit routes shall coordinate with the City of Barstow	

Table 3-1: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		and the applicable transit agency to ensure that bus pad and shelter improvements are incorporated, as appropriate. i. <u>Applicants for warehouse projects that maintain a heavy-duty truck fleet shall evaluate the feasibility of requiring a zero-emission heavy truck fleet, or near-zero heavy truck fleet.</u> j. <u>Applicants for warehouse projects shall place signage at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations (e.g., Rule 2485). At minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict nonessential idling to no more than two consecutive minutes (compared to five minutes currently allowed under Rule 2485); and 3) telephone numbers of the building facilities manager and CARB to report violations.</u> k. <u>If Applicants for warehouse project have domiciled heavy-duty trucks (Class 7 and 8) onsite, the tenant/operator of the facility shall be required to provide electric truck charging facilities on site sufficient to charge the electric trucks domiciled on the site, and such facilities shall be made available for all electric trucks that use the facility, to the extent the applicable utility authorizes and has capacity to support.</u>	
Impact 5.3-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	Potentially Significant	See MM GP AQ-1 and MM GP AQ-2 .	
Impact 5.3-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant	MM GP AQ-3: Operational Health Risk Assessment. Applicants for new discretionary industrial or warehousing projects or commercial land uses that would generate substantial diesel truck travel—i.e., 40 diesel trucks per day per the Mojave Desert Air Quality Management District (MDAQMD) CEQA Guidelines, or 40 or more trucks with diesel-powered transport refrigeration units per day based on the California	

Table 3-1: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Air Resources Board recommendations for siting new sensitive land uses—and that are within 1,000 feet of existing or planned sensitive land uses shall prepare a health risk assessment (HRA). Sensitive land uses consist of residences, senior living/assisted living communities, schools, daycare centers, playgrounds, and medical facilities. All HRAs shall be submitted to the City of Barstow Planning Division and the MDAQMD for evaluation. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and MDAQMD for projects in the Mojave Desert Air Basin (MDAB). If the HRA shows that the project incremental cancer risk exceeds ten in one million (10E-06) or the risk thresholds in effect at the time a project is considered, or that the appropriate noncancer hazard index exceeds 1.0 or the thresholds as determined by MDAQMD at the time a project is considered, the applicant will be required to identify and demonstrate that measures are capable of reducing potential cancer and noncancer risks to <u>an acceptable level to the extent feasible, the thresholds identified by MDAQMD above (i.e., cancer risk of 10E-06 or noncancer hazard index of 1.0)</u>, including appropriate enforcement mechanisms. Measures to reduce risk impacts may include but are not limited to: a. Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible. b. Electrifying warehousing docks. c. Requiring use of newer equipment and/or vehicles. d. Restricting off-site truck travel through the creation of truck routes. Measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the proposed project.	

Page 1-25 has been revised as follows:

Table 3-2: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.5 CULTURAL RESOURCES			
Impact 5.5-3: Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?	Potentially Significant	See MM BIG-CUL-8 . <u>MM GP CUL-5: Inadvertent Discoveries of Human Remains. For discoveries of Native American human remains, PRC § 5097.98 and HSC § 7050.5 shall be followed. If human remains are encountered, all ground-disturbing activities shall halt within 100 feet of the find. A Sensitive Resource Area (SRA) shall be established around the site plus the 100 foot buffer via the placement of a physical barrier/demarcation, such as fencing or caution tape. The human remains, along with any associated grave goods and associated burial and sacred items, shall remain in place until the procedures as outlined in PRC § 5097.98 and HSC § 7050.5 are completed. No photographs of the remains or associated funerary objects shall be taken unless specifically requested by the County Coroner as a part of the legal process.</u>	Less than Significant

Pages 1-27 through 1-29 have been revised as follows:

Table 3-3: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.8 GREENHOUSE GAS EMISSIONS			
Impact 5.8-1: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially Significant	MM GP GHG-1: Climate Action Plan. The City of Barstow shall prepare <u>qualified</u> a Climate Action Plan (CAP) to align GHG emissions targets in the City with the GHG reduction targets of Assembly Bill (AB) 1279. The <u>qualified</u> CAP shall be completed within 36 months of certification of the General Plan EIR. The <u>qualified</u> CAP shall be updated every five years to ensure the City is monitoring the plan's progress toward achieving the City's greenhouse gas (GHG) reduction target and to require amendment if the plan is not achieving specified level. The update shall consider a trajectory consistent with the GHG emissions reduction goal established under AB 1279 for year 2045, and the latest	Significant and Unavoidable

Table 3-3: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		applicable statewide legislative GHG emission reduction that may be in effect at the time of the CAP. The <u>qualified</u> CAP shall include the following: ▪ GHG inventories of existing and forecast year GHG levels. ▪ Tools and strategies for reducing GHG emissions to ensure a trajectory with the long-term GHG reduction and carbon neutrality goal for year 2045 of Assembly Bill 1279. These may include, but are not limited to: ○ Encouraging electric vehicle adoption through incentive or education programs. ○ Adopting local ordinances or policies that require greater energy efficiency, waste reduction, and water conservation in new construction, additions, and/or alterations. ○ Encouraging the construction of solar arrays above parking lots, as well as the integration of solar and other renewable energy generation technologies in new construction, additions, and/or alterations. ○ Encouraging the incorporation of energy storage and other grid-harmonizing infrastructure in new construction, additions, and/or alterations. ○ Collaborating with Southern California Edison to encourage existing developments to upgrade natural gas equipment (e.g., furnaces) with electric equipment (e.g., heat pumps). ○ <u>Ensuring municipal fleets are transitioning to zero-emission vehicles in accordance with CARB's Advanced Clean Fleets regulation.</u> ○ <u>Coordination with Southern California Edison to expand battery storage to support renewable energy generation and electric truck charging in the City.</u> ▪ Plan implementation guidance that includes, at minimum, the following components consistent with the proposed CAP: ○ Administration and Staffing ○ Finance and Budgeting	

Table 3-3: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		○ Timelines for Measure Implementation ○ Community Outreach and Education ○ Monitoring, Reporting, and Adaptive Management ○ Tracking Tools. <u>Discretionary projects with applications submitted to the City prior to the adoption of the CAP shall consider measures identified in the California Air Pollution Control Officer's Association 2024 Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (GHG Handbook).</u> MM GP GHG-2: Implementation of MM BIG AQ-1 through MM BIG AQ-14.	

Pages 1-33 through 1-35 have been revised as follows:

Table 3-4: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.12 NOISE			
Impact 5.12-1: Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant	MM GP NOI-1: Construction Noise Measures. Construction contractors shall implement the following measures for construction activities conducted in the City of Barstow. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Barstow shall verify that grading, demolition, and/or construction plans submitted to the City include these notations prior to issuance of demolition, grading, and/or building permits. ▪ Limit construction activities to the hours of 7:00 AM and 7:00 PM Monday through Sunday, unless an exception is approved by the Community Development Director, and enforce FTA nighttime construction noise standards outside of these hours. ▪ During active construction, project equipment and trucks shall use the best available noise control techniques (e.g., improved	Significant and Unavoidable

Table 3-4: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds), wherever feasible. <u>A technique shall be considered feasible when it would reduce, rather than increase, the noise impacts to the nearest sensitive receptor, and would not increase costs by over 10% of the base construction cost associated with using standard construction equipment without best available noise control techniques.</u> Proper mufflers and/or silencers can achieve a 4 to 5 dBA reduction, while engine enclosures can achieve 8 to 10 dBA reduction. ▪ Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where pneumatic tools must be used, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools, when within 300 feet of sensitive receptors. Pneumatic tools typically measure at a noise level of 6 to 8 dBA lower than impact tools. ▪ Stationary equipment, such as generators and air compressors, shall be located as far as feasible from nearby noise-sensitive uses. <u>A distance is “as far as feasible” if there is no further distance from nearby noise-sensitive uses where the equipment could be placed and continue to perform its intended function while complying with the safety requirements set out in the operation manuals for each piece of such equipment. “Feasible” distances are limited to areas where construction contractors have permission to place equipment from relevant landowners.</u> ▪ Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. <u>A distance is “as far as feasible” if there is no further distance from nearby noise-sensitive uses where the stockpiled materials could be placed and mobile equipment used for stockpiling can continue to perform its intended function while complying with the safety requirements set out in the operation manuals for each piece of such equipment. “Feasible” distances are limited to areas where construction contractors have permission to stockpile and use equipment from relevant landowners.</u>	

Table 3-4: Proposed General Plan: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		- Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City Community Development Department <u>Goods Movement Routes established in Figure CM-4 of the proposed General Plan and as further regulated by State law.</u> - At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action <u>to stop any ongoing violations, provide worker education designed to prevent such violations in the future,</u> and report the action to the City. - During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. - If construction is anticipated for prolonged periods <u>more than two days</u> adjacent to sensitive receptors, as required by the Community Development Director, erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 4 pounds per square foot with no gaps from the ground to the top of the barrier. <u>Barriers are considered feasible if City Engineer determines, based on acoustical modeling provided by the applicant, that the barriers would be effective in maintaining construction noise levels at or below the performance standard, and if the barriers would not increase the project's base construction costs by over 10%.</u>	

Page 1-44 has been revised as follows:

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.2 AGRICULTURE AND FORESTRY RESOURCES			
Impact 5.2-2: Would the Project conflict with conflict with existing zoning for agricultural use, or a Williamson Act contract?	Less than Significant	No mitigation measures are required.	No Impact <u>Less than Significant</u>

Pages 1-45 through 1-49 have been revised as follows:

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.3 AIR QUALITY			
Impact 5.3-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	Potentially Significant	MM BIG AQ-1: Fugitive Dust Emissions. During construction, the contractor shall employ the following measures to minimize and control fugitive dust emissions. The contractor shall prepare a fugitive dust control plan that complies with Mojave Desert Air Quality Management (MDAQMD) Rule 403, which, at a minimum, shall describe how each measure would be employed, identify the individual responsible for ensuring implementation, and address the following components unless alternative measures are approved by the MDAQMD. <u>The fugitive dust control plan shall be submitted to MDAQMD for approval by the Air Pollution Control Officer prior to the start of construction activities. In accordance with Rule 403, the contractor shall maintain a copy of the fugitive dust control plan and records demonstrating compliance with the requirements of the fugitive dust control plan and Rule 403 through the closure of BIG construction, to be provided to MDAQMD personnel upon request. Pursuant to MDAQMD standard practice, MDAQMD may issue Notices to Comply and/or Notices of Violation for non-compliance with the approved fugitive dust control plan.</u>	Significant and Unavoidable

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Water unpaved road surface shall be maintained with adequate moisture. ▪ Limit vehicle travel speed on unpaved roads to 25 miles per hour for loaded haul trucks which may be exceeded if visible fugitive dust is not generated. ▪ Reduce non-essential dust-generating activities when average wind speed exceeds 25 mph. ▪ Stabilize disturbed surface areas, including storage piles, that are not being used for over two weeks, by using water, a chemical stabilizer/suppressant, hydro mulch, or by covering with a tarp or other suitable cover or vegetative ground cover, to control fugitive dust emissions effectively. In areas adjacent to organic farms, the Contractor would use non-chemical means of dust suppression. Use of a water truck during visible dusting episodes is considered sufficient for compliance with this measure. For disturbed surface areas, project-related dust generating activities should be based on the difference between upwind and downwind dust (i.e., the metric should be no more dust than currently exiting the site). ▪ For buildings up to 6 stories in height, wet all exterior surfaces of buildings during demolition. MM BIG AQ-2: Low VOC Paint (Construction and Operations). During construction and operations, the implementing entity shall utilize “Super-Compliant” low VOC paints. Super-Compliant low VOC paints shall be no more than 10 grams per liter of VOC. Prior to issuance of building permits, the City of Barstow Building and Safety Department shall confirm that plans include the following specifications: ▪ All architectural coatings will be super-compliant low VOC paints. ▪ Recycle leftover paint. Take any leftover paint to a hazardous waste center; do not mix leftover water-based and oil-based paints. ▪ Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors. ▪ For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		cleanup water and take it to the hazardous waste center (www.cleanup.org). ▪ Use compliant low-VOC cleaning solvents to clean paint application equipment. ▪ Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions. ▪ Contractors shall construct/build with materials that do not require painting and use pre-painted construction materials to the extent practicable. ▪ Use high-pressure/low volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency. MM BIG AQ-3: Reduce Exhaust Emissions from Off-Road Construction Equipment. Prior to issuance of construction contracts, BNSF or its designee shall incorporate the following off-road construction equipment exhaust emissions requirements into the contract specifications: ▪ All heavy-duty diesel off-road construction equipment used during the construction phase shall meet Tier 4 Final engine requirements, except for specialized equipment, such as Caterpillar 657 Scrapers, Caterpillar 777 Articulated Off-Highway Trucks, track laying machines, ballast regulators, and other specialized rail equipment that are not commercially available as Tier 4. In the event that non-specialized construction equipment cannot meet Tier 4 Final engine certification, the implementing entity must demonstrate through future documentation with written findings that no Tier 4 equipment of that type are reasonably available. ▪ A copy of each unit's certified tier specification and shall be made available to the City in quarterly reports. MM BIG AQ-4: Renewable Diesel (Construction). During construction, the implementing entity shall use renewable diesel fuel to minimize and control exhaust emissions from heavy-duty diesel-fueled construction equipment and off-road heavy diesel trucks, except that traditional diesel can be used where renewable diesel is not available	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		from suppliers within 200 miles of the BIG footprint. Renewable diesel shall meet the most recent ASTM D975 specification for Ultra Low Sulfur Diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum fuels sold in California. The implementing entity shall provide the City with quarterly reports of renewable diesel purchase records and equipment and vehicle fuel consumption. The construction contract shall identify the quantity of traditional diesel purchased and fully document the availability and price of renewable diesel to meet BIG demand. <u>This may include, but is not limited to: a list of all fuel suppliers contacted; supplier addresses and distances from BIG; statements or correspondence from suppliers demonstrating availability of renewable diesel or lack thereof; documentation establishing that suppliers within 200 miles do not carry renewable diesel in the quantities needed; price quotes where relevant; any other information requested by the City to verify compliance.</u> MM BIG AQ-5: Reduce Exhaust Emissions from On-Road Construction Equipment. Prior to issuance of construction contracts, the implementing entity shall incorporate the following material-hauling heavy truck fleet mix requirements into the contract specifications: ▪ All on-road trucks used to haul construction materials shall consist of an average fleet mix of equipment model year 2010 or newer, but no less than the average fleet mix for the current calendar year as set forth in the CARB's EMFAC2021 database. ▪ The contractor shall provide documentation to BNSF of efforts to secure such a fleet mix <u>and shall maintain all supporting procurement records for City review upon request.</u> ▪ The implementing entity shall keep a written record of the fleet mix for on-road construction equipment during BIG construction and provide the City <u>with</u> annual reports documenting compliance. MM BIG AQ-6: Reduce the Potential Impact of Concrete and Asphalt Batch Plants. Prior to the construction or arrival of a batch plant on site, the implementing entity shall provide the City with	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		documentation demonstrating that batch plants are sited at least 1,000 feet from sensitive receptors, including places such as daycare centers, hospitals, senior care facilities, residences, parks, and other areas where people may congregate. <u>The City shall verify compliance with this siting requirement by reviewing site plans, maps, or other distance documentation submitted by the implementing entity, and shall issue written confirmation of verification prior to installation or operation of any batch plant. If the documentation does not demonstrate the required 1,000-foot buffer, the City shall require corrective action before the batch plant may be established.</u> Batch plants shall implement control measures required by MDAQMD as part of the Permit to Construct in order to reduce fugitive dust, such as water sprays, enclosures, hoods, curtains, shrouds, movable and telescoping chutes, central dust collection systems, and other suitable technology, to reduce emissions to be equivalent to the U.S. EPA AP-42 controlled emission factors for batch plants. The implementing entity shall provide a copy of the MDAQMD permit application to the City that each batch plant meets this standard during operation. MM BIG AQ-7: Sweep Paved Areas. During operations, paved areas such as parking lots, internal roadways, the container yard, chassis storage area, and cargo handling areas shall be swept at least once every 7 calendar days. <u>The implementing entity shall maintain sweeping logs documenting the date, time, and areas swept for City review upon request and provide the City with annual reports documenting compliance.</u>	

Pages 1-52 through 1-61 have been revised as follows:

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.4 BIOLOGICAL RESOURCES			
Impact 5.4-1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant	MM BIG BIO-1: Worker Environmental Awareness Program and Training. Prior to construction mobilization, designated biologists shall prepare a Worker Environmental Awareness Program (WEAP), including a training presentation and key fact sheet, to train construction crews to be aware of and recognize sensitive biological resources that may be encountered within, or adjacent to, the BIG footprint as well as measures required to minimize and avoid impacts to such resources. The WEAP training materials shall be submitted to the City for review. Prior to construction mobilization, the designated biologists or biological monitors shall provide the approved WEAP training materials, including but not limited to the key fact sheet, to all construction personnel. The fact sheet shall be provided to construction personnel in other languages, as necessary, to accommodate non-English speaking workers. Additionally, prior to beginning construction work, all construction personnel shall attend the WEAP training presentation. A refresher WEAP training shall be completed annually thereafter during construction. At a minimum, WEAP training materials reviewed during training shall include the following information: ▪ Key provisions of the FESA, CESA, the MBTA, CFGC § 1600, Porter-Cologne Act, and the CWA as they relate to BIG; ▪ Potential consequences and penalties for violation or noncompliance with these laws, regulations, and associated permits; ▪ General information, identification, and characteristics of special status wildlife and plant species, jurisdictional waters, and sensitive natural communities present on and adjacent to the BIG footprint as well as the required construction footprint boundaries; ▪ A discussion concerning the threat of common ravens (<i>Corvus corax</i>) to desert tortoise and instructions to not feed wildlife or	Less than Significant

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		dispose of food waste in a way that could attract and provide food for ravens; ▪ Hazardous substance spill prevention and containment measures; ▪ Contact information for designated biologists and instructions to call in the event of the discovery of a special status species or injured or dead wildlife; and ▪ Relevant mitigation measures and maps showing areas affected by resource-specific measures, as applicable. Upon completion of each WEAP training, each member of the construction personnel shall sign a form stating that they attended the training, understood the information presented, and agree to comply with the WEAP training requirements. The designated biologist or biological monitor shall provide training updates to construction personnel, as needed. MM BIG BIO-2 Biological Resource Monitoring. At least 30 days prior to start of construction mobilization activities, the implementing entity shall submit for review and approval by USFWS and CDFW the designated biologists' and Species-Specific biological monitors name(s) and qualifications retained to oversee biological resource monitoring activities during BIG construction. No vegetation removal or mass grading shall begin until the implementing entity has received written confirmation from USFWS and CDFW that the designated biologists have been approved. A request for designated biologist and Species-Specific biological monitor approval shall be submitted in writing and shall include adequate information regarding the proposed designated biologist and Species-Specific biological monitor qualifications for a reasonable person to determine qualification status. If USFWS and/or CDFW do not respond within 30 days after a verifiable written request for designated biologist and biological monitor approval is submitted, the designated biologist and/or Species-Specific biological monitor shall be deemed approved. Should a new designated biologist and/or Species-Specific biological monitor be necessary, the implementing entity shall seek approval through the same process as above, with the request being deemed approved after 30 days after the written	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		request. Note that the implementing entity's selection of General biological monitors does not require USFWS and CDFW approvals. Designated biologists shall oversee the timely implementation of all biological mitigation measures as outlined in the Mitigation Monitoring and Reporting Program (MMRP) during construction and the applicable post-construction monitoring period as required by the City and CDFW/USFWS for permit validity. The designated biologists shall also be responsible for guiding and directing the biological monitor's work. The designated biologists shall oversee the preparation of quarterly monitoring reports and the post-construction monitoring report summarizing compliance with BIG-specific mitigation measures submitted to the City. Species-Specific biological monitors shall be responsible for implementation of species-specific mitigation measures for the species for which they have been approved and would report directly to a designated biologist. Qualifications for Species-Specific biological monitors can be found in the species-specific mitigation measures. General biological monitors shall be responsible for conducting WEAP training, facilitating implementation of general mitigation measures, except where specified that a specific individual with specific qualifications (such as designated biologist) must implement the mitigation measures, conducting general compliance monitoring, and reporting on compliance monitoring activities. General biological monitors shall perform daily monitoring during initial vegetation removal and construction activities that result in the breaking of the ground surface. Following initial vegetation removal and construction activities, General biological monitors shall perform regular random checks (not less than once per week but could be required more frequently depending on the presence of special status species) to ensure that mitigation measures are implemented. General biological monitors would report directly to a designated biologist. MM BIG BIO-3: Work Stoppage. During BIG construction, the implementing entity shall adhere to the following guidelines:	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ A designated biologist with appropriate qualifications shall be retained to move special status species or other wildlife of low or limited mobility out of harm's way. Movement of wildlife out of harm's way shall be limited to only those individuals that would otherwise be injured or killed from BIG-related activities and shall be moved only as far as necessary to ensure their safety. ▪ If a biological or aquatics resources issue or concern is observed during monitoring (e.g., a special status wildlife species within an active construction area), the designated biologist or biological monitor shall have the authority to stop work as soon as practicable and shall immediately notify the City and the foreman and/or supervisor for the specific activity/area. The foreman/supervisor shall seek a timely resolution of the biological or aquatics resources issue or concern. ▪ If the issue or concern involves special status species, work shall not resume until the species has left the work area, or until a designated biologist implements the appropriate species-specific measures to avoid take, which may involve coordination with USFWS and/or CDFW. ▪ If construction personnel or biological monitor observe a burrowing owl, desert tortoise, American badger, or desert kit fox individual or active burrow within the BIG footprint or in the vicinity of construction activities, the foreman/supervisor shall contact a designated biologist immediately and all work in the vicinity of the animal/active burrow which could cause disturbance, injury, or mortality, shall cease until a designated biologist or Species-Specific biological monitor provides clearance. ▪ If construction personnel or a biological monitor observe a Mojave fringe-toed lizard within the BIG footprint or in the vicinity of construction activities, the foreman/supervisor shall contact a designated biologist immediately and all work in the vicinity of the lizard which could cause disturbance, injury, or mortality, shall cease until a designated biologist or Species-Specific biological monitor provide clearance.	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ If adverse impacts on willow flycatcher and/or yellow-billed cuckoo are documented by a Species-Specific biological monitor, all work within 500 feet of occupied habitat, or as deemed necessary by the Species-Specific biological monitor, shall cease until a designated biologist or Species-Specific biological monitor provide clearance. ▪ If a bird nest is discovered by construction personnel, the foreman/supervisor shall contact a designated biologist immediately and all work within 500 feet of the nest shall cease until it can be determined if the nest is active (e.g., eggs, juveniles, and/or adults present) and, if necessary, the biological monitor shall establish an appropriate buffer. ▪ If an injured wildlife species is observed within or adjacent BIG, a designated biologist shall be notified immediately to determine if it is appropriate to release or transport the wildlife species to the nearest CDFW permitted veterinarian or rehabilitation center. The designated biologist shall follow all relevant guidelines for sensitive species. ▪ If entrapped wildlife is discovered within an open excavation, project personnel shall halt work (when safe to do so) and contact a designated biologist. Project personnel shall avoid the area to prevent disturbing the wildlife until a designated biologist or biological monitor provide clearance. ▪ If entrapped wildlife is discovered in any open pipes, culverts, and other similar structures, project personnel shall halt all work (when safe to do so) and contact a designated biologist. Project personnel shall avoid disturbing the wildlife and shall not move the structures until a designated biologist or biological monitor provide clearance. MM BIG BIO-4: Vehicles and Equipment. During BIG construction, the implementing entity shall ensure that vehicle traffic within the construction limits is restricted to established roads, construction areas, and other permissible areas. Access routes (ingress and egress to the site) shall be flagged and marked, and measures shall be adopted to prevent off-road vehicle traffic into species habitats beyond the approved project limits.	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		If any vehicle must drive off established routes or cleared construction limits in suitable desert tortoise or burrowing owl habitat, a Species-Specific biological monitor shall walk the vehicle path in search of desert tortoise and/or burrowing owl and confirm the species are absent from the area, prior to use of the path. The Species-Specific biological monitor shall visually account for the route or construction site footprint plus a 15-foot buffer on each side. During the construction phase, the implementing entity shall implement the following measures: ▪ Vehicles shall not exceed 25 miles per hour. Nighttime vehicle speeds may be reduced at the discretion of the designated biologist and as described in the Nighttime Construction and Lighting Plan to be prepared per MM-BIO 8. ▪ If special status species are present within or near BIG access routes, speed limits shall be reduced at the discretion of a designated biologist. All personnel shall abide by the reduced speed limit within the designated area. ▪ A biological monitor shall oversee the adherence to on-site speed limits within Mojave fringe-toed lizard occupied habitat during species' active periods; for the purposes of this measure the active period is defined as March through September when temperatures are above 70. The biological monitor shall require additional speed limit signs, temporary speed bumps, or additional WEAP training to ensure compliance with this measure. ▪ All BIG and construction personnel shall stop and/or avoid wildlife that are present on roads (if safe to do so). ▪ BIG personnel shall not intentionally harm or harass wildlife that are present on roads. ▪ If wildlife are blocking vehicle and equipment access and do not move of their own volition within 10 minutes, BIG personnel shall contact a designated biologist. ▪ All wildlife vehicle or equipment strikes shall be reported to a designated biologist.	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Prior to moving a parked vehicle or staged equipment, all BIG personnel shall check under the vehicles and equipment for special-status wildlife. If wildlife is discovered under vehicles or equipment, project personnel shall halt work and allow wildlife to move safely away prior to moving vehicles or equipment. BIG personnel shall not harm or harass wildlife seeking refuge under vehicles and equipment. If wildlife do not move of their own volition within 10 minutes, project personnel shall contact a designated biologist. ▪ If a vehicle or construction equipment is parked for more than 10 minutes outside of the desert tortoise exclusion fenced area within suitable desert tortoise habitat, the ground under the vehicle shall be inspected for the presence of desert tortoise before the vehicle or equipment is moved. If a desert tortoise is present, the vehicle or equipment shall not be moved until the desert tortoise moves on its own away from the vehicle or equipment. If, during construction, a desert tortoise does not move within 10 minutes, an agency-approved Species-Specific biological monitor shall move the animal out of harm's way to a safe location no greater than 300 meters (984 feet), according to USFWS protocol. ▪ Drip pans shall be placed under parked (for an hour or more) or staged equipment that is near native habitat or aquatic resources that are to be avoided by BIG. ▪ The implementing entity shall ensure that these measures have been properly communicated to all personnel associated with BIG. MM BIG BIO-5: Compliance Reporting. A designated biologist shall report any non-compliance or unauthorized take of special-status species to the appropriate agencies within 48 hours of its occurrence. Monitoring reports that document compliance status with the MMs shall be prepared by designated biologists and submitted quarterly and post construction to the City. All mitigation measures shall be implemented as stated herein except for necessary modifications approved by a qualified biologist. Failure to implement mitigation measures shall be reported in monitoring reports.	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		MM BIG BIO-6: Weed Control and Landscaping. Prior to the start of construction mobilization activities, the implementing entity shall prepare and submit to the City for review an Adaptive Weed Control Plan to avoid and minimize the spread of non-native plant species from BIG to adjacent undeveloped lands during construction and operation. BIG landscape plans shall be reviewed by a designated biologist; any invasive plant species, as defined by the California Invasive Plant Council (www.cal-ipc.org), California Native Plant Society (www.cnps.org) or similar, shall be prohibited. Provisions of the Adaptive Weed Control Plan may include the following: e. installation of container plants and/or hydro-seeding areas adjacent to existing, undisturbed native vegetation areas with native plant species that are common within adjacent areas; f. review and screening of proposed plants to identify and avoid potential invasive species; g. weed removal during the initial planting of landscaped areas; h. methods to survey for and treat weeds during BIG construction and operations, particularly in disturbed areas after native vegetation and soils removal where weeds can quickly establish; i. weed controls for heavy equipment that come onto the site, e.g., track outs, all equipment pieces are delivered clean as confirmed via inspection, etc. Any site landscaping shall use water-wise concepts, including drought tolerant vegetation and native vegetation to the greatest extent feasible. To prevent weeds growing as a result of available water (and further ameliorate the water demands of BIG), water efficient and targeted irrigation systems (such as drip irrigation with a smart controller) shall be installed where necessary in lieu of traditional watering methods. Furthermore, the implementing entity shall comply with 49 CFR § 213 which includes prohibitions and requirements regarding vegetation growth within and adjacent to the rail right-of-way. MM BIG BIO-7: Delineation of Construction Work Limits. To prevent inadvertent disturbance to areas outside the delineated construction	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		work areas, prior to start of all construction mobilization activities, including equipment staging and maintenance and vegetation removal, the implementing entity shall clearly delineate the construction work limits (e.g., installation of flagging, staking, or other delineation methods approved by a designated biologist), and require construction personnel not to go beyond the delineated areas. All construction work shall be conducted within the delineated construction work limits, which shall be maintained throughout BIG construction. Should temporary visibility construction fencing be installed to delineate the construction work limits, that do not allow for dispersal of wildlife from construction work limits into adjacent undeveloped lands, a biological monitor shall check the perimeter fence at the beginning of each work day. The implementing entity shall consult with approved designated biologists to confirm that marking of construction boundaries are adequate to prevent unauthorized access beyond the limits of work while facilitating wildlife escape from active construction areas. <u>MM BIG BIO-8: Nighttime Work and Lighting. Nighttime construction shall minimize impacts on wildlife habitat by using the following methods to be described in a Nighttime Construction and Lighting Plan and submitted to the City for review:</u> ▪ <u>Conduct nighttime work only within the boundaries of previously disturbed, cleared and grubbed areas;</u> ▪ <u>Observe slower vehicle speeds at nighttime at the discretion of the designated biologist;</u> ▪ <u>Shield and direct nighttime lighting to avoid illuminating wildlife habitat, including movement corridors and bat roosts;</u> ▪ <u>When work safety considerations allow, use the minimum lighting levels approved by the Occupational Safety and Health Administration (OSHA) pursuant to 29 CFR 1926.56 for general construction (i.e., 5 foot-candles or 54 lux);</u> ▪ <u>Use low beams or turn off headlights when safety considerations permit; and</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Minimize the duration of lighting by using remote monitoring systems or other methods to allow security of the construction site during hours it is not in use. MM BIG BIO-9: Wildlife Entrapment. At the end of each workday during construction, the implementing entity's construction personnel shall cover all excavated, steep-sided holes or trenches more than eight inches deep and that have sidewalls steeper than 1:1 (45 degree) slope with plywood or similar materials, or provide a minimum of one escape ramp per 100 feet of trenching (with slopes no greater than 3:1) constructed of earth fill or wooden planks. A biological monitor shall thoroughly inspect holes and trenches for trapped animals before they are covered or filled and/ or if the work area is inactive for more than 24 hours. The implementing entity's construction personnel shall screen, cover, or elevate at least one foot above ground, construction pipe, culverts, or similar structures with a diameter of three inches or greater that are stored outside overnight. These pipes, culverts, and similar structures shall be inspected by the General biological monitor for wildlife before such material is moved, buried, or capped. Construction pipe, culverts, or similar structures with a diameter greater than three inches that is stored less than eight inches above ground, located outside of desert tortoise exclusion fencing, and left unattended for more than 24 hours when desert tortoise is active (i.e., early March through early June and September through early November) shall be inspected for desert tortoise by an agency-approved Species-Specific biological monitor. As an alternative, all such structures shall be capped or placed on pipe racks. MM BIG BIO-10: Trash Abatement. The implementing entity or its contractor shall ensure that fully covered trash receptacles that are animal-proof and weather-proof are used to contain all "micro-trash" (e.g., screws, nuts washers), food scraps, food wrappers, and other miscellaneous trash. Receptacles shall be emptied at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>MM BIG BIO-11: Dead Wildlife Disposal.</u> During construction, and ongoing during operations, the implementing entity shall remove any dead wildlife found on the BIG footprint, as practical, to reduce attraction of opportunistic predators. Dead and injured wildlife shall be promptly reported to a designated biologist and handled and removed in accordance with any applicable project permits and plans. <u>MM BIG BIO-12: Domestic Dogs.</u> The implementing entity shall not permit pet dogs in active project areas. Service animals are exempt from this prohibition. <u>MM BIG BIO-13: Desert Tortoise Clearance Surveys.</u> Prior to commencement of construction mobilization activities, desert tortoise exclusion fencing shall be installed and maintained according to a CESA ITP and Biological Opinion to avoid take of desert tortoise including destruction of nests or their potential habitat in the impact footprint, where individuals are known to occur, recent sign has been observed, or construction activities have the potential to result in take. A qualified Species-Specific biological monitor shall first conduct a pre-construction survey for desert tortoise according to the CESA ITP and Biological Opinion at locations where exclusionary fence will be installed and translocate or relocate any desert tortoise present at exclusionary fence installation locations as required by the CESA ITP and Biological Opinion and only then exclusionary fencing shall be installed and the qualified Species-Specific biological monitor shall be present during exclusion fence installation. Desert tortoise exclusion fencing in desert tortoise habitat shall be constructed to standards outlined in Chapter 8 of the Desert Tortoise (Mojave Population) Field Manual (<i>Gopherus agassizii</i>) (USFWS, 2009b) and shall be used to delineate the area. The desert tortoise exclusion fencing shall be maintained and monitored daily during the desert tortoise activity period (i.e., early March through early June and September through early November) to allow for fencing to be maintained in good condition, and to determine if tortoises are “trapped” along the fencing searching for a way to access the other side. Outside of the desert tortoise activity period, fence inspections shall occur at least once weekly by a qualified Species-Specific biological monitor. If	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>failures in the exclusion fence are documented, desert tortoise clearance surveys shall be repeated for affected areas. At the discretion of the designated biologist, desert tortoise exclusion fencing design shall incorporate areas of shade and/or predation protection (e.g., artificial burrows) in the event a desert tortoise becomes trapped along the fence. Desert tortoise guards, or other agency approved design, shall be installed and connected to the exclusionary fencing at construction area entry points to prohibit desert tortoise from crossing into the construction right-of-way. The desert tortoise guard shall have a clear escape route away from construction activity for any desert tortoise that should fall into the guard. The guard shall be inspected daily by a qualified biological monitor for desert tortoise and to ensure the escape route is free of obstruction and debris.</u> <u>Immediately following the installation of desert tortoise exclusion fencing, Species-Specific biological monitors and/or designated biologists approved by USFWS in accordance with the Desert Tortoise Authorized Biologist Qualifications Form (Section 3.2) of the Desert Tortoise (Mojave Population) Field Manual (<i>Gopherus agassizii</i>) (USFWS, 2009b) and CDFW shall conduct clearance surveys in suitable habitat for desert tortoise. The survey(s) shall be conducted in general accordance with Chapter 6 of the Desert Tortoise (Mojave Population) Field Manual (<i>Gopherus agassizii</i>) (USFWS, 2009) or current clearance survey protocol and shall align with requirements in the CESA ITP and Biological Opinion. Survey results shall be provided to the City, CDFW, and USFWS.</u> <u>If active desert tortoise burrows are identified in the impact footprint during desert tortoise clearance surveys and required to be moved off site, a desert tortoise translocation plan will be implemented as approved by USFWS and CDFW. All unoccupied desert tortoise pallets and burrows that are not practical to avoid shall be examined and excavated by hand during the clearance survey by the qualified Species Specific biological monitors and collapsed to prevent reentry following the procedures and precautions outlined in the Desert Tortoise (Mojave Population) Field Manual (<i>Gopherus agassizii</i>) (USFWS, 2009b), CESA ITP, and Biological Opinion.</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>MM BIG BIO-14: Desert Tortoise Relocation and Translocation.</u> Prior to start of construction mobilization activities, a designated biologist approved by CDFW through a CESA ITP and USFWS through a Biological Opinion shall prepare a BIG-specific Desert Tortoise Translocation Plan, based on the Translocation of Mojave Desert Tortoises from Project Sites: Plan Development Guidance (USFWS, 2020), Health Assessment Procedures for the Mojave Desert Tortoise (<i>Gopherus agassizii</i>): A Handbook Pertinent to Translocation (USFWS, 2016) and Desert Tortoise (Mojave Population) Field Manual (<i>Gopherus agassizii</i>) (USFWS, 2009b) or other current USFWS guidelines and in accordance with applicable Incidental Take Permits and Biological Opinions. The BIG-specific Desert Tortoise Translocation Plan shall identify suitable relocation and translocation sites, provide details on desert tortoise surveys and for moving desert tortoise out of harm's way, and include the methodology for visual desert tortoise body condition assessments. The designated biologist shall provide the BIG-specific Desert Tortoise Translocation Plan to the USFWS and CDFW for review and approval at least 30 days prior to start of translocation. At a minimum, the Desert Tortoise Translocation Plan shall include the following measures: ▪ <u>The qualified Species-Specific biological monitor or the designated biologist shall implement the Desert Tortoise Translocation Plan during BIG construction. Only qualified Species-Specific biological monitors or designated biologists authorized by the USFWS and CDFW to handle desert tortoise shall move the animal and project-specific ITPs for desert tortoise shall be acquired under CESA and FESA prior to such actions.</u> ▪ <u>The approved Species-Specific biological monitor or designated biologist shall move the desert tortoise found in construction work areas out of danger outside of the potential impact footprint, following the procedures and conditions outlined in the Incidental Take Permit and Biological Opinion.</u> ▪ <u>Prior to the approved Species-Specific biological monitor or designated biologist moving desert tortoise out of the construction work area, the biological monitor or designated biologist shall</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>survey the relocation and translocation site to confirm that suitable burrows for desert tortoise exist. If few or no burrows are available, artificial burrows and/or shade structures shall be created along the outer perimeter of the desert tortoise exclusion fencing following the guidelines in the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS 2009b) and Shade Structures for Desert Tortoise Exclusion Fence: Design Guidance (USFWS 2018), or as updated or replaced by the USFWS and in accordance with the CESA ITP and Biological Opinion.</u> ▪ <u>If needed, artificial burrows shall be installed outside of the construction work area (along the outer perimeter of the desert tortoise exclusion fencing if applicable) from where the individual was relocated to provide cover and prevent exposure to predators and dehydration. Prior to excavation of an occupied burrow, artificial burrows shall be installed.</u> MM BIG BIO-15: Common Raven Management. <u>Prior to the start of construction mobilization activities, the implementing entity shall prepare a Raven Management Plan to avoid attracting common ravens to BIG by creating food or water subsidies, perch sites, roost sites, or nest sites. The Raven Management Plan may include the following measures to be implemented during construction:</u> ▪ <u>Water used for dust control purposes shall not be wasteful and when used, shall avoid creating unintentional ponded water and eliminate any unintentional created standing water.</u> ▪ <u>Water tanks shall be sealed and free of leaks. Standing water created from leaks shall be promptly repaired.</u> ▪ <u>Irrigation used during revegetation and landscaping shall be kept to a minimum to avoid standing water, where feasible. The implementing entity shall coordinate with CDFW and USFWS to remove inactive raven nests and/or other suitable stick nests during the non-breeding season each year of BIG construction. Active raven nests within the BIG footprint shall be reported to USFWS and CDFW.</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		- During BIG construction, a biological monitor with knowledge of common raven identification (including nests) and desert tortoise remains (e.g., carcass, shell and bone fragments) shall conduct one survey per month for presence of common ravens and nests within 100 feet of the BIG footprint in occupied desert tortoise habitat for the purpose of identifying ravens that may prey upon desert tortoise. The location(s) of nest and desert tortoise remains shall be recorded using a GPS unit. Additionally, the implementing entity shall participate in the interagency Raven Monitoring and Management Program to address indirect impacts to desert tortoise related to the potential increase in the raven population. The implementing entity's participation in the program shall be subject to compensation through the payment of a onetime fee not to exceed \$150 and no less than \$105 per disturbed acre, as established by the Desert Managers Group. Payment shall be made prior to the start of ground disturbance or other project activities that may result in potential take of desert tortoise. Evidence of the USFWS and/or CDFW determination and payment of any required fees shall be submitted to the City. MM BIG BIO-16: Desert Tortoise Compensatory Mitigation Plan. Prior to start of construction mobilization activities, the implementing entity shall prepare a Compensatory Mitigation Plan (CMP) in consultation with CDFW and USFWS that describes the compensatory mitigation that shall be provided at a minimum 1:1 ratio to offset permanent and temporary impacts on desert tortoise habitat. The CMP shall describe the following: - A description of desert tortoise and habitat types for which compensatory mitigation is being proposed. - A description of the methods used to identify and evaluate mitigation options. Options may include one or more of the following: - Purchase of mitigation credits from an agency-approved mitigation bank (e.g., Mojave Desert Tortoise Conservation Bank or other CDFW/USFWS approved mitigation bank).	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		○ <u>Incidental take permit coverage through an existing agency general conservation plan (e.g., USFWS Desert Tortoise General Conservation Plan).</u> ○ <u>Protection of desert tortoise habitat through acquisition and a conservation easement and funding for long-term management of the habitat. Endowment funds shall be transferred to the applicable agency or entity approved by CDFW and USFWS and the conservation easements shall be held by an entity approved in writing by the applicable regulatory agency; for example, CDFW and USFWS. In circumstances where BNSF protects habitat through a conservation easement, the terms of the conservation easement shall be subject to approval of the applicable regulatory agencies, such as CDFW and USFWS and the conservation easement shall identify applicable regulatory agencies as third-party beneficiaries with a right of access to the easement areas.</u> ▪ <u>A summary of the estimated direct permanent and temporary impacts on desert tortoise and desert tortoise habitat.</u> ▪ <u>A description of the process that is proposed to be used to confirm impacts. Actual impacts on desert tortoise and desert tortoise habitat could differ from estimates. Should this occur, adjustments shall be made to the proposed compensatory mitigation in consultation with CDFW/USFWS.</u> <u>Final compensatory mitigation shall be determined in consultation with CDFW and USFWS as a part of the CESA ITP and federal take authorization review and approval process. The CMP shall be submitted to the City, CDFW, and USFWS.</u> <u>MM BIG BIO-17: Southwestern Willow Flycatcher, Western Yellow-billed Cuckoo, and LeConte's Thrasher Construction Requirements. Construction activities within suitable willow flycatcher, western yellow-billed cuckoo, and LeConte's thrasher nesting habitat should occur outside of the breeding season (generally May 1 through August 31 for southwestern willow flycatcher and western yellow-billed</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>cuckoo and late January to early June for LeConte’s thrasher) when feasible. If construction activities must occur within the breeding season, any nesting habitat shall be removed prior to the breeding season.</u> <u>If construction activities must occur within 500 feet of suitable nesting habitat (i.e., near the Mojave River) and within the nesting season for willow flycatcher, western yellow-billed cuckoo, and LeConte’s thrasher, pre-construction surveys shall be conducted prior to construction activities that occur within 500 feet of suitable habitat. Results shall be provided to the City. A Species-Specific biological monitor shall conduct preconstruction surveys for Willow Flycatcher, western yellow-billed cuckoo, and LeConte’s thrasher within 30 days prior to start of construction activities that occur within 500 feet of suitable habitat. The Species-Specific biological monitor shall hold a USFWS recovery permit and be authorized by the agency to conduct pre-construction willow flycatcher surveys and/or western yellow-billed cuckoo surveys. The Species-Specific BM shall also conduct the pre-construction LeConte’s thrasher survey in general accordance with the guidelines provided by the Desert Thrasher Working Group (2018, 2024) or other acceptable survey methodology that allows for thorough detection of nests (if any).</u> <u>If southwestern willow flycatcher, western yellow-billed cuckoo, and/or LeConte’s thrasher is documented within the BIG footprint during pre-construction surveys, no work shall occur within a 500-foot buffer of the nest and consultation with USFWS and CDFW shall occur (as applicable to the species under their jurisdiction) and additional measures may be implemented to avoid take. Federal and State Incidental Take Permits may be required for proposed actions that are determined to have adverse effects on willow flycatcher, western yellow-billed cuckoo, and/or LeConte’s thrasher.</u> <u>If southwestern willow flycatcher, western yellow-billed cuckoo, and/or LeConte’s thrasher nesting behavior and/or breeding territories are documented within 500 feet of construction activities during preconstruction surveys and construction activities must proceed during the nesting season, no work shall occur within a 500-foot buffer</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>of the nest and construction noise shall be monitored and minimized per a Wildlife Noise Study and Monitoring Plan to be implemented with designated biologist oversight. Prior to and during construction, noise monitoring shall be conducted within suitable nesting habitat contiguous with occupied territories at the vegetation limit closest to impact area. Noise limits are only applicable to the occupied nest habitat and suitable contiguous nesting vegetation determined to be part of the nesting territory. Noise monitoring shall be conducted by a qualified noise specialist in coordination with a Species-Specific biological monitor. While conducting noise monitoring, the biological monitor shall monitor the active nests to allow normal breeding behaviors to not be indirectly impacted by noise from construction activities.</u> <u>Construction noise levels shall not exceed pre-construction ambient levels or a 70 dBA hourly average, whichever is greater, in habitat occupied by nesting willow flycatcher, western yellow-billed cuckoo, and LeConte's thrasher unless authorized by the appropriate regulatory authorities (i.e., CDFW and/or USFWS). Construction activities that exceeded noise limits in the nest territory would be adjusted to reduce noise to below pre-construction ambient levels, a 70dBA hourly average, or the agency-approved threshold. Alternatively, noise attenuation measures shall be implemented to reduce noise within occupied willow flycatcher, western yellow-billed cuckoo, and/or LeConte's thrasher breeding territories to below the limit. Measures may include installation of sound barriers or walls, phasing of equipment use, changes in scheduling, and temporary avoidance of certain portions of the impact area. Noise monitoring shall be conducted when attenuation measures are implemented to document a successful or unsuccessful reduction in noise to below the established threshold. If such adjustments or measures are not feasible and noise levels are found to result in average hourly noise levels greater than 70 dBA or pre-construction ambient levels, whichever is greater, work would be postponed until after the breeding season or after the willow flycatcher, western yellow-billed cuckoo, and/or LeConte's thrasher fledglings are no longer dependent</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>on the affected breeding territory, as confirmed by a qualified biologist unless authorized by the appropriate regulatory authorities (i.e., CDFW and/or USFWS). A noise level verification report shall be submitted by the implementing entity to CDFW and/or USFWS every two weeks during work that required noise monitoring for listed or candidate species as described above.</u> <u>MM BIG BIO-18: Nesting Birds.</u> <u>To comply with CFGC §§ 3503, 3503.5, and 3513 and to avoid potential impacts on nesting birds, vegetation removal activities shall be conducted outside of the bird nesting season (generally February through August) to the greatest extent feasible. Regardless of the time of year, a biological monitor shall conduct a nesting bird survey no more than three days prior to initial construction activities. Results shall be provided to the City. Pre-construction surveys shall focus on evidence of nesting, including nest locations and nesting behavior. The biological monitor shall make every effort to avoid potential nest predation as a result of survey and monitoring efforts.</u> <u>If active nests are identified during the nesting bird survey, a biological monitor shall establish suitable exclusion buffers around the nests based on the level of construction activity within the vicinity and sensitivity of the species observed. The buffers shall be avoided until the nests are no longer occupied, and the juvenile birds can survive independently from the nests, as determined by the biological monitor. The biological monitor familiar with the nesting phenology of the nesting species may increase or decrease the buffer based on nest and buffer monitoring results. Active nests and adequacy of the established buffer distance shall be monitored by the biological monitor until the young have fledged or BIG construction has been completed. The biological monitor has the authority to stop work if nesting pairs exhibit signs of distress.</u> <u>If nests are documented during general biological monitoring activities, the biological monitor shall implement exclusion buffers and stop or redirect construction activities to avoid take of nesting birds.</u> <u>If there are time lapses between construction activities, and prior to re-initiation of construction activities, pre-construction nesting bird</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>surveys shall be repeated.</u> MM BIG BIO-19: Construction Noise. During all construction, the implementing entity or their contractor shall ensure that noise-generating equipment use is restricted to hours least likely to disrupt wildlife to the maximum extent practicable. The use of generators shall be restricted except for temporary use in emergencies. Power shall be provided via low noise-level sources (e.g., solar photovoltaic systems, cogeneration systems, small hydroelectric systems, or small wind turbine systems). If generators must be temporarily used, noise suppression devices such as mufflers or enclosures for generators shall be used. MM BIG BIO-20: Swainson's Hawk Construction Requirements. Swainson's hawk nest surveys shall be conducted during the breeding season immediately prior to start of construction and provided to the City and CDFW. Surveys shall be conducted within the area of the BIG Project construction footprint plus a 0.5-mile buffer by agency-approved Species-Specific biological monitors following the protocol outlined in the <i>Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley</i> (Swainson's Hawk Technical Advisory Committee, 2000). The Species-Specific biological monitor shall be familiar with Swainson's hawk identification and life history and be approved to conduct surveys by CDFW. <u>If active Swainson's hawk nests are found during nest surveys, the Species-Specific biological monitor shall establish an appropriate avoidance buffer around each nest in consultation with CDFW based on work activities proposed. The avoidance buffer will remain in place until a Species-Specific biological monitor confirms that the Swainson's hawk young have fledged or the nest is no longer active. If full avoidance of active Swainson's hawk nest(s) cannot be achieved, the Project Proponent shall obtain an ITP.</u> MM BIG BIO-21: Western Burrowing Owl Construction Requirements. No less than 14 days prior to the start of construction mobilization activities within suitable habitat, a qualified Species-Specific BM shall conduct pre-construction surveys for burrowing owl and/or occupied nest burrows within the limits of the BIG construction footprint plus a	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>500-foot buffer, according to the 2012 Staff Report on Burrowing Owl Mitigation.</u> <u>Additionally, time lapses between BIG construction within suitable habitat shall trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance. The pre-construction surveys shall be repeated if there is a time lapse between construction activities of 14 days or more within previously surveyed areas. All surveys shall be conducted in accordance with the most current CDFW survey methods.</u> <u>If burrowing owl or active burrows, or sign (e.g., molted feathers, cast pellets, prey remains, eggshell fragments, decoration, or excrement) are not observed during the pre-construction surveys, no additional conditions shall be required to avoid direct impacts on burrowing owl within the surveyed areas.</u> <u>If burrowing owl is documented during pre-construction surveys, occupied burrowing owl burrows shall not be disturbed during the nesting season (February 1 through August 31) and all impacts to burrowing owl shall be fully avoided until a CDFW approved Species-Specific BM verifies through non-invasive methods that either the birds have abandoned or failed nesting attempts, or that juveniles from the occupied burrows are foraging independently and capable of independent survival. A Species-Specific BM shall establish exclusion buffers to protect active nests in accordance with the recommendations included in CDFW's Staff Report on Burrowing Owl Mitigation (2012 or most recent version). A qualified Species-Specific BM shall conduct ongoing monitoring during construction activities.</u> <u>If burrowing owl is observed during the non-breeding season (September 1 through January 31) or confirmed to not be nesting during pre-construction surveys, a non-disturbance buffer between construction activities and the occupied burrow shall be installed by a qualified Species-Specific BM in accordance with the recommendations included in the Staff Report on Burrowing Owl Mitigation (CDFW, 2012 or most recent version).</u> <u>The implementing entity shall submit at least one burrowing owl pre-</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>construction survey report for each surveyed area to the satisfaction of CDFW to document compliance with BIG's western burrowing owl MMs. Survey reports shall also be submitted to the City.</u> <u>If full avoidance is not possible, either directly or indirectly, an ITP under CESA shall be obtained from CDFW and a Burrowing Owl Plan shall be prepared and submitted for review and approval by CDFW. The plan shall also be submitted to the City. Once approved by CDFW, the plan shall be implemented in conjunction with the CESA ITP to relocate non-breeding burrowing owls from BIG. The plan shall detail methods for relocation of burrowing owls and provide guidance for the monitoring and management of the replacement burrow sites and associated reporting requirements. Details of the Burrowing Owl Plan shall be determined in consultation with CDFW, and is anticipated to include, but may not be limited to, the following:</u> ▪ <u>Proposed avoidance, and monitoring actions.</u> ○ <u>Number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed.</u> ○ <u>Seasonal restrictions of relocation efforts - Relocation efforts shall occur during the non-breeding season (September 1 through January 31). Relocation during the breeding season (February 1 through August 31) may only occur if a qualified biologist determines that the bird have not begun egg-laying, or that the fledged juveniles are foraging independently and are capable of independent survival.</u> ○ <u>Climatic restrictions of relocation efforts - Relocation shall not occur during extreme temperatures or that may cause mortality during rain or high wind.</u> ○ <u>Monitoring schedule and length - Full-time monitoring shall occur for at least two weeks following passive relocation and periodically thereafter or as required by the CESA ITP.</u>	

		<u>MM BIG BIO-22: Western Burrowing Owl Compensatory Mitigation.</u> <u>Prior to start of construction mobilization activities, the implementing entity shall prepare a Compensatory Mitigation Plan (CMP) in consultation with CDFW that describes the compensatory mitigation that shall be provided at a minimum 1:1 ratio to offset permanent and temporary impacts on burrowing owl habitat. The CMP shall describe the following:</u> ▪ <u>A description of burrowing owl and habitat types for which compensatory mitigation is being proposed.</u> ▪ <u>A description of the methods used to identify and evaluate mitigation options. Options may include one or more of the following:</u> ○ <u>Purchase of mitigation credits from a CDFW approved mitigation bank.</u> ○ <u>Protection of burrowing owl habitat through a conservation easement and funding for long-term management of the habitat. Endowment funds shall be transferred to the applicable agency or entity and conservation easements shall be held by an entity approved in writing by CDFW. The terms of the conservation easement shall be subject to approval of CDFW, and the conservation easement shall identify CDFW as a third-party beneficiary with a right of access to the easement areas.</u> ▪ <u>A summary of the estimated direct permanent and temporary Project impacts on burrowing owl and burrowing owl habitat.</u> ▪ <u>A description of the process that is proposed to be used to confirm Project impacts. Actual Project impacts on burrowing owl and burrowing habitat could differ from estimates. Should this occur, the Permittee shall be responsible for providing compensatory mitigation for final Project impacts.</u> <u>The burrowing owl CMP and mitigation requirements shall be submitted to the City and CDFW for review. If all or any portion of the acquired desert tortoise and/or Mojave fringe-toed lizard compensatory mitigation (MM BIG BIO-16 and MM BIG BIO-24, respectively) or other required compensatory mitigation lands/credits meet the criteria for burrowing owl compensatory mitigation, it may be used to fulfill that portion of the obligation for burrowing owl compensatory mitigation requirements. Final compensatory mitigation for burrowing owl shall be determined in consultation with CDFW as a</u>	
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Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		part of the CESA ITP review and approval process. <u>MM BIG BIO-23: Mojave Fringe-toed Lizard Construction Requirements.</u> When possible, construction activities within Mojave fringe-toed lizard suitable habitat shall be conducted during the active season (March 1 – September 30). <u>A Species-Specific biological monitor shall be present during initial construction activities within suitable Mojave fringe-toed lizard dune habitat and shall inspect the impact area daily to confirm the area remains clear of the species. Any observed Mojave fringe-toed lizard shall be relocated outside of active work areas and out of harm's way. If necessary, reports summarizing relocation activities shall be submitted to the CDFW.</u> <u>MM BIG BIO-24: Mojave Fringe-toed Lizard Compensatory Mitigation.</u> Prior to construction mobilization activities, the implementing entity shall prepare a compensatory mitigation plan for direct impacts on Mojave fringe-toed lizard and 1,009.1 acres of occupied dune habitat (active desert dunes, stabilized and partially stabilized dunes, disturbed stabilized and partially stabilized dunes). Dune habitat shall be mitigated in-kind through the acquisition and preservation of dune habitat suitable for Mojave fringe-toed lizard at a minimum 2:1 ratio to offset permanent and temporary impacts on Mojave fringe-toed lizard habitat. <u>Land selected for compensatory mitigation must be:</u> ▪ <u>Deposits of aeolian or fine windblown sands associated with dunes, washes, hillsides, margins of dry lakes, and/or sandy hummocks within the Mojave Desert;</u> ▪ <u>Occupied with Mojave fringe-toed lizard or with potential for connectivity to lands occupied by Mojave fringe-toed lizard;</u> ▪ <u>Prioritized within the Mojave River Watershed;</u> ▪ <u>Near land currently under or planned for protection; and</u> ▪ <u>Not characterized as highly disturbed.</u> <u>A long-term management plan and endowment for land acquisition, preservation, and management in perpetuity shall be established by a</u>	

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>qualified land manager/conservancy.</u> <u>All or any portion of the compensatory mitigation lands/credits acquired for impacts on other sensitive resources (i.e., aquatic resources or sensitive vegetation communities) may also be used to fulfill compensatory mitigation requirements for Mojave fringe-toed lizard. For example, compensatory mitigation pursuant to MM BIG BIO-16 and MM BIG BIO-22 may also be used to fulfill compensatory mitigation requirements for Mojave fringe-toed lizard if acquired mitigation lands/credits meet the criteria above. Final compensatory mitigation for Mojave fringe-toed lizard shall be determined in coordination with CDFW.</u> <u>MM BIG BIO-25: Dry Season Construction.</u> <u>Construction within the Mojave River corridor shall be restricted to the dry season when there are no observable surface flows within 1,000 feet of the BIG construction footprint, to the extent feasible.</u> <u>If construction must occur outside of the dry season, biological monitors shall conduct daily pre-construction sweeps within 250 feet of direct impact areas occurring within the Mojave River corridor, such as construction associated with the Hinkley Road Bridge. If American beaver is observed, construction cannot be initiated until the species is able to disperse from the area. Construction activities may resume after a biological monitor confirms American beaver is no longer present within direct and indirect impact areas. If impacts to American beaver are unavoidable, the Project Proponents shall not commence Project activities at the locations where American beaver are found and contact CDFW immediately within 24 hours to discuss proper avoidance, minimization, and mitigation.</u> <u>MM BIG BIO-26: Ringtail, American Badger and Desert Kit Fox Construction Requirements.</u> <u>Prior to start of construction mobilization activities within suitable habitat, biological monitors familiar with ringtail, American badger, and desert kit fox shall conduct surveys within the limits of the BIG construction footprint for occupied natal dens. The survey(s) shall occur no more than 48 hours prior to start of ground-disturbing activities in suitable habitat for ringtail, American badger, and desert kit fox within the potential impact footprint. Survey</u>	

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>results shall be provided to CDFW and the City.</u> <u>If ringtail, American badger or desert kit fox dens are documented within the survey area, a biological monitor shall establish a no-work exclusion buffer around the den and dens shall not be disturbed until a biological monitor verifies through noninvasive methods that either the den is no longer occupied, or that juveniles from a natal den are foraging independently and capable of independent survival and not dependent on the den.</u> <u>A biological monitor shall monitor the den during construction activities approximately every other day if it is a natal den or weekly otherwise. The definitive frequency and duration of monitoring shall be dependent upon the age and behavior of the ringtail, American badger, or desert kit fox pups and the efficacy of the exclusion buffers, as determined by a designated biologist or biological monitor and in coordination with CDFW. Passive relocation methods may be employed for non-natal dens that cannot be avoided by construction activities. For individual, non-natal badger and kit fox dens, a plan for passive relocation, burrow monitoring, and excavation of vacated burrows will be developed in coordination with CDFW.</u> <u>MM BIG BIO-27: Bat Construction Requirements.</u> <u>Prior to start of demolition or disturbance of structures suitable for roosting (i.e., bridges), pre-construction surveys for special-status bat species shall be conducted by a biological monitor. Pre-construction surveys shall be conducted no more than 14 days prior to the start of demolition activities. Survey results shall be provided to CDFW and the City. If active bat roosting is documented during pre-construction surveys within structures to be impacted, bat exclusion techniques, consistent with recommendations provided in Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions (H. T. Harvey & Associates, 2019), shall be implemented. If required, exclusion shall be implemented between September 1 and October 15 to the extent feasible. Exclusion shall not occur during the typical bat maternity season (April through August).</u> <u>Prior to demolition and/or improvement of structures that could support roosting bats, including Hinkley Road Bridge, or trees that will</u>	

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>be removed, a biologist with expertise in chiropterology (study of bats) shall survey these features and any areas that could provide suitable roosting habitat to confirm they do not contain maternity roosts or special-status bats. If special-status bats and/or maternity roosts are confirmed to be absent, MM BIG BIO-1 above will be followed prior to construction to reduce potential impacts to individual roosting bats to a less than significant level and no further mitigation is required. If a potential maternity roost and/or a special-status bat roost is present, a Bat Avoidance and Mitigation Plan shall be developed in coordination with the City and CDFW, which may include the following measures to reduce potential impacts to special-status bat species to a less than significant level.</u> ▪ <u>Maternity Roosting Season Avoidance. All proposed demolition activities of active roost sites, including bat roost exclusion, shall occur outside the general bat maternity roosting season of March through August to reduce potentially significant impacts to maternity roosting bats. If the maternity roosting season cannot be avoided, then roost exclusion can occur outside the maternity roosting season (September through February) to exclude bats from the demolition area prior to the start of demolition during the maternity roosting season. The measures below shall be required to ensure to avoid impacts to roosting bats during the exclusion process.</u> ▪ <u>Replacement Roost Installation. If there is a potential or known maternity roost within a structure to be demolished, a replacement roost shall be installed outside the maternity roosting season. At least one month prior to the exclusion of bats from a roost, the implementing entity shall procure and install two or more (dependent on colony size) bat boxes from a reputable vendor, such as Bat Conservation and Management, to allow bats sufficient time to acclimate to a new potential roost location. The bat boxes shall be installed within close proximity to the trees and/or structures and in an area that is within close proximity to suitable foraging habitat (i.e., near the Mojave River). Additionally, the bat boxes shall be oriented to the south or southwest, and the area chosen</u>	

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>for the bat boxes must receive sufficient sunlight (at least 6 hours) to allow the bat boxes to reach an optimum internal temperature (approximately 90°F) to mimic the existing bat roost. The bat boxes shall be suitable to house crevice-roosting bat species, and large enough to contain a minimum of 50 bats (e.g., Four Chamber Premium Bat House or Bat Bunker Plus). The bat boxes shall be installed on a 20-foot-tall steel pole.</u> ▪ Roost Exclusion. <u>Roost exclusion must only occur during the time when bats are most active (early spring or fall) to increase the potential to exclude all bats from roosts and avoid the maternity roosting season, thereby minimizing the potential for a significant impact to occur. Approximately one month after bat boxes have been installed, exclusion of the existing roost shall occur. The primary exit points for roosting bats shall be identified, and all secondary ingress/egress locations shall be covered with a tarp or wood planks to prevent bats from leaving from other locations. The primary exit point shall remain uncovered to allow exclusion devices to be installed. Exclusion devices shall consist of a screen (poly netting, window screen, or fiberglass screening) with mesh 1/6 of an inch or smaller, installed at the top of the roost location and sealed along the sides and passing 2 feet below the bottom of the primary exit point. The exclusion devices shall be installed at night to increase the potential that bats have already left the roost and are less likely to return. Exclusion devices shall be left in place for a 1-week period to ensure that any remaining bats in the roost are excluded. A passive acoustic monitoring detector shall also be deployed during the exclusion period in order to verify excluded species and monitor if bat activity has decreased during the exclusion period. Periodic monitoring during the exclusion period should also be conducted to observe if any bats are still emerging from additional areas at BIG, and an active monitoring survey conducted on the final night of exclusion to ensure that no bats are emerging and determine that exclusion has been successful. Any continued presence of roosting bats shall require an adjustment to the exclusion devices and schedule. The exclusion devices may</u>	

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>remain in place until the start of demolition activities. If any bats are found roosting in any proposed demolition areas prior to demolition, additional exclusion shall be required and follow the same methodology described in this mitigation measure.</u> ▪ <u>Roost Habitat Creation.</u> If sensitive bat species are present within Hinkley Road Bridge or other structures that will persist post BIG construction but require bat displacement for improvements to be made, bat friendly roost designs shall be developed as part of Project plans as feasible. Bat friendly designs shall be developed in coordination with a qualified biologist, the City, and CDFW. <u>MM BIG BIO-33: Staging, Stockpiles, Materials and Equipment Storage.</u> During BIG construction, all construction materials, staging, employee parking, storage, dispensing, fueling, maintenance activities, and spoils shall be located only in areas cleared within the previous 48 hours by a designated biologist or a previously disturbed area. For off-site construction activities, staging areas shall be located within permanent impact areas or previously disturbed areas (e.g., developed areas, areas already disturbed by construction). Efforts shall be made to discourage sensitive wildlife inhabitation of spoils, stockpiles, and materials (i.e. covering with secured tarps, spreading out materials, etc.) in consultation with approved designated biologists. Uncovered/unmanaged spoils and stockpiles left undisturbed for 48 hours or more shall be inspected before being disturbed as determined necessary by the designated biologist. <u>MM BIG BIO-34: Permanent Security Fencing.</u> Prior to final construction design and upon securing a CESA ITP for CESA species and a USFWS BO for federally listed species, the designated biologist shall review and submit the fencing plans for the BIG Specific Plan Area to CDFW for review and consultation that are adjacent to natural habitats to confirm the fences provide a sufficient barrier to restrict wildlife from entering the BIG Specific Plan area. <u>The permanent security fencing shall be enhanced with a barrier (e.g., fine-mesh fencing) that extends at least 12 inches below ground and 12 inches above ground to prevent special status reptile and mammal species, including desert tortoise, from moving through or underneath</u>	

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>the fencing and gaining access to the BIG Specific Plan area. Where fencing is proposed between natural habitats and roadway right-of-way, at the 12-inch depth of the below-grade portion fence apron, the barrier shall extend or be bent at an approximately 90-degree angle and oriented outward from the roadway right-of-way a minimum of 12 inches to prevent fossorial (burrowing) mammals and reptiles from digging or tunneling below the security fence and gaining access to BIG. A climber barrier (e.g., rigid curved or bent overhang) shall be installed at the top of the apron to prevent reptiles and mammals from climbing over the apron.</u> <u>The designated biologists shall confirm that the selected apron material and climber barrier do not cause harm, injury, entanglement, or entrapment to wildlife species. The implementing entity shall provide quarterly inspection and repair of the fencing.</u> <u>The specific design and method for installation method of an apron or barrier may vary as required by regulatory permits issued under the FESA or CESA. Prior to start of operations then quarterly, biological monitors shall field-inspect the fencing that is adjacent to natural habitats and confirm appropriate installation and the implementing entity shall carry out repair of the fencing, as needed. Fencing plan review and field inspection shall be documented in a memorandum from the designated biologists and provided to CDFW and the City.</u> <u>MM BIG BIO-35: General Avian Safe Design.</u> <u>Prior to final construction design, the implementing entity shall ensure that fencing, electric lines, communication towers, and buildings are designed to be bird- and raptor-safe in accordance with recommendations presented in Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006) and Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC 2012). The designated biologist shall review the design for areas of high concern (e.g., areas adjacent to suitable raptor nesting habitat) to confirm the safety features provide sufficient protection for birds. Avian safe design features shall be implemented and maintained by the implementing entity during the period of operations. The project shall incorporate the following into the design:</u>	

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ <u>Sufficient spacing of phase conductors to prevent bird electrocution.</u> ▪ <u>Configuration of power lines to reduce vertical spread of lines and/or reductions in the span length if such options are feasible.</u> ▪ <u>Marking of lines and fences (e.g., with Bird Flight Diverters) to increase the visibility of lines and reduce potential collisions. Where fencing is necessary, use of bird-compatible design standards to increase visibility of fences to reduce collision and entanglement.</u> ▪ <u>Metal fence stakes plugged with bolts or other material to prevent raptor talons from becoming entrapped within the bolt holes.</u> ▪ <u>Perch guards to discourage avian presence on and near BIG facilities.</u> ▪ <u>Minimizing the use of guywires. Where the use of guywires is necessary, mark the guywires using the best available methods to minimize avian strikes (e.g., line markers).</u> ▪ <u>A monopole or dual-pole design versus a lattice tower design to minimize perching and nesting opportunities.</u> ▪ <u>Communication tower design in conformance with Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning (USFWS, 2021b).</u> ▪ <u>Facility lighting that does not attract birds or their prey to the BIG. This includes using non-steady burning lights (e.g., red, dual red and white strobe, strobe-like flashing lights) to meet Federal Aviation Administration requirements, using motion or heat sensors and switches to reduce the time when lights are illuminated, using appropriate shielding to reduce horizontal or skyward illumination, and avoiding the use of high-intensity lights (e.g., sodium vapor, quartz, and halogen).</u> <u>Prior to start of operations, biological monitors shall field-inspect the avian safe design features and summarize findings in a memorandum to be provided to the City.</u> <u>MM BIG BIO-36: Nighttime Lighting During Operations. To address</u>	

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<u>the permanent and intermittent impacts from lighting, the implementing entity shall implement measures to minimize the intensity, direction, and duration of operational lighting of permanent facilities (e.g., traction power facilities, radio sites, and maintenance facilities), as well as intermittent train lighting in compliance with BIG Specific Plan lighting standards (BIG Specific Plan Section 3.6). These shall include the following measures to minimize light trespass into adjacent habitat:</u> ▪ <u>All lights shall be fully cutoff or fully shielded to prevent uplight and limit horizontal spill into adjacent habitat.</u> ▪ <u>Warm lighting (3,000K or lower) shall be used to reduce blue light emissions).</u> ▪ <u>All exterior lighting fixtures shall be directed downward to illuminate pedestrian pathways and parking areas and avoid unnecessary glare and light trespass.</u> ▪ <u>Within the transload warehouse center, pole-mounted or building-mounted lighting fixtures shall be no more than 50 feet in height to limit light trespass.</u> MM BIG BIO-37: Desert Native Plant Salvage Plan. Prior to start of construction mobilization activities, the implementing entity shall prepare a Desert Native Plant Salvage Plan for the removal of any plant species regulated under the CDNPA and County Code § 88.01.060. Adequate mitigation for CDNPA/County-protected plants may include the salvage of plants for translocation to a suitable recipient site if removal cannot be avoided. In the case of translocation, the Desert Native Plant Salvage Plan shall be prepared for review and approval by the City and CDFW. The plan shall include a description and map showing plants to be salvaged, salvage and transport methods, the proposed recipient site, and disposition of the plant specimens at the recipient site. Recipient sites may include existing conservation areas, botanical preserves, museums and zoological societies, among other conservation organizations that provide adequate habitat and management of desert native plants.	

Pages 1-64 through 1-65 have been revised as follows:

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.4-4: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant	See MM BIG BIO-1 through MM BIG BIO-4, MM BIG BIO-8, MM BIG BIO-18 through MM BIG BIO-19, MM BIG BIO 35. MM BIG BIO-32: Wildlife Crossings. <u>With BIG implementation</u> As part of BIG construction, a wildlife crossing shall be constructed at the Unnamed Stream (Milepost 12.5) below the BNSF tracks and Main Street to facilitate wildlife movement between areas of natural habitat on either side of the railway and road. This railway crossing feature shall be placed alongside four smaller culverts constructed to convey water: three 36-inch and one 48-inch diameter culverts. The wildlife crossing shall be an 84-inch diameter culvert to facilitate passage beneath the rail right-of-way, which would connect open space east of the railway to the Mojave River, thereby maintaining access to existing linkages (i.e., the Rank 4/5 ACE, California Desert Linkage Network, and CEHC Potential Riparian Connection). <u>The wildlife crossing shall also include a dedicated underpass beneath National Trails Highway to facilitate movement of wildlife from habitat south of the roadway to the culvert under the BNSF tracks, situated just south of the Mojave River corridor.</u> Design features for facilitating wildlife culvert usage shall include installing inlet and outlet points <u>flush with the ground and maintaining one to six inches of native soil along the bottom of the culvert.</u> <u>The wildlife crossing shall be designed to function as all-weather wildlife passage to the extent feasible and shall be sized and configured to exceed minimum hydraulic conveyance requirements, or be located separately from primary hydraulic structures, as feasible, to ensure suitability for wildlife movement during both dry and wet conditions.</u> <u>Final sizing, placement, and configuration of the wildlife crossing shall be refined during final engineering design in coordination with the CDFW and other applicable agencies.</u> A long-term management plan for the wildlife crossing shall be submitted to the City of Barstow for review and approval prior to start of vegetation removal and/or mass grading. The long-term management plan shall include:	Less than Significant

		▪ Additional measures to encourage wildlife use include, but are not limited to, maintenance or restoration of native vegetation near, but not obstructing, culvert <u>or crossing entrances</u>, and invasive plant removal. ▪ Routine clearing of debris and trash from the <u>wildlife crossings</u> shall be completed on a quarterly basis and following large storm events to allow ample space <u>to remain</u> available for wildlife travel. ▪ Access points to the <u>wildlife crossings</u> shall contain rocks or woody refuge sites to attract subterranean wildlife <u>and structural cover elements shall be provided within the structure, as feasible, to facilitate movement of small and medium mammals and reptiles.</u> ▪ Habitat quality (i.e., the percentage of invasive versus native plants and level of anthropogenic degradation) within a 200-meter radius surrounding the <u>crossing entrances</u> shall be monitored quarterly by a qualified biologist to confirm wildlife corridor functionality <u>for the first two years following construction, with monitoring frequency and duration subject to adjustment based on observed conditions.</u> ▪ A mitigation entity responsible for the implementation of the long-term management plan. <u>As part of BIG implementation, the existing Lenwood Channel would be widened per the Project Description as described in the Draft EIR. Enhancements to the channel shall be incorporated to maintain and support wildlife movement through the eastern portion of the project site toward the Mojave River corridor. A long-term management plan for the enhancements shall be prepared and submitted to the City of Barstow for review and approval prior to construction. The plan would include the following, to the extent feasible given site constraints:</u> ▪ <u>Installation and maintenance of fencing along the channel to guide wildlife through the channel while restricting entry into hazardous areas within the project footprint.</u> ▪ <u>Installation of native vegetation in select locations along the channel edges to provide cover, where practicable.</u> ▪ <u>Placement of structural cover features, such as rocks or woody debris, where feasible, to provide refuge for small and medium mammals and reptiles.</u> ▪ <u>Periodic clearing of debris and trash to maintain passable conditions for wildlife, particularly following significant storm events.</u>	
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		▪ <u>Monitoring of conditions to assess functional wildlife passage.</u> ▪ <u>Assignment of a responsible mitigation entity to oversee implementation of the long-term management plan to be developed in accordance with the overarching objectives described above.</u>	
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Page 1-75 has been revised as follows:

Table 1-2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.6 ENERGY			
Impact 5.6-1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?	Potentially Significant	Also see MM BIG AQ-1 through AQ-6, MM BIG AQ-8, and MM BIG AQ-10. MM BIG EN-1: On-Site Renewable Electricity Generation. Prior to the issuance of building permits for intermodal facility structures or transload facilities, BIG shall install on-site rooftop solar generation beyond Title 24 compliance, or approximately 17 megawatts direct current (MWdc) for the total 9 million square-foot warehouse building area. Solar panel installation shall be phased proportionally with buildout of the Transload Warehouse Center (i.e., on-site solar generation shall generally be distributed equally among future buildings and the total 17 MWdc may not be required less than 9 million square feet are not ultimately developed). BIG shall ensure solar photovoltaic (PV) panels or other source of renewable energy generation is incorporated into the design based on the maximum solar roof area available. The maximum solar roof area available will be building specific and dependent on the structural considerations of each building and the ability to maximize the solar zone of each building (as defined in Section 110.10 of the California Energy Code). The solar zone (i.e., the location where solar panels can be installed) shall comply with 2022 California Energy Code, § 110.10, and shall comply with access, pathway, ventilation, and spacing requirements and excluding any skylight area. The final PV generation facility size is dependent on the maximum solar roof area available and shall be approved by Southern California Edison (SCE). SCE's Rule 21 governs operating and metering requirements for any facility connected to SCE's distribution system.	Less than Significant

		Should SCE limit the off-site electricity export, BIG may utilize a battery energy storage system (BESS) to lower off-site export while maintaining on-site renewable generation to off-set consumption. Each building shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure shall be clearly labeled with noticeable and permanent signage. This mitigation measure applies only to tenant or occupancy permits and not the building shell approvals. MM BIG EN-2: CALGreen Tier 2. Prior to the issuance of building permit for intermodal facility structures or transload facilities, the City shall provide documentation to the City of Barstow demonstrating that BIG is designed in a manner consistent with 2025, or then current, CALGreen Tier 2 standards in effect at the time of building permit application.	
Impact 5.6-2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Potentially Significant	See MM BIG AQ-1 through MM BIG AQ-6 , MM BIG AQ-8 , MM BIG AQ-10 , MM BIG EN-1 , and MM BIG EN-2 .	Less Than Significant

Page 1-80 has been revised as follows:

Table 1 2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.8 GREENHOUSE GAS EMISSIONS			
Impact 5.8-1: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially Significant	See MM BIG AQ-3 through MM BIG AQ-5 , MM BIG AQ-8 through MM BIG AQ-10 , MM BIG AQ-13 , MM BIG AQ-14 , and MM BIG EN-1 through MM BIG EN-2 .	Less than Significant
Impact 5.8-2: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant <u>Potentially Significant</u>	See MM BIG AQ-3 through MM BIG AQ-5 , MM BIG AQ-8 through MM BIG AQ-10 , MM BIG AQ-13 , and MM BIG AQ-14 . Also refer to MM BIG EN-1 and MM BIG EN-2 in Section 5.6: Energy .	Less than Significant

Page 1-89 has been revised as follows:

Table 1 2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG			
Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.12 NOISE			
Impact 5.12-1: Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant	MM BIG NOI-1: <u>Nighttime Construction Noise Logistics Plan.</u> Prior to the start of nighttime construction, the implementing entity shall demonstrate to the satisfaction <u>submit and gain approval of from</u> the City of Barstow Director of Public Works or City Engineer that BIG includes for a Nighttime Construction Noise Logistics Plan <u>that meets the standards specified herein for nighttime construction throughout the BIG footprint.</u> The <u>Nighttime Construction Noise Logistics Plan</u> shall identify the specific <u>nighttime</u> construction activity areas, list of the construction equipment to be used during nighttime construction, and include a determination, supported with citation to factual evidence, that certain specified noise reduction measures, incorporated into the Plan, will be implemented to ensure that exterior noise levels from nighttime construction activity, at the residence or residences nearest to that activity, do not exceed the FTA's 70 dBA Leq(8-hour) nighttime exterior construction noise standard for residential uses. <u>include noise reduction measures to minimize nighttime construction noise levels at nearby residences to the extent feasible below.</u> <u>Potential n</u>Noise reduction measures may include, but are not limited to, the following: ▪ Install a temporary construction site sound barrier near the noise source. ▪ Prohibit unnecessary idling of internal combustion engines. Post signs at gates and other places where vehicles may congregate reminding operators of the State's Airborne Toxic Control Measure (ATCM) limiting idling to no more than 5 minutes. ▪ Utilize "quiet" air compressors and other stationary noise sources where technology exists. ▪ <u>Monitor the effectiveness of noise attenuation measures by taking noise measurements, and make necessary adjustments to construction activities as required.</u>	Significant and Unavoidable.

Table 1 2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ <u>Specify additional feasible attenuation measures and best practices to further reduce construction noise impacts for the residences nearest to the nighttime noise activity.</u> <u>In addition, the Nighttime Construction Noise Logistics Plan shall require implementation of the following measures:</u> ▪ Construction contracts <u>shall</u> specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State required noise attenuation devices. ▪ Property owners and occupants located within <u>3500 feet of the BIG footprint areas when nighttime construction would occur</u> shall be sent a notice, at least <u>15 5</u> days prior to the commencement of nighttime construction activities, regarding the construction schedule of BIG. <u>A sign, legible at 50 feet shall also be posted at BIG's construction site. The initial format of All notices and signs shall be reviewed and approved by the Director of Planning, Building and Code Enforcement or Director's designee, prior to mailing or posting and The notice shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number for the Noise Disturbance Coordinator where residents can inquire about the construction process and register complaints. Copies of each nighttime noise notice will be provided to the City.</u> ▪ Prior to <u>nighttime</u> construction, the implementing entity's contractor shall <u>provide evidence that at all times during construction activities an on-site construction staff member will be designated as ensure</u> a Noise Disturbance Coordinator <u>is on-site during nighttime construction activities.</u> The Noise Disturbance Coordinator is responsible for responding to complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall determine the cause (e.g., starting too early, bad muffler, etc.), implement reasonable measures to resolve the complaint, and document actions taken. All notices sent to residential units within <u>3500 feet of the construction site and all signs posted at the construction</u>	

Table 1 2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		site, shall include the contact name and the telephone number for the Noise Disturbance Coordinator. <u>If the Plan determines that noise reduction measures incorporated into the Plan cannot feasibly ensure that exterior noise levels from an individual type of nighttime construction activity, at the residence or residences nearest to that activity, do not exceed the FTA's 70 dBA Leq (8-hour) nighttime exterior construction noise standard for residential uses, the Plan shall demonstrate that noise reduction measures incorporated into the Plan, potentially including limitation of the individual type of activity at issue to daytime hours, where feasible, will reduce the noise levels from that activity to the greatest extent practically achievable.</u> MM BIG NOI-2: Noise Barriers. The implementing entity shall construct three <u>two</u> noise barriers as listed below to mitigate BIG's noise impacts: ▪ A 10-foot-high, approximately 700-foot-long absorptive noise barrier surrounding the BESS equipment in the northeastern portion of the solar farm (BAR-2); ▪ A 10-foot-high, approximately 470-foot-long noise barrier surrounding the substation in the northeastern portion of the solar farm (BAR-3); and ▪ A 14-foot-high, approximately 150-foot-long acoustic noise barrier along the eastern and southern boundary the emergency generators in the northeastern portion of the intermodal facility (BAR-5). To be effective, the barriers shall be constructed with a solid material with no gaps in the face of the wall or at the base. Openings or gaps between sound wall materials or the ground substantially reduce the effectiveness of the noise barrier. <u>Acceptable materials for the construction of the barrier shall have a minimum density of 3.5 pounds per square foot of surface area and may be composed of the following: masonry block, stucco veneer over wood framing (or foam core), glass, Plexiglass, Lexan 9 ¼ inch thick), or metal. The barrier may also be constructed out of a combination of the above listed materials.</u> All noise control barrier walls shall be designed to	

Table 1 2: Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation – BIG

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		preclude structural failure due to such factors as winds, shear, shallow soil failure, earthquakes, and erosion. The City Building Official shall review and approve all proposed designs prior to the issuance of a building permit. The approximate locations of the noise barriers are provided in Figure 5.12-17-14 and Figure 5.12-18-15. <u>MM BIG NOI-3: Rubberized Asphalt.</u> Prior to issuance of a grading permit for work associated with Main Street improvements, BNSF off-site improvement plans shall be submitted to the City Director of Community Development to show that, on Main Street, from Country Club Drive to Lenwood Road, BIG shall utilize rubberized asphalt. For the portion from Country Club Drive to approximately 3,200 feet east (where new pavement would be installed), this would be full width new pavement construction. From approximately 3,200 feet east of Country Club Drive to Lenwood Road (approximately 1,900 feet), this would be full width mill and overlay with rubberized asphalt. On Main Street, BIG shall mill and overlay segments of the existing roadway with rubberized asphalt from approximately 200 feet east and west of each Receptor 1 through Receptor 4 (per <u>Figure 5.12-12).</u> <u>The City and the County shall determine that, for the segment of Lenwood Road from Agate Road to Community Boulevard within 200 feet of a sensitive receptor property line, the County shall use rubberized asphalt for mill and overlay following transload warehouse center buildings greater than 7.8 million square feet. Prior to certificate of occupancy for transload warehouse center buildings beyond 7.8 million square feet, BNSF shall pay the County the incremental increase in cost to mill and overlay Lenwood Road with rubberized asphalt for the roadway section from Agate Road to Community Boulevard within 200 feet of a sensitive receptor property line.</u>	

Section 3.0: Project Description

Page 3-8, last paragraph, has been revised as follows:

BNSF Railway Company (BNSF) proposes the new BIG facility and its Specific Plan to be located partly in incorporated Barstow and partly in an existing unincorporated portion of the County, which the proposed General Plan proposes for concurrent annexation to the City. The BIG Specific Plan proposes a rail yard (see **Section 3.7.5**) consisting of an intermodal facility,⁴ a “block swap” yard⁵ and ancillary rail area, as well as a transload warehouse center⁶ (see **Section 3.7.6**), and a private utility (i.e., solar farm), and an approximately 680-acre area at the northern boundary of the Specific Plan area that would remain ungraded (referred herein as the “Mojave River buffer”), a portion of which, approximately 545.75 acres, is proposed to be placed under a conservation easement. Additionally, to serve the proposed rail yard and transload warehouse center, BNSF proposes off-site rail improvements (i.e., lead track extensions)⁷ and off-site non-rail improvements (i.e., stormwater drainage, utilities, and circulation/ roadways). “Off-site improvements” refer to improvements outside the BIG Specific Plan area, located in the City and County. On-site and off-site improvements are described further in **Sections 3.7.7, 3.7.8, and 3.7.10**.

Page 3-39 has been revised as follows:

- ~~Transfer of law enforcement responsibility from the San Bernardino County Sheriff's Department to the City of Barstow Police Department of approximately 2,686 acres;~~

Page 3-39 has been revised as follows:

SBLAFCO Action B

SBLAFCO Action B would be a “reorganization” under the CKH Act that would include three actions: annexation to the City of Barstow of approximately 99 acres (expansion); annexation to the Odessa Water District of approximately 99 acres; and detachment from County Service Area 70 of approximately 99 acres (reduction). As a result of the LAFCO actions, a concurrent transfer of law enforcement responsibility of approximately 99 acres from the San Bernardino County Sheriff’s Department to the City of Barstow Police Department. The City of Barstow proposes to annex approximately 99 acres south of Main Street and west of Delaney Road into the City to prevent the creation of an unincorporated island resulting from SBLAFCO Action A. All parcels within this annexation area are currently County-designated Rural Living. The parcels would be designated in the proposed General Plan and ~~rezoned Zoning Map~~ as the new Business Park (BP), which primarily permits office and low-impact industrial (non-truck intensive) uses. Additionally, given the presence of existing homes, the new Business Park (BP) General Plan land use designation and zoning would allow for legacy residential uses to remain and a limited number of new homes developed subject to specific conditions identified in Barstow Code § 19.17.160 (proposed BP Zone District).

....

In summary, SBLAFCO Action B would involve a “reorganization” under the CKH Act that would include the following actions:

Annexation to the City of Barstow of approximately 99 acres (expansion), to be prezoned as Business Park (BP);

Page 3-40 has been revised as follows:

- ~~Transfer of law enforcement responsibility from the San Bernardino County Sheriff's Department to the City of Barstow Police Department of approximately 99 acres; and~~

Page 3-51 has been revised as follows:

BIG also includes a dedicated fleet of Tier 4 linehaul locomotives¹⁶ to move cross-dock intermodal containers between the Ports and the BIG intermodal facility. Additionally, BNSF has entered into a Memorandum of Understanding with MDAQMD to implement a demonstration program testing five hybrid diesel electric linehaul locomotives that consume less fuel and generate lower emissions than traditional diesel locomotives during mainline operations, to determine if hybrid locomotives could become feasible. These locomotives also have the ability to operate in zero emissions mode when near or at the yard and terminal at BIG. However, given it is unknown and thus speculative whether the demonstration program would be accomplished and would reduce impacts, the demonstration program is not mitigation under CEQA and the Draft EIR does not take credit for these emissions reductions. Additionally, BNSF has entered into a Memorandum of Understanding to engage in good faith with CARB to explore currently infeasible technologies and other methods that potentially could further reduce emissions. The CARB Memorandum of Understanding is not mitigation under CEQA and the Draft EIR does not take credit for emissions reductions. As noted in the Governor's Certification for Judicial Streamlining of the Barstow International Gateway Project in the County of San Bernardino¹, "The Project Applicant has entered into a Memorandum of Understanding (MOU) with [MDAQMD] executed on February 23, 2026...and with [CARB] executed April 23, 2026... to implement a demonstration project of hybrid battery electric locomotive technology ("Pilot") as part of the Project". Thus, the Draft EIR carefully considered emission-reducing measures and implemented all feasible mitigation measures.

Page 3-53 has been revised as follows:

Table 3-13: BIG IMF and Block Swap Estimated Annual Container Volumes				
	Containers per Year			Notes
	2028	2033	2048	
BIG INTERMODAL FACILITY AND BLOCK SWAP YARD				
Containers arriving at BIG via Train (Eastbound)	1,084,000	1,216,000	1,513,000	
Containers Departing BIG via Train (Eastbound)	1,036,400	1,149,088	1,441,769	
Containers arriving at BIG via Train (Westbound)	1,036,400	1,149,088	1,441,769	
Containers departing BIG via	1,084,000	1,216,000	1,513,000	

¹ Submitted into the administrative record to the City on May 1, 2026.

Table 3-13: BIG IMF and Block Swap Estimated Annual Container Volumes				
	Containers per Year			Notes
	2028	2033	2048	
BIG INTERMODAL FACILITY AND BLOCK SWAP YARD				
Train (Westbound)				
Subtotal of Containers arriving/departing BIG via Train	4,240,800	4,730,176	5,909,538	Subtotal of containers arriving/departing by Train
Containers arriving at BIG via Heavy-Duty Truck	64,000	80,000 <u>81,000</u>	100,000	Of this, 67 percent are existing containers transported by trucks that, without BIG, would travel a longer distance to a different BNSF intermodal facility. By arriving at the BIG IMF, the total truck miles traveled is reduced for those containers.
Containers departing BIG via Heavy-Duty Truck	64,000	80,000 <u>81,000</u>	100,000	Of this, 67 percent are existing trucks transported by truck that, without BIG, would travel a longer distance to a different BNSF intermodal facility. By arriving at the BIG IMF, the total truck miles traveled is reduced for those containers
Subtotal of Containers arriving/departing BIG via Heavy-Duty Truck	128,000	160,000 <u>162,000</u>	200,000	Subtotal of containers arriving/departing by truck
Total Estimated Annual Containers processed at BIG	4,368,800	4,890,176 <u>4,892,176</u>	6,109,538	Total estimated annual containers arriving/departing via Heavy-Duty Truck and Train at BIG

Page 3-62 has been revised as follows:

The solar farm is estimated to generate approximately 21 MW to serve BIG. The solar farm would include a ~~battery electric storage system (BESS) and a~~ new substation at the northwest corner of the solar farm to route power from the solar farm to the BIG rail yard.

Page 3-92 has been revised as follows:

Table 3-5: Proposed General Plan Permits and Approvals	
Lead Agency	Permit or Approval
California Public Utilities Commission	Golden State Water Company Service Area Extension
San Bernardino County Local Agency Formation Commission	- Approval of Municipal Service Review (MSR) - Approval of reorganization
San Bernardino County Fire Protection District	Approval of detachment of approximately 2,605 acres and detachment from the North Desert Service Zone and its Zone FP-5.
San Bernardino County Sheriff's Department	Transfer of law enforcement responsibility of approximately 2,686 acres
City of Barstow City Council	Certification of the Environmental Impact Report

	▪ Adoption of the Barstow General Plan ▪ Adoption of the Barstow International Gateway Project Specific Plan and implementing BIG Specific Plan Zoning ▪ Adoption of a Business Park (BP) Zone District ▪ Adoption of the Findings of Fact and Statement of Overriding Considerations for the Environmental Impact Report ▪ Approve Prezoning for SBLAFCO Actions A and B, including BIG Specific Plan zoning for the Specific Plan area and Business Park for SBLAFCO Action B and disestablish land designated as Agricultural Preserve. ▪ Approve application to LAFCO for reorganizations A and B including annexation to the Barstow Fire Protection District of approximately 2,605 acres. ▪ Approve transfer of law enforcement responsibility to the Barstow Police Department of approximately 2,686 acres under SBLAFCO Action A and 99 acres under SBLAFCO Action B.
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Section 5.1: Aesthetics

Page 5.1-30 has been revised as follows:

The BIG Specific Plan would include a rail yard with an intermodal facility, a block swap yard, and ancillary rail areas, and a solar farm that would include solar panels, ~~a battery electric storage system (BESS)~~ and an electrical substation.

Page 5.1-55 has been revised as follows:

The solar farm's built elements (i.e., ~~a BESS and~~ a new electrical substation at the northwest corner) would be visible from Main Street.

Section 5.2: Agriculture and Forestry Resources

Page 5.2-2 has been revised as follows:

~~There are no federal regulations concerning agriculture and forestry resources that are applicable to the Project.~~

Farmland Protection Policy Act (FPPA) (7 United States Code [USC] Section 4201)

The purpose of the Farmland Protection Policy Act (FPPA) is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It also directs Federal programs to be compatible with State and local policies for the protection of farmland. Under the FPPA, the term "farmland" includes Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance. Farmland that is subject to FPPA requirements does not have to be currently used as cropland. It can be forestland, pastureland, or other land but not urban and built-up land or water. FPPA assures that, to the extent possible, federal programs are administered to be compatible with State and local units of government, and private programs and policies to protect farmland.

In 1981, Congress passed the Agriculture and Food Act (Public Law 97-98) which contained the FPPA, Subtitle I of Title XV, Sections 1539-1549. The final rules and regulations were published in the Federal Register on June 17, 1994. Federal agencies are required to develop and review their policies and procedures related to implementing the FPPA every two years. The FPPA does not authorize the Federal government to regulate the use of private or nonfederal land or in any way affect the property rights of owners. Projects are subject to FPPA requirements if they irreversibly convert farmland (directly or indirectly) to non-agricultural use and are completed by a Federal agency or rely on assistance from a Federal Agency such as the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

Page 5.2-33 has been revised as follows:

Impact 5.2-2: BIG: Level of Significance Before Mitigation: Less than Significant Impact.

Impact 5.2-2: BIG Mitigation Measures: No mitigation required.

Impact 5.2-2: BIG Level of Significance After Mitigation: ~~No impact would occur~~ Less than Significant Impact.

Section 5.3: Air Quality

Explanation of BIG Air Quality and Greenhouse Gas Emissions Errata Revisions are provided in **Final EIR Appendix 3-1: Emissions Errata.**

Page 5.3-15 has been revised as follows:

The MDAQMD operates and maintains five ~~six~~ monitoring stations (Barstow, Hesperia, ~~Phelan~~, Trona, Twentynine Palms, and Victorville) in its 20,000-square-mile jurisdiction.

Pages 5.3-60 and 5.3-61 have been revised as follows:

Table 5.3-14: Sensitive Receptors – BIG			
Receptor ID	Receptor Description	Location	Distance and Direction from BIG ¹
Residential Receptors – West Lead Receptor Area			
W1	Single-Family Residences	Along Indian Trail, approximately 2,500 feet north of National Trails Highway	1,000 feet south
W2	Single-family Residences	Along Indian Trail, northeast of the Indian Trail and Lords Road Intersection	700 feet north
W3	Single-family Residences	Along Main Street, approximately 500 feet west of Hodge Road	240 feet south
W4	Single-family Residences	Along Main Street, approximately 400 feet east of Hodge Road	600 feet south
W5	Single-family Residences	Along Hodge Road, east of the Main Street and Hodge Road intersection	950 feet south
W6	Single-family Residences	Along Main Street, approximately 1,500 feet northeast of Hodge Road	350 feet south
W7	Single-family Residences	Along Main Street, approximately 5,680 feet	360 feet southeast

Table 5.3-14: Sensitive Receptors – BIG

Receptor ID	Receptor Description	Location	Distance and Direction from BIG ¹
		southwest of Buckboard Road	
W8	Single-family Residences	Along Main Street, approximately 4,400 feet southwest of Buckboard Road	340 feet southeast
Residential Receptors – Block Swap/Intermodal Receptor Area			
R1	Single-family Residences	Along Main Street, approximately 1,500 feet north of Buckboard Road	720 feet southeast
R2	Single-family Residences	Along Main Street, approximately 3,000 feet northeast of Buckboard Road	530 feet southeast
R3	Single-family Residences	Along Main Street, approximately 2,400 feet west of Prairie Avenue	500 feet southeast
R4	Single-family Residences	Along Main Street, approximately 2,175 feet west of Prairie Avenue	330 feet southeast
R5	Single-Family Residences	At the intersection of Prairie Avenue and Spinet Street	2,850 feet southeast
R6	Single-family Residences	Along Gazana Street, Approximately 245 feet west of Sylvan Avenue	570 feet southeast
R7	Single-family Residences	Along Amarylis Avenue, approximately 480 feet south of Main Street	570 feet southeast
Residential Receptors – East Lead Receptor Area			
E1	Single-family Residences	Along Sweeten Lane, approximately 800 feet east of National Trails Highway	1,600 feet southeast
E2	Single-family Residences	Along Main St, approximately west of Sun Valley Drive	760 feet southeast
E3	Single-family Residences	Along Main Street, approximately 1,700 Sun Valley Drive	610 feet southeast
E4	Single-family Residences	Along Main St, approximately 910 feet west of Sun Valley Drive	580 feet southeast
E5	Single-family Residences	At the intersection of Main Street and Holland Street	640 feet southeast
E6	Single-family Residences	Intersection of Main Street and Holland Street	380 feet south
E7	Single-family Residences	Intersection of Jade Road and Walnut Street	4,200 feet north
E8	Single-family Residences	Along Jasper Road, approximately 380 feet west of Birch Road	300 feet north
E9	Single-family Residences	Along Main Street, approximately 200 feet north of Anderson Avenue	440 feet south
E10	Single-family Residences	Southeast of Main Street and Avenue H	9,000 feet southeast
Along 33 kV Line			
T1	Single-family Residences	Surrey Court, North of Surrey Road and Surrey Court	100 feet south
T2	Single-family Residences	Along Rimrock Road, approximately 90 feet	120 feet east

Table 5.3-14: Sensitive Receptors – BIG			
Receptor ID	Receptor Description	Location	Distance and Direction from BIG ¹
		east of L Street	
T3	Single-family Residences	Along J Street, approximately 80 feet south of Bonanza Road	100 feet south
Schools			
1	Lenwood Elementary School	Along Ash Road, approximately 500 feet south of Main Street	520 feet southeast
Places of Worship			
2	Landmark Missionary Baptist Church	Along Cedar Road, approximately 530 feet north of Jasper Road	1,080 northeast
3	St. Philip Neri Catholic Church	Along 3rd Street, approximately 400 feet east of Paris Avenue	1,670 feet southeast
4	Lenwood Community Church	Along Main Street, approximately 95 feet west of Woods Avenue	230 feet south
<u>Other</u>			
5	Veterans of Foreign Wars	Intersection of Main Street and Frank Street	140 feet south
6	Dollar General	Along Main St, west of Ash Road	125 feet south
Parks			
7	Jasper Park	Along Jasper Road, approximately 290 feet east of Birch Road	Adjacent to the northeast
8	Lenwood Park	Along Ash Road, approximately 960 feet south of Main Street	960 feet to the southeast
Note: Distances are measured from the closest sensitive receptor to the closest point of BIG. Inclusion in this table does not necessarily denote that significant impacts would occur at these locations.			
W = West Lead Residential Receptor Area; R = Residential Receptors near the Block Swap and Intermodal Facilities; E = East Lead Residential Receptor Area; T = Along 33 kV Transmission Line			
Source: Google Inc. 2024. Google Earth Pro.			

Page 5.3-62 has been revised as follows:

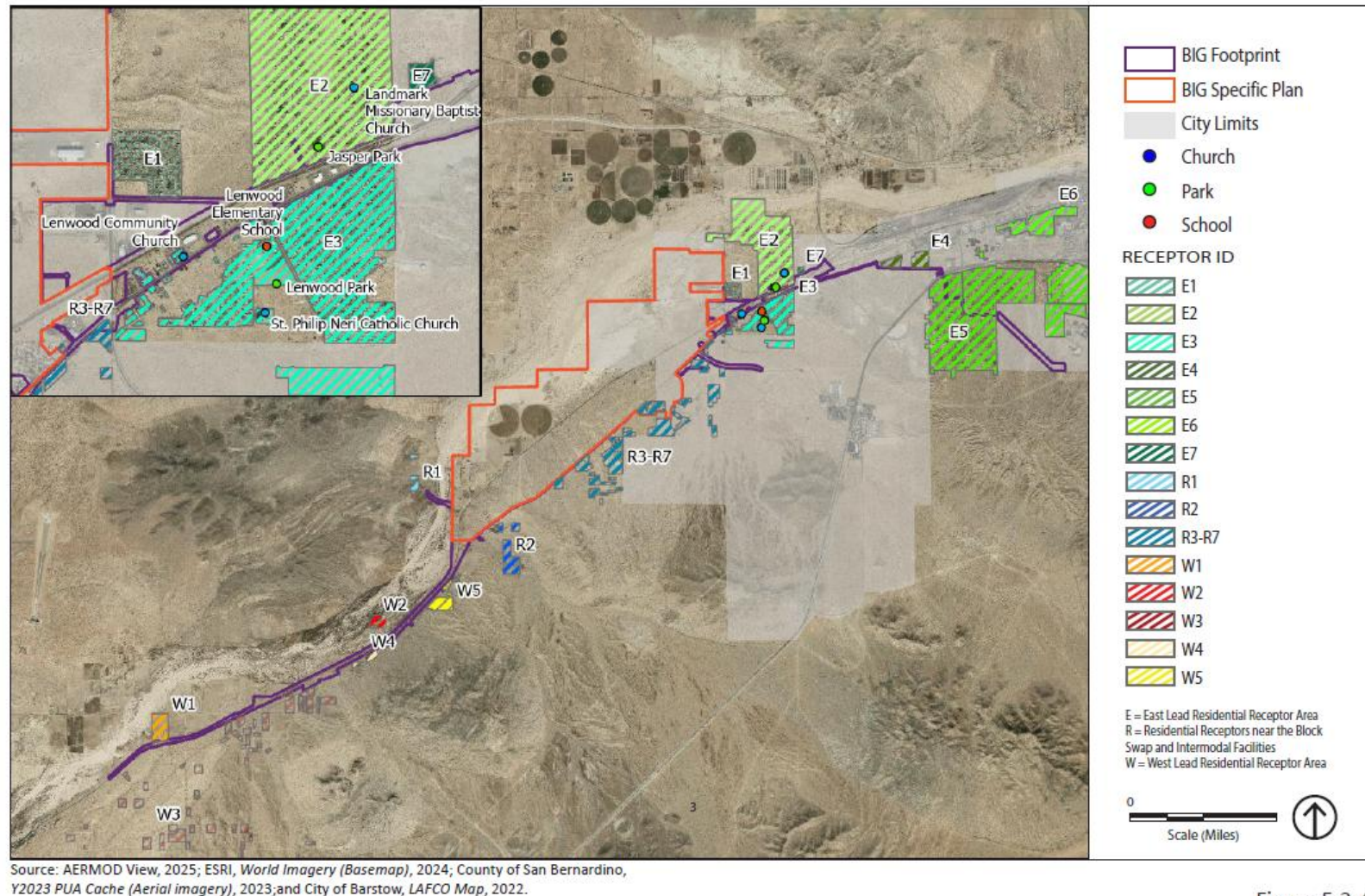


Figure 5.3-4
Sensitive Receptor Locations - BIG

Page 5.3-76 has been revised as follows due to the revised data found in the BNSF Barstow International Gateway Corridor Emissions Model Analysis Errata (*CEM Errata*) and to correct for typographical errors:

Table 5.3-17: Horizon Year 2048 Proposed General Plan Area Regional Criteria Air Pollutant Emissions Inventory Above Existing Conditions Within MDAB						
Source	Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Existing Land Uses – Year 2048						
On-Road Transportation ¹	17	422	1,306	10	93	35
Energy ²	10	173	104	1	14	14
Area Source – Offroad Equipment ³	141	158	3,030	<1	8	7
Area Source – Consumer Products ⁴	706	n/a	n/a	n/a	n/a	n/a
Maximum Daily Emissions	874	752	4,440	11	115	56
Proposed General Plan – Horizon Year 2048						
General Plan Community Emissions						
On-Road Transportation (including BIG) ¹	29	946	2,006	18	185	73
Energy ^{2,5}	15	257	154	2	20	20
Area Source – Offroad Equipment ^{3,6}	176	87	3,910	<1	3	2
Area Source – Consumer Products ⁴	1,365	n/a	n/a	n/a	n/a	n/a
Subtotal Proposed General Plan Emissions	1,584	1,289	6,070	20	208	95
BIG Emissions - MDAB						
BIG (Excludes Mobile Sources)	<u>394,377</u>	<u>2,746,556</u>	<u>3,337,355</u>	6	<u>76(86)</u>	<u>2(7)</u>
Maximum Daily Community + BIG	<u>1,978,962</u>	<u>4,035,846</u>	<u>9,408,425</u>	26	<u>132,122</u>	<u>9788</u>
Net Change						
Existing Land USEs 2048	874	752	4,440	11	115	56
Project Community + BIG	<u>1,978,962</u>	<u>4,035,846</u>	<u>9,408,425</u>	26	<u>132,122</u>	<u>9788</u>
Net Change	<u>1,105,108</u>	<u>3,284,094</u>	<u>4,968,985</u>	15	<u>178</u>	<u>4132</u>
MDAQMD Regional Significance Thresholds	137	137	548	137	82	65
Exceeds Threshold?	Yes	Yes	Yes	No	No	No
Notes: ¹ Based on calendar year 2048 emissions data from EMFAC2021, Version 1.0.2, and daily VMT and TMT provided by Fehr & Peers. Transportation sector includes the full trip lengths for internal-internal, internal-external, and external-internal trips. ² Based on average natural gas use of the five-year (2019 to 2023) usage data provided by Southwest Gas and the CalEEMod, version 2022.1, default natural gas emissions factors. The five-year average is used to account for fluctuations in energy use. ³ Based on calendar year 2023 offroad equipment emissions data for the County from OFFROAD2021, Version 1.0.2., adjusted to the farmland, household, employment, and population associated with the existing conditions of the proposed General Plan area compared to the County. ⁴ Based on the CalEEMod, version 2022.1, default emission rates, which are applied to residential and non-residential land uses. ⁵ Adjusted for increases in population for natural gas use and non-residential square footage for non-residential natural gas use in the proposed General Plan area. ⁶ Adjusted to the farmland, household, employment, and population associated with the proposed General Plan compared to the County.						
Sources: Appendix 5.3 GP-1: Air Quality and Greenhouse Gas Emissions Modeling and Appendix 5.3 BIG-1: Air Quality Technical Report.						

Page 5.3-77 has been revised as follows due to the revised data found in the BNSF Barstow International Gateway Corridor Emissions Model Analysis Errata and to correct for typographical errors:

Table 5.3-18: Horizon Year 2048 Proposed General Plan Area Annual Regional Criteria Air Pollutant Emissions Inventory Above Existing Conditions Within MDAB						
Source	Criteria Air Pollutant Emissions (tons per year)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Existing Land Uses – Year 2048						
On-Road Transportation ¹	3	73	227	2	16	1
Energy ²	2	32	19	<1	2	2
Area Source – Offroad Equipment ³	26	29	553	<1	1	1
Area Source – Consumer Products ⁴	129	n/a	n/a	n/a	n/a	n/a
Total Annual	168	409	799	2	20	5
Proposed General Plan – Horizon Year 2048						
General Plan Community Emissions						
On-Road Transportation (including BIG) ¹	5	164	348	3	32	3
Energy ^{2,5}	3	47	28	1	4	4
Area Source – Offroad Equipment ^{3,6}	32	16	714	<1	1	<1
Area Source – Consumer Products ⁴	249	n/a	n/a	n/a	n/a	n/a
Subtotal	289	227	1,090	3	36	7
BIG Emissions - MDAB						
BIG (Excludes Mobile Sources)	56 <u>54</u>	378 <u>350</u>	575 <u>543</u>	1	17 <u>(19)</u>	(3) <u>(4)</u>
Total Annual Community + BIG	345<u>342</u>	605<u>577</u>	1,665<u>1,633</u>	4	19<u>18</u>	4<u>3</u>
Net Change						
Existing Land Uses 2048	159	133	801	2	20	5
Project Community + BIG	345 <u>342</u>	605 <u>577</u>	1,665 <u>1,633</u>	4	19 <u>18</u>	43
Net Change From Existing 2048	186<u>183</u>	471<u>444</u>	864<u>834</u>	2	(1)<u>(2)</u>	(1)<u>(2)</u>
MDAQMD Regional Significance Thresholds	25	25	100	25	15	12
Exceeds Threshold?	Yes	Yes	Yes	No	No	No
Notes: ¹ Based on calendar year 2048 emissions data from EMFAC2021, Version 1.0.2, and daily VMT and TMT provided by Fehr & Peers. Transportation sector includes the full trip lengths for internal-internal, internal-external, and external-internal trips. ² Based on average natural gas use of the five-year (2019 to 2023) usage data provided by Southwest Gas and the CalEEMod, version 2022.1, default natural gas emissions factors. The five-year average is used to account for fluctuations in energy use. ³ Based on calendar year 2023 offroad equipment emissions data for the County from OFFROAD2021, Version 1.0.2., adjusted to the farmland, household, employment, and population associated with the existing conditions of the proposed General Plan area compared to the County. ⁴ Based on the CalEEMod, version 2022.1, default emission rates, which are applied to residential and non-residential land uses. ⁵ Adjusted for increases in population for natural gas use and non-residential square footage for non-residential natural gas use in the proposed General Plan area. ⁶ Adjusted to the farmland, household, employment, and population associated with the proposed General Plan compared to the County.						
Sources: Appendix 5.3 GP-1: Air Quality and Greenhouse Gas Emissions Modeling and Appendix 5.3 BIG-1: Air Quality Technical Report.						

Pages 5.3-79 and 5.3-80 have been revised as follows in response to comments from CARB and MDAQMD:

MM GP AQ-1

Reduce Emissions from Construction Activities. Prior to issuance of any construction permits for development projects subject to CEQA review (i.e., non-exempt projects), development project applicants shall prepare and submit to the City of Barstow (City) Planning Division a technical assessment evaluating potential project construction-related air quality impacts. The evaluation shall be prepared in conformance with the Mojave Desert Air Quality Management District (MDAQMD) methodology and guidelines for projects in the Mojave Desert Air Basin. If construction-related criteria air pollutants are determined to have the potential to exceed the adopted thresholds of significance of the applicable air district, the City Planning Division shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities to below these thresholds, ~~to the extent feasible~~. These identified measures shall be incorporated into appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City Public Works Division. Mitigation measures to reduce construction-related emissions could include, but are not limited to:

- a. Use of construction equipment rated by the United States Environmental Protection Agency as having Tier 3 ~~(model year 2006 or newer)~~ or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower. A list of construction equipment by type and model year shall be maintained by the construction contractor on-site and available for City review upon request.
- b. Ensure construction equipment is properly serviced and maintained to the manufacturer's standards.
- c. Use of alternative-fueled or catalyst-equipped diesel construction equipment, if available and feasible.
- d. Clearly posted signs that require operators of trucks and construction equipment to minimize idling time (e.g., five minute maximum).
- e. Preparation and implementation of a fugitive dust control plan that may include the following measures:
- f. Disturbed areas (including storage piles) that are not being actively utilized for construction purposes shall be effectively stabilized using water or chemical stabilizer/suppressant, or covered with a tarp or other suitable cover (e.g., revegetated).
- g. On-site unpaved roads and off-site unpaved access roads shall be effectively stabilized using water or chemical stabilizer/suppressant.

- h. Land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled utilizing application of water or by presoaking.
- i. Material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained when materials are transported off the site.
- j. Operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)
- k. Following the addition of materials to or the removal of materials from the surface of outdoor storage piles, said piles shall be effectively stabilized to prevent fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- l. Within urban areas, track out shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.
- m. Any site with 150 or more vehicle trips per day shall prevent carryout and track out.
- n. Limit traffic speeds on unpaved roads to 15 mph.
- o. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- p. Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the project area.
- g. Require electrical hookups for battery/electric tools.
- r. Require battery-electric or plug-in electric power where feasible for off-road equipment under 19 kW (e.g., compactors, pressure washers).
- s. Require model-year 2014 or newer heavy-duty trucks for construction access meeting CARB's lowest optional NOx standard.

Pages 5.3-80 through 5.3-82 have been revised as follows in response to comments from CARB and MDAQMD:

MM GP AQ-2

Reduce Emissions from Operation. Prior to discretionary approval by the City of Barstow (City) Planning Division for development projects subject to CEQA review (i.e., nonexempt projects), project applicants shall prepare a technical assessment evaluating potential air quality impacts related to the project operation phase and submit it to the City Planning Division for review and approval. The evaluation shall be prepared in conformance with the Mojave Desert Air Quality Management

District (MDAQMD) methodology and guidelines for projects in the Mojave Desert Air Basin. If operation-related air pollutants are determined to have the potential to exceed the MDAQMD-adopted thresholds of significance, the City Planning Division shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions ~~to the extent feasible~~ to below these thresholds, during operational activities. The identified measures shall be included as part of the conditions of approval. Possible Mitigation measures to reduce long-term emissions can include, but are not limited to:

- a. For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.
- b. Applicants for manufacturing and light industrial uses shall utilize energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
- c. Applicants for non-residential developments with over 50 employees shall provide changing/shower facilities as specified, at minimum, or greater than in the California Green Building Standards (CALGreen) Code (Non-residential Voluntary Measures).
- d. Applicants for multifamily, hotel, and motel developments shall provide bicycle parking facilities equivalent to or greater than as specified in the Residential Voluntary Measures of the CALGreen Code.
- e. Applicants for non-residential developments with 50 or more parking spaces shall provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles equivalent to or greater than the CALGreen Code (Non-residential Voluntary Measures).
- f. Applicants for non-residential developments and multi-family residential developments shall provide facilities to support electric charging stations identified in the Non-residential Voluntary Measures and Residential Voluntary Measures of the CALGreen Code, respectively.
- g. Applicant-provided appliances shall be Energy Star-certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star-certified or equivalent appliances shall be verified by Building & Safety during plan check.
- h. Applicants for future development projects along existing and planned transit routes shall coordinate with the City of Barstow and the applicable transit agency to ensure that bus pad and shelter improvements are incorporated, as appropriate.

- i. Applicants for warehouse projects that maintain a heavy-duty truck fleet shall evaluate the feasibility of requiring a zero-emission heavy truck fleet, or near-zero heavy truck fleet.
- j. Applicants for warehouse projects shall place signage at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations (e.g., Rule 2485). At minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict nonessential idling to no more than two consecutive minutes (compared to five minutes currently allowed under Rule 2485); and 3) telephone numbers of the building facilities manager and CARB to report violations.
- k. If Applicants for warehouse project have domiciled heavy-duty trucks (Class 7 and 8) onsite, the tenant/operator of the facility shall be required to provide electric truck charging facilities on site sufficient to charge the electric trucks domiciled on the site, and such facilities shall be made available for all electric trucks that use the facility, to the extent the applicable utility authorizes and has capacity to support.

Page 5.3-88 has been revised as follows:

Operations

BIG's operational emissions would be associated with area sources (e.g., landscape maintenance equipment, architectural coatings, off-road equipment, etc.), energy sources, mobile sources (i.e., motor vehicle use), and off-road equipment. The major contributors of operational emissions are heavy-duty trucks, line-haul locomotives, switcher locomotives, and non-electric cargo-handling equipment (e.g., chassis stackers, and maintenance equipment). BIG includes various features which reduce operational emissions, including dedicated Tier 4 trains to transport containers between the Ports and BIG's intermodal facility, Tier 4 switcher locomotives, the retirement of all existing switcher locomotives at the existing Barstow classification yard and the addition of six Tier 4 switcher locomotives,¹⁴ increase the renewable diesel composition within the Port's existing fueling site, the use of electric cargo handling equipment (i.e., electric rubber-tired gantry (RTG) rail-mounted gantry (RMG) cranes, chassis stacking forklifts, forklifts, top pick/side loaders, and electric hostlers) and the use of all-electric appliances and end uses instead of natural gas. Additionally, BNSF has entered into a Memorandum of Understanding with MDAQMD to implement a demonstration program testing five hybrid diesel electric linehaul locomotives that consume less fuel and generate lower emissions than traditional diesel locomotives during mainline operations, to determine if hybrid locomotives could become feasible. These locomotives also have the ability to operate in zero emissions mode when near or at the yard and terminal at BIG. However, given it is unknown and thus speculative whether the demonstration program would be accomplished and would reduce impacts, the demonstration program is not mitigation under CEQA and the Draft EIR does not take credit for these emissions reductions. Additionally, BNSF has entered into a Memorandum of Understanding to engage in good faith with CARB to explore currently infeasible technologies and other methods that potentially could further reduce emissions. The CARB Memorandum of Understanding is not mitigation under CEQA and the Draft EIR does not take credit for emissions reductions. As noted in the Governor's Certification for

Judicial Streamlining of the Barstow International Gateway Project in the County of San Bernardino , “The Project Applicant has entered into a Memorandum of Understanding (MOU) with [MDAQMD] executed on February 23, 2026...and with [CARB] executed April 23, 2026... to implement a demonstration project of hybrid battery electric locomotive technology (“Pilot”) as part of the Project”. Thus, the Draft EIR carefully considered emission-reducing measures and implemented all feasible mitigation measures.

Page 5.3-104 has been revised as follows:

MM BIG AQ-1 **Fugitive Dust Emissions.** During construction, the contractor shall employ the following measures to minimize and control fugitive dust emissions. The contractor shall prepare a fugitive dust control plan that complies with Mojave Desert Air Quality Management (MDAQMD) Rule 403, which, at a minimum, shall describe how each measure would be employed, identify the individual responsible for ensuring implementation, and address the following components unless alternative measures are approved by the MDAQMD. The fugitive dust control plan shall be submitted to MDAQMD for approval by the Air Pollution Control Officer prior to the start of construction activities. In accordance with Rule 403, the contractor shall maintain a copy of the fugitive dust control plan and records demonstrating compliance with the requirements of the fugitive dust control plan and Rule 403 through the closure of BIG construction, to be provided to MDAQMD personnel upon request. Pursuant to MDAQMD standard practice, MDAQMD may issue Notices to Comply and/or Notices of Violation for non-compliance with the approved fugitive dust control plan...

Page 5.3-105 has been revised as follows:

MM BIG AQ-4 **Renewable Diesel (Construction).** During construction, the implementing entity shall use renewable diesel fuel to minimize and control exhaust emissions from heavy-duty diesel-fueled construction equipment and off-road heavy diesel trucks, except that traditional diesel can be used where renewable diesel is not available from suppliers within 200 miles of the BIG footprint. Renewable diesel shall meet the most recent ASTM D975 specification for Ultra Low Sulfur Diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum fuels sold in California. The implementing entity shall provide the City with quarterly reports of renewable diesel purchase records and equipment and vehicle fuel consumption. The construction contract shall identify the quantity of traditional diesel purchased and fully document the availability and price of renewable diesel to meet BIG demand. This may include, but is not limited to: a list of all fuel suppliers contacted; supplier addresses and distances from BIG; statements or correspondence from suppliers demonstrating availability of renewable diesel or lack thereof; documentation establishing that suppliers within 200 miles do not carry renewable diesel in the quantities needed; price quotes where relevant; any other information requested by the City to verify compliance.

Page 5.3-106 has been revised as follows:

MM BIG AQ-5	Reduce Exhaust Emissions from On-Road Construction Equipment. Prior to issuance of construction contracts, the implementing entity shall incorporate the following material-hauling heavy truck fleet mix requirements into the contract specifications: ▪ All on-road trucks used to haul construction materials shall consist of an average fleet mix of equipment model year 2010 or newer, but no less than the average fleet mix for the current calendar year as set forth in the CARB's EMFAC2021 database. ▪ The implementing entity shall provide documentation to BNSF of efforts to secure such a fleet mix <u>and shall maintain all supporting procurement records for City review upon request.</u> ▪ The implementing entity shall keep a written record of the fleet mix for on-road construction equipment during BIG construction and provide the City <u>with</u> and annual reports documenting compliance
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Page 5.3-106 has been revised as follows:

MM BIG AQ-6	Reduce the Potential Impact of Concrete and Asphalt Batch Plants. Prior to the construction or arrival of a batch plant on site, the implementing entity shall provide the City with documentation demonstrating that batch plants are sited at least 1,000 feet from sensitive receptors, including places such as daycare centers, hospitals, senior care facilities, residences, parks, and other areas where people may congregate. <u>The City shall verify compliance with this siting requirement by reviewing site plans, maps, or other distance documentation submitted by the implementing entity, and shall issue written confirmation of verification prior to installation or operation of any batch plant. If the documentation does not demonstrate the required 1,000-foot buffer, the City shall require corrective action before the batch plant may be established.</u> Batch plants shall implement control measures required by MDAQMD as part of the Permit to Construct in order to reduce fugitive dust such as water sprays, enclosures, hoods, curtains, shrouds, movable and telescoping chutes, central dust collection systems, and other suitable technology, to reduce emissions to be equivalent to the U.S. EPA AP-42 controlled emission factors for batch plants. The implementing entity shall provide a copy of the MDAQMD permit application to the City that each batch plant meets this standard during operation
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Page 5.3-106 has been revised as follows:

MM BIG AQ-7:	Sweep Paved Areas. During operations, paved areas such as parking lots, internal roadways, the container yard, chassis storage area, and cargo handling areas shall be swept at least once every 7 calendar days. <u>The implementing entity shall maintain sweeping logs documenting the date, time, and areas swept for City review upon request and provide the City with annual reports documenting compliance.</u>
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Page 5.3-112 has been revised as follows:

The primary reason for BEL switchers being rejected is because they are not commercially ready or operationally feasible, as discussed above in “3. Battery Electric Locomotives (BELs) – Linehaul from Ports to IMF”. While not yet commercially viable or operationally proven for the type of switching operation at BIG, battery-electric locomotives (BELs) would require a capacity of at least 2 MWh to provide the power necessary to perform locomotive switching tasks for at least a full shift.

Pages 5.3-115 and 5.3-116 have been revised as follows:

This section discusses the relationship between BIG’s regional criteria pollutant emissions and the potential for adverse health effects to occur for persons exposed to the emitted pollutants. BIG construction and operation would produce regional mass emissions of VOC (ROG), NO_x, CO, PM₁₀, and PM_{2.5} above MDAQMD thresholds. NO₂, a criteria pollutant, is the primary component of NO_x. SO₂, a criteria pollutant, is the primary component of SO_x; though regional mass emissions of SO_x were not above MDAQMD thresholds, this pollutant is involved in secondary PM_{2.5} formation. ~~In addition, VOCs and NO_x are precursors of O₃, PM_{2.5} and O₃ are a criteria pollutants that is are photochemically formed from the precursors in the atmosphere in the presence of sunlight (known as a photochemical reaction).~~ As VOCs, NO_x, CO, and SO_x are precursors of O₃ and PM_{2.5}, the pollutants quantified are VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}, and ~~Therefore,~~ the criteria pollutants evaluated for regional health effects are CO, NO₂, O₃, CO, and PM.

There is currently no methodology available that can with precision ~~accurately~~ quantify regional health effects from NO₂, O₃, CO, or PM exposure associated with an individual project’s emissions. The South Coast AQMD reached a similar conclusion in its Amicus Curiae brief filed with the California Supreme Court in the case of Sierra Club v. County of Fresno, when, concerning O₃, the South Coast AQMD stated that it does not know of a way to accurately quantify health impacts caused by emissions produced on a scale as small as individual projects. One existing tool, U.S. EPA’s BenMAP, calculates the number and economic value of air pollution related deaths and illnesses resulting from changes in O₃ and PM_{2.5} concentrations. However, the expected changes in regional O₃ and PM_{2.5} concentrations associated with BIG would be so low that BenMAP would likely produce estimates of health effects that are near zero. Therefore, the extent to which regional adverse health effects can be identified in this section is limited to (a) discussing BIG’s potential impact on regional pollutant levels; and (b) generally describing the types of adverse health effects associated with exposure to the pollutants of concern.

Page 5.3-116 has been revised as follows:

Carbon Monoxide (CO)

The MDAB is currently designated attainment of the CAAQS and NAAQS for CO. The CAAQSs were established to protect public health, including the most sensitive groups. The NAAQS were established to protect public health with an adequate margin of safety. The most stringent CO CAAQS or NAAQS are 20 ppm for a 1-hour average and 9.0 ppm for an 8-hour average.

The highest CO concentrations recorded anywhere in the MDAB over the last three available years (2019 to 2021) are 5.461 ppm for a 1-hour average. This pollutant level is 27 percent of the 1-hour CAAQS and 16 percent of the 1-hour NAAQS.

According to the most recent U.S. EPA-approved MDAB emissions inventory, the MDAB's total CO emissions in 2020 were 337.3 tons per day. By comparison, BIG construction would result in a maximum of ~~3,8467,601~~ pounds per day (~~1,921.63~~ tons per day) and BIG operations total CO emissions would be ~~2,6971,974~~ pounds per day (~~1,350.73~~ tons per day), which would be 0.65 percent and 0.42 percent as large as the total MDAB emissions, respectively. Therefore, BIG's contribution to regional CO levels would be relatively small.

Pages 5.3-116 and 5.3-117 have been revised as follows:

Nitrogen Dioxide (NO₂)

The MDAB is currently designated attainment of the NO₂ CAAQS and NAAQS. The most stringent NO₂ standards are 0.18 ppm for a 1-hour average (State 1-hour standard), 0.100 ppm for a three-year average of the 98th percentile of the annual distributions of daily maximum 1-hour average concentrations (federal 1-hour standard), and 0.030 ppm for an annual average (CAAQS).

The highest NO₂ concentrations recorded anywhere in the MDAB over the last 3 available years (2021 – 2023) are 0.062 ppm. The pollutant level is 34 percent and 62 percent of the CAAQS and NAAQS 1-hour standards, respectively.

According to the most recent CARB emissions inventory, the total NO_x emissions within the MDAB in 2020 were 204.2 tons/day. By comparison, the highest NO_x emissions increment associated with BIG construction is ~~4,4195,178~~ lb/day (~~2,211.02~~ tons/day), which would be 0.75 percent of the total MDAB emissions. Operational emissions would exceed the MDAQMD threshold with ~~2,2652,236~~ lbs/day (~~1,10.93~~ tons/day), which would be 0.35 percent as large as the total MDAB emissions. Therefore, BIG's contribution to regional NO₂ levels would be relatively small.

Pages 5.3-117 and 5.3-118 have been revised as follows:

Ozone (O₃)

The MDAB is currently designated nonattainment of the O₃ concentration standards. The most stringent State and federal O₃ standards are 0.09 ppm for 1-hour average, 0.07 ppm for the three-year average of the fourth-highest 8-hour concentration each year (known as the federal 8-hour standard), and 0.07 ppm for an 8-hour average (known as the State 8-hour standard).

The highest 1-hour O₃ concentration recorded in the MDAB over the last three available years (2021 to 2023) is 0.131 ppm, which is 1.45 times the standard. The highest 8-hour O₃ concentration recorded in the MDAB over the last three available years is 0.107 ppm, which is 1.5 times the standard.

According to the most recent CARB emissions inventory, the MDAB's total VOC (ROG) emissions in 2020 were 93.5 tons/day. By comparison, BIG's highest VOC (ROG) emissions increment was ~~924~~913 lb/day (~~0.46~~15 tons/day) during construction and ~~596~~258 lbs/day (~~0.31~~11 tons/day) during operations, which would be ~~0.12~~ percent and 0.1 percent of the total MDAB emissions, respectively. As discussed above for NO₂, BIG's NO_x emissions increment would be ~~0.75~~ percent and ~~0.35~~ percent as large as the total MDAB emissions during construction and operations, respectively. Therefore, BIG's contribution to regional O₃ levels would be relatively small.

Page 5.3-118 and 5.3-119 have been revised as follows:

Particulate Matter (PM)

The MDAB is currently designated nonattainment of the PM₁₀ State 24-hour and annual CAAQS and NAAQS. The most stringent PM₁₀ CAAQS or NAAQS are 50 µg/m³ and 150 µg/m³, respectively. The highest PM₁₀ concentrations recorded in the BIG footprint over the last 3 available years (2021 through 2023) are 372.7 µg/m³. This pollutant level is seven times and two times the CAAQS and NAAQS, respectively. According to the most recent CARB emissions inventory, the total PM₁₀ emissions within the MDAB in 2020 were 219.2 tons/day. By comparison, the PM₁₀ emissions increment associated with BIG would ~~average 61,120~~ be 1,883 lb/day (~~340.61~~ tons/day) during construction and ~~914~~149 lbs/day (~~0.508~~ tons/day) during operations, which would be ~~9.10~~3 percent and ~~0.40~~4 percent as large as the total MDAB emissions, respectively. Therefore, BIG's contribution to regional PM₁₀ levels would be relatively small.

The MDAB is currently designated unclassified/attainment of the PM_{2.5} federal 24-hour and NAAQS of 35 µg/m³. The highest PM_{2.5} concentrations recorded in BIG's footprint over the last 3 available years (2021 through 2023) are 87.1 µg/m³. This pollutant level is 2.5 times the NAAQS. According to the most recent CARB emissions inventory, the total PM_{2.5} emissions within the MDAB in 2020 were 59.0 tons/day. By comparison, the highest PM_{2.5} emissions increment associated with BIG are ~~56,291~~902 lb/day (~~280.19~~ tons/day) during construction and ~~268~~43 lbs/day (~~0.13~~02 tons/day) during operations, which would be ~~8.30~~3 percent and 0.043 percent as large as the total MDAB emissions, respectively. Therefore, BIG's contribution to regional PM_{2.5} levels would be relatively small.

Pages 5.3-123 and 5.3-124 have been revised as follows in response to comments from CARB:

MM GP AQ-3	Operational Health Risk Assessment. Applicants for new discretionary industrial or warehousing projects or commercial land uses that would generate substantial diesel truck travel—i.e., 40 diesel trucks per day per the Mojave Desert Air Quality Management District (MDAQMD) CEQA Guidelines, or 40 or more trucks with diesel-powered transport refrigeration units per day based on the California Air Resources Board recommendations for siting new sensitive land uses—and that are within 1,000 feet of existing or planned sensitive land uses shall prepare a health risk assessment (HRA). Sensitive land uses consist of residences, senior living/assisted living communities, schools, daycare centers, playgrounds, and medical facilities. All HRAs shall be submitted to the City of Barstow Planning Division and the MDAQMD for evaluation.
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The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and MDAQMD for projects in the Mojave Desert Air Basin (MDAB). If the HRA shows that the project incremental cancer risk exceeds ten in one million (10E-06) or the risk thresholds in effect at the time a project is considered, or that the appropriate noncancer hazard index exceeds 1.0 or the thresholds as determined by MDAQMD at the time a project is considered, the applicant shall identify and demonstrate that measures are capable of reducing potential cancer and noncancer risks to the thresholds identified by MDAQMD above (i.e., cancer risk of 10E-06 or noncancer hazard index of 1.0)—an acceptable level to the extent feasible, including appropriate enforcement mechanisms. Measures to reduce risk impacts may include but are not limited to:

- a. Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible.
- b. Electrifying warehousing docks.
- c. Requiring use of newer equipment and/or vehicles.
- d. Restricting off-site truck travel through the creation of truck routes.

Measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the proposed project.

Section 5.4: Biological Resources

Any regulatory status references to LeConte's or Bendire's thrashers as CDFW Species of Special Concern (SSC) and USFWS Bird of Conservation Concern (BCC) within the Draft EIR are hereby revised to 'CESA Candidate' species via **Final EIR Appendix 3-2: LeConte's Thrasher and Bendire's Thrasher Regulatory Status Change Errata**.

Page 5.4-65 has been revised as follows:

MM BIG BIO-2	Biological Resource Monitoring. At least 30 days prior to start of construction mobilization activities, the implementing entity shall submit for review and approval by USFWS and CDFW the designated biologists' and Species-Specific biological monitors name(s) and qualifications retained to oversee biological resource monitoring activities during BIG construction. No vegetation removal or mass grading shall begin until the implementing entity has received written confirmation from USFWS and CDFW that the designated biologists have been approved. A request for designated biologist and Species-Specific biological monitor approval shall be submitted in writing and shall include adequate information regarding the proposed designated biologist and Species-Specific biological monitor qualifications for a reasonable person to determine qualification status. If USFWS and/or CDFW do not respond within 30 days after a verifiable written request for designated biologist and biological monitor approval is submitted, the designated biologist and/or Species-Specific biological monitor shall be deemed approved. Should a new designated biologist and/or Species-Specific biological monitor be necessary, the implementing entity shall seek approval
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through the same process as above, with the request being deemed approved after 30 days after the written request. Note that the implementing entity's selection of General biological monitors does not require USFWS and CDFW approvals.

Designated biologists shall oversee the timely implementation of all biological mitigation measures as outlined in the Mitigation Monitoring and Reporting Program (MMRP) during construction and the applicable post-construction monitoring period as required by the City and CDFW/USFWS for permit validity. The designated biologists shall also be responsible for guiding and directing the biological monitor's work. The designated biologist shall oversee the preparation of quarterly monitoring reports during construction and the post-construction monitoring report summarizing compliance with BIG-specific mitigation measures submitted to the City.

Species-

Specific biological monitors shall be responsible for implementation of species-specific mitigation measures for the species for which they have been approved and would report directly to a designated biologist. Qualifications for Species-Specific biological monitors can be found in the species-specific mitigation measures. General biological monitors shall be responsible for conducting WEAP training, facilitating implementation of general mitigation measures, except where specified that a specific individual with specific qualifications (such as designated biologist) must implement the mitigation measures, conducting general compliance monitoring, and reporting on compliance monitoring activities.

General biological monitors shall perform daily monitoring during initial vegetation removal and construction activities that result in the breaking of the ground surface. Following initial vegetation removal and construction activities, a General biological monitor shall perform regular random checks (not less than once per week but could be required more frequently depending on the presence of special status species) to ensure that mitigation measures are implemented. General biological monitors would report directly to a designated biologist

Page 5.4-68 has been revised as follows:

MM BIG BIO-5	Compliance Reporting. A designated biologist shall report any non-compliance or unauthorized take of special-status species to the appropriate agencies within 48 hours of its occurrence. Monitoring reports that document compliance status with the MMs shall be prepared by designated biologists and submitted quarterly <u>during construction</u> and post construction to the City. All mitigation measures shall be implemented as Stated herein except for necessary modifications approved by a qualified biologist. Failure to implement mitigation measures shall be reported in monitoring reports.
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Page 5.4-70 has been revised as follows:

MM BIG BIO-37	Desert Native Plant Salvage Plan. Prior to start of construction mobilization activities, the implementing entity shall prepare a Desert Native Plant Salvage Plan for the removal of any plant species regulated under the CDNPA and County Code § 88.01.060. Adequate mitigation for CDNPA/County-protected plants may include the salvage of plants for translocation to a suitable recipient site if removal cannot
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be avoided. In the case of translocation, the Desert Native Plant Salvage Plan shall be prepared for review and approval by the City and CDFW. The plan shall include a description and map showing plants to be salvaged, salvage and transport methods, the proposed recipient site, and disposition of the plant specimens at the recipient site. Recipient sites may include existing conservation areas, botanical preserves, museums and zoological societies, among other conservation organizations that provide adequate habitat and management of desert native plants.

Pages 5.4-74 and 5.4-75 have been revised as follows:

MM BIG BIO-13 **Desert Tortoise Clearance Surveys.** Prior to commencement of construction mobilization activities, desert tortoise exclusion fencing shall be installed and maintained according to a CESA ITP and Biological Opinion to avoid take of desert tortoise including destruction of nests or their potential habitat in the impact footprint, where individuals are known to occur, recent sign has been observed, or construction activities have the potential to result in take. A qualified Species-Specific biological monitor shall first conduct a pre-construction survey for desert tortoise according to the CESA ITP and Biological Opinion at locations where exclusionary fence will be installed and translocate or relocate any desert tortoise present at exclusionary fence installation locations as required by the CESA ITP and Biological Opinion and only then exclusionary fencing shall be installed and the qualified Species-Specific biological monitor shall be present during exclusion fence installation. Desert tortoise exclusion fencing in desert tortoise habitat shall be constructed to standards outlined in Chapter 8 of the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009b) and shall be used to delineate the area. The desert tortoise exclusion fencing shall be maintained and monitored daily during the desert tortoise activity period (i.e., early March through early June and September through early November) to allow for fencing to be maintained in good condition, and to determine if tortoises are “trapped” along the fencing searching for a way to access the other side. Outside of the desert tortoise activity period, fence inspections shall occur at least once weekly by a qualified Species-Specific biological monitor. If failures in the exclusion fence are documented, desert tortoise clearance surveys shall be repeated for affected areas. At the discretion of the designated biologist, desert tortoise exclusion fencing design shall incorporate areas of shade and/or predation protection (e.g., artificial burrows) in the event a desert tortoise becomes trapped along the fence. Desert tortoise guards, or other agency approved design, shall be installed and connected to the exclusionary fencing at construction area entry points to prohibit desert tortoise from crossing into the construction right-of-way. The desert tortoise guard shall have a clear escape route away from construction activity for any desert tortoise that should fall into the guard. The guard shall be inspected daily by a qualified biological monitor for desert tortoise and to ensure the escape route is free of obstruction and debris.

Immediately following the installation of desert tortoise exclusion fencing, Species-Specific biological monitors ~~the agencies~~ and/or designated biologists approved by USFWS in accordance with the Desert Tortoise Authorized Biologist Qualifications Form (Section 3.2) of the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009b) and CDFW shall conduct clearance surveys in suitable habitat for desert tortoise. The survey(s) shall be conducted in general

accordance with Chapter 6 of the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009) or current clearance survey protocol and shall align with requirements in the CESA ITP and Biological Opinion. ~~The survey(s) may be conducted any time of year, but preferably during the desert tortoise active period (i.e., early March through early June, and September through early November).~~ Survey results shall be provided to the City, CDFW, and USFWS.

If active desert tortoise burrows are identified in the impact footprint during desert tortoise clearance surveys and required to be moved off site, a desert tortoise translocation plan will be implemented as approved by USFWS and CDFW. All unoccupied desert tortoise pallets and burrows that are not practical to avoid shall be examined and excavated by hand during the clearance survey by the qualified Species Specific biological monitors and collapsed to prevent reentry following the procedures and precautions outlined in the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009b), CESA ITP, and Biological Opinion.

Pages 5.4-75 and 5.4-76 have been revised as follows:

MM BIG BIO-14

Desert Tortoise Relocation and Translocation. Prior to start of construction mobilization activities, a designated biologist approved by CDFW through a CESA ITP and USFWS through a Biological Opinion shall prepare a BIG-specific Desert Tortoise Translocation Plan, based on the Translocation of Mojave Desert Tortoises from Project Sites: Plan Development Guidance (USFWS, 2020), Health Assessment Procedures for the Mojave Desert Tortoise (Gopherus agassizii): A Handbook Pertinent to Translocation (USFWS, 2016) and Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009b) or other current USFWS guidelines and in accordance with applicable Incidental Take Permits and Biological Opinions. The BIG-specific Desert Tortoise Translocation Plan shall identify suitable relocation and translocation sites, provide details on desert tortoise surveys and for moving desert tortoise out of harm's way, and include the methodology for visual desert tortoise body condition assessments. ~~A~~ The designated biologist shall provide the BIG-specific Desert Tortoise Translocation Plan to the USFWS and CDFW for review and approval at least 30 days prior to start of translocation. At a minimum, the Desert Tortoise Translocation Plan shall include the following measures:

- The qualified Species-Specific biological monitor or the designated biologist shall implement the Desert Tortoise Translocation Plan during BIG construction. Only qualified Species-Specific biological monitors or designated biologists authorized by the USFWS and CDFW to handle desert tortoise shall move the animal and project-specific ITPs for desert tortoise shall be acquired under CESA and FESA prior to such actions.
- The approved Species-Specific biological monitor or designated biologist shall move the desert tortoise found in construction work areas out of danger outside of the potential impact footprint, following the procedures and conditions outlined in the Incidental Take Permit and Biological Opinion.

- Prior to the approved Species-Specific biological monitor or designated biologist moving desert tortoise out of the construction work area, the biological monitor or designated biologist shall survey the relocation and translocation site to confirm that suitable burrows for desert tortoise exist. If few or no burrows are available, artificial burrows and/or shade structures shall be created along the outer perimeter of the desert tortoise exclusion fencing following the guidelines in the Desert Tortoise (Mojave Population) Field Manual (*Gopherus agassizii*) (USFWS 2009b) and Shade Structures for Desert Tortoise Exclusion Fence: Design Guidance (USFWS 2018), or as updated or replaced by the USFWS and in accordance with the CESA ITP and Biological Opinion.
- If needed, artificial burrows shall be installed outside of the construction work area (along the outer perimeter of the desert tortoise exclusion fencing if applicable) from where the individual was relocated to provide cover and prevent exposure to predators and dehydration. Prior to excavation of an occupied burrow, artificial burrows shall be installed.

Pages 5.4-77 through 5.4-79 have been revised as follows:

- MM BIG BIO-16 Desert Tortoise Compensatory Mitigation Plan.** Prior to start of construction mobilization activities, the implementing entity shall prepare a Compensatory Mitigation Plan (CMP) in consultation with CDFW and USFWS that describes the compensatory mitigation that shall be provided at a minimum 1:1 ratio to offset permanent and temporary impacts on desert tortoise habitat. The CMP shall describe the following:
- A description of desert tortoise and habitat types for which compensatory mitigation is being ~~provided~~ proposed.
 - A description of the methods used to identify and evaluate mitigation options.
 - Options may include one or more of the following:
 - Purchase of mitigation credits from an agency-approved mitigation bank (e.g., Mojave Desert Tortoise Conservation Bank or other CDFW/USFWS approved mitigation bank).
 - Incidental take permit coverage through an existing agency general conservation plan (e.g., USFWS Desert Tortoise General Conservation Plan).
 - Protection of desert tortoise habitat through acquisition ~~of fee title or~~ and a conservation easement and funding for long-term management of the habitat. Endowment funds shall be transferred to the applicable agency or entity approved by CDFW and USFWS and the conservation easements shall be held by an entity approved in writing by the applicable regulatory agency; for example, CDFW and USFWS. In circumstances where BNSF protects habitat through a conservation easement, the terms of the conservation easement shall be subject to approval of the applicable regulatory agencies, such as CDFW and USFWS and the conservation easement shall identify applicable

regulatory agencies as third-party beneficiaries with a right of access to the easement areas.

- ~~Payment to an existing in-lieu fee program.~~
- A summary of the estimated direct permanent and temporary impacts on desert tortoise and desert tortoise habitat.
- A description of the process that is proposed to be used to confirm impacts. Actual impacts on desert tortoise and desert tortoise habitat could differ from estimates. Should this occur, adjustments shall be made to the proposed compensatory mitigation in consultation with CDFW/USFWS.
- ~~Adjustments to impact estimates and compensatory mitigation shall occur in the following circumstances:~~
- ~~Impacts on desert tortoise (typically measured as habitat loss) are reduced or increased as a result of changes in BIG design;~~
- ~~Pre-construction site assessments indicate that desert tortoise habitat features are absent (e.g., because of errors in land cover mapping or land cover conversion);~~
- ~~The desert tortoise habitat is determined to be unoccupied based on negative species surveys; or~~
- ~~Impacts initially categorized as permanent qualify as temporary impacts.~~
- ~~An overview of the strategy for mitigating effects on desert tortoise. The overview shall include the ratios to be applied to determine mitigation levels and the resulting mitigation totals.~~
- ~~A description of habitat restoration or enhancement Projects, if any, that would contribute to compensatory mitigation commitments.~~
- ~~A description of the success criteria that shall be used to evaluate the performance of habitat restoration or enhancement Projects, and a description of the types of monitoring that shall be used to verify that such criteria have been met.~~
- ~~A description of the management actions that shall be used to maintain the habitat on the mitigation sites, and the funding mechanisms for long term management, if applicable.~~
- ~~A description of adaptive management approaches, if applicable, that shall be used in the management of species habitat.~~
- ~~A description of financial assurances that shall be provided to demonstrate that the funding to implement mitigation is assured.~~

Final compensatory mitigation shall be determined in consultation with CDFW and USFWS as a part of the CESA ITP and federal take authorization review and approval process. The CMP shall be submitted to the City, CDFW, and USFWS.

Pages 5.4-80 and 5.4-81 have been revised via the **Final EIR Appendix 3-2: LeConte's Thrasher and Bendire's Thrasher Regulatory Status Change Errata**, as mentioned above, and here as follows:

MM BIG BIO-17	<u>Southwestern Willow Flycatcher, and Western Yellow-billed Cuckoo, and LeConte's Thrasher Construction Requirements.</u> Construction activities within suitable willow flycatcher, and western yellow-billed cuckoo, <u>and LeConte's thrasher</u> nesting habitat should occur outside of the breeding season (generally May 1 through August 31 <u>for southwestern willow flycatcher and western yellow-billed cuckoo and late January to early June for LeConte's thrasher</u>) when feasible. If construction activities must occur within the breeding season, any nesting habitat shall be removed prior to the breeding season. If construction activities must occur within 500 feet of suitable riparian <u>nesting</u> habitat (i.e., near the Mojave River) and within the nesting season for willow flycatcher, and western yellow-billed cuckoo, <u>and LeConte's thrasher</u>, pre-construction surveys shall be conducted prior to construction activities that occur within 500 feet of suitable habitat. Results shall be provided to the City. A Species-Specific biological monitor shall conduct preconstruction surveys for Willow Flycatcher, and western yellow-billed cuckoo, <u>and LeConte's thrasher</u> within 30 days prior to start of construction activities that occur within 500 feet of suitable habitat. The Species-Specific biological monitor shall hold a USFWS recovery permit and be authorized by the agency to conduct pre-construction willow flycatcher surveys and/or western yellow-billed cuckoo surveys. <u>The Species-Specific BM shall also conduct the pre-construction LeConte's thrasher survey in general accordance with the guidelines provided by the Desert Thrasher Working Group (2018, 2024) or other acceptable survey methodology that allows for thorough detection of nests (if any).</u> If <u>southwestern</u> willow flycatcher, or western yellow-billed cuckoo, <u>and/or LeConte's thrasher</u> is documented within the BIG footprint during pre-construction surveys, no work shall occur within a 500-foot buffer of the nest and consultation with USFWS and CDFW shall occur <u>(as applicable to the species under their jurisdiction)</u> and additional measures may be implemented to avoid take. Federal and State Incidental Take Permits may be required for proposed actions that are determined to have adverse effects on willow flycatcher, or western yellow-billed cuckoo, <u>and/or LeConte's thrasher</u>. If <u>southwestern</u> willow flycatcher, or western yellow-billed cuckoo, <u>and/or LeConte's thrasher</u> nesting behavior and/or breeding territories are documented within 500 feet of construction activities during preconstruction surveys and construction activities must proceed during the nesting season, no work shall occur within a 500-foot buffer of the nest and construction noise shall be monitored and minimized per a Wildlife Noise Study and Monitoring Plan to be implemented with designated biologist oversight. Prior to and during construction, noise monitoring shall be conducted within suitable riparian <u>nesting</u> habitat contiguous with occupied territories at the vegetation limit closest to impact area. Noise limits are only applicable to the occupied nest habitat and suitable contiguous riparian <u>nesting</u> vegetation determined to be part of the nesting territory. Noise monitoring shall be conducted by a qualified noise specialist in coordination with a SpeciesSpecific biological monitor. While conducting noise monitoring, the
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biological monitor shall monitor the active nests to allow normal breeding behaviors to not be indirectly impacted by noise from construction activities.

Construction noise levels shall not exceed pre-construction ambient levels or a 70 dBA hourly average, whichever is greater, in habitat occupied by nesting willow flycatcher, ~~and~~ western yellow-billed cuckoo, and LeConte's thrasher unless authorized by the appropriate regulatory authorities (i.e., CDFW and or USFWS). Construction activities that exceeded noise limits in the nest territory would be adjusted to reduce noise to below pre-construction ambient levels, a 70dBA hourly average, or the agency-approved threshold. Alternatively, noise attenuation measures shall be implemented to reduce noise within occupied willow flycatcher, ~~and/or~~ western yellow-billed cuckoo, and/or LeConte's thrasher breeding territories to below the limit. Measures may include installation of sound barriers or walls, phasing of equipment use, changes in scheduling, and temporary avoidance of certain portions of the impact area. Noise monitoring shall be conducted when attenuation measures are implemented to document a successful or unsuccessful reduction in noise to below the established threshold. If such adjustments or measures are not feasible and noise levels are found to result in average hourly noise levels greater than 70 dBA or pre-construction ambient levels, whichever is greater, work would be postponed until after the breeding season or after the willow flycatcher, ~~and/or~~ western yellow-billed cuckoo, and/or LeConte's thrasher fledglings are no longer dependent on the affected breeding territory, as confirmed by a qualified biologist unless authorized by the appropriate regulatory authorities (i.e., CDFW and or USFWS). A noise level verification report shall be submitted by the implementing entity to CDFW and or USFWS every two weeks during work that required noise monitoring for listed or candidate species as described above.

Page 5.4-79 has been revised as follows:

MM BIG BIO-34

Permanent Security Fencing. Prior to final construction design, the designated biologist shall review and approve the fencing plans for portions of the BIG Specific Plan Area that are adjacent to natural habitats to confirm the fences provide a sufficient barrier to restrict wildlife from entering the BIG Specific Plan area.

The permanent security fencing shall be enhanced with a barrier (e.g., fine-mesh fencing) that extends at least 12 inches below ground and 12 inches above ground to prevent special status reptile and mammal species, including desert tortoise, from moving through or underneath the fencing and gaining access to the BIG Specific Plan area. Where fencing is proposed between natural habitats and roadway right-of-way, at the 12-inch depth of the below-grade portion fence apron, the barrier shall extend or be bent at an approximately 90-degree angle and oriented outward from the roadway right-of-way a minimum of 12 inches to prevent fossorial (burrowing) mammals and reptiles from digging or tunneling below the security fence and gaining access to BIG. A climber barrier (e.g., rigid curved or bent overhang) shall be installed at the top of the apron to prevent reptiles and mammals from climbing over the apron.

The designated biologists shall confirm that the selected apron material and climber barrier do not cause harm, injury, entanglement, or entrapment to wildlife

species. The implementing entity shall provide quarterly inspection and repair of the fencing.

The specific design and method for installation method of an apron or barrier may vary as required by regulatory permits issued under the FESA or CESA. Prior to start of operations then quarterly, staff under the direction of biological monitors shall field-inspect the fencing that is adjacent to natural habitats and confirm appropriate installation and the implementing entity shall carry out repair of the fencing, as needed. Fencing plan review and field inspection shall be documented in a memorandum from the designated biologists and provided to the City.

Pages 5.4-84 and 5.4-85 have been revised as follows:

MM BIG BIO-20 Swainson's Hawk Construction Requirements. Swainson's hawk nest surveys shall be conducted during the breeding season immediately prior to start of construction and provided to the City and CDFW ~~for the breeding season immediately prior to start of construction~~. Surveys shall be conducted within the ~~annual~~ area of BIG construction footprint plus a 0.5-mile buffer by agency-approved Species-Specific biological monitors following the protocol outlined in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee, 2000). The Species-Specific biological monitor shall be familiar with Swainson's hawk identification and life history and be approved to conduct surveys by CDFW.

If active Swainson's hawk nests are found during nest surveys, the Species-Specific biological monitor shall establish an appropriate avoidance buffer around each nest in consultation with CDFW based on work activities proposed. The avoidance buffer will remain in place until a Species-Specific biological monitor confirms that the Swainson's hawk young have fledged or the nest is no longer active. If full avoidance of active Swainson's hawk nest(s) cannot be achieved, the Project Proponent shall obtain an ITP.

Pages 5.4-85 and 5.4-86 have been revised as follows:

MM BIG BIO-21 Western Burrowing Owl Construction Requirements. No less than 14 days prior to the start of construction mobilization activities within suitable habitat, a qualified Species-Specific BM shall conduct pre-construction surveys for burrowing owl and/or occupied nest burrows within the limits of the BIG construction footprint plus a 500-foot buffer, according to the 2012 Staff Report on Burrowing Owl Mitigation.

Additionally, time lapses between BIG construction within suitable habitat shall trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance. The pre-construction surveys shall be repeated if there is a time lapse between construction activities of 14 days or more within previously surveyed areas. All surveys shall be conducted in accordance with the most current CDFW survey methods.

If burrowing owl or active burrows, or sign (e.g., molted feathers, cast pellets, prey remains, eggshell fragments, decoration, or excrement) are not observed during

the pre-construction surveys, no additional conditions shall be required to avoid direct impacts on burrowing owl within the surveyed areas.

If burrowing owl is documented during pre-construction surveys, occupied burrowing owl burrows shall not be disturbed during the nesting season (February 1 through August 31) ~~unless an agency and all impacts to burrowing owl shall be fully avoided until a CDFW~~ approved Species-Specific BM verifies through non-invasive methods that either the birds have abandoned or failed nesting attempts, or that juveniles from the occupied burrows are foraging independently and capable of independent survival. A Species-Specific BM shall establish exclusion buffers to protect active nests in accordance with the recommendations included in CDFW's *Staff Report on Burrowing Owl Mitigation* (2012 or most recent version). A qualified Species-Specific BM shall conduct ongoing monitoring during construction activities.

If burrowing owl is observed during the non-breeding season (September 1 through January 31) or confirmed to not be nesting during pre-construction surveys, a non-disturbance buffer between construction activities and the occupied burrow shall be installed by a qualified Species-Specific BM in accordance with the recommendations included in the *Staff Report on Burrowing Owl Mitigation* (CDFW, 2012 or most recent version).

The implementing entity shall submit at least one burrowing owl pre-construction survey report for each surveyed area to the satisfaction of CDFW to document compliance with BIG's western burrowing owl MMs. Survey reports shall also be submitted to the City.

If full avoidance is not possible, either directly or indirectly, an ITP under CESA shall be obtained from CDFW and a Burrowing Owl Plan shall be prepared and submitted for review and approval by CDFW. The plan shall also be submitted to the City. Once approved by CDFW, the plan shall be implemented in conjunction with the CESA ITP to relocate non-breeding burrowing owls from BIG. The plan shall detail methods for relocation of burrowing owls and provide guidance for the monitoring and management of the replacement burrow sites and associated reporting requirements. Details of the Burrowing Owl Plan shall be determined in consultation with CDFW, and is anticipated to include, but may not be limited to, the following:

- Proposed avoidance, and monitoring actions.
 - Number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed.
 - Seasonal restrictions of relocation efforts - Relocation efforts shall occur during the non-breeding season (September 1 through January 31). Relocation during the breeding season (February 1 through August 31) may only occur if a qualified biologist determines that the bird have not begun egg-laying, or that the fledged juveniles are foraging independently and are capable of independent survival.

- Climatic restrictions of relocation efforts - Relocation shall not occur ~~when~~ during extreme temperatures ~~exceed 95 degrees Fahrenheit~~ or that may cause mortality during rain or high wind.
- Monitoring schedule and length - Full-time monitoring shall occur for at least two weeks following passive relocation and periodically thereafter or as required by the CESA ITP.

Pages 5.4-87 and 5.4-88 have been revised as follows:

MM BIG BIO-22 Western Burrowing Owl Compensatory Mitigation. Prior to start of construction mobilization activities, the implementing entity shall prepare a Compensatory Mitigation Plan (CMP) in consultation with CDFW that describes the compensatory mitigation that shall be provided at a minimum 1:1 ratio to offset permanent and temporary impacts on burrowing owl habitat. The CMP shall describe the following:

- A description of burrowing owl and habitat types for which compensatory mitigation is being ~~provided~~ proposed.
- A description of the methods used to identify and evaluate mitigation options. Options may include one or more of the following:
 - Purchase of mitigation credits from ~~a CDFW-an agency-approved mitigation bank (e.g., Mojave Desert Tortoise Conservation Bank or other CDFW approved mitigation bank).~~
 - Protection of burrowing owl habitat through ~~acquisition of fee title or a~~ conservation easement and funding for long-term management of the habitat. Endowment funds shall be transferred to the applicable agency or entity and conservation easements shall be held by an entity approved in writing ~~by the applicable regulatory agency CDFW. In circumstances where implementing entity protects habitat through a conservation easement, t~~ CDFW. ~~The terms of the conservation easement shall be subject to approval of the applicable regulatory agencies CDFW, and the conservation easement shall identify applicable regulatory agencies CDFW as third-party beneficiaries~~ The terms of the conservation easement shall be subject to approval of the applicable regulatory agencies CDFW, and the conservation easement shall identify applicable regulatory agencies CDFW as third-party beneficiaries
 - ~~Payment to an existing in-lieu fee program.~~
- A summary of the estimated direct permanent and temporary Project impacts on burrowing owl and burrowing owl habitat.
- A description of the process that ~~shall~~ is proposed to be used to confirm Project impacts. Actual Project impacts on burrowing owl and burrowing habitat could differ from estimates. Should this occur, ~~adjustments shall be made to the proposed compensatory mitigation in consultation with CDFW. the Permittee shall be responsible for providing compensatory mitigation for final Project impacts.~~

The burrowing owl CMP and mitigation requirements shall be submitted to the City and CDFW for review. If all or any portion of the acquired desert tortoise and/or

Mojave fringe-toed lizard compensatory mitigation (**MM BIG BIO-16** and **MM BIG BIO-24**, respectively) or other required compensatory mitigation lands/credits meet the criteria for burrowing owl compensatory mitigation, it may be used to fulfill that portion of the obligation for burrowing owl compensatory mitigation requirements. Final compensatory mitigation for burrowing owl shall be determined in consultation with CDFW as a part of the CESA ITP review and approval process.

Page 5.4-88, second to last paragraph, has been revised as follows:

Indirect impacts to Mojave fringe-toed lizard from dune habitat destruction or degradation could occur. Increased noise, vibration, and dust generated by construction equipment could cause previously suitable habitat to become unsuitable. However, suitable habitat for Mojave fringe-toed lizard exists in the areas surrounding the BIG footprint. ~~Specifically, BIG would place an area comprising approximately 500 feet on either side of the Mojave River within the BIG footprint under a conservation easement. A~~ conservation easement would be established within the Mojave River buffer, comprising 545.75 acres on 13 lots. Refer to Figure 3-5 for a depiction of the Mojave River buffer. This conserved area would provide suitable, adjacent Mojave fringe-toed lizard habitat that individuals potentially disturbed by construction activity could access. However, indirect impacts would remain potentially significant and would require mitigation.

Page 5.4-90, second paragraph, has been revised as follows:

American Beaver. One American beaver was incidentally observed swimming upstream in the Mojave River near the BIG footprint. No other American beaver sign, including tracks, cut vegetation, lodges, or dams, were observed. The species is not anticipated to dwell within the section of the Mojave River immediately adjacent to BIG since the river does not contain permanent water throughout the year. ~~Further, BIG would place an area comprising approximately 500 feet on either side of the Mojave River within the BIG footprint under a conservation easement. A~~ conservation easement would be established within the Mojave River buffer, comprising 545.75 acres on 13 lots. Refer to **Figure 3-5** for a depiction of the Mojave River buffer. This conserved area would provide a buffer between where American beaver would be expected to occur (i.e., within the Mojave River) and BIG construction activities. However, should an individual be present during BIG construction activities, BIG construction could result in direct impacts to American beaver through harassment, injury, and/or death. Increased noise, vibration, and dust generated by construction equipment could also result in indirect impacts related to habitat disturbance. Indirect impacts would be potentially significant and would require mitigation.

Pages 5.4-89 and 5.4-90 have been revised as follows:

MM BIG BIO-24 Mojave Fringe-toed Lizard Compensatory Mitigation. Prior to construction mobilization activities, the implementing entity shall prepare a compensatory mitigation plan for direct impacts on Mojave fringe-toed lizard and 1,009.1 acres

of occupied dune habitat (active desert dunes, stabilized and partially stabilized dunes, disturbed stabilized and partially stabilized dunes). Dune habitat shall be mitigated in-kind through the acquisition and preservation of dune habitat suitable for Mojave fringe-toed lizard at a minimum $\underline{12}$:1 ratio to offset permanent and temporary impacts on Mojave fringe-toed lizard habitat.

Land selected for compensatory mitigation must be:

- Deposits of aeolian or fine windblown sands associated with dunes, washes, hillsides, margins of dry lakes, and/or sandy hummocks within the Mojave Desert;
- Occupied with Mojave fringe-toed lizard or with potential for connectivity to lands occupied by Mojave fringe-toed lizard;
- Prioritized within the Mojave River Watershed;
- Near land currently under or planned for protection; and
- Not characterized as highly disturbed.

A long-term management plan and endowment for land acquisition, preservation, and management in perpetuity shall be established by a qualified land manager/conservancy.

All or any portion of the compensatory mitigation lands/credits acquired for impacts on other sensitive resources (i.e., aquatic resources or sensitive vegetation communities) may also be used to fulfill compensatory mitigation requirements for Mojave fringe-toed lizard. For example, compensatory mitigation pursuant to **MM BIG BIO-16** and **MM BIG BIO-22** may also be used to fulfill compensatory mitigation requirements for Mojave fringe-toed lizard if acquired mitigation lands/credits meet the criteria above. Final compensatory mitigation for Mojave fringe-toed lizard shall be determined in coordination with CDFW.

Pages 5.4-90 and 5.4-91 have been revised as follows:

MM BIG BIO-25 **Dry Season Construction.** Construction within the Mojave River corridor shall be restricted to the dry season when there are no observable surface flows within 1,000 feet of the BIG construction footprint, to the extent feasible.

If construction must occur outside of the dry season, biological monitors shall conduct daily pre-construction sweeps within 250 feet of direct impact areas occurring within the Mojave River corridor, such as construction associated with the Hinkley Road Bridge. If American beaver is observed, construction cannot be initiated until the species is able to disperse from the area. Construction activities may resume after a biological monitor confirms American beaver is no longer present within direct and indirect impact areas. If impacts to American beaver are unavoidable, the Project Proponents shall not commence Project activities at the locations where American beaver are found and contact CDFW immediately within 24 hours to discuss proper avoidance, minimization, and mitigation.

Pages 5.4-91 and 5.4-92 have been revised as follows:

MM BIG BIO-26 **Ringtail, American Badger and Desert Kit Fox Construction Requirements.** Prior to start of construction mobilization activities within suitable habitat, biological monitors familiar with ringtail, American badger, and desert kit fox shall conduct surveys within the limits of the BIG construction footprint for occupied ~~natal~~ dens. The survey(s) shall occur no more than 48 hours prior to start of ground-disturbing activities in suitable habitat for ringtail, American badger, and desert kit fox within the potential impact footprint. Survey results shall be provided to CDFW and the City.

If ringtail, American badger or desert kit fox ~~natal~~ dens are documented within the survey area, a biological monitor shall establish a no-work exclusion buffer around the den and ~~natal~~ dens shall not be disturbed until a biological monitor verifies through noninvasive methods that either the den is no longer occupied, or that juveniles from a ~~the~~ natal den are foraging independently and capable of independent survival and not dependent on the den.

A biological monitor shall monitor the ~~natal~~ den during construction activities approximately every other day if it is a natal den or weekly otherwise. The definitive frequency and duration of monitoring shall be dependent upon the age and behavior of the ringtail, American badger, or desert kit fox pups and the efficacy of the exclusion buffers, as determined by a designated biologist or biological monitor and in coordination with CDFW. Passive relocation methods may be employed for non-natal dens that cannot be avoided by construction activities. For individual, non-natal badger and kit fox dens, a plan for passive relocation, burrow monitoring, and excavation of vacated burrows will be developed in coordination with CDFW.

Page 5.4-95 has been revised as follows:

MM BIG BIO-34 **Permanent Security Fencing.** Prior to final construction design and upon securing a CESA ITP for CESA species and a USFWS BO for federally listed species, the designated biologist shall review and approve ~~submit~~ the fencing plans for ~~portions~~ of the BIG Specific Plan Area to CDFW for review and consultation that are adjacent to natural habitats to confirm the fences provide a sufficient barrier to restrict wildlife from entering the BIG Specific Plan area.

The permanent security fencing shall be enhanced with a barrier (e.g., fine-mesh fencing) that extends at least 12 inches below ground and 12 inches above ground to prevent special status reptile and mammal species, including desert tortoise, from moving through or underneath the fencing and gaining access to the BIG Specific Plan area. Where fencing is proposed between natural habitats and roadway right-of-way, at the 12-inch depth of the below-grade portion fence apron, the barrier shall extend or be bent at an approximately 90-degree angle and oriented outward from the roadway right-of-way a minimum of 12 inches to prevent fossorial (burrowing) mammals and reptiles from digging or tunneling below the security fence and gaining access to BIG. A climber barrier (e.g., rigid curved or bent overhang) shall be installed at the top of the apron to prevent reptiles and mammals from climbing over the apron.

The designated biologists shall confirm that the selected apron material and climber barrier do not cause harm, injury, entanglement, or entrapment to wildlife species. The implementing entity shall provide quarterly inspection and repair of the fencing.

The specific design and method for installation method of an apron or barrier may vary as required by regulatory permits issued under the FESA or CESA. Prior to start of operations then quarterly, biological monitors shall field-inspect the fencing that is adjacent to natural habitats and confirm appropriate installation and the implementing entity shall carry out repair of the fencing, as needed. Fencing plan review and field inspection shall be documented in a memorandum from the designated biologists and provided to CDFW and the City.

Page 5.4-97, third paragraph, has been revised as follows:

BIG includes the preservation of approximately ~~500 feet on either side of the Mojave River under a conservation easement.~~ 545.75 acres on 13 lots within the Mojave River buffer. **Figure 3-5 depicts the Mojave River buffer.** This area contains dune habitat and the preservation of the area would lessen BIG's potential impacts to sensitive habitat. However, impacts would remain potentially significant and require mitigation.

Pages 5.4-104 and 5.4-105 have been revised as follows:

MM BIG BIO-32: **Wildlife Crossings.** ~~With BIG implementation As part of BIG construction,~~ a wildlife crossing shall be constructed at the Unnamed Stream (Milepost 12.5) below the BNSF tracks ~~and Main Street~~ to facilitate wildlife movement between areas of natural habitat on either side of the railway ~~and road~~. This ~~railway crossing~~ feature shall be placed alongside four smaller culverts constructed to convey water: three 36-inch and one 48-inch diameter culverts. The wildlife crossing shall be an 84-inch diameter culvert to facilitate passage beneath the rail right-of-way, which would connect open space east of the railway to the Mojave River, thereby maintaining access to existing linkages (i.e., the Rank 4/5 ACE, California Desert Linkage Network, and CEHC Potential Riparian Connection). The wildlife crossing shall also include a dedicated underpass beneath National Trails Highway to facilitate movement of wildlife from habitat south of the roadway to the culvert under the BNSF tracks, situated just south of the Mojave River corridor.

Design features for facilitating wildlife culvert usage shall include installing inlet and outlet points flush with the ground and maintaining one to six inches of native soil along the bottom of the culvert. The wildlife crossing shall be designed to function as all-weather wildlife passage to the extent feasible and shall be sized and configured to exceed minimum hydraulic conveyance requirements, or be located separately from primary hydraulic structures, as feasible, to ensure suitability for wildlife movement during both dry and wet conditions. Final sizing, placement, and configuration of the wildlife crossing shall be refined during final engineering design in coordination with the CDFW and other applicable agencies.

A long-term management plan for the wildlife crossing shall be submitted to the City of Barstow for review and approval prior to start of vegetation removal and/or mass grading. The long-term management plan shall include:

- Additional measures to encourage wildlife use include, but are not limited to, maintenance or restoration of native vegetation near, but not obstructing, culvert ~~mouths~~ or crossing entrances, and invasive plant removal.
- Routine clearing of debris and trash from the ~~culvert~~ wildlife crossings shall be completed on a quarterly basis and following large storm events to allow ample space is to remain available for wildlife travel.
- Access points to the ~~culvert~~ wildlife crossings shall contain rocks or woody refuge sites to attract subterranean wildlife and structural cover elements shall be provided within the structure, as feasible, to facilitate movement of small and medium mammals and reptiles.
- Habitat quality (i.e., the percentage of invasive versus native plants and level of anthropogenic degradation) within a 200-meter radius surrounding the ~~culvert access points~~ crossing entrances shall be monitored quarterly by staff under the direction of a qualified biologist to confirm wildlife corridor functionality for the first two years following construction, with monitoring frequency and duration subject to adjustment based on observed conditions.
- A mitigation entity responsible for the implementation of the long-term management plan.

As part of BIG implementation, the existing Lenwood Channel would be widened per the Project Description as described in the Draft EIR. Enhancements to the channel shall be incorporated to maintain and support wildlife movement through the eastern portion of the project site toward the Mojave River corridor. A long-term management plan for the enhancements shall be prepared and submitted to the City of Barstow for review and approval prior to construction. The plan would include the following, to the extent feasible given site constraints:

- Installation and maintenance of fencing along the channel to guide wildlife through the channel while restricting entry into hazardous areas within the project footprint.
- Installation of native vegetation in select locations along the channel edges to provide cover, where practicable.
- Placement of structural cover features, such as rocks or woody debris, where feasible, to provide refuge for small and medium mammals and reptiles.
- Periodic clearing of debris and trash to maintain passable conditions for wildlife, particularly following significant storm events.
- Monitoring of conditions to assess functional wildlife passage.
- Assignment of a responsible mitigation entity to oversee implementation of the long-term management plan to be developed in accordance with the overarching objectives described above.

Section 5.5: Cultural Resources

Page 5.5-47 has been revised per the request of the tribes, as follows:

California Health and Safety Code § 7050.5, State CEQA Guidelines § 15064.5, and PRC § 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Specifically, California Health and Safety Code § 7050.5 requires that if human remains are discovered on a project site, disturbance of the site shall stop and necessary steps to ensure the integrity of the immediate area are taken until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in PRC § 5097.98. If the coroner determines that the remains are not subject to their authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, the coroner must contact, by telephone within 24 hours, the Native American Heritage Commission, who would, in turn, notify the person the NAHC identifies as the Most Likely Descendent (MLD) of any human remains. Further actions would be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the landowner would, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Although soil-disturbing activities associated with development in accordance with the proposed General Plan could result in the discovery of human remains, compliance with existing law would ensure that the remains would be treated appropriately and that there would be no significant impacts to human remains. Additionally, projects shall comply with the process identified in ~~MM-BIG-CUL-8~~ MM GP CUL-5 included in ~~Impact 5.5-3: BIG~~ below.

Therefore, following compliance with the regulatory requirements noted above and ~~MM-BIG-CUL-8~~ MM GP CUL-5, the proposed General Plan's potential impacts concerning disturbance to human remains would be less than significant.

Impact 5.5-3: General Plan: Level of Significance Before Mitigation: Potentially Significant Impact.

~~**Impact 5.5-3: General Plan: Mitigation Measures:** See MM-BIG-CUL-8 below.~~

Mitigation Measures

MM GP CUL-5 Inadvertent Discoveries of Human Remains. For discoveries of Native American human remains, PRC § 5097.98 and HSC § 7050.5 shall be followed. If human remains are encountered, all ground-disturbing activities shall halt within 100 feet of the find. A Sensitive Resource Area (SRA) shall be established around the site plus the 100 foot buffer via the placement of a physical barrier/demarcation, such as fencing or caution tape. The human remains, along with any associated grave goods and associated burial and sacred items, shall remain in place until the procedures as outlined in PRC § 5097.98 and HSC § 7050.5 are completed. No photographs of the remains or associated funerary objects shall be taken unless specifically requested by the County Coroner as a part of the legal process.

Impact 5.5-3: General Plan: Level of Significance After Mitigation: Less than Significant With Mitigation Incorporated.

Page 5.5-49 has been revised as follows:

For **Impact 5.5-1: General Plan** and **Impact 5.5-2: General Plan**, MM GP CUL-1 through MM GP CUL-4 would reduce potential impacts associated with historical and unique archaeological resources. However, if a proposed project would result in the demolition, significant alteration, and/or destruction of a resource, it is possible it cannot be mitigated to a less than significant level. Therefore, impacts to historical and unique archaeological resources would be significant and unavoidable.

For Impact 5.5-3: General Plan, MM GP CUL-5 and implementation of applicable laws, including CCR § 15064.5(e), HSC § 7050.5 through § 7055, and PRC § 5097.98, would reduce potential construction and operational impacts to human remains to a less than significant level.

Section 5.6: Energy

Page 5.6-36 has been revised as follows:

Table 3.2-6: Projected Annual BIG Energy Consumption During Operations		
Project Source	Annual Operational Energy (Unmitigated)	Annual Operational Energy (Mitigated)
ELECTRICITY CONSUMPTION		
Electricity Usage	GWh	
Electricity Usage ¹	145	145
Water Electricity ²	0.1	0.1
Electricity Provided by Solar ³	-61	-91
Total Electricity	85	53
FUEL CONSUMPTION⁴		
2028		
Diesel Use	Gallons	
On-Road Truck Trips	1,856,101	1,856,101
Locomotives	3,961,086,935,580	3,961,086,935,580
Off-Road Equipment	5,100,499	197,092
Reduced On-Road Truck Trips ⁵	-9,375,961	-9,375,961
Operational Diesel Total	1,541,726,931,219	-3,361,680,027,813
Gasoline	Gallons	
On-Road Passenger Vehicle Trips	4,847,279	4,847,279
Off-Road Equipment	37,096	14,861
Operational Gasoline Total	4,884,375	4,862,140
2033		
Diesel Use	Gallons	

Table 3.2-6: Projected Annual BIG Energy Consumption During Operations		
Project Source	Annual Operational Energy (Unmitigated)	Annual Operational Energy (Mitigated)
On-Road Truck Trips	2,335,066	2,335,066
Locomotives	4,406,417 <u>11,525,607</u>	4,406,417 <u>11,525,607</u>
Off-Road Equipment	5,100,499	214,966
Reduced On-Road Truck Trips	-12,317,001	-12,317,001
Operational Diesel Total	475,020 <u>6,44,170</u>	5,360,553 <u>1,758,637</u>
Gasoline	Gallons	
On-Road Passenger Vehicle Trips	6,270,303	6,270,303
Off-Road Equipment	37,096	16,808
Operational Gasoline Total	6,307,399	6,287,111
2048		
Diesel Use	Gallons	
On-Road Truck Trips	2,914,302	2,914,302
Locomotives	6,484,258 <u>14,659,821</u>	6,484,258 <u>14,659,821</u>
Off-Road Equipment	5,142,498	242,028
Reduced On-Road Truck Trips	-14,416,337	-14,416,337
Operational Diesel Total	124,721 <u>8,300,284</u>	4,775,749 <u>3,399,814</u>
Gasoline	Gallons	
On-Road Passenger Vehicle Trips	7,190,103	7,190,103
Off-Road Equipment	53,710	21,946
Operational Gasoline Total	7,243,814	7,212,049
Notes:		
1. Electricity usage is BIG specific consumption provided by 1898 & Co.		
2. Water conveyance electricity based on CalEEMod Default data.		
3. Unmitigated solar includes electricity offset by proposed solar farm and rooftop solar required by code. Mitigated solar includes combined offsets provided by proposed solar farm and rooftop solar and well as additional rooftop solar required by MM BIG EN-1 .		
4. Countywide fuel consumption data based on EMFAC2021 projections for each analysis year.		
5. Reductions in fuel consumption reflected in the unmitigated condition associated with reduced nationwide truck miles traveled, use of dedicated Tier 4 trains to transport containers between the Ports and BIG's intermodal facility, Tier 4 switcher locomotives, use of renewable diesel, and use of electric cargo handling equipment.		

Page 5.6-41 has been revised as follows:

BIG's operational diesel fuel consumption would be associated with heavy-duty truck hauling trips, rail yard equipment, line haul and switcher locomotives, and emergency diesel generators. BIG would incorporate the use of renewable diesel and electric cargo-handling equipment,) and comply with applicable laws, orders, and regulations. Additionally, BIG would transport almost all containers with trains instead of heavy-duty trucks, which would substantially reduce ~~eliminate almost all~~ truck trips and truck miles traveled (TMT). The annual TMT added and removed from the national roadway network by BIG are shown in **Table 5.6-15: Annual Net Truck Miles Traveled Removed from National Network by BIG**. As previously identified in **Table 5.6-13**, increases in diesel fuel usage attributable to locomotives would be completely offset in 2028 and 2033 ~~a net decrease as a result of BIG~~, due to removing hundreds of millions of truck miles as identified in **Table 5.6-15**.

Page 5.6-42 and 5.6-43 have been revised as follows:

BIG's estimated unmitigated annual diesel fuel consumption during operations would result in an increase of approximately ~~1.56.9~~ million gallons in 2028, ~~a reduction an increase of approximately 0.56.6~~ million gallons in 2033, and an increase of approximately ~~0.18.3~~ million gallons in 2048 (accounting for the reduction in truck miles) (see **Table 5.6-12**). It is noted that operational diesel fuel consumption is expected to decline over time as, among other things, zero emissions and near zero emissions heavy-duty trucks become more available and a portion could be incorporated into the heavy-duty truck fleets serving BIG. However, no credit for potential future reductions in operational diesel fuel consumption is incorporated into this analysis, as discussed further below.

Page 5.6-43 has been revised as follows:

While BIG would consume a considerable amount of diesel fuel, it is noted that BIG's objective is to convert existing heavy-duty truck trips to rail trips, ~~thereby reducing overall nationwide diesel fuel consumption~~. As discussed in **Section 5.17 Table 5.6-15**, BIG would remove approximately 58,130,956 annual truck miles in Opening Year 2028, approximately 76,365,405 annual truck miles in Interim Year 2033, and approximately 89,381,289 annual truck miles in Horizon Year 2048 from the California network.

BIG would include mitigation measures to minimize diesel fuel (e.g., use of renewable diesel rubber-tired gantry cranes [**MM BIG AQ-8**]). As noted above, the use of renewable diesel would improve fuel economy and would not increase demand for conventional non-renewable diesel fuel. BIG's estimated net mitigated annual diesel fuel consumption during operations would result in ~~net decreases~~increases of approximately ~~3.42.0~~ million gallons in 2028, ~~5.41.8~~ million gallons in 2033, and ~~4.83.4~~ million gallons in 2048 (accounting for the reduction in truck miles). BIG's estimated mitigated diesel fuel consumption during operations would constitute less than one percent of diesel fuel consumption within San Bernardino County and less than 0.2 percent of statewide diesel fuel consumption~~result in net reductions~~. As discussed in Section 3.0: Project Description, BNSF locomotives refuel at the Ports or at Belen, New Mexico and would not require refueling at BIG. Additionally, BIG would result in a net reduction of greenhouse gas emissions with air quality and energy mitigation applied, substantially reduce port and highway congestion, and expedite the transportation of goods from the Ports via rail, the most environmentally efficient way to move freight. Therefore, BIG operations would account for relatively low operational diesel fuel use proportional to County use and would not significantly affect existing diesel fuel supplies or resources, and new capacity or additional sources of diesel fuel are not anticipated to be required.

BIG operations would reduce non-renewable diesel fuel usage by the following:

- Use of renewable diesel
- Use of electric cargo-handling equipment
- Use of zero-emission TRUs
- Convert existing heavy-duty truck trips to rail trips, resulting in a more fuel efficient way to transport goods~~reducing overall (i.e., regional, statewide, and nationwide) diesel consumption~~.

BIG would serve an important role in the movement of goods throughout the state, increase the use of renewable diesel fuel, and reduce ~~on-road diesel fuel consumption~~ by on-road heavy-duty trucks on a regional, statewide, and nationwide basis. The County would not require additional capacity to serve BIG operations. Additionally, as stated above, BIG would help facilitate the conversion of heavy-duty truck trips to train trips, which are more fuel efficient. As such, BIG operations would not result in

wasteful, inefficient, or unnecessary electricity consumption, and would result in a less than significant environmental impact.

Pages 5.6-45 and 5.6-46 have been revised as follows:

MM BIG EN-1 On-Site Renewable Electricity Generation. Prior to the issuance of building permits for intermodal facility structures or transload facilities, BIG shall install on-site rooftop solar generation beyond Title 24 compliance, or approximately 17 megawatts direct current (MWdc) for the total 9 million-square-foot warehouse building area. Solar panel installation shall be phased proportionally with buildout of the Transload Warehouse Center (i.e., on-site solar generation shall generally be distributed equally among future buildings and the total 17 MWdc may not be required less than 9 million square feet are not ultimately developed).

BIG shall ensure solar photovoltaic (PV) panels or other source of renewable energy generation is incorporated into the design based on the maximum solar roof area available. The maximum solar roof area available will be building-specific and dependent on the structural considerations of each building and the ability to maximize the solar zone of each building (as defined in Section 110.10 of the California Energy Code). The solar zone (i.e., the location where solar panels can be installed) shall comply with 2022 California Energy Code, § 110.10, and shall comply with access, pathway, ventilation, and spacing requirements and excluding any skylight area.

The final PV generation facility size is dependent on the maximum solar roof area available and shall be approved by Southern California Edison (SCE). SCE's Rule 21 governs operating and metering requirements for any facility connected to SCE's distribution system. ~~Should SCE limit the off-site electricity export, BIG may utilize a battery energy storage system (BESS) to lower off-site export while maintaining on-site renewable generation to off-set consumption.~~

Each building shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure shall be clearly labeled with noticeable and permanent signage. This mitigation measure applies only to tenant or occupancy permits and not the building shell approvals.

Section 5.8: Greenhouse Gas Emissions

Explanation of BIG Air Quality and Greenhouse Gas Emissions Errata Revisions are provided in **Final EIR Appendix 3-1: Emissions Errata**.

Page 5.8-57 has been revised as follows due to the revised data found in the BNSF Barstow International Gateway Corridor Emissions Model Analysis Errata (CEM Errata) and to correct for typographical errors:

Table 5.8-10: Horizon Year 2048 Proposed General Plan Area GHG Emissions Forecast				
Sector	GHG Emissions			
	Existing (2023) MTCO ₂ e/Yr	Proposed General Plan MTCO ₂ e/Yr	Net Change MTCO ₂ e/yr	Percent Change
GENERAL PLAN COMMUNITY EMISSIONS				
On-Road Transportation ¹	232,465	300,266	67,801	29%
Residential (Natural Gas and Electricity) ^{2,3}	34,168	31,486	-2,682	-8%
Nonresidential (Natural Gas and Electricity) ^{2,3}	28,532	21,229	-7,303	-26%
Solid Waste (Waste Commitment)	8,984	17,958	8,974	100%
Water/Wastewater	1,772	570	-1,202	-68%
Offroad Equipment	4,732	3,360	-1,372	-29%
Refrigerants	15,460	23,812	8,352	54%
Subtotal Community Emissions	326,114	398,681	72,567	22%
Net BIG (California) ^{4,5}	N/A	61,904 <u>62,800</u>	61,904 <u>62,800</u>	N/A
TOTAL COMMUNITY + BIG WITHOUT MITIGATION (CALIFORNIA)	326,114	460,585 <u>461,481</u>	134,471 <u>135,367</u>	41 <u>42</u> %
Exceeds MDAQMD Significance Threshold? (100,000 tons [90,718 metric tons] CO ₂ e)	—	—	Yes	—
Achieves AB 1279 Target	—	No	--	--

Table 5.8-10: Horizon Year 2048 Proposed General Plan Area GHG Emissions Forecast				
Sector	GHG Emissions			
	Existing (2023) MTCO ₂ e/Yr	Proposed General Plan MTCO ₂ e/Yr	Net Change MTCO ₂ e/yr	Percent Change
(48,917 MTCO ₂ e, 85% Reduction from Existing)				
TOTAL COMMUNITY + BIG WITH (CALIFORNIA & NATIONAL)				
Community Emissions	326,114	398,681	72,567	22%
Net BIG Emissions (California & National)	N/A	-30,522 <u>-24,953</u>	-30,522 <u>-24,953</u>	N/A
TOTAL COMMUNITY + BIG	326,114	368,159 <u>373,728</u>	42,045 <u>47,614</u>	13 <u>15</u> %
Notes: () = negative value ¹ On-road transportation includes total VMT and TMT from BIG. ² Based on average national gas use of the five-year (2019 to 2023) usage data provided by Southwest Gas and the CalEEMod, version 2022.1, default natural gas emissions factors. The five-year average is used to account for fluctuations in energy use. ³ Proposed General Plan energy-sector emissions adjusted for increases in population for natural gas use and non-residential square footage for non-residential natural gas use in the proposed General Plan area. ⁴ Because community emissions includes total VMT and TMT from BIG, the BIG emissions exclude the on-road mobile sources, but accounts for the TMT reductions that would occur within California. ⁵ Accounts for emissions associated with offroad equipment used in daily operations, landscaping equipment, rail, refrigerants, in addition to the annual 30-year amortized BIG construction emissions.				
Sources: Appendix 5.3-1 General Plan: Air Quality and Greenhouse Gas Emissions Modeling and Appendix 5.8 BIG-1: Greenhouse Gas Emissions Assessment.				

Pages 5.8-57 and 5.8-58 have been revised as follows to reflect the latest results shown in the revised Table 5.8-10 (see above) due to the revised data found in the BNSF Barstow International Gateway Corridor Emissions Model Analysis Errata:

As shown in Table 5.8-10, implementation of the proposed General Plan, with BIG, would increase GHG emissions by ~~134,471~~135,367 MTCO₂e/yr (~~4142~~ percent) from existing levels without mitigation. This increase would exceed MDAQMD's significance threshold of 90,718 MTCO₂e/yr (100,000 tons/yr). The increase in emissions would primarily be from on-road mobile-source emissions followed by rail emissions. The overall increases in on-road mobile-source emissions would be due to the anticipated growth that would be accommodated under the proposed General Plan. In addition to comparison with the MDAQMD significance GHG threshold, the proposed project is also evaluated on whether it would be consistent with the state's 2045 GHG emissions reduction target of 85 percent below 1990 levels by 2045. As shown in Table 5.8-10, implementation of the proposed General Plan would increase emissions by ~~4142~~ percent and would not achieve the 85 percent reduction target.

Pages 5.8-58 and 5.8-59 have been revised as follows:

MM GP GHG-1 **Climate Action Plan.** The City of Barstow shall prepare a qualified Climate Action Plan (CAP) to align GHG emissions targets in the City with the GHG reduction targets of Assembly Bill (AB) 1279. The qualified CAP shall be completed within 36

months of certification of the General Plan EIR. The qualified CAP shall be updated every five years to ensure the City is monitoring the plan's progress toward achieving the City's greenhouse gas (GHG) reduction target and to require amendment if the plan is not achieving specified level. The update shall consider a trajectory consistent with the GHG emissions reduction goal established under AB 1279 for year 2045, and the latest applicable statewide legislative GHG emission reduction that may be in effect at the time of the CAP. The qualified CAP shall include the following:

- GHG inventories of existing and forecast year GHG levels.
- Tools and strategies for reducing GHG emissions to ensure a trajectory with the long-term GHG reduction and carbon neutrality goal for year 2045 of Assembly Bill 1279. These may include, but are not limited to:
- Encouraging electric vehicle adoption through incentive or education programs.
- Adopting local ordinances or policies that require greater energy efficiency, waste reduction, and water conservation in new construction, additions, and/or alterations.
- Encouraging the construction of solar arrays above parking lots, as well as the integration of solar and other renewable energy generation technologies in new construction, additions, and/or alterations.
- Encouraging the incorporation of energy storage and other grid-harmonizing infrastructure in new construction, additions, and/or alterations.
- Collaborating with Southern California Edison to encourage existing developments to upgrade natural gas equipment (e.g., furnaces) with electric equipment (e.g., heat pumps).
- Ensuring municipal fleets are transitioning to zero-emission vehicles in accordance with CARB's Advanced Clean Fleets regulation.
- Coordination with Southern California Edison to expand battery storage to support renewable energy generation and electric truck charging in the City.
- Plan implementation guidance that includes, at minimum, the following components consistent with the proposed CAP:
- Administration and Staffing
- Finance and Budgeting
- Timelines for Measure Implementation
- Community Outreach and Education
- Monitoring, Reporting, and Adaptive Management
- Tracking Tools

Discretionary projects with applications submitted to the City prior to the adoption of the CAP shall consider measures identified in the California Air Pollution Control

Officer's Association 2024 Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (GHG Handbook).

Page 5.8-59 has been revised as follows:

As shown in ~~Table 5.8-10~~ despite the national TMT reduction associated with the BIG project and implementation of ~~MM GP GHG-1~~ and ~~MM GP GHG-2~~ which requires implementation of ~~BIG AQ-1~~ through ~~MM BIG AQ-14~~ the City would not achieve the GHG reduction targets of AB 1279.

Page 5.8-63 has been revised as follows:

Impact 5.8-1: BIG: Level of Significance Before Mitigation: Potentially Significant Impact.
Impact 5.8-1: BIG Mitigation Measures: No mitigation required. MM BIG AQ-3 through MM BIG AQ-5, MM BIG AQ-8 through MM BIG AQ-10, MM BIG AQ-13, MM BIG AQ-14, and MM BIG EN-1 through MM BIG EN-2.
Impact 5.8-1: BIG Level of Significance After Mitigation: ~~Less than significant impact would occur.~~ Less than Significant with Mitigation Incorporated.

Pages 5.8-96 and 5.8-97 have been revised as follows:

Impact 5.8-2: BIG: Level of Significance Before Mitigation: ~~Less than Significant Impact.~~ Potentially Significant Impact.
Impact 5.8-2: BIG Mitigation Measures: ~~No mitigation is required. Refer to MM BIG AQ-3 through MM BIG AQ-5, MM BIG AQ-8 through MM BIG AQ-10, MM BIG AQ-13, and MM BIG AQ-14, in EIR Section 5.3: Air Quality. Also refer to MM BIG EN-1 and MM BIG EN-2 in Section 5.6: Energy.~~
Impact 5.8-2: BIG Level of Significance After Mitigation: ~~No impact would occur.~~ Less than Significant with Mitigation Incorporated.

Section 5.9: Hazards, Hazardous Materials, and Wildfire

Page 5.9-23 has been revised as follows:

~~Regional Water Quality Control Board Environmental Screening Levels Environmental Screening Levels~~

The Lahontan Regional Water Quality Control Board, which encompasses the City of Barstow, has adopted looks to certain standards developed by the ~~San Francisco Regional Water Quality Control Board–Office of Environmental Health Hazard Assessment (OEHHA), a division of the California Environmental Protection Agency (CalEPA). OEHHA has developed health protective screening values, including the California Human Health Screening Levels (CHHSLs), to support the preliminary evaluation of potential human health risks at sites with environmental contamination. These screening values are based on conservative exposure assumptions and are intended to identify conditions under which further evaluation may be warranted. CHHSLs are advisory in nature and do not constitute regulatory standards or cleanup levels. Additionally, OEHHA CHHSLs have not been comprehensively updated since 2010 and may not reflect the most current toxicity criteria or exposure assumptions used by regulatory agencies.~~

In addition to OEHHA guidance, multiple regulatory agencies in California and at the federal level have developed environmental screening levels (ESLs) or equivalent benchmarks that are commonly used to evaluate soil, groundwater, soil vapor, and indoor air quality. These include:

- Department of Toxic Substances Control (DTSC)–modified Screening Levels, published in Human Health Risk Assessment (HHRA) Note 3, which are based on U.S. Environmental Protection Agency (EPA) Regional Screening Levels but modified to reflect California specific toxicity criteria and exposure assumptions;
- U.S. EPA Regional Screening Levels (RSLs) for Region 9, which provide risk based concentrations for evaluating human health impacts at contaminated sites nationwide; and
- Environmental Screening Levels (ESLs) developed by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), which incorporate conservative land use assumptions and exposure pathways applicable to a wide range of site conditions.

Although these screening criteria are derived using similar risk assessment principles, they differ in their underlying assumptions regarding exposure duration, receptor characteristics, land use, and applicable toxicity values. As a result, screening levels developed by different agencies for the same constituent and environmental medium may vary, with some providing more health protective (i.e., lower) threshold concentrations than others.

~~Specifically, the San Francisco Regional Water Quality Control Board (SFRWQCB) has developed Environmental Screening Levels (ESLs) to assist in assessing the potential threats to human health and the environment and evaluation of potential environmental concerns at contaminated sites. Concentrations of constituents collected at a site in either soil, groundwater, or vapor samples can be directly compared to ESLs, to aid in determining the need for additional sampling efforts or assess level of potential contamination. ESLs have been developed for more than 100 commonly detected~~

~~constituents. They address a full range of concerns encountered at contamination sites and are protective of human health, water quality, and the environment. The ESLs do not constitute policy or regulation, and their use is optional.~~

~~While the ESLs developed by the SFRWQCB are primarily designed for and utilized by that agency, other agencies may also adopt these levels. Since 2019, ESLs have been widely used across California. In addition to SFRWQCB ESLs, other screening levels are used in the State, such as the U.S. EPA's Regional Screening Levels and DTSC modified Screening Levels. The conceptual site model applied to determine the ESLs applies to many sites throughout California. Among the available screening benchmarks, the SFRWQCB ESLs are generally the most current and most conservative, as they are intended to broadly protect sensitive receptors across multiple exposure pathways under a range of site conditions, and they are routinely updated to reflect advances in science and regulatory practice. The SFRWQCB ESLs are widely used throughout California, including by other Regional Water Quality Control Boards, as a conservative screening tool. Generally, ESLs can be used at any site with the agreement of all stakeholders. The Lahontan Regional Water Quality Control Board, which encompasses Barstow, has utilized has adopted the SFRWQCB ESLs (LRWQCB, 2022).~~

~~For purposes of this environmental impact analysis, the SFRWQCB ESLs were used as the primary screening criteria. Use of the most conservative applicable screening levels ensures that the evaluation of potential human health impacts errs on the side of protection and provides a conservative basis for determining whether the project could result in significant impacts under CEQA.~~

Page 5.9-33 has been revised as follows:

Over the long term, BIG's solar farm operation and maintenance could introduce potential ignition sources such as maintenance vehicles used for solar farm maintenance activities, however maintenance vehicles would travel on roads that have been cleared of vegetation. BIG's proposed inverters and solar panels may represent a potential ignition source; however, the potential for fire risk for these components is considered low through compliance with SBCFD's vegetation clearance requirements. As such, vegetation-related fires would be unlikely to occur within the solar farm. ~~As described above, all BESS battery components would include the integrated fire and safety systems within each enclosure and be installed within non-walk, outdoor enclosures on electrically grounded concrete pads or foundations to minimize the potential for sparks or ignition to occur.~~ As discussed above, BNSF would prepare and implement preparation and submittal of a Fire Protection and Emergency Response Plan to the SBCFD for review and approval in accordance with CFC Chapter 12. The Fire Protection and Emergency Response Plan would address fire hazards of the different BIG components, ~~including the BESS.~~ BIG's proposed solar farm area would be cleared during construction and would comply with the CFC and SBCFD vegetation clearance requirements during operations. Further, BIG's proposed solar farm design would be required to conform to conditions established by the SBCFD to ensure potential hazards relative to exposure of people or structures to significant risk of loss, injury, or death involving wildland fires would be reduced to the extent feasible. Following compliance with federal, State, and local worker safety and fire protection codes and regulations, fire occurrences during construction and for the life of BIG's solar farm would be minimized. Coupled with the implementation of fire suppression

technology and adherence with applicable industry best practices and regulatory fire standards, BIG's proposed solar farm operations would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and impacts would be less than significant.

Page 5.9-105 has been revised as follows:

~~**Solar Farm and Battery Energy Storage Systems.**~~ BIG's proposed solar farm would consist of solar modules, and transformers, ~~and battery storage in a battery energy storage system (BESS).~~ Solar modules made with cadmium telluride and crystalline silicon and batteries do not result in emissions during their normal operations and accidental breakage is unlikely. All proposed mineral oil filled transformers would be equipped with spill containment areas to prevent HMW contamination as required by regulation. ~~Battery storage in BESS would be in accordance with OSHA requirements, and would include ventilation, acid resistant materials, and spill response supplies.~~ All hazardous materials associated with BIG's proposed solar farm would be disposed of in accordance with RCRA and State Hazardous Waste Management Program requirements. Although BIG's proposed renewable energy facility would result in an increased use of commercially available potentially HMW, the use of these substances would be subject to applicable federal, State, and local health and safety laws and regulations that are intended to minimize health risk to the public associated with HMW. Further, BIG's proposed solar farm operations would not use substantial quantities of HMW or generate substantial quantities of HMW requiring transport during operations. Solar farm operations would only be expected to use limited hazardous materials and substances such as herbicides and pesticides to control vegetation within the solar farm. Large quantities of these materials are not expected to be stored on-site. Storage of hazardous materials would be regulated by applicable federal, State, and local regulations. Compliance with these requirements would serve to minimize health and safety risks to people or structures associated with routine use, transport, and disposal as well as accidental release of or exposure to hazardous materials.

Page 5.9-115 has been revised as follows:

BIG would modify the existing rail transportation system and develop a new transload warehouse center and rail yard that includes an intermodal facility and block swap yard which would transport containers, some of which could contain HMW. BIG also proposes a solar farm, which would consist of solar modules, and transformers, ~~and battery storage in a BESS.~~

Pages 5.9-118 and 5.9-119 have been revised as follows:

BIG's proposed solar farm would consist of solar modules, and transformers ~~and battery storage in a BESS~~ which would involve the use of limited hazardous materials during operation. As previously discussed under **Impact 5.9-1: BIG**, any routine transport, use, and disposal of these materials during BIG operations must adhere to federal, State, and local regulations for transport, handling, storage, and disposal of hazardous substances. Furthermore, hazardous materials/chemicals such as herbicides and

pesticides in low quantities do not pose a significant threat related to the release of hazardous materials into the environment. Under normal operations, BESS facilities do not store or generate hazardous materials in quantities that would represent a risk to off-site receptors. Further, operations of BIG's solar farm would include preventative measures, such as energy management systems and building management systems to reduce the potential for accidents to occur. Nevertheless, because lithium-ion BESS facilities do store energy, a battery thermal runaway can occur if a cell, or area within a cell, achieves elevated temperatures due to thermal failure, mechanical failure, internal/external short circuiting, and electrochemical abuse. In this event, state-of-the-art fire, and safety systems, such as a sounding alarm and flashing strobes, would alert employees of the thermal runaway event. Components of an integrated fire and safety system within a BESS enclosure include module level monitoring, control of the system 24/7, and an internal cooling/HVAC system. The fire and safety system may include, as required by the design, fire panels, aspirating hazard detection system, smoke/heat detectors, gas ventilation and deflagrations systems and suppression or thermal runaway systems. The BESS containers would have a fire rating in conformance with NFPA and County standards and specialized fire suppression systems. BIG would utilize pre-engineered battery storage systems listed under UL 9540 or BESS tested in compliance with UL 9540A. UL 9540 contains safety standards for the system's construction (e.g., frame and enclosure, including mounting, supporting materials, barriers and more); the insulation, wiring, switches, transformers, spacing and grounding; safety standards for performance of over 20 different elements, such as tests for temperature, volatility, impact, overload of switches, and an impact drop test; and standards for manufacturing, ratings, markings, and instruction manuals. In addition to the many individual standards referenced, CFC compliance requires a Failure Mode and Effects Analysis be performed and requires a test to ensure safe compatibility of the system's parts. This includes the UL 1973 standard, in which a battery manufacturer must prove that a failed cell inside will not cause a fire outside the system. BIG's compliance with the CFC, UL 9540/9540A requirements, and industry standards for adequate separations, cascading protections, and suppression systems to limit failure to a single cell or module would minimize potential impacts from a lithium-ion fire. In the unlikely event of thermal runaway, BIG's preventative measures and fire and safety systems, as described above, are designed to limit the event to a single battery module as well as reduce the duration and intensity of an event, if it occurs. BIG would also be subject to the requirements of Chapter 12 of the CFC which requires that all BESS use an Energy Management System for monitoring and balancing cell voltages, currents, and temperatures. The system must transmit an alarm signal if potentially hazardous temperatures or other conditions such as short circuits, over voltage or under voltage, are detected. The CFC also requires the use of appropriate fire detection and suppression systems, which would be incorporated into each of BIG's BESS enclosures. As required by CFC Chapter 12, BNSF would prepare and implement preparation and submittal of a Fire Protection and Emergency Response Plan to the SBCFD for review and approval. The purpose of the Fire Protection and Emergency Response Plan would be to eliminate causes of fire, prevent loss of life and property by fire, to comply with County and SBCFD standards for solar facilities, and to comply with the OSHA standard of fire prevention, 29 CFR 1910.39. The Fire Protection and Emergency Response Plan would address fire hazards of the different BIG components, including the BESS.

As discussed above, BNSF would be required to prepare a hazardous material business plan for BIG's rail yard, transload warehouse center, and solar farm pursuant to CHSC, § 25500 et seq., which would be required to also include an emergency response plan designed to minimize hazards to humans and the environment from a sudden release of hazardous waste, fires, or explosions. The emergency response plan would require immediate action to take place if an event were to occur. The hazardous materials business plan would also include emergency response training for local first responders. Further, BNSF provides hazmat commodity flow reports to local first responders and elected- or emergency-management officials upon request to assist with emergency response planning and provides free training to emergency service personnel regarding spills or accidents involving HMW (BNSF, 2025c). ~~Adherence to regulations and standard protocols during BIG's solar farm operation would minimize and reduce the potential for HMW impacts from the BESS.~~

Pages 5.9-132 and 5.9-133 have been revised as follows:

BIG's proposed solar farm would consist of solar modules, and transformers, and battery storage in a BESS within the vicinity of the Lenwood community. Given continuing rapid technological change in the battery industry, the proposed BESS component manufacturer has not been determined at this time but could include any commercially available and proven large-scale battery technology, including but not limited to lithium ion, sodium sulfur, and sodium or nickel hydride. The batteries would be contained within enclosures or in individual containers, housed in open-air-style racking within its enclosed container. The containers would also have heating, ventilation, and air conditioning (HVAC) cooling to maintain energy efficiency and to protect the batteries. The CFC and associated standards require rigorous large-scale fire testing, such as UL 9540A requiring the systems to pass performance-based criteria. This means that enclosures of battery storage systems may not pose a fire or explosion risk to adjacent exposures. To achieve these results, some BESS employ various types of active thermal runaway mitigation systems within the integrated design of utility scale, lithium-ion based battery storage enclosures. Regardless of the design basis, these thermal runaway mitigation systems are required to be tested to UL 9540A large scale fire testing in order to manage fire and exposure risks. Some BESS comply with these performance-based requirements without the use of active fire suppression systems, rather, they use passive design features or thermal management features that prevent or limit thermal runaway. Either design-based or active thermal runaway mitigation approaches to achieve the UL 9540A criteria, again, all systems must demonstrate that they pose no explosion or fire risk to adjacent exposures. BIG's proposed BESS would be designed, constructed, operated, and maintained in accordance with applicable best practices and regulatory requirements, including fire safety standards. Batteries would be housed in an enclosure that contains an integrated fire safety system and controls. If smoke, heat, or flammable gas were detected, an alarm would sound, strobes would flash, and any thermal runaway mitigation systems present would be activated. The BESS containers would have a fire rating, if required based on large-scale fire test results. Final fire safety design would follow applicable codes and referenced standards and would be specific to the battery technology that is ultimately implemented. The BESS containers would have a fire rating in conformance with NFPA and County standards and specialized fire suppression systems. Final fire safety

design would follow applicable standards and would be specific to the battery technology that is ultimately implemented.

Page 5.9-133 has been revised as follows:

Over the long term, BIG's solar farm operation and maintenance could introduce potential ignition sources such as maintenance vehicles used for solar farm maintenance activities, however maintenance vehicles would travel on roads that have been cleared of vegetation. BIG's proposed inverters and solar panels may represent a potential ignition source; however, the potential for fire risk for these components is considered low through compliance with SBCFD's vegetation clearance requirements. As such, vegetation-related fires would be unlikely to occur within the solar farm. ~~As described above, all BESS battery components would include the integrated fire and safety systems within each enclosure and be installed within non-walk, outdoor enclosures on electrically grounded concrete pads or foundations to minimize the potential for sparks or ignition to occur.~~ As discussed above, BNSF would prepare and implement preparation and submittal of a Fire Protection and Emergency Response Plan to the SBCFD for review and approval in accordance with CFC Chapter 12. The Fire Protection and Emergency Response Plan would address fire hazards of the different BIG components, ~~including the BESS.~~ BIG's proposed solar farm area would be cleared during construction and would comply with the CFC and SBCFD vegetation clearance requirements during operations. Further, BIG's proposed solar farm design would be required to conform to conditions established by the SBCFD to ensure potential hazards relative to exposure of people or structures to significant risk of loss, injury, or death involving wildland fires would be reduced to the extent feasible. Following compliance with federal, State, and local worker safety and fire protection codes and regulations, fire occurrences during construction and for the life of BIG's solar farm would be minimized. Coupled with the implementation of fire suppression technology and adherence with applicable industry best practices and regulatory fire standards, BIG's proposed solar farm operations would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and impacts would be less than significant.

Section 5.10: Hydrology and Water Quality

Page 5.10-13 has been revised as follows:

San Bernardino County Municipal Separate Storm Sewer System Permit Municipal Stormwater Program

~~In compliance with the requirement to develop a Stormwater Management Program, San Bernardino County has developed a Stormwater Management Program for the Mojave River area, in conjunction with the Town of Apple Valley and the cities of Victorville and Hesperia. The Phase II MS4 covers the watershed's urbanized area, including the City of Barstow. The Stormwater Management Program was developed under NPDES General Permit Number CAS000004 requirements~~ The Municipal Storm Water Program regulates storm water discharges from municipal separate storm sewer systems (MS4s) throughout California. U.S. EPA defines an MS4 as a conveyance or system of conveyances (including

roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned or operated by a State (40 CFR 122.26(b)(8)).

Pursuant to the Federal Water Pollution Control Act (Clean Water Act) section 402(p), stormwater permits are required for discharges from an MS4 serving a population of 100,000 or more. The Municipal Storm Water Program manages the Phase I Permit Program (serving municipalities over 100,000 people), the Phase II Permit Program (for municipalities less than 100,000), and the Statewide Storm Water Permit for the State of California Department of Transportation. The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (collectively, the Water Boards) implement and enforce the Municipal Storm Water Program.

The Town of Apple Valley, the cities of Victorville and Hesperia, along with San Bernardino County collaborate as the Mojave River Watershed Group to fulfill the requirements of the MS4 Program. Each entity maintains its own permit coverage while working together towards common goals.

The purpose of the program is to keep the Mojave River clean to the maximum extent practicable utilizing BMPs to reduce stormwater runoff and non-stormwater runoff flowing in the Mojave River. The program also serves to keep contamination, such as sediment, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons, pesticides, herbicides, and trash from entering the storm drain system.

The City of Barstow also has its own MS4 permit but has chosen to manage its program individually. The City obtains coverage under the County's Phase II MS4 permit. Barstow is individually responsible for complying with the County's Stormwater Management Program Municipal Storm Water Program requirements including, but not limited to, establishing a stormwater management plan, implementing BMPs, conducting regular inspections, ensuring compliance with TMDLs and local stormwater ordinances, and filing annual reports and monitoring data to the State Water Board.

Section 5.11: Land Use and Planning

Page 5.11-50 has been revised as follows:

Impact 5.11-21: BIG: Level of Significance Before Mitigation: Less than Significant Impact.

Impact 5.11-21: BIG Mitigation Measures: No mitigation required.

Impact 5.11-21: BIG Level of Significance After Mitigation: No significant impact would occur.

Page 5.11-53 has been revised as follows:

- ~~Transfer of law enforcement responsibility from the San Bernardino County Sheriff's Department to the City of Barstow Police Department of approximately 2,686 acres;~~

Page 5.11-54 has been revised as follows:

- ~~Transfer of law enforcement responsibility from the San Bernardino County Sheriff's Department to the City of Barstow Police Department of approximately 99 acres; and~~

Page 5.11-55 has been revised as follows:

In addition, see **Appendix 5.11 GP-1: Proposed General Plan SBLAFCO Cortese-Knox Hertzberg Local Government Reorganization Act**, Section 2.0 – 2.2.

Pages 5.11-83 and 5.11-84 have been revised as follows:

Table 3.2-7: Proposed General Plan Consistency – BIG		
Policy	Specific Plan Consistency Analysis	Off-site Improvement Consistency Analysis
Policy S-4.5 Transportation Noise. Minimize potential transportation noise through proper roadway design, coordination of commercial vehicle routing, and other feasible and appropriate traffic control or abatement measures.	No Conflict. The BIG Specific Plan Circulation Plan identifies public and private roadways designed pursuant to City standards. Tables 5.12-53 through 15.12-55 show the roadway traffic noise levels along roadway segments for years 2028, 2033, and 2048 conditions, respectively, and indicate BIG roadway traffic noise levels under 2028 <u>and 2033</u> would result in a less than significant impact, but would be significant and unavoidable under 2033 and 2048 conditions. Notwithstanding, as discussed in detail in Section 5.12: Noise and Vibration , the BIG noise analysis has considered all feasible mitigation measures (e.g., noise barriers, upgraded windows, rubberized asphalt surfaces) Further, the BIG Applicant does not have jurisdiction over the local roadways and/or existing residences to directly mitigate traffic noise impacts at the impacted receivers. Therefore, because BIG’s noise analysis has considered all feasible mitigation measures for transportation noise, the BIG Specific Plan would not conflict with Policy S-4.5.	No Conflict. BIG’s off-site roadway improvements would be constructed to City standards, thus would not conflict with Policy S-4.5.

Section 5.12: Noise

Page 5.12-30 has been revised as follows:

BIG construction activities would primarily occur between 7:00 AM and 7:00 PM consistent with the County Code (County Code Title 8, Division 3, Chapter 83.01). However, nighttime construction would be required throughout the BIG footprint except at the solar farm where no nighttime construction would be required. Nighttime construction would be required during certain phases or periods to accommodate key activities required to maintain progress on BIG construction and rail operations (e.g., concrete foundation pouring for the transload warehouse center, east and west lead track work adjacent to the mainline tracks where the lead tracks would tie into the mainline tracks, etc.). Therefore, nighttime construction was analyzed to occur at each phase of BIG construction (except for solar farm construction), and nighttime noise levels were evaluated against the FTA's nighttime construction noise assessment criteria as shown in **Table 5.12-1**.

Page 5.12-34 has been revised as follows:

Solar Farm. The proposed solar farm at the BIG Specific Plan area's southwestsoutheast corner would produce long-term, continuous, operational noise from the ~~battery electric storage system (BESS) and solar inverter equipment. The BESS equipment would be located~~ substation at the solar farm's northwesterneast corner of the solar farm site adjacent to Main Street, and the solar inverter equipment that would be positioned at various locations throughout the solar farm.

Page 5.12-38 has been revised as follows:

Sensitive receptors in BIG's vicinity (e.g., residential dwellings, churches) fall under Land Use Categories 2 or 3 described in **Appendix 5.12 BIG-1**. The FTA criteria for "infrequent events" are used for locomotives and rail car pass-bys are analyzed against the thresholds for "frequent events" in all design years (2028, 2033, and 2048) per FTA guidelines methodologies. BIG in Year 2028 and Year 2048 ~~because BIG train operations would result in a maximum of approximately 24 daily freight train pass-bys in Year 2028 and 35 pass-bys in Year 2048 at the nearest receptors.~~ The FTA vibration standards for frequent and infrequent events are provided in **Table 5.12-3**.

Pages 5.12-66 and 5.12-67 have been revised as follows:

MM GP NOI-1	Construction Noise Measures. Construction contractors shall implement the following measures for construction activities conducted in the City of Barstow. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Barstow shall verify that grading, demolition, and/or construction plans submitted to the City include these notations prior to issuance of demolition, grading, and/or building permits. ▪ Limit construction activities to the hours of 7:00 AM and 7:00 PM Monday through Sunday, unless an exception is approved by the Community Development Director, and enforce FTA nighttime construction noise standards outside of these hours.
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- During active construction, project equipment and trucks shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds), wherever feasible. A technique shall be considered feasible when it would reduce, rather than increase, the noise impacts to the nearest sensitive receptor, and would not increase costs by over 10% of the base construction cost associated with using standard construction equipment without best available noise control techniques. Proper mufflers and/or silencers can achieve a 4 to 5 dBA reduction, while engine enclosures can achieve 8 to 10 dBA reduction.
- Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered ~~wherever possible~~. Where pneumatic tools must be used, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools, when within 300 feet of sensitive receptors. Pneumatic tools typically measure at a noise level of 6 to 8 dBA lower than impact tools.
- Stationary equipment, such as generators and air compressors, shall be located as far as feasible from nearby noise-sensitive uses. A distance is “as far as feasible” if there is no further distance from nearby noise-sensitive uses where the equipment could be placed and continue to perform its intended function while complying with the safety requirements set out in the operation manuals for each piece of such equipment. “Feasible” distances are limited to areas where construction contractors have permission to place equipment from relevant landowners.
- Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. A distance is “as far as feasible” if there is no further distance from nearby noise-sensitive uses where the stockpiled materials could be placed and mobile equipment used for stockpiling can continue to perform its intended function while complying with the safety requirements set out in the operation manuals for each piece of such equipment. “Feasible” distances are limited to areas where construction contractors have permission to stockpile and use equipment from relevant landowners.
- Construction traffic shall be limited, ~~to the extent feasible~~, to approved haul routes established by the City Community Development Department. The project applicant shall submit a proposed haul route for review and approval by the City Engineer prior to the issuance of any grading or building permits. Haul routes shall maximize use of arterial roads, major thoroughfares, and local roads that predominantly serve commercial, agricultural, or industrial uses when state or interstate highways are not utilized. Haul routes shall use major or minor collector streets and local roads that predominantly serve commercial, agricultural, or industrial uses only when no other route exists to reach existing industrial zones. Local roads shall be considered to predominantly serve commercial, agricultural, or industrial uses if more than 50 percent of the properties fronting the road within 1,000 feet are designed

for commercial, agricultural, or industrial use according to the local zoning ordinance. The City Engineer, in coordination with the City Community Development Department, will approve proposed haul routes based on whether the routes adhere to the above criteria and are consistent with the ordinance to be adopted by the City pursuant to Government Code section 65098.2.8.

- At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take ~~appropriate~~ corrective action to stop any ongoing violations, provide worker education designed to prevent such violations in the future, and report the action to the City.
- During the entire active construction period ~~and to the extent feasible,~~ the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- If construction is anticipated for ~~prolonged periods~~ more than two days adjacent to sensitive receptors, as required by the Community Development Director, erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 4 pounds per square foot with no gaps from the ground to the top of the barrier. Barriers are considered feasible if City Engineer determines, based on acoustical modeling provided by the applicant, that the barriers would be effective in maintaining construction noise levels at or below the performance standard, and if the barriers would not increase the project's base construction costs by over 10%.

Pages 5.12-74 and 5.12-75 have been revised as follows:

Table 5.12-28: Maximum BIG Construction Noise Levels at Nearest Sensitive Receptors							
Construction Area/Activity	Impacted Receptor (Receptor ID) ¹	Receiving Land Use	Maximum Noise Level (dBA L _{eq} (8-hr)) ²	FTA Daytime Construction Noise Threshold, (dBA L _{eq} (8-hr))	Threshold Exceeded?	FTA Nighttime Construction Noise Threshold, (dBA L _{eq} (8-hr))	Threshold Exceeded?
Block Swap Yard	5	Residential	61.9	80	No	70	No
Intermodal Facility	1	Residential	63.6	80	No	70	No
Transload Warehouse Center	7	Residential	58.4	80	No	70	No
East Lead Tracks	15	Residential	73.3	80	No	70	Yes
West Lead Tracks	62	Residential	65.6	80	No	70	No
Solar Farm	87	Residential	75.7	80	No	70 Yes <u>Not Applicable</u> ³	
Lenwood Channel Improvements	6	Residential	73.4	80	No	70	Yes
Concrete Batch Plant	53	Residential	30.5	80	No	70	No
Pile Driving	5	Residential	73.7	80	No	70	Yes <u>No</u>
33 kV Line	13	Residential	84.2	80	Yes	70	Yes
Bridge Demolition	5	Residential	52.6	80	No	70	No
Sweeten Lane Paving	83	Residential	67.5	80	No	70	No
Combined (all sources)	6	Residential	84.4	80	Yes	70	Yes
Notes:							
¹ . Modeled receptor locations are shown in Figure 5.12-11 , Figure 5.12-12 , and Figure 5.12-13 .							
² . Noise levels calculated using the SoundPLAN Essential software. Modeling results are provided in Appendix 5.12 BIG-1- Appendix A .							
³ . <u>No nighttime construction is proposed at the solar farm.</u>							
Source: Kimley-Horn, 2024; SoundPLAN Essential version 5.1. Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for noise modeling results and receptor locations.							

Page 5.12-79 has been revised as follows:

Due to the nature of 33 kV line construction activities, the only ~~feasible~~ potential mitigation to reduce construction noise levels would be to construct a temporary noise barrier to block the line of sight from the construction area to the nearest residences.

Page 5.12-79 has been revised as follows:

Nighttime Construction

BIG would require approximately four weeks of nighttime construction for east and west lead track work adjacent to the mainline tracks where the lead tracks would tie into the mainline tracks. Additionally, nighttime construction may be required throughout the BIG footprint (except at the solar farm) during certain phases or periods to accommodate key activities required to maintain progress on construction and rail operations (e.g., concrete foundation pouring for the transload warehouse center, etc.).

As shown in **Table 5.12-28**, nighttime construction noise levels associated with the east lead tracks, ~~solar farm~~, Lenwood Channel improvements, and 33 kV line would exceed the FTA's 70 dBA $L_{eq(8-hour)}$ nighttime construction noise standard for residential uses. Noise levels from the other construction areas/activities would not exceed the FTA's nighttime standard. As previously noted, the combined noise level from simultaneous construction activities at all construction areas would reach a maximum of 84.4 dBA $L_{eq(8-hour)}$ and would exceed the FTA 70 dBA $L_{eq(8-hour)}$ nighttime noise standard. BIG would incorporate **MM BIG NOI-1**, which requires preparation of a Construction Noise Logistics Plan to reduce nighttime construction noise levels. While incorporation of **MM BIG NOI-1** would reduce nighttime construction noise levels to the extent feasible, the precise details regarding the proposed schedule, duration/hours, equipment type/quantity, and specific location of construction for nighttime construction activities are unknown at this time. Therefore, despite incorporation of noise reduction measures (to be included in the Construction Noise Logistics Plan), nighttime construction noise levels could still exceed the FTA's 70 dBA $L_{eq(8-hour)}$ for residential uses. Therefore, BIG nighttime construction noise could result in a significant and unavoidable impact despite incorporation of **MM BIG NOI-1**.

Page 5.12-80 has been revised as follows:

An impact pile-driver generates a noise level of approximately 101 dBA at a distance of 50 feet (**Table 5.12-13**). Conservatively assuming six impact pile drivers would be used simultaneously during construction of Bridges 6.5 and Bridge 10.9B (i.e., one pile driver at Bridge 6.5B, one pile driver at Bridge 6.5C, two pile drivers at Bridge 6.5F, and two pile drivers at Bridge 10.9B), the highest expected noise level at the nearest sensitive receptor would be approximately 73.7 dBA,¹ which is below the FTA 80 dBA $L_{eq(8-hour)}$ daytime standard for residential uses. BIG would avoid nighttime construction where near sensitive receptors (see page 3-86 of the Project Description), thus, no impacts would occur from nighttime pile-driving. Therefore, a less than significant impact would occur from pile-driving. ~~However, as also shown in **Table 5.12-13**, pile driving activities during the nighttime would likely exceed the FTA's 70 dBA $L_{eq(8-hour)}$ nighttime noise standard for residential. As discussed above, BIG would incorporate **MM NOI 1**, which requires preparation of a Construction Noise Logistics Plan to reduce nighttime construction noise levels. While incorporation of **MM NOI 1** would reduce nighttime pile driving noise levels to the extent feasible, the precise details for nighttime construction activities are unknown at this time. Therefore, despite incorporation of **MM NOI 1**, nighttime pile-driving noise levels could still exceed the FTA's 70 dBA $L_{eq(8-hour)}$ for residential uses. As such, nighttime noise from pile driving would result in a significant and unavoidable impact.~~

Page 5.12-82 has been revised as follows:

Table 5.12-29: Opening Year 2028 BIG Operational Noise Levels – City/County Noise Standards Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-hour		
			Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level ⁴	Noise Standard (dBA Ldn) ³	Exceeds Standard?
NO BIG											
1	Residential	County	59.5	55	Yes	58.1	45	Yes	64.7	60	Yes
2	Residential	County	58.4	55	Yes	57.0	45	Yes	63.7	60	Yes
4	Residential	City	57.0	65	No	55.6	65	No	62.3	65	No
5	Residential	City	58.7	65	No	57.4	65	No	64.0	65	No
6	Residential	City	53.1	65	No	51.7	65	No	58.3	65	No
83	Residential	City	47.3	65	No	45.9	65	No	52.6	65	No
84	Residential	City	46.2	65	No	44.9	65	No	51.5	65	No
88	Residential	City	45.5	65	No	44.2	65	No	50.8	65	No
89	Residential	City	45.6	65	No	44.2	65	No	50.9	65	No
90	Residential	City	45.1	65	No	43.8	65	No	50.4	65	No
WITH BIG											
1	Residential	County	61.5	55	Yes	60.9	45	Yes	67.4	60	Yes
2	Residential	County	59.2 <u>59.1</u>	55	Yes	58.9 <u>58.8</u>	45	Yes	65.3	60	Yes
4	Residential	City	59.2	65	No	58.7	65	No	65.2	65	Yes
5	Residential	City	63.9 <u>59.0</u>	65	No	63.8 <u>58.6</u>	65	No	70.2 <u>65.1</u>	65	Yes
6	Residential	City	59.7	65	No	59.5	65	No	66.0	65	Yes
83	Residential	City	59.8	65	No	59.7	65	No	66.1	65	Yes
84	Residential	City	59.8	65	No	59.8	65	No	66.2	65	Yes
88	Residential	City	59.3	65	No	59.1	65	No	65.5	65	Yes

89	Residential	City	59.8	65	No	59.7	65	No	66.1	65	Yes
90	Residential	City	61.6	65	No	61.5	65	No	67.9	65	Yes
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. City and County noise standards obtained from Table 5.12-8, and Table 5.12-11. 3. City and County 24-hour average (dBA Ldn) noise standard obtained from Table 5.12-9. 4. <u>Does not include reduction from rubberized asphalt.</u>											
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG -1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.											

Page 5.12-83 has been revised as follows:

Table 5.12-30: Opening Year 2028 BIG Operational Noise Levels – Noise Increase Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-Hour		
			Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA Ldn) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA Ldn) ²	Exceeds Standard?
1	Residential	County	2.0	1.5	Yes	2.8	1.5	Yes	2.7	1.5	Yes
2	Residential	County	0.8 <u>0.7</u>	1.5	No	1.9 <u>1.8</u>	1.5	Yes	1.6	1.5	Yes
4	Residential	City	2.2 <u>1.8</u>	1.5	Yes	3.1 <u>2.7</u>	1.5	Yes	2.9 <u>2.5</u>	1.5	Yes
5	Residential	City	5.2	1.5	Yes	6.4	1.5	Yes	6.2	1.5	Yes
6	Residential	City	6.6	5.0	Yes	7.8	5.0	Yes	7.7	5.0	Yes
83	Residential	City	12.5 <u>7.0</u>	1.5	Yes	13.8 <u>8.3</u>	1.5	Yes	13.6 <u>8.0</u>	1.5	Yes
84	Residential	City	13.6 <u>7.7</u>	1.5	Yes	14.9 <u>8.9</u>	1.5	Yes	14.7 <u>8.7</u>	1.5	Yes
86	Residential	City	8.7 <u>6.6</u>	1.5	Yes	9.8 <u>7.7</u>	1.5	Yes	9.7 <u>7.5</u>	1.5	Yes
87	Residential	City	13.2 <u>9.1</u>	1.5	Yes	14.4 <u>9.7</u>	1.5	Yes	14.1 <u>9.6</u>	1.5	Yes

Table 5.12-30: Opening Year 2028 BIG Operational Noise Levels – Noise Increase Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-Hour		
			Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA Ldn) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA Ldn) ²	Exceeds Standard?
88	Residential	City	13.8 <u>8.8</u>	1.5	Yes	14.9 <u>9.6</u>	1.5	Yes	14.7 <u>9.5</u>	1.5	Yes
89	Residential	City	14.2 <u>8.7</u>	1.5	Yes	15.5 <u>9.7</u>	1.5	Yes	15.2 <u>9.5</u>	1.5	Yes
90	Residential	City	16.5 <u>9.3</u>	1.5	Yes	17.7 <u>10.2</u>	1.5	Yes	17.5 <u>10.1</u>	1.5	Yes
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 5.12.3 (Methodology for Evaluating Impacts) and Section 5.12.5 (Impact Thresholds and Significance Criteria). 3. <u>Does not include reduction from rubberized asphalt.</u>											
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results and impact screening analysis for all receptors.											

Page 5.12-84 has been revised as follows:

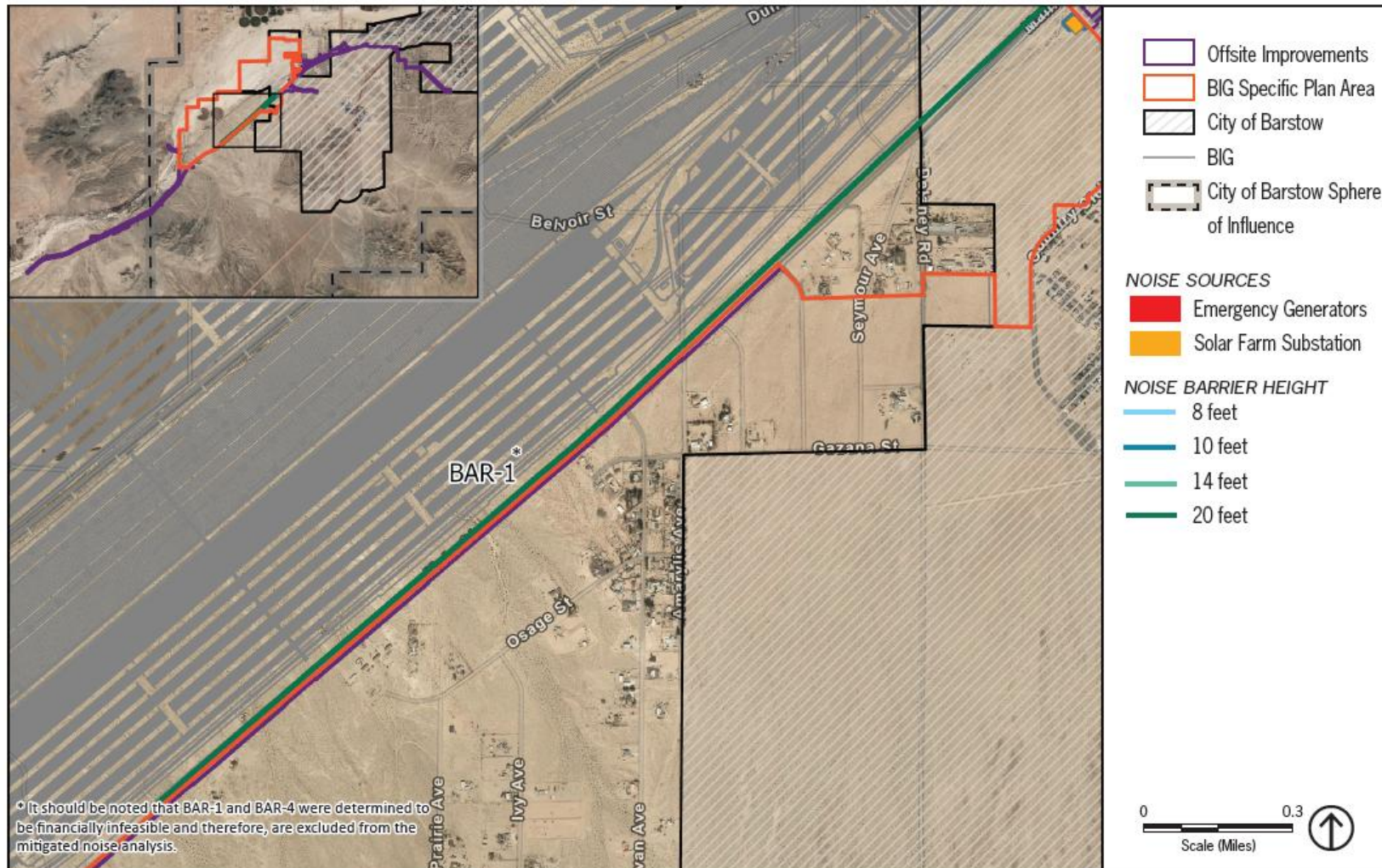
The following noise barriers ~~were~~ was determined to be financially feasible as mitigation to reduce BIG operational noise impacts:

- ~~• **Barrier 2 (BAR-2):** a 10-foot high absorptive noise barrier approximately 700 feet in length surrounding the BESS equipment in the northeastern portion of the solar farm; and~~
- **Barrier 3 (BAR-3):** a 10-foot-high absorptive noise barrier approximately 470 feet in length surrounding the substation in the northeastern portion of the solar farm.

BAR-2 and BAR-3 are is depicted in ~~Figure 5.12-14: Modeled Noise Barrier~~ and **Figure 5.12-15: Modeled Noise Barrier (BIG Specific Plan Area)**. It should be noted that BAR-1 and BAR-4 (as shown in **Figure 5.12-14: Modeled Noise Barriers (Main Street)** and **Figure 5.12-15**) were determined to be financially infeasible and, therefore, are excluded from the mitigated noise analysis in this EIR section; see **Appendix 5.12 BIG-1** for the complete Noise Barrier Financial Feasibility Analysis analyzing the feasibility of all potential noise barriers. Barrier 5 (BAR-5) (as shown in **Figure 5.12-15**), which was also determined to be financially feasible, is also excluded from this analysis, as this barrier would reduce emergency generator noise only and would not reduce typical (non-emergency situation) BIG operational noise levels.

Opening Year 2028 With BIG operational noise levels with incorporation of the noise barriers discussed above were modeled in SoundPLAN and the impacted receptor results are provided in **Table 5.12-31: Opening Year 2028 Mitigated BIG Operational Noise Levels– City/County Noise Standards Impact Analysis** and **Table 5.12-32: Opening Year 2028 Mitigated BIG Operational Noise Levels – Noise Increase Impact Analysis**. As indicated in **Table 5.12-31**, ~~BAR-2 and~~ BAR-3 would reduce BIG operational noise levels below the applicable City and/or County noise standards at all impacted receptor locations except for impacted Receptors 1, 2, and 4 ~~and 5 through 6~~, which would still exceed City/County noise thresholds despite construction of ~~these~~ this noise barriers. In addition, ~~BAR-2 and~~ BAR-3 would not reduce noise levels below the incremental increase threshold(s) and all receptors would experience a substantial noise increase over ambient conditions as a result of BIG operations. Therefore, a significant noise impact would occur in this regard. ~~It is noted the maximum noise level reduction from BAR-2 and BAR-3 under Opening Year 2028 With BIG conditions would be approximately 3.8 dBA.~~

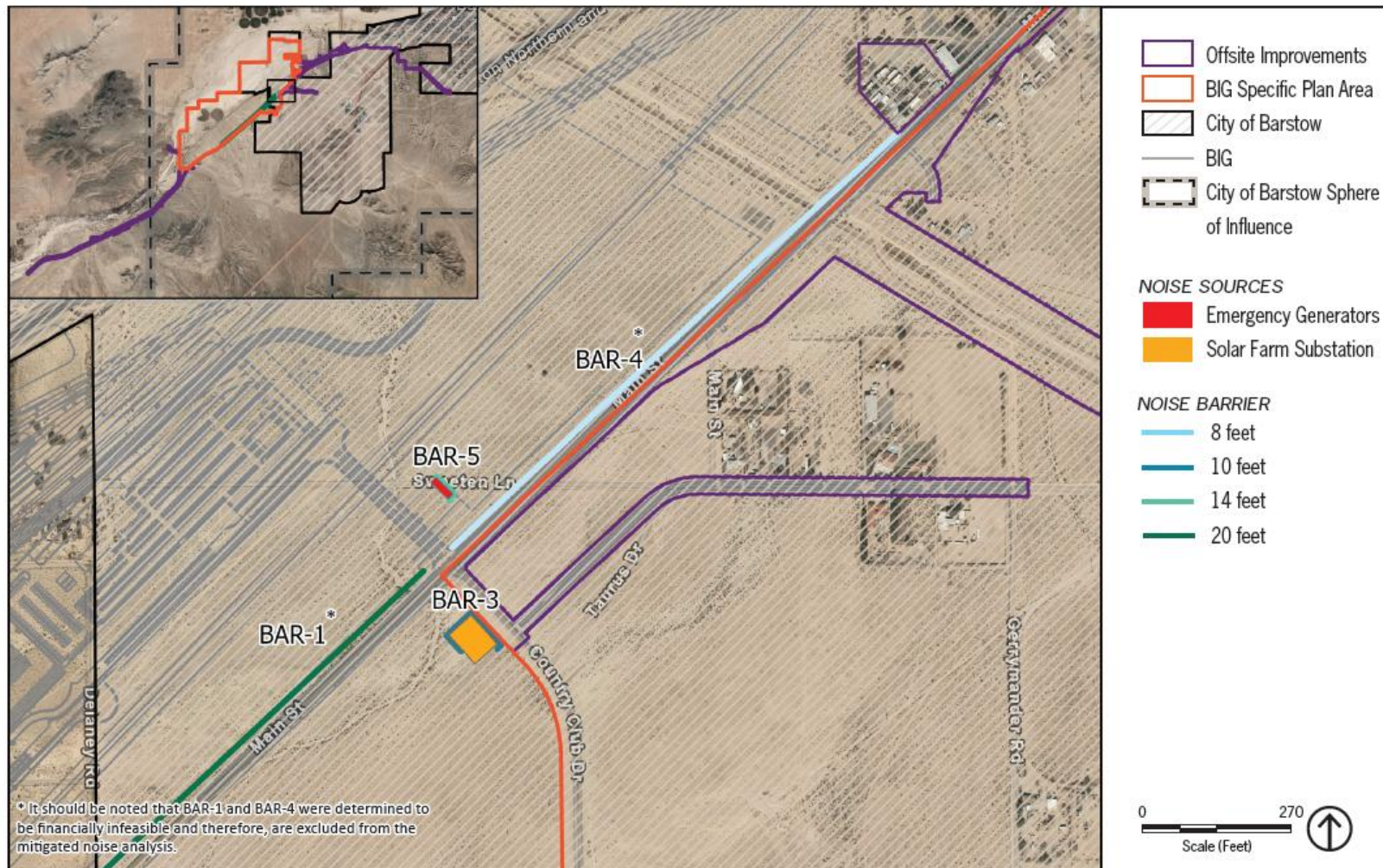
Page 5.12-86 has been revised as follows:



Sources:
County of San Bernardino, Y203 PUA Cache [Aerial Imagery], 2023; Kimley-Horn and Associates, 2024.

Figure 5.12-14
Modeled Noise Barriers (Main Street)

The following **Figure 5.12-15: Modeled Noise Barrier (BIG Specific Plan Area)** has been inserted after **Page 5.12-86**:



Sources:
County of San Bernardino, Y203 PUA Cache [Aerial Imagery], 2023; Kimley-Horn and Associates, 2024.

Figure 5.12-15
Modeled Noise Barriers (BIG SPA)

Page 5.12-87 has been revised as follows:

Table 5.12-31: Opening Year 2028 Mitigated BIG Operational Noise Levels– City/County Noise Standards Impact Analysis												
Receptor No. ¹	Land Use	Jurisdiction	Noise Barrier	Daytime			Nighttime			24-Hour		
				Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ³	Exceeds Standard?	Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ³	Exceeds Standard?	Modeled Noise Level (dBA Ldn) ⁴	Noise Standard (dBA Ldn) ³	Exceeds Standard?
WITH BIG												
1	Residential	County	N/A ²	61.5	55	Yes	60.9	45	Yes	67.4	60	Yes
2	Residential	County	N/A ²	59.2 <u>59.1</u>	55	Yes	58.9 <u>58.8</u>	45	Yes	65.3	60	Yes
4	Residential	City	N/A ²	59.1	65	No	58.6	65	No	65.1	65	Yes
5	Residential	City	N/A ²	60.3 <u>58.8</u>	65	No	60.0 <u>58.4</u>	65	No	66.4 <u>64.9</u>	65	Yes <u>No</u>
6	Residential	City	N/A ²	57.4	65	No	57.2	65	No	63.6	65	No
83	Residential	City	BAR-2 and BAR-3	57.4	65	No	57.4	65	No	63.8	65	No
84	Residential	City	BAR-2 and BAR-3	57.5	65	No	57.4	65	No	63.8	65	No
88	Residential	City	BAR-2 and BAR-3	56.9	65	No	56.7	65	No	63.1	65	No
89	Residential	City	BAR-2 and BAR-3	57.0	65	No	56.8	65	No	63.3	65	No
90	Residential	City	BAR-2 and BAR-3	58.3	65	No	58.2	65	No	64.6	65	No
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Impacted receptors 1, 2, and 4 through 6 would not receive noise level reductions from <u>the</u> feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for noise barrier feasibility analysis and complete modeling results. 3. City and County noise standards obtained from Table 5.12-8 , and Table 5.12-11 . <u>4. Does not include reduction from rubberized asphalt.</u>												
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.												

Page 5.12-88 has been revised as follows:

Table 5.12-32: Opening Year 2028 Mitigated BIG Operational Noise Levels – Noise Increase Impact Analysis												
Receptor No. ¹	Land Use	Jurisdiction	Noise Barrier	Daytime			Nighttime			24-Hour		
				Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA) ³	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA) ³	Exceeds Standard?	Incremental Increase (dBA Ldn) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA Ldn) ³	Exceeds Standard?
1	Residential	County	N/A ²	2.0	1.5	Yes	2.8	1.5	Yes	2.7	1.5	Yes
2	Residential	County	N/A ²	0.8 <u>0.7</u>	1.5	No	1.9 <u>1.8</u>	1.5	Yes	1.6	1.5	Yes
4	Residential	City	N/A ²	2.1 <u>1.8</u>	1.5	Yes	3.0 <u>2.7</u>	1.5	Yes	2.8 <u>2.5</u>	1.5	Yes
5	Residential	City	N/A ²	1.6	1.5	Yes	2.6	1.5	Yes	2.4	1.5	Yes
6	Residential	City	N/A ²	4.3	5.0	No	5.5	5.0	Yes	5.3	5.0	Yes
83	Residential	City	BAR-2 and BAR-3	10.1 <u>7.0</u>	1.5	Yes	11.5 <u>8.2</u>	1.5	Yes	11.2 <u>8.0</u>	1.5	Yes
84	Residential	City	BAR-2 and BAR-3	11.3 <u>7.6</u>	1.5	Yes	12.5 <u>8.7</u>	1.5	Yes	12.3 <u>8.6</u>	1.5	Yes
86	Residential	City	N/A ²	7.8 <u>6.6</u>	1.5	Yes	8.9 <u>7.7</u>	1.5	Yes	8.8 <u>7.5</u>	1.5	Yes
87	Residential	City	N/A ²	11.3 <u>9.1</u>	1.5	Yes	12.3 <u>9.7</u>	1.5	Yes	12.1 <u>9.6</u>	1.5	Yes
88	Residential	City	BAR-2 and BAR-3	11.4 <u>8.8</u>	1.5	Yes	12.5 <u>9.6</u>	1.5	Yes	12.3 <u>9.5</u>	1.5	Yes
89	Residential	City	BAR-2 and BAR-3	11.4 <u>8.7</u>	1.5	Yes	12.6 <u>9.7</u>	1.5	Yes	12.4 <u>9.5</u>	1.5	Yes
90	Residential	City	BAR-2 and BAR-3	13.2 <u>9.3</u>	1.5	Yes	14.4 <u>10.2</u>	1.5	Yes	14.2 <u>10.1</u>	1.5	Yes

Table 5.12-32: Opening Year 2028 Mitigated BIG Operational Noise Levels – Noise Increase Impact Analysis												
Receptor No. ¹	Land Use	Jurisdiction	Noise Barrier	Daytime			Nighttime			24-Hour		
				Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA) ³	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA) ³	Exceeds Standard?	Incremental Increase (dBA Ldn) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA Ldn) ³	Exceeds Standard?
Notes:												
1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations.												
2. Impacted receptors 1, 2, and 4 through 6, 86, and 87 would not receive noise level reductions from the feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results.												
3. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 5.12.3 (Methodology for Evaluating Impacts) and Section 5.12.5 (Impact Thresholds and Significance Criteria) .												
<u>4. Does not include reduction from rubberized asphalt.</u>												
Sources: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results and impact screening analysis for all receptors.												

Page 5.12-90 has been revised as follows:

Table 5.12-33: Interim Year 2033 BIG Operational Noise Levels – City/County Noise Standards Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-hour		
			Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level ⁴	Noise Standard (dBA L _{dn}) ³	Exceeds Standard?
NO BIG											
1	Residential	County	59.8	55	Yes	58.4	45	Yes	65.0	60	Yes
2	Residential	County	58.7	55	Yes	57.3	45	Yes	64.0	60	Yes
4	Residential	City	57.3	65	No	55.9	65	No	62.6	65	No
5	Residential	City	59.1	65	No	57.7	65	No	64.3	65	No
6	Residential	City	53.4	65	No	52.0	65	No	58.6	65	No
83	Residential	City	47.6	65	No	46.2	65	No	52.9	65	No
84	Residential	City	46.6	65	No	45.2	65	No	51.8	65	No
88	Residential	City	45.9	65	No	44.5	65	No	51.1	65	No
89	Residential	City	45.9	65	No	44.5	65	No	51.1	65	No
90	Residential	City	45.5	65	No	44.0	65	No	50.7	65	No
WITH BIG											

Table 5.12-33: Interim Year 2033 BIG Operational Noise Levels – City/County Noise Standards Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-hour		
			Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level ⁴	Noise Standard (dBA L _{dn}) ³	Exceeds Standard?
1	Residential	County	61.7	55	Yes	60.9	45	Yes	67.5 <u>67.4</u>	60	Yes
2	Residential	County	59.3	55	Yes	58.9 <u>58.8</u>	45	Yes	65.4 <u>65.3</u>	60	Yes
4	Residential	City	59.3	65	No	58.7	65	No	65.2	65	Yes
5	Residential	City	64.0 <u>59.1</u>	65	No	63.8 <u>58.6</u>	65	No	70.2 <u>65.1</u>	65	Yes
6	Residential	City	59.7	65	No	59.5	65	No	66.0	65	Yes
83	Residential	City	59.8	65	No	59.7	65	No	66.2	65	Yes
84	Residential	City	59.8	65	No	59.8	65	No	66.2	65	Yes
88	Residential	City	59.3	65	No	59.1	65	No	65.5	65	Yes
89	Residential	City	59.8	65	No	59.7	65	No	66.1	65	Yes
90	Residential	City	61.6	65	No	61.5	65	No	67.9	65	Yes
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. City and County noise standards obtained from Table 5.12-8, and Table 5.12-11. 3. City and County 24-hour average (dBA L_{dn}) noise standard obtained from Table 5.12-9. 4. <u>Does not include reduction from rubberized asphalt.</u>											
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.											

Page 5.12-91 has been revised as follows:

Table 5.12-34: Interim Year 2033 BIG Operational Noise Levels – Noise Increase Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-Hour		
			Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA L _{dn}) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA L _{dn}) ²	Exceeds Standard?
1	Residential	County	1.9	1.5	Yes	2.5	1.5	Yes	2.5 <u>2.4</u>	1.5	Yes
2	Residential	County	0.6	1.5	No	1.6	1.5	Yes	1.4	1.5	No
4	Residential	City	2.0 <u>1.7</u>	1.5	Yes	2.8 <u>2.4</u>	1.5	Yes	2.6 <u>2.3</u>	1.5	Yes
5	Residential	City	4.9	1.5	Yes	6.1	1.5	Yes	5.9	1.5	Yes
6	Residential	City	6.3	5.0	Yes	7.5	5.0	Yes	7.4	5.0	Yes
83	Residential	City	12.2 <u>6.8</u>	1.5	Yes	13.5 <u>8.0</u>	1.5	Yes	13.3 <u>7.7</u>	1.5	Yes
84	Residential	City	13.2 <u>7.3</u>	1.5	Yes	14.6 <u>8.6</u>	1.5	Yes	14.4 <u>8.4</u>	1.5	Yes
86	Residential	City	8.3 <u>6.2</u>	1.5	Yes	9.5 <u>7.4</u>	1.5	Yes	9.4 <u>7.2</u>	1.5	Yes
87	Residential	City	12.9 <u>8.8</u>	1.5	Yes	14.1 <u>9.4</u>	1.5	Yes	13.8 <u>9.3</u>	1.5	Yes
88	Residential	City	13.4 <u>8.4</u>	1.5	Yes	14.6 <u>9.3</u>	1.5	Yes	14.4 <u>9.2</u>	1.5	Yes
89	Residential	City	13.9 <u>8.5</u>	1.5	Yes	15.2 <u>9.4</u>	1.5	Yes	15.0 <u>9.3</u>	1.5	Yes
90	Residential	City	16.1 <u>8.9</u>	1.5	Yes	17.5 <u>10.0</u>	1.5	Yes	17.2 <u>9.8</u>	1.5	Yes
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 5.12.3 (Methodology for Evaluating Impacts) and Section 5.12.5 (Impact Thresholds and Significance Criteria). 3. <u>Does not include reduction from rubberized asphalt.</u>											
Sources: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results and impact screening analysis for all receptors.											

Page 5.12-92 has been revised as follows:

Table 5.12-35: Interim Year 2033 Mitigated BIG Operational Noise Levels– City/County Noise Standards Impact Analysis												
Receptor No. ¹	Land Use	Jurisdiction	Noise Barrier	Daytime			Nighttime			24-Hour		
				Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ³	Exceeds Standard?	Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ³	Exceeds Standard?	Modeled Noise Level (dBA L _{dn}) ⁴	Noise Standard (dBA L _{dn}) ³	Exceeds Standard?
WITH BIG												
1	Residential	County	N/A ²	61.7	55	Yes	60.9	45	Yes	67.5 <u>67.4</u>	60	Yes
2	Residential	County	N/A ²	59.3	55	Yes	58.9 <u>58.8</u>	45	Yes	65.4 <u>65.3</u>	60	Yes
4	Residential	City	N/A ²	59.2 <u>59.0</u>	65	No	58.6 <u>58.4</u>	65	No	65.1 <u>64.9</u>	65	Yes <u>No</u>
5	Residential	City	N/A ²	57.4	65	No	57.2	65	No	63.6	65	No
83	Residential	City	BAR 2 and BAR 3	57.5	65	No	57.4	65	No	63.8	65	No
84	Residential	City	BAR 2 and BAR 3	57.5	65	No	57.4	65	No	63.8	65	No
88	Residential	City	BAR 2 and BAR 3	57.0	65	No	56.7	65	No	63.1	65	No
89	Residential	City	BAR 2 and BAR 3	57.1	65	No	56.8	65	No	63.3	65	No
90	Residential	City	BAR 2 and BAR 3	58.3	65	No	58.2	65	No	64.6	65	No
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Impacted receptors 1, 2, and 4 through 6 would not receive noise level reductions from <u>the</u> feasible barriers (BAR 2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results 3. City and County noise standards obtained from Table 5.12-8 , and Table 5.12-11 . 4. <u>Does not include reduction from rubberized asphalt.</u>												
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.												

Page 5.12-93 has been revised as follows:

Table 5.12-36: Interim Year 2033 Mitigated BIG Operational Noise Levels – Noise Increase Impact Analysis												
Receptor No. ¹	Land Use	Jurisdiction	Noise Barrier	Daytime			Nighttime			24-Hour		
				Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA) ³	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA) ³	Exceeds Standard?	Incremental Increase (dBA Ldn) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA Ldn) ³	Exceeds Standard?
1	Residential	County	N/A ²	1.9	1.5	Yes	2.5	1.5	Yes	2.5 2.4	1.5	Yes
2	Residential	County	N/A²	0.6	1.5	No	1.6	1.5	Yes	1.4	1.5	No
4	Residential	City	N/A ²	1.9 1.7	1.5	Yes	2.7 2.4	1.5	Yes	2.5 2.3	1.5	Yes
5	Residential	City	N/A²	1.3	1.5	No	2.3	1.5	Yes	2.1	1.5	Yes
6	Residential	City	N/A²	4.0	5.0	No	5.2	5.0	Yes	5.0	5.0	No
83	Residential	City	BAR-2 and BAR-3	9.9 6.7	1.5	Yes	11.2 7.9	1.5	Yes	10.9 7.7	1.5	Yes
84	Residential	City	BAR-2 and BAR-3	10.9 7.2	1.5	Yes	12.2 8.4	1.5	Yes	12.0 8.3	1.5	Yes
86	Residential	City	N/A ²	7.4 6.2	1.5	Yes	8.6 7.4	1.5	Yes	8.5 7.2	1.5	Yes
87	Residential	City	N/A ²	11.1 8.8	1.5	Yes	12.0 9.4	1.5	Yes	11.8 9.3	1.5	Yes
88	Residential	City	BAR-2 and BAR-3	11.1 8.4	1.5	Yes	12.2 9.3	1.5	Yes	12.0 9.2	1.5	Yes
89	Residential	City	BAR-2 and BAR-3	11.2 8.5	1.5	Yes	12.3 9.4	1.5	Yes	12.2 9.3	1.5	Yes
8990	Residential	City	BAR-2 and BAR-3	12.8 8.9	1.5	Yes	14.2 10.0	1.5	Yes	13.9 9.8	1.5	Yes
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Impacted receptors 1, 2, 4 through 6, 86, and 87 would not receive noise level reductions from the feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results. 3. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 5.12.3 (Methodology for Evaluating Impacts) and Section 5.12.5 (Impact Thresholds and Significance Criteria). 4. Does not include reduction from rubberized asphalt.												
Sources: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results and impact screening analysis for all receptors.												

Page 5.12-95 has been revised as follows:

Table 5.12-37: Horizon Year 2048 BIG Operational Noise Levels – City/County Noise Standards Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-hour		
			Modeled Noise Level (dBA) ³	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level (dBA) ³	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level ³	Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
NO BIG											
1	Residential	County	60.9	55	Yes	59.4	45	Yes	66.0	60	Yes
4	Residential	City	58.4	65	No	56.9	65	No	63.6	65	No
5	Residential	City	60.1	65	No	58.6	65	No	65.3	65	Yes
6	Residential	City	54.5	65	No	53.0	65	No	59.6	65	No
83	Residential	City	48.7	65	No	47.2	65	No	53.8	65	No
84	Residential	City	47.6	65	No	46.1	65	No	52.8	65	No
88	Residential	City	46.9	65	No	45.4	65	No	52.1	65	No
89	Residential	City	47.0	65	No	45.5	65	No	52.1	65	No
90	Residential	City	46.5	65	No	45.0	65	No	51.7	65	No
WITH BIG											
1	Residential	County	61.9 <u>62.2</u>	55	Yes	61.3 <u>61.6</u>	45	Yes	67.8 <u>68.1</u>	60	Yes
4	Residential	City	59.5	65	No	59.0 <u>58.9</u>	65	No	65.5 <u>65.4</u>	65	Yes
5	Residential	City	64.0 <u>59.1</u>	65	No	63.9 <u>58.7</u>	65	No	70.3 <u>65.2</u>	65	Yes
6	Residential	City	59.7	65	No	59.6	65	No	66.0	65	Yes
83	Residential	City	59.8	65	No	59.8	65	No	66.2	65	Yes
84	Residential	City	59.8	65	No	59.8	65	No	66.2	65	Yes
88	Residential	City	59.3	65	No	59.1	65	No	65.6	65	Yes
89	Residential	City	59.8	65	No	59.7	65	No	66.1	65	Yes
90	Residential	City	61.6	65	No	61.5	65	No	67.9	65	Yes

Table 5.12-37: Horizon Year 2048 BIG Operational Noise Levels – City/County Noise Standards Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-hour		
			Modeled Noise Level (dBA) ³	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level (dBA) ³	Noise Standard (dBA) ²	Exceeds Standard?	Modeled Noise Level ³	Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. City and County noise standards obtained from Table 5.12-8 , from Table 5.12-9 , and Table 5.12-11 <u>3. Does not include reduction from rubberized asphalt.</u>											
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.											

Page 5.12-96 has been revised as follows:

Table 5.12-38: Horizon Year 2048 BIG Operational Noise Levels – Noise Increase Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-Hour		
			Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA L _{dn}) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA L _{dn}) ²	Exceeds Standard?
1	Residential	County	1.3	1.5	No	2.2	1.5	Yes	2.1	1.5	Yes
4	Residential	City	1.4 <u>1.1</u>	1.5	No	2.4 <u>2.0</u>	1.5	Yes	2.2 <u>1.8</u>	1.5	Yes
5	Residential	City	4.0	1.5	Yes	5.4	1.5	Yes	5.1	1.5	Yes
6	Residential	City	5.3	5.0	Yes	6.7	5.0	Yes	6.5	5.0	Yes
83	Residential	City	11.1 <u>5.8</u>	1.5	Yes	12.6 <u>7.1</u>	1.5	Yes	12.4 <u>7.0</u>	1.5	Yes
84	Residential	City	12.2 <u>6.4</u>	1.5	Yes	13.7 <u>7.8</u>	1.5	Yes	13.4 <u>7.5</u>	1.5	Yes
86	Residential	City	7.4 <u>5.4</u>	1.5	Yes	8.7 <u>6.6</u>	1.5	Yes	8.5 <u>6.4</u>	1.5	Yes
87	Residential	City	11.9 <u>7.8</u>	1.5	Yes	13.1 <u>8.6</u>	1.5	Yes	13.0 <u>8.5</u>	1.5	Yes

Table 5.12-38: Horizon Year 2048 BIG Operational Noise Levels – Noise Increase Impact Analysis											
Receptor No. ¹	Land Use	Jurisdiction	Daytime			Nighttime			24-Hour		
			Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA) ²	Exceeds Standard?	Incremental Increase (dBA L _{dn}) (With BIG Condition Minus No BIG Condition) ³	Incremental Standard (dBA L _{dn}) ²	Exceeds Standard?
88	Residential	City	12.4 <u>7.5</u>	1.5	Yes	13.7 <u>8.5</u>	1.5	Yes	13.5 <u>8.3</u>	1.5	Yes
89	Residential	City	12.8 <u>7.5</u>	1.5	Yes	14.2 <u>8.5</u>	1.5	Yes	14.0 <u>8.4</u>	1.5	Yes
90	Residential	City	15.1 <u>8.0</u>	1.5	Yes	16.5 <u>9.1</u>	1.5	Yes	16.2 <u>8.9</u>	1.5	Yes
Notes:											
1. See Figure 5.12 11 through Figure 5.12 13 for receptor locations.											
2. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 5.12.3 (Methodology for Evaluating Impacts) and Section 5.12.5 (Impact Thresholds and Significance Criteria) .											
3. <u>Does not include reduction from rubberized asphalt.</u>											
Sources: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results and impact screening analysis for all receptors.											

Page 5.12-97 has been revised as follows:

Table 5.12-39: Horizon Year 2048 Mitigated BIG Operational Noise Levels – City/County Noise Standards Impact Analysis												
Receptor No. ¹	Land Use	Jurisdiction	Noise Barriers	Daytime ²			Nighttime ²			24-Hour ³		
				Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ³	Exceeds Standard?	Modeled Noise Level (dBA) ⁴	Noise Standard (dBA) ³	Exceeds Standard?	Modeled Noise Level (dBA Ldn) ⁴	Noise Standard (dBA Ldn) ⁴	Exceeds Standard?
WITH BIG												
1	Residential	County	N/A ²	62.2	55	Yes	61.6	45	Yes	68.1	60	Yes
4	Residential	City	N/A ²	59.7 <u>59.5</u>	65	No	59.2 <u>59.0</u>	65	No	65.7 <u>65.4</u>	65	Yes
5	Residential	City	N/A ²	60.4 <u>58.9</u>	65	No	60.1 <u>58.5</u>	65	No	66.6 <u>65.0</u>	65	Yes
6	Residential	City	N/A ²	57.6	65	No	57.4	65	No	63.8	65	No
83	Residential	City	N/A ²	57.5	65	No	57.4	65	No	63.9	65	No
84	Residential	City	BAR-2 and BAR-3	57.5	65	No	57.5	65	No	63.9	65	No

88	Residential	City	BAR-2 and BAR-3	57.0	65	No	56.8	65	No	63.2	65	No
89	Residential	City	N/A²	57.1	65	No	56.9	65	No	63.3	65	No
90	Residential	City	N/A²	58.3	65	No	58.2	65	No	64.6	65	No
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Impacted receptors 1, 2, 4 through 6, 83, 89, and 90 would not receive noise level reductions from the feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results. 3. City and County noise standards obtained from Table 5.12-8, and Table 5.12-11. 4. Does not include reduction from rubberized asphalt.												
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.												

Page 5.12-98 has been revised as follows:

Table 5.12-40: Horizon Year 2048 Mitigated BIG Operational Noise Levels – Noise Increase Impact Analysis												
Receptor No. ¹	Land Use	Jurisdiction	Noise Barrier	Daytime			Nighttime			24-Hour		
				Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA) ³	Exceeds Standard?	Incremental Increase (dBA) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA) ³	Exceeds Standard?	Incremental Increase (dBA Ldn) (With BIG Condition Minus No BIG Condition) ^{3,4}	Incremental Standard (dBA Ldn) ³	Exceeds Standard?
1	Residential	County	N/A ²	1.3	1.5	No	2.2	1.5	Yes	2.1	1.5	Yes
4	Residential	City	N/A ²	1.3 1.1	1.5	No	2.3 2.1	1.5	Yes	2.1 1.8	1.5	Yes
5	Residential	City	N/A ²	0.3	1.5	Yes	1.5	1.5	Yes	1.3	1.5	Yes
6	Residential	City	N/A ²	3.1	5.0	Yes	4.4	5.0	Yes	4.2	5.0	Yes
83	Residential	City	N/A ²	8.8 5.7	1.5	Yes	10.2 7.1	1.5	Yes	10.1 6.9	1.5	Yes
84	Residential	City	BAR-2 and BAR-3	9.9 6.3	1.5	Yes	11.4 7.7	1.5	Yes	11.1 7.4	1.5	Yes
86	Residential	City	BAR-2 and BAR-3	6.5 5.4	1.5	Yes	7.8 6.6	1.5	Yes	7.6 6.4	1.5	Yes
87	Residential	City	N/A ²	10.0 7.8	1.5	Yes	11.1 8.6	1.5	Yes	11.0 8.5	1.5	Yes
88	Residential	City	N/A ²	10.1 7.5	1.5	Yes	11.4 8.5	1.5	Yes	11.1 8.3	1.5	Yes
89	Residential	City	BAR-2 and BAR-3	10.1 7.5	1.5	Yes	11.4 8.5	1.5	Yes	11.2 8.4	1.5	Yes
90	Residential	City	BAR-2 and BAR-3	11.8 8.0	1.5	Yes	13.2 9.1	1.5	Yes	12.9 8.9	1.5	Yes
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Impacted receptors 1, 2-4 through 6, 83, 87, and 89-98 would not receive noise level reductions from the feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results 3. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 5.12.3 (Methodology for Evaluating Impacts) and Section 5.12.5 (Impact Thresholds and Significance Criteria) 4. Does not include reduction from rubberized asphalt. Sources: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results and impact screening analysis for all receptors.												

Page 5.12-100 has been revised as follows:

Table 5.12-41: Opening Year 2028 BIG Operational Interior Noise Levels – Interior Noise Standard Analysis							
Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn})	Exceeds Standard?
NO BIG							
1	Residential	54.7	45	Yes	36.7	45	No
2	Residential	53.7	45	Yes	35.7	45	No
4	Residential	52.3	45	Yes	34.3	45	No
5	Residential	54.0	45	Yes	36.0	45	No
6	Residential	48.3	45	Yes	30.3	45	No
83	Residential	42.6	45	No	24.6	45	No
84	Residential	41.5	45	No	23.5	45	No
86	Residential	42.0	45	No	24.0	45	No
87	Residential	40.3	45	No	22.3	45	No
88	Residential	40.8	45	No	22.8	45	No
89	Residential	40.9	45	No	22.9	45	No
90	Residential	40.4	45	No	22.4	45	No
WITH BIG							
1	Residential	57.4	45	Yes	39.4	45	No
2	Residential	55.3	45	Yes	37.3	45	No
4	Residential	55.3 54.8	45	Yes	37.3 36.8	45	No
5	Residential	55.2 55.1	45	Yes	37.2 37.1	45	No
6	Residential	60.2 52.1	45	Yes	42.2 34.1	45	No
83	Residential	56.0 50.6	45	Yes	38.0 32.6	45	No

Table 5.12-41: Opening Year 2028 BIG Operational Interior Noise Levels – Interior Noise Standard Analysis

Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn})	Exceeds Standard?
84	Residential	56.2 <u>50.2</u>	45	Yes	38.2 <u>32.2</u>	45	No
86	Residential	56.2 <u>49.5</u>	45	Yes	38.2 <u>31.5</u>	45	No
87	Residential	51.7 <u>49.9</u>	45	Yes	33.7 <u>31.9</u>	45	No
88	Residential	54.4 <u>50.3</u>	45	Yes	36.4 <u>32.3</u>	45	No
89	Residential	55.5 <u>50.4</u>	45	Yes	37.5 <u>32.4</u>	45	No
90	Residential	56.1 <u>50.5</u>	45	Yes	38.1 <u>32.5</u>	45	No

1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations.

2. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open and 28 dBA for windows closed per the Locher, et al., Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows, 2018

3. Does not include reduction from rubberized asphalt.

Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.

Page 5.12-101 has been revised as follows:

Table 5.12-42: Opening Year 2028 BIG Operational Interior Noise Levels – Noise Impact Analysis

Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Standard (dBA L _{dn}) ²	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
1	Residential	2.7	1.5	Yes	2.7	1.5	Yes
2	Residential	1.6	1.5	Yes	1.6	1.5	Yes
4	Residential	2.9 <u>2.5</u>	1.5	Yes	2.9 <u>2.5</u>	1.5	Yes

Table 5.12-42: Opening Year 2028 BIG Operational Interior Noise Levels – Noise Impact Analysis

Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Standard (dBA L _{dn}) ²	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
5	Residential	6.2	1.5	Yes	6.2	1.5	Yes
6	Residential	7.7	5.0	Yes	7.7	5.0	Yes
83	Residential	13.6 <u>8.0</u>	1.5	Yes	13.6 <u>8.0</u>	1.5	Yes
84	Residential	14.7 <u>8.7</u>	1.5	Yes	14.7 <u>8.7</u>	1.5	Yes
86	Residential	9.7 <u>7.5</u>	1.5	Yes	9.7 <u>7.5</u>	1.5	Yes
87	Residential	14.1 <u>9.6</u>	1.5	Yes	14.1 <u>9.6</u>	1.5	Yes
88	Residential	14.7 <u>9.5</u>	1.5	Yes	14.7 <u>9.5</u>	1.5	Yes
89	Residential	15.2 <u>9.5</u>	1.5	Yes	15.2 <u>9.5</u>	1.5	Yes
90	Residential	17.5 <u>10.1</u>	1.5	Yes	17.5 <u>10.1</u>	1.5	Yes

Notes:

1. See **Figure 5.12-11** through **Figure 5.12-13** for receptor locations.2. Incremental standards are based on FICON methodology using measured ambient levels as described in **Section 4.1 (Impact Analysis Methodology)** and **Section 4.2 (Thresholds of Significance)**.

3. Does not include reduction from rubberized asphalt.

Source: SoundPLAN Essential version 5.1. Please see **Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A** for complete modeling results for all receptors.

Page 5.12-102 has been revised as follows:

Table 5.12-43: Opening Year 2028 Mitigated BIG Operational Interior Noise Levels								
Receptor No. ¹	Land Use	Noise Barrier	Windows Open			Windows Closed		
			Modeled Interior Noise Level (dBA L _{dn}) ^{2, 4}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2, 4}	Noise Standard (dBA L _{dn})	Exceeds Standard?
WITH BIG								
1	Residential	N/A ³	57.4	45	Yes	39.4	45	No
2	Residential	N/A ³	55.3	45	Yes	37.3	45	No
4	Residential	N/A ³	55.1 54.8	45	Yes	37.1 36.8	45	No
5	Residential	N/A ³	56.4 54.9	45	Yes	38.4 36.9	45	No
6	Residential	N/A ³	53.6 52.2	45	Yes	35.6 34.2	45	No
83	Residential	BAR-2 and BAR-3	53.8 50.6	45	Yes	35.8 32.6	45	No
84	Residential	BAR-2 and BAR-3	53.8 50.1	45	Yes	35.8 32.1	45	No
86	Residential	N/A ³	50.8 49.5	45	Yes	32.8 31.5	45	No
87	Residential	N/A ³	52.4 49.9	45	Yes	34.4 31.9	45	No
88	Residential	BAR-2 and BAR-3	53.1 50.3	45	Yes	35.1 32.3	45	No
89	Residential	BAR-2 and BAR-3	53.3 50.4	45	Yes	35.3 32.4	45	No
90	Residential	BAR-2 and BAR-3	54.6 50.5	45	Yes	36.6 32.5	45	No
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open and 28 dBA for windows closed per the International Journal of Environmental Research and Public Health, Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows, 2018. 3. Impacted receptors 1, 2, 4 through 6, 86, and 87 would not receive noise level reductions from <u>the</u> feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results 4. <u>Does not include reduction from rubberized asphalt.</u>								
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.								

Page 5.12-103 has been revised as follows:

Table 5.12-44: Opening Year 2028 Mitigated BIG Operational Interior Noise Levels – Noise Increase Impact Analysis								
Receptor No. ¹	Land Use	Noise Barriers	Windows Open			Windows Closed		
			Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ⁴	Incremental Standard (dBA L _{dn}) ³	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ⁴	Incremental Noise Standard (dBA L _{dn}) ³	Exceeds Standard?
1	Residential	N/A ²	2.7	1.5	Yes	2.7	1.5	Yes
2	Residential	N/A ²	1.6	1.5	Yes	1.6	1.5	Yes
4	Residential	N/A ²	2.8 <u>2.5</u>	1.5	Yes	2.8 <u>2.5</u>	1.5	Yes
5	Residential	N/A²	2.4	1.5	Yes	2.4	1.5	Yes
6	Residential	N/A²	5.3	5.0	Yes	5.3	5.0	Yes
83	Residential	BAR-2 and BAR-3	11.2 <u>8.0</u>	1.5	Yes	11.2 <u>8.0</u>	1.5	Yes
84	Residential	BAR-2 and BAR-3	12.3 <u>8.6</u>	1.5	Yes	12.3 <u>8.6</u>	1.5	Yes
86	Residential	N/A ²	8.8 <u>7.5</u>	1.5	Yes	8.8 <u>7.5</u>	1.5	Yes
87	Residential	N/A ²	12.1 <u>9.6</u>	1.5	Yes	12.1 <u>9.6</u>	1.5	Yes
88	Residential	BAR-2 and BAR-3	12.3 <u>9.5</u>	1.5	Yes	12.3 <u>9.5</u>	1.5	Yes
89	Residential	BAR-2 and BAR-3	12.4 <u>9.5</u>	1.5	Yes	12.4 <u>9.5</u>	1.5	Yes
90	Residential	BAR-2 and BAR-3	14.2 <u>10.1</u>	1.5	Yes	14.2 <u>10.1</u>	1.5	Yes

Notes:

1. See **Figure 5.12-11** through **Figure 5.12-13** for receptor locations.
2. Impacted receptors 1, 2, 4 through 6, 86, and 87 would not receive noise level reductions from the feasible barriers (~~BAR-2 and BAR-3~~); see **Appendix 5.12 BIG-1** for barrier feasibility analysis and complete modeling results
3. Incremental standards are based on FICON methodology using measured ambient levels as described in **Section 4.1 (Impact Analysis Methodology)** and **Section 4.2 (Thresholds of Significance)**.
4. Does not include reduction from rubberized asphalt

Source: SoundPLAN Essential version 5.1. Please see **Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A** for complete modeling results for all receptors.

Page 5.12-105 has been revised as follows:

Table 5.12-45: Interim Year 2033 BIG Operational Interior Noise Levels

Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
NO BIG							
1	Residential	55.0	45	Yes	37.0	45	No
4	Residential	52.6	45	Yes	34.6	45	No
5	Residential	54.3	45	Yes	36.3	45	No
6	Residential	48.6	45	Yes	30.6	45	No
83	Residential	42.9	45	No	24.9	45	No
84	Residential	41.8	45	No	23.8	45	No
86	Residential	42.3	45	No	24.3	45	No
87	Residential	40.6	45	No	22.6	45	No
88	Residential	41.1	45	No	23.1	45	No
89	Residential	41.1	45	No	23.1	45	No
90	Residential	40.7	45	No	22.7	45	No
WITH BIG							
1	Residential	57.1 <u>57.4</u>	45	Yes	39.1 <u>39.4</u>	45	No
4	Residential	54.9	45	Yes	36.9	45	No

Table 5.12-45: Interim Year 2033 BIG Operational Interior Noise Levels

Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
5	Residential	60.2 <u>55.1</u>	45	Yes	42.2 <u>37.1</u>	45	No
6	Residential	55.9 <u>52.1</u>	45	Yes	37.9 <u>34.1</u>	45	No
83	Residential	56.1 <u>50.6</u>	45	Yes	38.1 <u>32.6</u>	45	No
84	Residential	56.2 <u>50.2</u>	45	Yes	38.2 <u>32.2</u>	45	No
86	Residential	51.6 <u>49.5</u>	45	Yes	33.6 <u>31.5</u>	45	No
87	Residential	54.4 <u>49.9</u>	45	Yes	36.4 <u>31.9</u>	45	No
88	Residential	55.5 <u>50.3</u>	45	Yes	37.5 <u>32.3</u>	45	No
89	Residential	56.1 <u>50.4</u>	45	Yes	38.1 <u>32.4</u>	45	No
90	Residential	57.9 <u>50.5</u>	45	Yes	39.9 <u>32.5</u>	45	No

Notes:

1. See **Figure 5.12-11** through **Figure 5.12-13** for receptor locations.
2. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open and 28 dBA for windows closed per the International Journal of Environmental Research and Public Health, *Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows*, 2018.
3. Does not include reduction from rubberized asphalt.

Source: SoundPLAN Essential version 5.1. Please see **Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A** for complete modeling results for all receptors.

Page 5.12-106 has been revised as follows:

Table 5.12-46: Interim Year 2033 BIG Operational Interior Noise Levels – Noise Increase Impact Analysis							
Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Noise Standard (dBA L _{dn}) ²	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
1	Residential	2.5 <u>2.4</u>	1.5	Yes	2.5 <u>2.4</u>	1.5	Yes
4	Residential	2.6 <u>2.3</u>	1.5	Yes	2.6 <u>2.3</u>	1.5	Yes
5	Residential	5.9	1.5	Yes	5.9	1.5	Yes
6	Residential	7.4	5.0	Yes	7.4	5.0	Yes
83	Residential	13.3 <u>7.7</u>	1.5	Yes	13.3 <u>7.7</u>	1.5	Yes
84	Residential	14.4 <u>8.4</u>	1.5	Yes	14.4 <u>8.4</u>	1.5	Yes
86	Residential	9.4 <u>7.2</u>	1.5	Yes	9.4 <u>7.2</u>	1.5	Yes
87	Residential	13.8 <u>9.3</u>	1.5	Yes	13.8 <u>9.3</u>	1.5	Yes
88	Residential	14.4 <u>9.2</u>	1.5	Yes	14.4 <u>9.2</u>	1.5	Yes
89	Residential	15.0 <u>9.3</u>	1.5	Yes	15.0 <u>9.3</u>	1.5	Yes
90	Residential	17.2 <u>9.8</u>	1.5	Yes	17.2 <u>9.8</u>	1.5	Yes
Notes:							
1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations.							
2. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 4.1 (Impact Analysis Methodology) and Section 4.2 (Thresholds of Significance).							
3. <u>Does not include reduction from rubberized asphalt.</u>							
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.							

Page 5.12-107 has been revised as follows:

Table 5.12-47: Interim Year 2033 Mitigation BIG Operational Interior Noise Levels								
Receptor No. ¹	Land Use	Noise Barrier	Windows Open			Windows Closed		
			Modeled Interior Noise Level (dBA L _{dn}) ^{2,4}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2,4}	Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
WITH BIG								
1	Residential	N/A ³	57.5 57.4	45	Yes	39.5 39.4	45	No
2	Residential	N/A ³	55.4	45	Yes	37.4	45	No
4	Residential	N/A ³	55.1 54.9	45	Yes	37.1 36.9	45	No
5	Residential	N/A ³	56.4 54.9	45	Yes	38.4 36.9	45	No
6	Residential	N/A ³	53.6 52.2	45	Yes	35.6 34.2	45	No
83	Residential	BAR 2 and BAR 3	53.8 50.6	45	Yes	35.8 32.6	45	No
84	Residential	BAR 2 and BAR 3	53.8 50.1	45	Yes	35.8 32.1	45	No
86	Residential	N/A ³	50.8 49.5	45	Yes	32.8 31.5	45	No
87	Residential	N/A ³	52.4 49.9	45	Yes	34.4 31.9	45	No
88	Residential	BAR 2 and BAR 3	53.1 50.3	45	Yes	35.1 32.3	45	No
89	Residential	BAR 2 and BAR 3	53.3 50.4	45	Yes	35.3 32.4	45	No
90	Residential	N/A ³	54.6 50.5	45	Yes	36.6 32.5	45	No
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open and 28 dBA for windows closed per the International Journal of Environmental Research and Public Health, <i>Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows</i> , 2018. 3. Impacted receptors 1, 2, 4 through 6, 86, and 87, and 90 would not receive noise level reductions from the feasible barriers (BAR 2 and BAR 3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling result. 4. Does not include reduction from rubberized asphalt.								
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1 - Appendix A for complete modeling results for all receptors.								

Page 5.12-108 has been revised as follows:

Table 5.12-48: Interim Year 2033 Mitigated BIG Operational Interior Noise Levels – Noise Increase Impact Analysis								
Receptor No. ¹	Land Use	Noise Barrier	Windows Open			Windows Closed		
			Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ⁴	Incremental Standard (dBA L _{dn}) ³	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ⁴	Incremental Noise Standard (dBA L _{dn}) ³	Exceeds Standard?
1	Residential	N/A ²	2.5 2.4	1.5	Yes	2.5 2.4	1.5	Yes
4	Residential	N/A ²	2.5 2.3	1.5	Yes	2.5 2.3	1.5	Yes
5	Residential	N/A ²	2.1	1.5	Yes	2.1	1.5	Yes
6	Residential	N/A ²	5.0	5.0	Yes	5.0	5.0	Yes
83	Residential	BAR-2 and BAR-3	10.9 7.7	1.5	Yes	10.9 7.7	1.5	Yes
84	Residential	BAR-2 and BAR-3	12.0 8.3	1.5	Yes	12.0 8.3	1.5	Yes
86	Residential	N/A ²	8.5 7.2	1.5	Yes	8.5 7.2	1.5	Yes
87	Residential	N/A ²	11.8 9.3	1.5	Yes	11.8 9.3	1.5	Yes
88	Residential	BAR-2 and BAR-3	12.0 9.2	1.5	Yes	12.0 9.2	1.5	Yes
89	Residential	BAR-2 and BAR-3	12.2 9.3	1.5	Yes	12.2 9.3	1.5	Yes
90	Residential	N/A ²	13.9 9.8	1.5	Yes	13.9 9.8	1.5	Yes
Notes:								
1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations.								
2. Impacted receptors 1, 2, 4 through 6, 83 , 86, and 87 , and 690 would not receive noise level reductions from the feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results.								
3. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 4.1 (Impact Analysis Methodology) and Section 4.2 (Thresholds of Significance)								
4. Does not include reduction from rubberized asphalt.								
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.								

Page 5.12-110 has been revised as follows:

Table 5.12-49: Horizon Year 2048 BIG Operational Interior Noise Levels							
Receptor No.1	Land Use	Windows Open			Windows Closed		
		Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
NO BIG							
1	Residential	56.0	45	Yes	38.0	45	No
4	Residential	53.6	45	Yes	35.6	45	No
5	Residential	55.3	45	Yes	37.3	45	No
6	Residential	49.6	45	Yes	31.6	45	No
83	Residential	43.8	45	No	25.8	45	No
84	Residential	42.8	45	No	24.8	45	No
86	Residential	43.3	45	No	25.3	45	No
87	Residential	41.5	45	No	23.5	45	No
88	Residential	42.1	45	No	24.1	45	No
89	Residential	42.1	45	No	24.1	45	No
90	Residential	41.7	45	No	23.7	45	No
WITH BIG							
1	Residential	58.1	45	Yes	40.1	45	No
4	Residential	55.8 <u>55.4</u>	45	Yes	37.8 <u>37.4</u>	45	No
5	Residential	60.4 <u>55.2</u>	45	Yes	42.4 <u>37.2</u>	45	No
6	Residential	56.1 <u>52.4</u>	45	Yes	38.1 <u>34.4</u>	45	No
83	Residential	56.2 <u>50.8</u>	45	Yes	38.2 <u>32.8</u>	45	No
84	Residential	56.2 <u>50.3</u>	45	Yes	38.2 <u>32.3</u>	45	No
86	Residential	51.8 <u>49.7</u>	45	Yes	33.8 <u>31.7</u>	45	No

Table 5.12-49: Horizon Year 2048 BIG Operational Interior Noise Levels

Receptor No.1	Land Use	Windows Open			Windows Closed		
		Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2,3}	Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
87	Residential	54.5 <u>50.0</u>	45	Yes	36.5 <u>32.0</u>	45	No
88	Residential	55.6 <u>50.4</u>	45	Yes	37.6 <u>32.4</u>	45	No
89	Residential	56.1 <u>50.5</u>	45	Yes	38.1 <u>32.5</u>	45	No
90	Residential	57.9 <u>50.6</u>	45	Yes	39.9 <u>32.6</u>	45	No

Notes:

- See Figure 5.12-11 through Figure 5.12-13 for receptor locations.
- Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open and 28 dBA for windows closed per the International Journal of Environmental Research and Public Health, *Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows*, 2018.
- Does not include reduction from rubberized asphalt.

Source: SoundPLAN Essential version 5.1. Please see **Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A** for complete modeling results for all receptors.

Page 5.12-111 has been revised as follows:

Table 5.12-50: Horizon Year 2048 Unmitigated BIG Operational Interior Noise Levels – Noise Increase Impact Analysis

Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Standard (dBA L _{dn}) ²	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
1	Residential	2.1	1.5	Yes	2.1	1.5	Yes
4	Residential	2.2 <u>1.8</u>	1.5	Yes	2.2 <u>1.8</u>	1.5	Yes
5	Residential	5.1	1.5	Yes	5.1	1.5	Yes
6	Residential	6.5	5.0	Yes	6.5	5.0	Yes

Table 5.12-50: Horizon Year 2048 Unmitigated BIG Operational Interior Noise Levels – Noise Increase Impact Analysis

Receptor No. ¹	Land Use	Windows Open			Windows Closed		
		Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Standard (dBA L _{dn}) ²	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ³	Incremental Noise Standard (dBA L _{dn}) ²	Exceeds Standard?
83	Residential	12.4 <u>7.0</u>	1.5	Yes	12.4 <u>7.0</u>	1.5	Yes
84	Residential	13.4 <u>7.5</u>	1.5	Yes	13.4 <u>7.5</u>	1.5	Yes
86	Residential	8.5 <u>6.4</u>	1.5	Yes	8.5 <u>6.4</u>	1.5	Yes
87	Residential	13.0 <u>8.5</u>	1.5	Yes	13.0 <u>8.5</u>	1.5	Yes
88	Residential	13.5 <u>8.3</u>	1.5	Yes	13.5 <u>8.3</u>	1.5	Yes
89	Residential	14.0 <u>8.4</u>	1.5	Yes	14.0 <u>8.4</u>	1.5	Yes
90	Residential	16.2 <u>8.9</u>	1.5	Yes	16.2 <u>8.9</u>	1.5	Yes

Notes:

1. See **Figure 5.12-11** through **Figure 5.12-13** for receptor locations.
2. Incremental standards are based on FICON methodology using measured ambient levels as described in **Section 4.1 (Impact Analysis Methodology)** and **Section 4.2 (Thresholds of Significance)**.
3. Does not include reduction from rubberized asphalt.

Source: SoundPLAN Essential version 5.1. Please see **Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A** for complete modeling results for all receptors.

Page 5.12-112 has been revised as follows:

Table 5.12-51: Horizon Year 2048 Mitigated BIG Operational Interior Noise Levels								
Receptor No. ¹	Land Use	Noise Barrier	Windows Open			Windows Closed		
			Modeled Interior Noise Level (dBA L _{dn}) ^{2,4}	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ^{2,4}	Noise Standard (dBA L _{dn})	Exceeds Standard?
WITH BIG								
1	Residential	N/A ³	58.1	45	Yes	40.1	45	No
4	Residential	N/A ³	55.7 55.4	45	Yes	37.7 37.4	45	No
5	Residential	N/A ³	56.6 55.0	45	Yes	38.6 37.0	45	No
6	Residential	N/A ³	53.8 52.5	45	Yes	35.8 34.5	45	No
83	Residential	N/A ³	53.9 50.7	45	Yes	35.9 32.7	45	No
84	Residential	BAR-2 and BAR-3	53.9 50.2	45	Yes	35.9 32.2	45	No
86	Residential	BAR-2 and BAR-3	50.9 49.7	45	Yes	32.9 31.7	45	No
87	Residential	N/A ³	52.5 50.0	45	Yes	34.5 32.0	45	No
88	Residential	N/A ³	53.2 50.4	45	Yes	35.2 32.4	45	No
89	Residential	BAR-2 and BAR-3	53.3 50.5	45	Yes	35.3 32.5	45	No
90	Residential	BAR-2 and BAR-3	54.6 50.6	45	Yes	36.6 32.6	45	No
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open and 28 dBA for windows closed per the Locher, et al., Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows, 2018. 3. Impacted receptors 1, 2-4 through 6, 83, 86 , and 87, and 88 would not receive noise level reductions from <u>the</u> feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results. 4. <u>Does not include reduction from rubberized asphalt.</u>								
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.								

Page 5.12-113 has been revised as follows:

Table 5.12-52: Horizon Year 2048 Mitigated BIG Operational Interior Noise Levels – Noise Increase Impact Analysis								
Receptor No. ¹	Land Use	Noise Barriers	Windows Open			Windows Closed		
			Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ⁴	Incremental Standard (dBA L _{dn}) ³	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn}) ⁴	Incremental Noise Standard (dBA L _{dn}) ³	Exceeds Standard?
1	Residential	N/A ²	2.1	1.5	Yes	2.1	1.5	Yes
4	Residential	N/A ²	2.1 1.8	1.5	Yes	2.1 1.8	1.5	Yes
5	Residential	N/A²	1.3	1.5	No	1.3	1.5	No
6	Residential	N/A ²	4.2	5.0	Yes	4.2	5.0	Yes
83	Residential	N/A ²	10.1 6.9	1.5	Yes	10.1 6.9	1.5	Yes
84	Residential	BAR-2 and BAR-3	11.1 7.4	1.5	Yes	11.1 7.4	1.5	Yes
86	Residential	BAR-2 and BAR-3	7.6 6.4	1.5	Yes	7.6 6.4	1.5	Yes
87	Residential	N/A ²	11.0 8.5	1.5	Yes	11.0 8.5	1.5	Yes
88	Residential	N/A ²	11.1 8.3	1.5	Yes	11.1 8.3	1.5	Yes
89	Residential	BAR-2 and BAR-3	11.2 8.4	1.5	Yes	11.2 8.4	1.5	Yes
90	Residential	BAR-2 and BAR-3	12.9 8.9	1.5	Yes	12.9 8.9	1.5	Yes
Notes:								
1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations.								
2. Impacted receptors 1, 2, 4 through 6, 83, 86 , and 87 , and 88 would not receive noise level reductions from the feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results.								
3. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 4.1 (Impact Analysis Methodology) and Section 4.2 (Thresholds of Significance).								
4. Does not include reduction from rubberized asphalt.								
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.								

Page 5.12-112 has been revised as follows:

Table 5.12-51: Horizon Year 2048 Mitigated BIG Operational Interior Noise Levels								
Receptor No. ¹	Land Use	Noise Barrier	Windows Open			Windows Closed		
			Modeled Interior Noise Level (dBA L _{dn}) ²	Noise Standard (dBA L _{dn})	Exceeds Standard?	Modeled Interior Noise Level (dBA L _{dn}) ²	Noise Standard (dBA L _{dn})	Exceeds Standard?
WITH BIG								
1	Residential	N/A ³	58.1	45	Yes	40.1	45	No
4	Residential	N/A ³	55.7	45	Yes	37.7	45	No
5	Residential	N/A ³	56.6	45	Yes	38.6	45	No
6	Residential	N/A ³	53.8	45	Yes	35.8	45	No
83	Residential	N/A ³	53.9	45	Yes	35.9	45	No
84	Residential	BAR-2 and BAR-3	53.9	45	Yes	35.9	45	No
86	Residential	BAR-2 and BAR-3	50.9	45	Yes	32.9	45	No
87	Residential	N/A ³	52.5	45	Yes	34.5	45	No
88	Residential	N/A ³	53.2	45	Yes	35.2	45	No
89	Residential	BAR-2 and BAR-3	53.3	45	Yes	35.3	45	No
90	Residential	BAR-2 and BAR-3	54.6	45	Yes	36.6	45	No
Notes: 1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations. 2. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open and 28 dBA for windows closed per the Locher, et al., Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows, 2018. 3. Impacted receptors 1, 2-4 through 6, 83, 86, and 87, and 88 would not receive noise level reductions from the feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results.								
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.								

Page 5.12-113 has been revised as follows:

Table 5.12-52: Horizon Year 2048 Mitigated BIG Operational Interior Noise Levels – Noise Increase Impact Analysis								
Receptor No. ¹	Land Use	Noise Barriers	Windows Open			Windows Closed		
			Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn})	Incremental Standard (dBA L _{dn}) ³	Exceeds Standard?	Incremental Increase (With BIG Condition Minus No BIG Condition) (dBA L _{dn})	Incremental Noise Standard (dBA L _{dn}) ³	Exceeds Standard?
1	Residential	N/A ²	2.1	1.5	Yes	2.1	1.5	Yes
4	Residential	N/A ²	2.1	1.5	Yes	2.1	1.5	Yes
5	Residential	N/A ²	1.3	1.5	No	1.3	1.5	No
6	Residential	N/A ²	4.2	5.0	Yes	4.2	5.0	Yes
83	Residential	N/A ²	10.1	1.5	Yes	10.1	1.5	Yes
84	Residential	BAR-2 and BAR-3	11.1	1.5	Yes	11.1	1.5	Yes
86	Residential	BAR-2 and BAR-3	7.6	1.5	Yes	7.6	1.5	Yes
87	Residential	N/A ²	11.0	1.5	Yes	11.0	1.5	Yes
88	Residential	N/A ²	11.1	1.5	Yes	11.1	1.5	Yes
89	Residential	BAR-2 and BAR-3	11.2	1.5	Yes	11.2	1.5	Yes
90	Residential	BAR-2 and BAR-3	12.9	1.5	Yes	12.9	1.5	Yes
Notes:								
1. See Figure 5.12-11 through Figure 5.12-13 for receptor locations.								
2. Impacted receptors 1, 2, 4 through 6, 83, 86, and 87 , and 88 would not receive noise level reductions from the feasible barriers (BAR-2 and BAR-3); see Appendix 5.12 BIG-1 for barrier feasibility analysis and complete modeling results.								
3. Incremental standards are based on FICON methodology using measured ambient levels as described in Section 4.1 (Impact Analysis Methodology) and Section 4.2 (Thresholds of Significance).								
Source: SoundPLAN Essential version 5.1. Please see Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for complete modeling results for all receptors.								

The following has been inserted after **Page 5.12-115**. This table is identical to **Table 5.12-53**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-53B: Opening Year 2028 Mitigated Plus BIG Conditions Roadway Traffic Noise Levels													
Roadway	Segment	Opening Year 2028		Opening Year 2028 + BIG		Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ²	Nearest Receptor Land Use Type	Opening Year 2028 + BIG Noise Level at Nearest Receptor (dBA CNEL)	City/County Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
		ADT	dBA CNEL at 100 feet from Roadway Centerline	ADT	dBA CNEL at 100 feet from Roadway Centerline								
Main Street	Hinkley Road to Country Club Drive	5,046	62.9	5,396	63.0	0.0	3.0	No	SF Residential	60.8	60	Yes	No ³
	Country Club Drive to Lenwood Road	4,465	62.2	6,942	<u>60.4</u>	<u>0.0</u>	3.0	No	SF Residential	<u>59.8</u>	65	No	No
	Lenwood Road to County/City Boundary	9,341	61.8	10,645	<u>58.2</u>	<u>0.0</u>	3.0	No	SF Residential	<u>61.5</u>	65	<u>No</u>	No ³
	County/City Boundary to SR-58 Eastbound Ramps	9,341	62.8	10,645	63.2	0.4	3.0	No	Commercial	51.0	65	No	No
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	7,902	63.1	10,041	63.6	0.5	3.0	No	N/A ²	-	-	-	-
	SR-58 Westbound Ramps to L Street	6,837	62.0	8,583	62.1	0.1	5.0	No	SF Residential	66.0	65	Yes	No ³
	L Street to Avenue A	12,797	61.5	13,670	61.5	0.0	3.0	No	MF Residential	65.4	65	Yes	No ³
	Avenue A to Barstow Road	12,218	60.7	12,917	60.7	0.0	3.0	No	MF Residential	56.2	65	No	No
Barstow Road	Main Street to I-15 Southbound Ramps	11,754	63.6	12,191	63.7	0.1	3.0	No	SF Residential	70.5	65	Yes	No ³
	I-15 Southbound Ramps to I-15 Northbound Ramps	12,399	64.3	12,923	64.4	0.1	3.0	No	SF Residential	56.2	65	No	No
	I-15 Northbound Ramps to Rimrock Road	13,209	64.9	13,297	64.9	0.0	3.0	No	MF Residential	67.7	65	Yes	No ³
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	1,202	59.3	2,008	62.5	3.2	5.0	No	SF Residential	65.8	60	Yes	No ³
	Community Boulevard to Agate Road	1,100	57.8	2,517	61.5	3.7	5.0	No	SF Residential	51.7	60	No	No
	Agate Road to Jasper Road	3,929	62.4	6,306	64.2	1.8	5.0	No	SF Residential	65.7	60	Yes	No ³
	Jasper Road to Main Street	5,930	64.4	11,166	66.5	2.0	3.0	No	SF Residential	54.1	60	No	No
	Main Street to High Desert Road	5,051	64.4	9,179	65.5	1.1	5.0	No	SF Residential	68.3	65	Yes	No ³
	High Desert Road to I-15 SB Off-Ramp	12,735	68.4	16,689	69.1	0.8	1.5	No	Commercial	56.0	65	No	No
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	10,929	64.2	12,513	64.8	0.6	1.5	No	Commercial	60.9	65	No	No
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	348	47.9	418	47.9	0.1	5.0	No	SF Residential	49.0	60	No	No
	BIG Driveway to Main Street ¹	370	47.5	-	-	-	-	-	-	-	-		-
Notes: 1. Hinkley Road would be vacated along this segment as part of BIG. 2. There are no developed land uses or sensitive receptors along roadway segment. 3. This roadway segment would not result in a substantial increase when No BIG noise levels already exceed City/County noise standards. See Appendix 5.12 BIG-1 - Appendix A for impact screening analyses for all receptors.													
Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for roadway traffic noise modeling assumptions and results.													

The following has been inserted after **Page 5.12-117**. This table is identical to **Table 5.12-54**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-54B: Interim Year 2033 Mitigated Plus BIG Conditions Roadway Traffic Noise Levels													
Roadway	Segment	Interim Year 2033		Interim Year 2033 + BIG		Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ²	Nearest Receptor Land Use Type	Interim Year 2033 + BIG Noise Level at Nearest Receptor (dBA CNEL)	City/County Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
		ADT	dBA CNEL at 100 feet from Roadway Centerline	ADT	dBA CNEL at 100 feet from Roadway Centerline								
Main Street	Hinkley Road to Country Club Drive	6,482	65.2	6,934	65.3	0.0	3.0	No	SF Residential	63.1	60	Yes	No ³
	Country Club Drive to Lenwood Road	5,319	64.4	8,292	<u>62.1</u>	<u>0.0</u>	3.0	No	SF Residential	<u>61.5</u>	65	<u>No</u>	<u>No</u>
	Lenwood Road to County/City Boundary	9,031	62.0	10,692	<u>58.5</u>	<u>0.0</u>	3.0	No	SF Residential	<u>61.8</u>	65	<u>No</u>	No ³
	County/City Boundary to SR-58 Eastbound Ramps	9,031	63.0	10,692	63.5	1.5	3.0	No	Commercial	51.3	65	No	No
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	7,484	63.4	10,250	63.9	0.6	3.0	No	N/A ²	-	-	-	-
	SR-58 Westbound Ramps to L Street	6,683	62.5	8,941	62.6	0.1	5.0	No	SF Residential	66.5	65	Yes	No ³
	L Street to Avenue A	12,793	61.6	13,979	61.7	0.1	3.0	No	MF Residential	65.6	65	Yes	No ³
	Avenue A to Barstow Road	12,245	60.7	13,036	60.7	0.0	3.0	No	MF Residential	56.2	65	No	No
Barstow Road	Main Street to I-15 Southbound Ramps	12,438	63.8	12,947	63.8	0.1	3.0	No	SF Residential	70.7	65	Yes	No ³
	I-15 Southbound Ramps to I-15 Northbound Ramps	13,698	64.7	14,348	64.8	0.1	3.0	No	SF Residential	56.6	65	No	No
	I-15 Northbound ramps to Rimrock Road	15,277	65.5	15,390	65.5	0.0	3.0	No	MF Residential	68.3	65	Yes	No ³
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	1,113	58.8	2,027	62.7	4.0	5.0	No	SF Residential	66.1	60	Yes	No
	Community Boulevard to Agate Road	910	57.2	2,558	61.8	4.6	5.0	No	SF Residential	52.0	60	No	No
	Agate Road to Jasper Road	4,028	63.4	6,861	65.1	1.8	5.0	No	SF Residential	66.6	60	Yes	No ³
	Jasper Road to Main Street	5,489	65.5	12,466	67.6	2.0	3.0	No	SF Residential	55.2	60	No	No
	Main Street to High Desert Road	6,492	66.6	12,114	67.5	0.9	5.0	No	SF Residential	70.3	65	Yes	No ³
	High Desert Road to I-15 SB Off-Ramp	14,880	69.8	19,825	70.5	0.7	1.5	No	Commercial	57.4	65	No	No
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	12,877	65.6	14,983	66.1	0.6	1.5	No	Commercial	62.3	65	No	No
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	336	47.8	429	48.0	0.1	5.0	No	SF Residential	49.0	60	No	No
	BIG Driveway to Main Street ¹	379	47.5	-	-	-	-	-	-	-	-	-	-
Notes: 1. Hinkley Road would be vacated along this segment as part of BIG. 2. There are no developed land uses or sensitive receptors along this roadway segment. 3. This roadway segment would not result in a substantial increase when No BIG noise levels already exceed City/County noise standards. See Appendix 5.12 BIG-1 - Appendix A for impact screening analyses for all receptors.													
Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for roadway traffic noise modeling assumptions and results.													

Page 5.12-118 has been revised as follows:

~~(4) Rubberized asphalt surfaces would not be consistent with the rest of Main Street and/or the roadways in the surrounding area. Public roadways are improved and maintained by the City and not by project applicants. Roadway improvements are implemented based on a Capital Improvements Program (CIP) schedule, and rubberized asphalt has a different maintenance schedule and requires specialized equipment for installation compared to conventional asphalt. This could cause logistical issues for the City Public Works Department and road maintenance contractors. In addition, the cost of paving a 0.97-mile roadway segment with rubberized asphalt would not be roughly proportional to reducing a barely perceptible noise level increase in interior noise levels for the windows open condition. It is also noted that the interior noise level standard of 45 dBA Ldn is already exceeded along several roadway segments under the Interim Year 2033 No BIG scenario.~~

For the reasons mentioned above, the other off-site mitigation measures to reduce roadway traffic noise impacts from BIG are not feasible for implementation. Furthermore, despite implementation of MM BIG NOI-3, ~~Therefore,~~ BIG roadway traffic noise levels under Interim Year 2033 conditions would be significant and unavoidable.

Horizon Year 2048

Table 5.12-55: Horizon Year 2048 Plus BIG Conditions Roadway Traffic Noise Levels shows roadway traffic noise levels along roadway segments for Horizon Year 2048 Plus BIG. As indicated in **Table 5.12-55**, roadway noise levels (CNEL) would range from 47.6 dBA to 72.9 dBA at 100 feet from the roadway centerline under Horizon Year 2048 Plus BIG conditions. The highest noise level of 72.9 dBA would occur along Lenwood Road from High Desert Road to I-15 Southbound Off-Ramp and would result in an imperceptible increase of 0.5 dBA compared to Horizon Year 2048 No BIG conditions. Traffic noise levels along one roadway segment (Lenwood Road from Community Boulevard to Agate Road) would exceed the incremental standard. None of the aforementioned roadway segments would experience noise levels that exceed the applicable land use noise standard(s) at the nearest sensitive receptor(s) due to BIG.

Use of rubberized asphalt to reduce traffic noise along roadway segments below the threshold specified in MM BIG NOI-3 above could reduce mobile source noise in this section. Prior to certificate of occupancy for transload warehouse center buildings beyond 7.8 million square feet, BNSF would pay the County the incremental increase in cost to mill and overlay Lenwood Road with rubberized asphalt for the roadway section from Agate Road to Community Boulevard within 200 feet of a sensitive receptor property line.

However, given the Lenwood Road improvements from Community Boulevard to Agate Road is within the County, the City has no authority to enforce this measure and there are no agreements in place between BNSF and the County, nor has the County imposed this improvement as a condition of approval. Thus, while BNSF is willing to pay this incremental cost, the analysis conservatively concludes that the impact remains significant and unavoidable. Should the City enter into an agreement with the County that would result in the implementation of this improvement, the impact would be mitigated to below the applicable threshold. Therefore, BIG roadway traffic noise levels under Horizon Year 2048 would result in a potentially significant impact.

As previously mentioned above, other off-site mitigation measures to reduce roadway traffic noise impacts are not feasible for implementation. ~~Therefore~~ Despite implementation of **MM BIG NOI-3**, BIG roadway traffic noise levels under Horizon Year 2048 conditions would be significant and unavoidable.

The following has been inserted after **Page 5.12-119**. This table is identical to **Table 5.12-55**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-55B: Horizon Year 2048 Mitigated Plus BIG Conditions Roadway Traffic Noise Levels													
Roadway	Segment	Horizon Year 2048		Horizon Year 2048 + BIG		Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ²	Nearest Receptor Land Use Type	Horizon Year 2045 + BIG Noise Level at Nearest Receptor (dBA CNEL)	City/County Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
		ADT	dBA CNEL at 100 feet from Roadway Centerline	ADT	dBA CNEL at 100 feet from Roadway Centerline								
Main Street	Hinkley Road to Country Club Drive	10,790	68.7	11,300	68.7	0.0	3.0	No	SF Residential	66.5	60	Yes	No ³
	Country Club Drive to Lenwood Road	7,880	67.7	11,300	<u>64.7</u>	<u>0.0</u>	3.0	No	SF Residential	<u>64.1</u>	65	<u>No</u>	No ³
	Lenwood Road to County/City Boundary	8,101	62.5	10,000	<u>59.0</u>	<u>0.0</u>	3.0	No	SF Residential	<u>62.4</u>	65	<u>No</u>	No ³
	County/City Boundary to SR-58 Eastbound Ramps	8,101	63.4	10,000	64.0	0.5	3.0	No	Commercial	50.8	65	No	No
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	6,229	64.1	9,400	64.7	0.6	3.0	No	N/A ²	-	-	-	-
	SR-58 Westbound Ramps to L Street	6,221	63.9	8,800	63.9	0.1	5.0	No	SF Residential	67.8	65	Yes	No ³
	L Street to Avenue A	12,780	61.9	14,200	62.0	0.1	3.0	No	MF Residential	65.9	65	Yes	No ³
	Avenue A to Barstow Road	12,325	60.8	13,100	60.8	0.0	3.0	No	MF Residential	56.3	65	No	No
Barstow Road	Main Street to I-15 Southbound Ramps	14,488	64.2	15,000	64.3	0.1	3.0	No	SF Residential	71.1	65	Yes	No ³
	I-15 Southbound Ramps to I-15 Northbound Ramps	17,594	65.6	18,300	65.7	0.1	3.0	No	SF Residential	57.5	65	No	No
	I-15 Northbound Ramps to Rimrock Road	21,481	66.8	21,600	66.8	0.0	3.0	No	MF Residential	69.6	65	Yes	No ³
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	846	56.7	2,100	60.6	3.9	5.0	No	SF Residential	64.0	60	Yes	No ³
	Community Boulevard to Agate Road ⁴	339	54.5	2,300	<u>56.0</u>	<u>1.5</u>	5.0	<u>No</u>	SF Residential	<u>46.2</u>	60	No	<u>No</u>
	Agate Road to Jasper Road	4,323	65.3	7,400	66.8	1.4	5.0	No	SF Residential	68.2	60	Yes	No ³
	Jasper Road to Main Street	4,166	67.7	12,400	69.3	1.6	3.0	No	SF Residential	56.9	60	No	No
	Main Street to High Desert Road	10,814	69.9	17,600	70.4	0.5	5.0	No	SF Residential	73.2	65	Yes	No ³
	High Desert Road to I-15 SB Off-Ramp	21,313	72.5	26,800	72.9	0.5	1.5	No	Commercial	59.8	65	No	No
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	18,721	68.2	21,200	68.5	0.4	1.5	No	Commercial	64.7	65	Yes	No ³
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	299	47.5	400	47.6	0.1	5.0	No	SF Residential	48.7	60	No	No
	BIG Driveway to Main Street ¹	406	47.6	-	-	-	-	-	-	-	-	-	-
Notes: 1. Hinkley Road would be vacated along this segment as part of BIG. 2. There are no developed land uses or sensitive receptors along roadway segment. 3. This roadway segment would not result in a substantial increase when No BIG noise levels already exceed City/County noise standards See Appendix 5.12 BIG-1 - Appendix A for impact screening analyses for all receptors. 4. <u>Reduction in traffic noise along this segment would only occur if the County agreed to implement MM BIG NOI-3 on this segment.</u>													
Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Study - Appendix A for roadway traffic noise modeling assumptions and results.													

The following has been inserted after **Page 5.12-121** This table is identical to **Table 5.12-56**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-56B: Opening Year 2028 Plus Mitigated BIG Conditions Roadway Traffic Interior Noise Levels – Windows Open											
Roadway	Segment	Opening Year 2028 Interior Noise Level (dBA CNEL) ¹	Opening Year 2028 + BIG Interior Noise Level (dBA CNEL) ¹	Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ⁴	Nearest Receptor Land Use Type	Opening Year 2028 + BIG Interior Noise Level at Nearest Receptor (dBA CNEL)	Interior Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
Main Street	Hinkley Road to Country Club Drive	52.9	53.0	0.1	3.0	No	SF Residential	50.8	45	Yes	No ⁴
	Country Club Drive to Lenwood Road	52.2	<u>50.4</u>	<u>0.0</u>	3.0	No	SF Residential	<u>49.8</u>	45	Yes	No ⁴
	Lenwood Road to County/City Boundary	51.8	<u>48.2</u>	<u>0.0</u>	3.0	No	SF Residential	<u>51.5</u>	45	<u>No</u>	No ⁴
	County/City Boundary to SR-58 Eastbound Ramps	51.8	52.2	0.4	3.0	No	Commercial	40.0	45	No	No
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	53.1	53.6	0.5	3.0	No	N/A ⁵	N/A ⁵	45	-	No
	SR-58 Westbound Ramps to L Street	52.0	52.1	0.1	5.0	No	SF Residential	56.0	45	Yes	No ⁴
	L Street to Avenue A	51.5	51.5	0.0	3.0	No	MF Residential	55.4	45	Yes	No ⁴
	Avenue A to Barstow Road	50.7	50.7	0.0	3.0	No	MF Residential	46.2	45	Yes	No ⁴
Barstow Road	Main Street to I-15 Southbound Ramps	53.6	53.7	0.1	3.0	No	SF Residential	60.5	45	Yes	No ⁴
	I-15 Southbound Ramps to I-15 Northbound Ramps	54.3	54.4	0.1	3.0	No	SF Residential	46.2	45	Yes	No ⁴
	I-15 Northbound Ramps to Rimrock Road	54.9	54.9	0.0	3.0	No	MF Residential	57.7	45	Yes	No ⁴
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	49.3	52.5	3.2	5.0	No	SF Residential	55.8	45	Yes	No ⁴
	Community Boulevard to Agate Road	47.8	51.5	3.7	5.0	No	SF Residential	41.7	45	No	No
	Agate Road to Jasper Road	52.4	54.2	1.8	5.0	No	SF Residential	55.7	45	Yes	No ⁴
	Jasper Road to Main Street	54.4	56.5	2.0	3.0	No	SF Residential	44.1	45	No	No
	Main Street to High Desert Road	54.4	55.5	1.1	5.0	No	SF Residential	57.8	45	Yes	No ⁴
	High Desert Road to I-15 SB Off-Ramp	58.4	59.1	0.8	1.5	No	Commercial	46.0	50	No	No ²
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	54.2	54.8	0.6	1.5	No	Commercial	50.9	50	Yes	No ^{2,4}
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	37.9	37.9	0.0	5.0	No	SF Residential	39.0	45	No	No
	BIG Driveway to Main Street ³	-	-	-	-	-	-	-	-	-	-
Notes: 1. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open per the International Journal of Environmental Research and Public Health, <i>Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows</i>, 2018. 2. Hotels do not have operable windows, and therefore, interior noise levels would be within 45 dBA CNEL under a windows closed condition; see Table 5.12-57. 3. Hinkley Road would be vacated along this segment as part of BIG. 4. This roadway segment would not result in a substantial increase when No BIG noise levels already exceed City/County noise standards. See Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for impact screening analyses for all receptors. 5. <i>There are no developed land uses or sensitive receptors along roadway segment.</i>											
Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for roadway traffic noise modeling assumptions and results.											

The following has been inserted after **Page 5.12-122**. This table is identical to **Table 5.12-57**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-57B: Opening Year 2028 Mitigated Plus BIG Conditions Roadway Traffic Interior Noise Levels – Windows Closed											
Roadway	Segment	Opening Year 2028 Interior Noise Level (dBA CNEL) ¹	Opening Year 2028 + BIG Interior Noise Level (dBA CNEL) ¹	Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ³	Nearest Receptor Land Use Type	Opening Year 2028 + BIG Interior Noise Level at Nearest Receptor (dBA CNEL)	Interior Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
Main Street	Hinkley Road to Country Club Drive	34.9	35.0	0.0	3.0	No	SF Residential	33.3	45	No	No
	Country Club Drive to Lenwood Road	34.2	<u>32.4</u>	<u>0.0</u>	3.0	No	SF Residential	<u>31.8</u>	45	No	No
	Lenwood Road to County/City Boundary	33.8	<u>30.2</u>	<u>0.0</u>	3.0	No	SF Residential	<u>33.5</u>	45	No	No
	County/City Boundary to SR-58 Eastbound Ramps	33.8	34.2	0.4	3.0	No	Commercial	22.0	45	No	No
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	35.1	35.6	0.5	3.0	No	N/A ³	-	45	No	No ³
	SR-58 Westbound Ramps to L Street	34.0	34.1	0.1	5.0	No	SF Residential	38.0	45	No	No
	L Street to Avenue A	33.5	33.5	0.0	3.0	No	MF Residential	37.4	45	No	No
	Avenue A to Barstow Road	32.7	32.7	0.0	3.0	No	MF Residential	28.2	45	No	No
Barstow Road	Main Street to I-15 Southbound Ramps	35.6	35.7	0.1	3.0	No	SF Residential	42.5	45	No	No
	I-15 Southbound Ramps to I-15 Northbound Ramps	36.3	36.4	0.1	3.0	No	SF Residential	28.2	45	No	No
	I-15 Northbound Ramps to Rimrock Road	36.9	36.9	0.0	3.0	No	MF Residential	39.7	45	No	No
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	31.3	34.5	3.2	5.0	No	SF Residential	37.8	45	No	No
	Community Boulevard to Agate Road	29.8	33.5	3.7	5.0	No	SF Residential	23.7	45	No	No
	Agate Road to Jasper Road	34.4	36.2	1.8	5.0	No	SF Residential	37.7	45	No	No
	Jasper Road to Main Street	36.4	38.5	2.0	3.0	No	SF Residential	26.1	45	No	No
	Main Street to High Desert Road	36.4	37.5	1.1	5.0	No	SF Residential	39.8	45	No	No
	High Desert Road to I-15 SB Off-Ramp	40.4	41.1	0.8	1.5	No	Commercial	28.0	50	No	No
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	36.2	36.8	0.6	1.5	No	Commercial	32.9	50	No	No
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	19.9	19.9	0.1	5.0	No	SF Residential	21.0	45	No	No
	BIG Driveway to Main Street ²	-	-	-	-	-	-	-	-	-	-
Notes: 1. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 28 dBA for windows closed per the International Journal of Environmental Research and Public Health, <i>Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows</i> , 2018. 2. Hinkley Road would be vacated along this segment as part of BIG. 3. There are no developed land uses or sensitive receptors along roadway segment.											
Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for roadway traffic noise modeling assumptions and results.											

The following has been inserted after **Page 5.12-123**. This table is identical to **Table 5.12-58**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-58B: Interim Year 2033 Mitigated Plus BIG Conditions Roadway Traffic Interior Noise Levels – Windows Open											
Roadway	Segment	Interim Year 2033 Interior Noise Level (dBA CNEL) ¹	Interim Year 2033 + BIG Interior Noise Level (dBA CNEL) ¹	Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ⁴	Nearest Receptor Land Use Type	Interim Year 2033 + BIG Interior Noise Level at Nearest Receptor (dBA CNEL)	Interior Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
Main Street	Hinkley Road to Country Club Drive	55.2	55.3	0.0	3.0	No	SF Residential	53.1	45	Yes	No ⁴
	Country Club Drive to Lenwood Road	54.4	56.1	1.7	3.0	No	SF Residential	55.5	45	Yes	No ⁴
	Lenwood Road to County/City Boundary	52.0	<u>48.5</u>	<u>0.0</u>	3.0	No	SF Residential	<u>51.8</u>	45	Yes	No ⁴
	County/City Boundary to SR-58 Eastbound Ramps	52.0	<u>48.5</u>	<u>0.0</u>	3.0	No	Commercial	<u>36.3</u>	45	No	No
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	53.4	53.9	0.6	3.0	No	N/A ⁵	-	45	No	No
	SR-58 Westbound Ramps to L Street	52.5	52.6	0.1	5.0	No	SF Residential	56.5	45	Yes	No ⁴
	L Street to Avenue A	51.6	51.7	0.1	3.0	No	MF Residential	55.6	45	Yes	No ⁴
	Avenue A to Barstow Road	50.7	50.7	0.0	3.0	No	MF Residential	46.2	45	Yes	No ⁴
Barstow Road	Main Street to I-15 Southbound Ramps	53.8	53.8	0.1	3.0	No	SF Residential	60.7	45	Yes	No ⁴
	I-15 Southbound Ramps to I-15 Northbound Ramps	54.7	54.8	0.1	3.0	No	SF Residential	46.6	45	Yes	No ⁴
	I-15 Northbound Ramps to Rimrock Road	55.5	55.5	0.0	3.0	No	MF Residential	58.3	45	Yes	No ⁴
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	48.8	52.7	4.0	5.0	No	SF Residential	56.1	45	Yes	No ⁴
	Community Boulevard to Agate Road	47.2	51.8	4.6	5.0	No	SF Residential	42.0	45	No	No
	Agate Road to Jasper Road	53.4	55.1	1.8	5.0	No	SF Residential	56.6	45	Yes	No ⁴
	Jasper Road to Main Street	55.5	57.6	2.0	3.0	No	SF Residential	45.2	45	Yes	Yes
	Main Street to High Desert Road	56.6	57.5	0.9	5.0	No	SF Residential	59.8	45	Yes	No ⁴
	High Desert Road to I-15 SB Off-Ramp	59.8	60.5	0.7	1.5	No	Commercial	47.4	50	No	No ^{2,4}
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	55.6	56.1	0.6	1.5	No	Commercial	52.3	50	Yes	No ^{2,4}
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	37.8	38.0	0.1	5.0	No	SF Residential	39.0	45	No	No
	BIG Driveway to Main Street ³	-	-	-	-	-	-	-	-	-	-
Notes: 1. 2. 3. 4. 5. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open per the International Journal of Environmental Research and Public Health, <i>Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows</i>, 2018. Hotels do not have operable windows, and therefore, interior noise levels would be within 45 dBA CNEL under a windows closed condition; see Table 5.12-57. Hinkley Road would be vacated along this segment as part of BIG. This roadway segment would not result in a substantial increase when No BIG noise levels already exceed City/County noise standards. See Appendix 5.12 BIG-1 Appendix A for impact screening analyses for all receptors. There are no developed land uses or sensitive receptors along roadway segment.											
Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for roadway traffic noise modeling assumptions and results.											

The following has been inserted after **Page 5.12-124**. This table is identical to **Table 5.12-59**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-59B: Interim Year 2033 Mitigated Plus BIG Conditions Roadway Traffic Interior Noise Levels – Windows Closed											
Roadway	Segment	Interim Year 2033 Interior Noise Level (dBA CNEL) ¹	Interim Year 2033 + BIG Interior Noise Level (dBA CNEL) ¹	Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ³	Nearest Receptor Land Use Type	Interim Year 2033 + BIG Interior Noise Level at Nearest Receptor (dBA CNEL)	Interior Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
Main Street	Hinkley Road to Country Club Drive	37.2	37.3	0.0	3.0	No	SF Residential	35.1	45	No	No
	Country Club Drive to Lenwood Road	36.4	<u>34.1</u>	<u>0.0</u>	3.0	No	SF Residential	<u>33.5</u>	45	No	No
	Lenwood Road to County/City Boundary	34.0	<u>30.5</u>	<u>0.0</u>	3.0	No	SF Residential	<u>33.8</u>	45	No	No
	County/City Boundary to SR-58 Eastbound Ramps	34.0	34.5	0.5	3.0	No	Commercial	22.3	45	No	No
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	35.4	35.9	0.6	3.0	No	N/A ³		45	No	No
	SR-58 Westbound Ramps to L Street	34.5	34.6	0.1	5.0	No	SF Residential	38.5	45	No	No
	L Street to Avenue A	33.6	33.7	0.1	3.0	No	MF Residential	37.6	45	No	No
	Avenue A to Barstow Road	32.7	32.7	0.0	3.0	No	MF Residential	28.2	45	No	No
Barstow Road	Main Street to I-15 Southbound Ramps	35.8	35.8	0.1	3.0	No	SF Residential	42.7	45	No	No
	I-15 Southbound Ramps to I-15 Northbound Ramps	36.7	36.8	0.1	3.0	No	SF Residential	28.6	45	No	No
	I-15 Northbound Ramps to Rimrock Road	37.5	37.5	0.0	3.0	No	MF Residential	40.3	45	No	No
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	30.8	34.7	4.0	5.0	No	SF Residential	38.1	45	No	No
	Community Boulevard to Agate Road	29.2	33.8	4.6	5.0	No	SF Residential	24.0	45	No	No
	Agate Road to Jasper Road	35.4	37.1	1.8	5.0	No	SF Residential	38.6	45	No	No
	Jasper Road to Main Street	37.5	39.6	2.0	3.0	No	SF Residential	27.2	45	No	No
	Main Street to High Desert Road	38.6	39.5	0.9	5.0	No	SF Residential	41.8	45	No	No
	High Desert Road to I-15 SB Off-Ramp	41.8	42.5	0.7	1.5	No	Commercial	29.4	45	No	No
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	37.6	38.1	0.6	1.5	No	Commercial	34.3	45	No	No
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	19.8	20.0	0.1	5.0	No	SF Residential	21.0	45	No	No
	BIG Driveway to Main Street ²	-	-	-	-	-	-	-	-	-	-
Notes: 1. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 28 dBA for windows closed per the International Journal of Environmental Research and Public Health, <i>Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows</i> , 2018. 2. Hinkley Road would be vacated along this segment as part of BIG. 3. There are no developed land uses or sensitive receptors along roadway segment.											
Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for roadway traffic noise modeling assumptions and results.											

Page 5.12-125 has been revised as follows:

It is also noted that noise barriers ~~BAR-2 and~~ BAR-3 would not reduce roadway traffic noise levels at the impacted receptors along Lenwood Road (from Jasper Road to Main Street) due to ~~their~~ its location(s). Noise barriers ~~BAR-2 and~~ BAR-3 ~~were~~ was strategically positioned to block the line of sight from on-site BIG operational activities (i.e., rail corridor activity along the existing mainline and at the block swap yard and intermodal facility, new south mainline, train switching and coupling activities at the block swap yard, intermodal facility operations, truck loading/unloading activity at the transload warehouse center, mechanical equipment, ~~solar generation facility operations,~~ and generators) and would not block roadway traffic noise at the impacted receptors discussed above. Therefore, noise barriers ~~BAR-2 and~~ BAR-3 ~~are~~ is not considered feasible mitigation to reduce roadway traffic noise impacts and ~~are~~ is excluded from this analysis.

Horizon Year 2048

Table 5.12-60: Horizon Year 2048 Plus BIG Conditions Roadway Traffic Interior Noise Levels – Windows Open and **Table 5.12-61: Horizon Year 2048 Plus BIG Conditions Roadway Traffic Interior Noise Levels – Windows Closed** show interior roadway traffic noise levels along roadway segments for Horizon Year 2048 Plus BIG conditions. As indicated in **Table 5.12-60**, interior noise levels with windows open due to the addition of BIG roadway noise sources would range from 37.6 dBA to 62.9 dBA at 100 feet from the roadway centerline under Horizon Year 2048 Plus BIG conditions. Roadway traffic noise along one roadway segment (Lenwood Road from Community Boulevard to Agate Road) would result in an increase above the incremental standard under a windows open condition and exceed the interior noise standard of 45 dBA L_{dn} at the nearest sensitive receptors as a result of BIG.

As shown in **Table 5.12-60**, no roadway segments would also exceed the interior noise standard of 45 dBA L_{dn} at the nearest sensitive receptors as a result of BIG for a windows closed condition. However, one roadway segment (Lenwood Road from Community Boulevard to Agate Road) would result in an increase above the incremental standard under a windows closed condition and result in a potentially significant impact. However, as discussed above for exterior roadway traffic noise impacts, mitigation options to reduce incremental increase interior roadway traffic noise levels are limited and infeasible to implement. Therefore, a significant and unavoidable impact would occur in this regard.

It is also noted that noise barriers ~~BAR-2 and~~ BAR-3 would not reduce roadway traffic noise levels at the impacted receptors along Lenwood Road (from Jasper Road to Main Street) due to ~~their~~ its location(s). Noise barriers ~~BAR-2 and~~ BAR-3 ~~were~~ was strategically positioned to block the line of sight from on-site BIG operational activities (i.e., rail corridor activity along the existing mainline and at the block swap yard and intermodal facility, new south mainline, train switching and coupling activities at the block swap yard, intermodal facility operations, truck loading/unloading activity at the transload warehouse center, mechanical equipment, ~~solar generation facility operations,~~ and generators) and would not block roadway traffic noise at the impacted receptors discussed above. Therefore, noise barriers ~~BAR-2 and~~ BAR-3 ~~are~~ is not considered feasible mitigation to reduce roadway traffic noise impacts and ~~are~~ is excluded from this analysis.

The following has been inserted after **Page 5.12-126**. This table is identical to **Table 5.12-60**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-60B: Horizon Year 2048 Mitigated Plus BIG Conditions Roadway Traffic Interior Noise Levels – Windows Open											
Roadway	Segment	Horizon Year 2048 Interior Noise Level (dBA CNEL) ¹	Horizon Year 2048 + BIG Interior Noise Level (dBA CNEL) ¹	Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ⁴	Nearest Receptor Land Use Type	Horizon Year 2048 + BIG Interior Noise Level at Nearest Receptor (dBA CNEL)	Interior Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
Main Street	Hinkley Road to Country Club Drive	58.7	58.7	0.0	3.0	No	SF Residential	56.5	45	Yes	No ⁴
	Country Club Drive to Lenwood Road	57.7	<u>54.7</u>	<u>0.0</u>	3.0	No	SF Residential	<u>54.1</u>	45	Yes	No ⁴
	Lenwood Road to County/City Boundary	52.5	<u>49.0</u>	<u>0.0</u>	3.0	No	SF Residential	<u>52.4</u>	45	Yes	No ⁴
	County/City Boundary to SR-58 Eastbound Ramps	52.5	53.0	0.5	3.0	No	Commercial	40.8	45	No	No
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	54.1	54.7	0.6	3.0	No	N/A ⁵	-	45	No	No
	SR-58 Westbound Ramps to L Street	53.9	53.9	0.1	5.0	No	SF Residential	57.8	45	Yes	No ⁴
	L Street to Avenue A	51.9	52.0	0.1	3.0	No	MF Residential	55.9	45	Yes	No ⁴
	Avenue A to Barstow Road	50.8	50.8	0.0	3.0	No	MF Residential	46.3	45	Yes	No ⁴
Barstow Road	Main Street to I-15 Southbound Ramps	54.2	54.3	0.1	3.0	No	SF Residential	61.1	45	Yes	No ⁴
	I-15 Southbound Ramps to I-15 Northbound Ramps	55.6	55.7	0.1	3.0	No	SF Residential	47.5	45	Yes	No ⁴
	I-15 Northbound Ramps to Rimrock Road	56.8	56.8	0.0	3.0	No	MF Residential	59.6	45	Yes	No ⁴
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	46.7	50.6	3.9	5.0	No	SF Residential	54.0	45	Yes	No ⁴
	Community Boulevard to Agate Road ⁶	44.5	<u>46.0</u>	<u>1.5</u>	5.0	<u>No</u>	SF Residential	<u>36.2</u>	45	No	No
	Agate Road to Jasper Road	55.3	56.8	1.4	5.0	No	SF Residential	58.2	45	Yes	No ⁴
	Jasper Road to Main Street	57.7	59.3	1.6	3.0	No	SF Residential	46.9	45	Yes	No ⁴
	Main Street to High Desert Road	59.9	60.4	0.5	5.0	No	SF Residential	62.8	45	Yes	No ⁴
	High Desert Road to I-15 SB Off-Ramp	62.5	62.9	0.5	1.5	No	Commercial	49.8	50	Yes	No ^{2,4}
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	58.2	58.5	0.4	1.5	No	Commercial	54.7	50	Yes	No ^{2,4}
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	37.5	37.6	0.1	5.0	No	SF Residential	38.7	45	No	No
	BIG Driveway to Main Street ³	-	-	-	-	-	-	-	-	-	-
Notes: 1. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 10 dBA for windows open per the International Journal of Environmental Research and Public Health, <i>Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows</i>, 2018. 2. Hotels do not have operable windows, and therefore, interior noise levels would be within 45 dBA CNEL under a windows closed condition; see Table 5.12-61. 3. Hinkley Road would be vacated along this segment as part of BIG. 4. This roadway segment would not result in a substantial increase when No BIG noise levels already exceed City/County noise standards. See Appendix 5.12 BIG-1 - Appendix A for impact screening analyses for all receptors. 5. There are no developed land uses or sensitive receptors along roadway segment. 6. <u>Reduction in traffic noise along this segment would only occur if the County agreed to implement MM BIG NOI-3 on this segment.</u>											
Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for roadway traffic noise modeling assumptions and results.											

The following has been inserted after **Page 5.12-127**. This table is identical to **Table 5.12-61**, except that mitigated noise associated with **MM BIG NOI-3** is incorporated with the updated noise values shown in double underline:

Table 5.12-61B: Horizon Year 2048 Mitigated Plus BIG Conditions Roadway Traffic Interior Noise Levels – Windows Closed											
Roadway	Segment	Horizon Year 2048 Interior Noise Level (dBA CNEL) ¹	Horizon Year 2048 + BIG Interior Noise Level (dBA CNEL) ¹	Incremental Increase	Incremental Increase Threshold	Exceeds Threshold? ³	Nearest Receptor Land Use Type	Horizon Year 2048 + BIG Interior Noise Level at Nearest Receptor (dBA CNEL)	Interior Noise Standard (dBA CNEL)	Exceeds Standard?	Impact?
Main Street	Hinkley Road to Country Club Drive	40.7	40.7	0.0	3.0	No	SF Residential	38.5	45	No	No
	Country Club Drive to Lenwood Road	39.7	<u>36.7</u>	<u>0.0</u>	3.0	No	SF Residential	<u>36.1</u>	45	No	No
	Lenwood Road to County/City Boundary	34.5	<u>31.0</u>	<u>0.0</u>	3.0	No	SF Residential	<u>34.4</u>	45	No	No
	County/City Boundary to SR-58 Eastbound Ramps	34.5	35.0	0.5	3.0	No	Commercial	22.8	45	No	
	SR-58 Eastbound Off-Ramps to SR-58 Westbound Ramps	36.1	36.7	0.6	3.0	No	N/A	-	45	No	No
	SR-58 Westbound Ramps to L Street	35.9	35.9	0.1	5.0	No	SF Residential	39.8	45	No	No
	L Street to Avenue A	33.9	34.0	0.1	3.0	No	MF Residential	37.9	45	No	No
	Avenue A to Barstow Road	32.8	32.8	0.0	3.0	No	MF Residential	28.3	45	No	No
Barstow Road	Main Street to I-15 Southbound Ramps	36.2	36.3	0.1	3.0	No	SF Residential	43.1	45	No	No
	I-15 Southbound Ramps to I-15 Northbound Ramps	37.6	37.7	0.1	3.0	No	SF Residential	29.5	45	No	No
	I-15 Northbound Ramps to Rimrock Road	38.8	38.8	0.0	3.0	No	MF Residential	41.6	45	No	No
Lenwood Road	SR-58 Westbound Ramps to Community Boulevard	28.7	32.6	3.9	5.0	No	SF Residential	36.0	45	No	No
	Community Boulevard to Agate Road	26.5	<u>28.0</u>	<u>1.5</u>	5.0	<u>No</u>	SF Residential	<u>18.2</u>	45	No	No
	Agate Road to Jasper Road	37.3	38.8	1.4	5.0	No	SF Residential	40.2	45	No	No
	Jasper Road to Main Street	39.7	41.3	1.6	3.0	No	SF Residential	28.9	45	No	No
	Main Street to High Desert Road	41.9	42.4	0.5	5.0	No	SF Residential	44.8	45	Yes	No
	High Desert Road to I-15 SB Off-Ramp	44.5	44.9	0.5	1.5	No	Commercial	31.8	45	No	No
	I-15 SB Off-Ramp to I-15 NB Off-Ramp	40.2	40.5	0.4	1.5	No	Commercial	36.7	45	No	No
Hinkley Road	SR-58 Westbound Ramp to BIG Driveway	19.5	19.6	0.1	5.0	No	SF Residential	20.7	45	No	No
	BIG Driveway to Main Street ²	-	-	-	-	-	-	-	-	-	-
Notes: 4. Interior noise levels calculated using the modeled exterior noise levels and using an outdoor-to-indoor noise reduction of 28 dBA for windows closed per the International Journal of Environmental Research and Public Health, <i>Differences between Outdoor and Indoor Sound Levels for open, Tilted, and Closed Windows</i>, 2018. 5. Hinkley Road would be vacated along this segment as part of BIG. 6. This roadway segment would not result in a substantial increase when No BIG noise levels already exceed City/County noise standards (see Section 4.2 for noise impact thresholds). See Appendix 5.12 BIG-1: Appendix A for impact screening analyses for all receptors. Source: Based on traffic data derived from the Traffic Impact Analysis (Kimley-Horn, 2024). Refer to Appendix 5.12 BIG-1: Noise and Vibration Technical Report - Appendix A for roadway traffic noise modeling assumptions and results.											

Page 5.12-128 has been revised as follows:

MM BIG NOI-1

Nighttime Construction Noise Logistics Plan. Prior to the start of nighttime construction, the implementing entity shall ~~demonstrate to the satisfaction~~ submit and gain approval of from the City of Barstow Director of Public Works or City Engineer ~~that BIG includes for~~ a Nighttime Construction Noise Logistics Plan that meets the standards specified herein for nighttime construction throughout the BIG footprint. The Nighttime Construction Noise Logistics Plan shall identify the specific nighttime construction activity areas, list ~~of the~~ construction equipment to be used during nighttime construction, and include a determination, supported with citation to factual evidence, that certain specified noise reduction measures, incorporated into the Plan, will be implemented to ensure that exterior noise levels from nighttime construction activity, at the residence or residences nearest to that activity, do not exceed the FTA's 70 dBA Leq(8-hour) nighttime exterior construction noise standard for residential uses. ~~include noise reduction measures to minimize nighttime construction noise levels at nearby residences to the extent feasible below.~~ Potential n Noise reduction measures may include, but are not limited to, the following:

- Install a temporary construction site sound barrier near the noise source.
- Prohibit unnecessary idling of internal combustion engines. Post signs at gates and other places where vehicles may congregate reminding operators of the State's Airborne Toxic Control Measure (ATCM) limiting idling to no more than 5 minutes.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Monitor the effectiveness of noise attenuation measures by taking noise measurements, and make necessary adjustments to construction activities as required.
- Specify additional feasible attenuation measures and best practices to further reduce construction noise impacts for the residences nearest to the nighttime noise activity.
- In addition, the Nighttime Construction Noise Logistics Plan shall require implementation of the following measures:
- Construction contracts shall specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State-required noise attenuation devices.
- Property owners and occupants located within ~~3500 feet of the BIG footprint~~ areas when nighttime construction would occur shall be sent a notice, at least ~~15~~ 5 days prior to the commencement of nighttime construction activities, regarding the construction schedule of BIG. ~~A sign, legible at 50 feet shall also be posted at BIG's construction site.~~ The initial format of All-notices and signs shall be reviewed and approved by the Director of Planning, Building and Code Enforcement or Director's designee. ~~prior to mailing or posting and~~ The notice shall indicate the dates and duration of construction activities, as well as

provide a contact name and a telephone number for the Noise Disturbance Coordinator where residents can inquire about the construction process and register complaints. Copies of each nighttime noise notice will be provided to the City.

- Prior to nighttime construction, the implementing entity's contractor shall ~~provide evidence that at all times during construction activities an on-site construction staff member will be designated as~~ ensure a Noise Disturbance Coordinator is on-site during nighttime construction activities. The Noise Disturbance Coordinator is responsible for responding to complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall determine the cause (e.g., starting too early, bad muffler, etc.), implement reasonable measures to resolve the complaint, and document actions taken. All notices sent to residential units within 3500 feet of the construction site ~~and all signs posted at the construction site~~, shall include the contact name and the telephone number for the Noise Disturbance Coordinator.

If the Plan determines that noise reduction measures incorporated into the Plan cannot feasibly ensure that exterior noise levels from an individual type of nighttime construction activity, at the residence or residences nearest to that activity, do not exceed the FTA's 70 dBA Leq(8-hour) nighttime exterior construction noise standard for residential uses, the Plan shall demonstrate that noise reduction measures incorporated into the Plan, potentially including limitation of the individual type of activity at issue to daytime hours, where feasible, will reduce the noise levels from that activity to the greatest extent practically achievable.

Page 5.12-129 has been revised as follows:

MM BIG NOI-2

Noise Barriers. The implementing entity shall construct ~~three~~ two noise barriers as listed below to mitigate BIG's operational noise impacts:

- A 10-foot high, approximately 700-foot-long absorptive noise barrier surrounding the BESS equipment in the northeastern portion of the solar farm (BAR-2);
- A 10-foot-high, approximately 470-foot-long absorptive noise barrier surrounding the substation in the northeastern portion of the solar farm (BAR-3); and
- A 14-foot-high, approximately 150-foot-long absorptive noise barrier along the eastern and southern boundary of the emergency generators in the northeastern portion of the intermodal facility (BAR-5).

To be effective, the barriers shall be constructed with a solid material with no gaps in the face of the wall or at the base. Openings or gaps between sound wall materials or the ground substantially reduce the effectiveness of the noise barrier. Acceptable materials for the construction of the barrier shall have a minimum density of 3.5 pounds per square foot of surface area and may be composed of the following: masonry block, stucco veneer over wood framing (or foam core), glass,

Plexiglass, Lexan (9 ¼ inch thick), or metal. The barrier may also be constructed out of a combination of the above listed materials. All noise control barrier walls shall be designed to preclude structural failure due to such factors as winds, shear, shallow soil failure, earthquakes, and erosion. The City Building Official shall review and approve all proposed designs prior to the issuance of a building permit.

The following has been inserted in **Page 5.12-129**:

MM BIG NOI-3

Rubberized Asphalt. Prior to issuance of a grading permit for work associated with Main Street improvements, BNSF offsite improvement plans shall be submitted to the City Director of Community Development to show that, on Main Street, from Country Club Drive to Lenwood Road, BIG shall utilize rubberized asphalt. For the portion from Country Club Drive to approximately 3,200 feet east (where new pavement would be installed), this would be full width new pavement construction. From approximately 3,200 feet east of Country Club Drive to Lenwood Road (approximately 1,900 feet), this would be full width mill and overlay with rubberized asphalt. On Main Street, BIG shall mill and overlay segments of the existing roadway with rubberized asphalt from approximately 200 feet east and west of each Receptor 1 through Receptor 4 (per **Figure 5.12-12**).

The City and the County shall determine that, for the segment of Lenwood Road from Agate Road to Community Boulevard within 200 feet of a sensitive receptor property line, the County shall use rubberized asphalt for mill and overlay following transload warehouse center buildings greater than 7.8 million square feet. Prior to certificate of occupancy for transload warehouse center buildings beyond 7.8 million square feet, BNSF shall pay the County the incremental increase in cost to mill and overlay Lenwood Road with rubberized asphalt for the roadway section from Agate Road to Community Boulevard within 200 feet of a sensitive receptor property line.

Page 5.12-132 has been revised as follows:

Operations

Ground-borne Vibration Analysis

The nearest off-site structure (a single-family dwelling) to the BIG footprint is approximately 165 feet from the center of the ~~mainline tracks along the west lead track alignment~~. At this distance and conservatively.

Page 5.12-133 has been revised as follows:

assuming a maximum speed of 50 mph,² vibration levels from BIG locomotive train pass-bys would be approximately 73.44 VdB, which would be below the FTA's 80 VdB ground-borne vibration impact level for Land Use Category 2 uses for infrequent events ~~during Opening Year 2028 and Interim Year 2033 with BIG conditions. In addition, vibration levels (73.44 VdB) be below the FTA's 75 VdB ground-borne vibration impact level for Land Use Category 2 for infrequent events under Horizon Year 2048 with BIG conditions.~~ Rail car pass-bys would generate vibration levels up to approximately 62.64 VdB at the

nearest residences and would be below the FTA's 65 VdB threshold for frequent events for Land Use Category 2 uses. The expected vibration levels would also be substantially below the building damage criterion of 94 VdB as established in **Table 5.12-5**.

In addition, the nearest Land Use Category 3 structure (Lenwood Elementary School) is approximately 600 feet from the proposed east lead track alignment. At this distance and a maximum speed of 40 mph, locomotive vibration levels from BIG would be approximately 57.54 VdB, which would be below the FTA's 83 VdB ground-borne vibration impact level for Land Use Category 3 for infrequent events ~~during Opening Year 2028 and Interim Year 2033 with BIG conditions and 78 VdB threshold for occasional events during Horizon Year 2048 with BIG conditions~~. Vibration levels from rail car pass-bys would reach approximately 44.47 VdB at Lenwood Elementary School, which would also not exceed the FTA's 73 VdB threshold for frequent events for Land Use Category 3 uses. As a result, vibration levels from BIG operational train pass-bys would not cause structural damage at off-site structures or create human annoyance.

Section 5.17: Utilities

Pages 5.17-70 and **5.70-1** have been revised as follows:

A substantial portion of BIG's electric power usage would be met through electric power generated on the site using solar photovoltaic (PV) panels. As shown in **Appendix 5.17 BIG-3: Solar Farm Development Plan**, BIG proposes to construct a 21 MW, ground-mounted solar farm south of the rail yard and Main Street. This solar farm would supply power to the intermodal facility's load/customer side of the utility connection points. ~~Battery Energy Storage Systems (BESS) are also proposed at the solar farm and transload warehouse center to maximize the on-site usage of solar power at the intermodal facility and transload warehouse center.~~

BIG proposes to construct the following on-site electric power facilities to serve BIG:

- **Substations.** Three substations: two substations at the eastern and western extents of the rail yard; and one substation within the solar farm.
- **Distribution Lines.** Additional 33 kilovolt (kV) distribution lines connecting via underground duct banks in a loop around the west end of the intermodal facility and north end of the transload warehouse center. These proposed 33 kV distribution lines would total 23 miles of conduit within the BIG Specific Plan area.
- **Solar Farm.** An approximately 140-acre solar farm is proposed south of the BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 MW to serve the BIG rail yard. ~~The solar farm would include a battery electric storage system (BESS) and a new substation at the northwest corner to route power from the solar farm to the BIG rail yard.~~ The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm

would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff.

- **Transload Warehouse Center Rooftop Solar.** BIG would comply with CALGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse center building rooftops (Title 24, Section 140.10), resulting in an estimated approximately 6.4 megawatts (MW) of rooftop solar generation for Title 24 compliance. In addition, as described in **Section 5.6**, BIG would include additional rooftop solar beyond Title 24 compliance (**MM BIG EN-1**).
- **Emergency Generators.** Emergency diesel generators are proposed at various locations across the rail yard and transload warehouse center to provide backup power in the event of Tortilla Substation service interruptions. Rail yard generators would only be needed if a power outage were to occur at nighttime, as the proposed solar farm would provide sufficient power during daytime in the event of a power outage. The rail yard would include up to 10 generators dispersed throughout, while the transload warehouse center would include up to 29 generators dispersed throughout. Generators would require up to 50 hours of testing and maintenance operations per year.

Section 6.0: Cumulative Impacts

Page 6-1 has been revised as follows:

The proposed Project includes both the Proposed General Plan and the BIG Specific Plan. This chapter analyzes cumulative impacts of implementing the Proposed General Plan through the planning period of 2048, and the. ~~The proposed Project also includes the BIG Specific Plan, which is a development project that has the potential for cumulative environmental impacts that are not necessarily evaluated in each EIR section.~~

~~This section of the EIR provides a description of potential cumulative impacts from implementation of BIG.~~ CEQA defines cumulative impacts as two or more individual impacts that, when evaluated together, are considerable or which compound or increase other environmental impacts (State CEQA Guidelines § 15355). Under CEQA, when a project would contribute to a cumulatively significant impact, an EIR must discuss whether the project's incremental effect is cumulatively considerable. Cumulatively considerable means that the project's incremental effect is significant when viewed in the context of past, present, and reasonably probable future projects.

Page 6-3 has been revised as follows:

To determine BIG's potential cumulative impacts, the cumulative analysis relies upon a list of past, present, and probable future projects pursuant to State CEQA Guidelines § 15130(b)(1)(A). The past, present, and reasonably probable future projects ("cumulative projects" or "related projects") identified by the County of San Bernardino (County) and City of Barstow (City) in proximity ~~within proximity~~ to the BIG footprint are listed in **Table 6-1: Barstow SOI and BIG Footprint Cumulative Projects List** and depicted on **Figure 6-1: Cumulative Projects: Barstow Vicinity**. It is noted that the

County only considers formal applications as cumulative projects (County of San Bernardino, email communication, September 25, 2024). The cumulative impact analyses are provided in Section 6.4: Environmental Impacts. These analyses describe the potential environmental changes to the existing physical conditions that may occur as a result of the Project together with the cumulative projects listed in **Table 6-1**.

Page 6-24 has been revised as follows:

MDAB Mainline Rail Corridor West of BIG Segment (Silver Lakes to BIG): Localized Concentrations of Operational Emissions (Criteria Pollutants) Impacts

Identification of the Corridor analysis segments within the MDAB took into consideration the east and west directions from BIG and the location of receptors (refer to Appendix 5.3, Section 3.2). Based on these factors, a segment east of the Silver Lakes community in Helendale to just west of the BIG lead tracks was analyzed to determine the Corridor's localized concentrations west of BIG. No cumulative projects were identified within proximity to this segment of the Corridor. Therefore, no cumulative impacts related to localized operational emissions would occur in the segment.

The MDAQMD has not established its own thresholds for localized cumulative operational emissions; rather it relies on exceedances of the NAAQSs.

Although BIG would not result in any exceedances of the CAAQS or NAAQS (refer to **Table 5.3-33**) within this Corridor segment, modeled concentrations of one criteria pollutant (or precursors, CO) for which the MDAB is in non-attainment (O₃) would still increase above background concentrations.

Cumulative projects were identified in proximity to this segment of the mainline Corridor within both the cities of Victorville and Hesperia, as detailed in **Appendix 6 BIG-1**. These past, present and future cumulative projects along the Corridor in the MDAB could result in cumulatively considerable contributions of this pollutant to sensitive receptors near the Corridor. Therefore, BIG's cumulative contribution Corridor impacts within the MDAB in regard to localized emissions is conservatively considered to be cumulatively considerable only within the cities of Victorville and Hesperia. This impact would be significant and unavoidable.

Page 6-43 has been revised as follows:

As discussed in **Section 5.12**, Noise and Vibration, BIG operational noise, when added to future baseline noise conditions, without BIG, modeled to include foreseeable increases in noise from existing sources in the vicinity of BIG, would result in significant and unavoidable exterior and interior noise level impacts compared to the absolute noise level standards in applicable local ordinances. Thus BIG, along with those other existing noise sources, would contribute to significant cumulative exterior and interior noise level impacts.

As also discussed in **Section 5.12**, BIG operation noise would also result in substantial incremental increases in exterior and interior noise levels, compared to future baseline noise conditions without

BIG. Thus, BIG would make a cumulatively considerable contribution to those significant cumulative exterior and interior noise level impacts.

Additionally, as also discussed in **Section 5.12**, BIG would result, in combination with anticipated noise from existing noise sources to significant cumulative roadway traffic noise impacts under a “windows open” condition.

Buildout of other new adjacent land uses under the proposed General Plan would also contribute to the ambient noise environment, and therefore would be likely also to contribute, along with BIG and existing noise sources, to the significant cumulative operational noise level impacts described above. The proposed Logistics Facility would also contribute truck traffic to surrounding roadways, resulting in further contributions, along with BIG, to the significant cumulative roadway traffic noise impact described above.

Because of the above factors, both BIG’s construction and operation would constitute a cumulatively considerable contribution to significant cumulative noise impacts. As discussed in **Section 5.12**, all feasible mitigation for BIG’s significant noise impacts would not fully reduce or avoid those impacts. Therefore, despite the application of **MM BIG NOI-2** and **MM BIG NOI-3**, the above-described cumulative operational noise impacts would remain significant and unavoidable, and BIG’s contribution to those impacts would remain cumulatively considerable.

Page 6-45 has been revised as follows:

Cumulative development within the service areas of various providers could result in an additive increase in demand for services. Future development within the City and County would be required to demonstrate adequate availability of police, fire protection, schools, and park facilities. Any new or expanded facilities would be required to undergo their own CEQA review, thereby impacts from the proposed General Plan and cumulative development would be ~~mitigated to a level~~ less than significant.

Section 8.0: Alternatives to the Proposed Project

Page 8-17 has been revised as follows:

8.4.12 Noise and Vibration

BIG would result in a significant and unavoidable impact concerning noise during 33 kV line construction due to temporary noise barrier infeasibility and nighttime construction noise despite incorporation of mitigation measures identified in **Section 5.12: Noise and Vibration**. BIG operational noise would also result in a significant and unavoidable impact, as long-term operational noise levels would exceed applicable exterior/interior noise standards and/or result in a substantial noise increase at nearby sensitive receptors, even with implementation of Mitigation Measure **BIG MM NOI-3**.

Pages 8-19 through 8-20 has been revised as follows:

- **Impact 5.12-1: BIG**, concerning generation of a substantial temporary or permanent increase in ambient noise levels (i.e., compared to levels without BIG) in vicinity of BIG in excess of standards established in the local general plan or noise ordinance, or applicable standards of

other agencies, would be significant and unavoidable even with implementation of Mitigation Measure BIG MM NOI-3. Because temporary noise barriers for construction of the 33 kV transmission line would be considered infeasible mitigation, a significant and unavoidable impact would occur during these activities. Because BIG's proposed nighttime construction would exceed nighttime noise standards at nearby sensitive receptors despite implementation of mitigation identified in **Section 5.12: Noise and Vibration**, a significant and unavoidable impact would occur. Because BIG operational noise levels would exceed applicable exterior/interior noise standards and/or result in a substantial noise increase at nearby sensitive receptors despite implementation of mitigation identified in **Section 5.12**, a significant and unavoidable impact would occur.

Pages 8-112 through 8-113 have been revised as follows:

Table 8-17: West Transload Warehouse Center Alternative Ability to Meet Project Objectives	
Objective	Objective Met?
...	
allow for sufficient on-site power generation to the rail yard (i.e., solar farm).	No, given CPUC regulations would prohibit the solar farm from powering the rail yard under this alternative. <u>Yes</u>

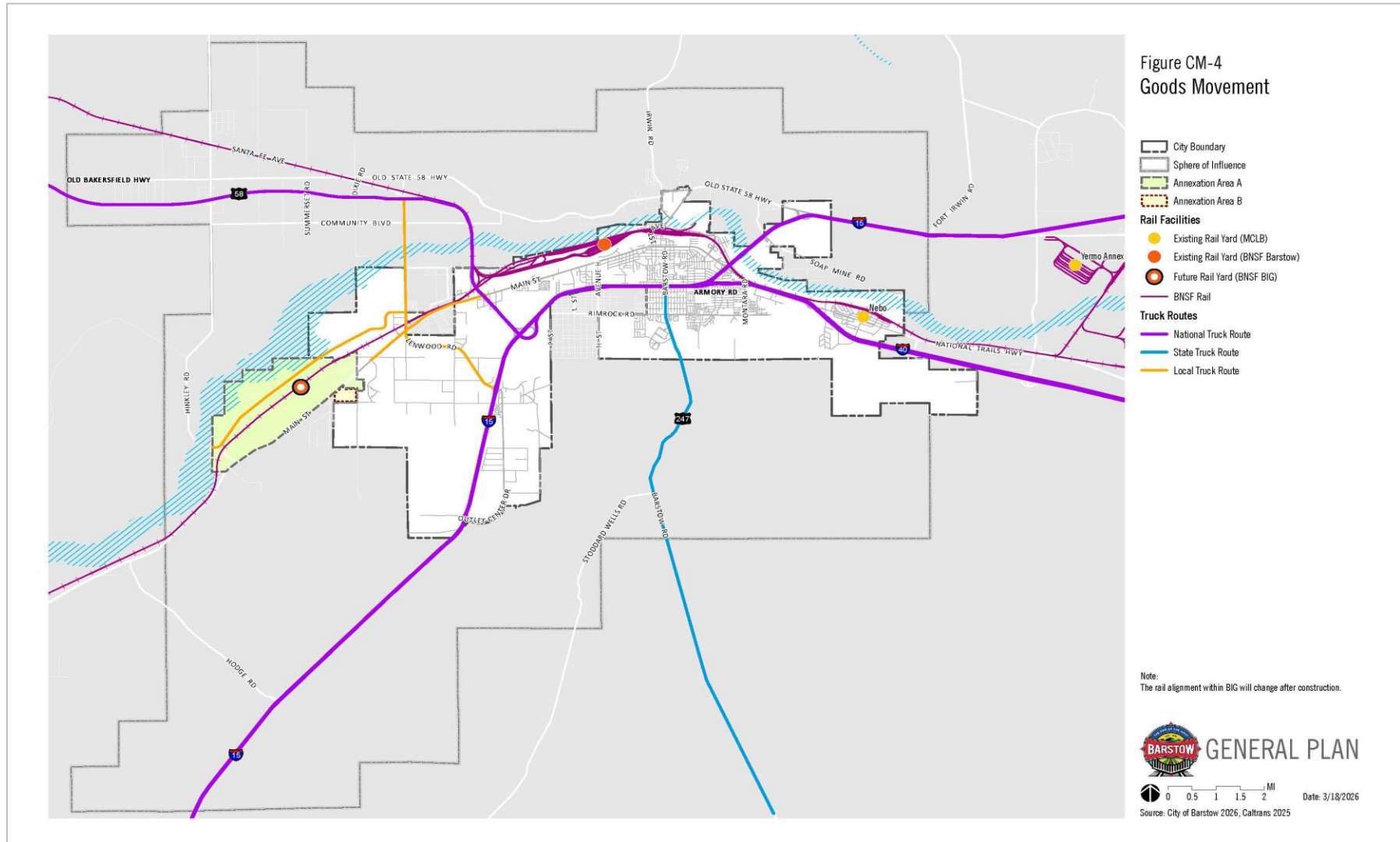
Appendix 3-1: Proposed General Plan

Page 32 has been revised as follows based on comments from Caltrans:

Table CM-2. Bikeway Classifications

Classification	Description
Class I Multipurpose Trail	A bikeway physically separated from the roadway and is considered an off-street facility. This multipurpose trail may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Typical width is at least 10 feet to support use in two directions. Along trails and rights-of-way where pedestrian activity is low, typical width is at least 8 feet. <u>Approaching intersections, the bicycle portion of trails should extend toward the curb to elevate visibility and awareness of bicyclists and vehicles.</u>
Class II Bike Lane	A portion of roadway that has been designated by striping, signaling, and pavement markings for the preferential or exclusive use of bicyclists in a single direction. Bike lanes can also be designed with a designated buffer space between the bike lane and the adjacent travel lane.
Class III Bike Route	A generic term for any road, street, path, or way that in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.
Class IV Separated Bikeway or Cycle Track	A bikeway for the exclusive use of bicycles that includes a physical separation between the bikeway and the through-vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible posts, inflexible barriers, or on-street parking.

Page 36 has been revised as follows based on comments from Caltrans:



Page 66 has been revised as follows based on public comments:

Policy S-4.5 Transportation noise.

Minimize potential transportation noise through proper roadway design, coordination of commercial vehicle routing, and other feasible and appropriate traffic control or abatement measures such as rubberized asphalt.

Appendix A: Implementation Plan, starting on Page A-2 has been revised as follows:

Barstow Code Content

If applicable, a list of the most relevant parts of the Barstow Code (as of 2025 May 2026) that should be reviewed and updated per the implementation action.

IMP-LU-9 Municipal Code Consistency. Update the Barstow Municipal Code as needed to ensure consistency with updates made to the General Plan, consistent with California Government Code Section 65860.

Lead: Planning

Support: Community Development, Community Services

Related General Plan Content:

Policy LU-1.5 Industrial amendments

Policy LU-1.7 Civil engagement on amendments

Policy LU-2.5 Fiscal impact of new development

Related Environmental Justice Topic(s):

Civil engagement

Related Barstow Code Content:

Chapter 1.05 – General Plan

Section 12.24.020 – Reference to infrastructure element

Section 12.36.020 – Reference to infrastructure element

Chapter 19.34 General Plan Amendments

Others as identified/needed to ensure internal consistency

IMP-CM-1 ATP maintenance and implementation. Update the ATP to be consistent with the General Plan and continue to pursue external sources to fund long-term capital improvements as directed by the updated ATP. Update list of prioritized pedestrian and bicycle network improvements considering closing existing network gaps, serving existing neighborhoods, and priority safety corridors. Update the ATP to identify and illustrate where bicycle pathway components of Class I Multipurpose Trails should extend toward the curb when approaching intersections to elevate visibility and awareness of bicyclists and vehicles, particularly along Lenwood Road and Veterans Parkway. Analyze feasibility of potential safety countermeasures along priority safety corridors and incorporate improvements through the City’s Capital Improvement Program; initiate improvements within 24 months of General Plan adoption.

Lead: Community Services

Support: Community Development

Related General Plan Content:

Policy CM-1.9 Safe Systems Approach	Policy CM-2.6 Design of new facilities
Policy CM-1.10 Safety Corridors	Policy CM-2.7 Public space and networks
Policy CM-2.1 Pedestrian network	Policy CM-2.8 Access management
Policy CM-2.2 Bicycle network	Policy CM-2.9 Site design
Policy CM-2.3 Electric bikes	Policy CM-2.10 VMT reduction
Policy CM-2.4 Transit service	Policy CM-3.1 Truck routes
Policy CM-2.5 Downtown Barstow	All CM-related tables/figures

Related Environmental Justice Topic(s):

Physical Activity, Public Facilities

Related Barstow Code Content:

N/A

IMP-S-12 Public health planning. Coordinate with local healthcare and public health providers to plan for, monitor, and respond to emergent health and disease conditions such as pests, disease outbreaks, high heat, and poor air quality. Identify additional programs and funding to expand affordable healthcare services and assist low-income residents in accessing these services.

Lead: Community Development

Support: Fire Protection District, Police, Barstow Community Hospital, County Public Health, Mojave Desert Air Quality Management District

Related General Plan Content:

Policy S-2.1 Resilient public facilities
Policy S-2.2 Emergency response operations plan
Policy S-2.3 Cooperative hazard management and recovery
Policy S-2.7 Community resilience centers
Policy S-2.8 Healthy, resilient, and efficient buildings

Related Environmental Justice Topic(s):

Public Facilities

Related Barstow Code Content:

N/A

IMP-S-16 Noise and vibration standards. Update the Barstow Code to incorporate the noise and vibration standards identified in Safety Element Tables N-1, N-2, and N-3, and as directed in policies such as Policy S-4. Evaluate what existing and new standards remain in or are added to current chapters and what existing and new standards are incorporated into a stand-alone noise ordinance and/or vibration ordinance.

Additionally, reflect construction criteria that can be met by typical construction activities and performance standards for operational noise sources based on land use types to control excessive noise. When a project-specific acoustical study is required, the following should also be taken into consideration for construction related noise: haul routes for movement of materials and construction equipment; signage for construction sites that has a 24-hour contact for community concerns over noise; appropriateness of type, effectiveness and location of temporary construction barriers; nighttime and/or after

hours construction requirements; requirements for stockpiling of materials and equipment; and requirements for staging areas.

Lead: Community Services

Support: Community Development, Community Services

Related General Plan Content:

Policy S-4.1 Land use compatibility

Policy S-4.2 New residential

Policy S-4.3 New nonresidential

Policy S-4.4 Control sound at the source

Policy S-4.5 Transportation noise

Policy S-4.6 Industrial proximity

Table N-1 State of California Interior and Exterior Noise Criteria

Table N-2 Federal Indoor Ground-Borne Vibration (GBV) and Ground-Borne Noise (GBN) Annoyance Criteria

Table N-3 Federal Vibration Damage Criteria

Related Environmental Justice Topic(s):

N/A

Related Barstow Code Content:

Chapter 19.16 Commercial District (Section 19.16.090)

Chapter 19.18 Industrial District (Section 19.18.170)

Chapter 19.36 Approval Conditions

IMP-OSC-4 Outdoor air quality improvements. Establish requirements and improvements that reduce fugitive dust and transportation emissions, such as incorporating fair share contributions of new development for paving roads when they must obtain access through unpaved roads, installing and enforcing truck-idling signage for heavy-duty trucks to limit idling in accordance with state law, and favoring trees with low biogenic volatile organic compounds and low ozone formation potential. Additionally, establish and/or maintain procedures to coordinate with the Mojave Desert Air Quality Management District on matters such as required dust control plans and indoor cannabis operations.

Lead: Community Services

Support: Community Development, Mojave Desert Air Quality Management District

Related General Plan Content:

Policy OSC-3.2 Pollution reduction and monitoring

Policy OSC-3.3 Construction and operations

Policy OSC-3.4 Fugitive dust emissions

Policy OSC-3.6 Improved outdoor air quality

Related Environmental Justice Topic(s):

Air Quality

Related Barstow Code Content:

N/A

IMP-OSC-54 Screening standards. Update the Barstow Code to define development standards and design guidelines for “well-designed” screening for commercial and industrial development entitled outside of specific plans, with a particular focus on screening large parking, truck loading, and outdoor storage areas.

Lead: Community Development

Support: N/A

Related General Plan Content:

Policy OSC-7.6 Screening

Related Environmental Justice Topic(s):

N/A

Related Barstow Code Content:

Chapter 19.18 Industrial District (Section 19.18.060)

Chapter 19.24 Other Uses (Section 19.24.035)

Appendix B: Glossary, starting on Page B-2 has been revised as follows:

Air basin. One of the ~~14~~ 15 self-contained regions in the United States, minimally influenced by air quality in contiguous regions. Barstow is located in the Mojave Desert Air Basin.

Air pollutants. Any airborne substance generated from manmade/anthropogenic sources (e.g., vehicles, stationary sources, consumer products) and natural/non-anthropomorphic sources (e.g., wildfire smoke, volcanic emissions, windblown dust) that could, in high enough concentration, harm animals, humans, vegetation, and/or materials. With respect to circulation, air pollutants fall into two main groups: (1) those emitted from identifiable sources (such as vehicles) and, (2) those formed in the air by interaction between pollutants and weather conditions.

Air pollutant emissions. Discharges into the atmosphere, usually specified in terms of weight per unit of time for a given pollutant. The Mojave Desert Air Quality Management District has identified primary pollutants including carbon monoxide, nitrogen dioxide, particulates (PM₁₀ and PM_{2.5}), reactive organic gases, and sulfur dioxide.

~~Air pollution control district (APCD)~~ **Air Quality Management District (AQMD).** A single-or multi-county agency with legislative authority to adopt and enforce all rules and regulations necessary to control ~~non-vehicular~~ stationary sources of air pollutants in its area. The Mojave Desert Air Quality Management District (MDAQMD) is the designated APCD / AQMD for the Mojave Desert Air Basin.

Ambient air quality. The quality of the outdoor air at a particular time and place.

...

Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD is the designated AQMD for the portions of the Mojave Desert Air Basin within San Bernardino and Riverside Counties.

...

Stationary source. Any permanently installed (or operating at a fixed, routine, or seasonal location) unit, piece of equipment, article, machine, process, contrivance, or combination thereof, which may emit or control an air contaminant.

Appendix 3-2: Barstow Code, Title 19 Zoning

Page 1 has been revised as follows:

SECTION 11. Municipal Code Amendment. Chapter 1.05 of the Barstow Municipal Code is hereby repealed in its entirety, the repealed text reads as follows:

CHAPTER 1.05-GENERAL PLAN

Sec. 1.05.010. Barstow general plan parts adopted. The city general plan contains six parts as follows:

- (1) ~~PART A—Introduction.~~
- (2) ~~PART B—General Plan Elements.~~
- (3) ~~PART C—Master Environmental Assessment—Technical Reports.~~
- (4) ~~PART D—Implementation Plan—Mitigation Monitoring Program.~~
- (5) ~~PART E—Environmental Reference Document.~~
- (6) ~~PART F—Appendices.~~

Sec. 1.05.020. Barstow general plan elements adopted. The city general plan consists of the following elements:

- (1) ~~Community development element — June, 1997.~~
- (2) ~~Natural factors element — June, 1997.~~
- (3) ~~Hazards element — June, 1997.~~
- (4) ~~Cultural resources element — June, 1997.~~
- (5) ~~Recreation and open space element — June, 1997.~~
- (6) ~~Infrastructure and public services element — June, 1997.~~
- (7) ~~Housing element — July 19, 2010.~~
- (8) ~~Air quality element — June, 1997.~~

[Chapter 1.05 is repealed in its entirety to avoid any confusion about consistency with the City's adopted General Plan and any future updates.]

Appendix 5.3 BIG-1: Air Quality Technical Report

Explanation of BIG Air Quality and Greenhouse Gas Emissions Errata Revisions are provided in Final EIR Appendix 3-1: Emissions Errata.

The below include other revisions to Draft EIR Appendix 5.3 BIG-1.

Page 14 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 MW to serve BIG. The solar farm would include a ~~battery electric storage system and~~ a new substation at the northwest corner to route power from the solar

farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 MW of rooftop solar generation for Title 24 compliance.

Page 19 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Pages 127 and 128 have been revised as follows:

Potential Criteria Pollutant Health Impacts

This section includes a discussion of the potential health effects of criteria air pollutant impacts due to the exceedance of mass emissions thresholds in accordance with the findings of the legal case *Sierra Club v. County of Fresno* (2018), commonly called “*Friant Ranch*”. Health effects information was acquired through a review of available literature published by the MDAQMD, CARB, and U.S. EPA. This discussion provides supplemental information related to the air quality concentration impacts. This discussion is not itself an impact-significance determination under any CEQA threshold identified in this document.

This section discusses the relationship between BIG’s regional criteria pollutant emissions and the potential for adverse health effects to occur for persons exposed to the emitted pollutants. BIG construction and operation would produce regional mass emissions of VOC (ROG), NO_x, CO, PM₁₀, and PM_{2.5} above MDAQMD thresholds. NO₂, a criteria pollutant, is the primary component of NO_x. SO₂, a criteria pollutant, is the primary component of SO_x; though regional mass emissions of SO_x were not above MDAQMD thresholds, this pollutant is involved in secondary PM_{2.5} formation. ~~In addition, VOCs and NO_x are precursors of O₃, PM_{2.5} and O₃ are a criterial pollutants that is are photochemically formed from the precursors in the atmosphere in the presence of sunlight (known as a photochemical reaction) (U.S. EPA, 2025a). As VOCs, NO_x, CO, and SO_x are precursors of O₃ and PM_{2.5}, the pollutants quantified are VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}, and Therefore,~~ the criteria pollutants evaluated for regional health effects are CO, NO₂, O₃, ~~CO~~, and PM.

There is currently no methodology available that can with precision ~~accurately~~ quantify regional health effects from NO₂, O₃, CO, or PM exposure associated with an individual project’s emissions. The South

Coast AQMD reached a similar conclusion in its *Amicus Curiae* brief filed with the California Supreme Court in the case of *Sierra Club v. County of Fresno*, when, concerning O₃, the South Coast AQMD stated that it does not know of a way to accurately quantify health impacts caused by emissions produced on a scale as small as individual projects (South Coast AQMD, 2015, p. 12). One existing tool, U.S. EPA's BenMAP, calculates the number and economic value of air pollution-related deaths and illnesses resulting from changes in O₃ and PM_{2.5} concentrations (U.S. EPA, 2025b). However, the expected changes in regional O₃ and PM_{2.5} concentrations associated with BIG would be so low that BenMAP would likely produce estimates of health effects that are near zero. Therefore, the extent to which regional adverse health effects can be identified in this section is limited to (a) discussing BIG's potential impact on regional pollutant levels; and (b) generally describing the types of adverse health effects associated with exposure to the pollutants of concern.

Page 128 has been revised as follows:

CO

The MDAB is currently designated attainment of the CAAQS and NAAQS for CO. The CAAQSs were established to protect public health, including the most sensitive groups (CARB, ND_b). The NAAQS were established to protect public health with an adequate margin of safety (U.S. EPA, 2025e). The most stringent CO CAAQS or NAAQS are 20 ppm for a 1-hour average and 9.0 ppm for an 8-hour average.

The highest CO concentrations recorded anywhere in the MDAB over the last three available years (2019 through 2021) are 5.461ppm for a 1-hour average (CARB, ND_a). This pollutant level is 27 percent of the 1- hour CAAQS and 16 percent of the 1-hour NAAQS.

According to the most recent U.S. EPA-approved MDAB emissions inventory, the MDAB's total CO emissions in 2020 were 337.3 tons per day (CARB, 2009). By comparison, BIG construction would result in a maximum of ~~3,8467,601~~ pounds per day (~~1,921.63~~ tons per day) and BIG operations total CO emissions would be ~~2,6971,974~~ pounds per day (~~1,350.73~~ tons per day), which would be 0.65 percent and 0.42 percent as large as the total MDAB emissions, respectively. Therefore, BIG's contribution to regional CO levels would be relatively small.

Pages 129 has been revised as follows:

NO₂

The MDAB is currently designated attainment of the NO₂ CAAQS and NAAQS. The most stringent NO₂ standards are 0.18 ppm for a 1-hour average (State 1-hour standard), 0.100 ppm for a three-year average of the 98th percentile of the annual distributions of daily maximum 1-hour average concentrations (federal 1-hour standard), and 0.030 ppm for an annual average (CAAQS).

The highest NO₂ concentrations recorded anywhere in the MDAB over the last 3 available years (2021 – 2023) are 0.062 ppm. The pollutant level is 34 percent and 62 percent of the CAAQS and NAAQS 1-hour standards, respectively.

According to the most recent CARB emissions inventory, the total NO_x emissions within the MDAB in 2020 were 204.2 tons/day. By comparison, the highest NO_x emissions increment associated with BIG construction is ~~4,419~~5,178 lb/day (~~2,211~~1,02 tons/day), which would be 0.~~75~~ percent of the total MDAB emissions. Operational emissions would exceed the MDAQMD threshold with ~~2,265~~2,236 lbs/day (~~1,10~~.93 tons/day), which would be 0.~~35~~ percent as large as the total MDAB emissions. Therefore, BIG's contribution to regional NO₂ levels would be relatively small.

Page 130 has been revised as follows:

O₃

The MDAB is currently designated nonattainment of the O₃ concentration standards. The most stringent state and federal O₃ standards are 0.09 ppm for 1-hour average, 0.07 ppm for the three-year average of the fourth-highest 8-hour concentration each year (known as the federal 8-hour standard), and 0.07 ppm for an 8-hour average (known as the state 8-hour standard).

The highest 1-hour O₃ concentration recorded in the MDAB over the last three available years (2021 through 2023) is 0.131 ppm, which is 1.45 times the standard. The highest 8-hour O₃ concentration recorded in the MDAB over the last three available years is 0.107 ppm, which is 1.5 times the standard (CARB, NDe).

According to the most recent CARB emissions inventory, the MDAB's total VOC (ROG) emissions in 2020 were 93.5 tons/day (CARB, 2009). By comparison, BIG's highest VOC (ROG) emissions increment was ~~924~~913 pounds per day (0.~~46~~15 tons/day) during construction and ~~596~~258 pounds per day (0.~~31~~11 tons/day) during operations, which would be 0.~~12~~ percent and 0.1 percent of the total MDAB emissions, respectively. As discussed above for NO₂, BIG's NO_x emissions increment would be 0.~~75~~ percent and 0.~~35~~ percent as large as the total MDAB emissions during construction and operations, respectively. Therefore, BIG's contribution to regional O₃ levels would be relatively small.

Page 131 has been revised as follows:

PM

The MDAB is currently designated nonattainment of the PM₁₀ State 24-hour and annual CAAQS and NAAQS. The most stringent PM₁₀ CAAQS or NAAQS are 50 µg/m³ and 150 µg/m³, respectively. The highest PM₁₀ concentrations recorded in the BIG footprint over the last 3 available years (2021 through 2023) are 372.7 µg/m³. This pollutant level is seven times and two times the CAAQS and NAAQS, respectively. According to the most recent CARB emissions inventory, the total PM₁₀ emissions within the MDAB in 2020 were 219.2 tons/day. By comparison, the PM₁₀ emissions increment associated with BIG would average ~~61,120~~ be 1,883 lb/day (~~310~~.61 tons/day) during construction and ~~914~~149 lbs/day (0.~~508~~ tons/day) during operations, which would be ~~9.10~~.3 percent and 0.~~404~~ percent as large as the

total MDAB emissions, respectively. Therefore, BIG's contribution to regional PM₁₀ levels would be relatively small.

The MDAB is currently designated unclassified/attainment of the PM_{2.5} federal 24-hour and NAAQS of 35 µg/m³. The highest PM_{2.5} concentrations recorded in BIG's footprint over the last 3 available years (2021 through 2023) are 87.1 µg/m³. This pollutant level is 2.5 times the NAAQS. According to the most recent CARB emissions inventory, the total PM_{2.5} emissions within the MDAB in 2020 were 59.0 tons/day. By comparison, the highest PM_{2.5} emissions increment associated with BIG are ~~56,291~~1902 lb/day (~~280.19~~ tons/day) during construction and ~~26843~~ lbs/day (~~0.1302~~ tons/day) during operations, which would be ~~8.30.3~~ percent and 0.043 percent as large as the total MDAB emissions, respectively. Therefore, BIG's contribution to regional PM_{2.5} levels would be relatively small.

Appendix 5.4 BIG-1: Biological Resources Technical Report

Page 16 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include ~~a battery electric storage system and~~ a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.

Page 21 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Appendix 5.7 BIG-1: Geology, Soils, And Seismicity Technical Report

Page 14 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include ~~a battery electric storage system and~~ a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.

Page 19 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Appendix 5.7 BIG-2: Mineral Resources Technical Report

Page 14 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include ~~a battery electric storage system and~~ a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.

Page 19 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Appendix 5.7 BIG-3: Paleontological Resources Assessment

Page 14 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include ~~a battery electric storage system and~~ a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.

Page 20 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG's footprint.

Appendix 5.8 BIG-1: Greenhouse Gas Emissions Assessment

Explanation of BIG Air Quality and Greenhouse Gas Emissions Errata Revisions are provided in **Final EIR Appendix 3-1: Emissions Errata**.

The below include other revisions to **Draft EIR Appendix 5.8 BIG-1**.

Page 14 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include ~~a battery electric storage system and~~ a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.

Page 19 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Pages 95 and 96 have been revised as follows:

MM BIG EN-1 On-Site Renewable Electricity Generation. Prior to the issuance of building permits for intermodal facility structures or transload facilities, BIG shall install onsite rooftop solar generation beyond Title 24 compliance, or approximately 17MWdc for the total 9 million square-foot warehouse building area. Solar panel installation shall be phased proportionally with buildout of the Transload Warehouse Center (i.e., on-site solar generation shall generally be distributed equally among future buildings and the total 17 MWdc may not be required if all 9 million square feet are not ultimately development).

BIG shall ensure solar photovoltaic panels or other source of renewable energy generation is incorporated into the design based on the maximum solar roof area available. The maximum solar roof area available will be building specific and dependent on the structural considerations of each building and the ability to maximize the solar zone of each building (as defined in § 110.10 of the California Energy Code). The solar zone (i.e., the location where solar panels can be installed) shall comply with 2022 California Energy Code, § 110.10, and shall comply with access, pathway, ventilation, and spacing requirements and excluding any skylight area.

The final photovoltaic generation facility size is dependent on the maximum solar roof area available and shall be approved by Southern California Edison (SCE). SCE's

Rule 21 governs operating and metering requirements for any facility connected to SCE's distribution system. ~~Should SCE limit the off-site electricity export, BIG may utilize a battery energy storage system to lower off-site export while maintaining on-site renewable generation to offset consumption.~~

Each building shall include an electrical system and other infrastructure sufficiently sized to accommodate the photovoltaic arrays. The electrical system and infrastructure shall be clearly labeled with noticeable and permanent signage. This mitigation measure applies only to tenant or occupancy permits and not the building shell approvals.

Appendix 5.9 BIG-1: Hazardous Materials and Wastes Technical Report

Page 22 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Appendix 5.10 BIG-1: Hydrology and Hydraulic Design Technical Report

Page 14 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include ~~a battery electric storage system and~~ a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.

Page 18 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Appendix 5.12 BIG-1: Noise and Vibration Technical Report

Page vi has been revised as follows:

~~BESS battery energy storage system~~

Page 14 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include ~~a battery electric storage system (BESS)~~ and a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance

Page 19 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Page 46 has been revised as follows:

BIG construction activities would primarily occur between 7 a.m. and 7 p.m. consistent with the County Code (County Code Title 8, Division 3, Chapter 83.01). However, nighttime construction would be required throughout the BIG footprint, except where within 300 feet of sensitive receptors (along the

33kv distribution line) and at the solar farm where no nighttime construction would be required, during certain phases or periods to accommodate key activities required to maintain progress on BIG construction and rail operations (e.g., concrete foundation pouring for the transload warehouse center, east and west lead track work adjacent to the mainline tracks where the lead tracks would tie into the mainline tracks, etc.). Thus, nighttime construction was analyzed to occur at each phase of BIG construction, and nighttime noise levels were evaluated against the FTA's nighttime construction noise assessment criteria as shown in **Table 5: Federal Transit Administration Construction Noise Assessment Criteria**.

Page 58 has been revised as follows:

Solar Farm

The proposed solar farm at the BIG Specific Plan area's southwest southeast corner would produce long-term, continuous, operational noise from the battery energy storage system (BESS) and solar array inverter equipment. ~~The BESS equipment would be located~~ substation at the solar farm's northwestern east corner of the solar farm adjacent to Main Street, and the solar array inverter equipment that would be positioned at various locations throughout the solar farm. Noise from solar farm equipment was modeled in SoundPLAN as the following sources:

- ~~32 point sources representing the HVAC equipment for the BESS was modeled using a reference sound level of 75 dBA at one foot (Eos Gen 2.3 Energy Block, 2021);~~
- ~~32 point sources representing the 3000 kV transformers for the BESS were modeled using a reference sound level of 63 dBA at one foot (NEMA, 2025); and~~
- Eight (8) solar array inverters were modeled at the locations identified in BIG's site plans throughout the solar farm using a reference sound level of 57.1 dBA at 50 feet (Hankard Environmental, Inc., 2019).

Page 82 have been revised as follows:

Table 22: Maximum BIG Construction Noise Levels at Nearest Sensitive Receptors

Construction Area/Activity	Impacted Receptor (Receptor ID) ¹	Receiving Land Use	Maximum Noise Level (dBA L _{eq} (8-hr)) ²	FTA Daytime Construction Noise Threshold, (dBA L _{eq} (8-hr))	Threshold Exceeded?	FTA Nighttime Construction Noise Threshold, (dBA L _{eq} (8-hr))	Threshold Exceeded?
Block Swap Yard	5	Residential	61.9	80	No	70	No
Intermodal Facility	1	Residential	63.6	80	No	70	No
Transload Warehouse Center	7	Residential	58.4	80	No	70	No
East Lead Tracks	15	Residential	73.3	80	No	70	Yes
West Lead Tracks	62	Residential	65.6	80	No	70	No
Solar Farm	87	Residential	75.7	80	No	70 Yes <u>Not Applicable</u> ³	
Lenwood Channel Improvements	6	Residential	73.4	80	No	70	Yes
Concrete Batch Plant	53	Residential	30.5	80	No	70	No
Pile Driving	5	Residential	73.7	80	No	70	Yes <u>No</u>
33 kV Line	13	Residential	84.2	80	Yes	70	Yes
Bridge Demolition	5	Residential	52.6	80	No	70	No

Table 22: Maximum BIG Construction Noise Levels at Nearest Sensitive Receptors

Construction Area/Activity	Impacted Receptor (Receptor ID) ¹	Receiving Land Use	Maximum Noise Level (dBA $L_{eq(8-hr)}$) ²	FTA Daytime Construction Noise Threshold, (dBA $L_{eq(8-hr)}$)	Threshold Exceeded?	FTA Nighttime Construction Noise Threshold, (dBA $L_{eq(8-hr)}$)	Threshold Exceeded?
Sweeten Lane Paving	83	Residential	67.5	80	No	70	No
Combined (all sources)	6	Residential	84.4	80	Yes	70	Yes

Notes:

¹ Modeled receptor locations are shown in **Figure 20** through **Figure 5 22**.

² Noise levels calculated using the SoundPLAN Essential software. Modeling results are provided in **Appendix A**.

³ No nighttime construction is proposed at the solar farm.

Source: Kimley-Horn, 2024; SoundPLAN Essential version 5.1. Refer to **Appendix A** for noise modeling results and receptor locations.

Page 81 has been revised as follows:

Due to the nature of 33 kV line construction activities, the only ~~feasible~~ potential mitigation to reduce construction noise levels would be to construct a temporary noise barrier to block the line of sight from the construction area to the nearest residences.

Page 86 has been revised as follows:

Nighttime Construction

BIG would require approximately four weeks of nighttime construction for east and west lead track work adjacent to the mainline tracks where the lead tracks would tie into the mainline tracks. Additionally, nighttime construction may be required throughout the BIG footprint (except at the solar farm) during certain phases or periods to accommodate key activities required to maintain progress on construction and rail operations (e.g., concrete foundation pouring for the transload warehouse center, etc.).

As shown in **Table 22**, nighttime construction noise levels associated with the east lead tracks, ~~solar farm~~, Lenwood Channel improvements, and 33 kV line would exceed the FTA's 70 dBA $L_{eq(8-hour)}$ nighttime construction noise standard for residential uses. Noise levels from the other construction areas/activities would not exceed the FTA's nighttime standard. As previously noted, the combined noise level from simultaneous construction activities at all construction areas would reach a maximum of 84.4 dBA $L_{eq(8-hour)}$ and would exceed the FTA 70 dBA $L_{eq(8-hour)}$ nighttime noise standard. BIG would incorporate Mitigation Measure NOI-1, which requires preparation of a Construction Noise Logistics Plan to reduce nighttime construction noise levels. While incorporation of Mitigation Measure NOI-1 would reduce nighttime construction noise levels to the extent feasible, the precise details regarding the proposed schedule, duration/hours, equipment type/quantity, and specific location of construction for nighttime construction activities are unknown at this time. Therefore, despite incorporation of noise reduction measures (to be included in the Construction Noise Logistics Plan), nighttime construction noise levels could still exceed the FTA's 70 dBA $L_{eq(8-hour)}$ for residential uses. Therefore, BIG nighttime

construction noise could result in a significant and unavoidable impact despite incorporation of Mitigation Measure NOI-1.

Pages 86-87 has been revised as follows:

As shown in **Table 15**, an impact pile-driver generates a noise level of approximately 101 dBA at a distance of 50 feet. Conservatively assuming six impact pile drivers would be used simultaneously during construction of Bridges 6.5 and Bridge 10.9B (i.e., one pile driver at Bridge 6.5B, one pile driver at Bridge 6.5C, two pile drivers at Bridge 6.5F, and two pile drivers at Bridge 10.9B), the highest expected noise level at the nearest sensitive receptor would be approximately 73.7 dBA,¹ which is below the FTA 80 dBA L_{eq} (8-hour) daytime standard for residential uses. BIG would avoid nighttime construction where near sensitive receptors (see page 19), thus, no impacts would occur from nighttime pile-driving. Therefore, a less than significant impact would occur from pile-driving. ~~However, as also shown in **Table 12**, pile driving activities during the nighttime would likely exceed the FTA's 70 dBA L_{eq} (8-hour) nighttime noise standard for residential. As discussed above, BIG would incorporate Mitigation Measure NOI 1, which requires preparation of a Construction Noise Logistics Plan to reduce nighttime construction noise levels. While incorporation of Mitigation Measure NOI 1 would reduce nighttime pile-driving noise levels to the extent feasible, the precise details for nighttime construction activities are unknown at this time. Therefore, despite incorporation of Mitigation Measure NOI 1, nighttime pile-driving noise levels could still exceed the FTA's 70 dBA L_{eq} (8-hour) for residential uses. As such, nighttime noise from pile driving would result in a significant and unavoidable impact.~~

Appendix 5.15 BIG-1: Barstow International Gateway CEQA Assessment – Transportation Analysis

The following stamp has been added to the **cover of Appendix 5.15-BIG-1** as follows:



Page 36 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include a ~~battery electric storage system~~ and a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal

grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.

Page 42 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Appendix 5.15 BIG-2: Level of Service Assessment – Transportation Analysis

The following stamp has been added to the **cover of Appendix 5.15-BIG-2** as follows:



Page 34 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 megawatts to serve BIG. The solar farm would include ~~a battery electric storage system and~~ a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 megawatts of rooftop solar generation for Title 24 compliance.

Page 39 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within the BIG footprint.

Appendix 5.17 BIG-1: Utility Assessment Technical Report

Page 14 has been revised as follows:

- An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 MW to serve BIG. The solar farm would include ~~a battery electric storage system and~~ a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff. Additionally, BIG would comply with CalGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 MSF of transload warehouse, BIG would include approximately 6.4 MW of rooftop solar generation for Title 24 compliance.

Page 20 has been revised as follows:

Nighttime construction could occur throughout the BIG footprint except where within 300 feet of sensitive receptors (along the 33kv distribution line) and at the solar farm where no nighttime construction would be required. To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within BIG footprint.

Page 65 has been revised as follows:

A substantial portion of BIG's electric power usage would be met through electric power generated on-site using solar photovoltaic panels. BIG proposes to construct a 21 MW, ground-mounted solar farm south of the rail yard and Main Street. This solar farm would supply power to the intermodal facility's load/customer side of the utility connection points. ~~Battery Energy Storage Systems (BESS) are also~~

~~proposed to maximize the on-site usage of solar power at the intermodal facility and transload warehouse center.~~

BIG proposes to construct the following on-site electric power facilities to serve BIG:

- **Substations.** Three substations: two substations at the eastern and western extents of the rail yard; and one substation within the solar farm
- **Distribution Lines.** Additional 33 kilovolt (kV) distribution lines connecting via underground duct banks in a loop around the west end of the intermodal facility and north end of the transload warehouse center. These proposed 33 kV distribution lines would total 23 miles of conduit within the BIG Specific Plan area.
- **Solar Farm.** An approximately 140-acre solar farm is proposed south of the BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 MWh to serve the BIG rail yard. The solar farm would include ~~a battery electric storage system (BESS) and~~ a new substation at the northwest corner to route power from the solar farm to the BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles. The solar farm would require minimal grading to level the site as existing topography is utilized wherever possible and excavation limited primarily to stormwater detention to capture runoff.