# DETERMINATION OF BIOLOGICALLY EQUIVALENT OR SUPERIOR PRESERVATION (DBESP) ANALYSIS

# FOR IMPACTS TO MSHCP RIPARIAN/RIVERINE AREAS

# RENAISSANCE RANCH DEVELOPMENT PROJECT (SP00333A01, GPA 200004, and CZ 2000016) LOCATED IN THE COUNTY OF RIVERSIDE, CALIFORNIA

APNs: Portions of APNs 393-300-026 AND 393-440-005

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# **1.0 EXECUTIVE SUMMARY**

This document provides an analysis in support of a Determination of Biologically Equivalent or Superior Preservation (DBESP) for the Renaissance Ranch Development Project Off Site Improvement Area [SP 00333A01, GPA 200004, and CZ 2000016] (the Off Site Improvement Project) located in Riverside County, California, in regard to the Multiple Species Habitat Conservation Plan (MSHCP) requirements for *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (MSHCP Volume I, Section 6.1.2)*.

This document has been prepared following the 2019 MSHCP DBESP Report Template and is consistent with the guidelines identified in *Volume I, Section 6.1.2* of the MSHCP document (Dudek 2003), to demonstrate that with the appropriate mitigation, the Project will represent a "biologically equivalent or superior alternative". This document analyzes onsite sensitive biological resources, including a summary of findings of general and focused biological surveys, and vegetation mapping. A more detailed reporting of biological resources, including results of species-specific focused surveys, are contained within the Project's Biological Technical Report [Glenn Lukos Associates Inc. (GLA), 2021].

This document describes compensatory mitigation for impacts to unvegetated riverine areas, which are expected to be considered equivalent or superior mitigation for the Project, as compared to avoidance of such resources on site.

This document also describes compensatory mitigation for impacts to the burrowing owl (*Athene cunicularia*), which is expected to be considered equivalent or superior mitigation for the Project, as compared to avoidance of such resources on site.

# 2.0 INTRODUCTION

# 2.1 Project Area

The Project site comprises approximately 157.11 acres in unincorporated Riverside County, California [Exhibit 1 – Regional Map] and is located within Section 17 of Township 5 South, Range 5 West, of the U.S. Geological Survey (USGS) 7.5" quadrangle map Alberhill (dated 1954 and photorevised in 1988) Exhibit 2 – Vicinity Map]. The Project site is bordered by Horsethief Canyon Road and residential development to the west, disturbed open space adjacent to Interstate Freeway 15 to the north, existing residential housing to the south, and disturbed lands and an isolated residential unit to the east [Exhibit 3 – Site Plan]. The Off Site Improvement Project documented in this report covers approximately 0.10 acre of land and is located within Section 17 of Township 5 South, Range 5 West, of the U.S. Geological Survey (USGS) 7.5" quadrangle map Alberhill (dated 1954 and photorevised in 1988) Exhibit 2A – Off Site Improvement Area Vicinity Map]. The Off Site Improvement Area Project site is bordered by the Renaissance Ranch Development Project to the north and west, Bolo Court to the east, and Hostettler Road to the south [Exhibit 3A – Aerial Map-Off Site Improvement Project]. County staff may access the Project site by exiting at Lake Street from the Interstate 15 Freeway and turning right. Continue on Lake Street until reaching Temescal Canyon Road and turn right and then continue on Temescal Canyon Road until reaching Hostettler Road. Turn left at Hostettler Road and follow it until reaching Bolo Court. Turn right at Bolo Court and the off site area is westerly of the road terminus.

For this report, the term *Off Site Improvement Project* is defined as the area of off site, permanent impacts equaling 0.10 acre [Exhibit 4 – Site Plan Map]. This report analyzes the combined impact area totaling 0.10 acre. The Off Site Improvement Project Site is composed of portions of Assessor's Parcel Numbers (APNs): 393-300-026 and 393-440-005. For this document, we have assumed that all direct impacts would be permanent.

# 2.2 <u>Project History</u>

Prior studies were performed for the Project site from 2003-2005 by both L&L Environmental, Inc. and GLA. Studies performed by L&L Environmental included:

- Habitat Assessment (November 2002),
- Site Assessment (March 2003),
- Oak Tree Survey (May 2003),
- Jurisdictional Wetland Delineation (May 2003, Revised Dec. 2003, Attached as Appendix C),
- Focused Gnatcatcher Survey and Spring Botanical Surveys (May 2003),
- Focused Survey for the Least Bell's Vireo (May June 2003),
- Focused Gnatcatcher Survey (April 2004),
- Focused Spring Botanical Study (April 2004),
- Determination of Biological Equivalent or Superior Preservation [DBESP] (January 2005),
- Evaluation of Urban/Wildland Interface (January 2005),
- Revised Jurisdictional Wetland Delineation (May 2005),
- Focused California Gnatcatcher & Narrow Endemic Plant Surveys (May-June 2005),
- Nesting Season Burrowing Owl Survey (May June 2005), and
- Focused Survey for the Least Bell's Vireo and Southwestern Willow Flycatcher and Habitat for the Western Yellow-Billed Cuckoo (May June 2005).

Additionally, L&L submitted a Habitat Evaluation and Acquisition Negotiation Strategy (HANS) application in 2003 which was approved in 2004.

Prior studies were also performed for the Project by GLA in 2006, which included:

- Offsite jurisdictional delineation (March 2006, attached as Appendix D)
- Burrowing Owl Surveys (May 2006)
- Focused Gnatcatcher Surveys (April May 2006)

Additionally, a Section 7 Consultation pursuant to the federal ESA was concluded on July 11, 2006. Site jurisdictional permit approvals included a 401 Water Quality Certification in 2005 [with amendments in 2005 and 2006, and a reissued certification in May 2019], a CWA Section 404 permit in 2005 (extended in 2010 and 2015), and a 1602 Streambed Alteration Agreement in 2004 (amended in 2013, reissued in 2015, and extended in 2019).

The Project site was approved for clearing and grubbing in late 2005, with impacts occurring from January to March 2007. While the entirety of the Project footprint was cleared of vegetation, grading did not occur. This report updates the focused surveys for least Bell's vireo and burrowing owl, in addition to a general biological update.

In 2021, it was discovered that an approximate 0.05-acre off site portion of the Project was not covered in the DBESP completed and approved for the site, nor was compensatory mitigation purchased for this 0.05-acre impact. As a result, this DBESP is being prepared to focus solely on the Off Site Improvement Project as the remainder of the Project Site has already been evaluated and approved by a previous DBESP and compensatory mitigation was purchased. Appendix A includes copies of the mitigation receipts for the Project.

# 2.3 <u>Project Description</u>

The proposed Project consists of the future development of a 120.29-acre Project site (116.52 acre onsite, and 3.77 acre offsite) out of a 157.11-acre site with "Business Park" land uses, "Light Industrial" land uses, and major circulation facilities. As proposed by SP00333A01, areas designated for "Light Industrial" and "Business Park" uses may be developed with a Floor Area Ratio (FAR) up to 0.50. The Project will also construct roads, parking lots, and docking bays, and other infrastructure associated with the buildings. Onsite improvements, including the creation of the warehouses, office buildings, and associated infrastructure would total approximately 116.52 acres, and offsite improvements associated primarily with slope modifications would include approximately 3.77 acres. The Project site consists of approximately 120.29 acres of development on and off site.

Business Park land uses are proposed in Planning Area 1 of the proposed Project. Business Park land uses would include small-scale light industrial, incubator industrial, merchant wholesalers, professional services, hospitality, professional office, small-scale warehousing/ storage, and research and development uses. The Business Park building area is assumed to consist of "Industrial Park" uses and "Warehouse" uses. The proposed Light Industrial buildings are anticipated to accommodate users such as industrial incubators, light manufacturing, parcel hub, warehouse/storage, fulfillment center, and e-commerce operations. The Light Industrial building area is assumed to consist of "High-Cube Cold Storage" uses, "High-Cube Fulfillment Center" uses, "High Cube Warehouse" uses, and "Manufacturing" uses.

Approximately 40.52 acres of the subject property will be avoided and not undergo impacts. Of the 40.52 acres to be avoided, Open Space – Conservation Habitat land uses are proposed on approximately 27.06 acres. These areas are intended to be preserved as natural open space and conveyed to the Western Riverside County Regional Conservation Authority (RCA) to be included in the MSHCP reserve.

Please note that the Project DBESP was already approved, as previously noted, and this report is limited to a proposed DBESP for the 0.10-acre Off Site Improvement Project which contains 0.05-acre of MSHCP riparian areas.

# 2.4 Existing Conditions

The Project site occurs between existing residential development to the south and west, Interstate Highway 15 (I-15) to the north, and a combination of rural residential, undeveloped land, and quarry operations to the east. The topography slopes downward from south to north with elevation on the site ranging from 1,186 feet above mean sea level (amsl) to 1,427 feet amsl. Topography onsite includes mesa areas divided by deep canyons, which have a vertical relief of up to 200 feet. The Project site contains several drainage features that extend south to north, terminating at I-15.

At the time of initial biological studies in 2003, the Project site included multiple disturbance features, such as unpaved roads, agricultural orchards, unoccupied structures, bird coops, mobile homes, and associated ornamental vegetation associated with the western half of the Property. Additionally, the site had prior evidence of off-roading activities. Vegetative cover on Project site in 2003 consisted of approximately 40% native cover, which included limited areas of chaparral and mulefat scrub, and more expansive areas of coastal sage scrub and Diegan sage scrub (L&L 2003). Approximately 60% of the site was dominated by non-native grasslands, ruderal species, and ornamental species. Impacts to the Project site were initiated in 2007, resulting in the removal of all vegetation within the impact boundary. After these removals, the Project was halted. By the time of this report, vegetation on the Project site has exhibited regrowth, with the majority of mesa areas becoming dominated by non-native ruderal species. Some areas onsite have been annually maintained, including a 50-foot fuel modification zone immediately adjacent to the surrounding residential areas.

The Off Site Improvement Project portion of this development includes a manufactured slope, a riparian drainage feature, known as Drainage 6, and a box culvert discharging flows into Drainage 6 from upstream development.

Soils within the Project are mapped as Gorgonio loamy sand, Hanford cobbly coarse sandy loam, and terrace escarpments [Exhibit 5– Soils Map]. Soils within the Off Site Improvement Project Area consist of Terrace escarpments (TeG) [Exhibit 5A– Soils Map, Off Site Improvement Project].

The Project Area supports the following vegetation types: Brittle Bush Scrub, Disturbed California Buckwheat Scrub, Disturbed Chamise Chaparral, Southern Cottonwood Willow Riparian Forest, Unvegetated Wash, and Upland Mustards. The Off Site Improvement Project Area consists of Southern Cottonwood-Willow Riparian Forest, Disturbed California Buckwheat Scrub, and Disturbed Ornamental. Table 2-1 provides a summary of the vegetation types and their corresponding acreage within the Off Site Improvement Project Area. Descriptions of each vegetation type follow the table. A Vegetation Map of the Project is attached as Exhibit 6 and a vegetation map of the Off Site Improvement Project is attached as Exhibit 6 A. Photographs depicting the Project are shown in Exhibit 7.

VEGETATION/LAND USE TYPE	OFFSITE IMPACT AREA (acres)
Southern Cottonwood-Willow Riparian Forest	0.05
Disturbed California Buckwheat Scrub	0.01
Disturbed Ornamental	0.04
Total	0.10

# Table 2-1. Summary of Vegetation/Land Use Types for the Off SiteImprovement Project Area

# 2.4.1 Disturbed California Buckwheat Scrub

The Off Site Improvement Project Area supports 0.01 acre of disturbed California buckwheat scrub [Exhibit 6A]. Predominant species in these areas include native California sagebrush, California buckwheat and deerweed, and non-native summer mustard and tocalote. Additional native species within these areas include arroyo willow (*Salix lasiolepis*), black sage, blue elderberry, brittlebush, Coulter's matilija poppy, jimsonweed (*Datura wrightii*), laurel sumac, salt heliotrope, and telegraph weed (*Heterotheca grandiflora*). Additional non-native species include olive (*Olea europaea*), Peruvian pepper, prickly lettuce, and tamarisk (*Tamarix* sp.).

# 2.4.2 Southern Cottonwood Willow Riparian Forest

The Off Site Improvement Project Area supports 0.05 acre of southern cottonwood willow riparian forest connected to the box culvert near Bolo Court. These areas are dominated by native riparian tree species with associated understories present [Exhibit 6A].

Predominant species in these areas include Fremont's cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), arroyo willow, and tamarisk trees. Additional native species include blue elderberry, mulefat (*Baccharis salicifolia*), California sagebrush, brittlebush, California buckwheat, western sunflower, California fan palm (*Washingtonia filifera*), and coast live oak.

# 2.4.3 Disturbed Ornamental

The Off Site Improvement Project Area supports 0.04 acre of disturbed ornamental habitat. These areas are located on an existing manufactured slope near Bolo Court and support nonnative grasses and Eucalyptus species (*Eucalyptus* sp.) [Exhibit 6A].

# **3.0 RIPARIAN/RIVERINE MITIGATION (SECTION 6.1.2)**

# 3.1 <u>Methods</u>

The MSHCP defines riparian areas as *lands which contain Habitat dominated by trees, shrubs, persistent emergent mosses and lichens, which occur close to or which depend upon soils moisture from a nearby fresh water source.* In the absence of riparian habitat, the MSHCP defines riverine areas as *areas with fresh water flow during all or a portion of the year.* 

The MSHCP defines vernal pools as *seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indictors of hydrology and/or vegetation during the drier portion of the growing season.* 

With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters, or from the alteration of natural stream courses, areas demonstrating characteristics as described above and which are artificially created are not included in these definitions.

The MSHCP requires habitat assessments/focused surveys for certain species identified under Section 6.1.2, including riparian birds and fairy shrimp. Bird species requiring assessments include least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). Fairy srhimp speces requiring assessments include listed species such as Riverside fairy shrimp (*Streptocephalus woottoni*), Santa Rosa Plataeu fairy shrimp (*Linderiella santarosae*), and vernal pool fairy shrimp (*Branchinecta lynchi*). Although not directly referenced by Section 6.1.2, assessments also should consider the San Diego fairy shrimp (*Branchinecta sandiegonensis*) where appropriate. For fairy shrimp, habitat assessments should consider all non-vernal pool features that could sufficiently hold water including stock ponds, ephemeral pools, road ruts, and other human-made depressions.

GLA biologists reviewed the Off Site Improvement Project Area to document MSHCP riparian/riverine resources on May 18, 2020. Prior to beginning the field assessment, a color aerial photograph, a topographic base map of the property, and the previously cited USGS topographic map were examined to determine the locations of potential riparian/riverine areas. Suspected resources were field-checked for the presence of definable channels and/or riparian vegetation. While in the field, the limits of riparian/riverine resources were recorded onto a color aerial photograph using visible landmarks and/or sub-meter accuracy global positioning system (GPS) devices.

To assess the Off Site Improvement Project Area for vernal/seasonal pools (including fairy shrimp habitat), GLA biologists evaluated the topography of the site, including whether the site contained depressional features/topography with the potential to become inundated; whether the site contained soils associated with vernal/seasonal pools; and whether the site supported plants that suggested areas of localized ponding. The site was evaluated by GLA biologists on May 18, 2020.

# 3.2 <u>Burrowing Owl</u>

The majority of the Project Site is located within the MSHCP survey area for the burrowing owl (*Athene cunicularia*). GLA biologists April Nakagawa and David Smith conducted focused surveys for the burrowing owl for all suitable habitat areas within the Project Site. Surveys were conducted in accordance with survey guidelines described in the 2006 MSHCP Burrowing Owl Survey Instructions. The guidelines stipulate that four focused survey visits be conducted on separate dates between March 1 and August 31. Within areas of suitable habitat, the MSHCP

first requires a focused burrow survey to map all potentially suitable burrows. The focused burrow survey for the Off Site Improvement Project Area was conducted on March 6, 2020. Focused burrowing owl surveys were conducted on March 6, March 30, April 3, and April 17, 2020. The burrowing owl survey visits were generally conducted within a survey window from one hour prior to sunrise to two hours after sunrise.

The surveys were conducted during weather that was conducive to observing owls outside their burrows and detecting burrowing owl sign and not during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Additionally, all work was performed more than 5 days after a rain event.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Exhibit 10A identifies the burrowing owl survey areas at the Off Site Improvement Project Area. Transects were spaced between 22 feet and 65 feet apart, adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 320 feet along transects, the survey area was scanned for burrowing owls using binoculars. All suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows. Transect locations are provided on Exhibit 10A, along with the 500-foot buffer area. Table 3-1 summarizes the burrowing owl survey visits.

Survey Date	Biologist(s)	Start/End Time	Start/End	Start/End	Cloud Cover
			Temperature	Wind Speed	(%)
			(°F)	(mph)	
03/06/2020	AN	0615/0915	57/64	0-3	20%
03/30/2020	DS	0600/0900	43/54	0-2	10%
04/03/2020	DS	0555/0855	51/57	0-1	60%
04/17/2020	DS	0610/0910	45/55	0-1	0%

Table 3-1. Summary of Burrowing Owl Surveys

AN = April Nakagawa, DS = David Smith

# 3.3 <u>Results/Impacts</u>

# 3.3.1 Results

The Off Site Improvement Project Area contains one intermittent drainage feature [Drainage 6]. This drainage feature qualifies as a MSHCP Riparian/Riverine areas. As such, a total of 0.05 acre of MSHCP Riparian/Riverine areas occur within the Off Site Improvement Project Area, all of which consists of riparian habitat [Exhibit 8 – MSHCP Riparian/Riverine Areas Map]. The Riparian areas may potentially support Riparian/Riverine associated sensitive species and would be considered as viable habitat.

No vernal or seasonal pools are present within the Off Site Improvement Project Area. As discussed above, no ponding was observed at the site during biological surveys, including those that occurred following periods of substantial rainfall. The Off Site Improvement Project Area lacks the suitable topography (including localized depressions) to support prolonged inundation

necessary to support fairy shrimp. In addition, the Off Site Improvement Project Area is mapped as containing terrace escarpments, which is generally not associated with vernal pools. Lastly, no plants were observed at the site that are associated with vernal pools and similar habitats that experience prolonged inundation.

The Off Site Improvement Project Area supports approximately 0.05 acre of potential habitat (disturbed ornamental and disturbed California buckwheat scrub) for the burrowing owl.

GLA biologists did not observe burrowing owls, or evidence of burrowing owls (e.g., cast pellets, preened feathers, or whitewash clustered at a burrow) during the focused burrow survey or focused burrowing owl surveys conducted in March and April 2020. Exhibit 10A – Burrowing Owl Survey Area/Burrow Map for Off Site Improvement Project, depicts the location of the burrowing owl survey areas and of burrows detected during the focused burrow survey. This species was confirmed absent from the Off Site Improvement Project Area.

# 3.3.2 Impacts

Pursuant to Volume I, Section 6.1.2 of the MSHCP, projects must consider alternatives providing for 100 percent avoidance of riparian/riverine areas. If avoidance is infeasible, then the unavoidable impacts must be mitigated and a DBESP is required.

The Off Site Improvement Project Area supports one jurisdictional drainage feature, Drainage 6, which qualifies as a MSHCP Riparian/Riverine area. As such, a total of 0.05 acre of MSHCP Riparian/Riverine areas occur within the Off Site Improvement Project Area, all of which is riparian [Exhibit 9A – MSHCP Riparian/Riverine Areas Map, Off Site Improvement Project]. The Riparian areas on site are too suitable to support Riparian/Riverine associated sensitive species and is viable habitat; however, neither of these species were identified during focused protocol least Bell's vireo surveys in 2020.

The proposed Project would permanently impact approximately 0.05 acre of MSHCP riparian areas [Exhibit 12]. No temporary impacts would occur.

No vernal or seasonal pools are present within the Off Site Improvement Project Area. The Off Site Improvement Project Area lacked ponding features. This lack of vernal pool habitat precludes the occurrence of any listed fairy shrimp species.

The Project will not impact the burrowing owl as no burrowing owl were detected or identified within the Off Site Improvement Project Area during 2020 focused surveys.

# 3.4 <u>Mitigation/Equivalency</u>

# Riparian/Riverine Mitigation

The following is proposed to mitigate unavoidable impacts to 0.05 acre of MSHCP riparian habitat:

- 1. The purchase of 0.075 acre of re-establishment credits (a 1.5:1 mitigation-to-impact ratio) from the Riverpark Mitigation Bank; *and*
- 2. The purchase of 0.075 acre of rehabilitation credits (a 1.5:1 mitigation-to-impact ratio) from the Riverpark Mitigation Bank;

#### **Riverpark Mitigation Bank**

To mitigate unavoidable impacts to 0.05 acre of MSHCP riparian areas, the Applicant is proposing to purchase 0.075 acre of re- establishment credits and 0.075 acre of rehabilitation credits (a 3:1 mitigation-to-impact ratio) from the Riverpark Mitigation Bank.

The Riverpark Mitigation Bank is an approved mitigation bank offering compensatory mitigation credits for impacts to agency and MSHCP jurisdiction in the Santa Ana River Watershed. The Riverside County portion of the Santa Margarita River Watershed, which includes the Project, is also within the service area for this mitigation bank. Credits have already been accepted and evaluated by the Wildlife Agencies to be acceptable to meet the goals of the MSHCP and to mitigate riparian/riverine resources described in Section 6.1.2 of the MSHCP. Mitigation credits are currently available to re-establish and rehabilitate lands within the mitigation bank area.

Compensatory mitigation credits are available for riverine and riparian habitat impacts, which are in-kind as compared to Project riverine and riparian impacts. The applicant will be providing funding to the mitigation bank to re-establish and rehabilitate riverine/riparian habitat. Since the Project impact totals 0.05 acre which will be re-established within the mitigation bank with in-kind mitigation totaling 0.075 acre as compared to impact, and an additional 0.075 acre of riverine/riparian habitat will be rehabilitated, there will be an increase in function and value for streambeds within the MSHCP plan area (0.15 acre re-established and/or rehabilitated as compared to 0.05 acre impacted).

There will be a loss in connectivity associated with downstream resources once this off site area is filled; however, wildlife will still have the opportunity to reach the downstream, avoided portion of the property through adjacent lands and the purchase of mitigation at the Riverpark Mitigation Bank.

Once completed, the purchase of mitigation credits at the Riverpark Mitigation Bank will provide greater acreage, habitat function, and wildlife connectivity as compared to the preservation of off site resources. As a result, mitigation at the Riverpark Mitigation Bank will be biologically superior as compared to preservation of the off site portion of Drainage 6.

#### Other Off Site Mitigation Contemplated

No other off site mitigation has been contemplated as the mitigation proposed is the most viable mitigation option available to the project proponent at this time.

# **Burrowing Owl Mitigation**

As a mitigation measure for burrowing owl, the developer will conduct a burrowing owl preconstruction survey 30 days or less from the commencement of initial ground disturbance.

# 3.4.1 Direct Effects/Infeasibility of Avoidance

The purchase of compensatory re-establishment and rehabilitation mitigation credits from the Riverpark Mitigation Bank at a 1.5:1 mitigation to impact ratio for both re-establishment and rehabilitation (totaling 3:1 mitigation) will be considered superior mitigation as compared to the preservation of 0.05 acre of drainage which has been disturbed for several; years. The proposed re-establishment and rehabilitation credits will consist of riparian habitat areas that will represent habitat functions that would be equivalent or superior to the existing conditions at the site.

The Project team's mitigation proposal consists of the following:

- 1) The purchase of 0.075 acre of re-establishment credits (a 1.5:1 mitigation-to-impact ratio) from the Riverpark Mitigation Bank; *and*
- 2) The purchase of 0.075 acre of rehabilitation credits (a 1.5:1 mitigation-to-impact ratio) from the Riverpark Mitigation Bank.

Direct impacts to MSHCP riparian areas are considered unavoidable and measures to avoid riparian and riverine areas have been incorporated into the Project design to the greatest practicable extent.

Although the Project proposes to permanently fill approximately 0.05 acre of riparian/riverine areas within Drainage 6 in the Off Site Improvement Project Area, flows discharged into this drainage will be of similar or better quality due to the water quality control measures that are documented in the Project's water quality management plan (WQMP), which meet the Regional Water Quality Control Board's (Regional Board) Basin Plan and the local Municipal Storm Water Permit requirements. Additionally, flows discharged into Drainage 6 will not alter the overall flow pattern of Drainage 6 as flows will be picked up at the existing off site location and exit the site through the same location as under existing conditions. As flows will enter and exit the site at the same place as under existing conditions, and flows will be treated to provide similar or higher water quality, there will be no degradation of water quality.

Development would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species; however, due to the limited amount of native habitat to be removed and the high level of existing disturbance from human activity in the surrounding areas, these impacts would not be expected to reduce the general wildlife populations below selfsustaining levels.

Development of the Off Site Improvement Project Area would result in the direct removal of numerous common plant species common throughout the region; however, their removal would not be significant. As such, the above-referenced MSHCP riparian/riverine resources exhibit

moderate function and value as compared to the provision of compensatory mitigation at a local approved mitigation bank or in-lieu fee program as described below.

Areas adjacent to the Off Site Improvement Project Area and its surroundings (the manufactured slope) have been disturbed for several years and consist of single-family residential development, sand mining, and ranching/farming uses. This area is not a wildlife movement corridor but is adjacent to proposed Constrained Linkage 6 in Criteria Cell 3748, and Cell Group N and Criteria Cell 3849. The Off Site Improvement Project will comply with the urban/wildlife interface guidelines (UWIG) to reduce potential effects on the MSHCP Conservation Area. The permanent impact to this 0.05-acre riparian area will not affect the MSHCP Conservation Area as areas south and west of this improvement are already fragmented by residential housing. The construction of a storm drain line and its associated improvements will not result in further fragmentation as compared to what already exists.

The purchase of compensatory re-establishment and rehabilitation mitigation credits from the Riverpark Mitigation Bank at a 1.5:1 mitigation to impact ratio for both re-establishment and/or rehabilitation will be considered superior mitigation as compared to the preservation of 0.05 acre of ephemeral drainage that is somewhat disturbed.

The Riverpark Mitigation Bank is an approved mitigation bank offering compensatory mitigation credits for impacts to agency and MSHCP jurisdiction in the Santa Ana River Watershed. The Riverside County portion of the Santa Margarita River Watershed, which includes the Project, is also within the service area for this mitigation bank. Credits have already been accepted and evaluated by the Wildlife Agencies to be acceptable to meet the goals of the MSHCP and to mitigate riparian/riverine resources described in Section 6.1.2 of the MSHCP. Mitigation credits are currently available to re-establish and rehabilitate lands within the mitigation bank area.

Compensatory mitigation credits are available for riverine and riparian habitat impacts, which are in-kind as compared to Project riverine and riparian impacts. The applicant will be providing funding to the mitigation bank to either re-establish or rehabilitate riverine/riparian habitat. Since the Project impact totals 0.05 acre which 0.075 acre will be re-established within the mitigation bank with in-kind mitigation as compared to impact, and an additional 0.075 acre of riverine/riparian habitat will be rehabilitated, there will be an increase in function and value for streambeds within the MSHCP plan area (0.15 acre re-established and/or rehabilitated as compared to 0.05 acre impacted).

There will be a loss in connectivity associated with downstream resources once Drainage 6 is filled; however, wildlife will still have the opportunity to reach the downstream, avoided portion of the property through adjacent lands and the purchase of mitigation at the Riverpark Mitigation Bank.

Once completed, the purchase of mitigation credits at the Riverpark Mitigation Bank will provide greater acreage, habitat function, and wildlife connectivity as compared to the preservation of this off site resource. As a result, mitigation at the Riverpark Mitigation Bank will be biologically superior as compared to preservation of this off site portion of Drainage 6.

No mitigation for burrowing owl is necessary as no owls are on site, nor is mitigation necessary for vernal pools or fairy shrimp as there are no such resources on site; however, as a project design measure for burrowing owl, the developer will conduct a burrowing owl pre-construction survey 30 days or less from the commencement of initial ground disturbance on site.

# 3.4.2 Indirect Effects

*Indirect effects* are those effects that give rise to delayed, secondary effects. Examples of indirect effects include fragmentation, increased levels of environmental toxins, plant and wildlife dispersal interruption, increased risk of fire, construction noise, and invasion of non-native animals and plants, which stresses or alters competition among natives. Indirect effects are those that can be assumed to increase mortality, reduce productivity, and/or reduce the functions and values of natural open space for native species.

Although implementation of the Project would result in disturbances to local wildlife movement within the Project site, those species are considered to comprise primarily of those adapted to urban areas and would be expected to persist in the area following construction.

Areas adjacent to the Off Site Improvement Project Area and its surroundings (the manufactured slope) have been disturbed for several years and consist of single-family residential development, sand mining, and ranching/farming uses. This area is not a wildlife movement corridor but is adjacent to proposed Constrained Linkage 6 in Criteria Cell 3748, and Cell Group N and Criteria Cell 3849. The Off Site Improvement Project will comply with the urban/wildlife interface guidelines (UWIG) to reduce potential effects on the MSHCP Conservation Area. The permanent impact to this 0.05-acre riparian area will not affect the MSHCP Conservation Area as areas south and west of this improvement are already fragmented by residential housing. The construction of a storm drain line and its associated improvements will not result in further fragmentation as compared to what already exists.

The Project is located adjacent to the MSHCP Conservation Area; therefore, it is subject to the UWIG. The Project will not result in adverse indirect effects to special-status resources.

The purchase of compensatory re-establishment and rehabilitation mitigation credits from the Riverpark Mitigation Bank at a 1.5:1 mitigation to impact ratio for both re-establishment and/or rehabilitation will be considered superior mitigation as compared to the preservation of 0.05 acre of ephemeral drainage that is somewhat disturbed.

#### 4.0 REFERENCES

AOU (American Ornithologists' Union). 1998. Check-List of North American Birds. Seventh Edition. American Ornithologists' Union, Washington, D.C. 829 pp.

- American Ornithologists' Union (AOU). 2009. Checklist of North American Birds, (7th Edition; 1998-2009).
- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken. 2012. The Jepson Manual: Vascular Plants of California. University of California Press. 1,568 pp.

Brown, B. T. 1988. Breeding ecology of a Willow Flycatcher population in Grand Canyon, Arizona. Western Birds 19: 25-33.

- California Department of Fish and Wildlife. 2008. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Dated September 2008.
- [CDFG] California Department of Fish and Game. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. State of California, California Natural Resources Agency, Department of Fish and Game. Dated November 24, 2009.
- [CDFW] California Department of Fish and Wildlife. 2021. Special Animals. State of California Resources Agency, Sacramento, California.
- California Department of Fish and Wildlife. 2021. State and Federally Listed Endangered and Threatened Animals of California. State of California Resources Agency. Sacramento, California.
- [CDFW] California Department of Fish and Wildlife. 2021. California Natural Diversity Database: RareFind 5. Records of occurrence for U.S.G.S. 7.5- minute Quadrangle maps: Steele Peak, Lake Elsinore, Alberhill, Corona South, Santiago Peak, Canada Gobernadora, Sitton Peak, Wildomar, and Lake Mathews. California Department of Fish and Wildlife, State of California Resources Agency. Sacramento, California. [accessed October 2021].
- [Cal-IPC] California Invasive Plant Council. California Invasive Plant Inventory Database. Website: http://cal-ipc.org/paf/. [accessed October 2021].
- [CNPS] California Native Plant Society. 2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA. x + 388pp.
- [CNPS] California Native Plant Society, Rare Plant Program. 2017. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed October 2021].

Collins, Joseph T. and Travis W. Taggart. 2009. Standard Common and Current Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians. Sixth Edition. Publication of The Center For North American Herpetology, Lawrence. iv+44p.

[Dudek] Dudek & Associates. 2003. Western Riverside County Multiple Species Habitat Conservation Plan. Volumes 1 – 5. Prepared for the Transportation and Land Management Agency, County of Riverside, California as part of the Riverside County Integrated Project. Adopted June 2003, currently available at http://www.rcip.org/conservation.htm.

- Eng, L.L., D. Belk and C.H. Eriksen. 1990. California Anostraca: distribution, habitat and status. Journal of Crustacean Biology 10: 247 - 277.
- Garrett, K. and J. Dunn. 1981. Birds of Southern California: Status and Distribution. Los Angeles Audubon Society. 407 pp.
- Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. Burrowing Owl (Speotyto cunicularia). In The Birds of North America, No. 130 (A. Poole and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.
- Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, California Department of Fish and Wildlife.

Munz, P.A. 1974. A Flora of Southern California. University of California Press. 1,086 pp.

Nelson, J. 1984. Rare plant survey guidelines. In: Inventory of rare and endangered vascular plants of California. J. Smith and R. York (eds.). Special Publication No. 1. California Native Plant Society.

[NRCS] Natural Resources Conservation Service. 2021. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: https://websoilsurvey.sc.egov.usda.gov/ [accessed October 2021].

Robertson, J. M. 1929. Some observations on the feeding habits of the burrowing owl. Condor 31: 38-39.

Sawyer, J.O, T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation. Second Edition. California Native Plant Society Press. Sacramento, California. 1,300 pp.

Sedgwick, J. A., and F. L. Knopf. 1992. Describing willow flycatcher Habitats: scale perspectives and gender differences. Condor 94: 720-733.

Small, A. 1994. California Birds: Their Status and Distribution. Ibis Publishing Company: Vista, CA. 342 pp.

U.S. Fish and Wildlife Service. 1986. Endangered and threatened wildlife and plants; determination of endangered status for the least Bell's vireo. Final Rule. Federal Register 51: 16474-16482.

U.S. Fish and Wildlife Service. 2001. Draft Southwestern Willow Flycatcher Recovery Plan. Whitfield, M. J. 1990. Willow flycatcher reproductive response to brown-headed cowbird parasitism. Masters theses, Calif. State Univ., Chico. 25 pp.

[USFWS] U.S. Fish and Wildlife Service. 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants. Sacramento, CA: U.S. Fish and Wildlife Service. Unpublished memorandum, dated January 2000.

Zeiner, D. C., W., F. Laudenslayer, Jr., K. E. Mayer, M. White. Editors. 1990. California's Wildlife. Volume 2. Birds. State of California, Department of Fish and Game. Sacramento, California. 731-732 pp.

# 5.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Mart. G. Rix

Signed:

Date: October 22, 2021

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Exhibit 2A







Offsite Areas



0	212.5	425	850
		Feet	

1 inch = 425 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: August 31, 2021

RENAISSANCE RANCH DEVELOPMENT PROJECT

Aerial Map



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80

Feet

1 inch = 40 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: October 22, 2021

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RENAISSANCE RANCH DEVELOPMENT PROJECT Aerial Map, Off Site Improvement Project

GLENN LUKOS ASSOCIATES



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# 3.0 Project Description









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#### 1 inch = 40 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: October 22, 2021



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0	212.5 425		850	
		Feet		

# 1 inch = 425 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: B. Gale, GLA Date Prepared: August 31, 2021

RENAISSANCE RANCH DEVELOPMENT PROJECT

Vegetation Map



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Study Area Offsite Areas Disturbed Ornamental Brittle Bush Scrub Disturbed California Buckwheat Scrub

Disturbed Chamise Chaparral

Southern Cottonwood Willow Riparian Forest



0 20 40 80

#### 1 inch = 40 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: October 22, 2021



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Photograph 1: Photo depicts southwestern portion of the site, which is primarily vegetated by non-native mustard species.



Photograph 3: Photo depicting brittle bush scrub in the foreground, and disturbed California buckwheat scrub in the background



Photograph 2: Photo depicting disturbed California buckwheat scrub. These areas have been either historically mowed or support components of upland mustards.



Photograph 4: Photo depicting burrow with the potential to support burrowing owl. Note the lack of diagnostic burrowing owl sign (pellets, feathers, white-wash, etc.), indicating the absence of burrowing owl.

GLENN LUKOS ASSOCIATES Exhibit 7 – Page 1

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Photograph 5: Photo depicting Channel 2 and its associated southern cottonwood willow riparian forest.



Photograph 6: Photo depicting Channel 6 and its associated southern cottonwood willow riparian forest.



Photograph 7: Photo depicting upland mustards within the northwestern portion of the Project site.



Photograph 8: Photo depicting Channel 1 and its associated southern cottonwood willow riparian forest.



GLENN LUKOS ASSOCIATES Exhibit 7 – Page 2

**PROJECT** Photographs Ite







# Study Area Offsite Areas MSHCP Riparian



0 20 40 80

1 inch = 40 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: October 22, 2021

RENAISSANCE RANCH DEVELOPMENT PROJECT

MSHCP Riparian/Riverine Map, Off Site Improvement Project



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0	250	500	1,000
		-	
		Feet	

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#### 1 inch = 40 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: October 22, 2021



MSHCP Overlay Map, Off Site Improvement Project

Exhibit 9A

GLENN LUKOS ASSOCIATES



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0 250 500 1,000

#### 1 inch = 500 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: B. Gale, GLA Date Prepared: October 22, 2021



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Exhibit 10

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1 inch = 40 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: October 22, 2021

RENAISSANCE RANCH DEVELOPMENT PROJECT

Burrowing Owl Survey Area/Burrow Map, Off Site Improvement Project



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Study Area Offsite Areas Permanent Impact Conserved Open Space **Disturbed Ornamental** Brittle Bush Scrub Disturbed California Buckwheat Scrub Disturbed Chamise Chaparral Southern Cottonwood Willow Riparian Forest



80 40 20 Feet

#### 1 inch = 40 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: October 22, 2021



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**Offsite Areas** Study Area Permanent Impact Conserved Open Space

MSHCP Riparian



80 20 40 Feet

1 inch = 40 feet

Coordinate System: State Plane 6 NAD 83 Projection: Lambert Conformal Conic Datum: NAD83 Map Prepared by: K. Kartunen, GLA Date Prepared: October 22, 2021

**RENAISSANCE RANCH DEVELOPMENT PROJECT** 

MSHCP Riparian/Riverine Impact Map, Off Site Improvement Project



Exhibit 12

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# Riverside-Corona Resource Conservation District

4500 Glenwood Drive, #A Riverside, CA 92501 Phone: 951-683-7691 Fax: 951-683-3814 Email: <u>RCRCD@RCRCD.COM</u>



The following number must appear on all related correspondence: PROJECT NUMBER: 05-10-11

#### TO: Barbara Darracq KB Home

For: 9.28 Acres of *Arundo donax* removal in Bedford Wash for a period of five years for the Reaissance Ranch Project.

3 Jenner, Ste 100 Irvine, CA 92618

INV. DATE	REQUISITIONER	PROJECT	LOCATION	F.O.B. POINT	TERM
10-11-05	Barbara Darracq	Renaissance Ranch	RCD's Lee Lake Conservation	N/A	

QTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
1	9.28 ac	Habitat restoration through arundo removal and control in Bedford Wash. Biomass removal, spraying and monitoring for five years.	18,375.00 per acre	170,520.00

SUB-TOTAL \$170,520.00

TOTAL DUE \$170,520.00

THANK YOU FOR YOUR SUPPORT

# Riverside-Corona Resource Conservation District

4500 Glenwood Drive, #A Riverside, CA 92501 Phone: 951-683-7691 Fax: 951-683-3814 Email: <u>RCRCD@RCRCD.COM</u>



The following number must appear on all related correspondence: PROJECT NUMBER: 05-10-11

TO: Barbara Darracq KB Home 3 Jenner, Ste 100 Irvine, CA 92618 For: Renaissance Ranch Off-site Mitigation in RCRCD's Lee Lake Easement.

INV. DATE	REQUISITIONER	PROJECT	LOCATION	F.O.B. POINT	TERM
10-11-05	Barbara Darracq	Renaissance Ranch	RCD's Lee Lake Conservation	N/A	

QTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
1	13.92 ac	Off-site mitigation at RCRCD Lee Lake Easement. Creation of riparian habitat, weed control, planting, maintenance and monitoring for five years, based upon the RCRCD's HMMP.	51,500 per acre	716,880.00

SUB-TOTAL

TOTAL DUE

\$716,880.00 **716,880.00** 

THANK YOU FOR YOUR SUPPORT