

IV MITIGATION MONITORING AND REPORTING PROGRAMS

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IV MITIGATION MONITORING AND REPORTING PROGRAMS

IV.1 INTRODUCTION

This document contains the Final Mitigation Monitoring and Reporting Program (FMMRP) for the Hudson Ranch II Geothermal Project (HR-2) and the FMMRP for the Simbol Calipatria Plant II Project (SmCP-2). The Final FMMRPs have been prepared pursuant to California Public Resources Code §21081.6, which requires public agencies to “adopt a reporting and 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.” A Final MMRP is required for each of the proposed Projects because the EIR identified significant adverse impacts and mitigation measures have been identified to address these impacts. The numbering of the individual mitigation measures follows the numbering sequence used in the EIR. All revisions to mitigation measures that were necessary, as a result of responding to public comments and incorporating staff-initiated revisions have been incorporated into the FMMRPs.

IV.2 MITIGATION MONITORING AND REPORTING PROGRAMS

The FMMRPs, as outlined in Table IV-1 and Table IV-2, describe mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Final EIR. The County of Imperial will be the primary agency, but not the only agency responsible for implementing the mitigation measures. In some cases, other public agencies will implement measures. In other cases, the project applicant(s) will be responsible for implementation of measures and the County’s role is exclusively to monitor the implementation of the measures. In such cases, the project applicant(s) may choose to require the construction contractor to implement specific mitigation measures prior to and/or during construction. The County will continue to monitor mitigation measures that are required to be implemented during the operation of the project.

The FMMRP for the HR-2 Project and for the SmCP-2 Project are presented in tabular form on the following pages. The components of the FMMRPs are described briefly below:

Mitigation Measures: The mitigation measures are taken from the Final EIR, in the same order that they appear. The Final MMRPs contain revisions to mitigation measures; however, no new mitigation measures were identified as part of the Final EIR.

Mitigation Timing: Identifies at which stage of the project mitigation must be completed.

Monitoring Responsibility: Identifies the department within the County, project applicant, or consultants responsible for mitigation monitoring.

Compliance Verification: Identifies the department of the County or other State agency responsible for verifying compliance with the mitigation. In some cases, verification will include contact with responsible state and federal agencies.

TABLE IV-1 HUDSON RANCH II (HR-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
Agricultural Resources				
MM AG 1.1	<p>Loss of Agricultural Land - Non-Prime (Farmland of Statewide Importance and Farmland of Local Importance) Farmland.</p> <p>Hudson Ranch Power II, LLC may choose one of the following three methods for mitigation:</p> <ol style="list-style-type: none"> 1. Agricultural Conservation Easements on a "1 to 1" basis on land of equal size, of equal quality farmland, outside of the path of development. The Conservation Easement shall meet the State Department of Conservation's regulations and shall be recorded prior to issuance of any grading or building permits. 2. Hudson Ranch Power II, LLC shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20% of the fair market value per acre for the total acres of proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. 	County of Imperial Planning and Development Services Department.	Prior to the issuance of a grading permit or building permit (whichever comes first).	

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MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM AG 1.1 Continued	<p>3. If Hudson Ranch Power II, LLC and the County voluntarily enter into a public benefit agreement that includes an Agricultural Benefit Fee payment that is equal to or greater than the amount that would be due under option ii of this mitigation measure and the public benefit agreement requires that the Agricultural Benefit Fee be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County, then this mitigation measure may be satisfied by payment of voluntarily agreed to Agricultural Benefit Fee.</p>			
MM AG-1.2	<p>Loss of Agricultural Land - Prime Farmland</p> <p>Hudson Ranch Power II, LLC may choose one of the following three methods for mitigation:</p> <ol style="list-style-type: none"> 1. Agricultural Conservation Easements on a "2 to 1" basis on land of equal size, of equal quality farmland, outside of the path of development. The Conservation Easement shall meet the State Department of Conservation's regulations and shall be recorded prior to issuance of any grading or building permits. 2. Hudson Ranch Power II, LLC shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30% of the fair market value per acre for the total acres of proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. 	County of Imperial Planning and Development Services.	Prior to the issuance of a grading permit or building permit (whichever comes first).for the project.	

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MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM AG-1.2 Continued	3. If Hudson Ranch Power II, LLC and the County voluntarily enter into a public benefit agreement that includes an Agricultural Benefit Fee payment that is equal to or greater than the amount that would be due under option ii of this mitigation measure and the public benefit agreement requires that the Agricultural Benefit Fee be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County, then this mitigation measure may be satisfied by payment of voluntarily agreed to Agricultural Benefit Fee.			
MM AG-1.3	Reclamation Plan/Site Abandonment Plan Prior to the issuance of the initial grading permit or building permit, Hudson Ranch Power II, LLC shall submit to County of Imperial Reclamation Plan/Site Abandonment Plan to return the property to its current agricultural condition. The Reclamation Plan/Site Abandonment Plan shall include a reclamation cost estimate prepared by a California-licensed general contractor or civil engineer. Hudson Ranch Power II, LLC shall provide financial assurance/bonding in the amount equal to the reclamation cost estimate to return the land to its current agricultural condition prior to the issuance of the initial grading permit or building permit.	County of Imperial Planning and Development Services Department.	Prior to the issuance of the initial grading permit or building permit (whichever comes first).	
Air Quality				
MM AQ 2.1	NOx Controls During HR-2/SmCP-2 Concurrent Construction The Permittee shall comply with all applicable standard mitigation measures for construction combustion equipment for the reduction of excess NOx emissions as identified in the air quality analysis and as contained in the Imperial County CEQA Air Quality Handbook and associated regulations:	Imperial County Air Pollution Control District; Imperial County Planning Development Services	During periods of concurrent construction with SmCP-1 (March 2015)	

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MM AQ 2.1 Continued	<ol style="list-style-type: none"> 1. Utilize all Tier 3 or Tier 4 construction equipment. 2. Prohibit idling of equipment not in use; for equipment in use reduce idling time to a maximum of 5 minutes. 3. Where feasible replace fossil fuel burning equipment with electrically driven equivalents provided they are not powered via a portable generator. 4. Register all portable engines 50 horse power or greater with the ICAPCD. <p>Permittee shall also apply enhanced measures to assure reduced levels of NOx are maintained during the construction phase of the project.</p> <ol style="list-style-type: none"> 1. Submit to the Air District prior to any earthmoving activity a complete list of all construction equipment to be utilized during the construction phase identifying Make, Model, Year, and estimated hours of usage. 2. In the event NOx emissions are calculated to exceed ICAPCD thresholds for construction, the Permittee shall provide for "off-site" mitigation or comply with Policy number 5. Policy number 5 allows a project to pay in-lieu impact fees utilizing the most current Carl Moyer Cost Effective methodology to reduce excess NOx emissions. <p>Prior to site preparation activities, the HR-2 Project will submit to the Imperial County Planning and Development Services evidence of the actions proposed to be undertaken to limit NOx emissions from the two Projects during construction to ensure that maximum daily NOx emissions resulting from the proposed combined construction activities will remain below 100 pounds per day.</p>			

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MM AQ 2.2	<p>Emission Offsets</p> <p>To address potentially significant operational emissions at the HR-2 site during startup, Hudson Ranch Power II, LLC shall purchase NOx offsets for the daily NOx exceedances over the ICAPCD Rule 207 C.2.a threshold for stationary sources. The applicant shall purchase NOx offset credits for the amount required by the ICAPCD as part of the Authority to Construct conditions, and provide documentation of the purchased offsets to the ICAPCD prior to the issuance of the Permit to Operate.</p>	Imperial county Air Pollution Control District; Imperial County Planning Development Services	Prior the issuance of the Permit to Operate.	
Biological Resources				
MM BIO 1.1-1	<p>Avoidance of Occupied Burrows</p> <p>Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the California Department of Fish and Game (CDFG) verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If occupied burrows are to be impacted by project-related activities, additional mitigation measures shall be applied (Mitigation Measures BIO 1.1-3 through 1.1-5).</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to and during construction.	
MM BIO 1.1-2	<p>Pre-Construction Surveys</p> <p>Pre-construction surveys shall be conducted to identify any burrowing owls present on-site prior to ground-disturbing activities. All occupied burrows identified on-site shall be flagged for passive relocation (MM BIO 1.1-5). A pre-construction survey is valid for 30 days. If ground disturbing activities do not commence within 30 days of the completion of the burrowing owl survey, an additional survey may be required.</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to construction.	

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MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM BIO1.1-3	<p>Preparation of a Burrowing Owl Mitigation Plan</p> <p>If pre-construction surveys determine that burrowing owls are on-site, a burrowing owl mitigation plan shall be prepared by a qualified biologist describing recommended site specific shelter-in-place measures, worker training, and/or other measures to ensure that project construction does not result in adverse impacts to the burrowing owl.</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to construction.	
MM BIO 1.1-4	<p>Activities During Nesting Season</p> <p>All occupied burrows identified off-site within 160 feet of construction activities outside of nesting season (September through January) and within 250 feet of construction activities during nesting season (February 1 through August 31) shall be buffered by hay bales, fencing (e.g. sheltering in place) or as directed by a qualified biologist and the CDFG.</p>	County of Imperial Planning and Development Services Department and CDFG.	During construction.	
MM BIO 1.1-5	<p>Passive Relocation Techniques</p> <p>Owls present on the construction site (as identified during pre-construction surveys MM BIO 1.1-2) shall be moved away from the disturbance area using passive relocation techniques. Prior to commencement of relocation, a management plan shall be prepared and approved by CDFG. Relocation shall be completed between September 1 and January 31 (outside of breeding season). If it is not possible to complete relocation during this time period, refer to Mitigation Measure BIO 1.1-1.</p> <p>A minimum of one or more weeks is required to relocate the owls and allow them to acclimate to alternate burrows. Passive relocation techniques will follow the CDFG Staff Report on Burrowing Owl Mitigation Guidelines (2012CDFG 2012b.) and include the following measures:</p> <ul style="list-style-type: none"> ▪ Passive relocation will be conducted during the non-breeding season. 	County of Imperial Planning and Development Services Department and CDFG	Prior to construction.	

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MM BIO 1.1-5 Continued	<ul style="list-style-type: none"> ▪ Artificial burrows must be established within 100m of original burrow and adjacent foraging habitat surrounding the artificial burrow must be suitable and protected. ▪ Install one-way doors in burrow opening to temporarily or permanently evict burrowing owls and prevent burrow re-occupation. Leave doors in place for 48 hours to ensure owls have left the burrow. ▪ Allow one or more weeks for owls to acclimate to off-site burrows (refer to Mitigation Measure 1.1-7 below). Daily monitoring shall be required for the passive relocation period. ▪ Once owls have relocated off-site, collapse existing burrows to prevent reoccupation. Prior to burrow excavation, flexible plastic pipe shall be inserted into the tunnels to allow escape of any remaining owls during excavation. Excavation shall be conducted by hand whenever possible. Photographs of the excavation and closure of the burrow will be taken to demonstrate success and sufficiency. ▪ Impacted site will continually be made inhospitable to burrowing owls and fossorial mammals until construction is complete. ▪ Destruction of burrows shall occur only pursuant to a management plan approved by CDFG. ▪ Burrowing owls should not be excluded from burrows until: a Burrowing Owl Exclusion Plan is developed by a qualified biologist and approved by DFG; the permanent loss of burrow(s) and habitat is mitigated; site monitoring is conducted prior to, during, and after excavation to ensure take is avoided; and excluded burrowing owls are documented using artificial or natural burrows on an adjoining mitigation site. 			

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MM BIO 1.1-6	<p>Worker Training</p> <p>Training for all construction personnel shall be conducted prior to the commencement of ground disturbing activities. Training shall include:</p> <ol style="list-style-type: none"> 1. description of burrowing owl; 2. biology; 3. regulations (CDFG/USFWS); 4. contact information and standard operating procedure for when an owl is identified on-site by construction personnel. <p>All construction personnel shall have access to this information in a printed form (e.g. brochure or flyer posted in construction trailers, informational wallet card distributed to construction personnel, or other form).</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to construction.	
MM BIO 1.1-7	<p>Mitigation Plan for Burrows</p> <p>Destruction of occupied burrows shall be mitigated through enhancement of existing unsuitable burrows (through enlargement or debris clearing) or creation of new burrows (by installation of artificial burrows) at a ratio of 2:1 on protected lands (mitigation lands). Prior to the destruction of burrows and/or the passive relocation of owls (Mitigation Measure 1.1-5), a MMRP shall be created and approved by the CDFG. The MMRP shall include:</p> <ul style="list-style-type: none"> ▪ A specific site (mitigation lands) where owl burrows will be created and/or enhanced which is a minimum of 50 meters from the impacted area. ▪ A minimum of 6.5 acres of foraging habitat per displaced owl or pair of owls to be conserved in conjunction with the creation and enhancement of burrows. 	County of Imperial Planning and Development Services	Prior to construction.	

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MM BIO 1.1-7 Continued	<ul style="list-style-type: none"> ▪ A conservation easement or other protection for the mitigation lands which will ensure that the created burrows, foraging habitat (and their associated owl population) will be conserved in-perpetuity ▪ Specific success criteria and management directives to ensure the success of the burrow creation and enhancement (Example: 40% occupancy by passively relocated burrowing owls). ▪ Compatibility with any passive relocation plan (See Mitigation Measure 1.1-5) approved by the wildlife agencies. ▪ Annual reporting requirements. 			
MM BIO 1.2	<p>Avoidance of American Badger Burrows</p> <p>Any American badger burrows found during pre-construction burrowing owl surveys should be avoided whenever possible. When destruction of occupied burrows is unavoidable, hand-excavation is an option if occupied dens cannot be avoided, but alternatives shall be considered due to potential danger to biologists. Dens shall be hand-excavated only before or after the breeding season (February 1–May 30). Any relocation of American badger shall occur only pursuant to a management plan approved by CDFG.</p>	County of Imperial Planning and Development Services Department.	During construction and operation.	
Cultural Resources				
MM CUL 1.1	<p>Cultural Resources Construction Monitor</p> <p>Hudson Ranch Power II, LLC shall retain the services of a consultant who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist. The cultural resources monitor shall be present during all excavation or other earth-moving activities within the Project site in Holocene-aged deposits. The applicant shall immediately notify the Imperial County Planning and Development Services Department if any undocumented and/or buried prehistoric or historic resource is uncovered. All construction must stop in the vicinity of the find until the find can be evaluated</p>	County Planning and Development Services Department.	Credentials of the proposed consultant are to be submitted to Imperial County Planning and Development Department prior to issuance of a grading permit.	

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MM CUL 1.1 Continued	for its eligibility for listing in the CRHR. The cultural resources monitor shall have the authority to halt construction activity in the immediate vicinity of the encountered historic resource for a sufficient interval of time to allow avoidance or recovery of the encountered historic resources and shall also have the authority to redirect construction equipment in the event that any cultural resource is inadvertently encountered. All cultural resources are assumed to be eligible for the CRHR until determined otherwise by the monitor. Work will not resume in the area of the discovery until authorized by the monitor.			
MM CUL 1.2	<p>Evaluate Significance of Unanticipated Discoveries</p> <p>The cultural resources monitor will evaluate the significance of the unanticipated discovery in conjunction with designated Native American representatives in order to provide proper management recommendations. If testing and evaluation of the site is recommended, the cultural resources consultant will prepare a research design, schedule, and budget for review and approval. During evaluation and testing, the local Native American tribes shall be notified in advance so that a tribal monitor can be present and assist with the work being conducted. At the completion of the monitoring program, the cultural resources consultant will prepare a report that describes the results of the monitoring efforts, the personnel used, the dates of performance, and findings, if any. If cultural resources are recovered, they shall be cleaned, catalogued, analyzed, and curated at an approved repository.</p>	Imperial County Planning and Development Services Department.	Implemented if unanticipated discoveries are found during monitoring.	
MM CUL 1.3	<p>Native American Construction Monitor</p> <p>The local Native American tribes shall be given the opportunity to provide one or more certified cultural monitors for the Project during all excavation or earthmoving within the Project site in Holocene-aged deposits. The applicant</p>	Imperial County Planning and Development Services Department	The Native American tribe will be notified two weeks prior to commencement of ground disturbing activities. Implemented if human remains	

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MM CUL 1.3 Continued	shall give the tribe's Preservation Officer (PO) or other designated representative two weeks' notice and shall provide a copy of such notice to the County Planning and Development Services Department. The notice shall include information regarding the scope of the proposed activity and the beginning and ending dates of the activity. The tribe has the authority and discretion to provide one or more monitors as determined necessary by the tribe. Upon arrival at the job site, the tribal monitor(s) shall provide the Project superintendent with a current cultural monitor certification document. The tribal monitor(s) shall fully comply with all safety requirements established by the superintendent for the Project site at all times.		are found during monitoring.	
MM CUL 1.4	<p>Unanticipated Discoveries Historic Treatment Plan</p> <p>if an unanticipated discovery is found to meet the eligibility criteria for listing on the CRHR, then the resource must either be protected in place and the Project altered to preserve the resource, or data recovery excavations must be conducted to mitigate the impact of the resource. The cultural resources consultant shall prepare a Historic Properties Treatment Plan (HPTP) for submittal to the County of Imperial for approval. The HPTP shall detail how much excavation is required and what excavation methods and other analytical tests would be required to mitigate the impact on the resource if avoidance or preservation in place is not feasible. The HPTP shall provide for reasonable efforts to be made to permit the resource to be preserved in place or left in an undisturbed state. Methods of accomplishing this may include capping or covering the resource with a layer of soil. To the extent that a resource cannot feasibly be preserved in place or not left in an undisturbed</p>	Imperial County Planning and Development Services Department.	Implemented if unanticipated discoveries are found during monitoring of ground disturbing activities.	

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MM CUL 1.4 Continued	<p>state, excavation as mitigation shall be restricted to those parts of resource that would be damaged or destroyed by the Project. Excavation as mitigation shall not be required for a unique archaeological resource if the treatment plan determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource. After data recovery excavations are complete, a technical report detailing the results of the excavation and analysis results shall be prepared by the cultural resources consultant. All artifacts and documentation pertaining to the data recovery effort shall be cleaned, catalogued, analyzed, and curated at an approved repository.</p> <p>The HPTP shall require communication and consultation with Native American tribes that attach cultural significance to the Project area with regard to their perspectives and wishes for the treatment of the resources.</p>			
MM CUL-3.1	<p>Paleontological Construction Monitoring</p> <p>A paleontological mitigation plan shall be prepared by a qualified paleontologist. The paleontological mitigation plan can be implemented before and/or during construction; however, the latter is more common on most construction projects.</p> <p>The paleontological mitigation plan shall include the following elements:</p> <ol style="list-style-type: none"> 1. A qualified paleontologist shall attend the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with an MS or Ph.D. in paleontology or geology that also is familiar with paleontological procedures and techniques, is knowledgeable in the geology and paleontology of the Project area, and has worked as a paleontological mitigation project supervisor in the area for at least one year. 	Imperial County Planning and Development Services Department.	Paleontological Mitigation Plan to be submitted to Imperial County Planning and Development Services for review and approval prior to the issuance of the first grading permit.	

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MM CUL-3.1 Continued	<p>2. Ground-disturbing construction activities shall be monitored by a qualified paleontologist to assess, document, and recover unique fossils. A paleontological monitor shall be on-site on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential (e.g., Lake Cahuilla sediments) to inspect exposures for contained fossils. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor should work under the direction of a qualified paleontologist.</p> <p>If paleontological resources are discovered during ground-disturbing activities, the qualified paleontologist (or paleontological monitor) shall 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 temporarily direct, divert, or halt grading to allow sufficient time for the recovery of fossil remains. Paleontological resources of scientific value shall be identified and curated into an established, accredited, professional museum repository in the region with permanent retrievable paleontological storage.</p>			
MM CUL 4.1	<p>Identification of Human Remains</p> <p>If human remains are encountered, State Health & Safety Code Section 7050.5 and CEQA Guidelines Section 15064.5(e) state that no further disturbance can occur within the vicinity of the discovery until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The cultural resources monitor or construction contractor shall protect discovered human remains remaining in the ground from additional disturbance. The monitor or construction contractor shall immediately notify the county coroner of the find. The county coroner shall determine if the remains are of recent origin and if an investigation of the</p>	<p>Hudson Ranch Power II, LLC and/or landowner would be responsible for the implementation of this measure.</p> <p>Imperial County Planning and Development Services Department would be responsible for ensuring compliance.</p>	<p>Implemented if human remains are found during monitoring of ground-disturbing activities.</p>	

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MM CUL 4.1 Continued	cause of death is required (Health and Safety Code, § 7050.5). If the remains are determined to be Native American and historic or prehistoric, the coroner shall notify the NAHC so that a most likely descendent can be identified as required under California Public Resources Code section 5097.98. With the permission of the landowner or his/her authorized representative, the most likely descendent may inspect the site of the discovery. The most likely descendent may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials or may simply request that the remains be removed and repatriated in a respectful manner. If the most likely descendent and the land owner cannot reach an agreement on the disposition of the remains, the NAHC may help in negotiations.			
MM CUL 4.1 Continued	If the county coroner determines that the human remains are not Native American and not evidence of a crime, Project personnel shall coordinate with a qualified archaeologist(s) to develop an appropriate treatment plan. This may include contacting the next-of-kin to solicit input on subsequent disposition of the remains. If there is no next-of-kin, or recommendations by the next-of-kin are considered unacceptable by the landowner, the landowner will reinter the remains with appropriate dignity in a location outside the Project site and where they would be unlikely to be disturbed in the future.			
Geology and Soils				
MM GEO 1.1	<p>Liquefaction Mitigation</p> <p>Liquefaction settlements shall be mitigated by one of the following methods:</p> <ol style="list-style-type: none"> 1. Structural flat-plate mats, either conventionally reinforced or tied with post-tensioned tendons; 	Imperial County Department of Public Works.	Prior to approval of initial grading or building permits (whichever comes first) permits.	

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MM GEO 1.1 Continued	2. Deep foundations (drilled piers or auger cast piles) founded at a minimum depth of 25 feet; or 3. Soil improvement by soil-cement mixing or soil replacement to create non-liquefying soils (20-foot minimum depth).			
MM GEO 2.1	<p>Reduce Soil Erosion</p> <p>Erosion potential shall be managed by implementing standard industry methods such as BMPs for dust suppression and for preventing surface water runoff and erosion impacts that are in place at the time of grading plan approval. Because the site is more than 5-acres, compliance with storm water NPDES criteria is required, including preparation of a Storm Water Pollution Prevention Plan (SWPPP) and the inclusion of BMPs to control erosion and the off-site transport of soils. The recently adopted State General Permit for construction imposes more minimum BMPs and requirements than were previously required only as elements of the SWPPP or were suggested by guidance. Additionally, erosion control shall be accomplished, in part, through compliance with Imperial County Air Pollution Control District (ICAPCD) Regulation VIII requirements.</p> <p>Compliance with these procedures shall ensure that potential erosion is controlled during the construction process. Additional information on the Project's storm water NPDES permitting requirements, as well as SWPPP requirements, is available in Section 4.8, Hydrology and Water Quality.</p>	Imperial County Public Works Department or local engineers.	Prior to issuance of grading permits.	
MM GEO 3.1	<p>Subsidence Monitoring</p> <p>Hudson Ranch Power II, LLC shall participate in the County's subsidence detection program, consistent with the California Division of Oil, Gas, and Geothermal Resources (CDOGGR) found in Section 1971 of Title 14 of the California Code of Regulations (CCR), and in connection therewith, submit a</p>	CDOGGR, Imperial County Department of Public Works or local engineers.	Hudson Ranch Power II, LLC shall submit a seismic and subsidence monitoring plan to the Imperial County Public Works Department for review	

TABLE IV-1 HUDSON RANCH II (HR-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

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<p>MM GEO 3.1 Continued</p>	<p>plan for Public Works Department approval, showing proposed locations of benchmark monuments. Monuments shall connect with the County's geothermal subsidence detection network. Benchmarks installed shall conform to County standards. Surveying shall be performed to National Geodetic Survey standards and all field surveying procedures shall conform to such standards.</p> <p>Hudson Ranch Power II, LLC shall perform surveying on an annual basis as required by the Director of Public Works, except the Director may require such surveying at shorter intervals if he deems it necessary. All work shall be performed under the supervision of a person licensed to practice surveying in California. All field surveying data (such as forms and instrument checks), along with an adjustment of said data and analysis, all in conformity with the National Geodetic Survey standards, shall be submitted for review and approval to the Department of Public Works within two months of completion of field work.</p> <p>If the Department of Public Works determines good cause exists to require additional surveying and analysis or additional subsurface data, the County reserves the right to require such work to be accomplished at the expense of the Permittee. The County further reserves the right, with Hudson Ranch Power II, LLC's input, to designate the consultant or firm to accomplish the work. Proprietary information shall not be released to the public.</p> <p>Should subsidence be identified as severe enough to result in off-site impacts, the County shall require that further actions be considered to mitigate subsidence impacts to an appropriate level such that impacts are avoided. Such measures include, but are not limited to, increasing the injection volume into the geothermal resource and grading of irrigated areas affected by the subsidence by Hudson Ranch Power II, LLC.</p>		<p>and approval prior to commencement of grading. After start of commercial operation the Hudson Ranch Power II, LLC shall submit to the County an annual report outlining the seismic and subsidence monitoring performed during the previous year as required by the above referenced requirements.</p>	

TABLE IV-1 HUDSON RANCH II (HR-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM GEO 4.1	<p>Remove/Replace Expansive Soil</p> <p>The upper 3 feet of clays within the building foundation areas, extending five (5) feet beyond all exterior wall/column lines, shall be replaced with imported non-expansive granular fill to mitigate the expansion forces and eliminate the need for special foundation designs. Design and construction of site improvements (concrete flatwork, curbs, housekeeping slabs, etc.) shall include provisions to mitigate clay soil movement. Additionally, the weak clay subgrade soil requires thickened structural sections for pavements.</p> <p>Imported fill soil shall be non-expansive, granular soil meeting the Unified Soil Classification System classifications of SM, SP-SM or SW-SM, with a maximum rock size of 3 inches and 5% to 35% passing the No. 200 sieve. A geotechnical engineer shall approve imported fill soil sources before hauling material to the site. To reduce settlement in the power plant structures, compressible clays shall be strengthened by soil improvement (soil mixing or replacement with sand/cement) or by using deep foundation system-like auger casts or driven piles.</p>	Imperial County Department of Public Works and Department of Planning and Development Services.	Prior to issuance of initial grading or building permits (whichever comes first).	
Water Resources				
MM WQ 1.1	<p>Implementation of a SWPPP.</p> <p>Prior to the issuance of grading permits, Hudson Ranch Power II, LLC shall obtain coverage under the SWRCB's General Permit for Stormwater Discharges Associated with Construction Activity (Water Quality Order No. 2009-0009-DWQ (NPDES No. CAS000002)). Hudson Ranch Power II, LLC shall prepare a SWPPP to be administered during grading and Project construction. The SWPPP must contain BMPs and construction techniques accepted by the County for use in the Project area at the time of construction that meet the technical standards of the General Construction Permit to ensure that potential water quality impacts (including on- and off-site erosion)</p>	Hudson Ranch Power II, LLC and California RWQCB CRB.	Prior to issuing grading permits.	

TABLE IV-1 HUDSON RANCH II (HR-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM WQ 1.1 Continued	<p>during construction phases are minimized, that shall reduce the potential for runoff and the release, mobilization, and exposure of pollutants from the construction area, and that no water quality standards are violated. The SWPPP must address spill prevention and include a countermeasure plan describing measures to ensure proper collection and disposal of all pollutants handled or produced on the site during construction, including sanitary wastes, cement, and petroleum products. Countermeasures may include measures to prevent or clean up spills of hazardous waste and of hazardous materials used for equipment operation, and emergency procedures for responding to spills. BMPs included in the SWPPP must be consistent with the California Stormwater Best Management Practices Handbook for Construction. The SWPPP must be submitted to California RWQCB CRB and Imperial County for review prior to the issuance of grading permits. The SWPP shall identify and specify the pollutants that are likely to be used during construction that could be present in stormwater drainage and non-stormwater discharges, including fuels, lubricants, and other types of materials used for equipment operation and the means of waste disposal.</p> <p>The SWPPP shall specify personnel training requirements and procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP. The SWPPP shall also specify the appropriate personnel responsible for supervisory duties related to implementation of the SWPPP.</p> <p>A copy of the approved SWPPP shall be maintained and available at all times on the construction site.</p>			

TABLE IV-1 HUDSON RANCH II (HR-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
Noise				
MM NOI 1.1	<p>Restricted Work Hours on Saturdays.</p> <p>HR-2 project construction activities would be restricted to daytime hours from 9:00 a.m. to 5:00 p.m. on Saturdays, in compliance with County of Imperial Construction Noise Standards, as established in the General Plan Noise Element.</p>	Imperial County Department of Public Works and Department of Planning and Development Services.	During construction.	
Transportation and Circulation				
MM TR 1.1	<p>Contribute Fair Share to Future Signalization of Highway 111/McDonald Road Intersection and Highway 111/Sinclair Road Intersections</p> <p>Hudson Ranch Power II, LLC and shall contribute to Caltrans, its portion of the fair-share contribution of 8.0% and 7.4%, as calculated in Appendix H of the Traffic Study, to the improvements prior to the issuance of the first building permit for each Project. Hudson Ranch Power II, LLC and Simbol Inc., shall enter into an Agreement with Caltrans to provide fair-share contributions to Caltrans for the future signalization of the intersections of Highway 111/McDonald Road and Highway 111/Sinclair Road, prior to the issuance of the first building permit for each Project. Hudson Ranch Power II, LLC and Simbol, Inc. shall also contribute to Caltrans their fair-share contribution to these future improvements prior to the issuance of a building permit. For the purpose of this Agreement, "fair-share" shall mean a percentage derived by taking the trips generated by the HR-2 Project and those generated by the SmCP-2 Project as a percentage of total trips of all users.</p>	Caltrans and the Imperial County Department of Planning and Development services.	Prior to the issuance of the first building permit.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
Agricultural Resources				
MM AG 1.1	<p>Loss of Agricultural Land - Non-Prime (Farmland of Statewide Importance and Farmland of Local Importance) Farmland.</p> <p>Simbol, Inc. may choose one of the following three methods for mitigation:</p> <ol style="list-style-type: none"> 1. Agricultural Conservation Easements on a "1 to 1" basis for 32 acres (32 acres x 1 = 32 acres) on land of equal size, of equal quality farmland, outside of the path of development. The Conservation Easement shall meet the State Department of Conservation's regulations and shall be recorded prior to issuance of any grading or building permits. Or 2. Simbol, Inc. shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20% of the fair market value per acre for the total acres of proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. Or 3. If Simbol, Inc. and the County voluntarily enter into a public benefit agreement that includes an Agricultural Benefit Fee payment that is equal to or greater than the amount that would be due under option ii of this mitigation measure and the public benefit agreement requires that the Agricultural Benefit Fee be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County, then this mitigation measure may be satisfied by payment of voluntarily agreed to Agricultural Benefit Fee. 	County of Imperial Planning and Development Services Department.	Prior to the issuance of a grading permit or building permit (whichever comes first) for the project.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM AG-1.2	<p>Loss of Agricultural Land - Prime Farmland</p> <p>Simbol, Inc. may choose one of the following three methods for mitigation:</p> <ol style="list-style-type: none"> 1. Agricultural Conservation Easements on a "2 to 1" basis for 32 acres (16 acres x 2 = 32 acres) on land of equal size, of equal quality farmland, outside of the path of development. The Conservation Easement shall meet the State Department of Conservation's regulations and shall be recorded prior to issuance of any grading or building permits. 2. Simbol, Inc. shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30% of the fair market value per acre for the total acres of proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. 3. If Simbol, Inc. and the County voluntarily enter into a public benefit agreement that includes an Agricultural Benefit Fee payment that is equal to or greater than the amount that would be due under option ii of this mitigation measure and the public benefit agreement requires that the Agricultural Benefit Fee be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County, then this mitigation measure may be satisfied by payment of voluntarily agreed to Agricultural Benefit Fee. 	County of Imperial Planning and Development Services Department.	Prior to the issuance of a grading permit or building permit (whichever comes first).for the project.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM AG-1.3	<p>Reclamation Plan/Site Abandonment Plan</p> <p>Prior to the issuance of the initial grading or building permit, Simbol, Inc. shall submit to the County of Imperial a Reclamation Plan/Site Abandonment Plan to return the property to its current agricultural condition prior to the issuance of the initial grading permit The Reclamation Plan/Site Abandonment Plan shall include a reclamation cost estimate prepared by a California-licensed general contractor or civil engineer. Simbol, Inc. shall provide financial assurance/bonding in the amount equal to the reclamation cost estimate to return the land to its current agricultural condition prior to the issuance of the initial grading permit or building permits.</p>	County of Imperial Planning and Development Services Department.	Prior to the issuance of the initial grading permit or building permit (whichever comes first).	
Air Quality				
MM AQ-2.1	<p>NOx Controls During HR-2/SmCP-2 Concurrent Construction.</p> <p>The Permittee shall comply with all applicable standard mitigation measures for construction combustion equipment for the reduction of excess NOx emissions as identified in the air quality analysis and as contained in the Imperial County CEQA Air Quality Handbook and associated regulations:</p> <ol style="list-style-type: none"> 1. Utilize all Tier 3 or Tier 4 construction equipment. 2. Prohibit idling of equipment not in use; for equipment in use reduce idling time to a maximum of 5 minutes. 3. Where feasible replace fossil fuel burning equipment with electrically driven equivalents provided they are not powered via a portable generator. 4. Register all portable engines 50 horse power or greater with the ICAPCD. 	Imperial County Planning and Development Services/ICAPCD.	During periods of concurrent construction with HR-2 (March 2015)	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM AQ-2.1 Continued	<p>Permittee shall also apply enhanced measures to assure reduced levels of NOx are maintained during the construction phase of the project.</p> <ol style="list-style-type: none"> 1. Submit to the Air District prior to any earthmoving activity a complete list of all construction equipment to be utilized during the construction phase identifying Make, Model, Year, and estimated hours of usage. 2. In the event NOx emissions are calculated to exceed ICAPCD thresholds for construction, the Permittee shall provide for "off-site" mitigation or comply with Policy number 5. Policy number 5 allows a project to pay in-lieu impact fees utilizing the most current Carl Moyer Cost Effective methodology to reduce excess NOx emissions. <p>Prior to site preparation activities, the HR-2 Project will submit to the Imperial County Planning and Development Services evidence of the actions proposed to be undertaken to limit NOx emissions from the two Projects during construction to ensure that maximum daily NOx emissions resulting from the proposed combined construction activities will remain below 100 pounds per day.</p>			
Biological Resources				
MM BIO 1.1-1	<p>Avoidance of Occupied Burrows</p> <p>Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If occupied burrows are to be impacted by project-related activities, additional mitigation measures shall be applied (Mitigation Measures BIO 1.1-3 through 1.1-5).</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to and during construction.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM BIO 1.1-2	<p>Pre-Construction Surveys</p> <p>Pre-construction surveys shall be conducted to identify any burrowing owls present on-site prior to ground-disturbing activities. All occupied burrows identified on-site shall be flagged for passive relocation (MM BIO 1.1-5). A pre-construction survey is valid for 30 days. If ground disturbing activities do not commence within 30 days of the completion of the burrowing owl survey, an additional survey may be required.</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to construction.	
MM BIO1.1-3	<p>Preparation of a Burrowing Owl Mitigation Plan</p> <p>If pre-construction surveys determine that burrowing owls are on-site, a burrowing owl mitigation plan shall be prepared by a qualified biologist describing recommended site specific shelter-in-place measures, worker training, and/or other measures to ensure that project construction does not result in adverse impacts to the burrowing owl.</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to construction.	
MM BIO 1.1-4	<p>Activities During Nesting Season</p> <p>All occupied burrows identified off-site within 160 feet of construction activities outside of nesting season (September through January) and within 250 feet of construction activities during nesting season (February 1 through August 31) shall be buffered by hay bales, fencing (e.g. sheltering in place) or as directed by a qualified biologist and the CDFG.</p>	County of Imperial Planning and Development Services Department and CDFG.	During construction.	
MM BIO 1.1-5	<p>Passive Relocation Techniques</p> <p>Owls present on the construction site (as identified during pre-construction surveys MM BIO 1.1-2) shall be moved away from the disturbance area using passive relocation techniques. Prior to commencement of relocation, a management plan shall be prepared and approved by CDFG. Relocation shall be completed between September 1 and January 31 (outside of breeding season). If it is not possible to complete relocation during this time period, refer to Mitigation Measure BIO 1.1-1.</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to construction.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM BIO 1.1-5 Continued	<p>A minimum of one or more weeks is required to relocate the owls and allow them to acclimate to alternate burrows. Passive relocation techniques will follow the CDFG Staff Report on Burrowing Owl Mitigation Guidelines and include the following measures:</p> <ul style="list-style-type: none"> ▪ Passive relocation will be conducted during the non-breeding season. ▪ Artificial burrows must be established within 100m of original burrow and adjacent foraging habitat surrounding the artificial burrow must be suitable and protected. ▪ Install one-way doors in burrow openings to temporarily or permanently evict burrowing owls and prevent burrow re-occupation. Leave doors in place for 48 hours to ensure owls have left the burrow. ▪ Allow one or more weeks for owls to acclimate to off-site burrows (refer to Mitigation Measure 1.1-7 below). Daily monitoring shall be required for the passive relocation period. ▪ Once owls have relocated off-site, collapse existing burrows to prevent reoccupation. Prior to burrow excavation, flexible plastic pipe shall be inserted into the tunnels to allow escape of any remaining owls during excavation. Excavation shall be conducted by hand whenever possible. Photographs of the excavation and closure of the burrow will be taken to demonstrate success and sufficiency. ▪ Impacted site will continually be made inhospitable to burrowing owls and fossorial mammals until construction is complete. ▪ Destruction of burrows shall occur only pursuant to a management plan approved by CDFG. 			

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM BIO 1.1-5 Continued	Burrowing owls should not be excluded from burrows until: a Burrowing Owl Exclusion Plan is developed by a qualified biologist and approved by DFG; the permanent loss of burrow(s) and habitat is mitigated; site monitoring is conducted prior to, during, and after excavation to ensure take is avoided; and excluded burrowing owls are documented using artificial or natural burrows on an adjoining mitigation site.			
MM BIO 1.1-6	<p>Worker Training.</p> <p>Training for all construction personnel shall be conducted prior to the commencement of ground disturbing activities. Training shall include:</p> <ol style="list-style-type: none"> 1. Description of burrowing owl; 2. Biology; 3. Regulations (CDFG/USFWS); 4. Contact information and standard operating procedure for when an owl is identified on-site by construction personnel. <p>All construction personnel shall have access to this information in a printed form (e.g. brochure or flyer posted in construction trailers, informational wallet card distributed to construction personnel, or other form).</p>	County of Imperial Planning and Development Services Department and CDFG.	Prior to construction.	
MM BIO 1.1-7	<p>Mitigation Plan for Burrows</p> <p>Destruction of occupied burrows shall be mitigated through enhancement of existing unsuitable burrows (through enlargement or debris clearing) or creation of new burrows (by installation of artificial burrows) at a ratio of 2:1 on protected lands (mitigation lands). Prior to the destruction of burrows and/or the passive relocation of owls (Mitigation Measure 1.1-5), a MMRP shall be created and approved by the CDFG. The MMRP shall include:</p> <ul style="list-style-type: none"> ▪ A specific site (mitigation lands) where owl burrows will be created and/or enhanced which is a minimum of 50 meters from the impacted area. 	County of Imperial Planning and Development Services	Prior to construction.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM BIO 1.1-7 Continued	<ul style="list-style-type: none"> ▪ A minimum of 6.5 acres of foraging habitat per displaced owl or pair of owls to be conserved in conjunction with the creation and enhancement of burrows. ▪ A conservation easement or other protection for the mitigation lands which will ensure that the created burrows, foraging habitat (and their associated owl population) will be conserved in-perpetuity ▪ Specific success criteria and management directives to ensure the success of the burrow creation and enhancement (Example: 40% occupancy by passively relocated burrowing owls). ▪ Compatibility with any passive relocation plan (See Mitigation Measure 1.1-5) approved by the wildlife agencies. ▪ Annual reporting requirements. 			
MM BIO-1.2	<p>Avoidance of American Badger Burrows</p> <p>Any American badger burrows found during pre-construction burrowing owl surveys should be avoided whenever possible. When destruction of occupied burrows is unavoidable, hand-excavation is an option if occupied dens cannot be avoided, but alternatives shall be considered due to potential danger to biologists. Dens shall be hand-excavated only before or after the breeding season (February 1–May 30). Any relocation of American badger shall occur only pursuant to a management plan approved by CDFG.</p>	County of Imperial Planning and Development Services Department.	During construction and operation.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
Cultural Resources				
MM CUL-1.1	<p>Cultural Resources Construction Monitor</p> <p>Simbol, Inc. shall retain the services of a consultant who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist. The cultural resources monitor shall be present during all excavation or other earth-moving activities within the Project site in Holocene-aged deposits. The applicant shall immediately notify the Imperial County Planning and Development Services Department if any undocumented and/or buried prehistoric or historic resource is uncovered. All construction must stop in the vicinity of the find until the find can be evaluated for its eligibility for listing in the CRHR. The cultural resources monitor shall have the authority to halt construction activity in the immediate vicinity of the encountered historic resource for a sufficient interval of time to allow avoidance or recovery of the encountered historic resources and shall also have the authority to redirect construction equipment in the event that any cultural resource is inadvertently encountered. All cultural resources are assumed to be eligible for the CRHR until determined otherwise by the monitor. Work will not resume in the area of the discovery until authorized by the monitor.</p>	Imperial County Planning and Development Services Department.	Credentials of the proposed consultant are to be submitted to Imperial County Planning and Development Department prior to issuance of a grading permit.	
MM CUL-1.2	<p>Evaluate Significance of Unanticipated Discoveries</p> <p>The cultural resources monitor will evaluate the significance of the unanticipated discovery in conjunction with designated Native American representatives in order to provide proper management recommendations. If testing and evaluation of the site is recommended, the cultural resources consultant will prepare a research design, schedule, and budget for review and approval. During evaluation and testing, the local Native American tribes shall be notified in advance so that a tribal monitor can be present and assist with the work being conducted. At the completion of the monitoring program,</p>	Imperial County Planning and Development Services Department.	Implemented if unanticipated discoveries are found during monitoring.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM CUL-1.2 Continued	the cultural resources consultant will prepare a report that describes the results of the monitoring efforts, the personnel used, the dates of performance, and findings, if any. If cultural resources are recovered, they shall be cleaned, catalogued, analyzed, and curated at an approved repository.			
MM CUL-1.3	<p>Native American Construction Monitor</p> <p>The local Native American tribes shall be given the opportunity to provide one or more certified cultural monitors for the Project during all excavation or earthmoving within the Project site in Holocene-aged deposits. The applicant shall give the tribe's Preservation Officer (PO) or other designated representative at least 24 hours' notice and shall provide a copy of such notice to the County Planning and Development Services Department. The notice shall include information regarding the scope of the proposed activity, the number of monitors proposed, and the beginning and ending dates and times that the monitors will be needed. The tribe has the authority and discretion to provide one or more monitors as determined necessary by the tribe.</p> <p>Upon arrival at the job site, the tribal monitor(s) shall provide the Project superintendent with a current cultural monitor certification document. The tribal monitor(s) shall fully comply with all safety requirements established by the superintendent for the Project site at all times.</p>	Imperial County Planning and Development Services Department.	<p>The Native American tribe will be notified two weeks prior to commencement of ground disturbing activities.</p> <p>Implemented if human remains are found during monitoring.</p>	
MM CUL-1.4	<p>Unanticipated Discoveries Historic Treatment Plan</p> <p>If an unanticipated discovery is found to meet the eligibility criteria for listing on the CRHR, then the resource must either be protected in place and the Project altered to preserve the resource, or data recovery excavations must be conducted to mitigate the impact of the resource. The cultural resources consultant shall prepare a Historic Properties Treatment Plan (HPTP) for</p>	Imperial County Planning and Development Services Department.	Implemented if unanticipated discoveries are found during monitoring of ground disturbing activities.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM CUL-1.4 Continued	<p>submittal to the County of Imperial for approval. The HPTP shall detail how much excavation is required and what excavation methods and other analytical tests would be required to mitigate the impact on the resource if avoidance or preservation in place is not feasible. The HPTP shall provide for reasonable efforts to be made to permit the resource to be preserved in place or left in an undisturbed state. Methods of accomplishing this may include capping or covering the resource with a layer of soil. To the extent that a resource cannot feasibly be preserved in place or not left in an undisturbed state, excavation as mitigation shall be restricted to those parts of resource that would be damaged or destroyed by the Project. Excavation as mitigation shall not be required for a unique archaeological resource if the treatment plan determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource. After data recovery excavations are complete, a technical report detailing the results of the excavation and analysis results shall be prepared by the cultural resources consultant. All artifacts and documentation pertaining to the data recovery effort shall be cleaned, catalogued, analyzed, and curated at an approved repository. The HPTP shall require communication and consultation with Native American tribes that attach cultural significance to the Project area with regard to their perspectives and wishes for the treatment of the resources.</p>			
MM CUL-3.1	<p>Paleontological Construction Monitoring</p> <p>A paleontological mitigation plan shall be prepared by a qualified paleontologist. The paleontological mitigation plan can be implemented before and/or during construction; however, the latter is more common on most construction projects. The paleontological mitigation plan shall include the following elements:</p>	Imperial County Planning and Development Services Department.	Paleontological Mitigation Plan to be submitted to Imperial County Planning and Development Services for review and approval prior to the issuance of the first grading permit.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM CUL-3.1 Continued	<p>1. A qualified paleontologist shall attend the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with an MS or Ph.D. in paleontology or geology that also is familiar with paleontological procedures and techniques, is knowledgeable in the geology and paleontology of the Project area, and has worked as a paleontological mitigation project supervisor in the area for at least one year.</p> <p>2. Ground-disturbing construction activities shall be monitored by a qualified paleontologist to assess, document, and recover unique fossils. A paleontological monitor shall be on-site on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential (e.g., Lake Cahuilla sediments) to inspect exposures for contained fossils. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor should work under the direction of a qualified paleontologist.</p> <p>If paleontological resources are discovered during ground-disturbing activities, the qualified paleontologist (or paleontological monitor) shall 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 temporarily direct, divert, or halt grading to allow sufficient time for the recovery of fossil remains. Paleontological resources of scientific value shall be identified and curated into an established, accredited, professional museum repository in the region with permanent retrievable paleontological storage.</p>			

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM CUL-4.1	<p>Identification of Human Remains</p> <p>If human remains are encountered, State Health & Safety Code Section 7050.5 and CEQA Guidelines Section 15064.5(e) state that no further disturbance can occur within the vicinity of the discovery until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The cultural resources monitor or construction contractor shall protect discovered human remains remaining in the ground from additional disturbance. The monitor or construction contractor shall immediately notify the county coroner of the find. The county coroner shall determine if the remains are of recent origin and if an investigation of the cause of death is required (Health and Safety Code, § 7050.5). If the remains are determined to be Native American and historic or prehistoric, the coroner shall notify the NAHC so that a most likely descendent can be identified as required under California Public Resources Code section 5097.98. With the permission of the landowner or his/her authorized representative, the most likely descendent may inspect the site of the discovery. The most likely descendent may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials or may simply request that the remains be removed and repatriated in a respectful manner. If the most likely descendent and the land owner cannot reach an agreement on the disposition of the remains, the NAHC may help in negotiations.</p> <p>If the county coroner determines that the human remains are not Native American and not evidence of a crime, Project personnel shall coordinate with a qualified archaeologist(s) to develop an appropriate treatment plan. This may include contacting the next-of-kin to solicit input on subsequent disposition of the remains. If there is no next-of-kin, or recommendations by</p>	Imperial County Planning and Development Services Department.	Implemented if human remains are found during monitoring of ground-disturbing activities.	

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MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM CUL-4.1 Continued	the next-of-kin are considered unacceptable by the landowner, the landowner will reinter the remains with appropriate dignity in a location outside the Project site and where they would be unlikely to be disturbed in the future.			
Geology and Soils				
MM GEO-1.1	<p>Prepare Geotechnical Investigation and Incorporate Results into Project Design.</p> <p>A registered professional civil/geotechnical engineer shall prepare a geotechnical investigation for the SmCP-2 Project that includes comprehensive subsurface exploration, appropriate laboratory testing, and detailed evaluation of potential constraints to critical Project structures, including liquefaction, subsidence and expansive soils. The geotechnical investigation shall also include specific recommendations to address issues identified in the geotechnical investigation of the Project site to meet State and County seismic building code requirements. The recommendations shall be incorporated into the design of the structures.</p>	Imperial County Department of Public Works and Department of Planning and Development Services.	Prior to approval of grading plans.	
MM GEO-2.1	<p>Reduce Soil Erosion</p> <p>Erosion potential shall be managed by implementing standard industry methods such as BMPs for dust suppression and for preventing surface water runoff and erosion impacts that are in place at the time of grading plan approval. Because the site is more than 5-acres, compliance with storm water NPDES criteria is required, including preparation of a Storm Water Pollution Prevention Plan (SWPPP) and the inclusion of BMPs to control erosion and the off-site transport of soils. The recently adopted State General Permit for construction imposes more minimum BMPs and requirements than were previously required only as elements of the SWPPP or were suggested by guidance. Additionally, erosion control shall be accomplished, in part, through</p>	Imperial County Public Works Department or local engineers.	Prior to issuance of grading permits.	

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MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM GEO-2.1 Continued	compliance with Imperial County Air Pollution Control District (ICAPCD) Regulation VIII requirements. Compliance with these procedures shall ensure that potential erosion is controlled during the construction process. Additional information on the Project's storm water NPDES permitting requirements, as well as SWPPP requirements, is available in Section 4.8, Hydrology and Water Quality.			
Water Resources				
MM WQ 1.1	<p>Implementation of a SWPPP.</p> <p>Prior to the issuance of grading permits, Hudson Ranch Power II, LLC shall obtain coverage under the SWRCB's General Permit for Stormwater Discharges Associated with Construction Activity (Water Quality Order No. 2009-0009-DWQ (NPDES No. CAS000002)). Simbol, Inc. shall prepare a SWPPP to be administered during grading and Project construction. The SWPPP must contain BMPs and construction techniques accepted by the County for use in the Project area at the time of construction that meet the technical standards of the General Construction Permit to ensure that potential water quality impacts (including on and off-site erosion) during construction phases are minimized, that shall reduce the potential for runoff and the release, mobilization, and exposure of pollutants from the construction area, and that no water quality standards are violated. The SWPPP must address spill prevention and include a countermeasure plan describing measures to ensure proper collection and disposal of all pollutants handled or produced on the site during construction, including sanitary wastes, cement, and petroleum products. Countermeasures may include measures to prevent or clean up spills of hazardous waste and of hazardous materials used for equipment operation, and emergency procedures for responding to spills. BMPs included in the SWPPP must be consistent with</p>	Simbol, Inc. and California RWQCB CRB.	Prior to the issuance of grading permits.	

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MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM WQ 1.1 Continued	the California Stormwater Best Management Practices Handbook for Construction. The SWPPP must be submitted to California RWQCB CRB and Imperial County for review prior to the issuance of grading permits. The SWPP shall identify and specify the pollutants that are likely to be used during construction that could be present in stormwater drainage and non-stormwater discharges, including fuels, lubricants, and other types of materials used for equipment operation and the means of waste disposal. The SWPPP shall specify personnel training requirements and procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP. The SWPPP shall also specify the appropriate personnel responsible for supervisory duties related to implementation of the SWPPP.			
Noise				
MM NOI-1.1	Restricted Work Hours on Saturdays SmCP-2's project construction activities would be restricted to daytime hours from 9:00 a.m. to 5:00 p.m. on Saturdays, in compliance with County of Imperial Construction Noise Standards, as established in the General Plan Noise Element.	Imperial County Department of Public Works and Department of Planning and Development Services.	During Construction.	
Transportation and Circulation				
MM TR-1.1	Contribute Fair Share to Future Signalization of Highway 111/McDonald Road Intersection and Highway 111/Sinclair Road Intersection. Simbol, Inc. shall contribute to Caltrans, its portion of the fair-share contribution of 8.0% and 7.4%, as calculated in Appendix H of the Traffic Study, to the improvements prior to the issuance of the first building permit for each Project. Hudson Ranch Power II, LLC and Simbol Inc., shall enter into an Agreement with Caltrans to provide fair-share contributions to Caltrans for	Caltrans and Imperial County Department of Planning and Development services.	Prior to the issuance of the first building permit.	

TABLE IV-2 SIMBOL CALIPATRIA II (SmCP-2) MITIGATION, MONITORING, AND REPORTING PROGRAM CHECKLIST

MM NO.	MITIGATION MEASURE	MONITORING RESPONSIBILITY	TIMING	COMPLIANCE VERIFICATION (DATE AND INITIALS)
MM TR-1.1 Continued	the future signalization of the intersections of Highway 111/McDonald Road and Highway 111/Sinclair Road, prior to the issuance of the first building permit for each Project. Hudson Ranch Power II, LLC and Simbol, Inc. shall also contribute to Caltrans their fair-share contribution to these future improvements prior to the issuance of a building permit. For the purpose of this Agreement, "fair-share" shall mean a percentage derived by taking the trips generated by the HR-2 Project and those generated by the SmCP-2 Project as a percentage of total trips of all users.			