



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



October 12, 2020

Ms. Jocelyn Swain
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534
jswain@cityoflanasterca.org

**Subject: Tentative Tract Map No. 61921, Mitigated Negative Declaration, SCH
#2020090306, City of Lancaster, Los Angeles County**

Dear Ms. Swain:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Mitigated Negative Declaration (MND) for the Tentative Tract Map No. 61921 Project (Project). The MND's supporting documentation includes *TTM 61921 Biological Report* and *TTM 61921 Initial Study*.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

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Project Description and Summary

Objective: The City of Lancaster (City; Lead Agency) and Royal Investors Group, LLC (Project Applicant) are proposing the Tentative Tract Map Number 61921 Project (Project). The Project would subdivide 20 acres of undeveloped land into 70 single family residential lots. Lot sizes within the development would range from 7,800 to 10,909 square feet. The streets within the subdivision would be public. A meandering sidewalk would be provided along Avenue J and 40th Street West. Landscaping would be provided along the perimeter of the subdivision and in the front yards of the individual lots.

Location: The Project is proposed for a 20-acre area in the central portion of the City in an area that is developing. The Project is located east of 40th Street West and north of Avenue J. Assessor's Parcel Numbers (APNs) associated with the Project include APN 3153-011-36 and APN 3153-011-43. The property to the east and south of the Project is developed with single family residential subdivisions. The area north of the Project is partially developed with a fire station and partially vacant. The property to the west is currently vacant; however, a portion of the property has an approved tentative map which has not been developed.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

Specific Comments

Comment #1: Impacts to Western Joshua tree (*Yucca brevifolia*)

Issue: The Project would require removal of a "handful of trees" including western Joshua trees, a CESA-listed candidate species.

Specific Impacts: The Project as proposed would result in the loss of an undisclosed number of western Joshua trees and its seed bank. Moreover, the Project would pave over soils that could potentially support the yucca moth (*Tegeticula synthetica*).

Why impacts would occur: The Project would require the removal of an undisclosed number of western Joshua trees. Paving over the Project site may result in permanent loss of seeds buried by abiotic processes and seed caches made by rodents (Waitman et al. 2010). Western Joshua trees would be permanently extirpated from the Project site. Local extirpation of western Joshua trees may also occur in the absence of a seed source that could be dispersed to adjacent areas. Lastly, the Project would pave over soils that may otherwise support the yucca moth's pupal stage. After feeding on fruits, yucca moth caterpillars drop onto the soil and retreat to pupate underground (Baker 1986; Bogler 1995). The yucca moth is the sole pollinator of western Joshua trees. Fruit and seed production of western Joshua trees fluctuate yearly depending on factors that include availability of pollinators (Sirchia et al. 2018). Regional

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collapses of yucca moth populations have led to complete failure of fruit production in the closely related banana yucca (*Y. baccatta*) in the Mojave Desert (St. Clair and Hoines 2018).

Evidence impacts would be significant: The western Joshua tree is a geographically and morphologically distinct species from the eastern Joshua tree (*Y. jaegeriana*) (Sirchia et al. 2018). The western Joshua tree has specific habitat requirements, which in turn restricts the range of the species (Center for Biological Diversity 2019). Currently, western Joshua trees are found in Joshua Tree National Park; northern slopes of the San Bernardino and San Gabriel Mountains; Antelope Valley; eastern flanks of the southern Sierra Nevada mountains; and the edges of Death Valley National Park (Center for Biological Diversity 2019). Recent studies have indicated that the species' range is contracting at lower elevations; recruitment is limited; and mortality is increasing. These trends are driven by the collective pressures of habitat loss; increased fire frequency and intensity; and poorly regulated ground disturbing activities; and climate change (Center for Biological Diversity 2019). One-third of suitable habitat for the western Joshua tree in California may be lost due to development over the coming decades, including over 40 percent of habitat in the species' southern California region. At this rate, western Joshua tree may be extirpated from all or most of California by the end of the century (Center for Biological Diversity 2019).

On November 1, 2019, CDFW accepted a petition for western Joshua tree as a threatened species for listing under the CESA (Commission 2019). CDFW determined that listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process (CDFW 2020a). On September 22, 2020, the California Fish and Game Commission determined that listing western Joshua tree as threatened under CESA may be warranted (CDFW 2020b). As a CESA candidate species, western Joshua tree is granted full protection of a threatened species under CESA.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends a survey report of western Joshua trees located within the Project footprint be conducted by a qualified botanist knowledgeable of western Joshua tree ecology. The qualified botanist should identify and map all western Joshua trees in the Project footprint.

CDFW recommends preparing a report to document survey methods and results. The map should include the survey area; surveyor(s) track lines; and location of each western Joshua tree. The map should be produced using clear and recent aerial imagery. On the map, each western Joshua tree should be displayed as a point feature. Each point should be labeled with a unique identification code (i.e., number, letter). For each point feature, provide the corresponding tree's approximate height (feet) and a clear photograph documenting the tree. The report should provide measures to fully avoid impacts (see Mitigation Measure #2) or mitigate for impacts (see Mitigation Measure #3) to western Joshua trees and their seed bank from Project implementation.

Mitigation Measure #2: CDFW recommends the City develop a robust avoidance plan in consultation with a qualified botanist. The avoidance plan should include measures that are effective, specific, enforceable, and feasible to avoid impacts to western Joshua trees. The City/qualified botanist may consult with CDFW to review an avoidance plan. An avoidance plan

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should be fully developed prior to implementing Project related ground disturbing activities that includes site preparation, equipment staging, and mobilization.

CDFW recommends fully avoiding impacts to western Joshua trees during and after the Project. A no less than 50-foot buffer should be established around each tree. Buffers should be of adequate size to protect a tree's seed bank, pollinator (yucca moth), and entire root system during Project implementation. The buffer should be of adequate size to accommodate the spread of roots laterally in perpetuity.

Mitigation Measure #3: If "take" or adverse impacts to western Joshua trees cannot be avoided during Project activities or over the life of the Project, the City must consult CDFW to determine if a CESA Incidental Take Permit (ITP) is required (pursuant to Fish & Game Code, § 2080 *et seq.*). Appropriate authorization from CDFW may include an ITP among other options [Fish & G. Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA ITP.

Comment #2: Impacts to Crotch's bumble bee (*Bombus crotchii*)

Issue: A review of CNDDDB shows one occurrence of Crotch's bumble bee, a CESA-listed candidate species, containing the Project site.

Specific impact: The Project proposes to develop 20 acres of land that may provide habitat for the Crotch's bumble bee. Permanent loss of colonies, and suitable nesting and foraging habitat may result. The Project may eliminate native vegetation that may support essential foraging habitat. Project ground disturbing activities such as grading, excavation, and soil compaction may impact bee colonies in adjacent areas, causing the death or injury of adults, eggs, and larvae, burrow collapse, nest abandonment, and reduced nest success.

Why impacts would occur: Crotch's bumble bee has been documented to occur within the vicinity of the Project area. Suitable Crotch's bumble bee habitat includes areas of grasslands and scrub that contain requisite habitat elements, such as small mammal burrows. Crotch's bumble bee primarily nest in late February through late October underground in abandoned small mammal burrows, but may also nest under perennial bunch grasses or thatched annual grasses, under-brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2018). Overwintering sites utilized by Crotch's bumble bee mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Development of the Project site may result in permanent loss of colonies, and suitable nesting and foraging habitat. Ground disturbance and vegetation removal associated with Project implementation during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas adjacent to the Project site.

Evidence impact would be significant: On June 12, 2019, the California Fish and Game Commission accepted a petition to list the Crotch's bumble bee as endangered under CESA, determining the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process. The Project's potential to substantially reduce and adversely modify habitat for Crotch's bumble bee, reduce and potentially seriously impair the viability of populations of Crotch's bumble bee, and reduce the number and range of the species while

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taking into account the likelihood that special status species on adjacent and nearby natural lands rely upon the habitat that occurs on the proposed Project site.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Due to suitable habitat within the Project site, within one year prior to vegetation removal and/or grading, a qualified entomologist familiar with the species behavior and life history should conduct surveys to determine the presence/absence of Crotch's bumble bee. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Survey results including negative findings should be submitted to CDFW prior to implementing Project related ground disturbing activities.

Mitigation Measure #2: If "take" or adverse impacts to Crotch's bumble bee cannot be avoided either during Project activities or over the life of the Project, the City must consult CDFW to determine if a CESA Incidental Take Permit is required (pursuant to Fish & Game Code, § 2080 *et seq.*).

Comment #3: Impacts to Swainson's Hawk (*Buteo swainsoni*)

Issue: A review of CNDDDB shows observations of Swainson's hawk, a CESA-listed threatened species, within an approximate 5-mile radius of the Project site. Swainson's hawks are also regularly observed foraging throughout the Lancaster and Palmdale area.

Specific Impacts: The Project site provides habitat for small prey mammals such as the California ground squirrel (*Citellus beecheyi*); pocket gophers (*Thomomys bottae*); desert cottontail (*Sylvilagus auduboni*); and black-tailed jackrabbit (*Lepus californicus*). The Project will likely result in the loss of foraging habitat for Swainson's hawk.

Why impacts would occur: The Project proposes to develop 20 acres of land that may provide essential foraging habitat for Swainson's hawk.

Evidence impacts would be significant: Consistent with CEQA Guidelines, section 15380, the status of Swainson's hawk as a threatened species under CESA qualifies it as an endangered, rare, or threatened species under CEQA. The estimated historical population of Swainson's hawk was nearly 17,000 pairs; however, in the late 20th century, Bloom (1980) estimated a population of only 375 pairs. The decline was primarily a result of habitat loss from development (CDFW 2016). The most recent survey conducted in 2009 estimated the population at 941 breeding pairs. The species is currently threatened by loss of nesting and foraging habitat (e.g., from agricultural shifts to less crops that provide less suitable habitat); urban development; environmental contaminants (e.g., pesticides); and climate change (CDFW 2016). CDFW considers a Swainson's hawk nest site to be active if it was used at least once within the past five years and impacts to suitable habitat or individual birds within a five-mile radius of an active nest as significant. Based on the foregoing, Project impacts would potentially reduce the number and/or restrict the range of the Swainson's hawk or contribute to the abandonment of an active nest and/or loss of significant foraging habitat for a given nest territory. This would result in "take" as defined under CEQA.

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Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW released guidance for this species entitled [Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California](#) (CDFW 2010).

CDFW recommends conducting focused surveys for Swainson's hawk following the 2010 guidance prior to implementing Project related ground disturbing activities. If Swainson's hawk is detected, CDFW recommends the City/biologist notify CDFW to determine the appropriate course of action.

Mitigation Measure #2: If "take" or adverse impacts to Swainson's hawk cannot be avoided either during Project activities or over the life of the Project, a CESA ITP would be required (pursuant to Fish & Game Code, § 2080 *et seq.*).

Mitigation Measure #3: Permanent impacts to foraging habitat for Swainson's hawk should be offset by setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity [see Comment #4 (Impacts to Burrowing Owl), Mitigation Measure #5].

Comment #4: Impacts to Burrowing Owl (*Athene cunicularia*)

Issue #1: Page 10 of the Biological Report states, "No burrowing owls were observed within the study area." Page 10 also states, "Potential future burrowing owl cover sites were present within the study area." The Biological Report states a burrowing owl survey was performed consistent with established protocols. However, one field survey on July 29, 2019 is not consistent with established protocol to conclude presence/absence of a California Species of Special Concern (SSC).

Issue #2: The Project proposes pre-construction surveys as mitigation for potential impacts to the burrowing owl.

Specific Impacts: The Project may result in direct and indirect burrowing owl mortality or injury; the disruption of natural burrowing owl breeding behavior; and permanent loss of potential breeding, wintering, and foraging habitat for the species. Project impacts would contribute to statewide population declines for burrowing owl. Within the Antelope Valley, the species persists in low densities and continues to experience significant direct and cumulative habitat loss.

Why impacts would occur: Burrowing owls are known to regularly occur throughout the Palmdale and Lancaster area. The Biological Report concluded that burrowing owl habitat is present in the Project site but not burrowing owls. Burrowing owls have been known to use highly degraded and marginal habitat where existing burrows or stem pipes are available. Nest and roost burrows of the burrowing owl are most commonly dug by ground squirrels, but they have also been known to use a variety of other species dens or holes, including coyote (Gervais et al. 2008). Per established survey protocol, the presence of burrows that could support burrowing owls requires breeding season surveys. Protocol for breeding season surveys require at least four surveys between February 15 to July 15. The Biological Report concluded that burrowing owls are absent from the site after one survey on July 29, 2019. Moreover, the field survey may not have search in areas within 150 meters (approximately 500 ft.) of the project impact zone. Project construction and activities following a false-negative conclusion may lead to burrowing owl mortality or injury. Impacts to burrowing owl could result from vegetation

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clearing and other ground disturbing activities. Project disturbance activities may result in crushing or filling of active owl burrows, causing the death or injury of adults, eggs, and young. In addition, the Project may permanently remove potential burrowing owl foraging habitat by eliminating native vegetation that supports essential rodent, insect, and reptile that are prey for burrowing owl. Rodent control activities could result in direct and secondary poisoning of burrowing owl ingesting treated rodents.

Evidence impacts would be significant: Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86 and prohibited by sections 3503, 3503.5, and 3513. Take is defined in Fish and Game Code section 86 as “hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill.” Without appropriate take avoidance surveys prior to Project operations including, but not limited to, ground and vegetation disturbing activities and rodent control activities, adverse impacts to burrowing owl may occur because species presence/absence has not been verified. In addition, burrowing owl qualifies for enhanced consideration afforded to species under CEQA, which can be shown to meet the criteria for listing as endangered, rare, or threatened [CEQA Guidelines, § 15380(d)].

Relying on future surveys is considered deferred mitigation under CEQA. Insufficient survey efforts for burrowing owl may conclude false negative results, which would not require avoidance and mitigation measure implementation. Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative 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 CDFW or United States Fish and Wildlife Service (USFWS).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends a protocol-level survey for burrowing owls adhering to survey methods described in CDFW’s March 7, 2012, [Staff Report on Burrowing Owl Mitigation](#) (CDFW 2012). All survey efforts should be conducted by a qualified biologist prior to any project activities that could result in habitat disturbance to soil, vegetation, or other sheltering habitat for burrowing owl. Survey protocol for breeding season owl surveys states to conduct four survey visits: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June. CDFW recommends the City/qualified biologist prepare a survey report summarizing methods and results. Survey results including negative findings, should be submitted to CDFW prior to implementing Project related ground disturbing activities.

Mitigation Measure #2: If necessary, the survey report should provide a burrowing owl mitigation plan described in the *Staff Report on Burrowing Owl Mitigation*. The objective should be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. The plan should provide measures to fully avoid (see Mitigation Measure #3) and/or mitigate for permanent impacts (see Mitigation Measure #4, #5).

Mitigation Measure #3: CDFW recommends fully avoiding impacts to burrowing owl and habitat according to the *Staff Report on Burrowing Owl Mitigation*. CDFW recommends that the City/qualified biologist submit an avoidance plan to CDFW for review and comment. A final avoidance plan should be fully developed prior to implementing Project related ground disturbing activities.

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Mitigation Measure #4: If the Project will have permanent impacts to burrowing owl and habitat, either during Project activities or over the life of the Project, CDFW recommends participation in a mitigation bank. CDFW recommends that mitigation occur at a state-approved bank. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to implementing Project related ground disturbing activities.

Mitigation Measure #5: If credits at a state-approved mitigation bank are not available for mitigating impacts to burrowing owls and habitat, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012), which amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A burrowing owl mitigation plan should include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include, but are not limited to, restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project related ground disturbing activities.

Mitigation Measure #6: Rodenticides that could result in direct or secondary poisoning to burrowing owl should be avoided for the duration of the Project and after the Project is complete in perpetuity.

Comment #5: Impacts to Alkali Mariposa Lily (*Calochortus striatus*)

Issue #1: Page 6 of the Biological Report states, "An alkali mariposa lily seed pod was observed within the western portion of the study site." Field surveys were conducted on January 21, 2019 and July 29, 2019. CDFW is concerned that the field surveys may have resulted in missed detections of alkali mariposa lily.

Issue #2: The Initial Study and Biological Report does not disclose how many plants and habitat acres will be impacted.

Issue #3: CDFW is concerned that the City has not proposed adequate measures to fully avoid or mitigate for impacts to alkali mariposa lily. Mitigation Measure 4 on Page 20 of the Initial Study states, "The applicant shall pay \$2,405 per acre for those portions of the project site determined to either contain alkali mariposa lilies or provide suitable habitat." It is unclear how the City determined the amount of mitigation payment would sufficiently offset Project impacts to alkali mariposa lilies and habitat. It is also unclear how the fees will be used and how acquisition of "habitat typical of the habitat in the Antelope Valley" would sufficiently offset Project impacts specifically to alkali mariposa lilies and habitat.

Specific Impacts: Potential loss of a substantial population of alkali mariposa lily. This may result in a population decline of the species, or local extirpation of a sensitive or special status plant without appropriate mitigation.

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Why impacts would occur:

Extirpation from Project site: The extent of impacts to alkali mariposa lily may be more substantial than what the Biological Report may suggest. The Project site may support more than one plant, especially given the presence of suitable habitat - clay pans - in the western portion of the Project site. Botanical surveys were conducted outside the bloom period for alkali mariposa lily (typically April to June) and would not have maximize detection of alkali mariposa lily. A single survey in spring may not accurately capture rare population distribution and abundance because plants typically emerge at different times throughout its bloom period. Therefore, the Biological Report may have underreported the abundance, distribution, and density of alkali mariposa lilies. Moreover, a large population of alkali mariposa lily may exist via underground bulbs than what could be detected via above-ground plant surveys (Miller et al. 2004). The Project may develop over a substantial population of alkali mariposa lily and result in permanent loss of a propagule source. The proposed Project may result in extirpation of alkali mariposa lily from the Project site.

Extirpation: Extirpation of alkali mariposa lily from neighboring parcels or from the City of Lancaster may result because of cumulative impacts from development. According to CDFW's [California Natural Diversity Database](#) (CNDDDB), there are 106 documented extant occurrences of alkali mariposa lily dated 1960 to present (CDFW 2020c). Many of these occurrences are located at the Kern/Los Angeles County border. Of these 106 occurrences, nine occur within the City of Lancaster and seven are threatened by development or have already been developed. Additional undocumented/unreported populations of alkali mariposa lily, such as the one at this Project site, may be threatened by development. Collectively, this Project and other proposed projects in the City of Lancaster could result in the extirpation of the species from within the City boundary. Decline in the species' abundance, range, and distribution in the State may also occur.

Mitigation: The Project proposes compensatory mitigation for impacts to alkali mariposa lily and habitat. Typical compensatory mitigation includes the purchase of land consisting of suitable habitat and/or individuals of the impacted species. CDFW is concerned a relatively low financial commitment of \$2,405 per acre would not provide enough funding for preservation, enhancement, restoration, or other mitigation activities to offset impacts to alkali mariposa lily. Moreover, it is unclear how the payment would be allocated in order to reduce impacts to alkali mariposa lily and habitat to less than significant [see Comment #10 (Mitigation Payment and Partnership)].

Evidence impacts would be significant: Alkali mariposa lily has a California Rare Plant Rank (CRPR) of 1B.2. Plants with a CRPR of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. All plants constituting CRPR 1A, 1B, 2A, and 2B meet the definitions of CESA and are eligible for State listing (CNPS 2020a). Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of rare or endangered (CEQA Guidelines, § 15380). California Native Plant Society's (CNPS) [Rare Plant Ranks](#) page includes additional rank definitions (CNPS 2020a). Impacts to special status plants should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to special status plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any

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species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends two additional season-appropriate, focused rare plant surveys to occur between April and June to sufficiently document the abundance and distribution of alkali mariposa lily and other rare plants that may be present. CDFW recommends the survey be performed by a qualified botanist with appropriate experience and knowledge of southern California flora; and, performed in accordance with CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). Surveys should be completed prior to implementing Project related ground disturbing activities.

Mitigation Measure #2: CDFW recommends the City/qualified botanist prepare a report summarizing survey methods and results. A final report should be submitted to CDFW prior to implementing Project related ground disturbing activities. The survey report should provide the following information:

- a) A description and map of the survey area. CDFW recommends the map show surveyor(s) track lines to document that the entire site was covered during field surveys.
- b) Field survey conditions that should include name(s) of qualified botanist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched. The botanist should search for alkali mariposa lily and additional rare plant species that could be present but not previously detected. This should include Parry's spineflower (*Chorizanthe parryi* var. *parryi*) and Lancaster milkvetch (*Astragalus preussii* var. *laxiflorus*).
- c) Map and quantify the total area of suitable rare plant habitat by species.
- d) Map(s) showing the location of individual plants or populations by species, and number of plants or density of plants per square feet occurring at each location. Use appropriate symbology, text boxes, and other map elements to show and distinguish between species found and which plants/populations will be avoided versus impacted by Project construction and activities that would require mitigation.
- e) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each rare plant or population is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).

Mitigation Measure #3: CDFW recommends fully avoiding impacts to alkali mariposa lilies and habitat. CDFW recommends the City develop a robust avoidance plan in consultation with a qualified botanist. Avoidance measures should be effective, specific, enforceable, and feasible actions. CDFW recommends that the City submit an avoidance plan to CDFW for review and

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comment. A final avoidance plan should be fully developed prior to implementing Project related ground disturbing activities.

At a minimum, CDFW recommends establish robust and enforceable protected areas or exclusion zones. An adequate protected area should be established around rare plants and habitat. The perimeter of all protected areas should be adequately demarcated with temporary fencing. Project construction and activities; equipment and material staging; vegetation clearing; equipment refueling; and worker entry should not occur in the protected area. Fencing should be installed in a manner that is not harmful to wildlife. Fences should not have any slack that may cause wildlife entanglement. Prohibited fencing materials include, but are not limited to, spikes, glass, razor, or barbed wire. Signage should be posted near the fencing to inform workers of the sensitivity of the protected areas. The City of Lancaster should be responsible for ensuring all perimeter controls are in place prior to commencing any construction, including all equipment staging and import of material. The protection measures should be in place at the end of each working day and for the duration of the Project and maintained for the duration of the Project.

Mitigation Measure #4: If the Project cannot feasibly avoid impacts to alkali mariposa lily and habitat, either during Project activities or over the life of the Project, CDFW recommends the City compensate for the loss of individual plants and associated habitat acres at a ratio of no less than 10:1. CDFW recommends 10:1 based on the rarity of alkali mariposa lily and risk of extirpation. CDFW recommends that mitigation occur at a state-approved mitigation bank or via an entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012), which amended Government Code sections 65965-65968. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to implementing Project related ground disturbing activities.

Mitigation Measure #5: If credits at a State-approved mitigation bank are not available for mitigating impacts to alkali mariposa lily, CDFW recommends off-site mitigation at no less than 10:1. CDFW recommends the City work with a qualified botanist to prepare an ecosystem-based Habitat Mitigation and Monitoring Plan. A plan should provide the following information describing mitigation for impacts to rare plants:

- a) A map and table showing location of impacts; number of plants impacted by species; acres of habitat impacted; and mitigation ratio applied.
- b) Provide species-specific measures for off-site mitigation. The plan should provide sufficient detail and resolution to describe the following at a minimum: 1) identify the impact and level of impact (e.g., acres or individual plants/habitat impacted); 2) mitigation ratio for impacts to number of plants and acres of habitat; 3) location of off-site mitigation and adequacy of the location(s) to serve as mitigation; 4) assessment of appropriate reference sites; 5) scientific [Genus and species (subspecies/variety if applicable)] of plants being used for restoration; 6) location(s) of propagule source; 7) species-specific planting methods (i.e., container or bulbs); 8) measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover); 9) long-term monitoring, and; 10) adaptive management techniques. CDFW defines success as long-term, self-sustaining population with a positive overall population trend, demonstrated fertile seed set, and demonstrated recruitment.

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- c) The Habitat Mitigation and Monitoring Plan should protect the targeted habitat values from direct and indirect negative impacts in perpetuity. Issues that should be addressed include, but are not limited to, restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion.

An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands. Areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968). A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to implementing Project related ground disturbing activities.

Mitigation Measure #6: CDFW recommends the City/qualified botanist prepare an alkali mariposa lily/rare plant mitigation plan. The objective of mitigation is to offset the Project-induced qualitative and quantitative losses of alkali mariposa lily and habitat. There should be no net loss of alkali mariposa lily and habitat. The plan should provide measures to fully avoid (see Mitigation Measure #3) and/or mitigate for permanent impacts (see Mitigation Measure #4, #5).

Comment #6: Impacts to Sensitive Vegetation Communities

Issue: Vegetation communities were not mapped. The Biological Report/Initial Study only states “the project site is characterized by heavily impacted saltbush scrub habitat.”

Specific impacts: The Project will result in loss of 20 acres of native plants, habitat, and vegetation communities that support sensitive or special status plants (e.g., alkali mariposa lily) and wildlife (e.g., burrowing owl, Swainson’s hawk, and legless lizard). Potential loss of a sensitive vegetation community not previously known or identified in the Project site may occur.

Why impacts would occur: Project implementation includes grading, vegetation clearing, road construction, housing construction, and other activities. This may result in permanent loss and potentially decline or local extirpation of a sensitive plant community.

Evidence impacts would be significant: CDFW considers plant communities, alliances, and associations with a statewide ranking of S1, S2, S3 and S4 as sensitive and declining at the local and regional level (Sawyer et al. 2008). An S3 ranking indicates there are 21 to 80 occurrences of this community in existence in California, S2 has 6 to 20 occurrences, and S1 has less than 6 occurrences. Impacts to sensitive vegetation communities should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative 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 CDFW or USFWS.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends mapping vegetation communities. Surveys should be conducted by a qualified botanist with appropriate experience and knowledge of southern

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California flora. Surveys should follow CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). Surveys should be completed prior to implementing Project related ground disturbing activities.

Mitigation Measure #2: CDFW recommends fully avoiding impacts to sensitive vegetation communities. See Comment #5 (Impacts to Alkali Mariposa Lily), Mitigation Measure #3.

Mitigation Measure #3: If the Project cannot feasibly avoid impacts to sensitive vegetation communities, either during Project activities or over the life of the Project, the City shall mitigate for impacts at no less than 5:1 for impacts to S3 ranked communities and 7:1 for S2 communities [see Comment #5 (Impacts to Alkali Mariposa Lily), Mitigation Measure #4, #5].

Mitigation Measure #4: If sensitive vegetation communities are identified, CDFW recommends the City/qualified biologist prepare a sensitive vegetation community mitigation plan. The plan should provide measures to fully avoid (see Mitigation Measure #2) and/or mitigate for permanent impacts (see Mitigation Measure #3). A plan may be combined with an alkali mariposa lily/rare plant mitigation plan [see Comment #5 (Impacts to Alkali Mariposa Lily)].

Recommendation: In 2007, the State Legislature required CDFW to develop and maintain a vegetation mapping standard for the state (Fish & G. Code, § 1940). This standard complies with the National Vegetation Classification System, which utilizes alliance and association-based classification of unique vegetation stands. CDFW utilizes vegetation descriptions found in the [Manual of California Vegetation](#) (MCV) (CNPS 2020; Sawyer et al. 2008). To determine the rarity ranking of vegetation communities on the Project site, the MCV alliance/association community names should be provided as CDFW only tracks rare natural communities using this classification system. This would allow CDFW to appropriately comment on potential impacts to sensitive plants and vegetation communities.

Comment #7: Lake Streambed Alteration (LSA) Agreement

Issue #1: Page 20 of the Initial Study states “two drainage channels have been created on the project site through runoff from the housing tract to the east. These drainage channels contain vegetation and on occasion, standing water.”

Issue #2: Clay pans are present in the western portion of the Project site. A review of CNDDDB also indicates that there are numerous records of alkali mariposa lily found on parcels adjacent to the Project site. Thus, the existence of claypans in the Antelope Valley is indicative of natural water flow in the region.

Specific Impacts: The Project may remove or otherwise alter two drainage channels. The Project may also impact watershed function.

Why impacts would occur: The Project may impact surface and subsurface water flow beyond the two drainage channels identified in the Biological Report/Initial Study. The Project may divert two surface drainage channels to subsurface flow or otherwise alter the existing stream pattern of the Project site. Alkali mariposa lilies were found on the western portion of the Project site. Alkali mariposa lily is hydrophytic vegetation that is typically sustained by an ephemeral source of water. Thus, the presence of alkali mariposa lily and clay pans, and the characteristic cracked surface of clay pans, is indicative of a streambed as determined by CDFW. “Soft clay pans may

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indicate potential water flow below and above the surface. These areas indicate that a large quantity of water flows through and pools within the area” (LADPW 2013). The Project would develop over clay pans thus impact surface and subsurface water flow.

Evidence impacts would be significant: The Project may substantially adversely affect the existing stream pattern of the Project site through the alteration or diversion of water, which absent specific mitigation, could result in substantial erosion or siltation on site or off site of the Project.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW has concluded that the Project may result in the alteration of streams. For any such activities, the Project applicant (or “entity”) must provide notification to CDFW pursuant to Fish and Game Code, section 1600 *et seq.* Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration Agreement (LSAA) with the applicant is required prior to conducting the proposed activities. Please visit CDFW’s [Lake and Streambed Alteration Program](#) webpage to for information about LSAA notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2020d).

CDFW’s issuance of an LSAA for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the City of Glendale for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA.

Any LSAA permit issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project site. The LSAA may include further erosion and pollution control measures. To compensate for any on-site and off-site impacts to aquatic resources, additional mitigation conditioned in any LSAA may include the following: avoidance of resources, on-site or off-site creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.

Recommendation #1: As part of the LSAA Notification process, CDFW requests a map showing features potentially subject to CDFW’s broad regulatory authority over streams. CDFW also requests a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions.

Recommendation #2: CDFW recommends that this Project and similar development projects (see Comment #10, Table 1) use permeable pavement to permit natural water filtration and percolation into the Antelope Valley Groundwater Basin. CDFW also recommends using native plants for landscaping to reduce water consumption and application of pesticides and herbicides that may seep into the groundwater table (see Additional Recommendation #3). Pesticides and herbicides may be transported via runoff into adjacent intermittent or ephemeral streams.

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Comment #8: Impacts to Northern California legless lizard (*Anniella pulchra*)

Issue: A review of CNDDDB shows one occurrences of the northern California legless lizard (legless lizard), a SSC, within 1.5 miles of the Project site.

Specific Impacts: The Project may result in direct mortality, population declines, or local extirpation of a Species of Special Concern. The Project may result in habitat destruction and eliminate essential foraging and breeding habitat.

Why impact would occur: Project ground disturbing activities such as grading, and vegetation clearing may cause the death or injury of adults, juveniles, eggs, or hatchlings. The Project may result in habitat destruction and eliminate essential foraging and breeding habitat.

Evidence impact would be significant: CEQA provides protection not only for CESA- and federal Endangered Special Act-listed species, but for any species including but not limited to SSC. CDFW considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Due to potentially suitable habitat within the Project site, prior to implementing Project related ground disturbing activities, CDFW recommends a qualified biologist familiar with northern California legless lizards conduct specialized surveys to determine the presence/absence the reptile. Surveys should be conducted during active season when the reptiles are most likely to be detected, between March 1 to October 31 (Thomson et al. 2016).

Mitigation Measure #2: If northern California legless lizards are detected, or there is evidence to suggest legless lizards are present, CDFW recommends a qualified biologist prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. The list (or plan) of protocols should be implemented during project construction and activities/biological construction monitoring. The City/qualified biologist may consult with CDFW to prepare species-specific protocols for proper handling and relocation procedures.

Mitigation Measure #3: CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's [Scientific Collection Permits](#) webpage for information (CDFW 2020e).

Pursuant to the [California Code of Regulations, title 14, section 650](#), the City of Lancaster/qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. The Lake and Streambed Alteration Agreement may provide similar take or

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possession of species as described in the conditions of the agreement (see Comment #7 Impacts to Aquatic Resources).

Comment #9: Impacts to Nesting Birds

Issue: Page 10 of the Biological Report states, “Migratory birds may potentially nest in the vegetation within the study site.” CDFW is concerned that the Project’s proposed mitigation measure does not fully avoid or mitigation for impacts to nesting birds.

Specific impact: Project construction and related activities may result in increased nesting mortality due to nest abandonment or decreased feeding frequency. The Project may result in temporal or permanent loss of bird nesting habitat.

Why impacts would occur: Construction during the breeding season for nesting birds could result in the loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Impacts could result from noise disturbances, increased human activity, dust, ground disturbing activities (e.g., staging, access, excavation, and grading), and vibrations caused by heavy equipment. The Project as proposed would clear vegetation that could provide bird nesting habitat (e.g., ground cover and shrubs). The temporal or permanent loss of vegetation may substantially impact birds that could return to the Project site year after year (Figueira et al. 2020; Haas 1998). Site fidelity exhibited across the avian taxa reflects the benefits associated with previous knowledge of a particular location, likely improving territory acquisition, foraging efficiency, potential breeding partners, and predator avoidance (Figueira et al. 2020).

Evidence impacts would be significant: Nests of all birds and raptors are protected under State laws and regulations, including Fish and Game Code, sections 3503 and 3503.5. Take or possession of migratory nongame birds designated in the Federal Migratory Bird Treaty Act of 1918 (Code of Federal Regulations, Title 50, § 10.13) is prohibited under Fish and Game Code section 3513. The loss of occupied habitat or reductions in the number of sensitive and special status bird species, either directly or indirectly through nest abandonment or reproductive suppression, would constitute a significant impact absent appropriate mitigation.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW recommends modifying Mitigation Measure 3 in the Initial Study to fully avoid impacts to nesting birds by conditioning the environmental document to provide the following language: “Project construction, equipment staging, mobilization, grading, ground disturbance activities, and vegetation removal shall be completed outside the avian breeding season. The City of Lancaster/Royal Investors Group, LLC shall not perform any Project construction or activities or remove or otherwise disturb vegetation on the project site, or adjacent to the site, from February 15 to August 31, and as early as January 1, to avoid impacts to breeding/nesting birds and raptors.”

Mitigation Measure #2: If avoidance is not feasible, a qualified biologist should complete a survey for nesting bird activity within a 500-foot radius of the Project footprint. Surveys should begin no more than 14 days prior to the start of Project ground disturbing activities and should be repeated for the duration of Project activities that occur during the bird nesting season. Nesting bird surveys should be conducted at appropriate nesting times and concentrate on potential roosting or perch sites. If Project activities are delayed or suspended for more than 7

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days during the breeding season, surveys should be repeated before work can resume.

Mitigation Measure #3: If nesting birds or raptors are identified, a qualified biologist should determine the nesting status and set up species-appropriate no-work buffers. CDFW recommends the following minimum no-disturbance buffers be implemented: 300 feet around active passerine (perching birds and songbirds) nests, 500 feet around active non-listed raptor nests and 0.5 mile around active CESA-listed bird nests. No Project activities should be allowed inside these buffers until the qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. These buffers should be increased if needed to protect the nesting birds. Buffers should be clearly delineated and marked around the active nest site as directed by the qualified biologist. Temporary fencing and signage should be maintained for the duration of the Project as determined by the qualified biologist. A qualified biologist should advise workers of the sensitivity of the buffered areas. Workers should be advised not to work, trespass, or engage in activities that would disturb nesting birds near or inside the buffer.

Mitigation Measure #4: It should be noted that the temporary exclusion of Project activities within nesting buffers during nesting season may not constitute effective mitigation for the purposes of offsetting Project impacts associated with loss of breeding and nesting habitat. Effective mitigation for impacts to nesting habitat for birds requires structurally (e.g., ground cover, subshrubs, shrubs, and trees) and species diverse vegetation as a part of habitat restoration.

Additional mitigation, separate from impacts to vegetation communities, would be necessary to compensate for the temporal or permanent loss of occupied nesting habitat within the Project site. CDFW recommends the qualified biologist/City consult with CDFW to determine proper mitigation for impacts to occupied habitat. Mitigation would be based on acreage of impact and vegetation composition. Depending on the status of the bird species impacted, replacement of habitat acres should increase with the occurrence a California Species of Special Concern. Replacement acres would further increase with the occurrence of a CESA-listed species.

Comment #10: Mitigation Payment and Partnership

Issue #1: Mitigation Measure 'e' on page 21 of the Initial Study states, "The proposed project would be subject to the requirements of Ordinance No. 848, Biological Impact Fee, which requires the payment of \$770/acre to offset the cumulative loss of biological resources in the Antelope Valley as a result of development. Therefore, no impacts would occur."

Issue #2: Mitigation Measure 4 on Page 20 of the Initial Study states, "The applicant shall pay \$2,405 per acre for those portions of the project site determined to either contain alkali mariposa lilies or provide suitable habitat" [see Comment #5 (Impacts to Alkali Mariposa Lily)].

Specific impacts: The Project has the potential to impact directly, or indirectly through habitat loss, sensitive, special status, threatened, and/or endangered plants, wildlife, and vegetation communities. The Project has the potential to impact streams. See Comments #1 through #9. It is unclear how proposed payments would be sufficient to offset impacts associated with the Project. Moreover, cumulative impacts on biological resources may occur from development.

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Why impacts would occur: Typical compensatory mitigation includes the purchase of land consisting of suitable habitat and/or individuals of the impacted species. CDFW is concerned that a payment of \$2,405/acre and \$770/acre would not provide enough funding for preservation, enhancement, restoration, or other mitigation activities to offset impacts to sensitive species and habitats. Based on a cursory search of real estate listings, land with similar vegetation composition and habitat cost significantly more than the fees being accepted to offset impacts. A 1.1-acre lot at 44724 45th Street West is listed for \$80,000 (Zillow 2020a); 2-acre lot at the intersection of Avenue J West and 32nd for \$199,000 (Zillow 2020b); and a 4.8-acre lot between 70th Street West and 80th Street West is listed for \$138,000 (Zillow 2020c).

Table 1 – A list of development projects for the City of Lancaster.

Project	SCH #	Project site acres	Proposal	Location
Tentative Tract Map No. 82830 & 82831	2020040187	9.7	32 single-family residential lots	north of Avenue J, between 70 th Street West and 60 th Street West
Tentative Tract Map No. 74966	2019129073	17.5	67 single-family residential lots	West Avenue J and 40 th Street West
Tentative Tract Map No. 71210	2019109045	40.4	161 residential lots and 2 parks	between Avenue K and Avenue K-8 on the east side of 55 th Street West
Tentative Tract Map No. 70892	2019029062	29.4	154 single-family residential lots	West Avenue I and 40 th Street West
Tentative Tract Map No. 70180	2019029061	19.5	109 single-family residential lots	44 th Street West and Lancaster Boulevard
Tentative Tract Map No. 70181	2019029061	23.3	141 single-family residential lots	northwest corner of 40 th Street West and Lancaster Boulevard
Tentative Tract Map No. 70182	2019029061	28.1	139 single-family residential lots	bounded by Avenue I, 40 th Street West, Jackman Street, and 42 nd Street West

According to the [CEQAnet Web Portal](#), since January 1, 2019, the City has proposed similar development projects (Table 1) (CEQAnet 2020). A Mitigated Negative Declaration (MND) was submitted for each project. A review of each MND and associated Biological Report/Initial Study showed that these projects may impact alkali mariposa lily and clay pan habitat; burrowing owls, Swainson's hawk; northern legless lizards; Crotch's bumble bee; vegetation communities; and water resources. Implementation of projects listed on Table 1, including this Project, would develop approximately 188 acres. The environmental document for each project did not disclose how many individual rare plants or acres of habitat would be impacted. These projects, not considering those prior to 2019, would have a cumulative on biological resources. The City has consistently proposed a payment of \$2,405/acre for impacts to alkali mariposa lily and \$770/acre to offset the cumulative loss of biological resources. It is unclear how the mitigation payment would be allocated in order to reduce impacts to biological resources to less than significant.

Evidence impacts would be significant: Mitigation payment does not equate to mitigation if the funds are not being used. In addition, without disclosing how the mitigation funds are being used, the Project may not adequately reduce impacts to below a significant level. Without identifying when mitigation activities will be implemented, additional temporal impacts to biological resources would occur. Inadequate avoidance and mitigation measures will result in

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the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by CDFW or USFWS. This Project has the potential to substantially reduce the habitat of rare plants or wildlife; cause rare plants or wildlife population to drop below self-sustaining levels; threatened to eliminate a plant or animal community; and substantially reduce the number or restrict the range of an endangered, rare, or threatened species [CEQA Guidelines, § 15065(a)(1)]. Additionally, this Project has possible environmental effects that are cumulatively considerable [CEQA Guidelines, § 15065(a)(3)].

Recommended Potentially Feasible Mitigation Measure(s):

Recommendation #1: CDFW requests the City disclose in the environmental document how the required one-time mitigation payment of \$2,405/acre and \$770/acre payment was derived and would adequately mitigate for impacts to biological resources. Scientific data and case studies should be presented to demonstrate that the payment is sufficient. CDFW also requests the City provide information as to where the funds are deposited and how the funds are being used.

Recommendation #2: CDFW recommends the City consider the avoidance and mitigation measures described in Comments #1 through #9 for impacts to biological resources. A payment of \$2,405/acre and \$770/acre may not be sufficient to mitigate for impacts to biological resources to less than significant. Moreover, CDFW does not accept payment into an in-lieu fee program as a viable mitigation option for mitigating impacts to CESA-listed biological resources.

Recommendation #3: CDFW recommends that the City prepare an Environmental Impact Report (EIR) for this and similar projects. The Project may have a significant and cumulative effect on the environment and thereby require an EIR to be prepared (CEQA Guidelines, §§ 15065, 15073.5).

Recommendation #4: CDFW appreciates that the City of Lancaster welcomes our biological expertise during the CEQA review period. Moving forward, CDFW would like to request dialogue and partnership with the City of Lancaster to develop a coordinate, robust, and sustainable plan to mitigate for impacts to biological resources resulting from long-term development. The City may coordinate with CDFW to improve and update its mitigation program (Ordinance No. 848). The City may also coordinate with CDFW discuss the potential for a broad-based ecosystem approach to protect and perpetuate biological diversity. This may include a [Natural Community Conservation Plan](#) (CDFW 2020f) and/or [a Regional Conservation Investment Strategies Program](#) (CDFW 2020g).

Additional Recommendations

Recommendation #1 - Data: CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species detected by completing and submitting [CNDDB Field Survey Forms](#) (CDFW 2020h).

Recommendation #2 – Translocation/Salvage of Plants and Animal Species: CDFW does not consider transplanting or salvaging rare plants or wildlife within a development as

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appropriate mitigation. Translocation and transplantation are the process of moving an individual plant or animal from a project site and permanently moving it to a new location. CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy. Studies have shown that these efforts are experimental and the outcome unreliable (Godefroid et al. 2010; CNPS 1998). CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals and their habitats.

Recommendation #3 – Landscaping: CDFW concurs with using native plants to the maximum extent feasibly in the Project's landscape design. Habitat loss and invasive plants are a leading cause of native biodiversity loss. Invasive plant species spread quickly and can displace native plants, prevent native plant growth, and create monocultures. CDFW recommends that any landscaping performed after the Project use native plants. The City should not plant, seed, or otherwise introduce invasive exotic plant species that may threatened the persistence of native habitat areas and plants such as western Joshua tree. CDFW strongly recommends avoiding species with a High or Moderate rating by the California Invasive Plant council. Please see the [Cal-IPC Inventory](#) webpage (Cal-IPC 2020a).

CDFW recommends using native, locally appropriate plant species and drought tolerant, lawn grass alternatives to reduce water consumption. Information on alternatives for invasive, non-native, or landscaping plants may be found on the [California Invasive Plant Council's, Don't Plant a Pest](#) webpage (Cal-IPC 2020b). The [Audubon Society's Native Plants Database](#) is a resource to identify native plants and trees that will attract and benefit birds. Birds may help to control and reduce insects, reducing the need for pesticides (National Audubon Society 2020). The [California Native Plant Society's Gardening](#) and [Xerces Society's Pollinator-Friendly Native Plant Lists](#) webpage has information on native plant species that invite insects and pollinators (CNPS 2020b; Xerces Society 2020). Pollinators are critical components of our environment and essential to our food security. Insects – and primarily bees – provide the indispensable service of pollination to more than 85% of flowering plants (Ollerton et al. 2011).

Per CEQA Guidelines Section 21081.6(a)(1), CDFW has provided the City with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A). A final MMRP shall be informed by the outcome of additional plant and wildlife surveys and reflect the Project's final on and/or off-site mitigation plans.

Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the City of Lancaster and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying Project approval to be operative, vested, and final (Cal. Code Regs., tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

Conclusion

We appreciate the opportunity to comment on the Project to assist the City of Lancaster in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City of Lancaster has to our

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comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist, at Ruby.Kwan-Davis@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Erinn Wilson
Environmental Program Manager I

Ec: CDFW

Victoria Tang, Los Alamitos – Victoria.Tang@wildlife.ca.gov
Ruby Kwan-Davis, Los Alamitos – Ruby.Kwan-Davis@wildlife.ca.gov
Andrew Valand, Los Alamitos – Andrew.Valand@wildlife.ca.gov
Felicia Silva, Los Alamitos – Felicia.Silva@wildlife.ca.gov
Frederic Reiman, Los Alamitos – Frederic.Reiman@wildlife.ca.gov
Susan Howell, San Diego – Susan.Howell@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov
State Clearinghouse – state.clearinghouse@opr.ca.gov

References:

- Baker, H.G. 1986. Yuccas and Yucca Moths-A Historical Commentary. *Annals of the Missouri Botanical Garden* 73(3): 556-564.
- Bloom, P. H. 1980. The status of the Swainson's hawk in California, 1979. Bureau of Land Management, Sacramento, CA, USA.
- Bogler, D.J., Neff, J.L., and B.B. Simpson. 1995. Multiple origins of the yucca-yucca moth association. *Proc. Natl. Acad. Sci.* 92: 6864-6867.
- [CDFWa] California Department of Fish and Wildlife. 2020. Evaluation of a Petition from the Center for Biological Diversity to List Western Joshua Tree (*Yucca brevifolia*) as Threatened Under the California Endangered Species Act. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178625&inline>
- [CDFWb] California Department of Fish and Wildlife. 2020. California Fish and Game Commission Holds Meeting on Western Joshua Tree. Available from: <https://cdfgnews.wordpress.com/2020/09/22/california-fish-and-game-commission-holds-meeting-on-western-joshua-tree/>
- [CDFWc] California Department of Fish and Wildlife. 2020. California Natural Diversity Database. [accessed 2020 September 29]. Available from: <https://wildlife.ca.gov/Data/CNDDB>
- [CDFWd] California Department of Fish and Wildlife. 2020. Lake and Streambed Alteration Program. Available from: <https://wildlife.ca.gov/Conservation/LSA>.
- [CDFWe] California Department of Fish and Wildlife. 2020. Scientific Collecting Permit. Available from: <https://wildlife.ca.gov/Licensing/Scientific-Collecting#53949678>
- [CDFWf] California Department of Fish and Wildlife. 2020. Natural Community Conservation Planning (NCCP). Available from: <https://wildlife.ca.gov/conservation/planning/NCCP>

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- [CDFWg] California Department of Fish and Wildlife. 2020. Regional Conservation Investment Strategies Program. Available from: <https://wildlife.ca.gov/Conservation/Planning/Regional-Conservation>
- [CDFWh] California Department of Fish and Wildlife. 2020. Submitting Data to the CNDDDB. Available from: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>
- [CDFW] California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>
- [CDFW] California Department of Fish and Wildlife. 2016. Status review: Swainson's hawk (*Buteo swainsoni*) in California. Report to the California Fish and Game Commission, Sacramento, CA, USA.
- [CDFW] California Department of Fish and Wildlife. 2012. Staff Report on Burrowing Owl Mitigation. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843>
- [CDFW] California Department of Fish and Wildlife. 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991&inline>
- [CEQAnet] California Environmental Quality Act. CEQAnet Web Portal. Available from: <https://ceqanet.opr.ca.gov/>
- [Cal-IPCa] California Invasive Plant Council. 2020. The Cal-IPC Inventory. Available from: <https://www.cal-ipc.org/plants/inventory/>
- [Cal-IPCb] California Invasive Plant Council. 2020. Don't Plant a Pest. Alternatives to invasive horticultural plants. Available from: <https://www.cal-ipc.org/solutions/prevention/landscaping/dpp/>
- [CNPSa] California Native Plant Society. 2020. CNPS Rare Plant Ranks. Accessed at: <https://www.cnps.org/rare-plants/cnps-rare-plant-ranks>
- [CNPSb] California Native Plant Society. 2020. Gardening and Horticulture. Available from: <https://www.cnps.org/gardening>.
- [CNPS] California Native Plant Society. 1998. Statement Opposing Transplantation as Mitigation for Impacts to Rare Plants. Available from: <https://www.cnps.org/wp-content/uploads/2018/04/transplanting2.pdf>
- Center for Biological Diversity. 2019. A Petition to List the Western Joshua Tree (*Yucca brevifolia*) as Threatened under the California Endangered Species Act (CESA). Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=175218&inline>
- Figueria, L., Martins, P., Ralph, C.J., Stephens, J.L., Alexander, J.D., and Wolfe, J.D. Effects of breeding and molt activity on songbird site fidelity. *The Auk* 137:1-15.
- Gervais, J.A., Rosenberg, D.K., and L.A. Comrack. Burrowing Owl (*Athene cunicularia*). Shuford, W.D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Godefroid, S., et al. 2011. How successful are plant species reintroductions? *Biological Conservation* 144: 672-682.
- Goulson, D. 2010. Bumblebees: behavior, ecology, and conservation. Oxford University Press, New York. 317pp.
- Haas, C.A. 1998. Effects of Prior Nesting Success on Site Fidelity and Breeding Dispersal: An Experimental Approach. *The Auk* 115(4): 929-936.

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- Hatfield, R., Jepsen, S., Foltz Jordan, S., Blackburn, M., Code, Aimee. 2018. A Petition to the State of California Fish and Game Commission to List Four Species of Bumblebees as Endangered Species.
- Los Angeles Department of Public Works (LADPW). 2013. Antelope Valley Integrated Regional Water Management Plan – 2013 Update.
- Miller, M.T., Allen, G.A., Antos, J.A. 2004. Dormancy and flowering in two mariposa lilies (*Calochortus*) with contrasting distribution patterns. *Canadian Journal of Botany* 82(12): 1790-1799.
- National Audubon Society. 2020. Native Plants Database. Available from: <https://www.audubon.org/native-plants>
- Ollerton J., Winfree, R., and S. Tarrant. 2011. How many flowering plants are pollinated by animals. *Oikos* 120:321-326.
- Sawyer, J.O., Keeler-Wolf, T., and Evens J.M. 2008. A manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.
- Sirchia, F., Hoffmann, S., and J. Wilkening. 2018. Joshua Tree Species Status Assessment. United States Fish and Wildlife Service. Available from: https://www.researchgate.net/profile/Jennifer_Wilkening/publication/335600680_Joshua_Tree_Species_Status_Assessment/links/5d6f3f02299bf16522f32097/Joshua-Tree-Species-Status-Assessment.pdf
- St. Clair, S.B. and J. Hoines. 2018. Reproductive ecology and stand structure of Joshua tree forests across climate gradients of the Mojave Desert. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0193248>
- Thomson, R.C, Wright, A.N, and H.B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife. University of California Press. Oakland, CA.
- Thorp, Robbin W., Horning Jr, Donald S., and Dunning, Lorry L. 1983. Bumble Bees and Cuckoo Bumble Bees of California. *Bulletin of the California Insect Survey* 23.
- Waitman, B.A., Vander Wall, S.B., and T.C. Esque. 2010. Seed dispersal and seed fate in Joshua tree (*Yucca brevifolia*). *Journal of Arid Environments* 8: 1-8.
- Williams, P. H., R. W. Thorp, L. L. Richardson, and S.R. Colla. 2014. Bumble bees of North America: An Identification guide. Princeton University Press, Princeton, New Jersey. 208pp.
- [Xerces Society] Xerces Society for Invertebrate Conservation. 2020. Pollinator-Friendly Native Plant Lists. Available from: <https://xerces.org/pollinator-conservation/pollinator-friendly-plant-lists>
- [Zillowa] Zillow.com. 2020. 44724 45th St W, Lancaster, CA 93536. [Internet]. [cited 2020 September 30]. Available from: https://www.zillow.com/homedetails/44724-45th-St-W-Lancaster-CA-93536/2091618667_zpid/
- [Zillowb] Zillow.com. 2020. 0 Vac Corner Ave #J, Lancaster, CA 93536. [Internet]. [cited 2020 September 30]. Available from: https://www.zillow.com/homedetails/0-Vac-Corner-Ave-J-Lancaster-CA-93536/2078806222_zpid/
- [Zillowc] Zillow.com. 2020. 0 Vac/40th Stw/vic Ave #E14, Lancaster, CA 93536. [Internet]. [cited 2020 September 30]. Available from: https://www.zillow.com/homedetails/0-Vac-40th-Stw-vic-Ave-E14-Lancaster-CA-93536/2115898586_zpid/



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 South Coast Region
 3883 Ruffin Road
 San Diego, CA 92123
 (858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project.

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
MM-BIO-1- Impacts to Western Joshua Tree – survey and report	A qualified botanist knowledgeable of western Joshua tree ecology shall prepare a survey report of western Joshua trees located within the Project footprint. The qualified botanist should identify and map all western Joshua trees in the Project footprint. The report should provide measures to fully avoid and/or mitigate for permanent impacts to western Joshua trees on the Project site.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-2- Impacts to Western Joshua Tree – avoidance	Impacts to western Joshua trees shall be fully avoided during and after the Project. A no less than 50-foot buffer shall be established around each tree. Buffers shall be of adequate size to protect a tree's seed bank, pollinator (yucca moth), and entire root system during Project implementation. The buffer shall be of adequate size to accommodate the spread of roots laterally in perpetuity. The City of Lancaster shall develop a robust avoidance plan in consultation with a qualified botanist. The City of Lancaster/qualified botanist may consult with CDFW to prepare an avoidance plan. The City of Lancaster shall submit a plan to CDFW for review and comment. A final avoidance plan shall be fully developed prior to implementing Project related ground disturbing activities.	Prior to/During/ After Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-3- Impacts to Western Joshua Tree – permanent impacts	If "take" or adverse impacts to western Joshua trees cannot be avoided during Project activities or over the life of the Project, the City of Lancaster shall consult CDFW to determine if a CESA Incidental Take Permit is required.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC

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MM-BIO-4- Impacts to Crotch's Bumble Bee - permanent impacts	If "take" or adverse impacts to Crotch's bumble bee cannot be avoided either during Project activities or over the life of the Project, the City of Lancaster shall consult CDFW to determine if a CESA Incidental Take Permit is required.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-5- Impacts to Swainson's Hawk - survey	A qualified biologist shall conduct focused surveys for Swainson's hawk following Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California prior to implementing Project related ground disturbing activities. If Swainson's hawk is detected, the City/qualified biologist shall notify CDFW to determine the appropriate course of action.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-6- Impacts to Swainson's Hawk – permanent impacts	If "take" or adverse impacts to Swainson's hawk cannot be avoided either during Project activities or over the life of the Project a CESA Incidental Take Permit will be required.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-7- Impacts to Swainson's Hawk – permanent impacts	Permanent impacts to foraging habitat for Swainson's hawk shall be offset by setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity. See MM-BIO-12- Impacts to Burrowing Owl – permanent impacts.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-8- Impacts to Burrowing Owl – survey and report	A protocol-level survey for burrowing owls shall be performed adhering to survey methods described in CDFW's March 7, 2012, Staff Report on Burrowing Owl Mitigation . All survey efforts shall be performed by a qualified biologist prior to any project activities that could result in habitat disturbance to soil, vegetation, or other sheltering habitat for burrowing owl. A report shall be prepared summarizing survey methods and results. Survey results including	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC

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	negative findings, shall be submitted to CDFW prior to implementing Project related ground disturbing activities.		
MM-BIO-9- Impacts to Burrowing Owl – mitigation plan	If necessary, the report shall provide a burrowing owl mitigation plan described in the <i>Staff Report on Burrowing Owl Mitigation</i> . The objective shall be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. The plan shall provide measures to fully avoid and/or mitigate for permanent impacts.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-10- Impacts to Burrowing Owl – avoidance	Impacts to burrowing owl and habitat shall be fully avoided in accordance with the <i>Staff Report on Burrowing Owl Mitigation</i> . The City of Lancaster/qualified biologist shall submit an avoidance plan to CDFW for review and comment. A final avoidance plan shall be fully developed prior to implementing Project related ground disturbing activities.	Prior to/During/ After Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-11- Impacts to Burrowing Owl – permanent impacts	If impacts to burrowing owl and habitat cannot be avoided, either during Project activities or over the life of the Project, the City of Lancaster shall purchase credits at a mitigation bank. Mitigation shall occur at a state-approved bank or via an entity that has been approved to hold and manage mitigation lands. Mitigation bank credits shall be purchased, approved, or otherwise fully executed prior to implementing Project related ground disturbing activities.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-12- Impacts to Burrowing Owl – permanent impacts	If credits at a state-approved mitigation bank are not available for mitigating impacts to burrowing owls and habitat, the City of Lancaster shall set aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A burrowing owl mitigation plan shall include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to implementing Project related ground disturbing activities.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC

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MM-BIO-13- Impacts to Burrowing Owl – rodenticides	Rodenticides that could result in direct or secondary poisoning to burrowing owl shall be avoided for the duration of the Project and after the Project is complete in perpetuity.	During/After Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-14- Impacts to Alkali Mariposa Lily – survey	A qualified botanist with appropriate experience and knowledge of southern California flora shall perform two additional season-appropriate, focused rare plant surveys between April and June to sufficiently document the abundance and distribution of alkali mariposa lily and other rare plants that may be present. Surveys shall be performed in accordance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities . Surveys shall be completed prior to implementing Project related ground disturbing activities.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-15- Impacts to Alkali Mariposa Lily – report	<p>The City of Lancaster/qualified botanist shall prepare a report summarizing survey methods and results. A final report shall be submitted to CDFW prior to implementing Project related ground disturbing activities. The survey report shall provide the following information:</p> <ul style="list-style-type: none"> a) A description and map of the survey area. The map shall show surveyor(s) track lines to document that the entire site was covered during field surveys. b) Field survey conditions that shall include name(s) of qualified botanists(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched. The botanist shall search for alkali mariposa lily and additional rare plant species that could be present but not previously detect. This should include Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>) and Lancaster milkvetch (<i>Astragalus preussii</i> var. <i>laxiflorus</i>). c) Map and quantify the total area of suitable rare plant habitat by species. d) Map(s) showing the location of individual plants or 	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC

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	<p>populations by species, and number of plants or density of plants per square feet occurring at each location.</p> <p>e) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each rare plant or population is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).</p>		
MM-BIO-16- Impacts to Alkali Mariposa Lily – avoidance	<p>Impacts to alkali mariposa lilies and habitat shall be fully avoided. The City of Lancaster shall develop a robust avoidance plan in consultation with a qualified botanist. An avoidance plan shall be submitted to CDFW for review and comment. A final avoidance plan shall be fully developed prior to implementing Project related ground disturbing activities.</p>	Prior to/During/ After Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-17- Impacts to Alkali Mariposa Lily – permanent impacts	<p>If impacts to alkali mariposa lily and habitat cannot be avoided, either during Project activities or over the life of the Project, the City of Lancaster shall compensate for the loss of individual plants and associated habitat acres at a ratio of no less than 10:1. Mitigation shall occur at a state-approved mitigation bank or via an entity that has been approved to hold and manage mitigation lands. Mitigation bank credits shall be purchased, approved, or otherwise fully executed prior to implementing Project related ground disturbing activities.</p>	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-18- Impacts to Alkali Mariposa Lily – permanent impacts	<p>If credits at a state-approved mitigation bank are not available for mitigating impacts to alkali mariposa lily, mitigation shall occur off-site at no less than 10:1. The City of Lancaster in consultation with a qualified botanist shall prepare an ecosystem-based Habitat Mitigation and Monitoring Plan. A plan shall provide the following information describing mitigation for impacts to rare plants:</p> <p>a) A map and table showing location of impacts; number of plants impacted by species; acres of habitat impacted; and mitigation ratio applied.</p>	Prior to/After Project construction and activities	City of Lancaster/Royal Investors Group, LLC

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	<p>b) Species-specific measures for off-site mitigation. The plan shall provide sufficient detail and resolution to describe the following at a minimum: 1) identify the impact and level of impact (e.g., acres or individual plants/habitat impacted); 2) mitigation ratio for impacts to number of plants <u>and</u> acres of habitat; 3) location of off-site mitigation and adequacy of the location(s) to serve as mitigation; 4) assessment of appropriate reference sites; 5) scientific [Genus and species (subspecies/variety if applicable)] of plants being used for restoration; 6) location(s) of propagule source; 7) species-specific planting methods (i.e., container or bulbs); 8) measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover); 9) long-term monitoring, and; 10) adaptive management techniques.</p> <p>c) The Habitat Mitigation and Monitoring Plan shall protect the targeted habitat values from direct and indirect negative impacts in perpetuity. Issues that shall be addressed include, but are not limited to, restrictions on access; proposed land dedications; control of illegal dumping; water pollution; and increased human intrusion.</p> <p>An appropriate non-wasting endowment shall be set aside to provide for long-term management of mitigation lands. Areas proposed as mitigation shall have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to implementing Project related ground disturbing activities.</p>		
MM-BIO-19- Impacts to Alkali Mariposa Lily – mitigation plan	The City of Lancaster/qualified botanist shall prepare an alkali mariposa lily/rare plant mitigation plan. There shall be no net loss of alkali mariposa lily and habitat. The plan shall provide measures to fully avoid and/or mitigate for permanent impacts.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC

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MM-BIO-20- Impacts to Vegetation Communities – survey	A qualified botanist with appropriate experience and knowledge of southern California flora shall map vegetation communities. Surveys shall follow CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities . Surveys shall be completed prior to implementing Project related ground disturbing activities.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-21- Impacts to Vegetation Communities – avoidance	Impacts to sensitive vegetation communities shall be fully avoided. See MM-BIO-16- Impacts to Alkali Mariposa Lily – avoidance .	Prior to/During Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-22- Impacts to Vegetation Communities – permanent impacts	If impacts to sensitive vegetation communities cannot be avoided, either during Project activities or over the life of the Project, the City of Lancaster shall mitigate for impacts at no less than 5:1 for impacts to S3 ranked communities and 7:1 for S2 communities. See MM-BIO-17- Impacts to Alkali Mariposa Lily – permanent impacts and MM-BIO-18- Impacts to Alkali Mariposa Lily – permanent impacts .	Prior to/After Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-23- Impacts to Vegetation Communities – mitigation plan	If sensitive vegetation communities are identified, CDFW recommends the City of Lancaster/qualified biologist prepare a sensitive vegetation community mitigation plan. The plan shall provide measures to fully avoid and/or mitigate for permanent impacts.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-24- Impacts to Streams	The City shall provide notification to CDFW pursuant to Fish and Game Code, section 1600 <i>et seq</i> .	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-25- Impacts to Northern California Legless Lizard - survey	Prior to implementing Project related ground disturbing activities, a qualified biologist familiar with northern California legless lizards shall conduct specialized surveys to determine the presence/absence the reptile. Surveys shall be conducted during active season when the reptiles are most likely to be detected, between March 1 to October 31.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC

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MM-BIO-26- Impacts to Northern California Legless Lizard – relocation plan	If northern California legless lizards are detected, or there is evidence to suggest legless lizards are present, a qualified biologist shall prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. The list (or plan) of protocols shall be implemented during project construction and activities/biological construction monitoring. The City of Lancaster/qualified biologist may consult with CDFW to prepare species-specific protocols for proper handling and relocation procedures.	Prior to/During Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-27- Impacts to Northern California Legless Lizard – permit	The City of Lancaster/qualified biologist shall obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-28- Impacts to Nesting Birds	Project construction, equipment staging, mobilization, grading, ground disturbance activities, and vegetation removal shall be completed outside the avian breeding season. The City of Lancaster/Royal Investors Group, LLC shall not perform any Project construction or activities or remove or otherwise disturb vegetation on the project site, or adjacent to the site, from February 15 to August 31, and as early as January 1, to avoid impacts to breeding/nesting birds and raptors.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC
MM-BIO-29- Impacts to Nesting Birds	If avoidance is not feasible, a qualified biologist shall complete a survey for nesting bird activity within a 500-foot radius of the Project footprint. Surveys shall begin no more than 14 days prior to the start of Project ground disturbing activities and shall be repeated for the duration of Project activities that occur during the bird nesting season. Nesting bird surveys shall be conducted at appropriate nesting times and concentrate on potential roosting or perch sites. If Project activities are delayed or suspended for more than 7 days during the breeding season, surveys shall be repeated before work can resume.	Prior to Project construction and activities	City of Lancaster/Royal Investors Group, LLC

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MM-BIO-30- Impacts to Nesting Birds	<p>If nesting birds or raptors are identified, a qualified biologist shall determine the nesting status and set up species-appropriate no-work buffers. The following minimum no-disturbance buffers shall be implemented: 300 feet around active passerine (perching birds and songbirds) nests, 500 feet around active non-listed raptor nests, and 0.5 mile around active CESA-listed bird nests. No Project activities shall be allowed inside these buffers until the qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. These buffers shall be increased if needed to protect the nesting birds.</p> <p>Buffers shall be clearly delineated and marked around the active nest site as directed by the qualified biologist. Temporary fencing and signage shall be maintained for the duration of the Project as determined by the qualified biologist. A qualified biologist shall advise workers of the sensitivity of the buffered areas. Workers shall be advised not to work, trespass, or engage in activities that would disturb nesting birds near or inside the buffer.</p>	<p>Prior to/During Project construction and activities</p>	<p>City of Lancaster/Royal Investors Group, LLC</p>
MM-BIO-31- Impacts to Nesting Birds	<p>The City of Lancaster shall consult CDFW to determine proper mitigation for impacts to occupied habitat for nesting birds.</p>	<p>Prior to Project construction and activities</p>	<p>City of Lancaster/Royal Investors Group, LLC</p>