

RESOLUTION NO. 5256-2026

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BARSTOW TO CERTIFY THE CITY OF BARSTOW GENERAL PLAN AND THE BARSTOW INTERNATIONAL GATEWAY DEVELOPMENT PROJECT ENVIRONMENTAL IMPACT REPORT (SCH# 2024020501) WITH TECHNICAL APPENDICES AND FINAL ENVIRONMENTAL IMPACT REPORT; ADOPTING CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) FINDINGS ON IMPACTS AND MITIGATION MEASURES; ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS; AND ADOPTING MITIGATION MONITORING AND REPORTING PROGRAMS.

WHEREAS, on February 17, 2015 the City Council adopted the 2015-2020 General Plan; and

WHEREAS, on October 2022, the City Council adopted a motion initiating preparation of the City of Barstow General Plan update to replace existing 2015 General Plan; and

WHEREAS, the City received an application (PDEV-24-001) from Burlington Northern Santa Fe Railway Company ("BNSF") for the Barstow International Gateway development project ("BIG") and related Specific Plan on December 22, 2023 to develop an approximately 4,335-acre development including Rail Yard Overlay, Transload Warehousing Center, Mojave River Buffer, Private Solar Power Utility and associated infrastructure improvements; and

WHEREAS, the BIG Specific Plan establishes land use policies, development standards, infrastructure planning, and design guidelines necessary to govern development of the BIG and any future development in the BIG Specific Plan area; and

WHEREAS, the updated City of Barstow General Plan ("General Plan") and associated re-zoning, ordinances, and resolutions, are collectively referred to as the "General Plan Update"; and

WHEREAS, the BIG Specific Plan and the Development Agreement for BIG, as well as associated re-zonings, pre-zonings, tentative tract map, vacations and dedications, maintenance agreement, ordinances, resolutions, and associated San Bernardino Local Agency Formation Commission ("LAFCO") reorganizations are the "Development Project"; and

WHEREAS, the Community Development Director determined the General Plan Update and Development Project would have one or more significant effects on the environment warranting the preparation of an environmental impact report ("EIR") under Section 21080(d) of California Environmental Quality Act (Public Resources Code section 21000 et seq.) ("CEQA") and section 15060(d) of Title 14, Division 6, Chapter 3 of the California Code of Regulations (the "CEQA Guidelines"); and

WHEREAS, given the size and scope of the Development Project and BIG Specific Plan application, the City determined that EIR should evaluate the General Plan and Development Project together, and the associated rezonings, prezonings, and San Bernardino Local Area Formation Commission Action (“LAFCO”) reorganizations should be processed concurrently; and

WHEREAS, the City of Barstow, acting as lead agency under CEQA and the CEQA Guidelines, prepared the EIR for the General Plan Update and Development Project (State Clearinghouse No. 2024020501) to provide responsible agencies and the public with information about the potential environmental effects of the General Plan Update and Development Project; and

WHEREAS, on February 15, 2024, the City Community Development Department prepared, posted, and file a Notice of Preparation (“NOP”) for the draft EIR (“DEIR”) with the San Bernardino County Clerk commencing a 30-day public review period in accordance with Section 15082 of the CEQA Guidelines which concluded on March 26, 2024, during which time the City received 56 public and responsible agency comments; and

WHEREAS, the Community Development Department also conducted a public scoping meeting in accordance with Section 15082 of the CEQA Guidelines regarding the General Plan Update and the Development Project on March 13, 2024; and

WHEREAS, the City published a notice of availability (NOA) of the DEIR in the Victorville Daily Press on November 9, 2025; and

WHEREAS, the City posted the DEIR on the City website on November 9, 2025; and

WHEREAS, the City mailed the NOA of the DEIR to local public agencies, organizations, and individuals on file with the Community Development Department who requested notification about the General Plan Update and the Development Project; and

WHEREAS, on November 10, 2025, the City provided a Notice of Completion (“NOC”) of the DEIR to the State Clearinghouse and the San Bernardino County Clerk in accordance with Section 15085 of the CEQA Guidelines notifying all State responsible agencies and the public of the review/comment period for the DEIR which began on November 10, 2025; and

WHEREAS, on November 10, 2025, the City made available a printed copy of the DEIR at City Hall, the Library, and Community College, and also provided portable electronic storage versions (USB Drive) of the DEIR and all technical appendices; and

WHEREAS, the DEIR evaluated the rezoning of land to be consistent with the new City of Barstow General Plan; and

WHEREAS, the DEIR evaluated the prezoneing and LAFCO reorganizations of land associated with the BIG Specific Plan for LAFCO Area A, and LAFCO Area B; and

WHEREAS, the DEIR evaluated the Development Project including construction and operation of a large-scale, rail-served intermodal logistics facility consisting of a rail yard, intermodal facility, transload warehouse center, private solar utility, and associated on-site and off-site rail and non-rail infrastructure improvements; and

WHEREAS, on Friday, January 2, 2026, the City extended the end of the public comment period for the DEIR from Monday January 5, 2026, to Monday, January 12, 2026; and

WHEREAS, during the public review period all comments received by the City were posted within five days of receipt to the City's website for public review; and

WHEREAS, at the conclusion of the 60-day public review/comment period, the Community Development Department received 2,056 public comment letters on the DEIR; and

WHEREAS, the Community Development Department has prepared a response to comments and Final Environmental Impact Report ("FEIR") for the General Plan Update and the Development Project, that includes: responses to each of the comment letters received during the public review/comment period on the DEIR and revisions to the DEIR; and

WHEREAS, the City provided notification that the FEIR was provided to each person and agency that commented on the DEIR on at least 10 days prior to certification of the FEIR in accordance with CEQA Guidelines; and

WHEREAS, in accordance with Chapter 19.40 - Notices of the Barstow Municipal Code, the Community Development Department on April 26, 2026, provided a public hearing notice to all interested persons who filed a written request to receive such notice of the May 16, 2026, Planning Commission meeting to accept public comment on the EIR, the General Plan Update, and Development Project; and

WHEREAS, the Planning Commission conducted a duly noticed public hearing on May 16, 2026, took public testimony, discussed the EIR, the General Plan Update, and Development Project and adopted Resolution No. 600-2026 recommending that the City Council certify the EIR; adopt Findings of Fact, Mitigation Monitoring and Reporting Programs ("MMRPs"), and Statements of Overriding Considerations; and approve the General Plan, the BIG Development Project, and approve all related actions; and

WHEREAS, in accordance with Barstow Municipal Code ("BMC") section 19.40.010(b)(1), the Community Development Department on May 20, 2026 published a legal notice (1/8 page ad) in the "Victorville Daily Press," a local newspaper of general circulation, notifying the general public of the June 2, 2026 meeting where the City Council would review the EIR, General Plan Update, and the Development Project, including this Resolution; and

WHEREAS, the City Council conducted a duly noticed public hearing on June 2, 2026 and considered all oral and written testimony, including the Planning Commission's recommendation, and discussed the EIR, the General Plan Update, and Development Project; and

WHEREAS, the City Council has reviewed the EIR, the staff report pertaining to the EIR, the Planning Commission hearing minutes and reports, all evidence received by the Planning Commission and at the City Council hearings, and the record of proceedings as a whole, all of which documents and evidence are hereby incorporated by reference into this Resolution; and

WHEREAS, the EIR identified certain significant and potentially significant adverse effects on the environment caused by the General Plan Update and the Development Project; and

WHEREAS, the City Council specifically finds that where more than one reason for approving the General Plan Update and the Development Project and rejecting alternatives is given in its findings or in the record, and where more than one reason is given for adopting the Statement of Overriding Considerations, the Council would have made its decision on the basis of any one of those reasons; and

WHEREAS, in connection with the certification of the EIR, the City Council is required to adopt MMRPs pursuant to Public Resources Code Section 21081.6, which identifies feasible mitigation measures to reduce or avoid significant environmental impacts of the General Plan Update and the Development Project, and establishes a program to monitor and report on compliance with those measures; and

WHEREAS, the EIR identified certain significant and unavoidable environmental impacts that cannot be fully mitigated to a less-than-significant level, and CEQA Guidelines Section 15093 requires the City Council to adopt a Statement of Overriding Considerations balancing those unavoidable impacts against the benefits of the General Plan Update and the Development Project; and

WHEREAS, CEQA (Guidelines Section 15043) affirms the City Council's authority to approve the General Plan Update and the Development Project even though it may cause significant effects on the environment so long as the Council makes a fully informed and publicly disclosed decision that there is no feasible way to lessen or avoid the significant effects (Guidelines Section 15091) and that there are specifically identified expected benefits from the General Plan Update and the Development Project that outweigh the policy of reducing or avoiding significant environmental impacts of the General Plan Update and the Development Project (Guidelines Section 15093); and

WHEREAS, the City Council determines that the evidence in the record constitutes substantial evidence to support the findings made and the actions taken in this Resolution, that the facts stated in this Resolution are supported by substantial evidence in the record, including testimony received at the public hearing, the staff presentations, the staff report and all materials in the General Plan Update and the Development Project files. There is no substantial evidence, nor are there other facts, that negate from the findings made in this Resolution. The City Council declares that it considered all evidence presented and reached these findings after due consideration of all evidence presented to it.

NOW, THEREFORE, the City Council of the City of Barstow does hereby find, resolve and order as follows:

SECTION 1. CEQA Findings.

That the City Council, upon recommendation of the Planning Commission, in light of the whole record before it, including but not limited to, the DEIR, Technical Appendices, and the FEIR, Findings of Fact, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program and all documents incorporated by reference therein, any comments received and responses provided, and all other substantial evidence (within

the meaning of Public Resources Code § 21080(e) and § 21082.2) within the record and/or provided at the public hearing, hereby finds and determines as follows:

1. Adoption of Recitals. The City Council finds that the above set forth recitals are true and correct and incorporated herein by reference, as if set forth herein in full.
2. Preparation of EIR: An Environmental Impact Report was prepared in accordance with the California Environmental Quality Act (Public Resources Code § 21000 et seq.) and CEQA Guidelines (14 California Code of Regulations § 15000 et seq.) to evaluate the City of Barstow General Plan Update; the Development Project; related Municipal Code revisions including creation of new Business Park (BP) and High Density Residential (HDR) zone districts, elimination of the unused Estate Residential zone district, modifications to the Medium Density Residential (MDR) zone district to implement the Housing Element and comply with state law, adoption of a new Zoning Map, and require adopted specific plans to be incorporated into the Barstow Municipal Code; and the rezoning and LAFCO reorganization of land within the BIG Specific Plan for LAFCO Action Area A (out of the County Fire District and into the City, the Barstow Fire Protection District, and the Odessa Water District) and Action Area B (into the City and the Odessa Water District).
3. Exhibits. **Exhibit A** (CEQA Findings, including certification of the EIR as recommended by the Planning Commission, adopting findings on impacts and mitigation measures, rejection of certain alternatives and mitigation measures as infeasible, and adopting a Statement of Overriding Considerations), and **Exhibit B-1** (General Plan MMRP) and **Exhibit B-2** (Development Project MMRP) of this Resolution, provide findings required under and satisfy the requirements of Section 15090, 15091, 15092 and 15093 of the CEQA Guidelines. The City Council hereby adopts these various findings of fact attached hereto as **Exhibit A** and the Mitigation Monitoring and Reporting Programs attached hereto as **Exhibit B-1** (General Plan) and **Exhibit B-2** (Development Project).
4. Certification of EIR: **Exhibit A** of this Resolution provides the findings required under Section 15090 of the CEQA Guidelines relating to certification of the EIR. The City Council finds that the Final Environmental Impact Report (FEIR) prepared for General Plan Update and the Development Project has been completed in accordance with the requirements of the CEQA and the City's Local CEQA Guidelines. In doing so, the City Council certifies:
 - a. The EIR in accordance with the requirements of CEQA as recommended by the Planning Commission.
 - b. The EIR has been presented to the City Council, and the City Council has reviewed the DEIR and Technical Appendices and has considered the information contained in the EIR prior to acting on the proposed General Plan Update and the Development Project, and that the EIR reflects the City Council's independent judgment and analysis.
 - c. The EIR was prepared, published, circulated and reviewed in accordance with the requirements of CEQA and the State CEQA Guidelines, and constitutes an adequate, accurate, objective and complete Final Environmental Impact Report in full compliance with the requirements of CEQA and the State CEQA

Guidelines.

5. Response to Comments: The City has responded to all 2,052 comment letters received during the 60-day public review/comment period and included responses to each of public comment letter as part of the Final EIR packet, incorporated herein by reference. In response to these comments, the City has made minor revisions to the DEIR. These revisions are identified in the FEIR and do not constitute significant additional information and do not require recirculation of the DEIR.
6. Findings of Fact: **Exhibit A** of this Resolution, provides the findings required under Section 15091 of the CEQA Guidelines related to the significant environmental impacts of the General Plan Update and the Development Project and mitigation measures. The City Council hereby adopts these various findings of fact attached hereto as **Exhibit A**.
7. Mitigation Monitoring and Reporting Programs. Pursuant to Section 15091 of the CEQA Guidelines, the MMRPs attached hereto as **Exhibit B-1** (General Plan) and **Exhibit B-2** (Development Project) are hereby adopted to ensure implementation of feasible mitigation measures identified in the EIR. The City Council finds that these mitigation measures include all reasonably feasible mitigation measures, are fully enforceable as conditions on the General Plan Update and the Development Project and shall be binding upon the City and affected parties by means of Project conditions, agreements, or other measures, to track compliance with the changes, alterations, and mitigation measures incorporated into, or imposed as conditions of approval on, the General Plan Update and the Development Project to avoid or reduce the potentially significant environmental effects identified in the FEIR, as set forth in the MMRPs in **Exhibit B-1** (General Plan) and **Exhibit B-2** (Development Project) of this Resolution.
8. Statement of Overriding Considerations: **Exhibit A** of this Resolution provides the findings required under Section 15093 of the CEQA Guidelines relating to accepting adverse impacts of the General Plan Update and the Development Project due to overriding considerations. The City Council has balanced the economic, legal, social, technological, and other benefits of the General Plan Update and the Development Project against the unavoidable environmental risks that may result, and finds that the specific economic, legal, social, technological, and other benefits outweigh the unavoidable adverse environmental effects. The City Council, therefore, finds the adverse environmental effects of the General Plan Update and the Development Project to be "acceptable." The City Council hereby adopts the Statement of Overriding Considerations contained within **Exhibit A**.
9. Independent Judgment: The FEIR reflects the independent judgment and analysis of the City of Barstow.
10. Substantial Evidence. These findings made by the City Council are supported by substantial evidence in the record as a whole, which is summarized herein.

SECTION 2. Related EIR Notices and Direction.

1. Location: The City Council directs that the DEIR and FEIR, and all documents incorporated therein and forming the record of decision, are available on the City's website at www.barstowgeneralplanupdate.com and at the City of Barstow Community Development Department at Barstow City Hall, 200 East Mountain View Street, Barstow, California, 92311-7304 and be made available for public review upon request during the hours of 8 am to 5 pm, Monday – Thursday.
2. Notice of Determination: The City Council directs, in compliance with Public Resources Code section 21152 and CEQA Guidelines section 15094, the Community Development Director to prepare Notices of Determination (NOD) concerning certification of the EIR for the General Plan Update and the Development Project and related approvals within five (5) working days of City Council approval, and to file such notice with the State Clearinghouse and San Bernardino County Clerk, in accordance with CEQA for posting, including payment of the required Fish & Game fee.

SECTION 3. Severability. If any provision, section, subsection, paragraph, sentence, clause, or word of this Resolution, or the application thereof to any person or circumstance, is rendered or declared invalid or unenforceable by any court of competent jurisdiction, the remaining provisions, sections, subsections paragraphs, sentences, clauses, or words of this Resolution, and their application to other persons or circumstances, shall not be affected thereby and shall remain in full force and effect and, to that end, the provisions of this Resolution are severable.

SECTION 4. Effective Date. This Resolution shall take effect immediately upon adoption.

SECTION 5. Certification. The City Clerk shall certify the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 2nd day of June, 2026.



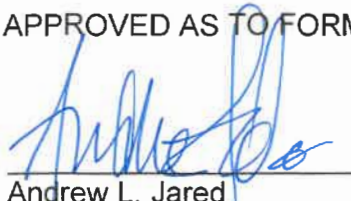
Timothy R. Silva, Mayor

ATTEST:



Andrea Flores, City Clerk

APPROVED AS TO FORM:



Andrew L. Jared
City Attorney

I, Andrea Flores, City Clerk of the City of Barstow, California, and ex-officio Clerk of the City Council, do hereby certify under penalty of perjury that the foregoing is a true and correct copy of Resolution No. 5256-2026, which was adopted by the City Council at a regular meeting held on June 2, 2026 by the following vote:

AYES: Mayor Silva, Mayor Pro Tem Noble, Councilmembers Hernandez, Rose and Williams

NOES:

ABSENT:

ABSTAIN:





Andrea Flores, City Clerk

EXHIBIT A
RESOLUTION NO. 5256-2026

CEQA FINDINGS AND STATEMENT OF
OVERRIDING CONSIDERATIONS FOR
GENERAL PLAN AND DEVELOPMENT PROJECT

(STAFF REPORT ATTACHMENT C-1.A)



City of Barstow General Plan and Barstow International Gateway Project

State Clearinghouse Number 2024020501

CEQA Certification Findings, Findings of Fact and Statement of Overriding Considerations

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1.0 INTRODUCTION

The potential environmental effects of the proposed City of Barstow General Plan (proposed General Plan) and Barstow International Gateway (BIG), collectively referred to as the “Project” or “proposed Project” have been analyzed in an Environmental Impact Report (EIR) (State Clearinghouse [SCH] 2024020501) dated November 2025. A Final EIR has been prepared that incorporates the Draft EIR (DEIR) and contains comments received on the DEIR; responses to the comments on the DEIR; revisions to the DEIR, including any clarifications based on the comments and the responses to the comments; and the Mitigation Monitoring and Reporting Program (MMRP) for the proposed General Plan and the MMRP for BIG.

The California Environmental Quality Act (CEQA) requires three steps before the approval of a project: (1) certification of the Final EIR under State CEQA Guidelines § 15090; (2) adoption of CEQA findings regarding the environmental impacts of the project and adoption of mitigation measures under State CEQA Guidelines § 15091 and Public Resources Code (PRC) § 21081; and (3) adoption of a written Statement of Overriding Considerations when a lead agency approves a project that will result in significant unavoidable impacts under State CEQA Guidelines § 15093. This document provides the written findings required by CEQA for all three steps for approval of the proposed Project.

These CEQA findings are incorporated by reference into each and every staff report, resolution and ordinance associated with approval of the Project. These findings are based on substantial evidence in the entire administrative record, and references to specific reports and specific pages of documents are not intended to identify those sources as the exclusive basis for the findings.

1.1 Statutory Requirements For Findings

CEQA (PRC §§ 21000, et seq.) and the State CEQA Guidelines (14 Ca. Code Regs §§ 15000, et seq.) require the environmental impacts of a project to be examined before a project is approved. State CEQA Guidelines § 15090 states regarding certification of a Final EIR:

“(a) Prior to approving a project the lead agency shall certify that:

- (1) The final EIR has been completed in compliance with CEQA;
- (2) The final EIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and
- (3) The final EIR reflects the lead agency’s independent judgment and analysis....”

Specifically, regarding findings, State CEQA Guidelines § 15091 provides:

“(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.
- (b) The findings required by subdivision (a) shall be supported by substantial evidence in the record.
- (c) The finding in subdivision (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. The finding in subdivision (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.
- (d) When making the findings required in subdivision (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.
- (e) The public agency shall specify the location and custodian of the documents or other material which constitute the record of the proceedings upon which its decision is based.
- (f) A statement made pursuant to Section 15093 does not substitute for the findings required by this section.”

The “changes or alterations” referred to in § 15091(a)(1)—that are required in or incorporated into the Project to mitigate or avoid the significant environmental effects of the Project—may include a wide variety of measures or actions as listed in State CEQA Guidelines § 15370, including:

- “(a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements.”

Regarding a Statement of Overriding Considerations, State CEQA Guidelines § 15093 provides:

- “(a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- (b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

- (c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.”

The Final EIR contains responses to comments, revisions, clarifications, and corrections to the DEIR. The focus of the response to comments is on the disposition of significant environmental issues raised in the comments, as specified by State CEQA Guidelines § 15088(b). The City provided a written response to each environmental comment, pursuant to State CEQA Guidelines § 15088(b).

1.2 Project Description

The Project analyzed in the EIR is the City of Barstow’s (City) proposed General Plan and the proposed Barstow International Gateway (BIG) (collectively referred to as the Project or proposed Project), both of which are described in this section.

The EIR’s analysis considers the whole of the proposed actions, which have the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. Under CEQA, the type of project determines the degree of specificity required in an EIR. Generally, as provided in State CEQA Guidelines § 15378, the level of specificity included in the EIR is commensurate with the level of detail that is known and the degree of specificity involved in the underlying activity. For example, a project-specific EIR will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.

The Final EIR serves as a program EIR for the General Plan and a project-specific EIR for BIG. As a result, Project Impacts and mitigation measures differ between the proposed General Plan and BIG, and are described separately in the EIR. For this same reason, these Findings include separate discussions and conclusions for the proposed General Plan and BIG, as appropriate.

Proposed General Plan

The City and its Sphere of Influence are in western San Bernardino County (County) and are surrounded entirely by unincorporated San Bernardino County. Interstate 15 (I-15) bisects Barstow in a southwest-northeast direction, while Interstate 40 (I-40) bisects Barstow in an east-west direction. State Route 247 (SR-247), which runs in a north-south direction, terminates as it intersects I-15. The General Plan area is generally within the 1984 Barstow USGS quadrangle map and can be found generally with global positioning satellite coordinates of 34° 53’ 44.8728” North and 117° 1’ 2.2116” West.

The proposed General Plan updates all of the City’s General Plan Elements except for the Housing Element, which was updated in 2024. During the 25-year planning horizon of the proposed General Plan, the General Plan area could potentially result in 6,326 new households, 6,608 new dwelling units, 18,531 new residents, 15,341,198 square feet of new non-residential uses, and 10,819 new jobs by 2048.

The 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. “Annexation” refers to the process where a city boundary is expanded to include certain property, or the service boundary for a utility or public service (e.g., police, fire) is extended 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, of the Draft EIR. 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 and bringing the property into the City of Barstow Fire Protection District for fire service), 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., rezoning), as well as completing the environmental analysis for the SBLAFCO reorganization and associated LAFCO actions, SBLAFCO will independently evaluate and determine whether to approve the requested actions.

The proposed General Plan would realign the City’s overall land use pattern to reinforce and support the residential and community focus of Central Barstow east of I-15 and SR-58 while concentrating new industrial and job-generating uses to the west. This new pattern encourages greater compatibility of land uses, enhances the efficiency of public services and safety, focuses public improvements and community amenities around existing neighborhoods, and enhances the long-term viability of future businesses.

Barstow International Gateway

The approximately 5,000-acre BIG footprint is at the western part of the City, which is in San Bernardino County. Most of BIG’s footprint is within unincorporated County lands, while the remainder is within City limits. The BIG Specific Plan area is approximately 4,300 acres and comprises most (approximately 87 percent) of BIG’s total footprint. BIG’s proposed Specific Plan area is generally bordered by the Mojave River to the north, Main Street (also referred to as National Trails Highway or Route 66) to the south, Lenwood Road to the east, and Hinkley Road to the west.

Regional vehicle access to the BIG footprint is provided by Main Street from the south, I-15 from the southeast, and SR-58 from the east. Local access to BIG is primarily provided by Lenwood Road and Hinkley Road from the east and west, respectively, in addition to various unpaved roads along Main Street. Regional rail access is provided from the north by BNSF Railway Company’s (BNSF) Mojave subdivision, from the west by BNSF’s Cajon subdivision, and from the east by BNSF’s Needles subdivision.

The BIG Specific Plan area is generally flat and gradually slopes north to the Mojave River. Off-site improvements are generally within existing BNSF rail and City/County street rights-of-way. The BIG Specific Plan area is primarily vacant undeveloped land, which is traversed by BNSF’s existing mainline, and which contains scattered agricultural, residential, commercial, and industrial land uses. The BIG Specific Plan area is mostly devoid of tall vegetation and trees, with structures and other elements of the built environment scattered throughout. Existing land uses within BIG’s footprint are as follows:

Description	Dwelling Units (DU)	Commercial (SF)	Industrial (SF)	TOTAL (DU)	TOTAL (SF)
Existing Land Use	108	85,887	7,837	108	93,724

Source: City of Barstow Proposed General Plan and Barstow International Gateway Project EIR: Table 3-3.

The BIG footprint is located partly in incorporated Barstow and partly in an existing unincorporated portion of the County, which the General Plan proposes for concurrent annexation to the City. The total BIG footprint is approximately 5,000 acres, of which approximately 4,300 acres would be in the BIG Specific Plan area. The BIG Specific Plan consists of a rail yard, a transload warehouse center, and a private utility (i.e., a 140-acre solar farm). The rail yard would include a block swap yard, an intermodal facility,

and ancillary rail areas (container yard, chassis storage, and maintenance of way). To serve the proposed rail yard and transload warehouse center, approximately 660 acres of various off-site rail and non-rail improvements (e.g., lead track extensions, drainage, utilities, and roadways) would be provided. Areas within the Mojave River would remain ungraded.

The block swap yard would allow for the transfer of blocks of intermodal rail cars between trains. The intermodal facility would facilitate the transfer of containers between rail cars and the on-site transload warehouse center via zero-emission electric hostlers. At the BIG intermodal facility, only a small percentage of containers would arrive at/depart via heavy trucks. The vast majority of containers would arrive at/depart from the intermodal facility via train. The transload warehouse center would be approximately 9.0 million square feet of transload warehouses that would primarily be dedicated to processing the contents of 20-foot and 40-foot international containers into 53-foot domestic containers for placement from and back onto the rail line. The transload warehouse center would primarily serve containers processed at or destined for the BIG intermodal facility.

1.3 Final Environmental Impact Report and Discretionary Actions

State CEQA Guidelines § 15089(a) states that “the Lead Agency shall prepare a final EIR before approving the project. The contents of a Final EIR are specified in Section 15132 of these Guidelines.”

The Final EIR addresses the direct, indirect, and cumulative environmental effects of construction and operational activities associated with the proposed Project. As stated in these findings, the City Council’s certification that the Final EIR for the proposed Project is in compliance with CEQA and reflects the independent judgement and analysis of the City; the City Council has reviewed and considered the information contained in the Final EIR prior to approving the proposed Project and has adopted MMRPs, finding that the MMRPs are adequately designed to ensure compliance with the mitigation measures during proposed Project implementation; and the City Council has determine that the significant adverse effects of the proposed Project either have been reduced to an acceptable level, or are outweighed by the specific overriding considerations of the proposed Project as outlined in the CEQA Findings of Fact and Statement of Overriding Considerations, as set forth herein.

The Final EIR provides the environmental information necessary for the City to make a final decision on the requested discretionary actions for the proposed Project. The Final EIR is also intended to support discretionary reviews and decisions by other responsible agencies. Upon certification of the Final EIR, the following discretionary actions will be considered by the City:

- Adoption of the Barstow General Plan.
- Adoption of the Barstow International Gateway Project Specific Plan and implementing BIG Specific Plan zoning.
- Approval of a Development Agreement with BNSF.
- Adoption of Tentative Tract Map (20878-1-10) as consistent with BIG Specific Plan.
- Approval of Road Maintenance and Property Tax Sharing Agreements with San Bernardino County;
- Approval of vacations and dedications outside the BIG Specific Plan area;
- Approval of San Bernardino Local Agency Formation Commission (SBLAFCO) applications requesting approval for SBLAFCO Action A and SBLAFCO Action B, resolutions of support

from Barstow Fire Protection District and Odessa Water District, and adoption of related pre-zoning;

- Approval of assignment and recordation of related easements; and
- Approval of the new zoning map, amendment to Title 19 of the Barstow Municipal Code (BMC) to create a New Business Development and New High Density Residential Zone Districts, adoption of minor changes to the Medium Density Residential Zone District, elimination of the Estate Residential Zone District, require adopted specific plans be incorporated by reference into the BMC, with copies available for review at the Clerk's office, and repeal Chapter 1.05 as it is unnecessary and superseded by the updated General Plan, and make conforming amendments throughout Title 12 and Title 19.

2.0 PROCEDURAL COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

The City published the DEIR on November 10, 2025, which was also posted to the California Governor’s Office of Land Use and Climate Innovation State Clearinghouse on November 13, 2025. The Final EIR has been prepared in accordance with CEQA and the State CEQA Guidelines. The key milestones associated with the preparation of the DEIR are summarized in this section. An extensive public involvement and agency notification effort was conducted to solicit input on the scope and content of the DEIR and to solicit comments on the results of the environmental analysis in the DEIR.

2.1 Public Notification and Outreach

In conformance with CEQA and the State CEQA Guidelines, the City conducted an extensive environmental review of the proposed Project.

- Completion of a Notice of Preparation (NOP) on February 15, 2024, titled “Notice of Preparation (NOP) for Draft Environmental Impact Report and Notice of a Public Scoping Meeting” for the City of Barstow General Plan and Barstow International Gateway Project Environmental Impact Report (EIR). A public scoping meeting was conducted on March 13, 2024, and the public comment period for the NOP closed on March 26, 2024.
- Preparation of a DEIR, which was made available for review beginning November 10, 2025, and ending January 12, 2026. The scope of the DEIR was determined based on the State CEQA Guidelines’ Appendix G Checklist and comments received in response to the NOP. The Notice of Availability (NOA) for the DEIR was sent to interested persons and organizations, to responsible and trustee agencies, to the State Clearinghouse for distribution to public agencies, posted to <https://www.barstowgeneralplanupdate.com>, and made available for in-person review at City Hall, Barstow Community College Library, and Barstow Branch Library on November 10, 2025. The NOA was posted at the San Bernardino County Clerk’s office on November 10, 2025.
- Preparation of a Final EIR, including the responses to comments to the DEIR. State CEQA Guidelines § 15088(b) requires that copies of the written responses to public agencies be provided to those agencies at least ten days prior to certifying an EIR, which in this case would be the City of Barstow City Council. The City provided notification of the availability of written responses to comments to all parties providing comments on the DEIR. Further, the City provided such notification ten days prior to first consideration of the Project by the City of Barstow Planning Commission.
- Public hearings on the proposed Project. The Planning Commission hearing was held on May 16, 2026 and the City Council hearing was held on June 2, 2026, with a second reading scheduled for June 16, 2026.

In summary, the City conducted all required noticing and scoping for the proposed Project in accordance with State CEQA Guidelines § 15083, and the public review period for the DEIR exceeded the requirements of State CEQA Guidelines § 15087.

2.2 Record of Proceedings

For the purpose of CEQA and these Findings, the record of proceedings for the Project includes all data and materials outlined in PRC Section 21167.6(e), along with other relevant Project information contained within the City's files. Specifically, the record of proceedings for the City Council's decision on the Project includes the following documents, all of which are incorporated herein by reference and are relied on in supporting these Findings:

- The NOP, NOA, and all other public notices issued by the City in conjunction with the proposed Project.
- The DEIR and Final EIR for the proposed Project.
- All written comments submitted by agencies, organizations, and members of the public during the public review comment period on the DEIR, inclusive of the Scoping Meeting.
- All responses to written comments submitted by agencies, organizations, and members of the public during the public review comment period on the DEIR.
- All written and verbal public testimony presented during a noticed public hearing for the proposed Project.
- The Mitigation Monitoring and Reporting Program.
- The reports and technical memoranda included or referenced in the Final EIR.
- All documents, studies, EIRs, or other materials incorporated by reference in the DEIR and Final EIR.
- The Resolutions adopted by the City in connection with the proposed Project and all documents incorporated by reference therein, including comments received after the close of the comment period and responses thereto.
- Matters of common knowledge to the City, including but not limited to federal, state, and local laws and regulations.
- Any documents expressly cited in these Findings.
- Any other relevant materials required to be in the record of proceedings by PRC § 21167.6(e).

The City has relied on all of the documents listed above in reaching its decisions on the Project even if not every document was formally presented to City decision-making bodies or City staff as part of the City files generated in connection with the Project. Without exception, any documents set forth above not found in the Project files fall into one of two categories. Many of these documents reflect prior planning or legislative decisions of which the City decision-making bodies were aware in approving the Project. (See *City of Santa Cruz v. Local Agency Formation Commission* (1978) 76 Cal.App.3d 381, 391-392; *Dominey v. Department of Personnel Administration* (1988) 205 Cal.App.3d 729, 738, fn. 6.) Other documents influenced the expert advice provided to City staff or consultants, who then provided advice to the City decision-making bodies for the Project. For that reason, such documents form part of the underlying factual basis for the City's decisions relating to approval of the Project. (See *Browning-Ferris Industries v. City Council of City of San Jose* (1986) 181 Cal.App.3d 852, 866.)

2.3 Custodian and Location of Records

The documents and other materials that constitute the administrative record for the City's actions related to the proposed Project are at the City of Barstow Community Development Department (220 East Mountain View Street, Suite A, Barstow, CA 92311). The Community Development Department is the custodian of the administrative record for the proposed Project. Copies of these documents, which constitute the record of proceedings, are and at all relevant times have been and will be available upon request of the City of Barstow City Clerk's Department. This information is provided in compliance with PRC § 21081.6(a)(2) and State CEQA Guidelines § 15091(e). Consistent with the procedural requirements of Senate Bill 149, the EIR and all other documents submitted to or relied upon by the City in the preparation of the EIR can be accessed and downloaded from the following website: www.BarstowGeneralPlanUpdate.com.

2.4 No Recirculation Required Due To Absence Of Significant New Information

The City recognizes that the Final EIR incorporates information obtained and produced after the DEIR was completed, and that the Final EIR contains additions, clarifications, and modifications. The City has reviewed and considered the Final EIR and all of this information. The new information added in the Final EIR merely clarifies and makes insignificant changes to an adequate DEIR, and does not add significant new information to the DEIR that would require recirculation of the EIR under CEQA. The new information added to the EIR does not involve a new significant environmental impact, a substantial increase in the severity of a previously identified significant environmental impact, or a feasible mitigation measure or alternative considerably different from others previously analyzed that the Project sponsor declines to adopt and that would clearly lessen the significant environmental impacts of the Project. No information indicates that the DEIR was inadequate or conclusory or that the public was deprived of a meaningful opportunity to review and comment on the DEIR. Thus, recirculation of the EIR is not required.

The City finds that the changes and modifications made to the EIR after the DEIR was circulated for public review and comment do not individually or collectively constitute significant new information within the meaning of Public Resources Code § 21092.1 or CEQA Guidelines § 15088.5.

3.0 CERTIFICATION OF THE FINAL EIR

In accordance with State CEQA Guideline § 15090, the City Council certifies the Final EIR based on the following findings:

1. The Final EIR has been completed in compliance with CEQA, the CEQA guidelines, and the City's CEQA procedures.
2. The City Council has independently reviewed and considered the record and the EIR prior to making its decision to certify the Final EIR and taking any action to approve the Project.
3. The Final EIR represents the independent judgment, review and analysis of the City and the City Council.
4. The Final EIR provides information to the decision-makers and the public on the environmental consequences of the Project.
5. The Final EIR adequately discusses the potential adverse environmental effects, ways in which such effects might be mitigated, and alternatives to the project which would reduce or avoid such adverse effects.

The City Council recognizes that the EIR may contain clerical errors. The City Council reviewed the entirety of the EIR and bases its determination on the substance of the information it contains.

The City Council certifies that the Final EIR is adequate to support all actions in connection with the approval of the Project and all other actions and recommendations necessary for approval of the Project. The City Council certifies that the Final EIR is adequate to support approval of the Project, described in the Final EIR, approval of any alternatives to the Project, and any minor modifications to the Project or alternatives described in the EIR.

4.0 MITIGATION MONITORING AND REPORTING PROGRAMS

Public Resources Code § 21081.6 and CEQA Guidelines § 15097 require the City to adopt a monitoring and reporting program to ensure that the mitigation measures and revisions to the Project identified in the EIR are implemented. The MMRPs for the proposed General Plan and for BIG are incorporated by reference and will be included in the conditions of approval for the Project approval actions. The MMRPs satisfy the requirements of CEQA.

The mitigation measures set forth in the MMRPs are specific and enforceable and are capable of being fully implemented by the efforts of the City, the applicant(s), and/or other identified entities of responsibility. As appropriate, some mitigation measures define performance standards to ensure no significant environmental impacts will result. The MMRPs adequately describe implementation procedures and monitoring responsibility in order to ensure that the Project complies with the adopted mitigation measures.

The City will adopt and impose the feasible mitigation measures as set forth in the MMRPs as enforceable conditions of approval. The City will adopt measures to substantially lessen or eliminate all significant effects where feasible.

The mitigation measures to be incorporated into and imposed upon the Project approval will not themselves have new significant environmental impacts or cause a substantial increase in the severity of a previously identified significant environmental impact that were not analyzed in the EIR. In the event a mitigation measure recommended in the EIR has been inadvertently omitted from a MMRP, that mitigation measure is adopted and incorporated from that EIR into the MMRP by reference and shall be imposed as a condition.

5.0 FINDINGS OF FACT

Having received, reviewed, and considered the Final EIR for the City of Barstow Proposed General Plan and Barstow International Gateway Project, as well as other information in the record of proceedings on this matter, the City of Barstow City Council adopts the following Findings of Fact and Statement of Overriding Considerations (Findings), in its capacity as the legislative body for the City of Barstow (City), which is the CEQA Lead Agency. The Findings set forth the environmental and other bases for current and subsequent discretionary actions to be undertaken by the City and responsible agencies for the implementation of the proposed Project.

In addition, the City of Barstow City Council hereby makes findings pursuant to and in accordance with PRC § 21081 and State CEQA Guidelines § 15090 and § 15091 and hereby certifies that:

- (1) Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant environmental effect as identified in the final EIR. [referred to in these Findings as “Finding 1”]
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. [referred to in these Findings as “Finding 2”]
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR. [referred to in these Findings as “Finding 3”]

In accordance with Public Resources Code § 21081 and CEQA Guidelines § 15091 and § 15092, the City Council adopts the findings and conclusions regarding impacts and mitigation measures that are set forth in the EIR and summarized in the MMRPs, which are incorporated herein by reference. These findings are summaries of conclusions regarding impacts and mitigation measures that are set forth in the EIR. They do not repeat the full discussions of environmental impacts, mitigation measures, and related explanations contained in the EIR. The City Council ratifies, adopts, and incorporates, as though fully set forth herein, the analysis, explanations, findings, responses to comments and conclusions of the EIR. The City Council adopts the reasoning of the EIR, staff reports, and presentations provided by the staff and the Project sponsor as may be modified by these findings.

In adopting the mitigation measures referenced and briefly described below, the City intends to adopt each of the mitigation measures recommended in the certified EIR and the full language of each mitigation measure. Accordingly, in the event that a mitigation measure recommended in the certified EIR has been inadvertently omitted from these findings, that mitigation measure is hereby adopted and incorporated by reference in the findings. Additionally, in the event that the description of mitigation measures set forth below fails to completely and accurately to capture the substance of a given mitigation measure due to a clerical error (as distinct from specific and express modification by the City through these findings), the language of the mitigation measure as set forth in the certified EIR shall govern.

With respect to mitigation measures that were suggested in comments by the public or other public agencies but not recommended in the certified EIR, the responses to comments explained that the suggested mitigation measures either are already part of the proposed Project and/or included in the EIR and MMRPs, or are infeasible or ineffectual or not required to mitigate a significant impact and, thus, not recommended for adoption for the reasons outlined in the responses to comments. The City hereby adopts and incorporates by reference the reasons stated in the responses to comments in the certified

EIR and elsewhere in the EIR or record as a whole as the basis for finding the suggested mitigation measures are not necessary or appropriate for inclusion as Project requirements.

The City Council recognizes that the environmental analysis of the Project raises some controversial environmental issues, and that a range of technical and scientific opinions exists with respect to those issues. The City Council acknowledges that there are differing and potentially conflicting expert and other opinions regarding the Project. The City Council has, through review of the evidence and analysis presented in the record, acquired a better understanding of the breadth of this technical and scientific opinion and of the full scope of the environmental issues presented. In turn, this understanding has enabled the City Council to make fully informed, thoroughly considered decisions after taking account of the various viewpoints on these important issues and reviewing the record. These findings are based on substantial evidence as defined in CEQA Guidelines § 15384, and a full appraisal of all viewpoints expressed in the EIR and in the record, as well as other relevant information in the record of the proceedings for the Project.

5.1 Structure and Format

State CEQA Guidelines § 15091 requires that a Lead Agency make a finding for each significant effect for a proposed project. This section summarizes the significant environmental impacts of the proposed Project, describes how these impacts are to be mitigated, and discusses various alternatives to the proposed Project, which were developed to reduce the remaining significant environmental impacts. All impacts are considered potentially significant prior to mitigation unless otherwise stated in the findings.

Section 5.0 is divided into the following subsections:

- **Section 5.2: Environmental Issues Deemed “No Impact” or “Less Than Significant Impact,”** presents in tables the environmental issues that were determined to have no impact or less than significant impacts.
- **Section 5.3: Findings for Environmental Impacts Found to be “Less Than Significant With Mitigation Incorporated,”** identifies the significant impacts of the proposed Project on a project-specific and cumulative basis and the feasible mitigation measures that were identified in the EIR and the rationale for the finding.
- **Section 5.4: Findings for Environmental Impacts Found to be “Significant and Unavoidable,”** identifies those project-specific and cumulative environmental impacts that would remain significant and unavoidable and the rationales for the finding.

Section 6.0: Alternatives to the Proposed Project presents alternatives to the Project and evaluates them in relation to the findings in State CEQA Guidelines § 15091(a)(3), which allows a public agency to approve a project that would result in one or more significant environmental effects if the Project alternatives are found to be infeasible because of specific economic, social, or other considerations.

Section 7.0: Statement of Overriding Considerations. When the lead agency approves a project which will result in the occurrence of significant environmental effects which are identified in the EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the EIR and/or other information in the record.

5.2 Environmental Issues Deemed “No Impact” or “Less Than Significant Impact”

Impact thresholds and significance criteria provide the thresholds that are the basis for determining whether the Project would have a significant effect on the environment (i.e., conclusions of significance). State CEQA Guidelines Appendix G: Environmental Checklist Form (14 California Code of Regulations §§ 15000-15387) includes suggested questions for each environmental issue area. As the Lead Agency, the City based its impact thresholds on State CEQA Guidelines Appendix G. Although the criteria for determining significance are different for each issue area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and State CEQA Guidelines.

A “No Impact” conclusion indicates that the construction, operation, and maintenance of the proposed Project would not have any direct or indirect effects on the environment. It means no change from existing conditions. This impact level does not require mitigation. A “Less than Significant Impact” conclusion indicates that the Project would have the potential to impact the environment, although this impact would be below established thresholds that are considered to be significant. No mitigation is required for a less than significant impact.

Proposed General Plan

Table 1: Proposed General Plan Environmental Issues With No Impact or Less Than Significant Impact lists the environmental issues determined to have no impact or a less than significant impact in Sections 5.1 through 5.17 of the EIR for the proposed General Plan.

Table 5: Proposed General Plan: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
5.1: AESTHETICS	
Impact 5.1-1: Would the Project have a substantial adverse effect on a scenic vista?	No Impact
Impact 5.1-2: Would the Project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less than Significant
5.2: AGRICULTURE AND FORESTRY RESOURCES	
Impact 5.2-3: Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?	No Impact
Impact 5.2-4: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?	No impact
Impact 5.2-5: Would the Project involve other changes in the existing environment that, due to their location or nature, could result in conversion of [Important] Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Less than Significant
5.3: AIR QUALITY	
Impact 5.3-4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant
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	Less than Significant

Table 5: Proposed General Plan: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	
Impact 5.4-2: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less than Significant
Impact 5.4-3: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Less than Significant
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?	Less than Significant
Impact 5.4-5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant
Impact 5.4-6: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	Less than Significant
Impact 5-4: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding biological resources?	Less than Significant
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?	Less than Significant
Impact 5.6-2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant
Impact 5-6: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding energy?	Less than Significant
5.7: GEOLOGY, SOILS AND MINERAL RESOURCES	
Impact 5.7-1: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Less than Significant
Impact 5.7-2: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	Less than Significant
Impact 5.7-3: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	Less than Significant
Impact 5.7-4: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	Less than Significant
Impact 5.7-5: Would the Project result in substantial soil erosion or the loss of topsoil?	Less than Significant
Impact 5.7-6: Would the Project be on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant

Table 5: Proposed General Plan: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
Impact 5.7-7: Would the Project be on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant
Impact 5.7-8: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Less than Significant
Impact 5.7-9: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant
5.9: HAZARDS, HAZARDOUS MATERIALS AND WILDFIRE	
Impact 5.9-1: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant
Impact 5.9-2: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant
Impact 5.9-3: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less than Significant
Impact 5.9-4: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to CGC § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less than Significant
Impact 5.9-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
Impact 5.9-6: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than Significant
Impact 5.9-7: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than Significant
Impact 5.9-8: If located in or near state responsibility areas (SRAs) or lands classified as very high fire severity zones (FHSZs), would the Project substantially impair an adopted emergency response plan or emergency evacuation plan, exacerbate wildlife risks which would expose occupants to pollutant concentrations, require the installation or maintenance of associated infrastructure, or expose people or structures to flooding or landslides as a result of post-fire instability?	No Impact
Impact 5.9-9: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding hazards and hazardous materials and wildfire?	Less than Significant
5.10: HYDROLOGY AND WATER QUALITY	
Impact 5.10-1: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less than Significant
Impact 5.10-2: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	Less than Significant
Impact 5.10-3: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i) Result in substantial erosion or siltation on- or off-site?	Less than Significant

Table 5: Proposed General Plan: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
Impact 5.10-4: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: ii) Substantially increase the rate or amount of surface run-off in a manner that would result in flooding on- or off-site?	Less than Significant
Impact 5.10-5: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: iii) Create or contribute run-off water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off?	Less than Significant
Impact 5.10-6: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: iv) Impede or redirect flood flows?	Less than Significant
Impact 5.10-7: Would the Project result in flood hazard, tsunami, or seiche zones, or risk release of pollutants due to project inundation?	Less than Significant
Impact 5.10-8: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant
Impact 5-10: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding hydrology and water quality?	Less than Significant
5.11: LAND USE AND PLANNING	
Impact 5.11-1: Would the Project physically divide an established community?	Less than Significant
Impact 5.11-2: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted by an agency with jurisdictional authority over the project, for the purpose of avoiding or mitigating an environmental effect?	Less than Significant
Impact 5-11: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding land use and planning?	No impact
5.12: NOISE	
Impact 5.12-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?	No Impact
5.13: POPULATION AND HOUSING	
Impact 5.13-1: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than Significant
Impact 5.13-2: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less than Significant
Impact 5-13: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding population and housing?	Less than Significant
5.14: PUBLIC SERVICES AND RECREATION	
Impact 5.14-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in	Less than Significant

Table 5: Proposed General Plan: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?	
Impact 5.14-2: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?	Less than Significant
Impact 5.14-3: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for school services?	Less than Significant
Impact 5.14-4: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services?	Less than Significant
Impact 5.14-5: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, need for new or physically altered park facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?	Less than Significant
Impact 5-14: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding public services and recreation?	Less than Significant
5.15: TRANSPORTATION	
Impact 5.15-1: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less than Significant
Impact 5.15-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant
Impact 5.15-4: Would the Project result in inadequate emergency access?	Less than Significant
5.17: UTILITIES AND SERVICE SYSTEMS	
Impact 5.17-2: Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less than Significant
Impact 5.17-3: Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	Less than Significant
Impact 5.17-4: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant
Impact 5.17-5: Would the Project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	Less than Significant
Impact 5-17: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding utilities and service systems?	Less than Significant

Barstow International Gateway

Table 2: Barstow International Gateway Environmental Issues With No Impact or Less Than Significant Impact lists the environmental issues determined to have no impact or a less than significant impact in Sections 5.1 through 5.17 for BIG.

Table 2: Barstow International Gateway: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
5.1: AESTHETICS	
Impact 5.1-1: Would the Project have a substantial adverse effect on a scenic vista?	No Impact
Impact 5.1-2: Would the Project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less than Significant
5.2: AGRICULTURE AND FORESTRY RESOURCES	
Impact 5.2-1: Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Less than Significant
Impact 5.2-2: Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Less than Significant
Impact 5.2-3: Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?	No impact
Impact 5.2-4: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?	No impact
Impact 5.2-5: Would the Project involve other changes in the existing environment that, due to their location or nature, could result in conversion of [Important] Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Less than Significant
Impact 5-2: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding agriculture and forestry resources?	No impact
5.3: AIR QUALITY	
Impact 5.3-4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant
5.4: BIOLOGICAL RESOURCES	
Impact 5.4-6: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	No Impact
5.7: GEOLOGY AND SOILS	
Impact 5.7-1: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Less than Significant
Impact 5.7-2: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	Less than Significant

Table 2: Barstow International Gateway: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
Impact 5.7-3: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	Less than Significant
Impact 5.7-4: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	Less than Significant
Impact 5.7-5: Would the Project result in substantial soil erosion or the loss of topsoil?	Less than Significant
Impact 5.7-6: Would the Project be on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant
Impact 5.7-7: Would the Project be on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant
Impact 5.7-8: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No Impact
Impact 5.7-10: Would the Project result in the loss of availability of a known mineral resource that would be of economic value to the region and the residents of the state?	Less than significant
Impact 5.7-11: Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	Less than Significant
5.9: HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE	
Impact 5.9-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
Impact 5.9-6: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less Than Significant
Impact 5.9-7: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than Significant
Impact 5.9-8: If located in or near state responsibility areas (SRAs) or lands classified as very high fire severity zones (FHSZs), would the Project substantially impair an adopted emergency response plan or emergency evacuation plan, exacerbate wildlife risks which would expose occupants to pollutant concentrations, require the installation or maintenance of associated infrastructure, or expose people or structures to flooding or landslides as a result of post-fire instability?	No Impact
5.10: HYDROLOGY AND WATER QUALITY	
Impact 5.10-1: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less than Significant
Impact 5.10-2: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	Less than Significant
Impact 5.10-3: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i) Result in substantial erosion or siltation on- or off-site?	Less than Significant
Impact 5.10-4: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of	Less than Significant

Table 2: Barstow International Gateway: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
impervious surfaces, in a manner that would: ii) Substantially increase the rate or amount of surface run-off in a manner that would result in flooding on- or off-site?	
Impact 5.10-5: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: iii) Create or contribute run-off water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off?	Less than Significant
Impact 5.10-6: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: iv) Impede or redirect flood flows?	Less than Significant
Impact 5.10-7: Would the Project result in flood hazard, tsunami, or seiche zones, or risk release of pollutants due to project inundation?	Less than Significant
Impact 5.10-8: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant
Impact 5-10: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding hydrology and water quality?	Less than Significant
5.11: LAND USE AND PLANNING	
Impact 5.11-1: Would the Project physically divide an established community?	Less than Significant
Impact 5.11-2: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted by an agency with jurisdictional authority over the project, for the purpose of avoiding or mitigating an environmental effect?	Less than Significant
Impact 5-11: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding land use and planning?	No impact
5.12: NOISE	
Impact 5.12-2: Would the Project result in generation of excessive ground borne vibration or noise levels?	Less than Significant
Impact 5.12-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?	Less than Significant
5.13: POPULATION AND HOUSING	
Impact 5.13-1: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than Significant
Impact 5.13-2: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less than Significant
Impact 5-13: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding population and housing?	Less than Significant
5.14: PUBLIC SERVICES AND RECREATION	
Impact 5.14-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in	Less than Significant

Table 2: Barstow International Gateway: Environmental Issues With No Impact or Less Than Significant Impact	
Environmental Issue and Threshold	Significance Finding
order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?	
Impact 5.14-2: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?	Less than Significant
Impact 5.14-3: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for school services?	Less than Significant
Impact 5.14-4: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services?	Less than Significant
Impact 5.14-5: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, need for new or physically altered park facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?	Less than Significant
Impact 5-14: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding public services and recreation?	Less than Significant
5.15: TRANSPORTATION	
Impact 5.15-1: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less than Significant
Impact 5.15-2: Would the Project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	Less than Significant
Impact 5.15-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant
Impact 5.15-4: Would the Project result in inadequate emergency access?	Less than Significant
Impact 5-15: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding transportation?	Less than Significant
5.17: UTILITIES AND SERVICE SYSTEMS	
Impact 5.17-2: Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less than Significant
Impact 5.17-3: Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	Less than Significant
Impact 5.17-4: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant
Impact 5.17-5: Would the Project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	Less than Significant

5.3 Findings on Significant Environmental Impacts That are “Less Than Significant With Mitigation Incorporated”

Public Resources Code § 21081 and State CEQA Guidelines § 15091(a)(1) state that no public agency shall approve or carry out a project for which an EIR has been completed, which identifies one or more significant effects unless the public agency finds that changes or alterations have been required in, or incorporated into, the project, which mitigate or avoid the significant effects on the environment.

The following potentially significant environmental impacts were analyzed in the EIR, and the effects of the Project were considered in the EIR. Where as a result of the environmental analysis of the Project and compliance with existing laws, codes and statutes, and the identification of feasible mitigation measures, the following potentially significant impacts have been determined by the City to be reduced to a level of less than significant, the City has found in accordance with CEQA § 21081(a)(1) and State CEQA Guidelines § 15091(a) (1) that “Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment,” which is referred to herein as “Finding 1.” Where the City has determined pursuant to CEQA § 21081(a)(2) and State CEQA Guidelines § 15091(a)(2) that “Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency,” the City’s findings is referred to as “Finding 2.”

Proposed General Plan

EIR SECTION 5.5: CULTURAL RESOURCES – PROPOSED GENERAL PLAN

Impact 5.5-3: Would the Project (Proposed General Plan) disturb any human remains, including those interred outside of dedicated cemeteries?

The EIR evaluated and concluded that the General Plan would allow development that would have the potential to disturb human remains during construction. With compliance with State law and implementation of **MM GP CUL-5**, potentially significant impacts to human remains within the General Plan area would be reduced to a less than significant level.

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.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into the proposed General Plan to mitigate or avoid potentially significant impacts. The City Council finds that **MM GP CUL-5** is

feasible and would reduce potential impacts to human remains to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City on future projects under the General Plan.

Basis for Finding: Although soil-disturbing activities associated with site-specific development in accordance with the proposed General Plan could result in the discovery of human remains, compliance with existing law, including California Health and Safety Code § 7050.5, State CEQA Guidelines § 15064.5, and PRC § 5097.98, would ensure that the remains would be treated appropriately. Other projects within the cultural resources cumulative study area also have the potential to uncover human remains. Similar to the proposed Project, past, present, and reasonably foreseeable projects would be required to comply with all applicable State, federal, and local regulations concerning preservation, salvage, or handling of archaeological resources. Additionally, the proposed General Plan will comply with the process identified in **MM GP CUL-5** that would reduce the proposed General Plan potential impacts concerning disturbance to human remains to a less than significant level. Implementation of **MM GP CUL-5** for future projects under the General Plan would reduce impacts to a less than significant level.

EIR SECTION 5.12: NOISE – PROPOSED GENERAL PLAN

Impact 5.12-2: Would the Project (Proposed General Plan) result in generation of excessive ground borne vibration or noise levels?

The EIR evaluated and concluded that the General Plan would allow development that would cause vibration generated by construction equipment and commercial/industrial operations that has the potential to exceed the City's vibration standard and the Federal Transit Administration's (FTA) criteria for architectural damage. With implementation of **MM GP NOI-3** and **MM GP NOI-4**, potentially significant impacts would be reduced to a less than significant level.

Mitigation Measures

MM GP NOI-3 Construction Vibration Analysis. Prior to issuance of a building permit for a project requiring pile driving during construction within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed the City's or FTA's architectural damage thresholds shown in Table 5-12.5. If vibration levels would exceed these thresholds, alternative methods shall be used, such as drilling piles instead of pile driving and static rollers instead of vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.

MM GP NOI-4 Operation Vibration Analysis. Prior to issuance of a building permit for equipment that has the potential to result in significant vibration, a vibration analysis shall be conducted to assess and mitigate potential vibration impacts. This vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer

and shall follow the latest practices, and precedents to show compliance with Strategy 2.B-2 vibration standard of 0.2 in/sec PPV.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into the proposed General Plan to mitigate or avoid potentially significant impacts. The City Council finds that **MM GP NOI-3** and **MM GP NOI-4** are feasible and would reduce potential noise impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City on future projects under the General Plan.

Basis for Finding: Vibration generated by construction equipment and commercial/industrial operations associated with future projects has the potential to exceed the City's Strategy 2.B-2 vibration standard of 0.2 in/sec Peak Particle Velocity and the FTA's criteria for architectural damage. Because specific project-level information is not available at this time, it is not possible to quantify future vibration levels at vibration-sensitive receptors that may be near future vibration sources. Therefore, due to the potential for sensitive uses within the City to be exposed to annoying and/or interfering levels of vibration from commercial or industrial operations, operation-related vibration impacts associated with implementation of the proposed General Plan are considered potentially significant. Implementation of **MM GP NOI-3** and **MM GP NOI-4** for future projects under the General Plan would reduce project-specific impacts to a less than significant level.

Barstow International Gateway

EIR SECTION 5.4: BIOLOGICAL RESOURCES - BIG

Impact 5.4-1: Would the Project (BIG) 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?

Impact 5-4: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding biological resources?

The EIR evaluated and concluded that BIG construction and operation could result in potentially significant impacts to 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 (CDFW) or U.S. Fish and Wildlife Service (USFWS). With implementation of **MM BIG BIO-1** through **MM BIG BIO-27** and **MM BIG BIO-33** through **MM BIG BIO-37**, potentially significant impacts to species identified as a candidate, sensitive, or special status species would be reduced to a less than significant level.

Mitigation Measures

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 (*Corvus corax*) to desert tortoise and instructions to not feed wildlife or 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 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 during construction 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:

- 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.
- 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.

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.
- 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 during construction 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.

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:

- a) 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;
- b) review and screening of proposed plants to identify and avoid potential invasive species;
- c) weed removal during the initial planting of landscaped areas;
- d) 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;

- e) 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 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.

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:

- Conduct nighttime work only within the boundaries of previously disturbed, cleared and grubbed areas;
- Observe slower vehicle speeds at nighttime at the discretion of the designated biologist;
- Shield and direct nighttime lighting to avoid illuminating wildlife habitat, including movement corridors and bat roosts;
- 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);
- Use low beams or turn off headlights when safety considerations permit; and
- 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.
- MM BIG BIO-11** **Dead Wildlife Disposal.** 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.
- MM BIG BIO-12** **Domestic Dogs.** The implementing entity shall not permit pet dogs in active project areas. Service animals are exempt from this prohibition.
- 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 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. 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 burrows 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.

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. 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.

MM BIG BIO-15 Common Raven Management. 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:

- 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.
- Water tanks shall be sealed and free of leaks. Standing water created from leaks shall be promptly repaired.
- 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.
- 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).
- 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 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.
- 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.

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.

MM BIG BIO-17 Southwestern Willow Flycatcher, Western Yellow-billed Cuckoo, and LeConte's Thrasher Construction Requirements. Construction activities within suitable southwestern 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 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.

If construction activities must occur within 500 feet of suitable nesting habitat (i.e., near the Mojave River) and within the nesting season for southwestern 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 (BM) shall conduct pre-construction surveys for southwestern 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 BM shall hold a USFWS recovery permit and be authorized by the agency to conduct pre-construction southwestern 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).

If southwestern willow flycatcher, western yellow-billed cuckoo, or LeConte's thrasher is documented nesting 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 southwestern willow flycatcher, western yellow-billed cuckoo, and/or LeConte's thrasher.

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 pre-construction 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 DB 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 on coordination with a Species-Specific BM. While conducting noise monitoring, the BM 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 southwestern 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 southwestern 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 southwestern willow flycatcher, 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.

MM BIG BIO-18 Nesting Birds. 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.

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.

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.

If there are time lapses between construction activities, and prior to re-initiation of construction activities, pre-construction nesting bird surveys shall be repeated.

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 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.

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) 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 birds 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 temperatures exceed 95 degrees Fahrenheit or 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.

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

- A summary of the estimated direct permanent and temporary Project impacts on burrowing owl and burrowing owl habitat.
- 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.

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.

MM BIG BIO-23 Mojave Fringe-toed Lizard Construction Requirements. When possible, construction activities within Mojave fringe-toed lizard suitable habitat shall be conducted during the active season (March 1 – September 30).

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.

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 2:1 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.

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.

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

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 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.

MM BIG BIO-27

Bat Construction Requirements. 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).

Prior to demolition and/or improvement of structures that could support roosting bats, including Hinkley Road Bridge, or trees that will 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 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.

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.

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 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.

Roost Exclusion. 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 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.

Roost Habitat Creation. 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.

MM BIG BIO-33

Staging, Stockpiles, Materials and Equipment Storage. 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.

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 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.

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 CDFW and the City.

MM BIG BIO-35 General Avian Safe Design. 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:

- Sufficient spacing of phase conductors to prevent bird electrocution.

- Configuration of power lines to reduce vertical spread of lines and/or reductions in the span length if such options are feasible.
- 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.
- Metal fence stakes plugged with bolts or other material to prevent raptor talons from becoming entrapped within the bolt holes.
- Perch guards to discourage avian presence on and near BIG facilities.
- 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).
- A monopole or dual-pole design versus a lattice tower design to minimize perching and nesting opportunities.
- Communication tower design in conformance with Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning (USFWS, 2021b).
- 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).

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.

MM BIG BIO-36

Nighttime Lighting During Operations. To address 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:

- All lights shall be fully cutoff or fully shielded to prevent uplight and limit horizontal spill into adjacent habitat.
- Warm lighting (3,000K or lower) shall be used to reduce blue light emissions).
- All exterior lighting fixtures shall be directed downward to illuminate pedestrian pathways and parking areas and avoid unnecessary glare and light trespass.
- 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.

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.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG BIO-1** through **MM BIG BIO-27**, and **MM BIG BIO-33** through **MM BIG BIO-37** are feasible and would reduce biological resources impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding: No federal or state-listed endangered or threatened plant species were documented within the BIG footprint, and none have moderate to high potential to occur based on the lack of suitable habitat. Thirteen non-listed special status plant species were identified to have potential to occur based on the presence of suitable habitat and previously recorded observations within three miles of the BIG footprint. However, none of these special status species were observed during focused surveys and are either presumed absent from or have no or low potential to occur in the BIG footprint.

Construction – Special Status Plant Species. Special status plants regulated under the County of San Bernardino Development Code were observed within the BIG footprint. Removal of individuals of these species without approval of removal and replacement plans during the entitlement and development permit application process would be a significant impact. There are 33 ornamentally planted western Joshua trees, a State Candidate for California Endangered Species Act listing, within the BIG footprint. With **MM BIG BIO-1**, **MM BIG BIO-2**, **MM BIG BIO-3**, **MM BIG BIO-4**, **MM BIG BIO-5**, **MM BIG BIO-6**, **MM BIG BIO-7**, **MM BIG BIO-33**, and **MM BIG BIO-37** incorporated, BIG's potentially significant construction impacts to special status plant species would be less than significant. **MM BIG BIO-7** and **MM BIG BIO-33** would lessen BIG's potential construction impacts on western Joshua tree individuals outside the construction work limits and habitat. With implementation of **MM BIG BIO-7** and **MM BIG BIO-33**, BIG's potentially significant construction impacts on western Joshua tree would be less than significant.

Construction – Special Status Wildlife Species. Federally and/or state-listed or candidate wildlife species—desert tortoise, willow flycatcher, LeConte's thrasher, yellow-billed cuckoo, Swainson's hawk, and burrowing owl—were documented within or adjacent to the BIG footprint during focused surveys conducted in 2022, 2023, and/or 2024. The state-listed tricolored blackbird was incidentally observed during various focused surveys in 2023. Twenty-seven non-listed but special status species were either documented during BIG biological surveys or were determined to have a moderate to high potential to occur within the BIG footprint. With implementation of **MM BIG BIO-1**, **MM BIG BIO-2**, **MM BIG BIO-3**, **MM BIG BIO-4**, **MM BIG BIO-5**, **MM BIG BIO-7**, **MM BIG BIO-8**, **MM BIG BIO-9**, **MM BIG BIO-10**, **MM BIG**

BIO-11, MM BIG BIO-12, MM BIG BIO-13, MM BIG BIO-14, MM BIG BIO-15, MM BIG BIO-16, and MM BIG BIO-34, BIG's potentially significant construction impacts to special-status wildlife species would be less than significant.

Operations. As ground-disturbing activities would occur during BIG construction, BIG operations would not result in direct or indirect impacts to special status wildlife and plant species. Should individuals of special status wildlife species with moderate to high potential occur within the BIG footprint enter the operational BIG and conflict with vehicles or trains could result in direct impacts. Further, an increase in noise, dust, and human activity from BIG operation could indirectly impact species by making previously suitable habitat unsuitable. **MM BIG BIO-34** and **MM BIG BIO-36** require the installation of permanent fencing to exclude wildlife from the operational BIG and places restrictions on nighttime lighting. With implementation of **MM BIG BIO-34** and **MM BIG BIO-36**, BIG's potentially significant operational impacts to special status wildlife would be less than significant.

Cumulative Impacts (Impact 5-4). Cumulative projects could result in impacts to similar resources within the study area. Construction of these projects could result in land disturbance, increased vehicle traffic, and topography alteration, which could lead to disturbance, injury, or mortality of various special-status wildlife species and their respective habitats, riparian and sensitive natural communities, wetlands, and wildlife movement. Furthermore, the ability of wildlife species to move freely within the cumulative study area would continue to be diminished through construction of developments. Impacts to sensitive species, habitats, waters and wetlands, and migratory species would be mitigated on a project-by-project basis and subject to compliance with the established regulatory framework, thereby reducing impacts from cumulative development to a less than significant level. With mitigation measures incorporated; BIG would not result in a cumulatively considerable contribution to biological resources impacts. Cumulative impacts would be less than significant.

Impact 5.4-2: Would the Project (BIG) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact 5-4: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding biological resources?

The EIR evaluated and concluded that BIG construction and operation could result in potentially significant impacts to riparian or sensitive natural communities identified in local or regional plans, policies, regulations or by CDFW or USFWS. With compliance with State law and implementation of **MM BIG BIO-28**, potentially significant impacts to sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or USFWS would be reduced to a less than significant level.

Mitigation Measures

MM BIG BIO-28 Compensatory Mitigation for Sensitive Natural Communities. Prior to start of construction mobilization activities, the implementing entity shall prepare a compensatory mitigation plan for permanent impacts of 1,014 acres of dune vegetation communities, including high-quality *Dicoria canescens* – *Abronia villosa* – *Panicum urvilleanum* sparsely vegetated alliance (e.g., active desert dunes; 551.5

acres), moderate-quality *Dicoria canescens* – *Abronia villosa* – *Panicum urvilleanum* sparsely vegetated alliance – partially stabilized (e.g., partially stabilized desert dunes; 7.1 acres), and low-quality *Dicoria canescens* – *Abronia villosa* – *Panicum urvilleanum* sparsely vegetated alliance – disturbed/stabilized (e.g., disturbed/stabilized desert dunes; 450.6 acres) at a minimum 1:1 ratio. Dune habitat shall be mitigated in-kind through the acquisition and preservation of dune habitat.

If all or any portion of the acquired Mojave fringe-toed lizard (MM BIG BIO-24) or other required compensatory mitigation lands/credits meet the criteria above, it may be used to fulfill that portion of the obligation for CDFW sensitive upland vegetation communities.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG BIO-28** is feasible and would reduce biological resources impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding: Three land cover types located within the BIG footprint are considered sensitive by the CDFW: active desert dunes, active desert dunes – disturbed and stabilized/partially stabilized desert dunes. To mitigate potentially significant direct impacts to active desert dunes, active desert dunes – disturbed, stabilized/partially stabilized desert dunes, BNSF would implement **MM BIG BIO-28** that requires land acquisition and preservation of dune habitat. As the CDFW requires mitigation ratios that fully mitigate all direct and indirect impacts to sensitive habitats, with implementation of **MM BIG BIO-28**, BIG construction impacts to sensitive vegetation communities would be less than significant. BIG operations would occur within the disturbed footprint impacted by construction. Therefore, BIG would not result in impacts to riparian habitat or other sensitive natural communities once the Project is operational. With implementation of **MM BIG BIO-28**, BIG's potentially significant construction and operational impacts on riparian or sensitive natural communities identified in local or regional plans, policies, regulations or by CDFW or USFWS would have a less than significant impact.

Cumulative Impacts (Impact 5-4). Cumulative projects could result in impacts to similar resources within the study area. Construction of these projects could result in land disturbance, increased vehicle traffic, and topography alteration, which could lead to disturbance, injury, or mortality of various special-status wildlife species and their respective habitats, riparian and sensitive natural communities, wetlands, and wildlife movement. Impacts to sensitive species, habitats, waters and wetlands, and migratory species would be mitigated on a project-by-project basis and subject to compliance with the established regulatory framework, thereby reducing impacts from cumulative development to a less than significant level. With mitigation measures incorporated; BIG would not result in a cumulatively considerable contribution to biological resources impacts. Cumulative impacts would be less than significant.

Impact 5.4-3: Would the Project (BIG) have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact 5-4: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding biological resources?

The EIR evaluated and concluded that BIG construction and operation could result in potentially significant impacts to federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. With the implementation of **MM BIG BIO-29**, **MM BIG BIO-30**, and **MM BIG BIO-31**, potentially significant impacts to jurisdictional aquatic resources would be reduced to a less than significant level.

Mitigation Measures

MM BIG BIO-29 Jurisdictional Aquatic Resources Permit Requirement. Prior to impacting jurisdictional aquatic resources, the implementing entity shall obtain a Clean Water Act (CWA) Section 404 Individual Permit from the U.S. Army Corps of Engineers (USACE) for permanent impacts on non-wetland waters of the U.S., a CWA Section 404 water quality certification (or other required permit) from the Regional Water Quality Control Board (RWQCB) for permanent impacts on non-wetland waters of the U.S./State, and a California Fish and Game Commission (CFGF) Section 1602 Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) for impacts on vegetated streambed and unvegetated streambed and watercourse jurisdictional by CDFW. The implementing entity shall implement/comply with all permit conditions and mitigation measures required by the resource agencies. Compensatory mitigation to offset impacts on jurisdictional aquatic resources may be implemented through on-site and/or off-site, permittee-responsible mitigation, mitigation bank credit purchase (e.g., purchase of enhancement and/or preservation credits at the Mojave River Watershed Mitigation Bank or other approved mitigation bank), or a combination of these options depending on availability. The proposed mitigation strategy shall prioritize in-kind and in-watershed options per the regulatory agencies' preferences. A minimum compensatory mitigation ratio of 1:1 will be required; final mitigation ratios and credits shall be determined in consultation with USACE, RWQCB, and CDFW based on agency evaluation of current resource functions and values and through each agency's respective permitting process.

Should implementing entity-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared and approved by the agencies in accordance with the proposed program permits. The HMMP shall include but is not limited to a conceptual planting plan including planting zones, grading, and irrigation, as applicable; a conceptual plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity.

MM BIG BIO-30 Water Quality Best Management Practices. Prior to construction mobilization activities, the implementing entity shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in conformance with California Construction Stormwater General Permit Order 2022-0057-DWQ requirements to avoid and minimize impacts associated with erosion, runoff, and stormwater contaminants. The SWPPP shall include best management practices (biological monitors) to avoid and minimize impacts on downstream jurisdictional aquatic resources including, but not limited to:

- Vehicles and equipment should not be operated in ponded or flowing water except as described in permits.
- Water containing mud, silt, or other pollutants from grading or other activities should not be allowed to enter jurisdictional waters adjacent to BIG or be placed in locations that may be subjected to high storm flows.
- Spoil sites should not be located within 30 feet from the boundaries of downstream jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages adjacent to BIG.
- Raw cement/concrete or washings thereof; asphalt, paint or other coating material; oil or other petroleum products; or any other substances that could be hazardous to vegetation or wildlife resources, resulting from BIG construction, should be prevented from contaminating the soil and/or entering avoided jurisdictional waters downstream of BIG.
- No equipment maintenance or fueling should be performed within 100 feet of jurisdictional waters downstream of BIG, where petroleum products or other pollutants from the equipment may enter these areas.
- Temporary structures, storage of construction materials, and staging/storage of construction equipment should be located outside jurisdictional waters downstream of BIG.

MM BIG BIO-31 Vegetation Removal. The implementing entity shall ensure that all cut vegetation is hauled out of any waterways and stored, if necessary, where it cannot be washed by rainfall or runoff into waterways. When maintenance activities are completed, any excess vegetation shall be removed from the BIG footprint.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG BIO-29** through **MM BIG BIO-31** are feasible and would reduce potential biological resources impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding: BIG construction work that would fill, excavate or dredge up to approximately 31.57 acres (216,252 linear feet) of non-wetland waters of the U.S./State under USACE and RWQCB jurisdiction as well as 7.97 acres of vegetated streambed, 38.71 acres of unvegetated streambed and 57.86 acres of CDFW jurisdictional watercourse (104.54 acres; 216,252 linear feet in total). BIG operations would occur within the disturbed footprint affected by construction. To mitigate potentially significant impacts to jurisdictional waters, **MM BIG BIO-29**, **MM BIG BIO-30**, and **MM BIG BIO-31**, which require BNSF to obtain permits from the applicable agencies, implement aquatic resource best management practices, and properly dispose of vegetation, would be implemented. With implementation of best management practices and compliance with USACE, RWQCB, and/or CDFW permit requirements, including compensatory mitigation, and **MM BIG BIO-29**, **MM BIG BIO-30**, and **MM BIG BIO-31**, BIG's potentially significant construction and operational impacts on jurisdictional aquatic resources would have a less than significant impact.

Cumulative Impacts (Impact 5-4). Where jurisdictional waters are present, cumulative projects could result in impacts within the study area. Construction of these projects could result in land disturbance,

which could lead to disturbance to riparian and wetland resources. Impacts to waters and wetlands would be mitigated on a project-by-project basis and subject to compliance with the established regulatory framework, thereby reducing impacts from cumulative development to a less than significant level. With mitigation measures incorporated; BIG would not result in a cumulatively considerable contribution to biological resources impacts. Cumulative impacts would be less than significant.

Impact 5.4-4: Would the Project (BIG) 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?

Impact 5-4: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding biological resources?

The EIR evaluated and concluded that BIG construction and operation could result in potentially significant impacts to the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors and impede the use of native wildlife nursery sites. With the implementation of **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** and **MM BIG BIO-32**, potentially significant impacts to migratory species and wildlife corridors would be reduced to a less than significant level.

Mitigation Measures

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** and the following measure are applicable.

MM BIG BIO-32 Wildlife Crossings. With BIG implementation, a wildlife crossing shall be constructed at the Unnamed Stream (Milepost 12.5) below the BNSF tracks to facilitate wildlife movement between areas of natural habitat on either side of the railway. This rail 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 designed 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 for review 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 or crossing entrances, and invasive plant removal.
- Routine clearing of debris and trash from the wildlife crossings shall be completed on a quarterly basis and following large storm events to allow ample space to remain available for wildlife travel.
- Access points to the 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 crossing entrances shall be monitored quarterly 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.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **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 and MM BIG BIO-32** are feasible and would reduce potential biological resources impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding:

Construction. The BIG footprint serves as a corridor facilitating movement between larger blocks of natural habitat in the region in conjunction with existing wildlife corridors. Existing barriers to movement limit the ability for many species to move through the BIG footprint to surrounding areas of natural habitat. Construction of BIG could result in direct and indirect impacts to these crossings and the movement of local wildlife within the BIG footprint as a result of degradation from increased noise, dust, and human activity. Construction impacts to these crossings' that function as wildlife corridors are potentially significant. BIG construction could result in potentially significant direct impacts to avian nests through destruction and potential death, injury, or harassment of nesting birds, their eggs, and/or their young and indirect impacts from elevated noise, dust, and human activity should nests be present during construction. With the implementation of **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-32, and MM BIG BIO-35**, BIG's potentially significant construction impacts to nesting birds would be less than significant.

Operations. While some areas of BIG that could serve as wildlife corridors are already obstructed by existing conditions, BIG operations that cross the wildlife corridors would obstruct wildlife movement through the corridors through on-going activity and introduction of elevated noise, dust, and lighting. **MM BIG BIO-32** would reduce the impacts from BIG operation to less than significant as wildlife would use the crossing rather than cross BIG. BIG operation impacts to nesting birds within the vicinity are also anticipated to be less than significant because increased noise was determined to be modest and generally within the range that would not affect normal avian communication. With the implementation of mitigation, BIG's potentially significant operational impacts to nesting birds would be less than significant.

Cumulative Impacts (Impact 5-4). Cumulative projects could result in impacts to similar resources within the study area. Construction of these projects could result in land disturbance, increased vehicle traffic, and topography alteration, which could lead to disturbance, injury, or mortality of various special-status wildlife species and their respective habitats and wildlife movement. Impacts to migratory species would be mitigated on a project-by-project basis and subject to compliance with the established regulatory framework, thereby reducing impacts from cumulative development to a less than significant level. With mitigation measures incorporated; BIG would not result in a cumulatively considerable contribution to biological resources impacts. Cumulative impacts would be less than significant.

Impact 5.4-5: Would the Project (BIG) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact 5-4: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding biological resources?

The EIR evaluated and concluded that BIG construction and operation could conflict with local policies or ordinances protecting biological resources, such as tree preservation policy or ordinances. The EIR evaluated and concluded that compliance with regulatory requirements and implementation of **MM BIG BIO-1** through **MM BIG BIO-4**, **MM BIG BIO-8**, **MM BIG BIO-9**, **MM BIG BIO-12**, **MM BIG BIO-21**, **MM BIG BIO-22**, and **MM BIG BIO-33** would reduce potentially significant impacts to a less than significant level.

Mitigation Measures

See **MM BIG BIO-1** through **MM BIG BIO-4**, **MM BIG BIO-8**, **MM BIG BIO-9**, **MM BIG BIO-12**, **MM BIG BIO-21**, **MM BIG BIO-22**, and **MM BIG BIO-33**.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG BIO-1** through **MM BIG BIO-4**, **MM BIG BIO-8**, **MM BIG BIO-9**, **MM BIG BIO-12**, **MM BIG BIO-21**, **MM BIG BIO-22**, and **MM BIG BIO-33** are feasible and would reduce potential conflicts with local policies or ordinances protecting biological resources, such as tree preservation policy or ordinances, to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding:

Construction. The BIG footprint is within the San Bernardino County Burrowing Owl Overlay Zone. Construction and operation of BIG is subject to the applicable requirements established for that zone. **MM BIG BIO-1**, **MM BIG BIO-2**, **MM BIG BIO-3**, **MM BIG BIO-4**, **MM BIG BIO-8**, **MM BIG BIO-9**, **MM BIG BIO-12**, **MM BIG BIO-21**, **MM BIG BIO-22**, and **MM BIG BIO-33** address potential impacts to burrowing owl as required of projects within the zone. BIG construction would meet the requirements for projects within the San Bernardino County Burrowing Owl Overlay Zone and impacts would be less than significant with mitigation. BIG would be consistent with the goals and policies in the San Bernardino County General Plan and the City of Barstow 2015 General Plan and proposed General Plan that address biological resources. BIG would comply with all permit requirements related to the management of plant resources. With implementation of mitigation measures noted above and compliance with the applicable regulatory framework and permitting requirements such as County Code §§ 88.01, BIG's potentially significant construction conflicts with local policies or ordinances protecting biological resources, such as tree preservation policy or ordinances would be less than significant.

Operations. BIG would be reviewed for compliance with all applicable local policies or ordinances protecting biological resources prior to start of construction and operation of BIG would not include habitat disturbance beyond that which occurs during construction. Impacts would be less than significant; no mitigation is required.

Cumulative Impacts (Impact 5-4). With mitigation and compliance with local policies and ordinances, BIG would have a less than significant impact concerning the potential to conflict with local policies or ordinances protecting biological resources and adopted habitat conservation plans. Cumulative projects could result in impacts to similar resources within the study area. Compliance with local regulations/ordinances and policies would be applicable to projects in the study area and would be addressed on a project-specific basis. BIG would not result in a cumulatively considerable contribution to biological resources impacts. Cumulative impacts would be less than significant.

EIR SECTION 5.5: CULTURAL RESOURCES - BIG

Impact 5.5-3: Would the Project (BIG) disturb any human remains, including those interred outside of dedicated cemeteries?

The EIR evaluated and concluded that BIG construction and operation could disturb human remains, including those interred outside of dedicated cemeteries. With compliance with the regulatory requirements and implementation of **MM BIG CUL-8**, BIG's potentially significant construction and operation impacts concerning disturbance to human remains would be reduced to a less than significant level.

Mitigation Measures

MM BIG CUL-8 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.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG CUL-8** is feasible and would reduce potential human remain impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding:

Construction. Due to the high archaeological sensitivity of the BIG footprint and previous instances of human remains, soil-disturbing activities could result in the discovery of previously unidentified human remains. Compliance with existing law and **MM BIG CUL-8** would ensure that the remains would be treated appropriately and that there would be no significant impacts to human remains. Other projects within the cultural resources cumulative study area also have the potential to uncover human remains. With implementation of **MM BIG CUL-8**, BIG's potentially significant construction impacts concerning disturbance to human remains would be less than significant and would not contribute to cumulatively considerable impacts.

Operations. Operation of BIG would not include ground disturbance beyond that which occurs during construction. Due to the high cultural and archaeological sensitivity of BIG and previous instances of human remains being identified within the BIG footprint, potential areas for future reburial have been identified that will not be subject to disturbances as a part of BIG operations. California Health and Safety Code § 7050.5, State CEQA Guidelines § 15064.5, and PRC § 5097.98, along with **MM BIG CUL-8**, identify reburial as a treatment option for human remains that have been removed from their original discovery

location. With implementation of **MM BIG CUL-8**, BIG's potentially significant operational impacts concerning disturbance to human remains would be less than significant.

EIR SECTION 5.6: ENERGY - BIG

Impact 5.6-1: Would the Project (BIG) result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?

Impact 5-6: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding energy?

The EIR evaluated and concluded that BIG construction and operation could result in potentially significant energy impacts. The EIR evaluated and concluded that BIG would be required to adhere to all federal, State, and local requirements for energy efficiency, including the latest Title 24 standards. Applicable laws, regulations, and orders, as well as mitigation measures, provide that BIG would not operate in a manner that is inefficient, wasteful, or unnecessary. BIG's energy consumption during construction and operations would not be wasteful, inefficient, or unnecessary. With compliance with the regulatory requirements and implementation of **MM BIG EN-1**, **MM BIG EN-2**, **MM BIG AQ-1** through **MM BIG AQ-6**, **MM BIG AQ-8**, and **MM BIG AQ-10**, BIG's potentially significant construction and operational energy impacts would be reduced to a less than significant level.

Mitigation Measures

MM BIG EN-1, **MM BIG EN-2**, **MM BIG AQ-1** through **AQ-6**, **MM BIG AQ-8**, and **MM BIG AQ-10** are applicable.

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.

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.

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.

- 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 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 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.

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 and shall maintain all supporting procurement records for City review upon request.
- The implementing entity shall keep a written record of the fleet mix for on-road construction equipment during BIG construction and provide the City with 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 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. 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. 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-8 Renewable Diesel RTG Cranes. Rubber Tired Gantry (RTG) cranes shall be powered with renewable diesel. BNSF shall provide the City of Barstow with evidence demonstrating use of renewable diesel for RTG cranes prior to the issuance of certificate of occupancy.

MM BIG AQ-10 Tier 4 Emergency Back-Up Generators. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that the BIG plans and specifications require all standard emergency generators (i.e., non-cold storage generators) to meet California Air Resources Board Tier 4 Final emissions standards. A copy of each unit's Best Available Control Technology (BACT) documentation (certified tier specification) and CARB or Mojave Desert AQMD operating permit (if applicable) shall be provided to the City. This mitigation measure applies only to tenant improvements and not the building shell approvals.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG EN-1, MM BIG EN-2, MM BIG AQ-1** through **MM BIG AQ-6, MM BIG AQ-8, and MM BIG AQ-10** are feasible and would reduce potential energy impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding: BIG construction and operations would consume energy from electricity, diesel and gasoline consumption.

Renewable Energy Sources. BIG includes measures to reduce the consumption of non-renewable resources and would be required to comply with laws, regulations, and orders to minimize energy consumption and use renewable energy to the most feasible extent possible. BIG would be required to adhere to all federal, State, and local requirements for energy efficiency, including the latest Title 24 standards. Applicable laws, regulations, and orders, as well as **MM BIG EN-1** and **MM BIG EN-2** provide that BIG would not operate in a manner that is inefficient, wasteful, or unnecessary. BIG's energy consumption during construction and operations would not be wasteful, inefficient, or unnecessary. With implementation of **MM BIG EN-1** and **MM BIG EN-2**, BIG's potentially significant impacts related to renewable energy sources would have a less than significant impact

Electricity – Construction. Electricity consumption during BIG construction would be associated with water demand, stationary construction equipment such as concrete and asphalt batch plants, and stationary facilities such as construction trailers/offices and water wells. To minimize construction-related electricity consumption, BIG would use alternative energy sources where feasible, including solar tool charging station, and solar-powered light boards and pump switches. BIG construction would not result in wasteful, inefficient, or unnecessary electricity consumption, and would result in a less than significant environmental impact and no mitigation measures are required.

Electricity – Operations. BIG would result in nominal electricity use proportional to annual County use and would not significantly affect existing energy fuel supplies or resources, and new capacity, infrastructure, or additional sources of electricity are not anticipated to be required. BIG operations would reduce electricity consumption through an approximately 21 megawatt MW solar farm, rooftop solar, compliance with applicable energy efficiency standards including the California Green Building Standards Code (CALGreen) and the California Energy Code, and implementation of **MM BIG EN-1** and **MM BIG EN-2**. BIG

operations would not result in wasteful, inefficient, or unnecessary electricity consumption and additional infrastructure or capacity is not required. With implementation of **MM BIG EN-1** and **MM BIG EN-2**, BIG's potentially significant operational impacts related to electricity use would have a less than significant impact.

Diesel – Construction. BIG's diesel fuel consumption during construction would be associated with heavy-duty off-road construction equipment, locomotive deliveries, on-road heavy-duty truck deliveries, mobile construction tools, and diesel generators. BIG would result in relatively low construction fuel use proportional to annual County use and would not significantly affect existing energy fuel supplies or resources, and new capacity or additional sources of construction diesel fuel are not anticipated to be required. BIG would reduce diesel fuel usage during construction through optimized site grading, prioritizing the use of rail transport for delivery, recycling construction waste, and implementation of **MM BIG AQ-4**. With implementation of **MM BIG AQ-4**, BIG's potentially significant construction impacts related to wasteful, inefficient, or unnecessary diesel consumption would have a less than significant environmental impact.

Diesel – Operations. 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. BIG would include mitigation measures to minimize diesel fuel (e.g., use of renewable diesel rubber-tired gantry cranes [**MM BIG AQ-8**]). BIG operations would reduce non-renewable diesel fuel usage through the use of renewable diesel, use of electric cargo-handling equipment, the use of zero-emission TRUs and through converting existing heavy-duty truck trips to rail trips, reducing overall (i.e., regional, statewide, and nationwide) diesel consumption. BIG would increase the use of renewable diesel fuel and reduce on-road diesel fuel consumption on a regional, statewide, and nationwide basis. BIG would help facilitate the conversion of heavy-duty truck trips to train trips, which are more fuel efficient. With implementation of **MM BIG AQ-8**, BIG's potentially significant operational impacts related to wasteful, inefficient, or unnecessary diesel fuel consumption would have a less than significant environmental impact.

Gasoline – Construction. Gasoline fuel consumption during BIG construction would be associated with on-road vehicles used for construction worker trips and vendor hauling to construction sites, and small construction tools within BIG footprint. BIG construction would not substantially affect projected energy gasoline fuel supplies or resources, and new capacity or additional sources of construction gasoline fuel are not anticipated to be required. BIG construction would reduce gasoline usage during construction through use of solar-powered generators for electric handheld construction tools and limiting idling of construction equipment. There are no unusual characteristics that necessitate the use of gasoline fuel vehicles that would be less energy-efficient than at comparable construction sites in the region or State. All on-road gasoline fuel vehicles that access BIG during construction would comply with applicable California Air Resources Board (CARB) and other State and federal fuel efficiency standards. BIG construction would not result in wasteful, inefficient, or unnecessary gasoline consumption and no mitigation measures are required.

Gasoline – Operations. Gasoline fuel consumption during operations would be associated with on-road vehicle worker and delivery trips. BIG operational fuel use would be relatively low proportional to annual County use and would not significantly affect projected gasoline fuel supplies or resources, and new capacity or additional sources of operational gasoline fuel are not anticipated to be required. BIG's

operational gasoline fuel use would be for worker and vendor trips. BIG would result in a less than significant environmental impact and no mitigation measures are required.

Cumulative Impacts (Impact 5-6). Other cumulative projects would result in additional demand for energy resources, including electricity and fuels (diesel, gasoline). Like BIG, cumulative projects would be required to comply with regulatory requirements to avoid wasteful or inefficient consumption of energy or potential conflicts with a plan for renewable energy. BIG would rely on renewable energy to the extent feasible, and with mitigation (**MM BIG AQ-1** through **AQ-6**, **MM BIG AQ-8**, **MM BIG AQ-10**, **MM BIG EN-1** and **MM BIG EN-2**), its impacts would be less than significant. Therefore, while BIG and cumulative projects would result in an increase in demand for energy resources, no wasteful use of energy resources would occur and with mitigation measures incorporated, cumulative impacts would be less than significant.

Impact 5.6-2: Would the Project (BIG) conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact 5-6: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding energy?

The EIR evaluated and concluded that BIG would potentially conflict with or obstruct a State or local plan for renewable energy or energy efficiency. With compliance with the regulatory requirements and laws regarding sustainability, and implementation of **MM BIG EN-1**, **MM BIG EN-2**, **MM BIG AQ-1** through **AQ-6**, **MM BIG AQ-8**, and **MM BIG AQ-10**, BIG's potential conflicts with state or local energy efficiency plans would be reduced to a less than significant level.

Mitigation Measures

See **MM BIG EN-1**, **MM BIG EN-2**, **MM BIG AQ-1** through **MM BIG AQ-6**, **MM BIG AQ-8**, and **MM BIG AQ-10**.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG EN-1**, **MM BIG EN-2**, **MM BIG AQ-1** through **MM BIG AQ-6**, **MM BIG AQ-8**, and **MM BIG AQ-10** are feasible and would reduce potential energy impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding: The Countywide Plan and County Greenhouse Gas (GHG) Emissions Reduction Plan would apply to BIG's off-site improvement construction and operation.

Construction. BIG would not conflict with applicable County nor City policies related to renewable energy and energy efficiency during construction. BIG would be subject to all applicable City, County, State, and federal regulations regarding energy efficiency as construction would occur within both City and County jurisdiction. BIG would use alternative energy sources where feasible. **MM BIG AQ-4** requires the use of renewable diesel to minimize and control exhaust emissions from heavy-duty diesel-fueled construction equipment and heavy diesel trucks. With implementation of **MM BIG AQ-4**, BIG's potentially significant construction conflicts with any existing State or local plans for renewable energy and energy efficiency would be less than significant.

Operations. Compliance with State and local energy efficiency standards would ensure that BIG would meet all applicable energy conservation policies and regulations. BIG would also comply with existing energy standards such as the CALGreen Code and be consistent with CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* which would also reduce energy use. BIG includes measures to minimize diesel fuel to the greatest extent feasible (e.g., use of renewable diesel rubber-tired gantry cranes [**MM BIG AQ-8**] and zero-emission truck refrigeration units [**MM BIG AQ-10**]). In addition to the proposed solar farm and installation of code-required rooftop solar, mitigation for the transload warehouse center would require BIG to offset energy demand with on-site renewable solar electricity generation beyond Title 24 compliance (**MM BIG EN-1**) and buildings would be required to meet or exceed CALGreen Tier 2 standards (**MM BIG EN-2**). Therefore, BIG would not conflict with any applicable State and local plans and would therefore have a less than significant impact on existing State and local plans for renewable energy and energy efficiency with the noted mitigation measures incorporated.

Cumulative Impacts (Impact 5-6). Development within the cumulative study area would be subject to the same State regulatory framework, such as CalGreen, which would reduce energy demands of future development. Cumulative growth in the study area would be subject to the same regulatory compliance (e.g., Building Energy Efficiency Standards, CalGreen, and CAFE standards) as BIG. Therefore, BIG would not result in a potentially significant impact associated with the wasteful or inefficient consumption of energy nor conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts related to energy would be less than significant.

EIR SECTION 5.7: GEOLOGY, SOILS AND MINERAL RESOURCES - BIG

Impact 5.7-9: Would the Project (BIG) directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact 5-7: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding geology and soils and mineral resources?

The EIR evaluated and concluded that there are likely undocumented paleontological resources within the BIG footprint which could be disturbed during construction activities. With the implementation of **MM BIG GEO-1** through **MM BIG GEO-3**, potentially significant impacts to undocumented paleontological resources would be reduced to a less than significant level.

Mitigation Measures

MM BIG GEO-1 The implementing entity shall submit a Paleontological Resources Impact Mitigation Program (PRIMP) prepared by a qualified paleontologist to the City of Barstow (City) prior to construction commencing. A qualified paleontologist is defined as an individual with an M.S./M.A. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques, and who is knowledgeable in the geology and paleontology of the area. The PRIMP shall be consistent with the Society of Vertebrate Paleontology 2010 guidelines. The PRIMP shall include, but is not limited to, the requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the BIG footprint based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring, discoveries treatment protocols and timelines,

paleontological methods including any sediment sampling, reporting, and collections management/curation.

MM BIG GEO-2

A qualified paleontologist shall attend preconstruction meetings to consult with the grading and excavation contractors concerning planned depths, excavation schedules, paleontological field techniques, and safety issues. In addition, all on-site construction personnel shall receive Worker Education and Awareness Program training prior to the commencement of excavation work. All BIG construction occurring within previously undisturbed fossil bearing formations shall be monitored by a qualified paleontologist or qualified paleontological monitor. Detailed narrative and exhibit outlining areas and depths that require monitoring across the BIG footprint shall be included in the Paleontological Resources Impact Mitigation Program (PRIMP). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials and works under the direction of a qualified paleontologist. If fossils are discovered, the paleontologist (or paleontological monitor) will recover them. In most cases, this fossil salvage can be completed in a short period of time; however, some fossil specimens, such as a complete large mammal skeleton, may require an extended salvage period. In these instances, the paleontologist (or paleontological monitor) will be allowed to temporarily direct, divert, or halt grading in the vicinity to allow recovery of fossil remains in a timely manner, which will be outlined and defined in the PRIMP. Because of the potential for the recovering of small fossil remains, such as isolated mammal teeth, it may be necessary to set up a screen-washing operation on site.

MM BIG GEO-3

Fossil remains collected during the monitoring and salvage portion of the Paleontological Resources Impact Program (PRIMP) shall be cleaned, repaired, sorted, and catalogued. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will be deposited (as a donation) in a scientific institution with permanent paleontological collections located within San Bernardino County (or, if no repository is available, adjacent Counties). A final data recovery report shall be completed by a qualified paleontologist that outlines the results of the paleontological monitoring program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils. The report shall be submitted to the implementing entity and City upon completion.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG GEO-1** through **MM BIG GEO-3** are feasible and would reduce potential paleontological impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding: No paleontological resources were identified within the BIG study area. However, the age and composition of soils and sediments across the study area, combined with the knowledge of paleontological resources identified within similar sediment deposits in Southern California, indicate a moderate-to-high sensitivity for paleontological resources. As only a very small percentage of the BIG footprint has been subject to prior disturbance, there is the potential for paleontological resources to exist. Because there is the potential to destroy a unique paleontological resource or unique geologic

feature, there would be a potentially significant impact. Impacts to paleontological resources could occur but would be mitigated through **BIG GEO-1** through **BIG GEO-3**, resulting in a less than significant impact.

Cumulative Impacts (Impact 5-7). Impacts to paleontological resources could occur but would be mitigated through project-level mitigation by BIG and the identified cumulative projects, resulting in a less than significant cumulative impact.

EIR SECTION 5.8: GREENHOUSE GAS EMISSIONS - BIG

Impact 5.8-1: Would the Project (BIG) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact 5-8: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding greenhouse gas emissions?

The EIR evaluated and concluded that BIG would generate temporary construction GHG emissions associated with demolition, grading, and construction. Because of direct GHG emission reductions, BIG would result in a net GHG emissions reduction during operations. With the implementation of **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** and **MM BIG EN-2**, BIG implementation would result in net reductions in GHG emissions and potentially significant impacts would be reduced to a less than significant level.

Laws, Ordinances, and Regulations (LORs) are existing requirements that are based on local, State, or federal regulations or laws that are frequently required independent of CEQA review. Because LORs are neither BIG specific nor a result of development of BIG, they are not considered to be mitigation measures. The following LORs are applicable.

- | | |
|------------------|--|
| LOR GHG-1 | Require diesel powered construction equipment to turn off when not in use per California Code of Regulations (CCR), Title 13, § 2449. |
| LOR GHG-2 | BIG shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings (CCR, Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (§ 110.10) require buildings to be designed to have 15 percent of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy. |
| LOR GHG-3 | <p>BIG shall be designed in accordance with the applicable CALGreen Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:</p> <ul style="list-style-type: none">▪ Design buildings to be water efficient. Install water-efficient fixtures in accordance with CALGreen Code, Part 11, § 5.303. |

- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with CALGreen Code, Part 11, § 5.408.1.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with CALGreen Code, Part 11, § 5.410.
- To facilitate future installation of electric vehicle supply equipment (EVSE), nonresidential construction shall comply with CALGreen Code, Part 11, § 5.106.5.3 (nonresidential EV charging).

Mitigation Measures

MM BIG AQ-3 through MM BIG AQ-5, MM BIG AQ-8 through MM BIG AQ-10, MM BIG EN-1 and MM BIG EN-2, and the following two measures are applicable.

MM BIG AQ-13 Electric Landscape Equipment. Prior to the issuance of occupancy permits, the implementing entity shall confirm that agreements for landscaping services include contractual language that all handheld landscaping equipment used on site shall be 100 percent electrically powered. This mitigation measure applies only to tenant permits and not the building shell approvals.

MM BIG AQ-14 Future EV Charging Infrastructure. Prior to the issuance of a building permit for transload warehouse facility tenant improvements, the implementing entity shall confirm that the BIG transload facility is designed to include the following:

- Prior to issuance of a Building Permit for the Shell Design, the buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed to supply power for the future installation of EV truck charging stations on the site. Conduit should be installed from the electrical room to tractor trailer parking spaces in a logical location(s) on the site determined by the implementing entity during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available and the buildings are being served by trucks with electric-powered engines.
- The buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed in the future to supply power to trailers with TRUs during the loading/unloading of refrigerated goods, if required by future tenants who utilize cold storage. Conduit should be installed from the electrical room to the loading docks in a location determined by the tenant as the logical location(s) to receive trailers with TRUs.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **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, MM BIG EN-1, and MM BIG EN-2** are feasible and would reduce potential GHG emission impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding:

Construction. BIG construction would generate temporary construction GHG emissions associated with demolition, grading, and construction. With implementation of **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**, **MM BIG EN-1**, and **MM BIG EN-2**, BIG exhaust emissions from construction equipment would be reduced. Once construction is complete, the generation of these GHG emissions would cease. Impacts would be less than significant.

Operations. Operational emissions would occur from rail yard equipment, locomotives, a small number of heavy-duty trucks, and building energy use. In addition to operational GHG emissions, BIG is designed to eliminate thousands of truck trips a day from the nation's roads and highways. BIG would enhance regional goods movement efficiency and would reduce environmental impacts from regional truck and train traffic in furtherance of the State Rail Plan. Because of these direct GHG emissions reductions, BIG would result in a net GHG emissions reduction under the unmitigated BIG condition for each of the analysis years. Mitigation to reduce GHG emissions is not required. However, BIG would implement the following mitigation to reduce impacts related to air quality and energy: **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**, **MM BIG EN-1**, and **MM BIG EN-2**. Impacts would be less than significant.

Cumulative Impacts (Impact 5-8). The additive effect of BIG-related GHG emissions would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. BIG would provide critical supply chain efficiencies that would reduce GHG emissions in the South Coast AQMD by removing approximately 800,000 truck trips per year (hundreds of millions of truck miles traveled each year) from regional roadways, converting those container moves from truck trips to train trips, in furtherance of the State Rail Plan (BIG is noted in the State Rail Plan as the solution needed for goods movement in California). Also, BIG would not conflict with the RTP/SCS or the CARB Scoping Plan. BIG would be consistent with the State's long-term goal to achieve statewide carbon neutrality by 2045 through compliance with the strategies, plans, and policies in the 2022 Scoping Plan. BIG as well as other cumulative related projects would be subject to all applicable regulatory requirements, which would further reduce GHG emissions.

BIG includes using dedicated Tier 4 locomotives to transport cross-dock intermodal containers from the Ports to 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 and increasing the renewable diesel composition within the BNSF's existing Southern California fueling sites and use electric cargo handling equipment. Despite this, total unmitigated construction and operational emissions would result in a net increase in GHG in 2048. **MM BIG AQ-3**, **MM BIG AQ-4**, **MM BIG AQ-5**, **MM BIG AQ-8**, **MM BIG AQ-9**, **MM BIG AQ-10**, **MM BIG AQ-13**, **MM BIG AQ-14**, **MM BIG EN-1**, and **MM BIG EN-2** would reduce construction and operational emissions, and result in net negative GHG emissions for all study years. With mitigation, BIG would reduce GHG emissions below a net zero threshold, therefore, BIG would not make a cumulatively considerable contribution to significant cumulative GHG impacts.

Impact 5.8-2: Would the Project (BIG) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact 5-8: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding greenhouse gas emissions?

The EIR evaluated and concluded that BIG would potentially conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The EIR evaluated and concluded that BIG would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant and no mitigation is required. The EIR evaluated and concluded that BIG would implement the following mitigation measures to reduce impacts related to air quality and energy: **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, MM BIG EN-1, and MM BIG EN-2**. Impacts would be mitigated to a less than significant level.

Mitigation Measures

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, MM BIG EN-1, and MM BIG EN-2**.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **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, MM BIG EN-1, and MM BIG EN-2** are feasible and would reduce potential GHG emissions to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding: BIG would be consistent with Connect SoCal, the CARB Scoping Plan, and would be required to comply with existing regulations, including applicable measures from the proposed General Plan. BIG would implement **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, MM BIG EN-1, and MM BIG EN-2** to reduce its contribution to GHG emissions and to ensure it does not conflict with or impede implementation of reduction goals identified in AB 32, SB 32, AB 1279, and other strategies to help reduce GHGs. BIG would be subject to all applicable regulatory requirements, which would also reduce BIG GHG emissions. Therefore, BIG would not conflict with any applicable plan, program, policy, or regulation related to the reduction of GHG emissions. BIG would not impede implementation of the Scoping Plan, or conflict with the policies of the Scoping Plan or any other GHG reduction plan.

Cumulative Impacts (Impact 5-8). With mitigation, BIG would reduce GHG emissions below a net zero threshold, therefore, BIG would not make a cumulatively considerable contribution to significant cumulative GHG impacts resulting in conflicts with applicable plans, policies, or regulations.

EIR SECTION 5.9: HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE - BIG

Impact 5.9-1: Would the Project (BIG) create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact 5-9: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding hazards and hazardous materials?

The EIR evaluated and concluded that BIG construction could result in temporary significant impacts regarding hazards to the public or environment from routine transport, use, or disposal of hazardous materials. With the implementation of **MM BIG HAZ-1**, potentially significant impacts would be reduced to a less than significant level.

Mitigation Measures

MM BIG HAZ-1 Limited Soil Management Plan. Prior to construction commencement, the implementing entity shall retain a qualified environmental consultant to prepare a Limited Soil Management Plan (SMP) for only areas considered as RECs within the BIG footprint. The SMP shall establish procedures for identification and management of impacted and clean soil, segregation, and management of impacted soil in accordance with regulatory requirements, transportation of impacted soil to an off-site disposal facility licensed to accept such soil, and identification and management of construction debris during excavation, grading, and construction activities to be completed within the BIG footprint. The SMP shall be submitted to the City of Barstow Building and Safety Division for review and approval. The SMP shall include the following:

- Procedures for identification, handling, reporting, and removal of the known or unknown ASTs/USTs, piping, dispensers, or other storage tank components that may be encountered (see MM BIG HAZ-3).
- Health and safety measures for when performing demolition, grading, or other construction activities, which may include but are not limited to, personal protective equipment and periodic work breathing zone monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. This will be documented through a health and safety plan as it pertains to on-site workers that may come in contact with contaminated soil.
- The limited SMP shall be prepared and executed for point source areas based on the Phase I and II ESA reports, which define soil, soil vapor, and groundwater impacts throughout the BIG footprint. The limited SMP shall require the timely testing and sampling of soils so that contaminated soils can be separated from inert soils for proper disposal versus reused on the site. The limited SMP shall specify the testing parameters and sampling frequency as well as transportation and disposal requirements. If groundwater is anticipated to be encountered within collocated areas of the limited SMP, then provisions for groundwater management shall be considered within the limited SMP.

- During BIG construction, the implementing entity's contractor shall remove and properly dispose of impacted materials in accordance with the provisions of the limited SMP. If soil is stockpiled prior to disposal, it will be managed in accordance with the SMP and BIG's Storm Water Pollution Prevention Plan, prior to its transfer for treatment and/or disposal.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG HAZ-1** is feasible and would reduce potential hazards, hazardous materials, and wildfire impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding:

Construction. BIG construction activities would require temporary transport (e.g., waste oils), use (e.g., cleaning solvents), and disposal of hazardous materials and wastes (HMW). Although BIG construction would involve the temporary handling of HMW, when HMW are properly used, transported, stored, and disposed of according to the manufacturers' guidelines and regulatory agency regulations, they present no substantial hazard to the community. Following compliance with the regulatory framework and with implementation of **MM BIG HAZ-1**, BIG construction activities would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of HMW. With implementation of **MM BIG HAZ-1**, BIG's potentially significant construction impacts related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of HMW would have a less than significant impact.

Operations. BIG operations would involve the routine transport, use, and disposal of HMW that could create a significant hazard to the public or the environment. This includes transport of HMW via rail, the transport of HMW via heavy duty truck, the use and generation of HMW during maintenance, HMW disposal, and the increased use of commercially available potentially HMW through the solar farm.

Long-term HMW storage and use (e.g., routine use and disposal of HMW during BIG operations and maintenance) would be governed by federal, State, and local regulations that prescribe the proper use, storage, and disposal of such materials. BIG would be required to prepare a California HMW business plan, which would specify requirements for material inventory management, inspections, training, recordkeeping, and reporting. Following compliance with the established regulatory framework and existing BNSF policies and procedures such as the BNSF Response Plan, BIG operations (including maintenance activities) would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant and no mitigation is required.

Cumulative Impacts (Impact 5-9). Typically, impacts associated with hazardous materials are localized in nature and do not combine with other cumulative projects to create a cumulative impact. The cumulative projects would be subject to the same regulatory framework as BIG and would be evaluated on a project-by-project basis. Therefore, no cumulative construction or operational hazardous materials impact would occur.

Impact 5.9-2: Would the Project (BIG) create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact 5-9: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding hazards and hazardous materials?

The EIR evaluated and concluded that BIG construction could create a potentially significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. With the implementation of **MM BIG AQ-1**, **MM BIG HAZ-1**, **MM BIG HAZ-2**, **MM BIG HAZ-3**, and **MM BIG HAZ-4**, BIG's potentially significant hazard impacts would be reduced to a less than significant level.

Mitigation Measures

See **MM BIG AQ-1** and **MM BIG HAZ-1**, and the following measures.

MM BIG HAZ-2 Water Well Abandonment. The intent for water well abandonment is to ensure that wells associated with the former residential operations within BIG are properly sealed and abandoned.

Well abandonment or reuse treatment will require adherence to State RWQCB and regional Certified Unified Program Agency (CUPA) guidelines for well abandonment if wells are not planned to be used for future development.

MM BIG HAZ-3 AST or UST Removal. AST and UST removal is intended to provide specific sampling and removal procedures for AST/USTs known or unknown at the start of construction. Prior to demolition permit issuance, the implementing entity shall demonstrate to the Barstow Department of Building and Safety and San Bernardino County Fire Protection District Hazardous Materials Division (CUPA) that a licensed contractor authorized to remove the above ground/USTs has been retained. The ASTs/USTs shall include the required permitting, soil sampling testing, and reporting the CUPA. If soil contamination exists, then impacted soils shall be removed and handled properly according to the Limited Soil Management Plan (see MM BIG HAZ-1). If previously unidentified USTs and/or ASTs are discovered during demolition or any ground disturbing activities, all construction within a 30-foot radius exclusion zone of the unidentified USTs and/or ASTs shall stop work. Implementation of proper permitting, cleaning, sampling, and reporting as described above shall be completed.

MM BIG HAZ-4 Data Gaps Requiring Further Environmental Site Assessment. Prior to the issuance of a grading permit, the Applicant shall conduct assessment in accordance with ASTM standards to address potential environmental concerns identified at PEC sites identified within the BIG footprint. Documentation shall include clearance or other forms of approval from responsible regulatory agencies, as warranted, confirming that the site conditions are suitable for the intended use and that any potential risks have been mitigated to a level that is safe for construction and future occupancy.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid

potentially significant impacts. The City Council finds that **MM BIG HAZ-1** through **MM BIG HAZ-4** are feasible and would reduce potential hazards and hazardous materials impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding:

Construction. With respect to the potential for groundwater contamination, groundwater is not expected to be encountered during construction because the proposed grading cuts are not anticipated to reach the existing groundwater table levels. Building and rail construction would not require transporting, storing, or disposing of HMW in quantities greater than needed to support construction activities, thereby minimizing potential exposure of the public, workers, and the environment. Inadvertent releases or spills could occur from the improper storage HMW, improper handling of HMW, accidents, seismic activity, or inclement weather and have the potential to result in direct and temporary effects. Direct and temporary effects from the inadvertent release of HMW could occur.

Construction would involve the demolition, dismantling, and removal of all on-site existing land uses and associated structures and infrastructure which could expose workers to HMW. Construction activities would also include grading. There are 73 properties within the environmental concerns study area that were identified as RECs (recognized environmental conditions).

Although construction BMPs would be designed and implemented to prevent the release of hazardous materials into the environment, lateral and horizontal delineation and removal of the RECs would still be required. **MM BIG AQ-1** requires daily watering of exposed soil and roads to further prevent the release of fugitive dust during construction. **MM BIG HAZ-1** requires implementation of a Soil Management Plan (SMP) to delineate any contamination in soil prior to and during grading activities, including provisions for responding to the disturbance of undocumented contamination. If soil, groundwater, or other environmental media with suspected contamination is encountered unexpectedly during construction (i.e., identified by odor or visual staining, or by unearthing any underground storage tanks [USTs], or abandoned drums), work would immediately cease in the vicinity of the suspect materials. The area would be secured as necessary, and all appropriate measures would be taken to protect human health and the environment. Appropriate measures include notifying regulatory agencies and complying with the various agencies' laws, regulations, and policies.

MM BIG HAZ-3 includes sampling, cleaning, permitting, and handling of potential on-site hazardous materials storage if USTs are discovered during construction. Demolition permits include measures for the safe dismantling and removal of building components and debris, and to prevent the accidental release of lead and asbestos, thereby protecting workers and the public from potential exposure to HMW during demolition. **MM BIG HAZ-4** requires the Applicant to conduct assessment of any Potential Environmental Concern (PEC) sites. With implementation of **MM BIG AQ-1**, **MM BIG HAZ-1**, **MM BIG HAZ-2**, **MM BIG HAZ-3**, and **MM BIG HAZ-4**, BIG's potentially significant construction hazards and hazardous materials impacts would have a less than significant impact.

Operations. 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. BNSF would be required to prepare a hazardous material business plan for BIG's rail yard, transload warehouse center, and solar farm pursuant to California Health and Safety Code (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. 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. BIG's operations would not create a potentially significant hazard to the public or the environment through reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment, and impacts would be less than significant with the implementation of **MM BIG AQ-1**, **MM BIG HAZ-1**, **MM BIG HAZ-2**, **MM BIG HAZ-3**, and **MM BIG HAZ-4**. With implementation of **MM BIG AQ-1**, **MM BIG HAZ-1**, **MM BIG HAZ-2**, **MM BIG HAZ-3**, and **MM BIG HAZ-4**, BIG's potentially significant operational hazards and hazardous materials impacts would have a less than significant impact.

Cumulative Impacts (Impact 5-9). Typically, impacts associated with hazardous materials are localized in nature and do not combine with other cumulative projects to create a cumulative impact. The cumulative projects would be subject to the same regulatory framework as BIG and would be evaluated on a project-by-project basis. Therefore, no cumulative construction or operational hazardous materials impact would occur.

Impact 5.9-3: Would the Project (BIG) emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact 5-9: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding hazards and hazardous materials?

The EIR evaluated and concluded that BIG construction activities would occur within 0.25-mile of a school. Although BIG would handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school, there would be no increase in risk over existing conditions. With the implementation of **MM BIG HAZ-1**, **MM BIG HAZ-2**, and **MM BIG HAZ-3**, potentially significant hazardous impacts to schools within 0.25-mile of BIG site would be reduced to a less than significant level.

Mitigation Measures

See **MM BIG HAZ-1**, **MM BIG HAZ-2**, and **MM BIG HAZ-3**.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG HAZ-1** through **MM BIG HAZ-3** are feasible and would reduce potential hazardous materials impacts to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding:

Construction. Materials potentially containing HMW commonly used in construction (e.g., compressed gases, oils and lubricants, fuels and additives, paints and varnishes, adhesives, and glues) would be used during BIG construction activities. Demolition of existing structures and earthwork within the BIG footprint could result in the release of contaminants (i.e., soil contaminated by heavy metals, lead,

herbicides, PCBs, asbestos, creosote, and arsenic). Lenwood Elementary School is approximately 0.15 miles from the BIG east lead track. East lead track construction would include clearing and grubbing, bridge crossing construction, ballast placement, track laying, and connection to the mainline.

PRC § 21151.4 states that “an environmental impact report shall not be certified or a negative declaration shall not be approved for any project involving the construction or alteration of a facility within 0.25 mile of a school that might reasonably be anticipated to emit hazardous air emissions, or that would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the State threshold quantity specified pursuant to CHSC § 25532 subdivision (j), that may pose a health or safety hazard to persons who would attend or would be employed at the school, unless both of the following occur: (1) The lead agency preparing the environmental impact report or negative declaration has consulted with the school district having jurisdiction regarding the potential impact of the project on the school, and (2) The school district has been given written notification of the project not less than 30 days prior to the proposed certification of the environmental impact report or approval of the negative declaration.” The criteria have been met. Impacts would be less than significant and no mitigation is required related to construction activities.

Operations. BIG operations would not involve the storage or handling of acute HMW within 0.25-mile of a school. BIG’s proposed solar farm would not be located within 0.25-mile of Lenwood Elementary School. Freight trains carrying HMW would use BIG’s tracks. These trains would travel immediately adjacent to the existing BNSF track position but would be 90 feet closer to Lenwood Elementary compared to the existing BNSF tracks and would increase the risk of HMW transport and use. Any handling of hazardous substances would be conducted in compliance with existing regulations of several agencies, including the U.S. EPA, the U.S. Department of Transportation, Cal/OSHA, and SBC Fire. Existing BNSF rail safety precautions and requirements minimize potential derailments and spills of HMW. Although BIG would handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school, there would be no increase in risk over existing conditions. Impacts would be less than significant with implementation of **MM BIG HAZ-1**, **BIG HAZ-2**, and **BIG HAZ-3**. With implementation of **MM BIG HAZ-1**, **BIG HAZ-2**, and **BIG HAZ-3**, BIG’s potentially significant operational impacts related to possible emissions of hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school would have a less than significant impact.

Cumulative Impacts (Impact 5-9). Cumulative development could occur within 0.25-mile of an existing or proposed school and would be evaluated on a project-specific basis. Because BIG’s potential impacts would be mitigated to less than significant level, BIG would not contribute to potential cumulative impacts to schools.

Impact 5.9-4: Would the Project (BIG) be located on a site which is included on a list of hazardous materials sites compiled pursuant to CGC § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact 5-9: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding hazards and hazardous materials?

The EIR evaluated and identified one open and three closed Cortese sites within the BIG footprint. Construction and operation of BIG in proximity to the three closed Cortese sites would not create a

significant hazard to the public or the environment given these sites have been sufficiently remediated to the satisfaction of the relevant regulatory agencies. With the implementation of **MM BIG HAZ-2**, which requires adherence to State RWQCB and regional CUPA guidelines for well abandonment or additional sampling and well head treatment prior to any reuse associated with BIG, potentially significant construction and operations impacts to the public or the environment would be reduced to a less than significant level.

Mitigation Measures

See **MM BIG HAZ-2**.

Finding: Pursuant to PRC § 21081(a)(1) and State CEQA Guidelines § 15091(a)(1), the City Council adopts CEQA Finding 1, noting that changes or alterations have been incorporated into BIG to mitigate or avoid potentially significant impacts. The City Council finds that **MM BIG HAZ-2** is feasible and would reduce any potential significant hazard to the public or the environment to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City.

Basis for Finding: Active Cortese sites are sites with known or potentially HMW releases that are not yet considered resolved or closed. Closed Cortese sites are sites with a prior HMW release which has been sufficiently remediated to the satisfaction of the relevant regulatory agencies. Closed Cortese sites are typically not considered an environmental issue given the HMW contamination has been removed.

Of the 25 Cortese sites identified, 21 closed Cortese sites are within the environmental concerns study area but are associated with properties outside of the BIG footprint. Of the remaining four sites, one open and three closed sites are located within the BIG footprint. Construction and operation of BIG in proximity to the three closed Cortese sites would not create a significant hazard to the public or the environment given these sites have been sufficiently remediated to the satisfaction of the relevant regulatory agencies. The open Cortese site within the BIG footprint is listed as N&M Dairy, which is located north of BIG's west lead track improvements. The open Corrective Action Order (CAO) in association with N&M Dairy is an environmental concern and is considered a recognized environmental concern. Once the CAO is terminated and considered closed, the property would not be considered a historical recognized environmental concern. With implementation of **MM BIG HAZ-2**, which requires adherence to State RWQCB and regional CUPA guidelines for well abandonment or additional sampling and well head treatment prior to any reuse associated with BIG, BIG construction and operations would not create a significant hazard to the public or the environment. With implementation of **MM BIG HAZ-2**, BIG's potentially significant construction and operational impacts related to significant hazard to the public or the environment would have a less than significant impact.

Cumulative Impacts (Impact 5-9). Typically, impacts associated with hazardous materials are localized in nature and do not combine with other cumulative projects to create a cumulative impact. The cumulative projects would be subject to the same regulatory framework as BIG and would be evaluated on a project-by-project basis. Therefore, no cumulative construction or operational hazardous materials impact would occur.

5.4 Findings on Significant Environmental Impacts that are “Significant and Unavoidable”

The following summary describes the impacts of the Project that would result in substantial adverse impacts on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

CEQA Guidelines § 15364 defines feasible as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” This definition is relevant to the development of mitigation measures, given CEQA’s requirement to “describe feasible measures which could minimize significant adverse impacts” (State CEQA Guidelines § 15126.4(a)(1)). Mitigation measures are also required to be consistent with applicable constitutional requirements, including being “roughly proportional” to the impacts and legal for the Lead Agency to impose (State CEQA Guidelines § 15126.4(a)(4)(5)). Feasibility under CEQA has a temporal element: feasible measures are those that can be implemented “within a reasonable period of time,” taking into account economic, technological, and other factors (State CEQA Guidelines § 15364).

Under CEQA, a mitigation measure may be found infeasible on economic grounds. (PRC § 21081(a)(3); State CEQA Guidelines, § 15091(a)(3).) Findings of economic infeasibility must be supported by relevant economic evidence. Evidence of costs alone is insufficient; rather, it is the magnitude of the marginal costs that determines the feasibility of the mitigation measure. Marginal costs should be so great that a project is rendered impractical and a reasonably prudent person would not proceed with the project. While confidential applicant financial data information need not be provided, cost information must be sufficiently detailed to allow a court to make a comparison. Courts have not established a brightline rule about how much evidence is sufficient to determine economic infeasibility.

Feasibility is relevant to Findings of Fact. In these findings, the agency must find that “specific economic, legal, social, technical, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures” identified in the Final EIR (State CEQA Guidelines § 15091(a)(3)); referred herein as Finding 3.

Proposed General Plan

EIR SECTION 5.1: AESTHETICS – PROPOSED GENERAL PLAN

Impact 5.1-3: Would the Project (Proposed General Plan), in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact 5-1: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding aesthetics?

The EIR evaluated and concluded that the proposed General Plan would allow development that would cause significant changes to the visual character in the General Plan area. The EIR concluded no mitigation measures are feasible and impacts would remain significant and unavoidable.

Mitigation Measures

No feasible mitigation measures.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that reasonably foreseeable future development under the proposed General Plan, including BIG, would introduce more urban structures and infrastructure, resulting in a permanent change to the visual character of the area and its surroundings. There are no feasible mitigation measures or alternatives that would reduce this impact to a less than significant level. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. No feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: The visual character of Barstow includes the desert and mountain landscapes, as well as rural and suburban neighborhoods. Future development in accordance with the proposed General Plan would allow for new development of currently undeveloped parcels, intensification of already developed areas, and changes in land uses within the proposed General Plan area. While it is recognized that the intent of the City's review process, design guidelines, and the proposed General Plan policies would be to reduce or preclude potential aesthetic impacts from the implementation of future land uses associated with the proposed General Plan, there is the potential for projects, including infrastructure improvements to have significant changes to the visual character of the proposed General Plan area. In the analysis for the site-specific development of BIG, which is a part of the Project, it is noted that BIG and other reasonably foreseeable future development under the proposed General Plan would introduce more urban structures and infrastructure, resulting in a permanent change to the visual character of the site and its surroundings. BIG would substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, the visual change in the character of the proposed General Plan area is a significant and unavoidable impact.

Cumulative Impacts (Impact 5-1). Buildout of the proposed General Plan combined with other growth and development that could occur within the County could contribute to a significant impact relative to aesthetics and nighttime views. Cumulative impacts would remain significant and unavoidable.

Impact 5.1-4: Would the Project (Proposed General Plan) create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Impact 5-1: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding aesthetics?

The EIR evaluated and concluded that the proposed General Plan would allow development that would create a new source of substantial light that would adversely affect nighttime views in the area. Despite the implementation of **MM BIG AES-1**, impacts associated with the change in light and glare, impacts would remain significant and unavoidable.

Mitigation Measures

MM BIG AES-1 Construction Lighting and Screening Plan. Prior to any BIG Specific Plan area site clearance or grading activity, the implementing entity shall prepare a Construction Lighting and Screening Plan (CLSP), which shall be submitted to the City of Barstow Planning Department for review and approval. The City shall review the CLSP to verify that it identifies for the construction phase, lighting practices and systems (e.g., shielded and directional lighting oriented toward work areas and to avoid light trespass onto residential or other sensitive receptor properties) that minimize light pollution, glare, and light trespass, while maintaining nighttime safety, visibility, utility, and productivity pursuant to the following:

- Barstow Code § 19.06.010(e) - Light Trespass and Control of Glare concerning trespass of light onto adjacent properties/light-sensitive uses. (e.g., maximum brightness values not to be exceeded by artificial bulbs, screening around BIG footprint to limit light and glare, use of non-reflective glass, etc.), and prohibiting aiming, directing, and focusing to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways. Use of 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).
- Use remote monitoring systems or other methods to ensure security of the construction site outside of construction hours.

CLSP shall also include specifications requiring that temporary construction fencing be installed along the BIG Specific Plan construction areas where adjacent to residences to screen views of construction activity and promote safety. Construction fencing shall be up to the height permitted by Barstow Code Section 19.18.060 (i.e., 8.0 feet), and include a privacy screen to provide as a safeguard from the surrounding environment, prevent trespassers from entering.

MM BIG AES-1 is applicable. No additional measures were found feasible. Eliminating exterior lighting is infeasible, as it would compromise safety by reducing visibility and hindering secure movement and urban operations during nighttime hours. Similarly, development at very low densities would reduce nighttime lighting impacts but would increase vehicle miles traveled, substantially raise the cost of infrastructure (e.g., roads, sewer, and water lines), and increase the cost of providing public services such as police and fire protection. Low and very low-density development would also contribute to sprawl and conflict with the City's objective of maintaining a compact urban form. Therefore, reducing development intensity is not a feasible mitigation measure. While compliance with the Barstow Code for Outdoor Lighting would reduce light trespass and glare, the amount of lighting necessary to support proposed development, particularly in higher-density areas, would still result in significant impacts on nighttime visibility.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with compliance with the Barstow Code and incorporation of **MM BIG AES-1**, lighting would be visible in areas that are currently not lit, and there would be a significant increase in lighting when compared to existing conditions. Further, because BIG is a component of the Project, due to the duration of construction including nighttime activities, BIG would result in significant and unavoidable impacts. As such, implementation of the proposed General Plan would result in significant and unavoidable lighting impacts during construction. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM BIG AES-1** is feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding:

Construction. Future development associated with the proposed General Plan would most often occur during daytime hours and would not require the use of lighting for construction activities. Where nighttime construction activities is required (e.g., 24-hour foundation pours, etc.), the use of outdoor lighting would be required and could include exterior lighting to illuminate work areas. Additionally, security lighting would typically be provided for the duration of construction of a project. Nighttime construction lighting would be limited to the construction site but would be noticeable from adjacent areas given the predominantly rural nature of the City and its surroundings. Because BIG is a component of the Project, due to the duration of construction including nighttime activities, BIG would result in significant and unavoidable impacts. Implementation of the proposed General Plan would result in significant and unavoidable lighting impacts during construction.

Operations. Future development would occur in areas designated for development and would allow for development of currently undeveloped parcels and alterations, intensification, and redesignation of land uses. The proposed land use changes would increase nighttime light and potential glare in the City and its Sphere of Influence, inclusive of BIG. While compliance with the Barstow Code and **MM GP AES-1** would reduce outdoor lighting impacts by minimizing trespass of light and directing light below the horizontal plane, lighting would be visible in areas that are currently not lit, and there would be a significant increase in lighting when compared to existing conditions. Even with the implementation of **MM GP AES-1**, impacts would remain significant and unavoidable.

Cumulative Impacts (Impact 5-1). Buildout of the proposed General Plan combined with other growth and development that could occur within the County could contribute to a significant impact relative to aesthetics and nighttime views. The proposed General Plan would result in a cumulatively considerable contribution to significant impacts relative to light and glare. Even with implementation of **MM BIG AES-1**, cumulative impacts would remain significant and unavoidable.

EIR SECTION 5.2: AGRICULTURE AND FORESTRY RESOURCES – PROPOSED GENERAL PLAN

Impact 5.2-1: Would the Project (Proposed General Plan) convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact 5-2: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding agriculture and forestry resources?

The EIR evaluated and concluded that the proposed General Plan would allow development that would result in the conversion of farmland to non-agricultural uses and contribute to the loss of agricultural production in the proposed General Plan area. Despite the implementation of **MM GP AG-1**, impacts to the loss of farmland would remain significant and unavoidable.

Mitigation Measures

MM GP AG-1 Prior to approval of any development permit on land considered Prime Farmland, Farmland of Statewide Importance, and Unique Farmlands, the City shall require the following:

1. Future development shall first seek to avoid developing on land classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland.
2. Completion of the California Department of Conservation Land Evaluation & Site Assessment Model. If the model score is 39 points or less, conversion of the land is not significant, and no further mitigation is required. If the model score is between 40 and 79 points, conversion of the land to urban uses may be significant but will depend on the results of the model. A LESA model score of 80 or greater identifies the conversion as significant.
3. If the LESA model results determine that conversion of the agricultural land to urban uses is a significant impact, the development shall be conditioned to provide either an agricultural easement on existing farmland with a similar or greater LESA model score, or the creation of new agricultural land and easement at a 1:1 ratio.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP AG-1**, the proposed General Plan would result in significant and unavoidable impacts associated with the conversion of agricultural land to non-agricultural use. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP AG-1** is feasible and would reduce potential

significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: The proposed General Plan would result in a significant and unavoidable impact concerning the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (important farmland) to non-agricultural use. This farmland represents approximately 2,000 acres (approximately 1.5 percent) of the approximately 127,160 total acres in the proposed General Plan area. Most of the approximately 2,000 acres is currently surrounded by vacant land. These lands have the potential to be developed due to their General Plan land use designations (General Industrial, Estate Residential, Public/Quasi-Public, etc.). The City evaluated all feasible mitigation that could avoid or lessen the potentially significant impact associated with the conversion of farmland to non-agricultural use. For the mitigation strategies listed in **MM GP AG-1**, including avoidance, preparation of a LESA model, adding an agricultural easement over existing land uses, or the creation of new agricultural land, compliance with this mitigation measure could reduce or lessen the potentially significant impact; it would not eliminate the direct loss of important farmlands associated with the implementation of the proposed General Plan, and the associated loss of agricultural production. The proposed General Plan would result in a significant and unavoidable impact even with implementation of **MM GP AG-1**.

Cumulative impacts (Impact 5-2). While avoidance or the use of agricultural easements could reduce potential impacts associated with conversion, if development does occur on agricultural lands, it would not reduce all potentially significant impacts. The loss of these farmland types under the proposed General Plan would be permanent and therefore, would be significant and unavoidable. Continued growth within the County under the CWP has the potential to result in direct and indirect loss of farmland over the planning horizon, thus resulting in a cumulative impact when combined with the proposed General Plan. Due to the proposed General Plan's significant and unavoidable impacts associated with farmland conversion, the proposed General Plan's impacts would constitute a cumulatively considerable contribution to overall farmland losses in the County. Cumulative impacts would be significant and unavoidable.

Impact 5.2-2: Would the Project (Proposed General Plan) conflict with existing zoning for agricultural use, or a Williamson Act contract?

Impact 5-2: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding agriculture and forestry resources?

The EIR evaluated and concluded that the proposed General Plan would allow development that would result in rezoning land designated agricultural to non-agricultural uses, and therefore, would conflict with existing zoning for agricultural uses. The EIR concluded no mitigation measures are feasible and impacts would remain significant and unavoidable.

Mitigation Measures

No feasible mitigation measures.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that existing County zoning for agricultural use and annexation would result in conversion to a non-agricultural use, and thus

conflict with existing zoning for agricultural use. There are no feasible mitigation measures or alternatives that would reduce this impact to a less than significant level. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts.

Basis for Finding: There are no Williamson Act contracts within the City limits; however, there are several Williamson Act contracts in the City's SOI. The proposed General Plan area does not include any active Williamson Act contracts that would be annexed into the City; therefore, no conflict would occur and impacts would be less than significant. However, the proposed General Plan uses would conflict with the existing County zoning for agricultural use and annexation would result in conversion to a non-agricultural use. The annexation under SBLAFCO Action A would convert existing County zoning for agricultural use to BIG Specific Plan. Due to limited existing agricultural resources in the City and surrounding area, including agricultural easement programs, there are no feasible mitigation measures that could be applied to fully address the actual loss of the agricultural resource. Therefore, the proposed General Plan would conflict with existing zoning for agricultural use and result in a significant and unavoidable impact.

Cumulative Impacts (Impact 5-2). Continued growth within the County under the CWP has the potential to result in direct and indirect loss of farmland over the planning horizon, thus resulting in a cumulative impact when combined with the proposed General Plan. Due to the proposed General Plan's significant and unavoidable impacts associated with farmland conversion, the proposed General Plan's impacts would constitute a cumulatively considerable contribution to overall farmland losses in the County. Cumulative impacts would be significant and unavoidable.

EIR SECTION 5.3: AIR QUALITY – PROPOSED GENERAL PLAN

Impact 5.3-1: Would the Project (Proposed General Plan) conflict with or obstruct implementation of the applicable air quality plan?

Impact 5-3: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding air quality?

The EIR evaluated and concluded that the proposed General Plan would allow development that would conflict with the Mojave Desert Air Quality Management District's (MDAQMD) Air Quality Management Plan (AQMP). Despite the implementation of **MM GP AQ-1** and **MM GP AQ-2**, impacts associated with conflicts to the MDAQMD AQMP would remain significant and unavoidable.

Mitigation Measures

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. 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 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-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.
- q. 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.

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 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 Class 8) on site, 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.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP AQ-1** and **MM GP AQ-2**, implementation of the various goals and policies of the proposed General Plan and compliance with all applicable MDAQMD rules and regulations, the magnitude and intensity of development accommodated by the proposed General Plan would conflict with the MDAQMD's AQMP. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP AQ-1** and **MM GP AQ-2** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible

mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: Per the MDAQMD CEQA and Federal Conformity Guidelines (2020), a project is nonconforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan (Criterion 1). A project is conforming if it complies with applicable air district rules and regulations, complies with proposed control measures, and is consistent with the growth forecasts in the applicable plan (Criterion 2). The proposed General Plan is considered to be inconsistent with both Criterion 1 and Criterion 2. Therefore, the proposed General Plan is considered to conflict with the AQMP despite the additional policies in the General Plan and would result in a potentially significant impact prior to any mitigation. **MM GP AQ-1** and **MM GP AQ-2** would reduce emissions to the extent feasible. The various goals and policies of the proposed General Plan, in addition to applicable MDAQMD rules and regulations, would contribute to reducing regional criteria air pollutant during construction and operational phases of development projects. Due to the magnitude and intensity of development accommodated by the proposed General Plan, impacts would remain significant and unavoidable even with implementation of **MM GP AQ-1** and **MM GP AQ-2**.

Cumulative Impacts (Impact 5-3). Emissions generated by cumulative development in addition to existing sources in the General Plan area are considered to cumulatively contribute to the nonattainment designations of the MDAB. Development allowed under the proposed General Plan could contribute to an increase in frequency or severity of air quality violations and delay attainment of the ambient air quality standards (AAQS) or interim emission reductions in an AQMP. Therefore, the proposed General Plan would conflict with the AQMP.

Application of State and MDAQMD rules and regulations and implementation of the proposed General Plan goals, policies, and actions would contribute to reducing construction- and operation-related criteria air pollutants generated from energy, area, and mobile sources to the extent feasible. The implementation of **MM GP AQ-1** and **MM GP AQ-2** would also contribute to reducing criteria air pollutants. Implementation of these rules, goals and policies, and mitigation could contribute to reducing construction- and operation-phase regional air quality impacts of future individual projects to a less than significant level. Criteria pollutant impacts are highly localized; therefore, cumulative impacts would only occur where new development occurred proximate to each other. The proposed General Plan would result in a cumulatively considerable contribution to criteria pollutant emissions, non-attainment within the MDAB and regarding Air Quality Plan Compliance. Cumulative impacts would be significant and unavoidable. Despite the implementation of mitigation measures, cumulative impacts would remain significant and unavoidable.

Impact 5.3-2: Would the Project (Proposed General Plan) 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?

Impact 5-3: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding air quality?

The EIR evaluated and concluded that construction and operational activities of development permitted under the proposed General Plan would exceed the MDAQMD's air quality emissions thresholds and result in a net increase of criteria pollutants for which the region is in non-attainment under applicable federal

or State Ambient Air Quality Standards (AAQS). Despite the implementation of **MM GP AQ-1** and **MM GP AQ-2**, impacts associated with a cumulatively considerable increase in criteria pollution levels would remain significant and unavoidable.

Mitigation Measures

See **MM GP AQ-1** and **MM GP AQ-2**.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP AQ-1** and **MM GP AQ-2**, application of State and MDAQMD rules and regulations, and implementation of the proposed General Plan goals, policies, and actions, construction and operational activities of development permitted under the proposed General Plan would exceed the MDAQMD's air quality emissions thresholds and result in a net increase of criteria pollutants for which the Project region is in non-attainment under applicable federal or State AAQS. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP AQ-1** and **MM GP AQ-2** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding:

Construction. Construction activities attributed to future development that could occur under the proposed General Plan could temporarily increase PM₁₀, PM_{2.5}, VOC, NO_x, SO_x, and CO regional emissions in the Mojave Desert Air Basin (MDAB). Though some individual projects under the proposed General Plan may not exceed the MDAQMD regional significance thresholds, the likely scale and extent of construction activities associated with future development projects under the proposed General Plan would likely exceed the relevant MDAQMD thresholds. Additionally, some future development projects could potentially exceed the MDAQMD regional significance thresholds on an individual basis. Application of State and MDAQMD rules and regulations, and implementation of the proposed General Plan goals, policies, and actions would contribute to reducing operation-related criteria air pollutants generated from energy, area, and mobile sources to the extent feasible. Implementation of **MM GP AQ-1** would also reduce criteria air pollutants during construction to the extent feasible. Implementation of the aforementioned rules and mitigation could reduce construction-phase regional air quality impacts of future individual projects to a less than significant level. However, due to the magnitude of the overall land use development associated with the proposed General Plan in addition to the uncertainty of the timing in their development and construction, construction impacts would remain significant and unavoidable even with implementation of **MM GP AQ-1** and **MM GP AQ-2**.

Operations. Application of State and MDAQMD rules and regulations and implementation of the proposed General Plan goals, policies, and actions would contribute to reducing operation-related criteria air pollutants generated from energy, area, and mobile sources to the extent feasible. **MM GP AQ-2**, which requires future development projects to assess air quality impacts associated with project operations, would also contribute to reducing criteria air pollutants. Implementation of these rules, goals and policies, and mitigation could contribute to reducing operation-phase regional air quality impacts of future individual projects to a less than significant level. Due to the magnitude of the overall land use

development associated with the proposed General Plan, long-term operational impacts would remain significant and unavoidable.

Cumulative Impacts (Impact 5-3). Emissions generated by cumulative development in addition to existing sources in the General Plan area are considered to cumulatively contribute to the nonattainment designations of the MDAB. Development allowed under the proposed General Plan could contribute to an increase in frequency or severity of air quality violations. Application of State and MDAQMD rules and regulations and implementation of the proposed General Plan goals, policies, and actions would contribute to reducing construction-and operation-related criteria air pollutants generated from energy, area, and mobile sources to the extent feasible. The implementation of **MM GP AQ-1** and **MM GP AQ-2** would also contribute to reducing criteria air pollutants. Implementation of these rules, goals and policies, and mitigation could contribute to reducing construction- and operation-phase regional air quality impacts of future individual projects to a less than significant level. However, the General Plan would result in significant air quality impacts relative to criteria pollutants and, in turn, air quality plan compliance. Criteria pollutant impacts are highly localized; therefore, cumulative impacts would only occur where new development occurred proximate to each other. Therefore, the proposed General Plan would result in a cumulatively considerable contribution to criteria pollutant emissions. Cumulative impacts would be significant and unavoidable.

Impact 5.3-3: Would the Project (Proposed General Plan) expose sensitive receptors to substantial pollutant concentrations?

Impact 5-3: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding air quality?

The EIR evaluated and concluded that development facilitated by the proposed General Plan could expose sensitive receptors to substantial concentrations of Toxic Air Contaminants (TAC) and result in the siting of new sources of TACs near existing or planned sensitive receptors. Despite the implementation of **MM GP AQ-3**, impacts to sensitive receptors from pollution concentrations would remain significant and unavoidable.

Mitigation Measures

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.

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 the thresholds identified by MDAQMD above (i.e., cancer risk of 10E-06 or noncancer hazard index of 1.0), 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.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP AQ-3** and review of development projects by MDAQMD for permitted sources of air toxics, development facilitated by the proposed General Plan could expose sensitive receptors to substantial concentrations of TACs and result in the siting of new sources of TACs near existing or planned sensitive receptors. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP AQ-3** is feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding:

CO Hot Spots. Areas of vehicle congestion have the potential to create pockets of carbon monoxide (CO) called hot spots. Implementation of the proposed General Plan would not have the potential to substantially increase CO hot spots at intersections in the vicinity of sensitive receptors in the proposed General Plan area, and impacts would be less than significant. Intersection conditions were analyzed based on cumulative traffic; therefore, the proposed General Plan would not result in cumulative CO hot spot impacts.

Toxic Air Contaminants (TACs). Various industrial and commercial processes (e.g., manufacturing, dry cleaning) allowed under the proposed General Plan would be expected to release TACs. Buildout of the proposed General Plan could expose sensitive receptors to substantial concentrations of TACs. The proposed General Plan could result in new sources of TACs near existing or planned sensitive receptors. Review of development projects by MDAQMD for permitted sources of air toxics (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure that health risks are minimized. Individual

development projects would be required to achieve the incremental risk thresholds established by MDAQMD to the extent feasible pursuant to **MM GP AQ-3**, and TACs would be less than significant. However, implementation of the proposed General Plan would generate TACs that could contribute to elevated levels in the MDAB. Though individual projects would achieve the project-level risk threshold of 10 per million, cumulatively they would contribute to the higher levels of cancer risk in the MDAB and, therefore, result in a cumulatively considerable impact. Therefore, the proposed Project's cumulative contribution to health risk is significant and unavoidable even with implementation of **MM GP AQ-3**.

Cumulative Impacts (Impact 5-3). Although individual projects would be unlikely to achieve the project-level risk threshold of 10 in one million, several projects built over the life of the proposed General Plan would nonetheless contribute to higher levels of cancer risk in the MDAB and therefore result in a cumulatively considerable impact. Projects that could exceed the 10 in one million threshold under construction or operational scenarios would require their own environmental analysis and consideration prior to approval. It is noted that the 10 in one million threshold is an incremental project-level threshold and not a cumulative threshold. Nonetheless, cumulative impacts are conservatively assumed to be significant and unavoidable, given multiple projects could be constructed and operated in close proximity to each other. Buildout of the proposed General Plan would be subject to **MM GP AQ-1** (construction emissions analysis), **MM GP AQ-2** (operational emissions analysis), and **MM GP AQ-3** (operational health risk assessment). Despite these mitigation measures, cumulative impacts would remain significant and unavoidable.

EIR SECTION 5.5: CULTURAL RESOURCES – PROPOSED GENERAL PLAN

Impact 5.5-1: Would the Project (Proposed General Plan) cause a substantial adverse change in the significance of a historical resource pursuant to § 15067.5?

Impact 5-5: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding cultural resources?

The EIR evaluated and concluded that the proposed General Plan would allow development would cause a substantial adverse change to significant historic resources. Despite the implementation of **MM GP CUL-1** through **MM GP CUL-4**, impacts to historical resources would remain significant and unavoidable.

Mitigation Measures

MM GP CUL-1 Assessment of Historic Built Environment Resources. Prior to any construction or demolition activities on the site of a federal, state, or local registered landmark or historic resource, a Historical Resources Assessment shall be prepared by an architectural historian or historian who meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in architectural history. This shall include a records search and the qualified architectural historian or their designee shall conduct a reconnaissance-level and/or intensive-level survey of the project site in accordance with the California Office of Historic Preservation (OHP) guidelines to identify and record any previously unrecorded historic structures that may be potentially affected by the proposed project.

To minimize the potential for projects requiring the relocation, rehabilitation, or alteration of a historical resource to adversely change the significance of a historical

resource, the proposed action on the site of a federal, state, or local registered landmark or historic resource must follow Secretary of the Interior's Standards for the Treatments of Historic Properties. The application of the standards shall be overseen by a qualified architectural historian or historic architect meeting Secretary of the Interior's PQS. Prior to any construction or demolition activities that may affect the historical resource, a report identifying and specifying the recommended treatment of the resource, any actions to preserve the resource's character-defining features, and recommended measures for pre-construction and construction phase actions shall be provided to the City of Barstow for review and approval. All final documentation shall be submitted to the City of Barstow and the South Central Coastal Information Center (SCCIC).

MM GP CUL-2 Treatment of Historic Built Environment Resources. If a proposed project on the site of a federal, state, or local registered landmark or historic resource would result in the demolition or significant alteration of a historical resource, then prior to any demolition or alteration, an architectural historian who meets the PQS, shall conduct additional recordation of the resource. Recordation shall take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation. The specific scope and details of documentation shall be developed at the project level but shall follow the standards for documentation as outlined in the Department of the Interior's Archaeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines, and the National Park Service Heritage Documentation Program guidelines for HABS/HAER/HALS. Final documentation shall be submitted to the City of Barstow, the Barstow Branch of the San Bernardino County Library, and the South Central Coastal Information Center (SCCIC).

MM GP CUL-3 Assessment of Archaeological Resources. For projects for which CEQA requires an environmental impact report, mitigated negative declaration, or negative declaration, and that are proposed in areas that have not been previously graded or disturbed by development, or would extend below the area previously disturbed, an Archaeological Resources Assessment shall be prepared, during environmental review and prior to project approval, by an archaeologist who meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in archaeology. The Assessment shall include a records search for the project area to determine if any archaeological resources have been previously recorded, evaluated, and/or listed, or recommended eligible for listing, in the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), and/or any local registers. Following the records search, the qualified archaeologist or their designee shall conduct a reconnaissance-level and/or intensive-level survey in accordance with the California Office of Historic Preservation (OHP) guidelines to identify and record any previously unrecorded archaeological resources that may be potentially affected by the proposed project. If tribal resources are discovered during the preparation of the Archaeological Resources Assessment, the City shall consult with the tribes on record as required by law. Following recordation, the archaeologist shall evaluate any identified resources for eligibility for listing in the NRHP, CRHR, and any local registers, as well as its potential as a historical resource and/or unique archaeological resource

under CEQA. Final documentation shall be submitted to the City of Barstow and the South-Central Coastal Information Center (SCCIC).

MM GP CUL- 4 Treatment of Archaeological Resources. If archaeological resources that are eligible for listing in the NRHP, CRHR, and/or local register are identified within or adjacent to a proposed development evaluated under GP CUL-3, the City shall consider the feasibility of avoidance, or preservation in place, of the resource. For resources that would be avoided and preserved in place, the site of the archaeological resource, plus a 50 foot buffer around the archaeological resource, shall be clearly flagged to identify the construction avoidance area and assure impacts to these resources are avoided during construction activities. Flagging may be completed using construction tape, caution tape, or installing fencing around the area, and off-limits signs may be placed near the area. Once areas are delineated, and prior to any ground disturbance, a qualified archaeologist shall verify that the flagging clearly delineates the avoidance area and construction limits. Since the location of some archaeological resources is confidential, these resources shall be flagged as environmentally sensitive areas (ESA). The qualified archaeologist or their designee shall be present to monitor any ground disturbing activity for any projects that have eligible archaeological resources. For any archaeological resources that cannot be avoided or preserved in place, the qualified archaeologist shall prepare a data recovery (i.e., excavation) plan that shall be submitted to the City for review and approval. The plan shall include methods for treatment of recovered resources, such as reburial or curation, that are appropriate for the specific project.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP CUL-1** through **MM GP CUL-4**, along with implementation of the proposed General Plan policies, impacts to historical resources as a result of implementation of the proposed General Plan would be significant and unavoidable. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP CUL-1** through **MM GP CUL-4** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: Historical resources, including archaeological resources, may be vulnerable to development activities accompanying infill, redevelopment, or revitalization that would be accommodated by the proposed General Plan. **MM GP CUL-1** through **MM GP CUL-4**, which require assessments to identify and evaluate resources that may be impacted during the environmental review stage of projects subject to CEQA, along with the implementation of the proposed General Plan policies, seek to reduce impacts to historical resources. Avoidance of some historical resources may not always be feasible, and requirements outlined in the mitigation measures and the proposed General Plan policies may not be sufficient in reducing significant impacts to historical resources to a less than significant level. Impacts to historical resources as a result of implementation of the proposed General Plan would be significant and unavoidable even with implementation of **MM GP CUL-1** through **MM GP CUL-4**.

Cumulative Impacts (Impact 5-5). The proposed General Plan would redesignate almost 1,200 acres of resource open space and approximately 1,500 acres of interim open space to urban land uses, thereby creating the potential for impacts on cultural resources in areas previously less likely to be disturbed. Future development under the proposed General Plan could impact historical resources through changes to access, visibility, vibration, visual context, renovations, or modifications, which could alter or destroy the characteristics that make potentially historic buildings significant. As buildings age, they may become eligible for historic designation during the proposed General Plan horizon and could be impacted by development in the future. Additionally, grading and intensive excavation that could occur as a result of future development could potentially disturb or unearth previously unknown archaeological resources or impact known sites. Despite implementation of the proposed General Plan policies and mitigation measures, the permanent loss or alteration of cultural resources is identified as a cumulatively considerable significant and unavoidable impact.

Impact 5.5-2: Would the Project (Proposed General Plan) cause a substantial adverse change in the significance of an archaeological resource pursuant to §15067.5?

Impact 5-5: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding cultural resources?

The EIR evaluated and concluded that the proposed General Plan would allow development would cause a substantial impact to significant archaeological resources. Despite the implementation of **MM GP CUL-3** and **MM GP CUL-4**, impacts to archaeological resources would remain significant and unavoidable.

Mitigation Measures

See **MM GP CUL-3** and **MM GP CUL-4**.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP CUL-3** and **MM GP CUL-4**, along with the implementation of the proposed General Plan policies, impacts to archaeological resources as a result of implementation of the proposed General Plan would be significant and unavoidable. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP CUL-1** through **MM GP CUL-4** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: Adoption of the proposed General Plan and associated long-term implementation could allow development, including grading of known and unknown sensitive areas. Grading and construction activities of undeveloped areas or redevelopment that require more intensive soil excavation than in the past could potentially cause the disturbance of archaeological resources. Future development under the proposed General Plan could cause a substantial adverse change in the significance of previously known or unknown archaeological resources. **MM GP CUL-3** and **MM GP CUL-4**, along with the implementation of the proposed General Plan policies, seek to reduce impacts to archaeological resources. Avoidance of some archaeological resources may not always be feasible and treatment requirements identified in **MM GP CUL-4** and the proposed General Plan policies may not be sufficient to reduce impacts to these

resources to a less than significant level. Impacts to archaeological resources would be significant and unavoidable even with implementation of **MM GP CUL-1** through **MM GP CUL-4**.

Cumulative Impacts (Impact 5-5). Under the cumulative condition, future development projects are expected to continue within the cumulative study area. Large portions of the cumulative study area are rural areas that have not been subject to development and are currently designated as open space. It is anticipated that undisturbed archaeological resources could be present in these largely undisturbed areas. In the more urban portion of the cumulative study area, where the landscape has been used historically, historic archaeological deposits can be expected to occur anywhere within that landscape in both disturbed and intact contexts. Due to the potential for substantial unknown resources to be present with the study area and the potential for new development to occur largely within previously undisturbed sites, cumulative impacts would result. Development under the proposed General Plan would constitute a cumulatively considerable impact on cultural resources throughout the study area. This cumulative impact is significant and unavoidable.

EIR SECTION 5.7: GEOLOGY, SOILS, AND MINERAL RESOURCES – PROPOSED GENERAL PLAN

Impact 5.7-10: Would the Project (Proposed General Plan) result in the loss of availability of a known mineral resource that would be of economic value to the region and the residents of the state?

Impact 5-7: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding geology and soils and mineral resources?

The EIR evaluated and concluded that the proposed General Plan would allow development that would result in the loss of availability of known aggregate mineral resources that would be of economic value. The EIR concluded that no feasible mitigation measures are available and impacts would remain significant and unavoidable.

Mitigation Measures

No feasible mitigation measures.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with the General Plan policies that permit the development of land classified as Mineral Resource Zone-2a (MRZ), MRZ 2b, or MRZ 3a in a manner that preserves future mining and encourages the use of on-site aggregate, development facilitated by the proposed General Plan would result in the loss of availability of known mineral resources. There are no feasible mitigation measures or alternatives that would reduce this impact to a less than significant level. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts.

Basis for Finding: The proposed General Plan area is primarily underlain by MRZ-3a lands, which are areas with moderate potential or possible location of aggregate resources. Development is likely to occur in areas that would impact MRZ-1 and MRZ-2b lands, thereby reducing the potential for mining of the resource. The only feasible mitigation would be to preclude development on these sites in order that extraction of the mineral(s) could occur in the future. While it is possible that a future General Plan

development could be redesigned to accommodate mineral extraction (most typically in an open-pit quarry), it is unlikely given the visual, dust, noise, heavy vehicle, and vibration impacts associated with such a land use. Precluding development within mineral resource zones is not a feasible mitigation and the impact would remain significant and unavoidable.

Cumulative Impacts (Impact 5-7). The region is rich with aggregate deposits, the loss of which over the course of buildout of urban uses under the proposed General Plan would be considered a significant and unavoidable impact. Other development that would occur throughout the County under the CWP could similarly result in a loss of mineral resources, as land is committed to various types of urban development, resulting in a cumulative loss of mineral resources across the County. The proposed General Plan would result in a cumulatively considerable impact to mineral resources. The only feasible mitigation would be to preclude development on important mineral resources sites in order that extraction of the mineral(s) could occur in the future. While it is possible that a development could be redesigned to accommodate mineral extraction (most typically in an open-pit quarry), it is unlikely given the visual, dust, noise, heavy vehicle, and vibration impacts associated with such land use. Therefore, preclusion of development within mineral resource zones is not a feasible mitigation, and cumulative impacts would remain significant and unavoidable.

Impact 5.7-11: Would the Project (Proposed General Plan) result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Impact 5-7: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding geology and soils and mineral resources?

The EIR evaluated and concluded that the proposed General Plan would allow development which would result in the loss of availability of locally-important mineral resources recovery sites delineated in a land use plan. The EIR concluded that no feasible mitigation measures are available and impacts would remain significant and unavoidable.

Mitigation Measures

No feasible mitigation measures.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with the proposed General Plan includes policies that permit the development of land classified as MRZ-2a, MRZ 2b, or MRZ 3a in a manner that preserves future mining and encourages the use of on-site aggregate, development facilitated by the proposed General Plan would result in the loss of availability of locally-important mineral resources recovery sites delineated in a land use plan. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts.

Basis for Finding: The proposed General Plan area is primarily underlain by MRZ-3a lands, which are areas with moderate potential or possible location of aggregate resources. Development is likely to occur in areas that would impact MRZ-1 and MRZ-2b lands, thereby reducing the potential for mining of the resource. The only feasible mitigation would be to preclude development on important mineral resource sites in order that extraction of the mineral(s) could occur in the future. While it is possible that a future

General Plan development could be redesigned to accommodate mineral extraction (most typically in an open-pit quarry), it is unlikely given the visual, dust, noise, heavy vehicle, and vibration impacts associated with such a land use. Precluding development within mineral resource zones is not a feasible mitigation and the impact would remain significant and unavoidable.

Cumulative Impacts (Impact 5-7). The region is rich with aggregate deposits, the loss of which over the course of buildout of urban uses under the proposed General Plan would be considered a significant and unavoidable impact. Other development that would occur throughout the County under the CWP could similarly result in a loss of mineral resources, as land is committed to various types of urban development, resulting in a cumulative loss of mineral resources across the County. The proposed General Plan would result in a cumulatively considerable impact to mineral resources. The only feasible mitigation would be to preclude development on important mineral resources sites in order that extraction of the mineral(s) could occur in the future. While it is possible that a development could be redesigned to accommodate mineral extraction (most typically in an open-pit quarry), it is unlikely given the visual, dust, noise, heavy vehicle, and vibration impacts associated with such land use. Therefore, preclusion of development within mineral resource zones is not a feasible mitigation, and cumulative impacts would remain significant and unavoidable.

EIR SECTION 5.8: GREENHOUSE GAS EMISSIONS – PROPOSED GENERAL PLAN

Impact 5.8-1: Would the Project (Proposed General Plan) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact 5-8: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding greenhouse gas emissions?

The EIR evaluated and concluded that the proposed General Plan would allow development that would generate greenhouse gas (GHG) emissions that may result in significant impact on the environment. Despite the implementation of **MM GP GHG-1** and **MM GP GHG-2**, GHG emission impacts would remain significant and unavoidable.

Mitigation Measures

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 qualified 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).

GP GHG-2

Implementation of MM BIG AQ-1 through MM BIG AQ-14.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with proposed General Plan policies and implementation of **MM GP GHG-1** and **MM GP GHG-2**, the proposed

General Plan would result in a substantial increase in GHG emissions from existing levels and would not achieve the GHG reduction targets of AB 1279, resulting in significant and unavoidable impacts to greenhouse gas emissions. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP GHG-1** and **MM GP GHG-2** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: Development under the proposed General Plan would contribute to global climate change through direct and indirect emissions of GHG from land uses within the proposed General Plan area. The proposed General Plan contains policies that would reduce emissions from the various GHG emissions sectors to the extent feasible. The proposed General Plan policies and mitigation measures (**MM GP GHG-1** and **MM GP GHG-2**) would reduce GHG emissions associated with implementation of the General Plan. However, the proposed General Plan would result in a substantial increase in GHG emissions from existing levels and would not achieve the GHG reduction targets of AB 1279. GHG emissions are considered significant and unavoidable even with implementation of **MM GP GHG-1** and **MM GP GHG-2**.

Cumulative Impacts (Impact 5-8). Given the growth in population and employment within the City and SOI and the magnitude of emissions reductions needed to achieve the GHG reduction target, GHG emissions would be significant after mitigation, and the proposed General Plan would result in a cumulatively considerable contribution to GHG emissions.

Impact 5.8-2: Would the Project (Proposed General Plan) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact 5-8: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding greenhouse gas emissions?

The EIR evaluated and concluded that the proposed General Plan would allow development that would conflict with CARB'S 2022 Scoping Plan strategies regarding farmland preservation. Despite the implementation of **MM GP AG-1**, impacts would remain significant and unavoidable.

Mitigation Measures

See **MM GP AG-1**.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP AG-1**, development permitted by the proposed General Plan would conflict with California Air Resources Board 2022 Scoping Plan strategies regarding farmland preservation. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP AG-1** is feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects

under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and the Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy (SCAG RTP/SCS). CARB's latest Scoping Plan (2022 Scoping Plan) outlines the State's strategies to reduce GHG emissions in accordance with the targets established under AB 32, SB 32, and AB 1279. The purpose of the 2024–2050 RTP/SCS is to achieve the regional per capita GHG reduction targets for the passenger vehicle and light-duty truck sector established by CARB pursuant to SB 375. The proposed General Plan would not conflict with the 2024-2050 RTP/SCS policies but would conflict with the Natural and Working Lands actions and strategies pertaining to croplands due to the anticipated loss of farmlands in the 2022 Scoping Plan. **MM GP AG-1** would reduce the loss of farmland to the extent feasible but it would not fully avoid or reduce the conversion of farmland to nonagricultural uses. The proposed General Plan would still conflict with the 2022 Scoping Plan as it pertains to the Natural and Working Lands strategies regarding croplands. As it pertains to consistency with the 2022 Scoping Plan, impacts would remain significant and unavoidable even with implementation of **MM GP AG-1**.

Cumulative Impacts (Impact 5-8). For the same reasons explained above, cumulative GHG emissions impacts would be significant and unavoidable.

EIR SECTION 5.12: NOISE – GENERAL PLAN

Impact 5.12-1: Would the Project (Proposed General Plan) 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?

Impact 5-12: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding noise and vibration?

The EIR evaluated and concluded that the proposed General Plan would allow development that would result in the generation of a substantial temporary or permanent increase in ambient noise levels in the General Plan area in excess of standards established in the local general plan or noise ordinance. Despite the implementation of **MM GP NOI-1** and **MM GP NOI-2**, increases in ambient noise levels would result in a significant and unavoidable impact.

Mitigation Measures

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 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. 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 approved Goods Movement Routes established in Figure CM-4 of the proposed General Plan and as further regulated by State law.
- 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 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, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- If construction is anticipated for 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%.

MM GP NOI-2

Traffic Noise Measures. No feasible mitigation measures have been identified that would substantially reduce impacts associated with a substantial increase in traffic noise levels for all roadways showing significant impacts. However, the following measures may be considered for mitigating or avoiding traffic noise impacts.

Special Roadway Paving. Notable reductions in tire noise have been achieved via the implementation of special paving materials. For example, the California Department of Transportation (Caltrans) conducted a study of pavement noise along Interstate 80 in Davis and found an average improvement of 6 dBA to 7 dBA compared to conventional asphalt overlay (Caltrans, 2011).

Sound Barrier Walls. Review of aerial depictions of the impacted segments show most residences along the study segments have direct access (via driveways) to the associated roadways. Therefore, barrier walls would prevent access to/from individual properties and would be infeasible because to be effective the barrier needs to break the line of sight of the receptor (home) from the noise source (road) which would mean blocking the driveway. Further, these impacted homes are on private property outside of the control of future project developers, so there may be limited admittance onto these properties to construct such walls. Lastly, the costs versus benefits ratio in relation to the number of benefited households may not be feasible and reasonable in all cases.

Sound Insulation of Existing Residences and Sensitive Receptors. Exterior-to-interior noise reductions depend on the materials used, the design of the homes, and their conditions. To determine what upgrades would be needed, a noise study would be required for each house to measure exterior-to-interior noise reduction. Sound insulation may require upgraded windows, upgraded doors, and a means of mechanical ventilation to allow for a "windows closed" condition. There are no funding mechanisms and procedures that would guarantee that the implementation

of sound insulation features at each affected home would offset the increase in traffic noise to interior areas and ensure that the State's 45 dBA CNEL standard for multifamily residences would be achieved.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP NOI-1**, due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential duration of construction activities, construction noise from activities of development permitted under the proposed General Plan could result in a temporary substantial increase in noise levels above ambient conditions. **MM GP NOI-2** could reduce future traffic noise levels; however, the measures listed may not be feasible or practical mitigation measures available to reduce project-generated traffic noise to less than significant levels for existing residences along the affected roadways. No individual measure and no set of feasible or practical mitigation measures are available to reduce project-generated traffic noise to less than significant levels in all cases. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable noise impacts. The City Council finds that **MM GP NOI-1** and **MM GP NOI-2** shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding:

Construction Noise. As part of implementing the proposed General Plan, individual future development and redevelopment projects would generate temporary noise level increases on and adjacent to construction sites. Construction noise levels are highly variable and dependent upon the specific locations, site plans, construction details, phasing, and presence or absence of any natural or human-made barriers with potential acoustic dampening effects (e.g., the presence of vegetation, berms, walls, or buildings). Due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential duration of construction activities, construction noise could result in a temporary substantial increase in noise levels above ambient conditions. Not all projects can limit construction hours to between 7:00 AM and 7:00 PM Monday through Sunday as required by **MM GP NOI-1**; therefore, some projects may exceed the noise standards (e.g., large concrete pours or roadway construction due to weather or a need to avoid peak traffic). Impacts would be significant and unavoidable even with the implementation of **MM GP NOI-1**. It should be noted that the identification of this program-level impact does not preclude the finding of less than significant impacts for subsequent projects analyzed at the project level.

Stationary Noise. The proposed General Plan would result in an increase in residential, commercial, and industrial land uses, and overall development and growth in the proposed General Plan area. Primary stationary noise sources would be from landscaping maintenance activities, back-up diesel generators, parking lot activity, maintenance activities, heating, ventilation, and air conditioning, and loading and unloading activities at commercial and industrial uses. The proposed General Plan is not expected to result in new types of stationary noise sources. Impacts would be less than significant.

On-Road Traffic Noise. Transportation noise from roadways will increase significantly during the planning period. While new projects can integrate design features that will reduce noise impacts from traffic, existing developments are limited in their ability to reduce noise impacts from traffic. Barrier walls would

prevent access to/from individual properties and would be infeasible because to be effective the barrier needs to break the line of sight of the receptor (home) from the noise source (road) which would mean blocking the driveway. Noise walls, building setbacks, and physical barriers between the traffic noise source and the sensitive receptor are effective, but not always feasible. **MM GP NOI-2** could reduce the impact of future traffic noise on new and existing development; however, the measures listed may not be feasible or practical mitigation measures to reduce project-generated traffic noise to less than significant levels for existing residences along the affected roadways. No individual measure and no set of feasible or practical mitigation measures are available to reduce proposed General Plan-generated traffic noise to less than significant levels in all cases. Traffic noise would remain a significant and unavoidable impact in the proposed General Plan area even with implementation of **MM GP NOI-2**.

Cumulative Impacts (Impact 5-12). Buildout of the proposed General Plan, combined with BIG, would be the main contributor of new noise source generation within the study areas. The CWP planned land use surrounding the City and SOI is primarily Rural Living (1 dwelling unit/2.5 acres) or Resource/Land Management (RLM) designation, neither of which would contribute substantial noise either stationary source or traffic related. Therefore, the proposed General Plan would result in a cumulatively considerable contribution to significant noise impacts. Cumulative noise impacts would be significant and unavoidable.

EIR SECTION 5.15: TRANSPORTATION – PROPOSED GENERAL PLAN

Impact 5.15-2: Would the Project (Proposed General Plan) conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

Impact 5-15: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding transportation?

The EIR evaluated and concluded that at a programmatic level of analysis, the proposed General Plan allows development that that would conflict or be inconsistent with CEQA Guideline § 15064.3(b) with respect to generating vehicle miles traveled (VMT). The EIR concluded that no feasible mitigation measures are available and impacts would remain significant and unavoidable.

Mitigation Measures

No feasible mitigation measures.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that development permitted under the proposed General Plan would result in a significant project-generated VMT impact. There are no feasible mitigation measures or alternatives that would reduce this impact to a less than significant level. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts.

Basis for Finding: The proposed General Plan policies would support multimodal access and safety as well as reduce VMT. While total VMT is expected to increase under the proposed General Plan compared to the 2015 General Plan, the VMT per service population is projected to decrease. The EIR has disclosed a significant and unavoidable VMT impact at the program level because the effectiveness of the proposed General Plan policies and strategies in reducing VMT cannot be guaranteed. The success of these mitigation strategies depends on factors such as citywide implementation, infrastructure funding, and

long-term changes in travel behavior, all of which introduce uncertainty—particularly in the short term. Despite the inclusion of these proposed General Plan policies, the VMT impact under the proposed General Plan remains significant and unavoidable.

Cumulative Impacts (Impact 5-15). Modeling assumes a fully implemented General Plan will reduce VMT, but projects that occur before buildout may increase VMT until the cumulative condition is reached. Therefore, the proposed General Plan would result in a significant impact in the short term. Development in areas surrounding the City would likely also result in similar impacts for the same reasons, all of which would contribute to cumulatively considerable VMT impacts in the short term, until buildout, when contemplated improvements would be fully funded and in place within the City. Therefore, buildout of the proposed General Plan would result in a cumulatively considerable contribution to VMT impacts, as growth and economic generators are centered around Barstow, until buildout of the General Plan is ultimately in place. This cumulative impact would be significant and unavoidable.

EIR SECTION 5.16: TRIBAL CULTURAL RESOURCES – PROPOSED GENERAL PLAN

Impact 5.16-1: Would the Project (Proposed General Plan) cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

Impact 5-16: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding tribal cultural resources?

The EIR evaluated and concluded that the proposed General Plan allows development that would result in substantial change in the significance of tribal cultural resources. Despite the implementation of **MM GP CUL-1** and **MM GP CUL-3**, impacts to tribal cultural resources would remain significant and unavoidable.

Mitigation Measures

See **MM GP CUL-1** and **MM GP CUL-3**.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM GP CUL-1** and **MM GP CUL-3**, conformance with the General Plan, zoning requirements, applicable local, State, and federal requirements, compliance with the requirements of CEQA as applicable; and obtainment of necessary clearances and permits, impacts to tribal cultural resources would be significant and unavoidable. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM GP CUL-1** and **MM GP CUL-3** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: Tribal cultural resources may be vulnerable to development activities accompanying infill, redevelopment, or revitalization that would be accommodated by the proposed General Plan. Future development may also impact tribal cultural and historic resources that are not archaeological resources, such as natural resources of historic value. Before development or redevelopment activities occur in the General Plan area, all such activities are required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local, State, and federal requirements; to comply with the requirements of CEQA as applicable; and to obtain all necessary clearances and permits. On a project-by-project basis, CEQA requires the evaluation and disclosure of significant effects on tribal cultural resources via consultation with tribes who have requested to be consulted on projects within the City's jurisdiction, for projects subject to CEQA. Given that the proposed General Plan contemplates development in undisturbed areas of the City and that BIG entails significant development in undisturbed areas, impacts to tribal cultural resources would be significant and unavoidable even with implementation of **MM GP CUL-1** and **MM GP CUL-3**.

Cumulative Impacts (Impact 5-16). Development planned under the general plans of San Bernardino County and Barstow, and relevant planned and future residential, commercial, industrial, and transportation projects constitute the cumulative condition relevant to cultural resources. Under the cumulative condition, ongoing development projects are expected to continue within the cumulative study area. Large portions of the cumulative study area are rural areas that have not been developed and are designated as open space. It is anticipated that undisturbed tribal cultural resources could be present in these largely undisturbed areas. Due to the potential for substantial unknown resources to be present with the study area and the potential for new development to occur largely within previously undisturbed sites, cumulative impacts would result. The proposed General Plan includes changes in land use designations from open space to a variety of urban uses and also facilitates further industrial growth inclusive of BIG in vacant areas; therefore, development under the proposed General Plan would constitute a cumulatively considerable contribution to impacts on tribal cultural resources throughout the study area. This cumulative impact would be significant and unavoidable.

Impact 5.16-2: Would the Project (Proposed General Plan) cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency in its discretion and supported by substantial evidence to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Impact 5-16: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding tribal cultural resources?

See **Impact 5.16-1**.

EIR SECTION 5.17: UTILITIES AND SERVICE SYSTEMS – PROPOSED GENERAL PLAN

Impact 5.17-1: Would the Project (Proposed General Plan) require or result in the relocation or construction of new or expanded water, wastewater/wastewater treatment, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact 5-17: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding utilities and service systems?

The EIR evaluated and concluded that the proposed General Plan allows development that would result in relocation/construction of new or expanded water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications facilities that would result in a significant environmental impacts. Despite the implementation mitigation measures set forth in **Section 5.1** through **Section 5.17** of the EIR, impacts would remain significant and unavoidable.

Mitigation Measures

Mitigation measures provided in **Section 5.1** through **Section 5.17** of the EIR are proposed to minimize environmental impacts associated with providing utilities and service systems to future projects within the General Plan area.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of mitigation measures provided in **Section 5.1** through **Section 5.17**, and implementation of standard development procedures included in the Barstow Code and engineering standards, the environmental impacts of utility and service system facility upgrades and maintenance consistent with the proposed General Plan would be significant and unavoidable. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. To the extent that the City Council finds that mitigation measures provided in **Section 5.1** through **Section 5.17** of the EIR are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City for future projects under the General Plan. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: The environmental effects resulting from construction of utility and service system facilities to accommodate future development under the proposed General Plan are discussed as part of the proposed General Plan’s overall environmental analyses in the EIR. The EIR evaluated and concluded that development facilitated by the proposed General Plan would require relocation/construction of water, wastewater, and stormwater conveyance infrastructure and utility infrastructure. The EIR concludes that aesthetics, agriculture, air quality, cultural resources, geology and mineral resources, greenhouse gas emissions, noise and vibration, transportation, and tribal cultural resources impacts would be significant and unavoidable despite mitigation. Therefore, proposed relocation/construction of new or expanded water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications facilities under the proposed General Plan would result in a significant unavoidable impact even with implementation of applicable mitigation measures.

Construction and Operations – Water. Future development under the proposed General Plan would require construction of new on-site and off-site water infrastructure including in areas of the City that are undeveloped. Water improvements include new potable water lines, reservoirs and pumps. All construction would be performed in accordance with the State Water Resources Control Board’s General Construction Permit and all associated requirements. Environmental clearance, including CEQA review where applicable, for the construction of water facilities would be required on a project-by-project basis.

Construction and Operations - Wastewater Collection and Treatment. Under SBLAFCO Actions A and B, the proposed General Plan proposes annexation to the City (i.e., the Environmental Services Division wastewater service area) of approximately 2,785 acres. Implementation of the proposed General Plan would require construction/relocation of new sewer infrastructure including in areas of the City that are undeveloped. All new development is intended to be connected to the City’s sewer system. Construction impacts are generally limited to noise for trenching, generation of dust during construction, and traffic management if roadways need to be temporarily closed during construction.

Construction and Operations – Stormwater System. New development/redevelopment under the proposed General Plan would result in an increase in impervious surfaces, which in turn could result in an increase in stormwater runoff, higher peak discharges to drainage channels, and the potential to cause nuisance flooding in areas without adequate drainage facilities. Individual projects would be responsible for the design and construction of storm drain facilities in accordance with the San Bernadino County Flood Control District (SBCFCD) requirements and would be required to comply with applicable regulations, such as Barstow Code Chapter 15.14, Stormwater and Urban Runoff Pollutant Control. Future development under the proposed General Plan would also need to prepare hydrology studies that would be reviewed and approved by SBCFCD. SBCFCD’s Hydrology Manual presents the design criteria to be used for such studies. Compliance with the MS4 permit and City and County requirements would ensure that future development would not result in significant increases in runoff and would not contribute to the construction of new storm drain facilities or expansion of existing facilities.

Construction and Operations – Electricity. Future development under the proposed General Plan could require the construction of new electricity infrastructure where existing lines are not sufficient to accommodate the increased needs. These determinations would be made on a project-by-project basis. The proposed improvements may include new or relocated power lines, underground line construction, new substations, or upgrades to existing substations. All infrastructure must abide by the standards of Southern California Edison (SCE); SCE would be notified in advance of proposed ground disturbance activities to avoid power lines and disruption of electric service. Any work that may include connections of new services to the existing power lines would be coordinated with SCE.

Construction and Operations - Natural Gas. While natural gas demand for the proposed General Plan area would increase compared to existing conditions, development accommodated under the proposed General Plan would be required to comply with the General Plan policies, current and future updates to the Building Energy Efficiency Standards, and CALGreen, which would contribute to reducing the natural gas demands. Implementation of projects consistent with the proposed General Plan could require the construction of new natural gas infrastructure where existing pipelines are not sufficient to accommodate the increased demands. These determinations would be made on a project-by-project basis. Projects would require clearance environmental clearance, including CEQA review and obtain relevant resource permits, for the construction of any applicable infrastructure such as upgrades to natural gas pipelines or the construction of new pipelines.

Construction and Operations – Telecommunications. Infrastructure supporting telecommunications services associated with the proposed General Plan would be provided and installed in compliance with all State and local regulations. Telecommunication providers must obtain environmental clearance, including CEQA review and obtain relevant resource permits as applicable, for the construction of infrastructure such as upgrades of data centers and telecommunication towers.

Cumulative Impacts (Impact 5-17). Cumulative development within the service area of each provider also would be subject to development review, which may include CEQA analysis, and be required to comply with applicable State and local regulations, and General Plan policies. Because all development outside the General Plan area cannot be known at this time, it is possible that future cumulative development could result in significant impacts related to water supply, water waste treatment, solid waste disposal capacity or stormwater and drainage systems. Also, cumulative projects could result in similar impacts as the project related to the construction of new utility infrastructure. However, the proposed General Plan would not result in a cumulatively considerable contribution to significant impacts given the mitigating effects of compliance with the established regulatory framework.

Barstow International Gateway

EIR SECTION 5.1: AESTHETICS - BIG

Impact 5.1-3: Would the Project (BIG), in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact 5-1: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding aesthetics?

The EIR evaluated and concluded that BIG would introduce more urban structures and infrastructure to the BIG aesthetics study area, resulting in a permanent change to the visual character of the site and its surroundings and substantially degrading the existing visual character or quality of public views of the site and its surroundings. The EIR evaluated and concluded that despite the implementation of **MM BIG AES-1**, impacts associated with a change to the visual character of the area would remain significant and unavoidable.

Mitigation Measures

MM BIG AES-1 Construction Lighting and Screening Plan. Prior to any BIG Specific Plan area site clearance or grading activity, the implementing entity shall prepare a Construction Lighting and Screening Plan (CLSP), which shall be submitted to the City of Barstow Planning Department for review and approval. The City shall review the CLSP to verify that it identifies for the construction phase, lighting practices and systems (e.g., shielded and directional lighting oriented toward work areas and to avoid light trespass onto residential or other sensitive receptor properties) that minimize light

pollution, glare, and light trespass, while maintaining nighttime safety, visibility, utility, and productivity pursuant to the following:

- Barstow Code § 19.06.010(e) - Light Trespass and Control of Glare concerning trespass of light onto adjacent properties/light-sensitive uses. (e.g., maximum brightness values not to be exceeded by artificial bulbs, screening around BIG footprint to limit light and glare, use of non-reflective glass, etc.), and prohibiting aiming, directing, and focusing to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways. Use of 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).
- Use remote monitoring systems or other methods to ensure security of the construction site outside of construction hours.

CLSP shall also include specifications requiring that temporary construction fencing be installed along the BIG Specific Plan construction areas where adjacent to residences to screen views of construction activity and promote safety. Construction fencing shall be up to the height permitted by Barstow Code Section 19.18.060 (i.e., 8.0 feet), and include a privacy screen to provide as a safeguard from the surrounding environment, prevent trespassers from entering.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM BIG AES-1**, BIG would substantially degrade the site's visual character resulting in a significant unavoidable impact during both construction and operational phases. Only avoidance of development within the BIG footprint would preclude the significant impact. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impact. The City Council finds that **MM BIG AES-1** is feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: BIG is surrounded by primarily vacant undeveloped land with sparse rural residential uses in the surrounding areas. Therefore, given the rural setting, BIG would be considered to have a significant effect on the environment if it would substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from a publicly accessible vantage point).

Construction. Substantial construction activity would be required for BIG over approximately 34 months. Consequently, visual disturbances associated with BIG construction would occur for the duration of construction, and be more noticeable to travelers, including along Main Street, Lenwood Road, and Hinkley Road. The presence of construction materials, equipment, on-site workers, and other associated improvements would temporarily degrade the existing visual character of public views of BIG's footprint, as experienced from these roadways. BIG would implement **MM BIG AES-1**, which requires visual screening during construction, as appropriate to minimize visual intrusions (and ensure safety and

security). However, even with **MM BIG AES-1**, construction activities associated with the implementation of BIG would substantially alter the visual character of public views of the existing environment.

Operations. Visual simulations (VS) were prepared to assess impacts to visual character of public views. Decreases in visual quality shown in VS-1, VS-2, VS-3, VS-5, VS-6, and VS-8 would be substantial enough to change the overall visual quality of the existing environment resulting in a significant impact on the viewsheds identified. BIG would introduce more urban structures and infrastructure to the BIG aesthetics study area, resulting in a permanent change to the visual character of the site and its surroundings

With respect to the use of vegetative screening or berms, vegetative screening is infeasible due to the arid desert environment and thus, vegetative screening would require non-native plants with excessive water demands. Berms were determined to be infeasible because of the limited space between Main Street and the slope would be minimal. As shown on the visual simulations, the key elements of the BIG facility that would be visible are high-mast lighting and portions of rail-mounted gantry cranes. A berm or visual screening would not be able to obscure high-mast lighting of up to 120 feet, thus, would not be feasible mitigation. As such, BIG would substantially degrade the existing visual character or quality of public views of the site and its surroundings resulting in a significant unavoidable impact.

Cumulative Impacts (Impact 5-1). BIG would substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, BIG combined with these applicable cumulative projects would result in a cumulatively considerable contribution to significant impacts relative to visual character.

Impact 5.1-4: Would the Project (BIG) create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Impact 5-1: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding aesthetics?

The EIR evaluated and concluded that light or glare impacts would be significant and unavoidable. Because BIG would create a new source of substantial glare/light pollution that would adversely affect day or nighttime views in the area, a significant unavoidable impact would occur. Despite the implementation of **MM BIG AES-1**, light and glare impacts would remain significant and unavoidable.

Mitigation Measures

See **MM BIG AES-1**.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM BIG AES-1**, BIG would create a new source of substantial glare/light pollution that would adversely affect day or nighttime views in the area. Only avoidance of development within the BIG footprint would preclude the significant impact. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM BIG AES-1** is feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: BIG operations would cause substantial aesthetic degradation from the introduction of lighting to a minimally illuminated area. The substantial degradation from introduction of light during BIG operations would conflict with, and be highly contrasting to, the visual character of the surrounding environment. BIG Specific Plan lighting standards and applicable mitigation measures during BIG construction would be implemented to minimize impacts relating to light trespass, glare, and light pollution and glow.

Nighttime lighting disturbances such as glare, light pollution, and glow affecting viewers, visual character, and visual quality would result from BIG operations and built features. Glare impacts would be reduced in these locations by utilizing lighting with high-efficiency technologies, dark-sky cutoffs, strategic orientation to avoid light trespass into adjacent properties and open space areas, and appropriate shielding or recesses to avoid glare and reflections. Visual degradation caused by necessary nighttime and daytime lighting of features during BIG operations, including visually apparent barriers, signage, contrasting signal lighting, and the residual glare impacts would remain potentially significant. Similarly, as BIG would operate 24 hours a day, BIG would introduce new significant light pollution and glow impacts during nighttime hours. Even with implementation of **MM BIG AES-1**, impacts would be significant and unavoidable.

Cumulative Impacts (Impact 5-1). Because of the order of magnitude of BIG relative to other cumulative development, BIG would result in a cumulatively considerable contribution to significant impacts relative to light and glare.

EIR SECTION 5.3: AIR QUALITY - BIG

Impact 5.3-1: Would the Project (BIG) conflict with or obstruct implementation of the applicable air quality plan?

Impact 5-3: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding air quality?

The EIR evaluated and concluded that BIG would conflict with the Mojave Desert Air Quality Management District's (MDAQMD) CEQA and Federal Conformity Guidelines (2020). Despite the implementation of **MM BIG AQ-1** through **MM BIG AQ-14**, the conflict with the air quality plan would remain significant and unavoidable.

Mitigation Measures

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.

- 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 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 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.

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 and shall maintain all supporting procurement records for City review upon request.
- The implementing entity shall keep a written record of the fleet mix for on-road construction equipment during BIG construction and provide the City with 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 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. 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. 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. 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.

MM BIG AQ-8 Renewable Diesel RTG Cranes. Rubber Tired Gantry (RTG) cranes shall be powered with renewable diesel. BNSF shall provide the City of Barstow with evidence demonstrating use of renewable diesel for RTG cranes prior to the issuance of certificate of occupancy.

MM BIG AQ-9 Truck Idling Limits and Truck Route Signage. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that all truck access gates and loading docks within the BIG site shall have posted signage posted that states:

- Truck drivers shall turn off engines when not in use.
- Truck drivers shall shut down the engine after two minutes of continuous idling operation. Once the vehicle is stopped, the transmission is set to “neutral” or “park,” and the parking brake is engaged.
- Telephone numbers of the building facilities manager, the South Coast AQMD, and CARB to report violations.

- Signs shall also inform truck drivers about the health effects of diesel particulates, the California Air Resources Board diesel idling regulations, and the importance of being a good neighbor by not parking in residential areas.
- Clearly mark truck routes with trailblazer signs, so that trucks will not travel next to or near sensitive land uses (e.g., residences, schools, day care centers, etc.).
- Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the proposed Project site.
- The implementing entity shall designate an officer to monitor trucks on-site for compliance. Signs and drive aisle pavement markings shall clearly identify the on-site circulation pattern to minimize unnecessary on-site vehicular travel.
- Additionally, signs shall be provided at every truck exit driveway showing directional information to the off-site truck route. To the extent feasible, the BIG shall direct trucks away from sensitive receptors. All signage installed as part of BIG shall be legible, durable, and weather-proof.

This mitigation measure applies only to tenant improvements and not the building shell approvals.

MM BIG AQ-10 Tier 4 Emergency Back-Up Generators. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that the BIG plans and specifications require all standard emergency generators (i.e., non-cold storage generators) to meet California Air Resources Board Tier 4 Final emissions standards. A copy of each unit's Best Available Control Technology (BACT) documentation (certified tier specification) and CARB or Mojave Desert AQMD operating permit (if applicable) shall be provided to the City. This mitigation measure applies only to tenant improvements and not the building shell approvals.

MM BIG AQ-11 Carl Moyer Truck Efficiency Improvements. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that tenant lease agreements include specifications that require vendor trucks for the industrial buildings include energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption. This mitigation measure applies only to tenant improvements and not the building shell approvals.

MM BIG AQ-12 EPA Smart Way Program. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that tenant lease agreements include specifications that require tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and tenants shall be required to use carriers that are SmartWay carriers. This mitigation measure applies only to tenant improvements and not the building shell approvals.

MM BIG AQ-13 Electric Landscape Equipment. Prior to the issuance of occupancy permits, the implementing entity shall confirm that agreements for landscaping services include contractual language that all handheld landscaping equipment used on-site shall be 100 percent electrically powered. This mitigation measure applies only to tenant permits and not the building shell approvals.

MM BIG AQ-14 Future EV Charging Infrastructure. Prior to the issuance of a building permit for transload warehouse facility tenant improvements, the implementing entity shall confirm that the BIG transload facility is designed to include the following:

- Prior to issuance of a Building Permit for the Shell Design, the buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed to supply power for the future installation of EV truck charging stations on the site. Conduit should be installed from the electrical room to tractor trailer parking spaces in a logical location(s) on the site determined by the implementing entity during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available and the buildings are being served by trucks with electric-powered engines.
- The buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed in the future to supply power to trailers with TRUs during the loading/unloading of refrigerated goods, if required by future tenants who utilize cold storage. Conduit should be installed from the electrical room to the loading docks in a location determined by the tenant as the logical location(s) to receive trailers with TRUs.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM BIG AQ-1** through **MM BIG AQ-14**, BIG would exceed MDAQMD's construction and operational emissions thresholds. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM BIG AQ-1** through **MM BIG AQ-14** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: Per the MDAQMD CEQA and Federal Conformity Guidelines (2020), a project is nonconforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan (Criterion 1). A project is conforming if it complies with applicable air district rules and regulations, complies with proposed control measures, and is consistent with the growth forecasts in the applicable plan (Criterion 2). BIG would exceed MDAQMD's construction and operational emissions thresholds. Therefore, BIG's impact is inconsistent with the Criterion 1. BIG implementation, however, complies with applicable air district rules and regulations, complies with proposed control measures, and is consistent with the MDAQMD's Western Mojave Desert AQMP, South Coast AQMD 2022 AQMP, SCAG Connect SoCal SCAG Connect SoCal and would therefore be consistent with the Criterion 2. Even with the implementation of **MM BIG AQ-1** through **MM BIG AQ-14**, the impacts would be significant and unavoidable.

Cumulative Impacts (Impact 5-3). Despite implementation of the measures, BIG would have a cumulatively considerable contribution to cumulatively significant effects concerning conflicts with air quality plans which are unavoidable. Mitigation measures were evaluated in terms of whether they were capable of being accomplished in a successful manner within a reasonable period of time, taking into

account economic, environmental, legal, social, and technological factors. These additional mitigation measures were studied but deemed infeasible.

Impact 5.3-2: Would the Project (BIG) 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?

Impact 5-3: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding air quality?

Concerning a cumulatively considerable net increase of any criteria pollutant for which the region is in nonattainment under an applicable federal or State AAQS, the EIR evaluated and concluded that impacts would be significant and unavoidable. The EIR concluded that BIG's construction and operations emissions would still exceed MDAQMD's thresholds despite the implementation of **MM BIG AQ-1** through **MM BIG AQ-14** and impacts would remain significant and unavoidable.

Laws, Ordinances, and Regulations (LORs) are existing requirements that are based on local, State, or federal regulations or laws that are frequently required independent of CEQA review. Because LORs are neither BIG specific nor a result of development of BIG, they are not considered to be mitigation measures. The following Laws, Ordinances, and Regulations (LOR) are applicable.

LOR AQ-1

Prior to the issuance of grading permits, the City Engineer shall confirm that the Grading Plan, Building Plans and Specifications require all construction contractors to comply with Mojave Air Quality Management District (MDAQMD) Rule 403 to minimize construction emissions of dust and particulates. The measures in the plans/specifications include, but are not limited to, the following:

- Minimize fugitive dust emissions from wrecking, excavation, grading, clearing of land and solid waste disposal operations.
- A person shall not cause or allow particulate matter (PM) to exceed 100 µg/m³ when determined as the difference between upwind and downwind samples collected on high volume samplers at the property line for a minimum of five hours.
- Prevent visible PM from being deposited upon public roadways as a direct result of their operations. Reasonable precautions shall include, but are not limited to:
 - Remove PM from off-road equipment prior to movement on paved streets or the prompt removal of any material from paved streets onto which such material has been deposited.
 - Use periodic watering for short-term stabilization of Disturbed Surface Area to minimize visible fugitive dust emissions. Use of a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes shall be considered sufficient to maintain compliance.
 - Take actions sufficient to prevent project-related track-outs onto paved surfaces.

- Cover loaded haul vehicles while operating on publicly maintained paved surfaces.
- Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than thirty days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate Visible Fugitive Dust emissions.
- Clean-up project-related Track-outs or spills on Publicly Maintained paved surfaces within twenty-four hours.
- Reduce non-essential Earth-Moving Activity under High Wind conditions. For purposes of this Rule, a reduction in Earth-Moving Activity when visible dusting occurs from moist and dry surfaces due to wind erosion shall be considered sufficient to maintain compliance.
- Prepare and submit to the MDAQMD, prior to commencing Earth-Moving Activity, a dust control plan that describes all applicable dust control measures that will be implemented at the project.
- Provide Stabilized access route(s) to the project site as soon as is feasible.
- Maintain natural topography to the extent possible.
- Construct parking lots and paved roads first, where feasible; and
- Construct upwind portions of project first, where feasible.
- The Owner or Operator of a site undergoing weed abatement activity shall not disrupt the soil crust to the extent that Visible Fugitive Dust is created due to wind erosion.

LOR AQ-2 Pursuant to MDAQMD Rule 1113, the Applicant shall require by contract specifications that the interior and exterior architectural coatings products used have a volatile organic compound rating of 50 grams per liter or less.

LOR AQ-3 The Applicant shall ensure contractors post signs and train personnel on compliance with California Code of Regulations, Title 13, § 2449 requiring applicable diesel powered construction equipment idling to be limited to five minutes, except in circumstances when the limit does not apply (e.g., when queuing).

LOR AQ-4 BIG shall be designed in accordance with the applicable California Code of Regulations (CCR), Title 24 (California Building Standards Code) Energy Efficiency Standards for Non-residential Buildings (CCR, Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The City of Barstow Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (§ 110.10) require buildings to be designed to have 15 percent of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

LOR AQ-5

BIG shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 California Code of Regulations, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water efficient. Install water-efficient fixtures in accordance with the CALGreen Code, Part 11, § 5.303.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with the CALGreen Code, Part 11, § 5.408.1.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with the CALGreen Code, Part 11, § 5.410.
- To facilitate future installation of electric vehicle supply equipment, construction shall comply with CALGreen Code, Part 11, § 5.106.5.3 (non-residential electric vehicle charging).

Mitigation Measures

See **MM BIG AQ-1** through **MM BIG AQ-14**.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM BIG AQ-1** through **MM BIG AQ-14**, BIG would produce construction and operations emissions of CO, VOC (ROG), NO_x, PM_{2.5} and PM₁₀ above applicable thresholds regional emissions. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM BIG AQ-1** through **MM BIG AQ-14** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding:

Construction. BIG construction would generate short-term emissions of criteria air pollutants. Construction-generated emissions are short term and of temporary duration but are considered a significant air quality impact if the amount of pollutants generated exceeds the MDAQMD's thresholds of significance. Unmitigated construction emissions would exceed the MDAQMD thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5} construction thresholds despite compliance with applicable laws, ordinances, and regulations (LORs). The majority of emissions occur from off-road equipment exhaust. Additionally, VOC emissions occur from architectural coating and paving activities. BIG would also be required to comply with the mitigation measures to lower construction emissions. Despite the implementation of mitigation measures, due to the size of BIG, emissions would remain above MDAQMD's thresholds. Even with the implementation of **MM BIG AQ-1** through **MM BIG AQ-6**, BIG's construction impacts would be significant and unavoidable.

With respect to the use of alternative technologies, such as zero emission construction equipment, zero emission large construction equipment (loaders, excavators, etc.) are infeasible due to charging

limitations. Temporary construction charging would require additional temporary powerlines and related infrastructure that would only be utilized to charge electric construction equipment. The limited battery capacity, requirement for mid-shift charging, and additional costs and timeline associated with permitting and constructing temporary charging stations makes the use of zero emission construction equipment “very impractical.” Furthermore, electric construction heavy-duty construction equipment is not available from major construction equipment manufacturers. Therefore, a zero emission construction fleet is not technologically feasible for a project requiring hundreds of pieces of heavy-duty, high-horsepower off-road equipment. No commercially available battery-electric or hydrogen equipment exists in these size classes, particularly for scrapers, track-laying machines, high-horsepower dozers, or rail-construction machinery. CARB and U.S. EPA reports consistently recognize that large-horsepower off-road equipment is not yet available in zero-emission configurations, and when available, performance, duty-cycle, and refueling time do not meet the needs of large-scale grading or rail-yard construction.¹ Therefore, under CEQA, requiring the use of technology that does not yet exist at commercial scale is considered infeasible, in that would inhibit completion of the project or is technologically incapable of meeting project requirements (CEQA Guidelines § 15126.4(a)(1)(A)).

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. Contributors of operational emissions are heavy-duty trucks, line-haul locomotives, switcher locomotives, and non-electric cargo-handling equipment (e.g., hybrid RTGs, chassis stackers, and maintenance equipment). BIG includes features to reduce operational emissions, including dedicated newly purchased Tier 4 locomotives 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 newly purchased Tier 4 switcher locomotives,² 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 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. Unmitigated operational emissions would exceed the MDAQMD VOC, NO_x, CO, PM₁₀, and PM_{2.5} thresholds. Despite the implementation of **MM BIG AQ-7** through **MM BIG AQ-14**, operational emissions would remain above MDAQMD thresholds. Operational emissions would be significant and unavoidable. Unmitigated emissions within the South Coast Air Basin (i.e., South Coast AQMD’s jurisdiction) would be below applicable thresholds and no mitigation is required.

Cumulative Impacts (Impact 5-3). The cumulative setting for air quality includes the City of Barstow, County of San Bernardino, the MDAB and the South Coast Air Basin (SCAB) (for the portion of the mainline corridor within SCAB). Although BIG is within the MDAQMD’s jurisdiction, it would affect truck and train movements that also occur within the South Coast AQMD’s jurisdiction (i.e., the SCAB).

The SCAQMD has provided the following guidance on an acceptable approach to addressing cumulative air quality impacts:³

¹ CARB’s Advanced Clean Equipment (ACE) program confirms that zero-emission off-road equipment categories, including construction machinery, are either commercially available only in limited low-horsepower classes or are still “in development or demonstration.” <https://ww2.arb.ca.gov/our-work/programs/msei/off-road-advance-clean-equipment>.

² Only six Tier 4 switcher locomotives are needed to fully replace the 15 existing Tier 0/0+/1+ switcher locomotives due to improved reliability, advanced traction control, and better power/improved torque with Tier 4 switchers.

³ South Coast Air Quality Management District, *Cumulative Impacts White Paper, Appendix D*, August 2003.

As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR... Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

The nature of project mass emissions makes them largely a cumulative impact. As a result, no single project is sufficient to, by itself, result in the nonattainment of CAAQS or NAAQS. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The regional significance thresholds published by the MDAQMD and SCAQMD are designed to ensure compliance with both NAAQS and CAAQS and are based on an inventory of projected emissions in the MDAB. Therefore, any increase in a criteria pollutant for which an air basin is in nonattainment is conservatively considered a cumulatively considerable contribution, regardless of whether project-level thresholds would be exceeded.

The MDAB is designated nonattainment area for all state O₃ standards, all state PM₁₀ and PM_{2.5} standards, all federal O₃, and the federal 24-hour PM₁₀ standard. MDAB is designated as attainment or unclassified for the remaining CAAQS and NAAQS.

BIG's construction-related mass emissions are positive for VOCs, CO (O₃ [ozone] pre-cursors), PM₁₀, and PM_{2.5}, despite all feasible mitigation. Therefore, BIG is conservatively assumed to have a cumulatively considerable contribution to cumulative air pollutant emissions of VOCs, CO (O₃ [ozone] pre-cursors), PM₁₀, and PM_{2.5} during construction. This cumulative impact would be significant and unavoidable.

BIG's cumulative operational net emissions would be above the applicable threshold for VOCs, NO_x, CO, PM_{2.5} and PM₁₀ for at least one analysis year. Because BIG, despite all feasible mitigation, would result in significant impacts for VOCs, NO_x, CO, PM_{2.5} and PM₁₀ in at least one analysis year, it would have a cumulatively considerable contribution to regional emissions of those pollutants. Furthermore, because BIG would result in an increase in PM₁₀, and PM_{2.5}, for which the MDAB is non-attainment, and an increase of CO and VOCs, which are precursors to O₃, a pollutant for which the MDAB also is in non-attainment, BIG is conservatively assumed to have a cumulative contribution to cumulative operational mass emissions impacts within the MDAB for these pollutants. This cumulative impact would be significant and unavoidable.

The SCAB is in attainment relative to CO, NO₂, SO₂, PM₁₀ (NAAQS), PM_{2.5} (NAAQS, 1997 Annual (15.0 µg/m³), Hydrogen Sulfide, Sulfates and Vinyl Chloride. The SCAB is a designated non-attainment area for O₃. Although the BIG project itself does not have significant impacts, because BIG would result in an increase in CO and VOCs, both of which are precursors to O₃, for which the SCAB is in non-attainment, BIG's cumulative contribution to mainline corridor impacts within the SCAB in regard to mass emissions is conservatively assumed to be cumulatively considerable. This impact would be a significant and unavoidable cumulative impact.

Mitigation. The EIR identifies and evaluates a comprehensive suite of mitigation measures for construction and operational air quality impacts, including compliance with MDAQMD rules, best available control measures for fugitive dust, and operational controls to reduce emissions where feasible. Even with implementation of **MM BIG AQ-7** through **MM BIG AQ-8**, BIG's construction and operational impacts would be significant and unavoidable.

Additional measures were considered but rejected because they were either infeasible or would not reduce significant air quality impacts addressed in the EIR:

- Air filtration programs: These measures address indoor exposure and would not reduce BIG's emissions.
- Vegetative buffers: Vegetative buffers do not provide quantifiable reductions in diesel particulate matter sufficient to reduce significance under CEQA thresholds (California Air Pollution Control Officers Association (CAPCOA), *Health Risk Assessment for Land Use Projects*, August 2009, Section 8.3.2 (Unquantifiable Mitigation Measures), p. 16.
- Setbacks: Setbacks beyond what is already designed for BIG would be infeasible due to the fixed nature of rail infrastructure and would not reduce regional emissions.
- Zero emission equipment requirements: To the extent feasible and within regulatory authority, cleaner equipment assumptions are incorporated into the EIR analysis. However, CEQA does not require adoption of speculative or technologically infeasible measures. BIG incorporates zero emission trucks into the project design by including zero emission hostlers that would move cargo between the intermodal facility and the transload warehouses. BIG would also use zero-emission rail-mounted gantry cranes, forklifts, top picks/side loaders, and hostlers. However, in response to comments, as set forth in the following reports, additional zero emissions technologies were evaluated and determined not to be feasible within a reasonable period of time for operational, technological, commercial and/or economic reasons:

Feasibility Analysis of New Propulsion Locomotive Technologies and Overhead Catenary for the BIG Project, by Michael E. Iden. P.E., dated March 2026.

Operational Feasibility of Power Swapping BEL Linehaul Locomotives at BIG and Other Operational Challenges for BEL Switchers, by Travis Thowe (BNSF Director of Network Strategy) and Mike Swaney (BNSF Director of Advanced Energy Innovation), February 27, 2026.

Operational and Cost Feasibility for Switcher BELs and Linehaul BELs, by Mike Swaney (BNSF Director of Advanced Energy Innovation, Eric Putnam (Burns and McDonnell Senior Associate Technical Consultant), Connor Smith (1898 & Co Project Delivery Manager), and Jonathan Leffert, P.E. (1898 & Co Managing Director), March 13, 2026.

Feasibility of Electric Rubber Tire Gantry (RTG) Cranes Technical Memorandum, Prepared by Rod Haney (Managing Member of Transport Equipment Consulting, LLC), dated March 2026.

Zero Emission Trucks Feasibility Evaluation for Barstow International Gateway, Prepared by Chris Shimoda (Shimoda Government Strategies LLC), Brad Womack (BNSF), Naomi Germain, PE, TE and Josh Rowe, EIT (both Kimley-Horn and Associates, Inc.), dated March 2026.

Impacts on BIG's Viability Due to Suggested Zero-Emission Mitigation Measures, Prepared by Brad Womack (BNSF General Director of Intermodal Strategy and Innovation), dated April 2026.

Finally, as discussed in the *Impacts on BIG's Viability Due to Suggested Zero-Emission Mitigation Measures*, BIG includes the cleanest feasible technology for its dedicated fleet locomotives, yard hostlers and cargo handling equipment and forced implementation of technology that is not feasible and otherwise not an industry-wide requirement would put BIG at a substantial market disadvantage as it would increase costs, and customers could simply choose to use existing modes of transportation that do not include these same requirements. Thus, forced implementation of these measures would fail to meet a key Project objective to “[i]ncrease the speed and reliability, and *lower the cost*, of moving containerized goods from the San Pedro Bay Ports (Ports) to their end destinations, with the end effect of reducing traffic congestion and associated air emissions from trucking of goods to and from transload facilities” (emphasis added).

Impact 5.3-3: Would the Project (BIG) expose sensitive receptors to substantial pollutant concentrations?

Impact 5-3: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding air quality?

The EIR evaluated and concluded that BIG's construction would exceed carcinogenic risk at the maximally exposed individual residential and worker receptors. The EIR evaluated and concluded that despite the implementation of **MM BIG AQ-1** through **MM BIG AQ-14**, pollutant concentration impacts to sensitive receptors would remain significant and unavoidable.

Mitigation Measures

See **MM BIG AQ-1** through **MM BIG AQ-14**. No additional mitigation is feasible.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM BIG AQ-1** through **MM BIG AQ-14**, BIG could have the potential to expose sensitive receptors to substantial pollutant concentrations. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM BIG AQ-1** through **MM BIG AQ-14** are feasible and would reduce potential significant project impacts, although not all to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: BIG implementation would result in localized emissions that would result in the exposure of sensitive receptors to localized criteria pollutant concentrations and TACs.

Criteria Pollutant Concentrations

Localized Concentrations of Construction Emissions of Criteria Pollutants (BIG Footprint Only). Dispersion modeling of on-site and off-site BIG construction emissions was performed to assess the impact of construction on ambient air concentrations in the vicinity of the BIG footprint. BIG construction would comply with MDAQMD rules which include fugitive dust control (Rule 403) and use of low-VOC paints and coatings (Rule 1113). The U.S. EPA dispersion model AERMOD was used to predict maximum ambient pollutant concentrations within the BIG study area. Emissions of PM₁₀, and PM_{2.5} from BIG construction would result in ambient concentrations that exceed applicable PM₁₀ and PM_{2.5} NAAQSs. BIG would be required to implement **MM BIG AQ-1** and **MM BIG AQ-3** through **MM BIG AQ-6**, which would reduce

construction PM₁₀ and PM_{2.5} emissions. These mitigation measures require fugitive dust controls, Tier 4 equipment, use of renewable diesel, clean on-road construction vehicles, and concrete batch plant emissions controls. Construction emissions would be reduced, but would still exceed the PM₁₀ NAAQS (24-hour). Even with implementation of **MM BIG AQ-1** and **MM BIG-3** through **MM BIG AQ-6**, localized concentrations of criteria pollutant emissions during construction would be significant and unavoidable.

Localized Concentrations of Operations Emissions of Criteria Pollutants: BIG Footprint. Dispersion modeling of on-site and off-site BIG operational emissions was performed to assess impacts to air concentrations in the vicinity of BIG. These concentrations were modeled for BIG Opening Year 2028, Interim Year 2033, and Horizon Year 2048. The U.S. EPA dispersion model, AERMOD, was used to predict maximum ambient pollutant concentrations based on mass emissions modeled for each analysis year in the vicinity of BIG. Unmitigated BIG operations would exceed the NAAQS and CAAQS for NO₂ (1-hour) in 2048. BIG operations would include Tier 4 locomotives, renewable diesel fuels, and electric cargo handling equipment. Operational concentrations would not exceed the NAAQS or CAAQS in any of the analysis years with implementation of **MM BIG AQ-7** through **MM BIG AQ-14**. With implementation of **MM BIG AQ-7** through **MM BIG AQ-14**, BIG's potentially significant localized concentrations of operations emissions of criteria pollutants within the BIG footprint would be less than significant.

Rail Corridor Concentrations. Localized effects of BIG-related corridor emissions and the associated increases in criteria pollutants were modeled for a worst-case segment in the SCAB and two segments in the MDAB near BIG. The analyzed segments include one location in the SCAB (based on the Source Receptor Area [SRA] with the highest background concentration) and two locations in the MDAB (one west of BIG and one east of BIG).

South Coast AQMD Segment. Dispersion modeling of off-site BIG operational emissions was performed to assess impacts to air concentrations along the rail corridor in the SCAB. The segment modeled is located in SRA 12, which has been identified as the worst-case railroad segment because it has the highest background concentrations. These concentrations were modeled for BIG Opening Year (2028), Interim Year (2033), and Horizon Year (2048). Unmitigated BIG operations would not exceed the NAAQS and CAAQS for NO₂ (1-hour), PM₁₀ (24-hour and annual), and PM_{2.5} (24-hour and annual) in 2028, 2033, and 2048, and, thus, no mitigation is required.

MDAQMD West of BIG. Dispersion modeling of off-site BIG operational emissions was performed to assess impacts to air concentrations along the rail corridor west of the BIG Footprint to the Silver Lakes Community. This segment is located closest to sensitive receptors that are not adjacent to the BIG footprint and therefore were not included in the BIG footprint modeling described above. The concentrations were modeled for BIG Opening Year 2028, Interim Year 2033, and Horizon Year 2048. Unmitigated BIG operations would not exceed the NAAQS or CAAQS in any analysis years and, thus, no mitigation is required.

MDAQMD East of BIG. Dispersion modeling of off-site BIG operational emissions was performed to assess impacts to air concentrations along the rail corridor east of the BIG Footprint. This segment is located closest to sensitive receptors that are not adjacent to the BIG footprint and therefore were not included in the BIG footprint modeling described above. The concentrations were modeled for BIG Opening Year 2028, Interim Year 2033, and Horizon Year 2048. Unmitigated BIG operations would not exceed the NAAQS or CAAQS in any of the analysis years and, thus, no mitigation is required.

CO Hot spots. BIG CO concentrations would not exceed the 1-hour or 8-hour NAAQS or CAAQS when compared with background concentrations. Therefore, BIG would not have the potential to cause an intersection to reach the volume of traffic required to generate a CO hot spot and, thus, no mitigation is required. Note that the Barstow Yard switcher replacements would not affect CO hotspots because Tier 4 emission standards primarily reduce NO_x and particulate matter, but CO emission rates are unchanged.

Asbestos. BIG would acquire various properties. Structures which need to be removed may have been built with structural and building materials that contain asbestos. The demolition of structures with asbestos-containing materials is subject to *National Emission Standards for HAPs* limitations and would require an asbestos inspection. BIG would comply with the MDAQMD asbestos requirements, including submission of an asbestos survey and notification of demolition form. Strict compliance with existing asbestos regulations would prevent a substantial effect from asbestos. Additionally, the County is not designated by the California Geological Survey as areas likely to contain naturally occurring asbestos (NOA) and therefore would not likely be disturbed during BIG construction and, thus, no mitigation is required.

Valley Fever. BIG would not result in a significant impact attributable to Valley Fever exposure based on its geographic location and compliance with applicable regulatory standards and dust control measures, which will serve to minimize the release of and exposure to fungal spores. Impacts associated with Valley Fever exposure for sensitive receptors would be less than significant and, thus, no mitigation is required.

Potential Impacts of Toxic Air Contaminants

The Health Risk Assessment (HRA) analyzes BIG TAC emissions and human exposure to the emissions during 9-, 25-, 30-, and 70- year periods, each starting the year after the baseline and reflecting OEHHA-recommended exposure durations for different receptor types. The analysis evaluated address three types of health effects: individual lifetime cancer risk, chronic non-cancer health index (HI), and acute non-cancer HI. A threshold exceedance indicates a substantial contribution to adverse health effects related to TAC exposure.

The HRA examined Project impacts resulting from BIG construction and operations from the commencement of construction for a 30-year exposure duration for sensitive/residential receptors, 25-year exposure duration for worker receptors, and 9-year exposure duration for school site student receptors. Because cancerous health risks result from long exposure periods, construction health risk and operational health risk were analyzed separately and combined.

It should be noted that HRAs are not intended to quantify estimates of the absolute health risk or expected disease incidence for a population. Rather, HRAs are conducted to allow for comparisons of the potential health risks of different alternatives to each other and the significance criteria. Consistent with agency guidelines and standard approaches to regulatory risk assessment, the HRA used health-protective (high-end/conservative) assumptions to provide a margin of safety with respect to human health.

Carcinogenic Risk Assessment

Carcinogenic Risk Assessment (Construction Only). The exposure duration for construction is approximately 2.8 years. The unmitigated construction risk assessment includes existing regulations. Unmitigated and mitigated construction risk would exceed the 10 in one million incremental threshold at residential and worker receptors. The unmitigated risk would be minimized with **MM BIG AQ-3** through **MM BIG AQ-6**, which would reduce construction exhaust emissions (i.e., DPM (diesel particulate matter))

by requiring Tier 4 offroad equipment, renewable diesel, newer model year on-road construction trucks, and the minimization of batch plant emissions. Construction carcinogenic risk would remain above the 10 in one million threshold despite the implementation of mitigation measures. Even with implementation of **MM BIG-3** through **MM BIG AQ-6**, BIG's construction carcinogenic risk impacts would be significant and unavoidable.

Carcinogenic Risk Assessment (Operations Only). Based on *OEHHA Risk Assessment Guidelines*, the exposure duration for a resident is 30 years, beginning with the third trimester; the exposure duration for workers is 25 years, and the exposure duration for students is 9 years. Unmitigated operations would exceed the MDAQMD threshold of 10 in one million. BIG includes various features which reduce major contributors to 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., hybrid electric rubber-tired gantry (RTG) cranes, electric rail mounted cranes (RMG), 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. These impacts would be reduced with implementation of **LOR AQ-3**, **MM BIG AQ-3** through **MM BIG AQ-6** and **MM BIG AQ-8** through **MM BIG AQ-14**. Impacts would remain above MDAQMD's thresholds after mitigation is applied. Unmitigated and mitigated risk would exceed the 10 in one million incremental threshold at residential receptors during operations. Even with implementation of **MM BIG-3** through **MM BIG AQ-6** and **MM BIG AQ-8** through **MM BIG AQ-14**, BIG's operational carcinogenic risk impacts to residential receptors would be significant and unavoidable. However, the risk for student, worker, and park receptors would be less than significant.

Carcinogenic Risk Assessment (Construction and Operations) assumes continued exposure starting from the beginning of BIG construction for 2.8 years and the operational exposure continuing for the remaining time (e.g., 27.2 years for residential exposure). Unmitigated and mitigated risk would exceed the 10 in one million incremental threshold at residential receptors during operations. Unmitigated risk would be minimized with **LOR AQ-3**. Even with implementation of **MM BIG-3** through **MM BIG AQ-6** and **MM BIG AQ-8** through **MM BIG AQ-14**, BIG's operational carcinogenic risk impacts to residential receptors would be significant and unavoidable. However, the risk for student, worker, and park receptors would be less than significant.

Individual residential cancer risk is calculated assuming that an individual would be exposed to the same concentration of a pollutant for a duration of 30 years without consideration of time spent indoors. Exposure would be reduced when factoring in time spent indoors with windows closed. With high summer temperatures in the City, the use of air conditioning is likely to reduce indoor temperatures. With consideration of time spent indoors and the likelihood that windows would be closed and air conditioning would be used during the summer months, risk would be lower than what is assumed in the analysis.

Population Cancer Burden at 70-Year Exposure. The cancer burden calculation provides an estimate of the increased number of cancer cases as a result of exposures to TAC emissions. The total cancer burden is the product of the number of persons in a population area (such as a census tract) and the estimated individual risk from TACs in that population area and then summed over all of the population areas. The unmitigated cancer burden includes LORs. BIG's population cancer burden would be below the MDAQMD significance threshold of 0.5, thus, a less than significant impact would occur, and no mitigation is required.

Chronic Hazard Index. Unmitigated and mitigated chronic non-carcinogenic impacts for the worst-case peak receptor. A chronic HI of 1.0 is considered individually significant. The HI is calculated by dividing the chronic exposure by the REL. The chronic HI was calculated based on the highest annual average concentration at the maximally exposed individual receptor. The highest worst-case chronic HI associated with unmitigated DPM emissions from BIG in year 2028 would be 0.08. Therefore, even without mitigation, non-carcinogenic hazards are calculated to be less than the MDAQMD significance threshold of 1.0 at all receptors and a less than significant impact would occur. With mitigation the chronic HI would be reduced to 0.06. Impacts would be less than significant.

Improvements in the Corridor. BIG trains would travel along a Corridor, which is defined as the rail line operated by BNSF between the San Pedro Ports and Needles Station at approximately the California/Arizona border." The western portion of the Corridor is located within the jurisdiction of the South Coast AQMD (within the SCAB), and the eastern portion is within the jurisdiction of the MDAQMD (within the MDAB). BIG would not increase particulate matter pollutant emissions in the Corridor within the SCAB (i.e., the South Coast AQMD's jurisdiction) above the No Project conditions. BIG would result in a net decrease of particulate matter emissions in the Corridor segment within the MDAB west of BIG from the use of the Tier 4 dedicated fleet and increased use of renewable diesel. DPM is the primary TAC of concern because it is the most potent TAC emitted from diesel exhaust and includes hundreds of chemicals. DPM is a subset of PM₁₀; however, locomotive emission factors are only available for PM₁₀ and not DPM. Therefore, although DPM is a subset of PM₁₀ exhaust, the analysis conservatively assumes all PM₁₀ exhaust emissions are DPM. BIG would reduce PM₁₀ (DPM) emissions in the Corridor west of BIG. BIG's DPM emission reduction occur from using dedicated Tier 4 locomotives to transport containers between the Ports and BIG's intermodal facility, using Tier 4 switcher locomotives, and modifying the fuel blend used within the Ports' existing fueling site to use up to ten percent renewable diesel. BIG would improve DPM emissions in the Corridor and would result in a beneficial impact. Thus, there is no potential cancer risk, hazard index, or cancer burden impacts in the Corridor west of BIG.

Mitigation Deemed Infeasible. Various mitigation measures were evaluated in the Draft EIR or Final EIR to mitigate air quality impacts. Battery-electric locomotives (BELs) are infeasible mitigation, as established in the *Feasibility Analysis of New Propulsion Locomotive Technologies and Overhead Catenary for the BIG Project*, Prepared by Michael Iden. P.E. (*BEL and Catenary Feasibility Analysis*). The *BEL and Catenary Feasibility Analysis* responded to comments submitted by Earthjustice, et al., including Mr. Hal Connolly's report (attached as Appendix A to the Earthjustice letter), the California Air Resources Board (CARB), the South Coast Air Quality Management District (South Coast AQMD), and others, concerning the application of BELs (both in line haul and switcher service) to BIG. The *BEL and Catenary Feasibility Analysis*, as well as the *BELs Operational And Economic Feasibility for Switchers and Linehauls*, by Burns and McDonnell, and *Operational Feasibility of Power Swapping BEL Linehaul Locomotives at BIG and Other Operational Challenges for BEL Switchers*, by Travis Thowe (BNSF Director of Network Strategy) and Mike Swaney (BNSF Director of Advanced Energy Innovation), February 27, 2026 (*Power Swapping Memo*), individually and collectively constitute substantial evidence that BELs are not "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (CEQA Guidelines Section 15364.). Furthermore, the *BEL and Catenary Feasibility Analysis* documents that catenary is infeasible due to risk of energy disruption, massive additional costs, lack of proportionality to the level of impact, and conflict with BIG project objectives due to the 9- to 20-year development timeline. Requiring BELs and catenary along BNSF' railway corridors is

also infeasible because the City does not have jurisdiction to impose mitigation outside of its jurisdictional boundaries.

Commenters (Earthjustice, et al., CARB, South Coast AQMD, etc.) also requested further evaluation of zero-emission technologies. However, in response to these comments, as set forth in the following reports, additional zero emissions technologies were evaluated and determined not to be feasible within a reasonable period of time for operational, technological, commercial and/or economic reasons:

Feasibility Analysis of New Propulsion Locomotive Technologies and Overhead Catenary for the BIG Project, Prepared by Michael E. Iden, P.E., dated March 2026.

Operational Feasibility of Power Swapping BEL Linehaul Locomotives at BIG and Other Operational Challenges for BEL Switchers, by Travis Thowe (BNSF Director of Network Strategy) and Mike Swaney (BNSF Director of Advanced Energy Innovation), February 27, 2026.

Operational and Cost Feasibility for Switcher BELs and Linehaul BELs, by Mike Swaney (BNSF Director of Advanced Energy Innovation, Eric Putnam (Burns and McDonnell Senior Associate Technical Consultant), Connor Smith (1898 & Co Project Delivery Manager), and Jonathan Leffert, P.E. (1898 & Co Managing Director), March 13, 2026.

Feasibility of Electric Rubber Tire Gantry (RTG) Cranes Technical Memorandum, Prepared by Rod Haney (Managing Member of Transport Equipment Consulting, LLC), dated March 2026.

Zero Emission Trucks Feasibility Evaluation for Barstow International Gateway, Prepared by Chris Shimoda (Shimoda Government Strategies LLC), Brad Womack (BNSF), Naomi Germain, PE, TE and Josh Rowe, EIT (both Kimley-Horn and Associates, Inc.), dated March 2026.

Finally, as discussed in the *Impacts on BIG's Viability Due to Suggested Zero-Emission Mitigation Measures*, BIG includes the cleanest feasible technology for its dedicated fleet locomotives, yard hostlers and cargo handling equipment and forced implementation of technology that is not feasible and otherwise not an industry-wide requirement would put BIG at a substantial market disadvantage as it would increase costs, and customers could simply choose to use existing modes of transportation that do not include these same requirements. Thus, forced implementation of these measures would fail to meet a key Project objective to “[i]ncrease the speed and reliability, and *lower the cost*, of moving containerized goods from the San Pedro Bay Ports (Ports) to their end destinations, with the end effect of reducing traffic congestion and associated air emissions from trucking of goods to and from transload facilities” (emphasis added). For all of the above reasons, the suggested mitigation measures are infeasible. Imposing zero-emission truck requirements for accessing BIG is further infeasible because neither the City nor BNSF would own the trucks accessing BIG. The City has no authority to require adequate charging infrastructure along trucking routes, as they fall outside the City’s jurisdiction.

Cumulative Impacts (Impact 5-3). The proposed Logistics Facility project and existing Barstow Yard are located near or adjacent to the eastern edge of the BIG footprint. No other projects listed in Table 6-1 of the EIR have the potential to overlap with BIG’s construction either geographically or temporally. Sensitive receptors are located in close proximity to these project areas to the east and southeast. Therefore, there is the potential for localized construction emissions to overlap within the vicinity of these projects, and for localized cumulative construction emissions impacts to occur. BIG’s construction is conservatively

considered to result in a cumulatively considerable contribution for all criteria pollutants and therefore considered to have significant cumulative localized concentration impacts. Localized construction emissions cumulative impacts would be significant and unavoidable. As noted above, beyond **MM BIG AQ-1** through **MM BIG AQ-6**, no additional mitigation is available to further reduce or avoid BIG's cumulatively considerable contribution to this significant cumulative impact.

No emissions from other projects listed in Section 6.0, Table 6-1 of the EIR have the potential to combine with BIG's operational emissions geographically or temporally to result in concentration impacts at receptors near BIG. While analysis is not yet complete for the Logistics Facility project, due to its proximity to BIG, BIG's localized operational emissions may combine with the proposed Logistics Facility at receptors near BIG. Similarly, while the current emissions from the existing Barstow Yard also are unknown, the localized operational emissions from BIG may combine with the existing Barstow Yard at receptors near BIG. Because BIG, even after mitigation, would increase concentrations of NO_x, CO, PM_{2.5} and PM₁₀ beyond existing background concentrations, it is conservatively assumed BIG's emissions could combine with emissions from the proposed Logistics Facility and the existing Barstow Yard and result in cumulatively considerable contribution of these pollutants at individual receptors near BIG. For these reasons, BIG is conservatively considered to result in a cumulatively considerable contribution to cumulative significant localized concentration impacts for all criteria pollutants, and therefore, considered to have cumulative localized operational emissions impacts that would be significant and unavoidable. As discussed above, additional mitigation measures were studied but deemed infeasible. Therefore, no additional mitigation for BIG's contribution to these cumulative impacts is available.

EIR SECTION 5.5: CULTURAL RESOURCES - BIG

Impact 5.5-1: Would the Project (BIG) cause a substantial adverse change in the significance of a historical resource pursuant to §15067.5?

Impact 5-5: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding cultural resources?

The EIR evaluated and concluded that impacts to historic and archaeological resources would be significant and unavoidable. The high likelihood of previously unidentified historical and unique archaeological resources to be affected by BIG's ground-disturbing activities and physical impacts may cause adverse effects to said resources. Despite the implementation of **MM BIG CUL-1** through **MM BIG CUL-7**, impacts to historical resources during construction would remain significant and unavoidable during construction.

Mitigation Measures

MM BIG CUL-1 Phase III Data Recovery. Prior to any ground-disturbing activities, a Phase III Data Recovery Plan for the 19 archaeological sites identified as historical resources and unique archaeological resources shall be planned and implemented. Prior to BIG approval, an archaeologist that meets Secretary of Interior Professional Qualifications in Archaeology and who has at least 10 years of experience in the Mojave Desert for both prehistoric and historic era resources, henceforth identified as the BIG Project Archaeologist, shall prepare a Phase III Data Recovery Plan. Approval of the Plan may be completed after BIG approval, though implementation of the Plan must occur prior

to, or concurrent with, installation of fencing for Desert Tortoise that is required as biological resources mitigation. The Plan shall include details related to research design, excavation methodology, and final disposition, and shall be reflective of requirements outlined in BIG CUL mitigation measures. Additionally, the plan shall be reflective of BIG design and proposed ground disturbance, in that if any of the 19 archeological sites or portions of sites that will not be subject to physical impacts should be left in place. The Plan shall be submitted to the Lead Agency, as well as the Cultural Resources Management Department for the Yuhaaviatam of San Manuel Nation and the Tribal Historic Preservation Office for the Morongo Band of Mission Indians, henceforth referred to as the consulting Tribes, for review and comment. Parties shall be provided with a comment period of 20 business days from the date of receipt. Once approved by the City and U.S. Army Corps of Engineers, the plan shall be overseen by the BIG Project Archaeologist, with fieldwork overseen and implemented by archaeological field staff that have demonstrated experience in the Mojave Desert for both prehistoric and historic era resources. The BIG Project Archaeologist and City (or City and U.S. Army Corps of Engineers, as applicable) shall coordinate with consulting Tribes who have elected to place a Native American monitor on-site during data recovery regarding schedule and monitor acquisition. For any consulting Tribe that requires a formal agreement to obtain a Native American monitor, the applicant shall enter into said agreement with the respective Tribe. Data recovery shall require a Tribal monitor. Upon completion of the data recovery field efforts, a draft Phase III Data Recovery Report shall be compiled and submitted to the implementing entity, City, U.S. Army Corps of Engineers, and consulting Tribes for review and comment no later than 120 days after fieldwork completion. Once approved and considered final by the consulting Tribes, City, and U.S. Army Corps of Engineers, a final copy shall be submitted to the aforementioned recipients, as well as the South Central Coastal Information Center (SCCIC).

MM BIG CUL-2 Cultural Resources Monitoring Plan. Prior to the installation of fencing for Desert Tortoise that is required as biological resources mitigation, as well as any other ground-disturbing activities connected to BIG, a Cultural Resources Monitoring and Management Plan (CRMMP) must be approved by the City and US Army Corps of Engineers that shall be enforced for all ground-disturbing activities that take place within the BIG footprint after BIG approval. The CRMMP shall be prepared by the BIG Project Archaeologist and be reflective of cultural resources mitigation and outlines requirements for conducting Worker Environmental Awareness Program (WEAP) training, archaeological and Native American monitoring, and inadvertent discoveries of archaeological resources. The CRMMP shall include, but is not limited to, roles and responsibilities, summary description of known and potential cultural resources, monitoring procedures, process for inadvertent discovery of cultural resources, process for determining treatment of cultural resources, and process for inadvertent discovery of human remains. The CRMMP shall also include appendices with the approved mitigation measures/conditions of approval, as well as contact information for all relevant parties. The draft CRMMP shall be submitted to the implementing entity, City, US Army Corps of Engineers, and consulting Tribes for review and comment. Parties shall be provided with a comment period of 15 business days from

the date of receipt. Once approved by the City and U.S. Army Corps of Engineers, the CRMMP shall be enforced through the duration of all ground-disturbing activities associated with BIG site preparation and construction.

MM BIG CUL-3

Worker's Environmental Awareness Program. Concurrently with the preparation of the CRMMP, the BIG Project Archaeologist shall prepare a Worker Environmental Awareness Program (WEAP) training for all on-site personnel related to cultural resources for BIG. The draft WEAP training shall be submitted to the implementing entity, City, US Army Corps of Engineers, and consulting Tribes for review and comment. Parties shall be provided with a comment period of 15 business days from the date of receipt. Once approved by the City and US Army Corps of Engineers, the training shall be utilized for all WEAP trainings provided by the BIG Project Archaeologist, or their designee, throughout BIG site preparation and construction. The WEAP shall include an overview of the requirements in the CRMMP, applicable mitigation measures, and information related to cultural resources that may be identified during BIG site preparation and construction, how to identify them, and the process to follow in the case of inadvertent discovery. The consulting Tribes shall be contacted with an invitation to participate in the initial training at least 10 business days prior to the scheduled date. All personnel that access the site during BIG site preparation and construction must undergo this training, to include any personnel that access the BIG footprint after the initial WEAP training is provided but prior to completion of construction. Methods and timing for providing the training may vary throughout BIG construction depending on schedule, though the training itself shall not exceed 1 hour and all participants shall be required to add their name to a sign-in sheet for tracking purposes.

MM BIG CUL-4

Construction Monitoring. Archaeological monitors shall be present during all ground-disturbing activities. Archaeological monitors shall be designated as either a Crew Chief or Field Technician, with a ratio of no fewer than one Crew Chief for every eight Field Technicians. Crew Chiefs are required to have a bachelor's degree in Anthropology, Archaeology, or a related field and at least 3 years of demonstrated experience in Mojave Desert archaeology. Field Technicians are required to have a bachelor's degree in Anthropology, Archaeology, or a related field. All Field Technicians are required to undergo an Archaeological Resources Training prepared by the BIG Project Archaeologist or their designee prior to accessing the BIG footprint. A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. The monitors would work under the direct supervision of the BIG Project Archaeologist, who shall serve as the Principal Investigator for BIG. In addition, the consulting Tribes shall be contacted with an invitation to provide Native American monitors representing each respective Tribe who shall be present during all ground-disturbing activities. However, ground-disturbing activities shall be permitted to continue on any days that were included in the schedule and for which a Tribal monitor is not provided. "Ground-disturbing activities" mean tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, fence/gate removal and installation, drainage and irrigation removal and installation, and archaeological work. The tribal representative, in coordination with the BIG Project

Archaeologist, and review of the CRMMP, may determine that certain ground-disturbing activities are exempt from monitoring. For any consulting Tribe that requires a formal agreement to obtain a Native American monitor, the implementing entity shall enter into said agreement with the respective Tribe. All archaeological and Native American monitors shall have the authority to temporarily divert, redirect, or halt ground-disturbing activities to address potential inadvertent discoveries.

MM BIG CUL-5 Inadvertent Discoveries of Cultural Resources. In the event that cultural resources are discovered during BIG construction, all earthwork and ground-disturbing activities shall halt within 50 feet of the discovery. The on-site archaeological monitor shall immediately notify the BIG Project Archaeologist, who shall work with both the archaeological monitor to identify if the resource is potentially a Historical Resource and/or Unique Archaeological Resource (i.e., significant). All prehistoric resources shall be considered tribal cultural resources.

For any resources that are not potentially significant, or within the boundary of previously recorded site that was identified as ineligible/not significant during BIG environmental review, the BIG Project Archaeologist shall prepare a site record or site record update, as appropriate, and the monitors shall collect the resource for later reburial as treatment for its status as a tribal cultural resource. Work shall continue in the area once this is completed.

Should a resource be identified within a previously recorded site that is potentially significant and, therefore, potentially increase the eligibility status of the site from ineligible to eligible, the site shall be treated as a potentially significant resource, and steps A through B below shall be followed. Similarly, for any previously unknown and unrecorded resources that are potentially significant, steps A through B below shall be followed.

- A. An Archaeological Resource Area (ARA) shall be established around the find plus the 50 foot buffer via the placement of a physical barrier/demarcation, such as fencing or caution tape. This material shall be provided by the implementing entity and put in place by construction personnel in the presence of, and at the direction of, the archaeological and Native American monitors.
- B. The archaeological monitors shall immediately contact the BIG Project Archaeologist, who shall contact the consulting Tribes, City, and U.S. Army Corps of Engineers within 1 business day to provide notification of the find, details related to the nature of the resource, and evaluation recommendations or recommended effort to support evaluations, such as subsurface testing of the resource. Parties must respond within 1 business day with feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 1 business day, the evaluation recommendations or recommendations for additional effort to support evaluations shall be considered approved. For resources that require additional effort, implementation of the additional work shall occur within 1 business day of approval or non-response. Upon completion of the additional work, the BIG Project Archaeologist shall submit the evaluation recommendations to the parties. Parties must respond within 1 business day with

feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 1 business day, the evaluation recommendation shall be considered approved.

- a. For resources that are evaluated as ineligible, the previously noted steps in this mitigation measure related to recordation and collection shall be followed.
- b. For significant/eligible cultural resources, the BIG Project Archaeologist shall make recommendations to the City and U.S. Army Corps of Engineers and consulting Tribes regarding the measures that shall be implemented to avoid or mitigate impacts to the resource. Parties must respond within 3 business days with feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 3 business days, the recommendations shall be considered approved. Treatment measures shall be considered in the following order:
 1. Preservation in place (i.e., avoidance) is the preferred manner of treatment. In this case, the site shall be recorded on a site record and the established ARA shall remain in place until all ground-disturbing activities are completed within that area of the BIG footprint.
 2. If preservation in place is determined to be infeasible by the BIG Project Archaeologist based on input from the implementing entity, City, and U.S. Army Corps of Engineers, treatment may include implementation of archaeological data recovery (i.e., excavations) to remove the resource along with subsequent laboratory processing and analysis. Should this be the case, a Data Recovery Plan shall be prepared by the BIG Project Archaeologist and submitted to the City and consulting Tribes for review and approval. Timelines for review and approval may vary depending on the resource, but all Data Recovery Plans for inadvertent discoveries should be approved within 10 business days of discovery. Upon conclusion of Data Recovery, all findings shall be recorded on-site records, as well as included in a report drafted by the BIG Project Archaeologist after the completion of BIG and submitted to the City, U.S. Army Corps of Engineers, and consulting Tribes for review and approval.
 - i. Prehistoric archaeological material shall be reburied in an area that shall not be impacted by future earth-moving activities and reside in a permanent conservation easement or Deed Restriction. Such an area shall be identified by the Lead Agency in consultation with the applicant, BIG Project Archaeologist, and consulting Tribes. Should reburial be infeasible, the material and associated site records/ reports shall be curated at a Tribal-accredited facility or an American Association of Museums (AAM)-accredited facility within the County or adjacent Counties, as agreed by the consulting Tribes.
 - ii. Historic archaeological material shall be curated at an American Association of Museums (AAM)-accredited facility within the

County or adjacent Counties. If no institution accepts the historic archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. If no one accepts the material, the resource may be destroyed after recordation.

MM BIG CUL-6 Reporting Protocols. Once all ground-disturbing activities are complete and all resources have been appropriately reburied or curated, the BIG Project Archaeologist shall draft a Monitoring Report that includes details related to BIG construction, duration of monitoring, inadvertent discoveries, eligibility evaluations, and final disposition of all inadvertent discoveries. The draft Monitoring Report shall be submitted to the implementing entity, City, U.S. Army Corps of Engineers, and consulting Tribes for review. In addition to the submission of the Phase III Data Recovery Report to the SCCIC, as noted in MM BIG CUL-1, the Monitoring Report, CRMMP, any additional data recovery plans and reports, and all site records shall be submitted to the implementing entity, consulting Tribes, City, U.S. Army Corps of Engineers, and SCCIC once final.

MM BIG CUL-7 Public Education. Once all ground-disturbing activities are complete and all resources have been appropriately reburied or curated for construction of the railyard, the BIG Project Archaeologist shall work with the consulting Tribes to develop a public education program focused on the history and culture of the Serrano people indigenous to the Barstow area. The program shall include broad information related to the archaeological resources identified within the BIG footprint, as appropriate to preserve the confidentiality of archaeological data and as agreed upon by the consulting Tribes, as well as information that demonstrates the long history and connection the Serrano people have to the area. Additionally, the program shall underline the living Serrano communities and their active stewardship of their ancestral lands, including the Barstow area. BNSF shall be responsible for funding, completing, and disseminating the materials. All materials, to include any text, imagery, and format, shall be subject to final approval by the consulting Tribes. The program shall include:

- An educational booklet (10-15 pages) that shall be provided to local museums, libraries, schools, historical societies, and the consulting Tribes. The product shall be primarily geared toward a younger audience and shall be printed and available online. The educational booklet shall be due within one year of railyard construction being completed.
- Outreach to a local museum, library, or a publicly accessible administrative building/community center to identify a location to develop a museum exhibit or mural. Should a property agree to house such an exhibit, the exhibit shall be completed within 5 years of project completion.
- A plaque acknowledging that the City of Barstow and BIG occupy unceded Maara'yam (Serrano) ancestral territory, to be developed in consultation with the consulting Tribes. This plaque shall be displayed in any location identified by the

City of Barstow that agrees to do so, as well as on the home page of the BIG project website, within 1 year of railyard construction completion.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM BIG CUL-1** through **MM BIG CUL-7**, and compliance with the established regulatory framework, BIG construction activities would result in significant and unavoidable impacts to the significance of a historical resource pursuant to § 15064.5. Only avoidance of development within the BIG footprint would preclude the potential for significant impacts. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM BIG CUL-1** through **MM BIG CUL-7** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding:

Construction. There are 20 cultural resources within the BIG footprint that meet the definition of “historical resources” under CEQA, of which 19 are prehistoric archaeological sites that would be subject to ground disturbances, grading, and other physical impacts. BIG construction activities could cause a substantial adverse change in the significance of a historical resource, including tribal cultural resources. **MM BIG CUL-1** through **MM BIG CUL-7** seek to avoid/reduce impacts to unique archaeological resources. However, despite compliance with the established regulatory framework and implementation of mitigation, such measures may not be sufficient to reduce impacts to these resources to a less than significant level. As such, BIG construction activities would result in significant and unavoidable impacts even with the implementation of **MM BIG CUL-1** through **MM BIG CUL-7**.

Operations. Following completion of BIG construction, a rail yard with intermodal facility, block swap yard, and transload warehouse center would operate within the BIG Specific Plan area. BIG would involve off-site operations, including the lead track extensions and other infrastructure. Proposed treatment outlined in **MM BIG CUL-5** is to rebury cultural resources within BIG or its vicinity in an area that would not be impacted by future earth-moving activities or operations. Reburial areas have been identified that will not be impacted as a result of the Project or its operations. BIG’s operational impacts to unique archaeological resources would be less than significant.

Cumulative Impacts (Impact 5-5). BIG, combined with proposed cumulative projects, would result in a cumulative impact concerning impacts to cultural resources. Beyond the noted measures, no additional mitigation is available to further reduce or avoid BIG’s cumulatively considerable contribution to this significant cumulative impact. BIG would result in a cumulatively considerable contribution to significant unavoidable impacts on cultural resources.

Impact 5.5-2: Would the Project (BIG) cause a substantial adverse change in the significance of an archaeological resource pursuant to §15067.5?

Impact 5-5: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding cultural resources?

The DEIR evaluated and concluded that BIG would result in a substantial adverse change in the significance of an archaeological resource pursuant to § 15067.5 due to the high likelihood of previously unidentified historical and unique archaeological resources to be affected by ground-disturbing activities and physical impacts. With implementation of **MM BIG CUL-1** through **MM BIG CUL-7**, impacts would remain significant and unavoidable.

Mitigation Measures

See **MM BIG CUL-1** through **MM BIG CUL-7**.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM BIG CUL-1** through **MM BIG CUL-7**, and compliance with the established regulatory framework, BIG construction activities would result in significant and unavoidable impacts to the significance of an archaeological resource pursuant to § 15067.5. Only avoidance of development within the BIG footprint would preclude the potential for significant impacts. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. The City Council finds that **MM BIG CUL-1** through **MM BIG CUL-7** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: There are 19 prehistoric archaeological resources eligible for listing in the CRHR/NRHP, all of which also meet the definition of “unique archaeological resources” under CEQA. All 19 sites would be subject to ground disturbances, grading, and other physical impacts. BIG construction activities could cause a substantial adverse change in the significance of an archaeological resource. **MM BIG CUL-1** through **MM BIG CUL-7** are applicable to reduce impacts to archaeological resources. Despite compliance with the established regulatory framework and implementation of mitigation, such measures may not be sufficient to reduce impacts to these resources to a less than significant level. BIG construction activities would result in significant and unavoidable impacts concerning potential adverse changes in the significance of known and unknown archaeological resources even with the implementation of **MM BIG CUL-1** through **MM BIG CUL-7**.

With respect to operations, impacts would be the same as **Impact 5.5-1**. Proposed treatment outlined in **MM BIG CUL-5** is to rebury cultural resources within BIG or its vicinity in an area that would not be impacted by future earth-moving activities or operations. Reburial areas have been identified that will not be impacted as a result of the Project or its operations. BIG’s operational impacts to archaeological resources would be less than significant.

Cumulative Impacts (Impact 5-5). BIG, combined with proposed cumulative projects, would result in a cumulative impact concerning impacts to cultural resources. Beyond compliance with noted measures, no additional mitigation is available to further reduce or avoid BIG’s cumulatively considerable contribution to this significant cumulative impact. BIG would result in a cumulatively considerable contribution to significant and unavoidable impacts on cultural resources.

EIR SECTION 5.12: NOISE - BIG

Impact 5.12-1: Would the Project (BIG) 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?

Impact 5-12: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding noise?

The EIR evaluated and concluded that BIG construction and operational would generate 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, or due to a substantial increase over ambient conditions even if the noise level would not exceed applicable ordinances or standards. Despite the implementation of **MM BIG NOI-1**, **MM BIG NOI-2**, and **BIG NOI-3**, noise impacts would remain significant and unavoidable.

Mitigation Measures

MM BIG NOI-1: Nighttime Construction Noise Logistics Plan. Prior to the start of nighttime construction, the implementing entity shall submit and gain approval from the City of Barstow Director of Public Works or City Engineer—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, include a determination, supported with citation to factual evidence, that certain specified noise reduction measures, incorporated into the Plan, will be implemented to ensure, to the extent feasible, 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. Potential 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 500 feet of areas when nighttime construction would occur shall be sent a notice, at least 5 days prior to the commencement of nighttime construction activities, regarding the construction schedule of BIG. The initial format of notices shall be reviewed and approved by the Director of Planning, Building and Code Enforcement or Director's designee. 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 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 300 feet of 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.

MM BIG NOI-2

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

- A 10-foot-high, approximately 470-foot-long noise barrier surrounding the substation in the northeastern portion of the solar farm (Barrier-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 (Barrier-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 approximate locations of the noise barriers are provided in EIR Figure 5.12-14: Modeled Noise Barriers (Main Street) (page 5.12-85) and Figure 5.12-15: Modeled Noise Barriers (BIG Specific Plan Area) (page 5.12-86).

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 in the EIR).

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.

Finding: The City adopts Finding 2 and Finding 3 (CEQA Guidelines § 15091(a)(2) and (3)). The City finds that temporary noise barriers for construction of the 33kV line would be infeasible mitigation and that noise from the construction of the 33 kV line would exceed daytime noise standards at nearby sensitive receptors, resulting in significant and unavoidable impacts. The City further finds that even with implementation of **MM BIG NOI-1**, BIG's proposed nighttime construction would exceed nighttime noise standards at nearby sensitive receptors, resulting in significant and unavoidable impacts. The City further finds that, even with implementation of **MM BIG NOI-2** and **MM BIG NOI-3**, BIG's operational noise levels would exceed applicable exterior/interior noise standards and/or result in a substantial noise increase at nearby sensitive receptors, resulting in significant and unavoidable impacts. It is noted that a Battery Energy Storage System (BESS) was originally included in BIG's design to provide supplemental power to enable battery electric locomotives (BELs). BELs were subsequently determined to be infeasible due to technological, operational, and economic constraints. Therefore, because BELs were infeasible, the BESS was removed from BIG and the proposed 10-foot high, approximately 700-foot-long absorptive noise

barrier surrounding the BESS equipment (Barrier-2) was not required. **MM BIG NOI-2** was revised to reflect this change.

The City Council finds that **MM BIG NOI-1** and **MM BIG NOI-2** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. The City Council finds that **MM BIG NOI-3**, which would require rubberized asphalt on noted roadways in the City and County are feasible for roadway segments in the City and would reduce vehicular noise levels to a less than significant level. However, given the Lenwood Road improvements from Community Boulevard to Agate Road are 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. Therefore, as set forth in Finding 2 (“Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding”), the City cannot ensure that improvements in the County would be implemented. Therefore, while BNSF is willing to pay this incremental cost, vehicular noise impacts on Lenwood Road between Agate Road to Community Boulevard would be 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.

No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable noise impacts.

Basis for Finding: Concerning the generation of a substantial temporary or permanent increase in ambient noise levels (i.e., compared to levels without BIG) in the vicinity of BIG (in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies or due to a substantial increase over ambient conditions even if the noise level would not exceed ordinances or standards), the EIR evaluated and concluded that impacts would be significant and unavoidable. Because temporary noise barriers for construction of the 33 kV transmission line would be considered infeasible mitigation, noise from construction of the 33 kV line would exceed daytime noise standards at nearby sensitive receptors and a significant and unavoidable impact would occur during 33 kV transmission line construction. Because BIG’s proposed nighttime construction would exceed nighttime noise standards at nearby sensitive receptors despite implementation of **MM BIG NOI-1**, 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 **MM BIG NOI-2**, those impacts would be significant and unavoidable.

Daytime Construction. BIG construction noise levels would exceed the Federal Transportation Administration’s (FTA) daytime construction noise standard for residential uses. Temporary noise barriers for construction of the 33 kV line would be infeasible mitigation and no other potential mitigation is available, a significant and unavoidable construction noise impact would occur.

Nighttime Construction. 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.). Nighttime construction noise levels associated with the east lead tracks, solar farm, Lenwood Channel improvements, and 33 kV distribution line would exceed the FTA’s nighttime construction noise standard for residential uses. BIG would incorporate **MM BIG NOI-1**, which requires

submittal to and approval from the City of Barstow Director of Public Works or City Engineer of a Nighttime Construction Noise Logistics Plan that meets the performance standards specified therein for nighttime construction throughout the BIG footprint. While **MM BIG NOI-1** would require that the Nighttime Construction Noise Logistics Plan include a determination, supported with citation to factual evidence, that certain specified noise reduction measures, incorporated into the Plan, would be implemented to ensure that exterior noise levels from each 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 construction activities near residential uses. While implementation 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, and therefore, nighttime construction noise levels could still exceed the FTA's nighttime construction noise standard for residential uses. Nighttime noise from the construction of BIG would remain significant and unavoidable impacts even with the implementation of **MM BIG NOI-1**.

Pile-driving (Daytime and Nighttime). Pile-driving would be required wherever there are railroad bridges. Daytime pile-driving would be below the FTA's daytime construction noise threshold. As noted on page 3-86 of the EIR Project Description, BIG would avoid nighttime pile-driving by establishing an 1,800-foot buffer from sensitive receptors; thus, no nighttime pile-driving impacts would occur.

Construction– Roadway Traffic Noise. Construction crews traveling to and from the BIG footprint and vendors transporting construction equipment and materials to construction sites would incrementally increase noise levels along travel routes. BIG construction activities would require temporary lane or roadway closures. Rerouted traffic could affect existing noise levels and nearby land uses. BIG's construction trips would not double existing traffic volumes and would result in a less than perceptible 3 dBA roadway traffic noise increase, and a less than significant impact would occur.

Operations – On-site BIG Facility Noise for Operational Exterior Noise Levels. BIG operations would result in new noise sources that could affect nearby sensitive receptors. BIG would generate an increase in rail corridor activity along the existing mainline and at the block swap yard and intermodal facility, construct a new south mainline track closer to residential uses, increase train switching and coupling activities at the block swap yard, include new sources such as intermodal facility operations, truck loading/unloading activity at the transload warehouse center, mechanical equipment, and emergency generator equipment. **MM BIG NOI-2** would not reduce noise levels at nearby sensitive receptors below the incremental increase threshold(s) and some nearby sensitive receptors would experience a substantial noise increase over ambient conditions because of BIG operations. A significant noise impact would occur for Opening Year 2028, Interim Year 2033, and Horizon Year 2048 for operational exterior noise levels.

With respect to operational restrictions like reduction of nighttime operations, reduction of warning horns and signals to reduce noise, while there are tangible benefits from speed reductions during the most noise-sensitive time periods, FTA does not ordinarily accept speed reduction as a noise mitigation measure for two important reasons: speed reduction is unenforceable and negated if vehicle operators do not adhere to established policies, and it is contrary to the purpose of the transit investment by FTA, which is to move as many people as possible as efficiently and safely as possible. (FTA 2018. Transit Noise and Vibration Impact Assessment Manual, pg. 98). Reduction of nighttime noise is infeasible because, as a common carrier freight railroad, BNSF must operate 24/7, and cannot reduce the level of nighttime operations at one facility or else there would be downstream impacts throughout the BNSF network and

the supply chain and passenger rail service. Further, the City is prevented from attempting to enforce any limitation on nighttime operations due to preemption under the Interstate Commerce Commission Termination Act (ICCTA), which prohibits local jurisdictions from establishing laws or regulations that could unreasonably interfere with interstate commerce. Finally, reduction of warning horns and signals is infeasible due to safety concerns with reducing horn usage within a rail yard. While there are tangible benefits from limits on operations during the most noise-sensitive time periods, FTA does not recommend limits on operations as a way to reduce noise impacts because it is contrary to the purpose of the transit investment by FTA which is to move as many people as possible as efficiently and safely as possible (FTA, 2018. Transit Noise and Vibration Impact Assessment Manual, pg. 99).

Additionally, commenters suggested other mitigation measures that involve physical modifications to locomotives or infrastructure, which have been determined to be infeasible, ineffective, or already incorporated into BIG operations, as addressed below.

Resilient or damped wheels. BIG does not propose any tight turns or direction change within the footprint that would cause significant wheel roar, impact, or squeal, and therefore this proposed measure would not affect the impact analysis. Both the proposed north and south main and the lead tracks follow an east/west path. BIG noise impacts are not primarily attributed to wheel roar, impact, or squeal and pursuing resilient wheels to reduce such noise would not result in a significant reduction in operational noise levels or bring impacts to a less than significant level. Implementation of this measure would require modifications to each locomotive under service in BNSF's network, thus, there is not a sufficient "nexus" or "rough proportionality" established by case law for systemwide upgrades to locomotives (Nollan v. California Coastal Commission (1987) 483 U.S. 825, Dolan v. City of Tigard, (1994) 512 U.S. 374, Ehrlich v. City of Culver City, (1996) 12 Cal. 4th 854.).

Quiet fan design and fan placement. This measure is not applicable as fan noise does not materially contribute to BIG's noise impacts, meaning a reduction in such fan noise would not result in a clear reduction in noise impacts. The primary noise sources are from train horns and IMF activities. Locomotive fan noise would be masked by these noise sources and would not be noticeable at the nearest sensitive receptors. Thus, the measure is not incorporated as proposed mitigation.

Preventative maintenance on rail systems. BNSF already undertakes this as part of standard maintenance, and thus, it is not considered a mitigation measure because it is already incorporated into the operational impacts analysis.

Turn radii greater than 1,000 feet. The greatest turn radii on rail tracks within the BIG Specific Plan area is approximately 3,800 feet, thus, BIG design exceeds this suggested measure and it is already incorporated into the operational impacts analysis.

Rail lubrication on sharp curves. BNSF already undertakes this as part of standard maintenance, and thus, it is not considered a mitigation measure because it is already incorporated into the operational impacts analysis.

Movable-point frogs. Movable-point frogs, or frogs with movable points, are mechanisms to close gaps between running rails designed to reduce impact noise near crossovers, would be implemented on the mainline tracks; therefore, it is not considered a mitigation measure because it is already incorporated into the operational impacts analysis. However, note that per the FTA, there is no quantifiable noise reduction from this measure and the effectiveness is varied (FTA, 2018. Transit Noise and Vibration Impact Assessment Manual, pg. 97).

Engine compartment treatments. The primary source of noise from a rail project is typically from train horns, not from engine compartments. Thus, engine compartment treatments would minimally lessen BIG's overall noise levels at these receptors. Furthermore, implementation of this measure would require modifications to each locomotive under service in BNSF's network, thus, there is not a sufficient "nexus" or "rough proportionality" for systemwide upgrades to locomotives required by CEQA Guideline § 15126.4(a)(4).

Quiet zones. Under the Train Horn Rule (49 CFR Part 222, effective August 17, 2006), locomotive engineers are required to sound train horns at least 15 seconds and no more than 20 seconds before reaching a public highway-rail grade crossing. Federal Regulations allow for the establishment of quiet zones (49 CFR; Part 222; Part 229) under special circumstances where trains approach and enter public highway-rail grade crossings. As described in Section 3.0, Project Description, of the EIR, BIG proposes to remove the existing at-grade Hinkley Road rail crossing. Therefore, there would be no public highway-rail grade crossings and a quiet zone cannot be established. Further, a quiet zone's restriction on locomotive horns has no effect on the usage of horns for regular railyard operations.⁴ Thus, a quiet zone cannot be established for BIG under the federal requirements for a quiet zone, and was therefore not considered as a mitigation measure.

Alternation of horizontal and vertical alignments. BNSF has already substantially incorporated this into BIG's design by placing the intermodal facility between 30 and 45 feet below Main Street, thus, it is not considered a mitigation measure because it is already incorporated into the operational impacts analysis, resulting in a substantial alternation between the rail noise and Main Street, reducing potential noise impacts.

Wayside horns. Wayside horns minimize noise associated with locomotive horns at at-grade crossings. As described above, BIG proposes to remove the existing at-grade Hinkley Road rail crossing. Therefore, there would be no public highway-rail grade crossings where a wayside horn could be implemented. Therefore, this proposed measure would not affect the impact analysis and so was not considered as mitigation.

Ballast on at-grade guideway. BIG rail tracks are all ballasted tracks, and thus, it is not considered a mitigation measure because it is already incorporated into the operational impacts analysis.

Ballast on aerial guideway. BIG rail tracks are all ballasted tracks, and thus, it is not considered a mitigation measure because it is already incorporated into the operational impacts analysis.

Operations – On-site BIG Facility Noise for Operational Interior Noise Levels. Increased noise barrier heights identified in **MM BIG NOI-2** were modeled in SoundPLAN to evaluate their effectiveness and determine whether they could reduce interior noise impacts at the affected receptors for the windows open condition. The modeling results indicate the increased barrier height would not achieve a large enough reduction to bring interior noise levels below standards for the windows open condition; a potentially significant impact would occur. Other options to reduce interior noise levels for a windows open condition are limited, as upgraded windows are ineffective under such condition and BIG cannot feasibly commit to construct noise barriers on private property. As there are no feasible interior noise abatement measures for a windows open condition, a significant and unavoidable impact would occur for Opening Year 2028, Interim Year 2033, and Horizon Year 2048.

⁴ 49 CFR; Part 222; Part 23 (a)(c) "Nothing in this part restricts the use of the locomotive horn for purposes other than highway-rail crossing safety..."

Operations – Roadway Traffic Noise – Exterior Noise Analysis. BIG operations would result in additional traffic within the noise and vibration study area roadways/highways thereby increasing vehicular noise at nearby land uses. BIG would result in new net daily trips in Opening Year 2028, Interim Year 2033, and Horizon Year 2048. Roadway traffic noise levels under Opening Year 2028 conditions would be less than significant. For Interim Year 2033, the implementation of **MM NOI-3** would reduce roadway traffic noise impacts to a less than significant level. In Horizon Year 2028, roadway noise impacts would occur in the County. Because the Lenwood Road improvements from Community Boulevard to Agate Road are 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. Therefore, while BNSF is willing to pay this incremental cost, vehicular noise impacts on Lenwood Road between Agate Road to Community Boulevard would be 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. Additionally, **MM BIG NOI-2** is not considered feasible mitigation to reduce roadway traffic noise impacts resulting in a significant and unavoidable impact since Noise Barrier 3 and Noise Barrier 5, strategically positioned to block the line of sight from on-site BIG operational activities would not block roadway traffic noise at impacted receptors. Additionally, commenters suggested other mitigation measures which have been determined to be infeasible, as listed below.

Real property acquisition to allow construction of a noise barrier between roadways and impacted residences. To be effective a noise wall needs to be solid and disrupt line of sight between the source of the noise and the receptor. There are 11 driveways south of Main Street that are each a minimum of 25 feet wide. Each driveway would involve a gap between any noise barrier south of Main Street, resulting in up to 11 gaps. These gaps in a noise barrier would render the noise barrier nearly meaningless, as sound would still propagate through the gap at the driveway. Additionally, most driveways are immediately adjacent to residences, thus, the gap would occur immediately adjacent to a sensitive receptor, further reducing any potential benefit. FHWA guidance states “Openings in noise barriers for driveway connections or intersecting streets reduce the effectiveness of barriers.”⁵ See also Caltrans guidance 1102.7, Maintenance Consideration in Noise Barrier Design, stating that overlaps are required to overcome any gaps in a noise barrier, “Offset barriers must be overlapped a minimum of 2.5 to 3 times the offset distance in order to maintain the integrity of the sound attenuation of the main barrier.”⁶ Overlaps would not be possible at any driveways. Given the number of properties that would need to be acquired (depending on the length of the noise barrier, approximately 15), and the fact that a single “hold-out” property owner would further increase the amount and extent of gaps, and thereby render such mitigation ineffective, this mitigation measure was properly rejected as infeasible. Under CEQA, mitigation measures must reduce the severity of potentially significant impacts, their effectiveness must be clear, and they must be “fully enforceable.” (State CEQA Guidelines § 15126.4(a)). A mitigation measure to acquire real property from private landowners is not enforceable because of the potential for landowners to be unwilling to sell their properties. Such “hold-out” landowners would thereby render such mitigation ineffective.

Real property acquisition to serve as a buffer zone. The acquisition of real property to serve as a buffer zone, as referenced in FHWA regulation 23 CFR 772.15 lists, among the abatement measures for which federal funding may be used, “[a]cquisition of real property or interests therein (predominantly

⁵ https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf

⁶ <https://dot.ca.gov/-/media/dot-media/programs/design/documents/chp1100-a11y.pdf>

unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise.” FHWA guidance clarifies that “[t]he potential use of buffer zones applies to predominantly unimproved property; not to purchase homes or developed property to create a noise buffer zone.” The FHWA acknowledges that, “because of the tremendous amount of needed land and because in many cases dwellings already border existing roads, creating buffer zones is often not possible.” Thus, acquisition of real property as a buffer zone, for CEQA purposes, would not mitigate BIG’s impacts on existing residences, but would serve as a speculative buffer for potential future development. Also, under CEQA, mitigation measures must reduce the severity of potentially significant impacts, their effectiveness must be clear, and they must be “fully enforceable.” (State CEQA Guidelines § 15126.4(a)). A mitigation measure to acquire real property from private landowners is not enforceable because of the potential for landowners to be unwilling to sell their properties. Such “hold-out” landowners would thereby render such mitigation ineffective. This mitigation measure is rejected as infeasible.

Regarding **modifications to vehicles to reduce noise**, this measure can only be implemented on roadway vehicles by auto makers, not the lead agency or the applicant. With respect to modifications to locomotives, per the FTA, there is no quantifiable noise reduction from this measure and the effectiveness is varied. (FTA. 2018. Transit Noise and Vibration Impact Assessment Manual, pg. 97.) Furthermore, as implementation of this measure would require modifications to each locomotive under service in BNSF’s network, the cost of such modifications would far exceed any reductions in noise impacts; thus, there is not a sufficient “nexus” or “rough proportionality” established by case law for systemwide upgrades to locomotives.

Speed reduction along roadways. Although there are tangible benefits from speed reductions during the most noise-sensitive time periods, the FTA does not ordinarily accept speed reduction as a noise mitigation measure for two important reasons: speed reduction is negated if vehicle operators do not adhere to established policies, and it is contrary to the purpose of the transit investment by FTA. (FTA, 2018, Transit Noise and Vibration Impact Assessment Manual, pg. 98). Speed reduction along other roadways is infeasible because roadway noise is primarily associated with Main Street (also known as Route 66 or National Trails Highway). The existing speed limit is 55 miles per hour from Lenwood Road westward. Further reducing the speed limit of a Primary Arterial roadway that is generally without curve, intersections, or turns is illogical and unlikely to be adhered to by those who are used to driving this roadway. The City has determined that reduced the speed limit on Main Street, a highway with a posted speed limit of 55 miles per hour, is infeasible. Further, as identified as **BIG MM NOI-3**, rubberized asphalt is proposed to reduce traffic noise.

Vehicle skirts are infeasible because the Project does not control or regulate third-party truck equipment, nor would this measure significantly reduce the identified operational noise associated with the proposed Project.

Vegetation and trees would not be an effective strategy for BIG as it would not provide meaningful attenuation of low-frequency rail noise. In addition, vegetation required to provide even minimal rail or roadway noise reduction would need to be dense, wide, and continuously maintained which is not feasible given water constraints, high temperatures, and long-term maintenance challenges.

Intermodal facility noise mitigation measures:

- **Orient and fully shield loading docks away from receptors with a doors-closed operations plan.** Dock doors would generally be oriented away from receptors. Additionally, the closest transload warehouse would be more than 1,000 feet from receptors, with most transload warehouses being 3,000 feet or more from receptors. Due to this distance buffer, no significant noise impacts would occur to residences along Lenwood Road, the closest residential receptors to transload warehouses. Additionally, due to the rapid nature of transloading, a doors-closed operations plan is infeasible. The suggested measure would be operationally infeasible and would not materially reduce noise impacts. For these reasons, the measure is not incorporated as proposed mitigation.
- **Prohibit nighttime loading/queuing within 600 feet of residences.** This is incorporated into BIG design with the internal truck entrance (where trucks may queue when entering the intermodal facility) more than 1,000 feet from residences and vertically separated by between 10 and 30 feet. The mitigation would not materially reduce noise impacts.
- **Implement truck-route restrictions that avoid the nearest homes.** BIG trucks would comply with the City's adopted truck routes (see Figure CM-4 of the proposed General Plan) and would include truck route signage per **MM BIG AQ-9**. The suggested measure would not materially reduce noise impacts beyond the reductions achieved by existing mitigation and applicable regulations.
- **Use broadband (quiet) backup alarms.** Broadband alarms are not universal amongst Class 8 trucks, including at the Ports. Thus, trucks could be able to operate at warehouses in Boron, Las Vegas, the Central Valley, and the Ports, but then be unable to access BIG. For this reason, it would make BIG less marketable to customers and preclude some independent contractors, limiting flexibility. The impact of backup alarms is not a primary contributor to BIG's noise impacts, meaning that the suggested measure would not materially reduce impacts.
- **Impose a strict ≤2-minute idling rule with active enforcement.** Truck idling restrictions of two minutes is included in **MM BIG AQ-9**. Thus, the suggested measure would not materially reduce noise impacts beyond the reductions achieved by existing mitigation.
- **Require on-site queuing so trucks do not stage on public streets.** This is incorporated into BIG design with approximately 2,000 feet of roadway between the truck gate and the Country Club Drive intersection, with six lanes at the internal truck gate.
- **Pave access roads with low-noise asphalt and post reduced speed signage nearby.** See above Response O21-73 on rubberized asphalt and above in Response O21-75 on speed reduction.
- **Verify mufflers and acoustic shrouds are equipped on stationary equipment and surround any combustion equipment with temporary noise enclosures during construction.** Per **MM BIG BIO-19**, where generators must be used temporarily for an emergency, noise suppression devices such as mufflers or enclosures for generators shall be used. Thus, the mitigation would not materially reduce noise impacts.
- **Conduct post-occupancy noise monitoring.** Given post-occupancy noise monitoring does not reduce an environmental impact, it is not "mitigation" under CEQA.

Operations – Roadway Traffic Noise – Interior Noise Analysis. BIG roadway traffic noise levels under Opening Year 2028 windows open and windows closed conditions would be less than significant and no impacts would occur. For Interim Year 2033 and Horizon Year 2048, however, these impacts would be potentially significant and because off-site mitigation measures to reduce roadway traffic noise impacts from BIG, listed above, are not feasible for the roadway in the County, a significant and unavoidable impact would occur.

Cumulative Impacts (Impact 5-12). A cumulative noise effect would occur if activities related to BIG combined with the noise generated by other planned development and transportation projects to expose people to significantly adverse noise levels. Cumulative noise impacts could occur from both temporary and permanent increases in ambient noise levels within the study area and result from noise-generating activities combining during construction or operation of any of these projects. These impacts would be considered a cumulative impact if the noise levels from BIG combined with noise emissions from other projects to exceed applicable noise standards, or to substantially increase noise levels above preexisting levels.

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. Both BIG's construction and operation would constitute a cumulatively considerable contribution to significant cumulative noise impacts. BIG, along with those other existing noise sources, would contribute to significant cumulative exterior and interior noise level impacts. All feasible mitigation for BIG's significant noise impacts would not fully reduce or avoid those impacts. Therefore, despite the application of mitigation, cumulative operational noise impacts would remain significant and unavoidable, and BIG's contribution to those impacts would remain cumulatively considerable.

EIR SECTION 5.16: TRIBAL CULTURAL RESOURCES - BIG

Impact 5.16-1: Would the Project (BIG) cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

Impact 5-16: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding tribal cultural resources?

The EIR evaluated and concluded that impacts to tribal cultural resources would be significant and unavoidable due to the high likelihood of previously unidentified tribal cultural resources that are archaeological resources to be affected by BIG's ground-disturbing activities. Despite the implementation of **MM BIG CUL-1** through **MM BIG CUL-8**, impacts would remain significant and unavoidable during construction.

Mitigation Measures

See **MM BIG CUL-1** through **MM BIG CUL-8**.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of **MM BIG CUL-1** through **MM BIG CUL-8**, compliance with California Health and Safety Code Section 7050.5, State CEQA Guidelines § 15064.5, and PRC § 5097.98, BIG construction activities would result in significant and unavoidable impacts concerning potential adverse changes in the significance of known and unknown tribal cultural resources that are eligible for listing in the California Register or in a local register of historical resources as defined in PRC § 5020.1(k). Only avoidance of development within the BIG footprint would preclude the potential for significant impacts. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable tribal cultural impacts. The City Council finds that **MM BIG CUL-1** through **MM BIG CUL-8** are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding:

Construction. There are 19 identified prehistoric cultural resources within the BIG footprint that are recommended eligible for listing the CRHR/NRHP. BIG would implement **MM BIG CUL-1** through **MM BIG CUL-7**. California Health and Safety Code Section 7050.5, State CEQA Guidelines § 15064.5, and PRC § 5097.98, as well as **MM BIG CUL-8**, identify the process for discovery and treatment for human remains, including those that would be tribal cultural resources, that have been removed from their original discovery location. Such measures may not be sufficient to reduce construction impacts to these resources to a less than significant level due to the high likelihood of previously unidentified tribal cultural resources that are archaeological resources to be impacted by ground-disturbing activities, and given physical impacts may cause adverse effects to said resources even with process in place to address inadvertent discoveries. BIG's construction impacts to these resources would be significant and unavoidable even with implementation of **MM BIG CUL-1** through **MM BIG CUL-8**.

Operations. Following completion of BIG construction, a rail yard with intermodal facility, block swap yard, and transload warehouse center would operate within the BIG Specific Plan area. Operation of BIG would not include ground disturbance beyond that which occurs during construction-related activities. BIG would have off-site operations, including the lead track extensions and other infrastructure. Proposed treatment identified in **MM BIG CUL-5** for archaeological resources, as well as treatment of human remains outlined in California Health and Safety Code § 7050.5, State CEQA Guidelines § 15064.5, PRC § 5097.98, and **MM BIG CUL-8**, would be to rebury tribal cultural resources within BIG or its vicinity in an area that would not be impacted by future earth-moving activities. Reburial areas have been identified in consultation with the Tribes and will not be impacted as a result of BIG or its operations. With implementation of **MM BIG CUL-8**, BIG's potentially significant operational impacts concerning substantial adverse change in the significance of a tribal cultural resource would be less than significant.

Cumulative Impacts (Impact 5-16). Similar to the proposed General Plan, cumulative development within the unincorporated County and City would contribute to the cumulative loss of tribal cultural resources within the study area. BIG represents a transition in the area from vacant land and open space to urban uses. Because of the order of magnitude of BIG relative to other cumulative development, despite mitigation, BIG would result in a cumulatively considerable contribution to significant unavoidable impacts to tribal cultural resources. Regardless of mitigation, due to the high likelihood of previously

unidentified tribal cultural resources that could be impacted by ground-disturbing activities, and given physical impacts may cause adverse effects to said resources even with processes in place to address inadvertent discoveries, construction impacts to these resources could occur.

Impact 5.16-2: Would the Project (BIG) cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency in its discretion and supported by substantial evidence to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Impact 5-16: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding tribal cultural resources?

See **Impact 5.16-1**.

EIR SECTION 5.17: UTILITIES AND SERVICE SYSTEMS - BIG

Impact 5.17-1: Would the Project (BIG) require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact 5-17: Would the Project make a cumulatively considerable contribution to a significant cumulative impact regarding utilities and service systems?

The environmental effects resulting from construction of utility and service system facilities to accommodate BIG are evaluated as part of BIG's overall environmental analyses. The EIR evaluated and concluded that proposed relocation/construction of new or expanded water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications facilities under the proposed General Plan would result in significant impacts. Despite the implementation of mitigation measures identified in **Section 5.1** through **Section 5.17**, impacts would remain significant and unavoidable during construction.

Mitigation Measures

Mitigation measures provided in **Section 5.1** through **Section 5.17** of the DEIR are proposed to minimize environmental impacts associated with BIG development inclusive of utility and service system facilities.

Finding: The City adopts Finding 3 (CEQA Guidelines § 15091(a)(3)). The City finds that, even with implementation of mitigation measures provided in **Section 5.1** through **Section 5.17**, and implementation of standard development procedures included in the Barstow Code and engineering standards, the environmental impacts of utility and service system facility upgrades and maintenance consistent with BIG would be significant and unavoidable. Accordingly, pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), the City finds that specific economic, social, and other considerations, as

set forth in the Statement of Overriding Considerations, outweigh the significant unavoidable impacts. To the extent that the City Council finds that mitigation measures provided in **Section 5.1** through **Section 5.17** of the DEIR are feasible and would reduce potential significant project impacts, although not to a less than significant level, and shall be required as a condition of approval and made binding and enforced by the City. No other feasible mitigation measures have been identified that would avoid or substantially lessen this impact to a less than significant level.

Basis for Finding: The environmental effects resulting from construction of utility and service system facilities to accommodate BIG are discussed as part of BIG's overall environmental analyses in the EIR. The EIR evaluated and concluded that development facilitated by BIG would require relocation/ construction of water, wastewater, and stormwater conveyance infrastructure and utility infrastructure. The EIR concludes that aesthetics, air quality, cultural resources, noise and vibration, and tribal cultural resources impacts would be significant and unavoidable despite mitigation. Proposed relocation/ construction of new or expanded water, wastewater, stormwater drainage, electric power, and telecommunications facilities under BIG would result in a significant and unavoidable impact even with implementation of applicable mitigation measures.

Construction and Operations – Water. BIG's construction phase water demand includes non-potable water for construction activities (i.e., mixing concrete, equipment cooling, general site cleaning, earthwork, and dust control) and potable water for on-site construction workers. During construction, the existing private groundwater wells throughout the BIG footprint would be abandoned, and BIG would construct up to eight private groundwater wells within the transload warehouse center area to meet BIG's non-potable water demand. Well abandonment and construction would occur pursuant to County Code § 33.06554: Desert Groundwater Management Permits, which requires a permit for any entity that seeks to construct, reconstruct, abandon, and destroy groundwater wells in the County, County Code § 33.0643: Well Abandonment, which provides requirements for when a well must be abandoned. Potable water for construction workers would be supplied via temporary above-ground pipeline connections to Golden State Water Company's (GSWC) Barstow's existing mains. The Mojave Water Agency (MWA) owns and operates a 48-inch recharge water line that crosses the BIG Specific Plan area. BIG would relocate this line to the north to avoid conflict with rail yard and transload warehouse center improvements.

Operational potable water and fire flow water would be provided by directly connecting to facilities owned and operated by the GSWC. Relocation of existing/construction of new permanent water facilities to meet operational demands would be limited to on-site water distribution and minor off-site work associated with connections to the public main. GSWC and the City would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. In compliance with Public Utilities Code § 1001, BIG would obtain required approvals from the CPUC.

Construction and Operations – Wastewater Collection and Treatment. Temporary portable facilities would be used during the construction phase. The wastewater generated by these facilities would be transported to a permitted disposal facility. BIG's construction phase would not require or result in the relocation or construction of new temporary sewer facilities, and no environmental effects would occur.

Wastewater generated by BIG operations would require relocation or construction of new or expanded facilities, which would connect to the City's sewer infrastructure. Rail yard wastewater would be collected and treated with an oil water separator before being discharged to the wastewater system. BIG's wastewater would be conveyed by gravity flow to and treated at the Barstow Regional Wastewater Treatment Facility (WWTF). Installation of the sewer infrastructure would be limited to on-site

wastewater distribution and minor off-site work associated with connections to the public main. No upgrades to the public main or downstream lines are anticipated. Any work that may affect services to the existing lines would be coordinated with the City and County.

Construction and Operations – Stormwater System. The BIG footprint is primarily undeveloped and does not currently have stormwater infrastructure. BIG would require the construction and maintenance of stormwater infrastructure including underground conveyance, storm drain, on-site surface detention basins, channel improvements to the Lenwood Channel, channel improvements at the Hinkley Road Bridge, and other constructed surface reaches. All storm drain infrastructure on private property within the BIG footprint would be constructed by the property developer and maintained by the property owners. Storm drain infrastructure located within the public rights-of-way within roadways to be constructed by BIG would be constructed simultaneously with those roadways.

Construction and Operations – Electricity. BIG construction activities would result in temporary electric power usage for construction equipment, tools, lighting, and other necessary facilities such as temporary offices. The total average annual electricity usage from BIG construction is estimated to be 1,121,000 MWh (1,121 GWh). The electric power for construction activities would be supplied through connections to existing SCE facilities and sourced from the Tortilla Substation. Additionally, diesel fuel and portable generators would be used during construction.

BIG operations would result in permanent electric power usage for the transload warehouse center (lighting, electric vehicle charging for material handling, and forklifts) and rail yard (lighting, buildings, cranes, and electric hostlers (used to move containers between the rail yard and the transload warehouse center)). BIG's projected annual energy usage during operations would total approximately 145,258 MWh, including 46,018 MWh for the intermodal facility and 99,240 MWh for the transload warehouse center, with substantial usage from electric vehicle charging for the electric hostlers. BIG's electric power usage would be met through connecting to SCE's Tortilla Substation and supplemented with on-site electrical generation from the 21 MW solar farm, from transload warehouse center rooftop solar generation for Title 24 compliance, and from additional rooftop solar beyond Title 24 compliance. When accounting for BIG's on-site electrical power generation from these sources, BIG's net electrical usage would total 53,353 MWh. SCE has indicated that their existing power generation and transmission lines in the region are capable of supporting BIG's electric power usage via their existing Tortilla Substation.

BIG also proposes to construct off-site electric power facilities to serve BIG. A 33 kV distribution line with three underground duct banks and electrical conductors is proposed to connect BIG to the Tortilla Substation. This distribution route would extend approximately 10.6 miles, including both below ground and above ground segments. The EIR analyzed an approximately 30-foot-wide disturbance area within the 450-foot-wide corridor. To minimize BIG's operational electric power usage, BIG would be subject to compliance with various regulations concerning energy conservation including the CBSC Part 3 - California Electrical Code, the Renewables Portfolio Standard Program, and CALGreen. Additionally, the solar farm would aid in progressing the State's 100 Percent Clean Energy Act, which requires the production of exclusively clean energy by December 31, 2045.

Construction and Operations - Natural Gas. BIG construction activities would not require construction of new natural gas facilities. Existing natural gas infrastructure could be encountered during ground moving activities, and unmapped facilities are likely. Because the BIG Specific Plan area would be mass graded and substantial excavation would occur, it is anticipated that relocation would be accommodated during mass grading activities and likely placed within or adjacent to other utilities being relocated. Protection in

place or relocation of existing on-site and off-site natural gas facilities would be required. BIG does not propose any new natural gas infrastructure. BIG's proposed buildings would use electric power for heating and would not require or result in the relocation or construction of natural gas facilities.

Construction and Operations – Telecommunications. No temporary telecommunications facilities are proposed during BIG construction activities. Permanent telecommunication lines would connect to existing telecommunications infrastructure. BIG's proposed telecommunications facilities consists of fiber optic cables, which would be run in underground conduit from the connection point to various buildings and telecommunications cabinets within the site, as well as on-site telecommunications towers. BNSF would install approximately 12 communication towers with heights generally between 100 and 120 feet; two communication towers would be 160 feet tall.

Cumulative Impacts (Impact 5-17). Future development within the City and County would be required to demonstrate adequate availability of water supply, wastewater treatment capacity and landfill capacity. Cumulative development within the service areas of various utility providers could result in an additive increase in demand for water supply, wastewater treatment, storm drain capacity and solid waste disposal. Also, cumulative projects could result in similar impacts as BIG related to the construction of new utility infrastructure, and contribute to significant impacts to various resource areas as the project. Because of the order of magnitude of BIG relative to other cumulative development, despite mitigation, BIG would result in a cumulatively considerable contribution to significant unavoidable impacts associated with utilities.

6.0 FINDINGS REGARDING PROJECT ALTERNATIVES

Under CEQA, the identification and analysis of alternatives to a project is a fundamental part of the environmental review process. Public Resources Code (PRC) § 21002.1(a) establishes the need to address alternatives in an EIR by stating that in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is to identify alternatives to the project." Each alternative was evaluated for its feasibility, its ability to attain the Project's basic objectives, and its ability to reduce and/or eliminate significant impacts associated with the Project.

The EIR evaluated these alternatives for their ability to meet the Project's basic objectives. CEQA requires evaluation of alternatives that can reduce the significance of identified impacts and "feasibly attain most of the basic objectives of the Project." (State CEQA Guidelines § 15126.6.) Therefore, the Project objectives must be considered when the City Council is evaluating alternatives.

PROJECT OBJECTIVES

Proposed General Plan

- Objective 1: The addition of a substantial number of livable wage and head of household jobs that will strengthen the City's economic base and fiscal resiliency and provide career pathways for the community.
- Objective 2: A larger amount and wider range of housing opportunities to address the needs of the community and military installations, demand from new households generated by job growth, and full spectrum of lifestyles and life stages.
- Objective 3: A cohesive land use plan that appropriately transitions between residential, commercial, and industrial areas, encourages new development to leverage and improve existing infrastructure, and provides expansion opportunities to support long term growth.
- Objective 4: Economic opportunities that allow residents and local businesses to (re)invest in the community and create generational wealth.
- Objective 5: Land use and circulation plans that capitalize on Barstow's unique location, as a link in the national supply chain, and existing industrial and rail infrastructure to attract and retain innovative industrial and rail operators and to support the efficient movement of goods.
- Objective 6: Goals, policies, and implementation strategies that ensure Barstow is a healthy and safe community for residents, businesses, and visitors.

Barstow International Gateway

- Objective 1: Increase the speed and reliability, and lower the cost, of moving containerized goods from the San Pedro Bay Ports (Ports) to their end destinations, with the end effect of reducing traffic congestion and associated air emissions from trucking of goods to and from transload facilities, by constructing and operating a freight rail facility that comprises:

- an intermodal freight rail yard (IMF) with a “closed loop” connection to an on-site transload warehouse center of sufficient capacity to attract large-scale users of warehouse facilities and justify their adoption of rail transport instead of long-distance, heavy-duty truck transport, and
- a block swap yard at the same site as the IMF, to enable blocks of rail cars with the same destination to be combined into a single train, thereby increasing the efficiency of goods movement by rail.
- Objective 2: Optimize symbiotic facility site design that allows the most efficient interplay between the operations of the block swap, IMF and transload warehouse center to ensure that the site will accommodate projected future demand.
- Objective 3: Construct and operate the facility in a manner that promotes the public policy goals in the State Rail Plan to reduce the disproportionate impacts of truck-borne goods movement in urbanized and densely populated areas adjacent to Port facilities in Southern California.
- Objective 4: Utilize a single technology platform to track goods throughout their journey from the Ports through the facility to their end destinations, thereby maintaining greater control, awareness, and visibility of goods movement through the supply chain.
- Objective 5: Design the facility so that its construction and operations do not interfere with or cause delays to existing operations on the mainlines.
- Objective 6: Locate the facility at a site that would:
 - be large enough for all BIG components (i.e., intermodal facility, transload warehouse center, block swap yard, additional laydown area, and additional tracks along BNSF’s existing mainline);
 - be positioned along BNSF’s existing mainline and near where the Cajon, Mojave, and Needles Subdivision main railroad lines converge (i.e., the “Subdivision Wye”);
 - be positioned near an existing locomotive maintenance facility, or with sufficient space for a new locomotive maintenance facility;
 - be positioned a reasonable distance from heavily urbanized areas (where land use incompatibilities can be minimized) yet near an existing employment base, freeways, and essential infrastructure;
 - be relatively level and largely devoid of existing land uses and sensitive biological resources; and
 - allow for sufficient on-site power generation to the rail yard (i.e., solar farm).

SIGNIFICANT AND UNAVOIDABLE IMPACTS

State CEQA Guidelines § 15126.6(b) (14 CCR) states that “Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (PRC § 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.”

Accordingly, in identifying alternatives to the Project, primary consideration was given to alternatives that could reduce significant unavoidable impacts resulting from the Project. With implementation of the mitigation measures identified in the EIR, most potentially significant impacts of the Project would be reduced to less than significant levels. However, the analysis determined that the Project would result in a significant and unavoidable impact in the following topical areas for which no feasible mitigation measures or alternatives have been identified that would reduce impacts to a less than significant level.

Proposed General Plan

- Aesthetics – Visual character (Impact 5.1-3)
- Aesthetics – Light and glare (Impact 5.1-4)
- Aesthetics – Cumulative (Impact 5-1)
- Agriculture and Forestry Resources – Loss of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland (Impact 5.2-1)
- Agriculture and Forestry Resources – Conflicts with existing zoning for agricultural use (Impact 5.2-2)
- Agriculture and Forestry Resources – Cumulative (Impact 5-2)
- Air Quality – Conflicting with or obstructing implementation of applicable air quality plans (Impact 5.3-1)
- Air Quality – Cumulatively considerable net increase of criteria pollutants (Impact 5.3-2)
- Air Quality – Exposure of sensitive receptors to substantial pollutant concentrations (Impact 5.3-3)
- Air Quality – Cumulative (Impact 5-3)
- Cultural Resources – Potential demolition, significant alteration, and/or destruction of historic resources (Impact 5.5-1)
- Cultural Resources – Demolition, significant alteration, and/or destruction of archaeological resources (Impact 5.5-2)
- Cultural Resources – Cumulative (5-5)
- Geology, Soils, and Mineral Resources – Inability to extract mineral resources within lands designated as Mineral Resources Zone (MRZ-1) and MRZ-2b (Impact 5.7-10)
- Geology, Soils, and Mineral Resources– Impacts to locally-important mineral resource recovery sites (Impact 5.7-11)
- Geology, Soils, and Mineral Resources–Cumulative (Impact 5-7)
- Greenhouse Gas (GHG) Emissions – Exceed MDAQMD’s brightline threshold and not achieve the GHG reduction targets of Assembly Bill (AB) 1279 (Impact 5.8-1)
- Greenhouse Gas (GHG) Emissions – Conflict with the 2022 California Air Resources Board (CARB) Scoping Plan (Impact 5.8-2)
- Greenhouse Gas (GHG) Emissions –Cumulative (Impact 5-8)

- Noise and Vibration – Temporary substantial increases in construction noise proximate to sensitive uses and significant traffic noise increases along several roadways (Impact 5.12-1)
- Noise and Vibration – Cumulative (5-12)
- Transportation – Vehicle miles traveled (VMT) impacts (Impact 5.15-2)
- Transportation – Cumulative (5-15)
- Tribal Cultural Resources – Impacts on historically significant tribal cultural resources (Impact 5.16-1)
- Tribal Cultural Resources – Impacts to resources of significance to California Native American tribes (Impact 5.16-2)
- Tribal Cultural Resources – Cumulative (Impact 5-16)
- Utilities and Service Systems – Relocation or construction of utilities and service systems resulting in significant and unavoidable aesthetics, agricultural resources, air quality, cultural resources, noise and vibration, transportation, and tribal cultural resources impacts (Impact 5.17-1)

Barstow International Gateway (BIG)

- Aesthetics – Substantial changes in the overall visual quality of the existing environment (Impact 5.1-3)
- Aesthetics – Substantial light or glare (Impact 5.1-4)
- Aesthetics – Cumulative (Impact 5-1)
- Air Quality – Emissions that exceed air quality emissions standards (Impact 5.3-1)
- Air Quality – Cumulatively considerable net increases of criteria pollutants during construction and operational emissions above MDAQMD thresholds (Impact 5.3-2)
- Air Quality – Exposure of sensitive receptors to substantial pollutant concentrations (Impact 5.3-3)
- Air Quality – Cumulative (Impact 5-3)
- Cultural Resources – Potential adverse changes in the significance of known and unknown historical resources (Impact 5.5-1)
- Cultural Resources – Demolition, significant alteration, and/or destruction of archaeological resources (Impact 5.5-2)
- Cultural Resources – Cumulative (5-5)
- Noise and Vibration – Substantial temporary noise level increases (Impact 5.12-1)
- Noise and Vibration – Cumulative (5-12)
- Tribal Cultural Resources – Impacts to historically significant tribal cultural resources (Impact 5.16-1)

- Tribal Cultural Resources – Construction activity impacts to known and unknown tribal cultural resources that are eligible for listing (Impact 5.16-1)
- Tribal Cultural Resources – Cumulative (Impact 5-16)
- Utilities and Service Systems –Relocation or construction of utilities and service systems resulting in significant and unavoidable aesthetics, agricultural resources, air quality, cultural resources, noise and vibration, transportation, and tribal cultural resources impacts
- Utilities and Service Systems – Cumulative (Impact 5-17)

7.1 Alternatives Screened Out from Detailed Consideration in the EIR

State CEQA Guidelines § 15126.6(c) notes that the EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process. The following alternatives were considered but dismissed from further analysis because they would not fulfill most of the project objectives, would not eliminate or substantially lessen environmental effects, and/or would otherwise be infeasible. The City finds that each of the alternatives eliminated from further consideration in the EIR is infeasible on the ground that it is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological or legal factors, or is inconsistent with City goals or policies, or would not meet important project objectives, or that it would not reduce or avoid any of the significant effects of the Project, for the reasons detailed in Section 8.7 of the EIR which are incorporated herein by reference as well as all the facts and evidence in the record supporting the rationale, including the Responses to Comments prepared to address comments received on the DEIR.

Proposed General Plan

The following alternatives were considered but dismissed from further analysis because they would not fulfill most of the proposed General Plan objectives, would not eliminate or substantially lessen environmental effects, and/or would otherwise be infeasible.

Reduced Residential Density Alternative

The proposed General Plan would result in the buildout of 6,608 new housing units in the City by 2048. The Reduced Residential Density Alternative assumes 3,304 units by 2048. This alternative assumes that BIG would be implemented, resulting in the same job growth of approximately 5,373 direct employees associated with BIG and 5,538 net direct employees associated with other planned or induced projects (totaling 10,819 new jobs).

The impacts of this alternative would reduce air quality and GHG emissions and noise impacts when compared to the proposed General Plan. Fewer homes would also use less land resulting in a reduction of physical impacts related to biological resources, cultural and tribal cultural resources, paleontological resources, hydrology and water quality as less land would be graded, paved, and developed. Fewer homes would also result in fewer residents resulting in a lesser demand of public services and utilities when compared to the proposed General Plan. The Reduced Residential Density Alternative's restriction on housing growth could increase the pressure to develop elsewhere in the region, which would not

eliminate the environmental impacts disclosed in the EIR, but rather relocate them outside the proposed General Plan area into the unincorporated areas of the County or into neighboring jurisdictions.

The Reduced Residential Density Alternative requires a regulatory structure that does not currently exist, and which may be difficult to employ. As identified in the 2021-2029 Housing Element, the City's currently adopted land use plan contains a total development capacity on undeveloped land of between 15,140 and 19,266 housing units, representing land available for between 5,517 and 9,643 new housing units. The City would need to establish growth control policies in the General Plan and limit the issuance of building permits. The implementation of growth control policies would represent a change from housing conditions represented in the certified Housing Element and could be seen as a housing impediment by the State Department of Housing and Community Development, requiring a revision to the Housing Element and resubmittal for certification. It is likely that the RHNA, and other affordable housing projects, would need to be exempt from the housing restrictions. Additionally, the proposed Land Use Map was prepared in part to ensure no net loss of housing capacity compared to the 2015 General Plan, in accordance with the no-net loss provisions in State law.

This alternative would not meet the proposed General Plan's objective to create a "larger amount and wider range of housing opportunities to address the needs of the community and military installations, demand from new households generated by job growth, and full spectrum of lifestyles and life stages." As a Reduced Residential Density Alternative would not meet a key Project objective, and would move environmental impacts outside of the City failing to avoid the environmental impacts of the proposed General Plan, this alternative was eliminated from further consideration in the EIR.

Increased Residential Density Alternative

An "Increased Residential Density Alternative" assumes the development of higher density neighborhoods in proximity to services, transit, and jobs with the expectation of reducing the need for personal vehicle use, thereby decreasing VMT. The use of less land for the same amount of housing would reduce the need to convert agricultural land to urban uses, and reduce the need to annex land for housing development. Higher density development also uses less water per capita and reduces the amount of roadway and other infrastructure needed to serve the same population. A more compact urban form would also reduce impacts to geology and soils, as well as reduce biological and cultural resources impacts. More population within a smaller area may also encourage more services proximate to housing that would encourage walking and biking that would reduce VMT resulting in less air quality and GHG impacts.

The Increased Residential Density Alternative would meet the objectives of the proposed General Plan since it would result in similar outcomes for growth when compared to the proposed General Plan. However, even with the full development of BIG, the demand for housing within the City is not anticipated to exceed the residential capacity of the 2015 General Plan. The 2021-2029 Housing Element estimated a potential for between 15,140 and 19,266 units on approximately 1,939 acres of vacant land based on current zoning. This represents an increase of between 5,517 and 9,643 housing units. The projected housing demand assumed for the proposed General Plan is 6,617 new housing units in the City by 2048. While an Increased Density Alternative could reduce the demand to develop outside of the City limits, the proposed General Plan's increases in residential density would largely accomplish the same task. The proposed General Plan is intended to accommodate a range of housing types in the City which is Goal H-1: A diverse range of housing types that meets the City's housing needs of the Housing Element. In

addition, SCAG has projected that roughly three quarters of Barstow's future housing need should be moderate income and above.

The proposed General Plan's residential density is intended to accommodate an increased population from new BIG employees. With the livable wage(s) paid to BIG employees, it is reasonable to assume that a range of housing types would be ideal. This is a key objective of the proposed General Plan and would be more difficult to accomplish with this alternative. Even if the City develops a compact urban core, or even higher density neighborhoods, without significant investment in transit services for residents and employees, a personal vehicle would still be needed; a significant reduction in VMT is unlikely.

The proposed General Plan already accounts for increased density in core areas making this alternative unnecessary. While an Increased Residential Density Alternative is potentially feasible, and would meet the proposed General Plan's objectives, it does not offer a significant change in development pattern from the proposed Project.

The City finds that each alternative eliminated from further consideration in the EIR is infeasible on the ground that it is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological or legal factors, or is inconsistent with City goals or policies, or would not meet important Project objectives, or that it would not reduce or avoid any of the significant effects of the Project.

Barstow International Gateway

Off-Site Alternative

No other suitable locations exist near BNSF's rail network where an integrated facility can feasibly be built, due to disqualifying topographical constraints, the presence of sensitive environmental resources, or surrounding urban development. Four potential off-site alternatives were considered and rejected.

- **Boron.** The Boron site is west of SR-395 with a large amount of connected vacant, undeveloped land. However, topographical constraints (elevation difference of greater than 120 feet across the site) would result in substantial additional grading. The site is approximately 30 miles from the Cajon subdivision mainline; trains to or from Southern California would need to travel an additional 30 miles to and from the Boron site to be transloaded then route back to the Cajon subdivision. Due to this distance, it would not be operationally feasible to route trains from or destined to Southern California to this location. There is only a single mainline track from Barstow to Boron; the approximately 30-mile segment from Barstow to Boron would need to be expanded to a double (or possible triple) track to handle the train counts under BIG, as well as adding additional staging tracks. These construction activities would require substantial additional costs and construction activities in this segment. The Boron site is also far removed from any population center; thus, it would be unlikely that sufficient employees could be found to operate the facility. Given the distance between Boron and the existing Barstow classification yard, the Boron site would be unable to use the support functions of fueling, maintenance, crew, etc., requiring all these facilities and capabilities to also be built at the Boron site.

- **Victorville.** A 1,600-acre rail yard and multimodal industrial uses in the northeast portion of the Southern California Logistics Airport (“Potential Area”) was analyzed in the Southern California Logistics Center EIR. In the 2020 Southern California Logistics Airport Amendment EIR, the Potential Area removed the rail yard and multimodal industrial uses. The Potential Area is not connected to the existing mainline, which would require an approximately two-mile extension of lead tracks from the mainline and two new grade-separated crossings. Other uses have since developed within the Potential Area resulting in an area of less than 800 acres. Redevelopment of existing land uses to expand the area is not economically feasible given the high cost of these utility facilities to demolish and replace. Additionally, the vast majority of the Potential Area is owned by the federal government, utility providers, or the Southern California Logistics Airport Authority (the entity which operates the airport). Acquisition of these parcels is speculative and unlikely. BIG’s intermodal facility and block swap yard is approximately 1,200 acres. The Potential Area’s size precludes any warehouse space, given all acreage would be needed for the railyard. Transload warehouses would have to be off the site under this alternative.

Additionally, trains from Northern California would need to travel an additional approximately 29 miles from the Barstow Subdivision Wye junction to the Victorville site, resulting in proportionately greater air quality and GHG emissions. Therefore, BNSF would not route Northern California trains to this location due to the additional travel distance from the mainline. Due to the slopes within the available area, greater earthwork is anticipated under this alternative. Finally, given the distance between Victorville and the existing Barstow classification yard, the Victorville site would be unable to use the support functions of fueling, maintenance, crew, etc., requiring all these facilities and capabilities to also be built at the Victorville site.

- **Redevelop Existing Barstow Classification Yard.** This alternative assumed redevelopment of the existing Barstow classification yard to accommodate an intermodal facility and block swap yard. The existing Barstow classification yard does not have any equipment to load or unload containers; thus, portions of the yard would need to be demolished and cranes and container parking areas established. A substantial number of tracks would need to be removed to allow for the container parking areas. Redevelopment of the existing Barstow classification yard would result in the classification yard no longer able to fulfill classification operations. Classification operations are integral to the efficient BNSF network operations and would require the classification yard to be rebuilt in another location in Southern California to serve trains from Northern California. Instead of converting portions of the existing classification yard to a block swap yard or intermodal facility, the existing classification yard would be expanded to accommodate a block swap yard and intermodal facility. This would require substantial grading into the Mojave River. Existing bridges cross the yard which would either constrain crane operations or need to be demolished and rebuilt elsewhere. This would increase rail operations near more sensitive receptors.
- **Newberry Springs.** The Newberry Springs site is approximately 20 miles east of Barstow. The site is far from any population center and it is likely that employees would be required to commute from the closest population centers, which would increase worker VMT, or relocate to Newberry Springs. Employee relocation to Newberry Springs would potentially result in unplanned population growth, which would be difficult to support without new

public facility construction and major utility expansion. Substantial roadway improvements would be required within and surrounding the site given the lack of notable transportation infrastructure. Given the distance between Newberry Springs and the existing Barstow classification yard, the Newberry Springs site would be unable to use the support functions of fueling, maintenance, crew, etc., requiring all these facilities and capabilities to also be built at the Newberry Springs site. There is not sufficient electricity supply in or near Newberry Springs; thus, electrical supply is speculative and would likely require substantial additional power infrastructure, such as solar development and battery storage to serve rail yard electrical demand for operations 24 hours per day. All other utility services would similarly require much greater utility construction compared to BIG. The additional utility construction would result in substantial additional expense.

In summary, there are no feasible off-site alternatives that would be of sufficient size, at a strategic available location and proximate to employment bases, and under control or potential control of BNSF. Therefore, the Off-Site Alternatives were considered but rejected.

BIG Flipped Concept Alternative

The BIG Flipped Concept Alternative would locate warehouse operations between the rail yard operations and Main Street in an attempt to increase the distance of the rail yard operations from sensitive receptors. Under this alternative, approximately 3.7 million square feet of BIG's approximately 4.4 million square feet of transload warehouses would be moved from the north to the south side of the rail yard, which would be flipped with the intermodal facility and relocated northwest of the block swap yard. To accommodate the 9.0 million square feet transload warehouse center despite spatial constraints from the Mojave River to the northwest, approximately 1.7 miles of Main Street would be relocated south to maintain similarly sized components as proposed under BIG. Given the spatial constraints from the Mojave River to the northwest, the footprint would extend south of Main Street in order to accommodate similarly sized components as BIG, requiring additional property acquisitions.

Under this alternative, the existing southern mainline tracks would be relocated to the north to maximize container parking/staging and accommodate the relocated transload warehouses, whereas BIG would maintain the mainline tracks in their existing location. Transload warehouses would be at elevation with Main Street, resulting in warehouses at ground level within approximately 900 feet of residences. This alternative's configuration would require yard switching movements occurring between the Block Swap Yard and intermodal freight rail yard (IMF) to occupy the proposed mainlines, which would prevent other trains from passing through. Under this alternative, trains only passing through BIG to other destinations would need to wait just outside of BIG for the main line to clear before passing through, thereby substantially increasing engine idling and emissions. This alternative's configuration would substantially slow the flow of train traffic along BNSF's existing Southern Transcontinental line from the Ports to the interior of the U.S., which is critical to the U.S. supply-chain, resulting in overall greater processing time (the time from container arrival to departure) of containers via BNSF's existing Southern Transcontinental line. This would conflict with one of BIG's objectives because it would interfere with mainline operations.

Under this alternative, the rail yard would not be adjacent to the solar farm and the transload warehouse center would be owned by a different entity. Construction of the solar farm would not be possible unless the solar infrastructure was extended approximately 3.0 miles from the solar farm to the rail yard. The additional infrastructure would mean the solar farm is not viable. This alternative would still include rooftop solar on the transload warehouse center.

Off-site improvements would remain unchanged, except for hydrology and drainage improvements because impervious surfaces and flows would be different compared to BIG. Under this alternative, vehicular access to the transload warehouse center would be provided directly from Main Street, as compared to Hinkley Road/Lenwood Road under BIG. Like BIG, vehicular access to the rail yard would be provided directly from Main Street but it would occur approximately 3.0 miles further west. Approximately 1.7 miles of Main Street would be relocated south near the Hinkley Road bridge through an area identified as a wildlife movement area which has been identified as sensitive to desert tortoise.

Container parking would be located north of the intermodal facility, which would result in greater internal dray distances and durations as compared to BIG and would result in proportionately greater electric hostler electrical demand. An intersection would be required to provide access between the north and south portions of the transload warehouse center. Electric hostlers would be required to share this intersection with any incidental heavy-duty trucks and employee traffic between the transload warehouse center and intermodal facility, resulting in potential conflicts and congested operations, reducing operational efficiency. Given these considerations, electric hostler operations would be impaired under this alternative and a greater number of electric hostlers, which would generate greater electric power demand, would be required.

This alternative's configuration would significantly disrupt the flow of train traffic along BNSF's existing Southern Transcontinental line from the Ports to the U.S. interior. This disruption would cause increased train idling and emissions outside of BIG, extend overall container processing times (the time from container arrival to departure) via BNSF's line, and reduce the speed and reliability of container transport by train. Consequently, this would likely elevate transportation costs, failing to meet most BIG project objectives.

BIG Reduced Flipped Concept Alternative

The Reduced BIG Flipped Concept Alternative would locate warehouse operations between rail yard operations and Main Street to increase the distance of the rail yard operations from sensitive receptors. The block swap yard and intermodal facility would be flipped. The transload warehouse center square footage under this alternative would total 8.0 million square feet, or approximately 11 percent less than BIG's proposed 9.0 million square feet. The transload warehouses would be at elevation with Main Street because there would not be space to create a vertical slope like as proposed under BIG or the Flipped Concept Alternative, resulting in warehouses at ground level within approximately 900 feet of residences. This alternative would provide less staging area within the rail yard and transload warehouse center due to the geometrical constraints of track layout.

This alternative would relocate the existing mainline tracks to the north adjacent to the Mojave River boundary. Relocating the mainline tracks results in an irregular trackage curvature which would add approximately 1,800 linear feet of mainline track compared to BIG. The additional trackage would result in longer train routes through the site. This alternative's configuration would require yard switching movements occurring between the block swap yard and intermodal facility to occupy the proposed mainlines, which would prevent other trains from passing through. Trains passing through BIG to other destinations would need to wait outside of BIG for the main line to clear before passing through, thereby substantially increasing idling and emissions. This configuration would substantially slow the flow of train traffic along BNSF's Southern Transcontinental line from the Ports to the interior of the U.S., which is critical to the U.S. supply-chain, resulting in overall greater processing time (the time from container

arrival to departure) of containers via BNSF's existing Southern Transcontinental line. This would conflict with BIG's objectives due to interfering with mainline operations.

Acquisitions would be similar to BIG, except that the solar farm would not be constructed. This alternative would include rooftop solar on the transload warehouse center.

Off-site improvements would remain unchanged under this alternative, except for hydrology and drainage improvements, given impervious surfaces and flows would be different under this alternative compared to BIG.

Vehicular access to the transload warehouse center would be provided directly from Main Street, as compared to Hinkley Road/Lenwood Road under BIG. Like BIG, vehicular access to the rail yard would be provided directly from Main Street but it would occur approximately 3.0 miles further west.

Container parking would be located north of the intermodal facility, which would result in greater internal dray distances and durations compared to BIG, and would result in proportionately greater electric hostler electrical demand. An intersection would be required to facilitate access between the north and south portions of the transload warehouse center. Electric hostlers would be required to share this intersection with any incidental heavy-duty trucks and employee traffic between the transload warehouse center and intermodal facility, resulting in potential conflicts and congested operations, reducing operational efficiency. Given these considerations, electric hostler operations would be impaired under this alternative and a greater number of electric hostlers, which would generate greater electric power demand, would be required.

Earthwork was estimated to total approximately 23 million cubic yards (MCY), or approximately 12 percent less than BIG's estimated 26 MCY.

The configuration of this alternative would reduce the capacity of the transload warehouse center by approximately 11 percent and would significantly disrupt the flow of train traffic along BNSF's existing Southern Transcontinental line from the Ports to the U.S. interior. This disruption would cause increased train idling and emissions outside of BIG, extend overall container processing times (the time from container arrival to departure) via BNSF's line, and reduce the speed and reliability of container transport by train. Consequently, this would likely elevate transportation costs, failing to meet most BIG project objectives.

Block Swap Only Alternative

Under this alternative, the block swap yard would be constructed in the same location as proposed under BIG, but the transload warehouse center and intermodal facility would not be built. BIG's proposed cross-dock intermodal operations would not occur because the intermodal facility and transload warehouse center would not be built to unload, transfer, repackage, and load containers. The solar farm and 33kV distribution line components would not be constructed due to minimal electrical demand from the block swap yard.

Construction activities would be substantially less under this alternative, however, the portion between the existing mainlines and Main Street would still be graded to accommodate the near-level tracks. The cut would still be taken to the north side of the existing tracks and used as fill.

During operations, no heavy-duty trucks would enter the site as it would not include container loading or unloading. There would be very minimal employees associated with the block swap yard; thus, employee traffic would be substantially reduced under this alternative.

This alternative would not fulfill most BIG project objectives and therefore was considered but rejected.

Intermodal Facility/Transload Warehouse Center Only Alternative

Under this alternative, the intermodal facility and transload warehouse center would be constructed in the same location as proposed under BIG but the block swap yard would not be built. BIG's proposed cross-dock intermodal operations would occur under this alternative in the similar closed loop operation as BIG; however, the efficiency of combining blocks with other blocks that have similar destinations, leading to national supply-chain benefits and redundancy, would not occur under this alternative. This alternative would not fulfill most BIG project objectives and was considered but rejected.

No On-Site Warehouses Alternative

Under this alternative, the intermodal facility and block swap yard would be constructed in the same location as proposed with BIG but the transload warehouse center would be constructed in other High Desert locations (e.g., Victorville, Apple Valley, Adelanto). Cross-dock intermodal operations would still occur at the site; however, containers would be drayed to these off-site warehouse locations (approximately 25 miles of trucking between Victorville warehouses and BIG). Because the transload warehouses would be off the site, containers would be transported over public roadways using heavy-duty trucks rather than electric hostlers because electric hostlers are not permitted to operate on public roadways. Containers being trucked from the Ports would be approximately 29 miles closer to warehouse locations in the High Desert. However, this would not include the closed loop operations provided under BIG. Substantial heavy-duty trucking would occur between the proposed rail yard and off-site warehouses. Because of trucking costs, warehouse operators would be less likely to use these warehouses and it is unlikely that BIG would be able to attract sufficient customer volumes to be feasible. This alternative would not fulfill most BIG project objectives and was considered but rejected.

There are no any feasible off-site alternatives that would be of sufficient size, at a strategic available location and proximate to employment bases, and under control or potential control of BNSF. Therefore, the Off-Site Alternatives were considered but rejected.

The City finds that each of the alternatives eliminated from further consideration in the EIR is infeasible on the ground that it is not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological or legal factors, or is inconsistent with City goals or policies, or would not meet important project objectives, or that it would not reduce or avoid any of the significant effects of the Project.

6.2 Alternatives Analyzed in the EIR

In compliance with CEQA and the CEQA Guidelines, the EIR evaluated a reasonable range of alternatives to the Project that were described in the EIR (Section 8.0), which are hereby incorporated by reference. The four alternatives analyzed in detail in the EIR represent a reasonable range of potentially feasible alternatives that reduce one or more significant impacts of the Project and/or provide decision makers with additional information about Project alternatives. The EIR also identified an environmentally superior alternative that was considered to have the least number of environmental impacts if implemented. The City Council certifies that it has independently reviewed and considered the information on the

alternatives provided in the EIR and in the record. The EIR reflects the City Council's independent judgment as to alternatives.

The City Council finds that specific economic, social, environmental, technological, legal or other considerations make infeasible alternatives to the Proposed Project for the reasons stated below. Each individual reason presented below constitutes a separate and independent basis to reject the Project alternative as being infeasible, and, when the reasons are viewed collectively, provide an overall basis for rejecting the alternative as being infeasible.

Proposed General Plan

The following alternatives were determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the proposed General Plan but may avoid or substantially lessen any of the significant effects of the proposed General Plan.

No Proposed General Plan/2015 General Plan Alternative

Description. The No Proposed General Plan (No Project) Alternative would continue to implement the 2015 General Plan in addition to the adopted 2021 Safety Element, 2021 Environmental Justice Element, and 2021-2029 6th Cycle Housing Element. Under the No Project Alternative, the City would continue to use the 2015 General Plan Land Use Plan to permit development. Most of the City's incorporated area is designated General Industrial (approximately 5,240 acres or approximately 20 percent) and Single Family Residential (approximately 4,733 acres or approximately 18 percent). This alternative would have a buildout capacity of approximately 16,868 dwelling units and approximately 17,442,339 square feet of non-residential uses, with a forecast population of approximately 45,603 persons and approximately 19,810 jobs by 2048.

Under the No Project Alternative, none of the proposed General Plan's land use designation or policy changes would occur. Additionally, the 4,300-acre BIG Specific Plan would not be adopted, and the rezoning and annexation of 2,686 acres of unincorporated County land associated with BIG would not occur. Under this Alternative, the City's land area would continue to total 26,427 acres, and the increased City limits resulting from the proposed General Plan's annexation (approximately 10 percent) would not occur. Future development under the 2015 General Plan Alternative would allow new development and redevelopment in the same general areas as the proposed General Plan.

The No Project Alternative would keep the approximately 4,733 acres designated Single Family Residential, or approximately 2,888 acres more than under the proposed General Plan. Similarly, under the 2015 General Plan approximately 520 acres are designated Medium Density Residential, or 869 acres less than under the proposed General Plan. As the proposed General Plan would designate more land to higher residential densities, the No Project Alternative would maintain the lower residential densities assumed in the 2015 General Plan. This alternative would result in less overall growth by 2048 than the proposed General Plan.

- Approximately 15 percent less growth in housing or approximately 2,870 fewer dwelling units;
- Approximately 34 percent less growth in non-residential development or approximately 8,970,451 less square feet;

- Approximately 14 percent less population growth or approximately 7,230 fewer persons; and
- Approximately 22 percent less job growth or approximately 5,426 fewer new jobs.

Environmental Effects. The No Project Alternative's environmental impacts are compared to the proposed Project in Section 8.9.1 of the EIR. Because less development would occur under this alternative scenario, most environmental impacts would be less than the proposed General Plan but would not reduce impacts to a less than significant level. Impacts associated with the topic of Land Use and Planning would be greater than the proposed General Plan but would remain less than significant.

Finding: Pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), based on the whole of the record, the City Council finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the No Proposed General Plan/2015 General Plan Alternative infeasible. The City Council finds that this alternative is infeasible and less desirable than the Project and rejects this alternative on the following grounds, which provide sufficient justification for rejection of this alternative.

- Based on substantial evidence in the entire record, the City finds that the No Proposed General Plan/2015 General Plan Amendment Alternative would reduce the environmental impacts associated with the proposed General Plan but would not avoid the following significant and unavoidable impacts: light and glare; conversion of important farmland to non-agricultural development; air quality; historic and cultural resources; loss of mineral resources; GHG emissions; transportation (VMT); tribal cultural resources; and utilities and service systems.
- This Alternative is rejected as infeasible because it would not fulfill the following objectives for the General Plan noted below and discussed in detail in **Table 8-5: No Proposed General Plan/2015 General Plan Alternative Ability of Alternative to Meet Project Objectives** of the EIR.

Objective 1: Meets objective to a lesser extent.

Objective 2: Does not meet objective.

Objective 3: Does not meet objective.

Objective 4: Meets objective to a lesser extent.

Objective 5: Does not meet objective.

Objective 6: Meets objective to a lesser extent.

Since this Alternative does not meet many of the Project Objectives or to a lesser extent than the proposed General Plan, the City Council rejects this Alternative as infeasible. Each of the aforementioned considerations is sufficient, both by itself and in combination with the other aforementioned considerations, to reject the No Proposed General Plan/2015 General Plan Alternative infeasible.

No BIG/Proposed General Plan Reduced Development Alternative

Description. The No BIG/Proposed General Plan Reduced Development Alternative would update the City's General Plan but would not approve the BIG Specific Plan. In place of BIG, this alternative would assume that the majority of job growth is associated with conventional logistics uses located near the

interchanges of I-15 and Lenwood Avenue and Outlet Center Drive in the west, and SR-40 in the east. Many of the changes included in the proposed General Plan are intended to comply with State laws adopted since adoption of the 2015 General Plan, and to reflect development that has occurred since 2015. This alternative would implement the General Plan policy updates needed to remain compliant with State law but would not include the BIG Specific Plan and the associated General Plan land use designation changes and policies that support BIG.

The following features would remain:

- Changes to the Land Use Plan that focus housing east of I-15 to provide desirable separation between logistics uses and sensitive receptors;
- A new Business Park land use designation and zone district to provide additional non-logistics job growth opportunities in the City; and
- A new High Density Residential land use designation and zone district would remain to support housing types and densities discussed in the 2021–2029 Housing Element.

With ongoing long-term demand for logistics and fewer air quality restrictions in the MDAQMD, Barstow is likely to attract traditional truck-based warehousing without BIG. Based on input from property owners and speculative development interest, along with an evaluation of roadway capacity, this alternative assumes up to 10 million square feet of new traditional truck-based warehousing by 2048, which would generate up to 5,910 jobs and 1,413 new houses.

Environmental Effects. The No BIG/Proposed General Plan Reduced Development Alternative’s environmental impacts are compared to the proposed Project in Section 8.9.2 of the EIR. Many environmental impacts would be less than the proposed General Plan but would not reduce impacts to a less than significant level. Air quality impacts would increase due to the traditional truck-based warehousing associated with this alternative.

Finding: Pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), based on the whole of the record, the City Council finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the No BIG/Proposed General Plan Reduced Development Alternative infeasible. The City Council finds that this alternative is infeasible and less desirable than the Project and rejects this alternative on the following grounds, which provide sufficient justification for rejection of this alternative.

This alternative is rejected because it does not feasibly attain most of the basic objectives of the Project, and would not substantially lessen the significant impacts of the Project.

- As discussed in Section 8.9.2 of the DEIR, “the replacement of BIG with 10 million square feet of truck-based warehousing would increase truck trips and VMT, which would result in significant and unavoidable air quality emissions and health risk impacts” (page 8-68). Based on substantial evidence in the entire record, the City Council finds that while many environmental impacts would be lessened or remain the same under this alternative, the significant and unavoidable air quality impact would worsen due to the traditional truck-based warehousing associated with this alternative.
- This Alternative is rejected as infeasible because it would meet some but not all the objectives for the Project noted below and discussed in detail in **Table 8-6: No**

BIG/Proposed General Plan Reduced Development Alternative Ability of Alternative to Meet Project Objectives of the EIR.

Objective 1: Meets objective to a lesser extent.

Objective 2: Meets objective.

Objective 3: Meets objective.

Objective 4: Meets objective to a lesser extent.

Objective 5: Meets objective to a lesser extent.

Objective 6: Meets objectives.

The City Council finds that this alternative would not achieve the basic Project objectives to the same extent as the proposed General Plan and would implicate specific social and economic considerations. Furthermore, this alternative would result in greater impacts (see above). Each of the aforementioned considerations is sufficient, both by itself and in combination with the other aforementioned considerations, to reject the No BIG/Proposed General Plan Reduced Development Alternative as infeasible.

Barstow International Gateway

The following alternatives were determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of BIG but may avoid or substantially lessen any of the significant effects of BIG.

No BIG/No Annexation Alternative (hereinafter referred to as the “No BIG” Alternative)

Description. The No Project Alternative is required to discuss the existing conditions at the time the Notice of Preparation is published and evaluate what would reasonably be expected to occur in the foreseeable future if BIG is not approved (State CEQA Guidelines § 15126.6[e]). Pursuant to CEQA, this alternative is also based on current plans and consistent with available infrastructure and community services. Therefore, the No BIG/No Annexation Alternative assumes that BIG would not be approved and development would occur based on market demand and the existing City and County zoning.

This alternative assumes 15 dwelling units, whereas BIG proposes none and this alternative assumes approximately 650,000 square feet of industrial uses, whereas BIG proposes a rail yard and 9,150,000 million square feet of industrial uses (including approximately 134,000 square feet of support buildings and structures at BIG’s intermodal facility and approximately 9.0 million square feet of transload warehouse center). Comparatively, this alternative involves approximately 93 percent less industrial square footage than BIG.

Environmental Effects. The No BIG’s environmental impacts are compared to the proposed Project in Section 8.10.1 of the EIR. Many environmental impacts would be less than BIG but would not reduce impacts to a less than significant level. Energy, GHG, and utility impacts would increase.

Finding: Pursuant to Public Resources Code § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), based on the whole of the record, the City Council finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the No BIG Alternative infeasible. The City Council finds that this Alternative is infeasible and less desirable than the Project and rejects this alternative on the following grounds, which provide sufficient justification for rejection of this alternative.

This Alternative is rejected because it does not feasibly attain the basic objectives of the Project, and would not substantially lessen the significant impacts of the Project.

- Based on substantial evidence in the entire record, the City Council finds that this alternative would reduce certain environmental impacts but would not avoid any of the significant and unavoidable impacts. The No Big Alternative would increase impacts on energy, GHG emissions, and utilities and service systems compared to the proposed Project.
- This Alternative is rejected as infeasible because it would not meet objectives for the Project as noted below and discussed in detail in **Table 8-12: No BIG Alternative Ability to Meet Project Objectives** of the EIR.

Objective 1: Does not meet objective.

Objective 2: Does not meet objective.

Objective 3: Does not meet objective.

Objective 4: Does not meet objective.

Objective 5: Does not meet objective.

Objective 6: Does not meet objective, except regarding locating the facility at a site that would allow for sufficient on-site power generation to the rail yard (i.e., solar farm). While on-site power generation could occur under this alternative, there are no proposals for on-site power generation from other applicants, thus, is uncertain.

The City Council finds that this alternative would not feasibly achieve most of the basic project objectives and would implicate specific social and economic considerations. Furthermore, this alternative would not avoid any of the significant and unavoidable impacts and result in greater impacts (see above). Each of the aforementioned considerations is sufficient, both by itself and in combination with the other aforementioned considerations, to reject the No BIG Alternative as infeasible.

Reduced Intensity Alternative

Description. The Reduced Intensity Alternative assumes development similar to BIG. Under this alternative scenario, the rail yard and transload warehouse center's development intensity and footprint would be reduced by approximately 50 percent. The transload warehouse center under this alternative would be reduced to approximately 4.5 million square feet within 665 acres (from 9.0 million square feet within 1,330 acres under BIG) and the rail yard would be reduced to 975 acres (from 1,950 acres under BIG). Based on the conceptual site plan for this alternative, earthwork is estimated to total approximately 22 million cubic yards (MCY), or approximately 15 percent less than BIG's estimated 26 MCY. The transload warehouse center development would be concentrated at the western end of the BIG footprint. The area east of Lenwood Channel would not be redesignated to BIG Specific Plan, but would instead retain the existing land use designations, and is assumed to not be developed within the Horizon Year (2048). The solar farm would remain unchanged under this alternative. BIG's proposed off-site improvements would remain unchanged under this alternative, except the following, which would be proportionately reduced under this alternative:

- Stormwater improvements, given the reduced impervious surfaces;
- Circulation/roadway improvements such as signalizing intersections, given the proportionate decrease in heavy-duty truck and passenger vehicle trips.

Environmental Effects. The Reduced Intensity Alternative's environmental impacts are compared to the proposed Project in Section 8.10.2 of the EIR. Many environmental impacts would be less than BIG but would not reduce impacts to a less than significant level. Impacts associated with the topics of GHG and Transportation would increase but like BIG would be less than significant.

Under this alternative, there would be proportionally fewer vehicle trips (including trains, heavy-duty trucks, and worker trips) during construction and operations. However, the reduction in transload warehouse space would result in fewer trucks being removed from local highways and placed onto trains for the closed loop operation, resulting in greater truck miles travelled under this alternative. Impacts would be greater than BIG's, given this alternative would result in greater truck miles travelled due to the reduction in transload warehouse center space, despite half the square feet of industrial development.

Operations under this alternative would involve proportionately fewer heavy-duty truck and vehicle trips, given the decreased intermodal facility and transload warehouse center capacity under this alternative. Utility demand and generation would be proportionately less than BIG, as this alternative would involve

proportionately fewer operations and employees. Cross-dock intermodal operations consisting of transloading international container cargo into domestic containers would occur also under this alternative but would be proportionately less. Therefore, VMT under this alternative would be proportionately less than under BIG. Similarly, the reduction in existing regional VMT achieved by BIG would be proportionately less under this alternative. Train volumes and related rail yard equipment (cranes, electric hostlers, etc.) activity would be proportionately less under this alternative given reduced rail yard operations. GHG emissions under the Reduced Intensity Alternative would be greater than BIG's, given this alternative remove fewer trucks from local highways by placement of containers onto trains for the closed loop operation, resulting in less net GHG reduction

Finding: Pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), based on the whole of the record, the City Council finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the Reduced Intensity Alternative infeasible. The City Council finds that this alternative is infeasible and less desirable than the Project and rejects this alternative on the following grounds, which provide sufficient justification for rejection of this alternative.

This Alternative is rejected because it does not feasibly attain the basic objectives of the Project, and would not substantially lessen the significant impacts of the Project.

- Based on substantial evidence in the entire record, the City Council finds that this alternative would reduce certain environmental impacts but would not avoid any of the significant and unavoidable impacts. The Reduced Intensity Alternative would increase impacts associated with GHG emissions and on transportation compared to BIG. A reduction of cross-dock intermodal operations under this alternative would result in less reduction of regional heavy-duty truck traffic congestion and therefore less reduction in road maintenance costs throughout the SCAG region, as compared to the reductions that would be achieved by BIG. Additionally, this alternative would have less available cargo handling volume. Therefore, more heavy-duty truck trips would occur under this alternative compared to BIG, which would lead to less reduction in GHG and criteria pollutant emissions.
- This Alternative is rejected as infeasible because it would not meet objectives for the Project as discussed below and in **Table 8-14: Reduced Intensity Alternative Ability of Alternative to Meet Project Objectives** of the EIR.

Objective 1: Meets objective to a lesser extent.

Objective 2: Does not meet objective.

Objective 3: Meets objective to a lesser extent.

Objective 4: Meets objective to a lesser extent.

Objective 5: Meets objective to a lesser extent.

Objective 6: Meets objective to a lesser extent.

The Reduced Intensity Alternative would meet some objectives to a lesser degree than BIG. This alternative would still provide an integrated, sustainable rail option on BNSF's mainline as a substitute for trucking some goods. However, due to the reduced rail yard and transload warehouse center, operations under this alternative would be 50% of BIG and, thus, not have

the same effect on goods movement in the region or allow for future demand. As a result, the alternative would be inconsistent with Objective 2 (related to optimizing facility site design for efficiency and future demand) and Objective 3 (related to promoting public policy in the State Rail Plan to reduce impacts of truck-borne goods movement in densely populated areas nearly the Ports of Long Beach and Los Angeles). A reduction in development intensity and area would also fail to meet Objective 6 related to having a site large enough for all BIG components (i.e., intermodal facility, transload warehouse center, block swap yard, and additional tracks along BNSF's existing mainline) to achieve maximum operational efficiency thereby increasing the speed and reliability of goods movement from the Ports to their end destinations and reducing delivery costs of goods imported through the Ports. While freight handling and transit time through the Midwest would still be improved, a reduction in operations would mean this alternative would result in a smaller improvement compared to BIG.

The Reduced Intensity Alternative would also be inconsistent with the policies and objectives of the General Plan related to promoting economic opportunities for residents and local businesses and attracting and retaining innovative rail operators and supporting the efficient movement of goods. The reduced amount of freight handling capacity under this alternative would decrease the competitiveness of the High Desert economy compared to BIG as a smaller handling capacity would limit the efficient movement of goods to and from the High Desert. Further, reduced construction and operation intensity would reasonably proportionally decrease generated construction and permanent jobs, including potentially high-paying jobs within the High Desert.

The Reduced Intensity Alternative would also not promote objectives and goals related to promoting a financially viable and successful project. BNSF has submitted information to the City that this alternative is not viable from a business and economic perspective, and BNSF would not build this alternative. (See BNSF Letter to City re BIG Project Design and Alternatives, dated May 22, 2026). As stated in the BNSF's letter, the Reduced Intensity Alternative would not handle the volume of goods needed to attract sufficient freight transport away from heavy-duty trucks and toward rail transport to achieve the paradigm mode shift envisioned by BIG. This mode shift was a significant part of the State's certification of the BIG project under SB 149. The letter also explains how the alternative would not be consistent with the SB 149 and would not provide the same benefits as BIG committed to by BNSF as part of the SB 149 certification, including the dedicated fleet of Tier 4 linehaul locomotives to transport cross-dock intermodal containers from the Ports, the Tier 4 switcher locomotives at the site or the replacement of yard locomotives at the Bartow Yard. For these reasons, it is unlikely the project would be successfully implemented if this alternative is selected, and therefore the benefits of the project would not be realized.

The City Council finds that this Alternative would not feasibly achieve most of the basic project objectives and would implicate specific social and economic considerations. Furthermore, this alternative would not avoid any of the significant and unavoidable impacts and result in greater impacts (see above). Each of the aforementioned considerations is sufficient, both by itself and in combination with the other aforementioned considerations, to reject the Reduced Intensity Alternative as infeasible.

BIG West Transload Warehouse Center Alternative

Description. Under the BIG West Transload Warehouse Center Alternative, a rail yard with block swap yard, intermodal facility, and ancillary rail areas (container yard/chassis storage and maintenance of way laydown) and a transload warehouse center would be developed as would under BIG, except no transload warehouse center buildings would be constructed east of the Lenwood Channel. This alternative would

locate the transload warehouse center entirely west of the Lenwood Channel, resulting in a total transload warehouse center footprint of approximately 690 acres, or approximately 48 percent fewer acres than the approximately 1,330 acres proposed under BIG, inclusive of roadways and the Lenwood Channel.

The alternative assumes approximately 8 million square feet of industrial uses, including approximately 550,000 square feet of industrial park uses, approximately 150,000-square-foot rail yard buildings and structures, and approximately 7.3 million square feet of transload warehouse center floor area., which is approximately 19 percent less than the 9.0 million square feet proposed under BIG. BIG's proposed off-site improvements would remain unchanged under this alternative.

Under this alternative, the BIG Specific Plan would be implemented similar to BIG but its boundaries would differ. The approximately 640 acres east of Lenwood Channel (i.e., "Industrial Park area) would be designated General Industrial (GI) pursuant to the proposed General Plan and pre-zoned Industrial. Therefore, under this alternative, the Industrial Park area would be excluded from the BIG Specific Plan. BNSF would not develop the Industrial Park area although it could be developed by others in accordance with the City's proposed General Plan General Industrial land use designation and Industrial pre-zoning.

Construction would be approximately the same duration as under BIG but would result in approximately 3 million cubic yards less earthwork. Earthwork was estimated to total approximately 23 MCY, or approximately 12 percent less than BIG's estimated 26 MCY. Construction activities would be proportionately greater under this alternative compared to BIG, given the rail yard and off-site improvements would remain unchanged, though 1.1 million square feet more warehouse space would be constructed. The phasing and construction schedule is assumed to be the same given the rail yard and off-site improvements would remain unchanged.

Electric hostlers would need to travel farther under this alternative, given the transload warehouse center would be concentrated farther to the west, away from the proposed overpass from the rail yard to the transload warehouse center. Electric hostlers would need to dray containers farther under this alternative, resulting in additional travel time and electric hostlers. Concentrating transload warehouse center development to the west would site the transload warehouse center further from sensitive receptors along Lenwood Road but would allow traditional, truck intensive industrial uses within this area. Under this alternative, given reduced transload warehouse center square footage, BIG's intermodal facility operations would be proportionately less.

Environmental Effects. The BIG West Transload Warehouse Center Alternative's environmental impacts are compared to the proposed Project in Section 8.10.3 of the EIR. Most of the environmental impacts would be the same or less than BIG but would not reduce impacts to a less than significant level. Impacts associated with the topic of Transportation would increase but like BIG would be less than significant.

Finding: Pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), based on the whole of the record, the City Council finds that the specific economic, legal, social, technological, or other considerations, including failure to meet project objectives, render the BIG West Transload Warehouse Center Alternative infeasible. The City Council finds that this alternative is infeasible and less desirable than the Project and rejects this alternative on the following grounds, which provide sufficient justification for rejection of this alternative.

This Alternative is rejected because it does not feasibly attain the basic objectives of the Project, and would not substantially lessen the significant impacts of the Project.

- Based on substantial evidence in the entire record, the City Council finds that this Alternative would reduce certain environmental impacts but would not avoid any of the significant and unavoidable impacts associated with BIG. This alternative would increase impacts associated with transportation compared to BIG.
- This Alternative is rejected as infeasible because it would not meet objectives for the Project as noted below and discussed in detail in **Table 8-17: West Transload Warehouse Center Alternative Ability of Alternative to Meet Project Objectives** of the EIR.
 - Objective 1: Meets objective to a lesser extent.
 - Objective 2: Meets objective to a lesser extent.
 - Objective 3: Meets objective to a lesser extent.
 - Objective 4: Meets objective to a lesser extent.
 - Objective 5: Meets objective to a lesser extent.
 - Objective 6: Meets objective to a lesser extent.
- The BIG West Transload Warehouse Center Alternative would fulfill BIG's objectives but to a lesser degree, given this alternative anticipates approximately 1.7 million square feet less transload warehouse center and would result in a 19% reduction in operations. This alternative would still provide an integrated, sustainable rail option on BNSF's mainline as a substitute for trucking some goods. However, due to the reduction in operations, this alternative not have the same effect on goods movement in the region. The constrained footprint would also not allow for accommodation of future demand. As a result, the alternative would be inconsistent with Objective 2 (related to optimizing facility site design for efficiency and future demand) and Objective 3 (related to promoting public policy in the State Rail Plan to reduce impacts of truck-borne goods movement in densely populated areas nearly the Ports of Long Beach and Los Angeles).
- The BIG West Transload Warehouse Center Alternative would also be inconsistent with the policies and objectives of the General Plan related to promoting economic opportunities for residents and local businesses and attracting and retaining innovative rail operators and supporting the efficient movement of goods. The reduced amount of freight handling capacity under this alternative would decrease the competitiveness of the High Desert economy compared to BIG as a smaller handling capacity would limit the efficient movement of goods to and from the High Desert. Further, reduced construction and operation intensity would reasonably proportionally decrease generated construction and permanent jobs, including potentially high-paying jobs within the High Desert.
- The BIG West Transload Warehouse Center Alternative would also not promote objectives and goals related to promoting a financially feasible and successful project. BNSF has submitted information to the City that this alternative is not viable from a business and economic perspective, and BNSF would not build this alternative. (See BNSF Letter to City re BIG Project Design and Alternatives, dated May 22, 2026). As stated in the BNSF's letter, the BIG West Transload Warehouse Center Alternative would not handle the volume of goods needed to attract sufficient freight transport away from heavy-duty trucks and toward rail transport to achieve the paradigm mode shift envisioned by BIG. This mode shift was a significant part of the State's

certification of the BIG project under SB 149, and this alternative may not be consistent with the SB 149 or provide the same benefits as BIG committed to by BNSF as part of the SB 149 certification process. The letter further explained that because the West Transload Warehouse Center Alternative would preclude transload warehouses from being developed in the approximately 640-acre area east of Lenwood Channel for the project, BNSF would likely seek to recoup its investment through sale or development in accordance with the City's proposed General Plan "General Industrial" land use designation and Industrial zoning. This would likely be traditional warehousing and logistics, which would result in potentially greater impacts to the City compared to BIG. For these reasons, it is unlikely the project would be successfully implemented if this alternative is selected, and therefore the benefits of the project would not be realized.

The City Council finds that this Alternative would not feasibly and fully achieve most of the basic project objectives and would implicate specific social and economic considerations. Furthermore, this alternative would not avoid any of the significant and unavoidable impacts and result in greater impacts (see above). Each of the aforementioned considerations is sufficient, both by itself and in combination with the other aforementioned considerations, to reject the BIG West Transload Warehouse Center Alternative as infeasible.

6.3 Environmentally Superior Alternative

While the City Council finds that the No Project Alternative is the environmentally superior alternative because it would avoid all of the significant environmental impacts of the development that would occur under the Project, the City also finds that the No Project Alternative is infeasible pursuant to PRC § 21081(a)(3) and CEQA Guidelines § 15091(a)(3) because it would not attain any of the Project objectives. CEQA Guidelines § 15126.6(e)(2) requires that if the environmentally superior alternative is the no project alternative, the EIR shall identify an environmentally superior alternative among the other alternatives. Therefore, the EIR identified the Reduced Project Alternative as the environmentally superior alternative.

As stated in the EIR, none of the other alternatives would be effective in eliminating the Project's significant and unavoidable impacts. The City Council further finds that of the remaining alternatives evaluated in the EIR, each has varying levels of impacts on different environmental resources, as noted in the Findings above, and none of the remaining alternatives is environmentally superior to the Project for CEQA purposes.

The lead agency may reject an alternative that it considers undesirable from a policy standpoint, provided that such a decision reflects a reasonable balancing of various economic, social, and other factors. Based on impacts identified in the EIR and the evidence identified in these Findings and the record as whole, the City Council finds, when compared to those alternatives, the Project provides the best available and feasible balance between maximizing attainment of the project objectives and minimizing significant environmental impacts, and the Project is the environmentally superior alternative and the most desirable among those options, and rejects the other alternatives as infeasible.

6.4 Alternatives Suggested By Commenters

With respect to other alternatives suggested in comments on the EIR, the Responses to Comments in the Final EIR explained why each of these alternative either could not satisfy most of the objectives of the proposed Project, does not offer substantial environmental advantages over the Project, or could not be feasibly accomplished in a successful manner considering the economic or environmental or technological factors involved. These findings are based on the entirety of the record. The City Council hereby adopts

and incorporates by reference the reasons stated in the responses to comments as the grounds for rejecting those alternatives.

7.0 STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to CEQA Guidelines § 15093, when a project will result in significant environmental impacts that cannot be reduced to less than significant levels, the decision-making body must balance those impacts against the economic, legal, social, technological, or other benefits of the project in determining whether to approve the project. If the specific benefits of the project outweigh the unavoidable adverse environmental effects, those effects may be considered acceptable (CEQA Guidelines § 15093(a)). In such cases, the lead agency must adopt a written Statement of Overriding Considerations, supported by substantial evidence in the record, identifying the reasons for approving the project despite its significant unavoidable impacts (CEQA Guidelines § 15093(b)).

The Project would result in significant and unavoidable impacts for which no feasible mitigation measures or alternatives have been identified that would reduce the impacts to a less than significant level.

The City, having reviewed and considered the information contained in the EIR for the Project, the Final EIR for the Project, Responses to Comments and the public record (collectively, Public Record), adopts the following Statement of Overriding Considerations that have been balanced against the Project's significant and unavoidable impacts in reaching a decision on this Project.

While the significant and unavoidable impacts associated with the proposed General Plan and BIG (Project) cannot be fully mitigated, the City Council has balanced that impact against the benefits of the Project, as detailed below, and has determined that the benefits of the Project outweigh the impact. The City Council finds that all feasible mitigation measures have been imposed pursuant to the MMRP for the proposed General Plan and MMRP for BIG, which would lessen all other Project to less than significant levels. Additionally, the City Council finds that while the Project alternatives would have similar or less environmental impacts as compared to the Project, the alternatives to the Project are rejected as infeasible because they do not meet Project objectives, do not eliminate significant unavoidable impacts, or are otherwise socially or economically infeasible when compared to the Project, as described herein.

The City Council, having reviewed and considered the information contained in the Public Record, and having balanced the benefits of the Project against the Project's significant and unavoidable impacts, finds such unmitigated impact to be acceptable in view of the following overriding considerations. The below stated reasons summarize the benefits, goals, and objectives of the proposed Project and provide the rationale for the benefits of the proposed Project. The City finds that any one of these Project benefits standing alone constitutes an overriding consideration warranting approval of the Project and would be sufficient to sustain the Statement of Overriding Considerations:

Proposed General Plan Statement of Overriding Considerations

The planned growth in the Proposed General Plan Area would result in significant and unavoidable impacts to aesthetics, agriculture and forestry resources, air quality, cultural resources, geology, soils, and mineral resources, noise; transportation; tribal cultural resources; and utilities and service systems. However, each of the following benefits of the proposed Project, individually, constitutes a sufficient basis for approving the Project notwithstanding the significant and unavoidable impacts which will result.

Implement the Objectives Established for the Proposed General Plan. The proposed General Plan would provide goals and policies that would facilitate and achieve the Project objectives, thereby providing direct benefits to the City and the Barstow community:

- Jobs. As stated on page 5.13-15 of the EIR, "...the proposed railyard is estimated to generate 860 direct (i.e., on site) jobs by 2028, increasing to 1,125 direct jobs by 2048. The transload warehouse center is estimated to generate approximately 2,767 direct jobs by 2028, increasing to 4,248 direct jobs by 2048. These are permanent, livable wage, head of household jobs. In addition to these direct jobs from BIG, the EIR also documents the significant projected job growth stemming from the proposed General Plan and its planning for the City's future, specifically an estimated approximately 75 percent increase in the total number of jobs in the City, up to a total of approximately 25,235 jobs City-wide by 2048 (see EIR Table 5.13-3). Further, as addressed on page 3-5 and detailed in Table 3-12 of the EIR, BIG itself would create nearly 16,000 direct, indirect, and induced jobs at full build out in 2048. (See Economic Impact Analysis: Barstow International Gateway (AECOM, 2025; Appendix 5.11 BIG-1: Economic Impact Report.)
- The addition of a substantial number of livable wage and head of household jobs that will strengthen the City's economic base and fiscal resiliency and provide career pathways for the community (see Appendix 5.11 BIG-1, Economic and Fiscal Impact Analysis, of the EIR). Unlike all of its neighboring cities in the High Desert, Barstow's growth has been stagnant for 50 years. If a city is not growing, its future is uncertain, at best. Barstow's past failure to grow came despite significant efforts at trying to grow its jobs, housing, and population bases. Unfortunately, the City's efforts at growth in the past 50 years failed due to a mix of wider economic factors, such as the 2008-era Great Recession and Housing Crisis, and specific failures of prior proposed development projects. Of these, several individual projects failed due to factors including delayed State level review processes, market shifts, high utilities costs, regional competition, and inadequately capitalized would-be developers. The proposed General Plan, as anchored by the BIG Project, addresses these past challenges and presents the best, per some public commenters, only opportunity for the City to grow its employment and jobs, and population and households bases. This is specifically true for the proposed General Plan and BIG because BNSF is sufficiently well-capitalized to be able to deliver on its promises and to build the BIG Project and implement all applicable mitigation measures without losing funding part-way through, as happened before for other projects. (See Section 4.0, Project Context, of the EIR.)
- A larger amount and wider range of housing opportunities to address the needs of the community and military installations, demand from new households generated by job growth, and full spectrum of lifestyles and life stages (see Appendix 5.13-1, Population, Housing, and Employment Projections Methodology, of the EIR). The increased employment, particularly increased livable wage and head-of-household jobs projected to stem from the proposed General Plan and BIG will drive developers to build new housing. The new housing, as projected and planned for by the proposed General Plan, will meet the community's existing unmet housing needs, particularly for family housing and new, high-quality for-sale housing for workforce and livable wage jobs. As recounted by several local major employers, employers currently have challenges in recruitment because there are limited modern, high-quality single-family residential units available for sale in Barstow. (See, e.g. Scoping Meeting Comments and Barstow Community Hospital Resolution of Support [Letter: O5_20251204_Barstow Community Hospital].) The growth in housing expected to result from the proposed General Plan is a significant economic and social benefit to the community.
- A cohesive land use plan that appropriately transitions between residential, commercial, and industrial areas, encourages new development to leverage and improve existing infrastructure,

and provides expansion opportunities to support long term growth (see Section 3.0, Project Description, of the EIR). There is a significant community economic and social benefit in the General Plan update's zoning shifts separating residential land uses from commercial and industrial employment generating land uses. The City's current, 2015, land use and zoning maps mix together residential and commercial and industrial land uses across the Lenwood area, along Lenwood Road between and beyond Highway 58 and Interstate 15. This current mixing reflects a mix of the specific history of past, failed residential projects and adjacent successful and failed commercial and industrial projects, such as the former Cambridge Homes residential development that failed due to market conditions and the failed aluminum plant proposal (see Section 4.0, Project Context, of the EIR). The current General Plan land use designations and zoning map hinder the City's development of both new housing and new jobs because, by mixing employment generating land uses and residential land uses without master planned mixed use community vision, both land uses are set up to compete with each other. If new housing is built on the City's west side, in the Lenwood area, then those new residents will inevitably raise concerns with new employment generating commercial and industrial land uses. And vice-versa, if new commercial and industrial land uses come first, then the adjacent residentially zoned areas become less desirable, and thus less likely to develop into residential land uses. The solution is the proposed General Plan's new General Plan land use designation and zoning maps, which largely separate commercial and industrial land uses from new residential land uses. The proposed General Plan focuses new residential development in the east side of Barstow, within and south of the existing residential core. This ensures that the new residential land uses will be within and adjacent to City's existing residential core, thereby preventing creation of a so-called "New Barstow," into which investment would be focused, and a so-called "Old Barstow," which could be left behind. This approach also allows both land uses to thrive. The new residential land uses in the City's east side can be built without fear of conflicts with or impacts from commercial and industrial development. Similarly, focusing commercial and industrial development into the City's west side ensures those employment generating land uses are also able to thrive. The General Plan's proposed shifting of commercial and industrial land uses to the west side and planning for new and expanded residential land uses within and adjacent to the City's east side is a significant economic and social benefit.

- Land use and circulation plans that capitalize on Barstow's unique location, as a link in the national supply chain, and existing industrial and rail infrastructure to attract and retain innovative industrial and rail operators and to support the efficient movement of goods.
- Goals, policies, and implementation strategies that ensure Barstow is a healthy and safe community for residents, businesses, and visitors.

Consistency with Regional Plans. The proposed Project provides goals and policies that are consistent with the Connect SoCal 2024 goals and would further the State's goals through emphasis on design and reducing VMT. For instance, the proposed Project would address economic growth in the General Plan area through the increase in jobs and improving mobility and circulation. Additionally, the reorganization and change of organization proposed in connection with the proposed Project would not result in significant impacts related to conflicting with any SBLAFCO plan, policy, or regulation. The adoption of the proposed General Plan and proposed SBLAFCO Actions A and B would be annexed to the City and its services and would therefore be detached from County services. See Section 5.3: Air Quality, Section 5.6:

Energy, Section 5.8: Greenhouse Gas Emissions, Section 5.13: Population and Housing, and Section 5.15: Transportation, of the EIR.

Promoted the City's Economic Vision. The proposed General Plan supports the City's economic growth and vitality that reflect the changing conditions and promote fiscal sustainability. For example, the proposed General Plan Land Use Element includes policies that ensure effective land use compatibility so as to not hinder economic viability (Policy LU-1.1), maintain the viability of commercial and industrial businesses for the community's present and future economic viability in undeveloped areas west of Highway 58 and Interstate 15 (Policy LU-1.4), and support the annexation of lands that would provide a fiscal benefit to the City and promote economic prosperity (Policy LU-2.2). See Appendix 3-1: Proposed General Plan, and Appendix 5.11 BIG-1: Economic and Fiscal Impact Analysis, of the EIR.

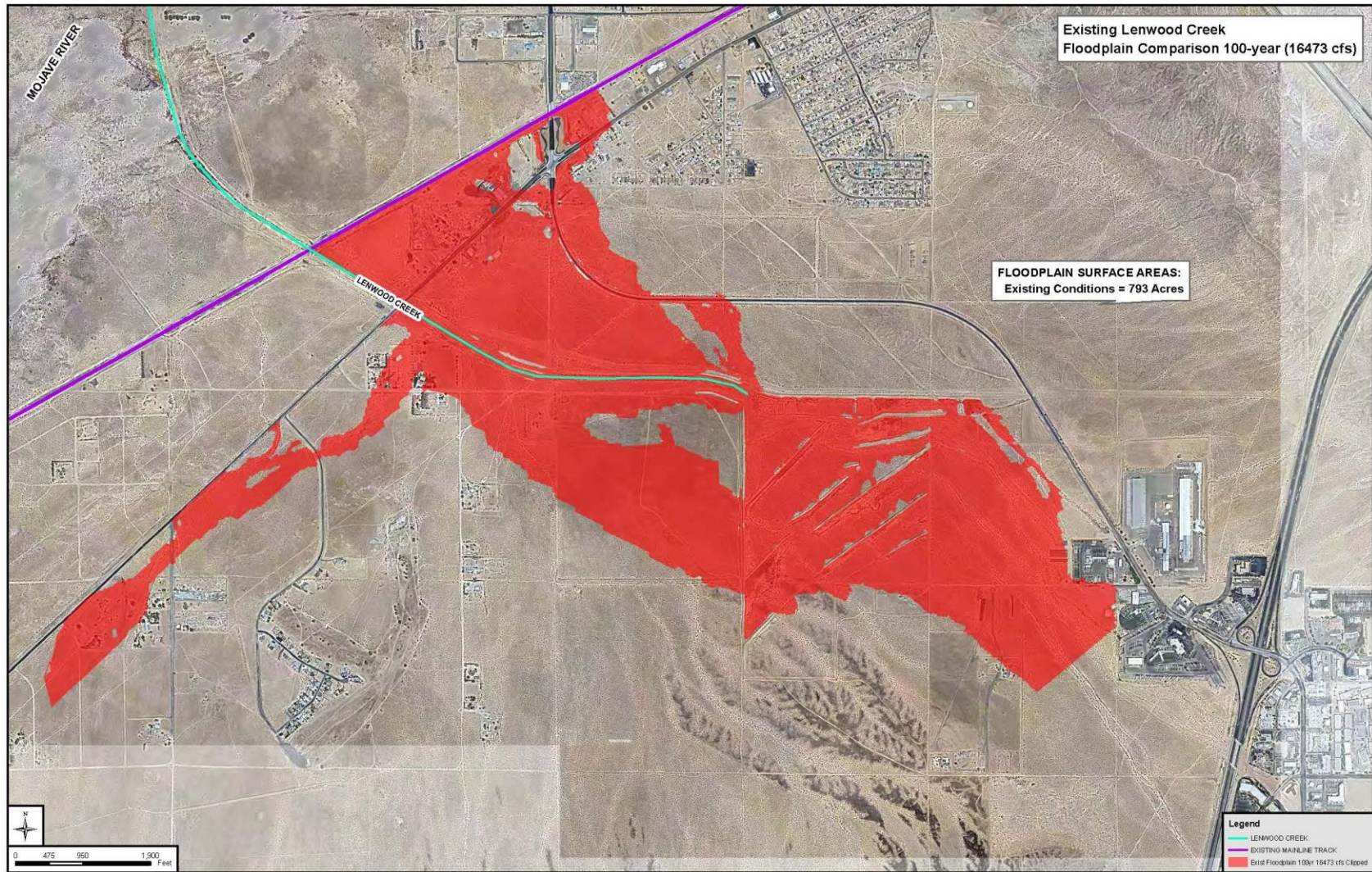
Senate Bill 1000 – Environmental Justice (2016). Senate Bill 1000 (SB 1000), Planning for Healthy Communities Act, mandate that cities adopt an environmental justice (EJ) element or integrate EJ policies, objectives, and goals into other elements in their general plans. The proposed General Plan includes EJ policies integrated throughout all applicable elements. See Appendix 3-1: Proposed General Plan, of the EIR.

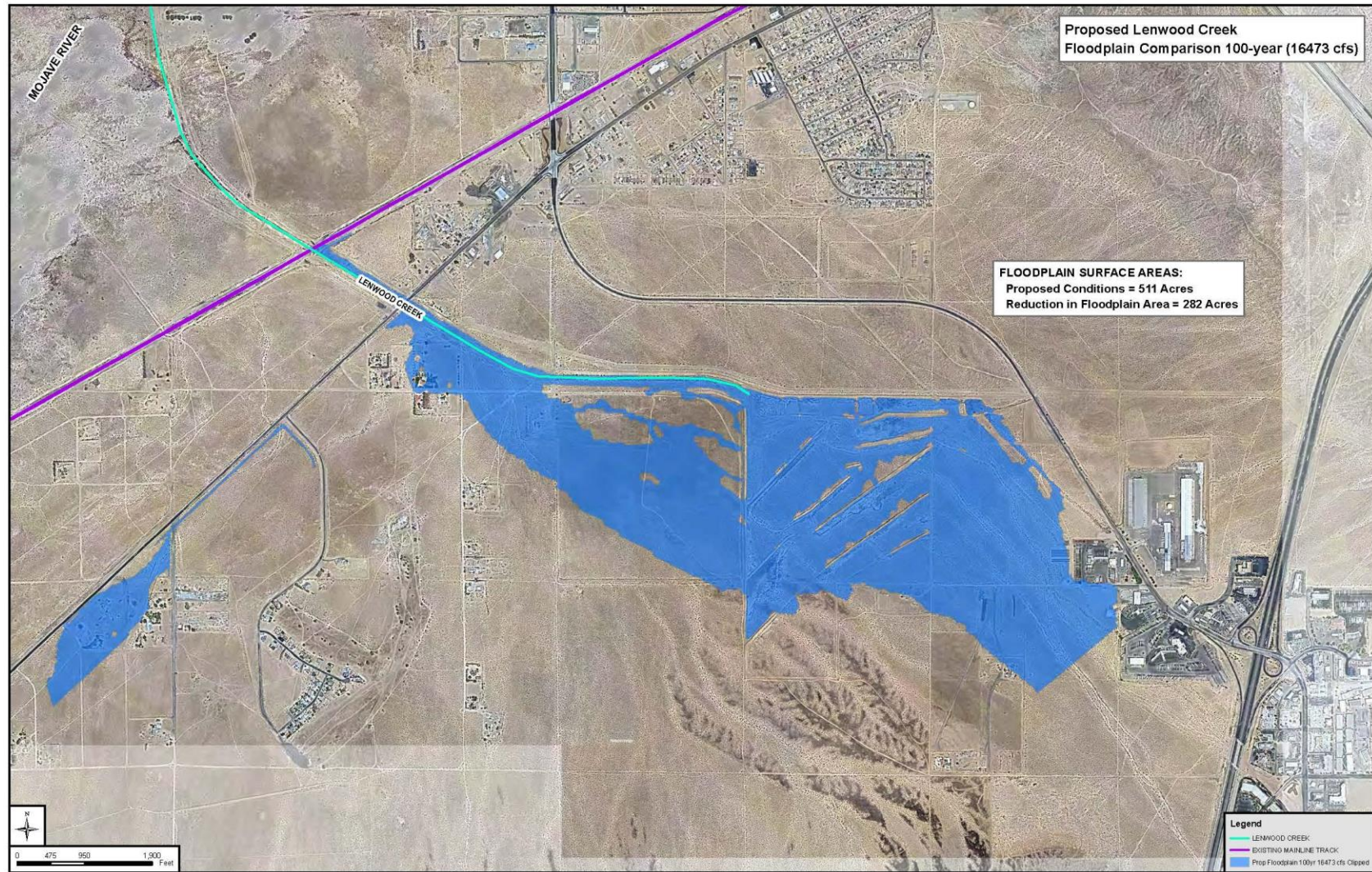
Implementation of the Barstow International Gateway Project. Implementation of the Barstow International Gateway Project would result in a number of significant economic and social community benefits as follows:

- **Jobs:** As disclosed on page 3-5 of the Draft EIR, "...BIG would create nearly 16,000 direct, indirect and induced jobs, all while keeping the Ports competitive by locating the first integrated rail and transload complex on the west coast." Tens of thousands of jobs would be accessible to Barstow residents, including some high paid, livable wage/head of household, and union jobs that can become a career. Adding to the significant economic and social benefit of these new jobs themselves, many of these jobs will be head-of-household technical and skilled jobs available to persons without advanced education, significantly expanding economic opportunities for the entire Barstow community. (See Economic Impact Analysis: Barstow International Gateway (AECOM, 2025; Appendix 5.11 BIG-1: Economic Impact Report.)
- **Increased Property Taxes:** The City anticipates a net surplus of revenue from property tax paid on the warehouses of approximately \$2.6 million per year combined for the City and the Barstow Fire Protection District. This is after the estimated costs of nine (9) new police officers, twelve (12) new firefighters, and a ladder truck. (Staff Report Attachment D LAFCO Action Area A Fiscal Impact Analysis.) These new police officers and firefighters will provide a significant economic and social benefit by boosting the community's public safety services and presence.
- **Fiscal Boost to Barstow Fire Protection District:** There would be new property tax revenues to the Barstow Fire Protection District and other agencies that would benefit the City, County, schools, cemetery, and indirectly, the entire State; an increase in police officers and firefighters; and a new ladder truck and other fire safety equipment. Specifically, the Fiscal Impact Analysis estimates that the Barstow Fire Protection District will have a net revenue surplus over costs to service BIG of an estimated additional \$111,325 annually coming to it from the BIG Project, after accounting for the costs of the Project's proposed 12 new firefighters and serving BIG. (Staff Report Attachment D BIG Action Area A Fiscal Impact Analysis)

- Infrastructure Improvements: Infrastructure improvements would open up Barstow for business development and job creation:
 - Rerouting sewer lines through Jasper Road benefits the Lenwood and Grandview communities (historically economically disadvantaged communities) and creates opportunities for their development with new jobs and businesses.
 - Drainage improvements including Lenwood Channel improvements.
 - New West Main Street Bridge over the Lenwood Channel, replacing existing low-water crossing that has significant safety challenges with a new bridge built to withstand flood flows. (see Figures 1 and 2 to these findings)
 - New waterline to serve West Barstow down Main Street to the current Hinkley Road crossing, particularly including the historically economically disadvantaged communities of Sylvan and Hinkley).
 - New Hinkley Road Bridge over the Mojave River, replacing the existing bridge that regularly washes out with a new bridge built to withstand flood flows.
 - Improvements to roads, bike lanes, bus stops, and additional traffic signals and other traffic safety enhancements.
 - Electrical improvements with a new 33kV major electricity line, opening up significant additional electrical power to an area that lacks adequate electricity.
 - Reducing the Lenwood Creek floodplain surface area from 793 acres to 511 acres.
- Community Life Improvements: The Barstow International Gateway Project would include a number of community life improvements, such as:
 - Keeping the Barstow Community Hospital viable by bringing in new well-paying jobs that would slow the decline in hospital services. For example, OBGYN services are currently in a long-term period of leaving the City all together due to the economic conditions and significant difficulties in attracting new doctors and medical services providers.
 - Reduce truck traffic on freeways and the Cajon Pass by shifting goods and supply chain movements to rails.
 - The potential for increased population growth to bring new workers and families to Barstow, which in turn is expected to lead to increased medical and professional services opportunities for the community.
 - Construction of new homes, particularly new for-sale, market rate and workforce single-family residential housing, which would provide diverse housing options for Barstow families and residents including modern rental and ownership properties. The addition of new for-sale market rate and workforce housing units will also solve recruitment challenges experienced by Barstow employers who find it difficult to ensure safe, desirable housing for their employees.
 - Increased economic growth giving local residents more amenities and increased local shopping opportunities.

- The Barstow International Gateway project and related development would provide opportunities for Barstow's youth to stay in Barstow, as opposed to either leaving for other jobs or to go to school or remaining unemployed, by providing jobs.
- Barstow would have an essential role in a project that will change how goods are moved across the nation.
- The Barstow International Gateway Project gives Barstow residents an overall positive outlook for the future.





BIG Statement of Overriding Considerations

In addition to all of the overriding considerations as stated above for the proposed General Plan, which are incorporated by reference as also applicable to the BIG Project, the BIG Project will bring significant additional economic, legal, social, technological, and other benefits to the Barstow community, sufficient to justify approval of the Project. The development of otherwise underutilized land, the creation of jobs by BIG, both during construction and after BIG is in operation, the multiplier effect which will create secondary jobs to support BIG and those who work in it, the substantial economic benefits which will be generated, directly and indirectly, by BIG, the reduction in commute times and the reduction of heavy-duty truck trips on the County's highways, the generation of revenues which will go into the City's General Fund constitute benefits which outweigh the unavoidable adverse environmental impacts to aesthetics, agriculture and forestry resources, air quality, cultural resources, geology, soils, and mineral resource, GHG emissions, noise, transportation, tribal cultural resources, and utilities and service systems. Each of the benefits, individually, constitutes a sufficient basis for approving the Project notwithstanding the significant and unavoidable impacts which will result.

Approval of BIG would enhance supply chain resiliency, efficiency, and cost-effective goods movement by rail. BIG was identified in the 2024 adopted California State Rail Plan and by the State's SB 149 Certification to help build toward an integrated statewide rail and transit network and investments in zero emission infrastructure. BIG would shift cargo from heavy-duty trucking to rail transport at a location away from dense population centers, planned with the City as part of the proposed General Plan to site industrial uses on the western edge of the City away from residential uses. BIG's utilization of shared track infrastructure, shared utility infrastructure, shared equipment, reduced train travel time between facilities, and increased employee efficiency enhances supply chain resiliency, efficiency, and cost-effective goods movement by rail. An intermodal freight rail yard (IMF) with a "closed loop" connection to an on-site transload warehouse center of sufficient capacity would attract large-scale users of warehouse facilities and justify their adoption of rail transport instead of long-distance, heavy-duty truck transport. A block swap yard at the same site as the IMF would enable blocks of rail cars with the same destination to be combined into a single train, thereby increasing the efficiency of goods movement by rail.

Approval of BIG would create jobs and increase economic activity. BIG would create over 20 years: approximately 62,000 direct, indirect and induced construction jobs, including union construction jobs and approximately 15,000 direct, indirect, and induced operation jobs. In addition, the construction economic benefit is approximately \$11 billion and operational economic benefit is approximately \$7 billion.

Approval of BIG would improve public infrastructure. BIG would result in several substantial public improvements, including:

- Widening Lenwood Channel by between 60 and 100 feet for more than two miles, substantially reducing existing flooding hazards,
- Replacing the existing Main Street low-water crossing over Lenwood Channel with a new four-lane bridge which would be designed for 100-year flood events
- Replacing the existing Hinkley Road bridge over the Mojave River with a longer bridge to better match the channel width of the Mojave River at that location, reducing flooding compared to existing conditions, and

- Expanding Golden State Water Company (GSWC) infrastructure to the western extent of the City, enabling nearby residents to connect to Golden State Water Company water lines.

The widened channel, new four-lane bridge, and replacement of the existing Hinkley Road Bridge would improve flooding protections compared to existing conditions. Furthermore, expanding GSWC infrastructure would ensure that projected supply would be sufficient to meet all projected water demand in the GSWC Barstow's service area, inclusive of BIG, under current and future conditions, for normal, single-dry, and multiple dry years through 2045.

Approval of BIG would achieve the proposed General Plan's goals, objectives, and policies to increase the concentration of new jobs and housing within the City limits and bring new amenities that will enhance Barstow as a place to live. With the proposed General Plan, projected household growth is estimated to increase by 6,608 housing units by 2048 over the existing 2023 total while project employment growth is estimated to increase by 10,819. Additionally, the City's unique location (e.g., 30 miles from the Victor Valley cities) means that there are fewer housing opportunities within a relatively short commute (less than 30 minutes). The nearest cities in Los Angeles and Kern Counties are Lancaster (approximately 90 miles) and California City (approximately 60 miles), respectively.

Approval of BIG would result in hundreds of millions of fewer truck miles as a result of converting freight movements from trucks to trains. This substantial reduction in truck trips would in turn result in a net decrease in greenhouse gas emissions. BIG would also result in no increase in diesel particulate matter (DPM) in the corridor from the Ports to the BIG site compared to the no project condition, which includes all of South Coast AQMD and the western portion of the Mojave Desert Air Quality Management District (MDAQMD).

Having considered the benefits summarized above, the City Council finds that the benefits of approving the Project outweigh and override the unavoidable significant adverse environmental effects associated with the Project, and therefore, the Project's unavoidable significant adverse environmental effects are acceptable.

6475170.3

EXHIBIT B-1
RESOLUTION NO. 5256-2026

GENERAL PLAN
MITIGATION MONITORING AND
REPORTING PROGRAM

(STAFF REPORT ATTACHMENT C-1.B-1)

City of Barstow

CITY OF BARSTOW GENERAL PLAN

June 2026 | Mitigation Monitoring and Reporting Program

SCH# 2024020501



4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 Introduction

The California Environmental Quality Act (CEQA) requires that all public agencies establish monitoring and/or reporting procedures for mitigation adopted as conditions of approval to mitigate or avoid significant environmental impacts. This Mitigation Monitoring and Reporting Program (MMRP) has been developed to provide a vehicle by which to monitor mitigation measures (MMs) outlined in the Proposed General Plan and Barstow International Gateway Project (“Project”) Environmental Impact Report (EIR). The Project MMRP has been prepared in conformance with Public Resources Code § 21081.6 and City of Barstow (“City”) monitoring requirements. Specifically, Public Resources Code § 21081.6 states:

- (a) *When making findings required by paragraph (1) of subdivision (a) of Section 21081 or when adopting a mitigated negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the following requirements shall apply:*
- (1) *The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program.*
 - (2) *The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.*

State CEQA Guidelines § 15097 provides clarification of mitigation monitoring and reporting requirements and guidance to local lead agencies on implementing strategies. The reporting or monitoring program must be designed to ensure compliance during Project implementation. The City of Barstow is the Lead Agency for the Project and is therefore responsible for ensuring MMRP implementation. The MMRP has been drafted to meet Public Resources Code § 21081.6 requirements as a fully enforceable monitoring program.

The MMRP is comprised of the Mitigation Program specified in the EIR and includes requirements to implement and monitor the Mitigation Program. The MMRP defines the following for each MM:

- **Definition of Mitigation.** The definition contains the criteria for the MM, either in the form of adherence to certain adopted regulations or identification of the steps to be taken in mitigation.
- **Responsible Party or Designated Representative.** Unless otherwise indicated, an applicant would be the responsible party for implementing the MM, and the City of Barstow or designated representative would be responsible for monitoring the MM’s performance and implementation. To guarantee that the MM will not be inadvertently overlooked, a supervising public official acting as the Designated Representative is the official who grants the permit or authorization called for

in the performance. Where more than one official is identified, permits or authorization from all officials shall be required. Regardless of whether the City delegates reporting or monitoring responsibilities, the City, as lead agency, remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

- **Time Frame.** In each case, a time frame is provided for the MM's performance or the review of evidence that mitigation has taken place. The performance points selected are designed to ensure that the Project's impact-related components do not proceed without establishing that the mitigation is implemented or ensured. All activities are subject to the approval of all required permits from agencies with permitting authority over the specific activity.

Table 4-1: Mitigation Monitoring and Reporting Program is provided on the following pages. The numbering system in **Table 4-1** corresponds with the EIR's numbering system. The table's "Verification" column will be used by the parties responsible for documenting when the MM has been completed. The City will complete ongoing documentation and MM compliance monitoring. The completed MMRP and supplemental documents will be kept on file at the City of San Bernardino Community Development Department.

4.2 Mitigation Monitoring and Reporting Program

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
AESTHETICS					
MM BIG AES-1: Construction Lighting and Screening Plan. Prior to any BIG Specific Plan area site clearance or grading activity, the implementing entity shall prepare a Construction Lighting and Screening Plan (CLSP), which shall be submitted to the City of Barstow Planning Department for review and approval. The City shall review the CLSP to verify that it identifies for the construction phase, lighting practices and systems (e.g., shielded and directional lighting oriented toward work areas and to avoid light trespass onto residential or other sensitive receptor properties) that minimize light pollution, glare, and light trespass, while maintaining nighttime safety, visibility, utility, and productivity pursuant to the following: - Barstow Code § 19.06.010(e) - Light Trespass and Control of Glare concerning trespass of light onto adjacent properties/light-sensitive uses. (e.g., maximum brightness values not to be exceeded by artificial bulbs, screening around BIG footprint to limit light and glare, use of non-reflective glass, etc.), and prohibiting aiming, directing, and focusing to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways. Use of 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). - Use remote monitoring systems or other methods to ensure security of the construction site outside of construction hours. The CLSP shall also include specifications requiring that temporary construction fencing be installed along the BIG Specific Plan construction areas where adjacent to residences to screen views of construction activity and promote safety. Construction fencing shall be up to the height permitted by Barstow Code Section 19.18.060 (i.e., 8.0	Prior to any BIG Specific Plan area site clearance or grading activity	The implementing entity shall prepare a Construction Lighting and Screening Plan (CLSP). The City shall review and approve the CLSP after verifying specified construction phase lighting practices and systems, and temporary construction fencing, are included in the CLSP and meet the requirements in MM BIG AES-1.	City of Barstow Planning Division		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
feet) and include a privacy screen to provide as a safeguard from the surrounding environment, prevent trespassers from entering.					
AIR QUALITY					
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. - 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	Prior to the start of construction activities During and through the closure of BIG construction	The contractor shall prepare and submit to MDAQMD a fugitive dust control plan (FDCP) that complies with MDAQMD Rule 403 and meets the requirements set forth in MM BIG AQ-1. MDAQMD shall review and approve the FDCP after verifying the FDCP complies with MDAQMD Rule 403 and meets the requirements set forth in MM BIG AQ-1. The contractor shall maintain records demonstrating compliance with the requirements of the FDCP and Rule 403,	Mojave Desert Air Quality Management District Air Pollution Control Officer		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
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		verified by the contractor under penalty of perjury. MDAQMD may issue Notices to Comply and/or Notices of Violation for non-compliance with the approved fugitive dust control plan.			
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 cleanup water and take it to the hazardous waste center (www.cleanup.org).	Prior to the issuance of building permits, during construction, and throughout all operational years.	The implementing entity shall submit, for review and approval by the City Community Development Department, Building and Safety Division, plans that comply with specifications and performance standards set forth in MM BIG AQ-2.	City of Barstow Community Development Department, Building and Safety Division		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
- 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.	Prior to the issuance of construction contracts; during construction	BNSF or its designee shall incorporate the emissions requirements specified in MM BIG AQ-3 into construction contract specifications and submit the documentation specified in MM BIG AQ-3 to the City. The City shall review and verify that documentation complies with the performance standards set forth in MM BIG AQ-3.	City of Barstow		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
		The City shall review written findings provided by the Contractor of Tier 4 lack of availability for any equipment that is not Tier or not listed as an exception in MM BIG-3.			
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	During construction	The implementing entity shall incorporate the renewable diesel fuel requirements in MM BIG AQ-4 into construction contract specifications. The implementing entity shall submit the documentation specified in MM BIG AQ-4 to the City, which shall review this documentation to verify compliance with the performance	City of Barstow		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
requested by the City to verify compliance.		standards in MM BIG AQ-4.			
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 and shall maintain all supporting procurement records for City review upon request. ▪ The implementing entity shall keep a written record of the fleet mix for on-road construction equipment during BIG construction and provide the City annual reports documenting compliance.	Prior to the issuance of construction contracts	The implementing entity shall incorporate the material-hauling heavy truck fleet mix requirements in MM BIG AQ-5 into construction contract specifications. The City of Barstow shall review annual reports and as needed, procurement records, to confirm compliance with the performance standards in MM BIG AQ-5.	City of Barstow		
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. The City shall verify compliance with this siting requirement by reviewing site plans, maps, or other	Prior to construction or arrival of a batch plant on site	The implementing entity shall provide the City with documentation demonstrating that batch plants meet the performance	City of Barstow; MDAQMD		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
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. 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.		standards set forth in MM BIG AQ-6. City shall review documentation, verify compliance with performance standards set forth in MM BIG AQ-6, and either issue written confirmation of compliance or require corrective action prior to installation, operation, or establishment of any batch plant. For each batch plant, the implementing entity shall apply for, and once granted, comply with, an MDAQMD Permit to Construct, including control measures in MM BIG AQ-6. The implementing entity shall provide a copy of the permit			

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
		application for each such plant to the City.			
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. 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.	At least once every 7 calendar days, throughout all operational years.	The implementing entity shall maintain sweeping logs as specified in MM BIG AQ-7 and provide the City with annual reports documenting compliance. The City of Barstow shall review annual reports and as needed, sweeping logs, to confirm compliance with the performance standards set forth in MM BIG AQ-7.	City of Barstow		
MM BIG AQ-8: Renewable Diesel RTG Cranes. Rubber Tired Gantry (RTG) cranes shall be powered with renewable diesel. BNSF shall provide the City of Barstow with evidence demonstrating use of renewable diesel for RTG cranes prior to the issuance of certificate of occupancy.	Prior to issuance of certificate of occupancy	BNSF shall provide the City with evidence demonstrating use of renewable diesel for RTG cranes. The City shall verify that the evidence provided ensures	City of Barstow		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
		compliance with the performance standards set forth in MM BIG AQ-8.			
MM BIG AQ-9: Truck Idling Limits and Truck Route Signage. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that all truck access gates and loading docks within the BIG site shall have posted signage posted that states: ▪ Truck drivers shall turn off engines when not in use. ▪ Truck drivers shall shut down the engine after two minutes of continuous idling operation. Once the vehicle is stopped, the transmission is set to “neutral” or “park”, and the parking brake is engaged. ▪ Telephone numbers of the building facilities manager, the South Coast AQMD, and CARB to report violations. ▪ Signs shall also inform truck drivers about the health effects of diesel particulates, the California Air Resources Board diesel idling regulations, and the importance of being a good neighbor by not parking in residential areas. ▪ Clearly mark truck routes with trailblazer signs, so that trucks will not travel next to or near sensitive land uses (e.g., residences, schools, day care centers, etc.). ▪ Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the proposed Project site. ▪ The implementing entity shall designate an officer to monitor trucks on-site for compliance. Signs and drive aisle pavement markings shall clearly identify the on-site circulation pattern to minimize unnecessary on-site vehicular travel. ▪ Additionally, signs shall be provided at every truck exit driveway showing directional information to the off-site truck route. To the	Prior to the issuance of a tenant occupancy permit	The City Planning Division shall verify that all truck access gates and loading docks within the BIG site have posted signage with specified details set forth in MM BIG AQ-9 before issuing tenant occupancy permits for tenant improvements.	City of Barstow Planning Division		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
extent feasible, the BIG shall direct trucks away from sensitive receptors. All signage installed as part of BIG shall be legible, durable, and weather-proof. This mitigation measure applies only to tenant improvements and not the building shell approvals.					
MM BIG AQ-10: Tier 4 Emergency Back-Up Generators. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that the BIG plans and specifications require all standard emergency generators (i.e., non-cold storage generators) to meet California Air Resources Board Tier 4 Final emissions standards. A copy of each unit's Best Available Control Technology (BACT) documentation (certified tier specification) and CARB or Mojave Desert AQMD operating permit (if applicable) shall be provided to the City. This mitigation measure applies only to tenant improvements and not the building shell approvals.	Prior to the issuance of a tenant occupancy permit	Applicants for tenant occupancy permits shall submit copies of each unit's documentation, as specified in MM BIG AQ-10, to the City Planning Division. The City Planning Division shall review plans and specifications to verify conformity with the performance standards set forth in MM BIG-10.	City of Barstow Planning Division		
MM BIG AQ-11: Carl Moyer Truck Efficiency Improvements. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that tenant lease agreements include specifications that require vendor trucks for the industrial buildings include energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption. This mitigation measure applies only to tenant improvements and not the	Prior to the issuance of a tenant occupancy permit	Any applicant for a tenant occupancy permit shall provide the City Planning Division a copy of the tenant lease agreement conforming to the	City of Barstow Planning Division		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
building shell approvals.		performance standards set forth in MM BIG AQ-11. The City Planning Division shall review the tenant lease agreement and verify conformity to the performance standards set forth in MM BIG AQ-11.			
MM BIG AQ-12: EPA Smart Way Program. Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that tenant lease agreements include specifications that require tenants to enroll in the United States Environmental Protection Agency’s SmartWay program, and tenants shall be required to use carriers that are SmartWay carriers. This mitigation measure applies only to tenant improvements and not the building shell approvals.	Prior to issuance of a tenant occupancy permit	Any applicant for a tenant occupancy permit shall provide the City Planning Division a copy of the tenant lease agreement conforming to the performance standards set forth in MM BIG AQ-12. The City Planning Division shall review the tenant lease agreement and verify conformity to the performance	City of Barstow Planning Division		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
		standards set forth in MM BIG AQ-12.			
MM BIG AQ-13: Electric Landscape Equipment. Prior to the issuance of occupancy permits, the implementing entity shall confirm that agreements for landscaping services include contractual language that all handheld landscaping equipment used on-site shall be 100 percent electrically powered. This mitigation measure applies only to tenant permits and not the building shell approvals.	Prior to the issuance of occupancy permits	Any applicant for a tenant occupancy permit shall provide the City Planning Division a copy of the agreement conforming to the performance standards set forth in MM BIG AQ-13. The City Planning Division shall review the agreement and verify conformity to the performance standards set forth in MM BIG AQ-13.	City of Barstow Planning Division		
MM BIG AQ-14: Future EV Charging Infrastructure. Prior to the issuance of a building permit for transload warehouse facility tenant improvements, the implementing entity shall confirm that the BIG transload facility is designed to include the following: ▪ Prior to issuance of a Building Permit for the Shell Design, the buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed to supply power for the future installation of EV truck charging stations on the site. Conduit should be installed from the electrical room to tractor trailer parking spaces in a logical location(s) on the site	Prior to the issuance of a building permit for transload warehouse facility tenant improvements	Any applicant for a building permit for the shell design of a transload warehouse facility tenant improvement, shall provide the City Planning Division documentation of site plan conformity	City of Barstow Planning Division		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
determined by the implementing entity during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available and the buildings are being served by trucks with electric-powered engines. The buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed in the future to supply power to trailers with TRUs during the loading/unloading of refrigerated goods, if required by future tenants who utilize cold storage. Conduit should be installed from the electrical room to the loading docks in a location determined by the tenant as the logical location(s) receive trailers with TRUs.		to the performance standards in MM BIG AQ-14. The City Planning Division shall review the documentation and verify conformity to the performance standards in MM BIG AQ-14.			
BIOLOGICAL RESOURCES					
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,	Prior to construction mobilization; annually for duration of construction	The implementing entity, through designated biologists, shall prepare a Worker Environmental Awareness Program (WEAP) meeting the performance standards specified in MM BIG BIO-1. The City shall review and approve the WEAP after verifying that the WEAP meets the performance	City of Barstow		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
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 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.		standards in MM BIG BIO-1. The implementing entity, through designated biologists or biological monitors, shall provide the approved WEAP materials and WEAP training to construction personnel, as well as updates as needed, as specified in MM BIG BIO-1. The implementing entity, through designated biologists or biological monitors, shall collect and maintain records of signed attendance forms, as specified in MM BIG BIO-1.			

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
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 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 construction monitoring reports during construction and the post-construction monitoring report summarizing compliance with	At least 30 days prior to start of construction mobilization activities, including site mobilization, project limits delineation and fencing, demolition, staging, vegetation removal and mass grading; during construction; post-construction	Within 30 days of a written request by the implementing entity, USFWS and CDFW shall review, approve, and provide written confirmation of approval of the designated biologists and species-specific biological monitors, consistent with the performance standards in MM BIG BIO-2. The implementing entity, through the designated biologists, shall submit quarterly construction reports and a post-construction monitoring report to the City, consistent with the standards specified in MM BIG BIO-2, and summarizing compliance with	USFWS, CDFW, and City of Barstow		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
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.		other BIG-specific mitigation measures related to biological resources. The implementing entity, through general biological monitors, shall perform monitoring on daily and weekly bases, as specified in MM BIG BIO-2.			
MM BIG BIO-3: Work Stoppage. During BIG construction, the implementing entity shall adhere to the following guidelines: - 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	During construction	The implementing entity, through designated biologists or biological monitors, shall implement the work stoppage measures listed in MM BIG BIO-3, pursuant to the performance	USFWS, CDFW, and City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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. ▪ 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.		standards set forth therein.			

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
▪ 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.	During construction	The implementing entity, through designated biologists or biological monitors, shall implement the vehicle traffic and construction	City of Barstow (See also MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
▪ 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.		equipment-related measures listed in MM BIG BIO-4, pursuant to the performance standards set forth therein.	and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
- All wildlife vehicle or equipment strikes shall be reported to a designated biologist. - 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.	During construction, including within 48 hours of any non-	The implementing entity, through a designated	Appropriate agencies (i.e., CDFW, USFWS); City of		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
Monitoring reports that document compliance status with the MMs shall be prepared by designated biologists and submitted quarterly during construction 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.	compliance or unauthorized take of special-status species; post-construction	biologist, shall report non-compliance with mitigation measures and unauthorized take to appropriate agencies within 48 hours thereof, as specified in MM BIG BIO-5. The implementing entity, through a designated biologist, shall submit quarterly monitoring reports and one post-construction report to the City.	Barstow (See also, MM BIG BIO-2 [identifying regular monitoring and reporting requirements during and post-construction])		
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:	Prior to the start of construction mobilization activities, during construction, during all operational years	The implementing entity shall prepare and submit an Adaptive Weed Control Plan (AWCP) to the City for review to verify the AWCP's compliance with the performance	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
a. 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; b. review and screening of proposed plants to identify and avoid potential invasive species; c. weed removal during the initial planting of landscaped areas; d. 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; e. 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.		standards in MM BIG BIO-6. The implementing entity shall prepare and submit landscape plans for review by a designated biologist to verify the plans' compliance with the performance standards in MM BIG BIO-6 and 49 CFR § 213.			
MM BIG BIO-7: Delineation of Construction Work Limits. To prevent inadvertent disturbance to areas outside the delineated construction 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	Prior to the start of all construction mobilization activities; during construction	The implementing entity, through designated biologists or biological monitors, shall implement the work limit-related measures listed in MM BIG BIO-7,	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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.		pursuant to the performance standards set forth therein.			
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: ▪ Conduct nighttime work only within the boundaries of previously disturbed, cleared and grubbed areas; ▪ Observe slower vehicle speeds at nighttime at the discretion of the designated biologist; ▪ Shield and direct nighttime lighting to avoid illuminating wildlife habitat, including movement corridors and bat roosts; ▪ 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); ▪ Use low beams or turn off headlights when safety considerations permit; and ▪ 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.	Prior to construction; during construction	The implementing entity shall prepare a Nighttime Construction and Lighting Plan (NCLP) pursuant to the performance standards in MM BIG BIO-8. The City shall review the NCLP to verify the NCLP's compliance with the performance standards in MM BIG BIO-8.	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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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.	During construction	The implementing entity, through a biological monitor, construction personnel, and a Species-Specific biological monitor, as specified in MM BIG BIO-9, shall implement the wildlife entrapment-related measures specified in MM BIG BIO-9, pursuant to the performance standards specified therein.	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		
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,	During construction; throughout all operational years	The implementing entity shall implement the trash abatement measures specified in MM BIG BIO-10, pursuant to the	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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coyotes, and feral dogs.		performance standards therein.	and post-construction])		
MM BIG BIO-11: Dead Wildlife Disposal. 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.	During construction; throughout all operational years	The implementing entity, through a designated biologist, shall implement the dead wildlife disposal measures specified in MM BIG BIO-11, pursuant to the performance standards therein.	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		
MM BIG BIO-12: Domestic Dogs. The implementing entity shall not permit pet dogs in active project areas. Service animals are exempt from this prohibition.	During construction	The implementing entity shall implement the domestic dog exclusion measures specified in MM BIG BIO-12, pursuant to the performance standards therein.	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		
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	Prior to the start of construction mobilization activities; during construction	The implementing entity, through a Species-Specific biological monitor, shall conduct a pre-construction survey, monitor exclusion	USFWS, CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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 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.		fence installation, conduct ongoing fence monitoring on a daily or weekly basis, conduct additional desert tortoise clearance surveys following each detection of exclusion fence failures, and conduct daily inspections of the desert tortoise guard during the active period, as specified in MM BIG BIO-13, pursuant to the performance standards specified therein. The implementing entity, through a Species-Specific biological monitor and/or designated biologists approved as specified in MM BIG BIO-13, shall conduct clearance surveys in suitable habitat following	requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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 (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. 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.		installation of exclusion fencing, pursuant to the performance standards specified therein. The City, CDFW, and USFWS shall receive and review the survey results to verify conformity to the performance standards specified in MM BIG BIO-13. The implementing entity, through a Species-Specific biological monitor and/or designated biologists, as specified in MM BIG BIO-14, shall implement the approved desert tortoise translocation plan if necessary pursuant to MM BIG BIO-13.			

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
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 (<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: ▪ 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 start of construction mobilization activities, including at least 30 days prior to the start of translocation	The implementing entity, through a CDFW- and USFWS-approved designated biologist shall prepare and implement a BIG-specific Desert Tortoise Translocation Plan, as specified in MM BIG BIO-14, pursuant to the performance standards specified therein.	USFWS, CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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- 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 (<i>Gopherus agassizii</i>) (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.					
MM BIG BIO-15: Common Raven Management. 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: - 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. - Water tanks shall be sealed and free of leaks. Standing water created from leaks shall be promptly repaired.	Prior to the start of construction mobilization activities; during construction	The implementing entity shall prepare and implement a Raven Management Plan, as specified in MM BIG BIO-15, pursuant to the performance standards specified therein. The implementing entity shall	CDFW, USFWS, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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- 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. - 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		coordinate with USFWS and CDFW to remove inactive raven nests within the BIG footprint and shall report active raven nests to USFWS and CDFW, as specified in MM BIG BIO-15, pursuant to the performance standards specified therein. The implementing entity, through a biological monitor, shall conduct monthly presence surveys, as specified in MM BIG BIO-15, pursuant to the performance standards specified therein. The implementing entity shall provide, and the City shall verify, evidence of payment of required fees for			

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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		the implementing entity to participate in the interagency Raven Monitoring and Management Program.			
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). • 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 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	Prior to the start of construction mobilization activities	The implementing entity shall consult with USFWS and CDFW to prepare a CMP, as specified in MM BIG BIO-16, pursuant to the performance standards specified therein. The implementing entity shall provide the City, CDFW, and USFWS with the CMP for verification of compliance with the performance standards specified in MM BIG BIO-16.	CDFW, USFWS, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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. ▪ 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. 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.					
MM BIG BIO-17: Southwestern Willow Flycatcher, Western Yellow-billed Cuckoo, and LeConte's Thrasher Construction Requirements. Construction activities within suitable southwestern 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 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. If construction activities must occur within 500 feet of suitable nesting	Within 30 days prior to start of construction activities that occur within 500 feet of suitable habitat; during construction	The implementing entity shall time construction activities, as specified in MM BIG BIO-17, pursuant to the performance standards specified therein when feasible.	CDFW, USFWS, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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habitat (i.e., near the Mojave River) and within the nesting season for southwestern 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 BM shall conduct pre-construction surveys for southwestern 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 BM shall hold a USFWS recovery permit and be authorized by the agency to conduct pre-construction southwestern 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). If southwestern willow flycatcher, western yellow-billed cuckoo, and/or LeConte's thrasher is documented nesting 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 southwestern willow flycatcher, western yellow-billed cuckoo, and/or LeConte's thrasher. 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 pre-construction 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		The implementing entity, through a Species-Specific Biological Monitor, shall conduct pre-construction surveys prior to construction activities, as specified in MM BIG BIO-17, pursuant to the performance standards specified therein. The Biological Monitor shall provide survey results to the City for verification of consistency with MM BIG BIO-17. The implementing entity, through a Species-Specific Biological Monitor, shall consult with USFWS and CDFW, as specified in MM BIG BIO-17, pursuant to the performance			

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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Wildlife Noise Study and Monitoring Plan to be implemented with DB 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 on coordination with a Species-Specific BM. While conducting noise monitoring, the BM 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 southwestern 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 southwestern 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 southwestern willow flycatcher, western yellow-billed		standards specified therein. The implementing entity, through a Designated Biologist, shall implement a Wildlife Noise Study and Monitoring Plan if active nests occur within 500 feet of construction activities, as specified in MM BIG BIO-17, pursuant to the performance standards specified therein. The implementing entity, through a Species-Specific Biological Monitor and qualified noise specialist, shall monitor active nests, as specified in MM BIG BIO-17, pursuant to the performance			

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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.		standards specified therein. When noise attenuation measures are implemented, the implementing entity, in consultation with a qualified noise specialist, shall conduct noise monitoring and submit noise level verification reports to CDFW and/or USFWS every two weeks during work for which noise monitoring is required, as specified in MM BIG BIO-17, pursuant to the performance standards specified therein.			
MM BIG BIO-18: Nesting Birds. 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	Within three days before initial construction activities; and during construction,	The implementing entity shall time construction activities, as specified in MM BIG	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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. 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. 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. If there are time lapses between construction activities, and prior to re-initiation of construction activities, pre-construction nesting bird surveys shall be repeated.	including following time lapses between, and prior to reinitiation of, construction activities	BIO-18, pursuant to the performance standards specified therein. The implementing entity, through a biological monitor, shall conduct pre-construction nesting bird surveys, provide the results of pre-construction surveys to the City, conduct nest and buffer monitoring, as specified in MM BIG BIO-18, pursuant to the performance standards specified therein. The City shall review the preconstruction survey to verify compliance with MM BIG BIO-18, pursuant to the performance	reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
		standards specified therein.			
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.	During construction	The implementing entity shall implement the construction noise measures specified in MM BIG BIO-19, pursuant to the performance standards therein.	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		
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. 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	During the breeding season immediately prior to the start of construction	The implementing entity, through a CDFW-approved, Species-Specific biological monitor, shall conduct Swainson's hawk nest surveys and provide the results to CDFW and the City, and consult with CDFW regarding avoidance buffers, as specified in MM BIG BIO-20, pursuant to the performance	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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Project Proponent shall obtain an ITP.		standards specified therein. The Project Proponent shall obtain an ITP as needed, as specified in MM BIG BIO-20, pursuant to the performance standards specified therein.			
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	Prior to construction, including no less than 14 days prior to the start of construction mobilization activities; during construction, including within 24 hours prior to ground disturbance.	The implementing entity shall time construction activities, as specified in MM BIG BIO-21, pursuant to the performance standards specified The implementing entity, through a qualified Species-Specific Biological Monitor, shall conduct pre-construction surveys and subsequent take avoidance surveys, and monitoring, as	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
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) 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 <i>Staff Report on Burrowing Owl Mitigation</i> (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		specified in MM BIG BIO-21, pursuant to the performance standards specified therein. The implementing entity shall submit at least one burrowing owl pre-construction survey report for each surveyed area to CDFW and the City for verification of compliance with the performance standards specified in MM BIG BIO-21. If full avoidance of impacts to burrowing owls is not possible, the implementing entity shall obtain an ITP from CDFW, as specified in MM BIG BIO-21, pursuant to the performance standards specified therein. The implementing entity			

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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 during extreme temperatures 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.		shall also submit the Burrowing Owl Plan to the City for verification of compliance with the performance standards specified in MM BIG BIO-21. If full avoidance of impacts to burrowing owls is not possible, the implementing entity shall prepare a Burrowing Owl Plan in consultation with CDFW, submit the Plan to CDFW for approval, and implement the approved plan, as specified in MM BIG BIO-21, pursuant to the performance standards specified therein.			
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	Prior to the start of construction mobilization activities	The implementing entity shall consult with CDFW to prepare a CMP, as specified in MM BIG	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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 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-approved mitigation bank. • 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. ▪ A summary of the estimated direct permanent and temporary Project impacts on burrowing owl and burrowing owl habitat. ▪ 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. 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		BIO-22, pursuant to the performance standards specified therein. The implementing entity shall provide the City and CDFW with the CMP for verification of compliance with the performance standards specified in MM BIG BIO-22.	monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
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.					
MM BIG BIO-23: Mojave Fringe-toed Lizard Construction Requirements. When possible, construction activities within Mojave fringe-toed lizard suitable habitat shall be conducted during the active season (March 1 – September 30). 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.	During construction, including initial construction activities	The implementing entity shall time construction activities, when possible, as specified in MM BIG BIO-23, pursuant to the performance standards specified therein. The implementing entity, through a Species-Specific biological monitor, shall perform the monitoring; daily inspections; relocations; and, at the request of CDFW, provide relocation activity reports, as specified in MM BIG BIO-23, pursuant to the performance	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
		standards specified therein.			
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 2:1 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-	Prior to construction mobilization activities	The implementing entity shall consult with CDFW to prepare a compensatory mitigation plan as specified in MM BIG BIO-24, pursuant to the performance standards specified therein.	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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.					
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.	During construction	The implementing entity shall time construction activities and consult with CDFW when impacts to species are unavoidable, as specified in MM BIG BIO-25, pursuant to the performance standards specified therein. The implementing entity, through biological monitors, shall coordinate daily pre-construction inspections and confirm species absence, as specified in MM BIG BIO-25, pursuant to the performance	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
		standards specified therein.			
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 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 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 non-invasive 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. 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	Prior to the start of construction mobilization activities, including no more than 48 hours prior to the start of ground-disturbing activities; during construction	The implementing entity, through qualified biological monitors, shall conduct pre-construction surveys, provide the survey results to CDFW and the City for verification of compliance with MM BIG BIO-26, as specified in MM BIG BIO-26, pursuant to the performance standards specified therein. If the specified species are documented in the survey area, the implementing entity, through qualified biological monitors, shall monitor dens in coordination with	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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burrows will be developed in coordination with CDFW and the City.		CDFW, as specified in MM BIG BIO-26, pursuant to the performance standards therein. For individual, non-natal badger and kit fox dens, the implementing entity, through qualified biological monitors, shall develop a plan for passive relocation, burrow monitoring, and excavation of vacated burrows in coordination with CDFW.			
MM BIG BIO-27: Bat Construction Requirements. 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	No more than 14 days prior to the start of demolition or disturbance of structures suitable for roosting	The implementing entity, through qualified biological monitors, shall conduct pre-construction surveys, provide the survey results to CDFW and the City for verification of compliance with MM BIG BIO-27, as	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction]),		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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feasible. Exclusion shall not occur during the typical bat maternity season (April through August). Prior to demolition and/or improvement of structures that could support roosting bats, including Hinkley Road Bridge, or trees that will 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 ▪ 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. ▪ 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		specified in MM BIG BIO-27, pursuant to the performance standards therein. If a potential maternity roost and/or a special-status bat roost is present, the implementing entity, shall prepare, in coordination with the City and CDFW, a Bat Avoidance and Mitigation Plan, as specified in BIO-27, pursuant to the performance standards therein.			

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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 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. ▪ Roost Exclusion. 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					

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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 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 ▪ Roost Habitat Creation. 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.					
MM BIG BIO-28: Compensatory Mitigation for Sensitive Natural Communities. Prior to start of construction mobilization activities, the implementing entity shall prepare a compensatory mitigation plan for permanent impacts of 1,014 acres of dune vegetation communities, including high-quality <i>Dicoria canescens</i> – <i>Abronia villosa</i> – <i>Panicum urvilleanum</i> sparsely vegetated alliance (e.g., active desert dunes; 551.5 acres), moderate-quality <i>Dicoria canescens</i> – <i>Abronia villosa</i> – <i>Panicum urvilleanum</i> sparsely vegetated alliance – partially stabilized (e.g., partially stabilized desert dunes; 7.1 acres), and low-quality <i>Dicoria canescens</i> – <i>Abronia villosa</i> – <i>Panicum urvilleanum</i> sparsely	Prior to the start of construction mobilization activities	The implementing entity shall prepare and implement a compensatory mitigation plan for sensitive natural communities, as specified in MM BIG BIO-28, pursuant to the performance	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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vegetated alliance – disturbed/stabilized (e.g., disturbed/stabilized desert dunes; 450.6 acres) at a minimum 1:1 ratio. Dune habitat shall be mitigated in-kind through the acquisition and preservation of dune habitat. If all or any portion of the acquired Mojave fringe-toed lizard (MM BIG BIO-24) or other required compensatory mitigation lands/credits meet the criteria above, it may be used to fulfill that portion of the obligation for CDFW sensitive upland vegetation communities.		standards specified therein.			
MM BIG BIO-29: Jurisdictional Aquatic Resources Permit Requirement. Prior to impacting jurisdictional aquatic resources, the implementing entity shall obtain a Clean Water Act (CWA) Section 404 Individual Permit from the U.S. Army Corps of Engineers (USACE) for permanent impacts on non-wetland waters of the U.S., a CWA Section 404 water quality certification (or other required permit) from the Regional Water Quality Control Board (RWQCB) for permanent impacts on non-wetland waters of the U.S./State, and a California Fish and Game Commission (CFGF) Section 1602 Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) for impacts on vegetated streambed and unvegetated streambed and watercourse jurisdictional by CDFW. The implementing entity shall implement/comply with all permit conditions and mitigation measures required by the resource agencies. Compensatory mitigation to offset impacts on jurisdictional aquatic resources may be implemented through on-site and/or off-site, permittee-responsible mitigation, mitigation bank credit purchase (e.g., purchase of enhancement and/or preservation credits at the Mojave River Watershed Mitigation Bank or other approved mitigation bank), or a combination of these options depending on availability. The proposed mitigation strategy shall prioritize in-kind and in-watershed options per the regulatory agencies’ preferences. A minimum compensatory mitigation ratio of 1:1 will be required; final mitigation ratios and	Prior to impacting jurisdictional aquatic resources	The implementing entity shall obtain, implement, and comply with all requirements of the permits and certifications specified in MM BIG BIO-29, pursuant to the performance standards specified therein. The implementing entity shall consult with USACE, RWQCB, and CDFW to determine mitigation ratios and credits, as specified in MM BIG BIO-29, pursuant to the performance	USACE, RWQCB, CDFW, CFGC, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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credits shall be determined in consultation with USACE, RWQCB, and CDFW based on agency evaluation of current resource functions and values and through each agency's respective permitting process. Should implementing entity-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared and approved by the agencies in accordance with the proposed program permits. The HMMP shall include but is not limited to a conceptual planting plan including planting zones, grading, and irrigation, as applicable; a conceptual plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity.		standards specified therein. If the implementing entity-sponsored mitigation is implemented, the implementing entity shall prepare and submit to the relevant agencies for approval an HMMP, as specified in MM BIG BIO-29, pursuant to the performance standards specified therein.			
MM BIO-30: Water Quality Best Management Practices. Prior to construction mobilization activities, the implementing entity shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in conformance with California Construction Stormwater General Permit Order 2022-0057-DWQ requirements to avoid and minimize impacts associated with erosion, runoff, and stormwater contaminants. The SWPPP shall include best management practices (biological monitors) to avoid and minimize impacts on downstream jurisdictional aquatic resources including, but not limited to: ▪ Vehicles and equipment should not be operated in ponded or flowing water except as described in permits. ▪ Water containing mud, silt, or other pollutants from grading or other activities should not be allowed to enter jurisdictional	Prior to construction mobilization activities	The implementing entity shall prepare a Storm Water Pollution Prevention Plan (SWPPP), as specified in MM BIG BIO-30, pursuant to the performance standards specified therein.	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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waters adjacent to BIG or be placed in locations that may be subjected to high storm flows. ▪ Spoil sites should not be located within 30 feet from the boundaries of downstream jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages adjacent to BIG. ▪ Raw cement/concrete or washings thereof; asphalt, paint or other coating material; oil or other petroleum products; or any other substances that could be hazardous to vegetation or wildlife resources, resulting from BIG construction, should be prevented from contaminating the soil and/or entering avoided jurisdictional waters downstream of BIG. ▪ No equipment maintenance or fueling should be performed within 100 feet of jurisdictional waters downstream of BIG, where petroleum products or other pollutants from the equipment may enter these areas. ▪ Temporary structures, storage of construction materials, and staging/storage of construction equipment should be located outside jurisdictional waters downstream of BIG. ▪ No equipment maintenance or fueling should be performed within 100 feet of jurisdictional waters downstream of BIG, where petroleum products or other pollutants from the equipment may enter these areas. ▪ Temporary structures, storage of construction materials, and staging/storage of construction equipment should be located outside jurisdictional waters downstream of BIG.					
MM BIO-31: Vegetation Removal. The implementing entity shall ensure that all cut vegetation is hauled out of any waterways and stored, if necessary, where it cannot be washed by rainfall or runoff into waterways. When maintenance activities are completed, any	During construction; when maintenance	The implementing entity shall implement the vegetation removal measures specified	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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excess vegetation shall be removed from the BIG footprint.	activities are completed	in MM BIG BIO-31, pursuant to the performance standards therein.	reporting requirements during and post-construction])		
MM BIO-32: Wildlife Crossings. With BIG implementation, a wildlife crossing shall be constructed at the Unnamed Stream (Milepost 12.5) below the BNSF tracks and to facilitate wildlife movement between areas of natural habitat on either side of the railway. This rail 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 designed 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.	Prior to construction, including the start of vegetation removal and/or mass grading; during construction; for the first two years following completion of construction	The implementing entity, through consultation with CDFW and other applicable agencies, shall design and construct a wildlife crossing, as specified in MM BIG BIO-32, pursuant to the performance standards specified therein. The implementing entity shall prepare and submit to the City for review a long-term management plan for wildlife crossing, as specified in MM BIG BIO-32, pursuant to the performance standards specified therein. The City shall review the	CDFW, City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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A long-term management plan for the wildlife crossing shall be submitted to the City for review 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 or crossing entrances, and invasive plant removal. ▪ Routine clearing of debris and trash from the wildlife crossings shall be completed on a quarterly basis and following large storm events to allow ample space to remain available for wildlife travel. ▪ Access points to the 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 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:		plan to verify compliance with MM BIG BIO-32. The implementing entity, through staff under the direction of a qualified biologist, shall monitor habitat quality to confirm wildlife corridor functionality, as specified in MM BIG BIO-32, pursuant to the performance standards specified therein. The implementing entity shall prepare and submit to the City for review and approval a long-term management plan for the widening of the existing Lenwood Channel, as specified in MM BIG BIO-32, pursuant to the performance standards specified			

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
- 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 describe above.		therein. The City shall review the plan to verify compliance with MM BIG BIO-32 prior to approval.			
MM BIG BIO-33: Staging, Stockpiles, Materials and Equipment Storage. 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.	During construction	The implementing entity, in consultation with designated biologists, shall implement the staging, stockpiles, materials and equipment storage measures in MM BIG BIO-33, in compliance with the performance	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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		standards detailed therein.			
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 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. 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 during construction. The specific design and method for installation method of an apron or barrier may vary as required by regulatory permits issued under the	Prior to final construction design, after receiving a CESA ITP for CESA species and a USFWS BO for federally listed species; prior to operations	The implementing entity, through a designated biologist, shall submit fencing plans to CDFW for review and consultation. The fencing plans shall conform to the performance standards set forth in MM BIG BIO-34. The implementing entity, through a designated biologist, shall perform quarterly inspections and repairs of fencing during construction, pursuant to the performance standards set forth in MM BIG BIO-34. The implementing entity, through biological monitors	CDFW, USFWS, and City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
FESA or CESA. Prior to start of operations, 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 CDFW and the City.		and designated biologists, shall carry out, and submit a memorandum to the City and CDFW detailing, fencing plan review and field inspection, pursuant to the performance standards set forth in MM BIG BIO-34.			
MM BIG BIO-35: General Avian Safe Design. 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: ▪ Sufficient spacing of phase conductors to prevent bird electrocution. ▪ Configuration of power lines to reduce vertical spread of lines and/or reductions in the span length if such options are feasible.	Prior to final construction design; prior to the start of operations	The implementing entity shall review the project design to ensure the project design conforms to the avian safe design standards identified in MM BIG BIO-35. The implementing entity, through a designated biologist, shall review the project design to ensure bird safety features provide sufficient protection for birds	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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▪ 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. ▪ Metal fence stakes plugged with bolts or other material to prevent raptor talons from becoming entrapped within the bolt holes. ▪ Perch guards to discourage avian presence on and near BIG facilities. ▪ 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). ▪ A monopole or dual-pole design versus a lattice tower design to minimize perching and nesting opportunities. ▪ Communication tower design in conformance with Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning (USFWS, 2021b). ▪ 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). 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		in areas of high concern. The implementing entity, through biological monitors, shall conduct a field inspection of avian-safe design features, prepare a memorandum summarizing findings, and provide the memorandum to the City. The City shall review the memorandum to verify compliance with the performance standards specified in MM BIO-35.			

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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MM BIG BIO-36: Nighttime Lighting During Operations. To address 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: ▪ All lights shall be fully cutoff or fully shielded to prevent uplight and limit horizontal spill into adjacent habitat. ▪ Warm lighting (3,000K or lower) shall be used to reduce blue light emissions). ▪ All exterior lighting fixtures shall be directed downward to illuminate pedestrian pathways and parking areas and avoid unnecessary glare and light trespass. ▪ 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.	Throughout all operational years	The implementing entity shall implement the operational nighttime lighting measures specified in MM BIG BIO-36, pursuant to the performance standards specified therein.	City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		
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,	Prior to the start of construction mobilization activities	The implementing entity shall prepare a Desert Native Plant Salvage Plan pursuant to the performance standards for removal specified in MM BIG BIO-37. The implementing entity shall prepare	CDFW (if applicable), City of Barstow (See also, MM BIG BIO-2 and MM BIG BIO-5 [identifying regular monitoring and reporting requirements during and post-construction])		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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botanical preserves, museums and zoological societies, among other conservation organizations that provide adequate habitat and management of desert native plants.		a Desert Native Plant Salvage Plan for review and approval by the City and CDFW pursuant to the performance standards for translocation specified in MM BIG BIO-37.			
CULTURAL RESOURCES					
MM BIG CUL-1: Phase III Data Recovery. Prior to any ground-disturbing activities, a Phase III Data Recovery Plan for the 19 archaeological sites identified as historical resources and unique archaeological resources shall be planned and implemented. Prior to BIG approval, an archaeologist that meets Secretary of Interior Professional Qualifications in Archaeology and who has at least 10 years of experience in the Mojave Desert for both prehistoric and historic era resources, henceforth identified as the BIG Project Archaeologist, shall prepare a Phase III Data Recovery Plan. Approval of the Plan may be completed after BIG approval, though implementation of the Plan must occur prior to, or concurrent with, installation of fencing for Desert Tortoise that is required as biological resources mitigation. The Plan shall include details related to research design, excavation methodology, and final disposition, and shall be reflective of requirements outlined in BIG CUL mitigation measures. Additionally, the plan shall be reflective of BIG design and proposed ground disturbance, in that if any of the 19 archeological sites or portions of sites that will not be subject to physical impacts should be left in place. The Plan shall be submitted to the Lead Agency, as well as the Cultural Resources Management Department for the Yuhaaviatam of San	Prior to, or concurrent with, installation of fencing for Desert Tortoise; no later than 120 days after fieldwork completion	The implementing entity, through a qualified archaeologist, shall prepare a Phase III Data Recovery Plan, as specified in MM BIG CUL-1, pursuant to the performance standards therein. The implementing entity shall submit the Plan to the City and consulting Tribes for review and comment, and to the City and USACE for approval. The implementing entity shall	City of Barstow, U.S. Army Corps of Engineers		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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Manuel Nation and the Tribal Historic Preservation Office for the Morongo Band of Mission Indians, henceforth referred to as the consulting Tribes, for review and comment. Parties shall be provided with a comment period of 20 business days from the date of receipt. Once approved by the City and U.S. Army Corps of Engineers, the plan shall be overseen by the BIG Project Archaeologist, with fieldwork overseen and implemented by archaeological field staff that have demonstrated experience in the Mojave Desert for both prehistoric and historic era resources. The BIG Project Archaeologist and City (or City and U.S. Army Corps of Engineers, as applicable) shall coordinate with consulting Tribes who have elected to place a Native American monitor on-site during data recovery regarding schedule and monitor acquisition. For any consulting Tribe that requires a formal agreement to obtain a Native American monitor, the applicant shall enter into said agreement with the respective Tribe. Data recovery shall require a Tribal monitor. Upon completion of the data recovery field efforts, a draft Phase III Rata Recovery Report shall be compiled and submitted to the implementing entity, City, U.S. Army Corps of Engineers, and consulting Tribes for review and comment no later than 120 days after fieldwork completion. Once approved and considered final by the consulting Tribes, City, and U.S. Army Corps of Engineers, a final copy shall be submitted to the aforementioned recipients, as well as the South Central Coastal Information Center (SCCIC).		implement the Plan, through the BIG Project Archaeologist and in consultation with the City, USACE, and consulting Tribes, as specified in MM BIG CUL-1, pursuant to the performance standards therein. The implementing entity, through the BIG Project Archaeologist, and City (or City and USACE, as applicable) shall coordinate with consulting Tribes who have elected to place a Native American monitor on-site during data recovery regarding schedule and monitor acquisition. The BIG Project Archaeologist shall prepare a Phase III			

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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		Data Recovery Report and submit the Report for review and approval by the consulting Tribes, City, and USACE. The final Report shall be sent to the consulting Tribes, City, and USACE, as well as the SCCIC.			
MM BIG CUL-2: Cultural Resources Monitoring Plan. Prior to the installation of fencing for Desert Tortoise that is required as biological resources mitigation, as well as any other ground-disturbing activities connected to BIG, a Cultural Resources Monitoring and Management Plan (CRMMP) must be approved by the City and US Army Corps of Engineers that shall be enforced for all ground-disturbing activities that take place within the BIG footprint after BIG approval. The CRMMP shall be prepared by the BIG Project Archaeologist and be reflective of cultural resources mitigation and outlines requirements for conducting Worker Environmental Awareness Program (WEAP) training, archaeological and Native American monitoring, and inadvertent discoveries of archaeological resources. The CRMMP shall include, but is not limited to, roles and responsibilities, summary description of known and potential cultural resources, monitoring procedures, process for inadvertent discovery of cultural resources, process for determining treatment of cultural resources, and process for inadvertent discovery of human remains. The CRMMP shall also include appendices with the approved mitigation measures/conditions of approval, as well as contact information for all relevant parties. The	Prior to the installation of fencing for Desert Tortoise; throughout all ground-disturbing activities associated with BIG site preparation and construction.	The implementing entity, through the BIG Project Archaeologist, shall prepare a CRMMP, as specified in MM BIG CUL-2, pursuant to the performance standards therein. The implementing entity shall submit the Plan to the City, USACE, and consulting Tribes for review and comment, and to the City and USACE for approval.	City of Barstow, U.S. Army Corps of Engineers		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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draft CRMMP shall be submitted to the implementing entity, City, US Army Corps of Engineers, and consulting Tribes for review and comment. Parties shall be provided with a comment period of 15 business days from the date of receipt. Once approved by the City and U.S. Army Corps of Engineers, the CRMMP shall be enforced through the duration of all ground-disturbing activities associated with BIG site preparation and construction.		The implementing entity shall implement the Plan, through the BIG Project Archaeologist and in consultation with the City, USACE, and consulting Tribes, as specified in MM BIG CUL-2, pursuant to the performance standards therein.			
MM BIG CUL-3: Worker's Environmental Awareness Program. Concurrently with the preparation of the CRMMP, the BIG Project Archaeologist shall prepare a Worker Environmental Awareness Program (WEAP) training for all on-site personnel related to cultural resources for BIG. The draft WEAP training shall be submitted to the implementing entity, City, US Army Corps of Engineers, and consulting Tribes for review and comment. Parties shall be provided with a comment period of 15 business days from the date of receipt. Once approved by the City and US Army Corps of Engineers, the training shall be utilized for all WEAP trainings provided by the BIG Project Archaeologist, or their designee, throughout BIG site preparation and construction. The WEAP shall include an overview of the requirements in the CRMMP, applicable mitigation measures, and information related to cultural resources that may be identified during BIG site preparation and construction, how to identify them, and the process to follow in the case of inadvertent discovery. The consulting Tribes shall be contacted with an invitation to participate in the initial training	Throughout site preparation and construction	The implementing entity, through the BIG Project Archaeologist, shall prepare a Worker Environmental Awareness Program (WEAP) meeting the performance standards specified in MM BIG CUL-3, to be submitted to the City, USACE, and consulting Tribes for review and comment. The City, USACE shall	City of Barstow, US Army Corps of Engineers		

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at least 10 business days prior to the scheduled date. All personnel that access the site during BIG site preparation and construction must undergo this training, to include any personnel that access the BIG footprint after the initial WEAP training is provided but prior to completion of construction. Methods and timing for providing the training may vary throughout BIG construction depending on schedule, though the training itself shall not exceed 1 hour and all participants shall be required to add their name to a sign-in sheet for tracking purposes.		approve the WEAP after verifying that the WEAP meets the performance standards specified in MM BIG CUL-3. The implementing entity, through designated biologists or biological monitors, shall collect and maintain records of signed attendance forms, as referenced in MM BIG CUL-3.			
MM BIG CUL-4: Construction Monitoring. Archaeological monitors shall be present during all ground-disturbing activities. Archaeological monitors shall be designated as either a Crew Chief or Field Technician, with a ratio of no fewer than one Crew Chief for every eight Field Technicians. Crew Chiefs are required to have a bachelor's degree in Anthropology, Archaeology, or a related field and at least 3 years of demonstrated experience in Mojave Desert archaeology. Field Technicians are required to have a bachelor's degree in Anthropology, Archaeology, or a related field. All Field Technicians are required to undergo an Archaeological Resources Training prepared by the BIG Project Archaeologist or their designee prior to accessing the BIG footprint. A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.	During all ground disturbing activities	The implementing entity, through archaeological monitors, shall implement the construction monitoring measures specified in MM BIG CUL-4, pursuant to the performance standards therein.	City of Barstow		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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The monitors would work under the direct supervision of the BIG Project Archaeologist, who shall serve as the Principal Investigator for BIG. In addition, the consulting Tribes shall be contacted with an invitation to provide Native American monitors representing each respective Tribe who shall be present during all ground-disturbing activities. However, ground-disturbing activities shall be permitted to continue on any days that were included in the schedule and for which a Tribal monitor is not provided. "Ground-disturbing activities" mean tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, fence/gate removal and installation, drainage and irrigation removal and installation, and archaeological work. The tribal representative, in coordination with the BIG Project Archaeologist, and review of the CRMMP, may determine that certain ground-disturbing activities are exempt from monitoring. For any consulting Tribe that requires a formal agreement to obtain a Native American monitor, the implementing entity shall enter into said agreement with the respective Tribe. All archaeological and Native American monitors shall have the authority to temporarily divert, redirect, or halt ground-disturbing activities to address potential inadvertent discoveries.		The implementing entity shall enter into a formal agreement with any consulting Tribe that requires a formal agreement to obtain the services of a Native American monitor.			
MM BIG CUL-5. Inadvertent Discoveries of Cultural Resources. In the event that cultural resources are discovered during BIG construction, all earthwork and ground-disturbing activities shall halt within 50 feet of the discovery. The on-site archaeological monitor shall immediately notify the BIG Project Archaeologist, who shall work with both the archaeological monitor to identify if the resource is potentially a Historical Resource and/or Unique Archaeological Resource (i.e., significant). All prehistoric resources shall be considered tribal cultural resources. For any resources that are not potentially significant, or within the boundary of previously recorded site that was identified as	During construction	The implementing entity, through the on-site archaeological monitor and the BIG Project Archaeologist, shall, in the event of an inadvertent discovery, implement the measures specified	City of Barstow, U.S. Army Corps of Engineers		

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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ineligible/not significant during BIG environmental review, the BIG Project Archaeologist shall prepare a site record or site record update, as appropriate, and the monitors shall collect the resource for later reburial as treatment for its status as a tribal cultural resource. Work shall continue in the area once this is completed. Should a resource be identified within a previously recorded site that is potentially significant and, therefore, potentially increase the eligibility status of the site from ineligible to eligible, the site shall be treated as a potentially significant resource, and steps A through B below shall be followed. Similarly, for any previously unknown and unrecorded resources that are potentially significant, steps A through B below shall be followed. A. An Archaeological Resource Area (ARA) shall be established around the find plus the 50 foot buffer via the placement of a physical barrier/demarcation, such as fencing or caution tape. This material shall be provided by the implementing entity and put in place by construction personnel in the presence of, and at the direction of, the archaeological and Native American monitors. B. The archaeological monitors shall immediately contact the BIG Project Archaeologist, who shall contact the consulting Tribes, City, and U.S. Army Corps of Engineers within 1 business day to provide notification of the find, details related to the nature of the resource, and evaluation recommendations or recommended effort to support evaluations, such as subsurface testing of the resource. Parties must respond within 1 business day with feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 1 business day, the evaluation recommendations or recommendations for additional effort to support evaluations shall be considered		in MM BIG CUL-5, pursuant to the performance standards specified therein. The implementing entity, through the BIG Project Archaeologist, shall prepare a site record, or update thereto, for resources that are not potentially significant, and the archaeological and Native American monitors shall collect the resource for treatment as described in MM BIG CUL-5. The implementing entity, through the BIG Project Archaeologist, shall consult the consulting Tribes, City, and USACE regarding a potentially			

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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approved. For resources that require additional effort, implementation of the additional work shall occur within 1 business day of approval or non-response. Upon completion of the additional work, the BIG Project Archaeologist shall submit the evaluation recommendations to the parties. Parties must respond within 1 business day with feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 1 business day, the evaluation recommendation shall be considered approved. a. For resources that are evaluated as ineligible, the previously noted steps in this mitigation measure related to recordation and collection shall be followed. b. For significant/eligible cultural resources, the BIG Project Archaeologist shall make recommendations to the City and U.S. Army Corps of Engineers and consulting Tribes regarding the measures that shall be implemented to avoid or mitigate impacts to the resource. Parties must respond within 3 business days with feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 3 business days, the recommendations shall be considered approved. Treatment measures shall be considered in the following order: 1. Preservation in place (i.e., avoidance) is the preferred manner of treatment. In this case, the site shall be recorded on a site record and the established ARA shall remain in place until all ground-disturbing activities are completed within that area of the BIG footprint. 2. If preservation in place is determined to be infeasible by the BIG Project Archaeologist based on input from the implementing entity, City, and U.S. Army Corps of Engineers, treatment may include implementation of archaeological data recovery (i.e., excavations) to		significant resource discovery, and implement the monitoring and treatment measures described in MM BIG CUL-5, consistent with the performance standards therein.			

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remove the resource along with subsequent laboratory processing and analysis. Should this be the case, a Data Recovery Plan shall be prepared by the BIG Project Archaeologist and submitted to the City and consulting Tribes for review and approval. Timelines for review and approval may vary depending on the resource, but all Data Recovery Plans for inadvertent discoveries should be approved within 10 business days of discovery. Upon conclusion of Data Recovery, all findings shall be recorded on site records, as well as included in a report drafted by the BIG Project Archaeologist after the completion of BIG and submitted to the City, U.S. Army Corps of Engineers, and consulting Tribes for review and approval. i. Prehistoric archaeological material shall be reburied in an area that shall not be impacted by future earth-moving activities and reside in a permanent conservation easement or Deed Restriction. Such an area shall be identified by the Lead Agency in consultation with the applicant, BIG Project Archaeologist, and consulting Tribes. Should reburial be infeasible, the material and associated site records/ reports shall be curated at a Tribal-accredited facility or an American Association of Museums (AAM)-accredited facility within the County or adjacent Counties, as agreed by the consulting Tribes. ii. Historic archaeological material shall be curated at an American Association of Museums (AAM)-accredited facility within the County or adjacent Counties. If no institution accepts the historic archaeological material, it shall be offered to a					

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local school or historical society in the area for educational purposes. If no one accepts the material, the resource may be destroyed after recordation.					
MM BIG CUL-6: Reporting Protocols Once all ground-disturbing activities are complete and all resources have been appropriately reburied or curated, the BIG Project Archaeologist shall draft a Monitoring Report that includes details related to BIG construction, duration of monitoring, inadvertent discoveries, eligibility evaluations, and final disposition of all inadvertent discoveries. The draft Monitoring Report shall be submitted to the implementing entity, City, U.S. Army Corps of Engineers, and consulting Tribes for review. In addition to the submission of the Phase III Data Recovery Report to the SCCIC, as noted in MM BIG CUL-1 , the Monitoring Report, CRMMP, any additional data recovery plans and reports, and all site records shall be submitted to the implementing entity, consulting Tribes, City, U.S. Army Corps of Engineers, and SCCIC once final.	Once all ground-disturbing activities are complete and all resources have been appropriately reburied or curated	The implementing entity, through the BIG Project Archaeologist, shall prepare a monitoring report, as specified in MM BIG CUL-6, pursuant to the performance standards therein. The implementing entity shall submit the draft Monitoring Report to the City, USACE, and consulting Tribes for review, and submit final copies of the Monitoring Report, CRMMP, any additional data recovery plans and reports, and all site records to the City, USACE, consulting Tribes, and SCCIC.	City of Barstow, U.S. Army Corps of Engineers		

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BIG CUL-7: Public Education Once all ground-disturbing activities are complete and all resources have been appropriately reburied or curated for construction of the railyard, the BIG Project Archaeologist shall work with the consulting Tribes to develop a public education program focused on the history and culture of the Serrano people indigenous to the Barstow area. The program shall include broad information related to the archaeological resources identified within the BIG footprint, as appropriate to preserve the confidentiality of archaeological data and as agreed upon by the consulting Tribes, as well as information that demonstrates the long history and connection the Serrano people have to the area. Additionally, the program shall underline the living Serrano communities and their active stewardship of their ancestral lands, including the Barstow area. BNSF shall be responsible for funding, completing, and disseminating the materials. All materials, to include any text, imagery, and format, shall be subject to final approval by the consulting Tribes. The program shall include: A. An educational booklet (10-15 pages) that shall be provided to local museums, libraries, schools, historical societies, and the consulting Tribes. The product shall be primarily geared toward a younger audience and shall be printed and available online. The educational booklet shall be due within one year of railyard construction being completed. B. Outreach to a local museum, library, or a publicly accessible administrative building/community center to identify a location to develop a museum exhibit or mural. Should a property agree to house such an exhibit, the exhibit shall be completed within 5 years of project completion. C. A plaque acknowledging that the City of Barstow and BIG occupy unceded Maara'yam (Serrano) ancestral territory, to be developed in consultation with the consulting Tribes. This plaque shall be displayed in any location identified by the City of	Within one and five years of completion of construction, following completion of all ground disturbing activities and appropriate reburial or curation of all resources	The implementing entity, through the BIG Project Archaeologist, shall develop the public education program described in MM BIG CUL-7, in consultation with, and subject to the approval of, the consulting Tribes, pursuant to the performance standards specified in MM BIG CUL-7.	City of Barstow		

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Barstow that agrees to do so, as well as on the home page of the BIG project website, within 1 year of railyard construction completion.					
MM BIG CUL-8: 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.	During construction and operation	The implementing entity shall implement the measures related to inadvertent discoveries specified in MM BIG CUL-8, pursuant to the performance standards specified therein.	City of Barstow, County of San Bernardino Coroner		
ENERGY					
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	Prior to the issuance of building permits for intermodal facility structures or transload facilities	The implementing entity shall implement the measures related to on-site renewable electricity generation specified in MM BIG EN-1, pursuant to the performance standards specified therein.	City of Barstow		

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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. 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.	Prior to the issuance of a building permit for intermodal facility structures or transload facilities	BNSF shall provide documentation to the City demonstrating that BIG is consistent with CALGreen Tier 2 standards, as specified in MM BIG EN-2, pursuant to the performance standards therein.	City of Barstow		
GEOLOGY, SOILS AND MINERAL RESOURCES					

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MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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MM BIG GEO-1: The implementing entity shall submit a Paleontological Resources Impact Mitigation Program (PRIMP) prepared by a qualified paleontologist to the City of Barstow (City) prior to construction commencing. A qualified paleontologist is defined as an individual with an M.S./M.A. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques, and who is knowledgeable in the geology and paleontology of the area. The PRIMP shall be consistent with the Society of Vertebrate Paleontology 2010 guidelines. The PRIMP shall include, but is not limited to, the requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the BIG footprint based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring, discoveries treatment protocols and timelines, paleontological methods including any sediment sampling, reporting, and collections management/curation.	Prior to start of construction	The implementing entity, through a qualified palaeontologist, shall prepare and submit to the City a Paleontological Resources Impact Mitigation Program (PRIMP), as specified in MM BIG GEO-1, pursuant to the performance standards therein.	City of Barstow		
MM BIG GEO-2: A qualified paleontologist shall attend preconstruction meetings to consult with the grading and excavation contractors concerning planned depths, excavation schedules, paleontological field techniques, and safety issues. In addition, all on-site construction personnel shall receive Worker Education and Awareness Program training prior to the commencement of excavation work. All BIG construction occurring within previously undisturbed fossil bearing formations shall be monitored by a qualified paleontologist or qualified paleontological monitor. Detailed narrative and exhibit outlining areas and depths that require monitoring across the BIG footprint shall be included in the Paleontological Resources Impact Mitigation Program (PRIMP). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials and works under the direction of a qualified paleontologist. If fossils are discovered, the paleontologist (or paleontological monitor) will recover them. In most cases, this fossil salvage can be completed in a short	Prior to the commencement of excavation work, during construction	The implementing entity, through the qualified palaeontologist and paleontological monitor, shall implement the worker education and construction monitoring measures specified in MM BIG GEO-2, pursuant to the performance standards therein.	City of Barstow		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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period of time; however, some fossil specimens, such as a complete large mammal skeleton, may require an extended salvage period. In these instances, the paleontologist (or paleontological monitor) will be allowed to temporarily direct, divert, or halt grading in the vicinity to allow recovery of fossil remains in a timely manner, which will be outlined and defined in the PRIMP. Because of the potential for the recovering of small fossil remains, such as isolated mammal teeth, it may be necessary to set up a screen-washing operation on site.					
MM BIG GEO-3: Fossil remains collected during the monitoring and salvage portion of the Paleontological Resources Impact Program (PRIMP) shall be cleaned, repaired, sorted, and catalogued. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will be deposited (as a donation) in a scientific institution with permanent paleontological collections located within San Bernardino County (or, if no repository is available, adjacent Counties). A final data recovery report shall be completed by a qualified paleontologist that outlines the results of the paleontological monitoring program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils. The report shall be submitted to the implementing entity and City upon completion.	During the monitoring and salvage portion of the Paleontological Resources Impact Program (PRIMP); following completion of construction	The implementing entity, through a qualified palaeontologist, shall prepare a final data recovery report and submit this report to the City, as specified in MM BIG GEO-3, pursuant to the performance standards therein.	City of Barstow		
HAZARDOUS MATERIALS & WASTES					

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
				DATE	INITIALS
MM BIG HAZ -1: Limited Soil Management Plan. Prior to construction commencement, the implementing entity shall retain a qualified environmental consultant to prepare a Limited Soil Management Plan (SMP) for only areas considered as RECs within the BIG footprint. The SMP shall establish procedures for identification and management of impacted and clean soil, segregation, and management of impacted soil in accordance with regulatory requirements, transportation of impacted soil to an off-site disposal facility licensed to accept such soil, and identification and management of construction debris during excavation, grading, and construction activities to be completed within the BIG footprint. The SMP shall be submitted to the City of Barstow Building and Safety Division for review and approval. The SMP shall include the following: - Procedures for identification, handling, reporting, and removal of the known or unknown ASTs/USTs, piping, dispensers, or other storage tank components that may be encountered (see MM BIG HAZ-3). - Health and safety measures for when performing demolition, grading, or other construction activities, which may include but are not limited to, personal protective equipment and periodic work breathing zone monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. This will be documented through a health and safety plan as it pertains to on-site workers that may come in contact with contaminated soil. - The limited SMP shall be prepared and executed for point source areas based on the Phase I and II ESA reports, which define soil, soil vapor, and groundwater impacts throughout the BIG footprint. The limited SMP shall require the timely testing and sampling of soils so that contaminated soils can be separated from inert soils for proper disposal versus reused on the site. The limited SMP shall specify the testing parameters and sampling	Prior to construction commencement; during BIG construction	The implementing entity shall, through an environmental consultant, prepare a Limited Soil Management Plan (SMP), as specified in MM BIG HAZ-1, pursuant to the performance standards therein, including testing and sampling procedures. The implementing entity shall submit the SMP to the City Building and Safety Division for review and approval, upon verification of compliance with the performance standards in MM BIG HAZ-1.	City of Barstow Community Development Department, Building and Safety Division		

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frequency as well as transportation and disposal requirements. If groundwater is anticipated to be encountered within collocated areas of the limited SMP, then provisions for groundwater management shall be considered within the limited SMP. During BIG construction, the implementing entity's contractor shall remove and properly dispose of impacted materials in accordance with the provisions of the limited SMP. If soil is stockpiled prior to disposal, it will be managed in accordance with the SMP and BIG's Storm Water Pollution Prevention Plan, prior to its transfer for treatment and/or disposal.					
BIG HAZ-2: Water Well Abandonment. The intent for water well abandonment is to ensure that wells associated with the former residential operations within BIG are properly sealed and abandoned. Well abandonment or reuse treatment will require adherence to State RWQCB and regional Certified Unified Program Agency (CUPA) guidelines for well abandonment if wells are not planned to be used for future development.	Prior to construction	The implementing entity shall properly seal and abandon water wells associated with former residential operations within BIG, pursuant to the performance standards set forth in MM BIG HAZ-2.	City of Barstow		
BIG HAZ-3: AST or UST Removal. AST and UST removal is intended to provide specific sampling and removal procedures for AST/USTs known or unknown at the start of construction. Prior to demolition permit issuance, the implementing entity shall demonstrate to the Barstow Department of Building and Safety and San Bernardino County Fire Protection District Hazardous Materials Division (CUPA) that a licensed contractor authorized to remove the above ground/USTs has been	Prior to demolition permit issuance; during construction	The implementing entity shall provide documentation demonstrating to the City Department of Building and Safety	City of Barstow Community Development Department, Building and Safety Division, San Bernardino County		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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retained. The ASTs/USTs shall include the required permitting, soil sampling testing, and reporting the CUPA. If soil contamination exists, then impacted soils shall be removed and handled properly according to the Limited Soil Management Plan (see MM BIG HAZ-1). If previously unidentified USTs and/or ASTs are discovered during demolition or any ground disturbing activities, all construction within a 30-foot radius exclusion zone of the unidentified USTs and/or ASTs shall stop work. Implementation of proper permitting, cleaning, sampling, and reporting as described above shall be completed.		and San Bernardino County Fire Protection District Hazardous Materials Division (CUPA) that a licensed contractor has been retained, as specified in MM BIG HAZ-3, pursuant to the performance standards described therein.	Fire District Hazardous Materials Division (CUPA)		
BIG HAZ-4: Data Gaps Requiring Further Environmental Site Assessment. Prior to the issuance of a grading permit, the Applicant shall conduct assessment in accordance with ASTM standards to address potential environmental concerns identified at PEC sites identified within the BIG footprint. Documentation shall include clearance or other forms of approval from responsible regulatory agencies, as warranted, confirming that the site conditions are suitable for the intended use and that any potential risks have been mitigated to a level that is safe for construction and future occupancy.	Prior to issuance of a grading permit	The implementing entity shall prepare the documentation described in MM BIG HAZ-4, pursuant to the performance standards therein.	City of Barstow		
NOISE					
MM BIG NOI-1: Nighttime Construction Noise Logistics Plan. Prior to the start of nighttime construction that is within 500 feet of residences, the implementing entity shall submit and gain approval from the City of Barstow Director of Public Works or City Engineer for a Nighttime Construction Noise Logistics Plan that meets the performance standards specified herein for nighttime construction throughout the BIG footprint. The Nighttime Construction Noise	At least 5 days prior to the start of nighttime construction within 500 feet of residences	The implementing entity shall prepare a Nighttime Construction Noise Logistics Plan (NCNLP) for approval by the City	City of Barstow Director of Public Works or City Engineer, Noise Disturbance Coordinator		

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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Logistics Plan shall identify the specific nighttime construction activity areas, list the construction equipment to be used during nighttime construction, include a determination, supported with citation to factual evidence, that certain specified noise reduction measures, incorporated into the Plan, would 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 construction activities near residential uses. To achieve this noise standard, potential noise reduction measures in the Nighttime Construction Noise Logistics Plan 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 (less than 65 dBA) and other stationary noise sources where technology exists. ▪ Monitor the effectiveness of noise attenuation measures by taking noise measurements and make adjustments to nighttime construction activities as required to meet the FTA's 70 dBA Leq(8-hour) nighttime exterior construction noise standard for residential uses. ▪ Specify additional noise attenuation measures and best practices, with supporting evidence, that demonstrates reduction of nighttime construction noise impacts for the residences nearest to the nighttime noise activity to below the FTA's nighttime exterior construction noise standard for residential uses. In addition, the Nighttime Construction Noise Logistics Plan shall		Director of Public Works or City Engineer, as specified in MM BIG NOI-1, pursuant to the performance standards therein. The NCNLP shall include requirements that construction contracts contain noise attenuation requirements; that nighttime construction notices must be submitted to the City Director of Planning, Building and Code Enforcement or Director's designee for review of approval; and that the implementing entity's contractor must ensure a Noise Disturbance Coordinator is on site during nighttime construction			

TABLE 4-1: MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MEASURES (MM)	IMPLEMENTATION TIMING	MONITORING/ REPORTING METHODS	RESPONSIBLE FOR APPROVAL/ MONITORING	VERIFICATION	
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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 500 feet of areas when nighttime construction would occur shall be sent a notice, at least 5 days prior to commencement of nighttime construction activities, regarding the construction schedule of BIG. The initial format of notices shall be reviewed and approved by the Director of Planning, Building and Code Enforcement or Director's designee. The notice shall indicate the dates and duration of construction activities, the general type of construction activities to be performed, 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 would be provided to the City. - Prior to nighttime construction, the implementing entity's contractor shall 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 500 feet of 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 ensure that exterior noise levels from an		activities to document actions taken in response to noise complaints, as specified in MM BIG NOI-1, pursuant to the performance standards therein.			

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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, would reduce the noise levels from that activity to the greatest extent practically achievable.					
MM BIG NOI-2: Noise Barriers. The implementing entity shall construct two noise barriers as listed below to mitigate BIG's operational noise impacts: ▪ 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. 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	Prior to the issuance of a building permit	The implementing entity shall submit proposed designs for the noise barriers described in MM BIG NOI-2 to the City Building Official for review and approval based on compliance with the performance standards in MM BIG NOI-2.	City of Barstow Building Official		

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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 14 and Figure 5.12 15.					
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.	Prior to the issuance of a grading permit for work associated with Main Street improvements; prior to the certificate of occupancy for transload warehouse center buildings beyond 7.8 million square feet.	The implementing entity shall submit offsite improvement plans to the City Director of Community Development, as specified in MM BIG NOI-3, pursuant to the performance standards therein. The implementing entity shall pay the County as specified in MM BIG NOI-3, pursuant to the performance standards therein.	City of Barstow Director of Community Development; County of San Bernardino		