MELON PROPERTY MULTIPLE-FAMILY RESIDENTIAL PROJECT

Biological Resources Technical Report County of Imperial, California

July, 2017

Prepared for:

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1.0 INTRODUCTION

This report addresses biological resources, project and California Environmental Quality (CEQA) requirements for the proposed Melon Property Multiple-Family Residential Project. The site will be located in the City of Holtville, County of Imperial (currently being annexed from County of Imperial), at northeast corner of Melon Ave. & 9th St and is +/- 8.19 Acres; APN**s:** 045-390-067, 045-390-065, 045-390-066, 045-390-044, 045-390-006.

Proposed Development consists of:

- Multi-Family Units: +/- 8.19 acres
- A 0.34 acre residential community designated area situated at a centralized location of the project.
- The retention basin is large enough to accommodate open park space should the City of Holtville require it and is approximately 0.60 AC.
- Retention: +/- 26,136 SF, retention basin is sized to hold storm water for the site for a 100-year flood, please see engineer's calculation on Site Plan. If it is determined that the retention basin in times of rain does not diminish/percolate within 72 hours a mosquito abatement plan will be put into place.

2.0 PROJECT AND SITE DESCRIPTION

The project is located within the Holtville West Quadrangle. In the Imperial County General Plan the habitat is listed as Disturbed (Agriculture/Urban); Not a Sensitive Wildlife Area and Area with No Sensitive Plants.

Current land uses surrounding the project include vacant lots, agricultural yards, residential areas, and SR 115.

Figure 1 identifies the regional location of Holtville and the proposed project location.

The proposed Melon Multi-Family Residential Project will be situated on +/- 8.19 acres of undeveloped land currently located within the County of Imperial and the City of Holtville jurisdiction. In order to bring the Project into fruition the applicant must be required to annex all existing parcels located within the County of Imperial into the City of Holtville. Co-currently through the Annexation process the applicant will be submitting a lot merger through the County of Imperial for APN's: 045-390-006 and 045-390-044. The City of Holtville has agreed to let the County of Imperial act as the lead agency in this endeavor and will provide the County of Imperial with proper documentation. Annexation, Lot Merger(s), Street

Abandonment, General Plan Amendment, Zone Change, Environmental Review and Site Plan Review applications will be submitted to the applicable agencies.

The proposed project will be comprised of 11 Multi-Family Building Units that will contain 152 total dwelling units. Within these 11 Multi-Family Building Units, 8 will be of Unit Type 1 and 3 will be of Unit Type 2. Located at the projects center will be a location for a .34 acre Residential Community Designated Area. Additionally, maintenance and laundry facility buildings will be located at the eastern portion of the proposed project. There are a total of 13 proposed new building structures for the project. The proposed project would add an additional of 152 dwelling units to the City of Holtville's current housing stock, thus improving the quality of life for those citizens of Holtville who choose to live in the proposed development.

The main access to the proposed project will be located on Melon Road located west of the project site. Secondary access will be located on Tenth Street, located north of the project site. The proposed circulation of the project is linear with a cul-du-sac located at the Far East portion of the project site. Parking spaces line the path of interior traffic. The proposed project will contain a total of 266 parking spaces, 16 of which will be designated handicap to meet the ADA requirement.

In order to control storm runoff, there will be a retention basin located at the southwest portion of the proposed project. The retention basin is located at that location due to the sites topographic nature. The retention basin is designed to retain the onsite storm water. The retention basin drainage will be discharged to an approved drain outlet or to drain-out by percolation. If the retention basin is to drain-out by percolation and exceeds the 72- hour threshold a mosquito abatement will be required.

The project area will require City services such as sewer and water; therefore the property will require annexation into the City of Holtville.

3.0 PURPOSE OF THE STUDY

The purpose of the study was to determine the inventory of biological resources at the time of the survey; the possibility of the existence of endangered, threatened, sensitive or species of concern within project area; map habitats, and ascertain the probability of the presence of sensitive species on site. This survey was not intended to determine the presence/absence of threatened or endangered species except for the burrowing owl (BUOW) *Athene cunicularia,* but only assess the potential for them to occur based on habitat suitability. Other focused surveys to determine presence/absence would be at the discretion of the appropriate State or federal resource agencies.

4.0 BIOLOGICAL SURVEY METHODOLOGIES

The California Natural Diversity Database (CNCCB), California Native Plant Society database (CNPS), United States Fish and Wildlife Service (USFWS)/Carlsbad Sensitive Species list, field guides, personal contacts and other methods to ascertain potential for sensitive species on the site (Appendix A).

Status Assessment and Conservation Plan for the Western Burrowing Owl in the United States, Biological Technical Publication (BTP-R6001-2003) state that 71% of the California burrowing owl (*Athene cunicularia hypugea)* population is found in the agricultural areas of Imperial County and is a California species of special concern therefore a focused burrowing owl survey was performed

A biological survey of vegetation, animals and a focused western burrowing owl survey was completed by Marie Barrett and Glenna Barrett, biologists, on June 27, 2017. Temperatures ranged between 82° and 87°F; clear and calm. One pedestrian morning survey was done. A Garmin GPS, a Nikon spotting scope, binoculars and Nikon digital camera were used.

5.0 BIOLOGICAL SURVEY RESULTS

5.1 PLANT COMMUNITIES

Vegetation has been divided into communities that are groups of plants that usually coexist within the same area. Although this area is considered the Colorado Desert area (*A Manual of California Vegetation)* Sawyer/Wolf, approximately 500,000 acres of the Colorado Desert in Imperial County has been converted to agricultural use and this area is within that conversion area. The plant community would be considered ruderal (weedy) communities within the vacant lot (Photographs).

5.1.1 Agriculture

The project will be located adjacent to a residential area. The only agricultural area is located off site to the northwest and is not adjacent to the site. No agricultural activities are being conducted on site.

5.1.2 Ruderal

Ruderal vegetation is found on the vacant lot. Weedy plants such as saltcedar, Russian thistle and white horse nettle (listed with scientific names in Appendix C) were found. The vegetative community would be considered ruderal; there is little native vegetation.

5.1.3 SENSITIVE HABITATS

Sensitive habitats are those that are designated either rare within the region by governmental agencies or known to support sensitive animal or plant species and/or they serve as "corridors" for wildlife within the region. Although the western burrowing owl (species of special concern) is abundant in the area, it is due to manmade features such as the irrigation canals, ditches and drains and the cultivation of agricultural crops within the region and not "native" factors. This would also apply to the Mountain Plover and several species of raptors.

Several saltcedar are found along the perimeter of the site. No dense stands of cattails were observed along the bank of the Imperial Irrigation District canal located to the south of the site. No sensitive habitats were observed on site.

If the Pear Canal is undergrounded, a California Department of Fish and Wildlife Streambed Alteration Permit could be required.

5.2 ZOOLOGICAL/VEGETATIVE SPECIES

Eighteen (18) species of zoological species were observed or heard using the site or in the immediate vicinity. Twelve (12) species of vegetation were found. These are listed in Appendix C.

5.3 WESTERN BURROWING OWL (BUOW)

The project site was searched for Burrowing Owls and their sign (burrows, pellets, feathers, scat, litter, and animal dung) on June 27, 2017.

The Burrowing Owl (BUOW) is a small, pale, buffy-brown owl that nests in borrowed burrows. The entrances to burrows often have bits of animal dung, prey carcasses, feathers, and litter, among other objects. Up to 12 eggs are laid, primarily from February to May.

The Imperial Valley has a majority of the BUOW in southern California. Irrigation canals and drains are commonly used as nesting sites in this area. The Burrowing Owl is a California Department of Fish and Wildlife (CDFW) Species of Special Concern, and a Federal Species of Concern and listed on the Migratory Bird Treaty Act. This survey was done using The CDFW Staff Report (CDFW 2012), which addresses survey and mitigation guidelines for the owl and communications with CDFW, Bermuda Dunes, CA office.

No Burrowing owls, a CDFW species of concern, or burrows were observed on site. Habitat is not favorable to burrowing and burrowing owl would not be expected within the site.

Figure 2 is a map of biological resources found on site.

As no BUOW habitat was found on the vacant lot or within the buffer zone, no further BUOW surveys are required.

6.0 EXPECTED IMPACTS TO BIOLOGICAL RESOURCES

Possible CEQA significant impacts that could include the following within the parameters of this project:

Area	Endangered/threatened/ Species of Concern Habitat	Riparian Habitat	Wetlands	Wildlife Corridors	Local Ordinances	HCP*
Ruderal vacant lot	None	No; none will be removed	No	No	No	No

*Habitat conservation plan

No species or habitat were observed that would be harmed by this poject.

7.0 MITIGATION MEASURES

No burrowing owl habitat was found on the site.

While no nesting birds were observed during this survey, a preconstruction survey should be performed within 3 days prior to initiating ground disturbance to survey for nesting birds if construction is started between January through the end of August. Report should be submitted to the appropriate agency.

Since burrowing owls have been located within the vicinity and there is the possibility of nesting birds, it is recommended that construction foremen and workers and onsite employees be given worker training by a qualified biologist regarding burrowing owl that would include the following:

- Description of owl/nesting birds
- Biology
- Regulations (CDFW/USFWS)
- Wallet card with owl picture/guidelines for protecting owl and wildlife
- Notification procedures if avian species (dead, alive, injured) is found on or near site

8.0 REFERENCES

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APPENDIX A
SENSITIVE SPECIES

APPENDIX A
SENSITIVE BOTANICAL AND ZOOLOGICAL SPECIES (CNDDB/CNPS)
Holtville West Quadrangle (9 Quads)

June, 2017

BOTANICAL SPECIES	STATUS[1]	DESCRIPTION OF SPECIES	HABITAT	OBSERVATION/SITE POTENTIAL
Sand Food *Pholisma sonorae*	State: S1.2 (threatened); CNPS list:1B.2	Parasite on species such as *Erigonus, /tiquilia, ambrosia, pluchea.* White to brown color. Corolla pink to purple.	Sonoran Desert Dunes; loose deep sand	L No deep loose sand available habitat; none observed
Wiggins' croton *Croton wigginsi*	State: Rare	Shrub/subscrub; Petiole is 1-4 cm with a blade of 2-8.5 cm. and is elliptic (narrowly)to linear-oblong. Tip is rounded to obtuse. Flowers have 10-15 stamens – filiments are hairy; no petals	Desert Dunes	L No desert habitat; none observed
Abrams's Spurge *Chamaesyce abramisiana*	CNPS list: 2	Annual herbaceous blooms Sept/Nov. Common spurge in area has large purple spot and is prostrate; Abram's is not as colorful.	Sonoran Desert Shrub	L No Abrams's spurge found; no desert shrub.
Hairy stickleaf *Mentzelia hirsuitissima*	CNPS list: 2.3	Branched at base; spreading. Pale yellow flowers. Leaf 1-11 cm toothed to lobed	Washes, fans, slopes, creosote bush scrub.	L None observed; not expected – no habitat
Calif Satintail *Imperata brevifolia*	CNPS: 2.1	The rhizomes are hard, scaly; stems: .7–1.5 m with the leaf ligule densely ciliate; the blade 15–50 cm, 4–15 mm wide, found to be narrow at collar. The inflorescence is 1–3 dm, plume-like, with densely white-silky-hairy,		L None observed; not expected – no habitat

		and appears speckled from adherent brown anthers and stigmas; hairs 8–15 mm		
Chaparral sand-verbena *Abronia villosa var. aurita*	CNPS: 1B.1	Purple flowers	a dicot, is an annual herb that is native to California and is endemic (limited) to California	L None observed; not expected – no habitat
Gravel milk-vetch *Astragalus sabulonum*	CNPS: 2B.2	This is a hairy annual herb with stems up to about 26 centimeters long. Leaves are a few centimeters long and are made up of several hairy oval-shaped leaflets. The inflorescence is an open array of 2 to 7 off-white to pale lilac flowers each less than a centimeter in length.	It is native to the Southwestern United States and California, from desert to mountain habitats.	L None observed; not expected – no habitat
Giant Spanish-needle *Palafoxia arida var gigantea*	CNPS: 1B.3	Stems generally 9-20 mm in diameter and glabulous; leaves 6-12 mm	Sonoran Desert Shrub	L No desert habitat; none seen
ZOOLOGICAL SPECIES	**STATUS[1]**	**DESCRIPTION OF SPECIES**	**HABITAT**	**OBSERVATION/ SITE POTENTIAL**
Yuma clapper rail (Ridgeway Rail) *Rallus longirostris yumanensis*	Fed:Endangered Ca: Threatened	A chickenlike marsh bird with a long, slightly drooping bill and an often upturned tail. Light brownish with dark streaks above. Rust-colored breast; bold, vertical gray and white bars on the flanks; white undertail coverts	Lives in freshwater and brackish marshes. Prefers dense cattails, bulrushes, and other aquatic vegetation. Nests in riverine wetlands near upland, in shallow sites dominated by mature vegetation, often in the base of a shrub. Prefers denser cover in winter than in summer. Very shy.	L None observed or heard; Cattails not found in dense stands
Burrowing Owl *Athene cunicularia*	CDFW: SC Species of Concern	Small raptors that nest in burrows that have been borrowed from other species in open grassland	Open, dry annual or perennial grasslands; deserts & scrublands	L No owls or active burrows found; no habitat. Survey

		areas. Have adapted well in Imperial County using canals/drains/ditches to establish burrows and foraging for insects in agricultural fields		results included in this report
Summer tanager *Piranga rubra*	CDFW: SC Species of Concern	Adults have stout pointed bills and measure 17 cm (6.7 in) in length and 29 g (1.0 oz) in weight. Adult males are rose red and similar in appearance to the hepatic tanager, although the latter has a dark bill; females are orangish on the underparts and olive on top, with olive-brown wings and tail.	Their breeding habitat is open wooded areas, especially with oaks, across the southern United States, extending as far north as Iowa. These birds migrate to Mexico, Central America and northern South America. This tanager is an extremely rare vagrant to western Europe.	L None observed; not expected – no habitat
Yellow Warbler *Dendroica petechia brewsteri*	State: S2; CDFW: SC	Plain yellow face with dark eyes;yellow spots on tail. Flits around hunting insects. Rare in winter in southwest; winters in tropics	Nests in riparian plant areas; preferring willows, cottonwoods, aspens, sycamores and alders for nesting and foraging	L No favored riparian habitat observed; no tree habitat for forage on site.
Vermillion flycatcher *Pyrocephalus rubinus*	CDFW: SC Species of Concern	Length: 5 inches The adult male has a Bright red cap, throat and underparts; with a Black eyeline, nape, back, wings, and tail The Immature male similar to female but has variable amount of red on underparts. The female and immature has brown upperparts with White underparts with faint streaks on breast with an undertail coverts tinged pink the adult male Vermilion Flycatcher is very distinctive. The female and immatures are more nondescript but the streaking on the breast and	Frequents streams and ponds in arid areas; agricultural areas	L None observed.

		pink tinge to the undertail coverts distinguish them from other flycatchers		
Northern Harrier *Circus cyaneus*	CDFW: SC Species of Concern	Long-winged, long tailed hawk. Habitually flys low over open fields and marshes watching and listening for prey such as rodents and birds. (I observed Harrier with a white faced ibis as prey). Perches low or on ground. Low slow flight. Nests in reeds. Grey with black wingtips.	Marshes, open fields. Nests in reeds	L None observed; not expected – no habitat
Gila Woodpecker *Melanerpes uropygialis*	CDFW: Endangered	Bill black to grayish black with dark red to reddish hazel eyes. About 9.3 inches long with brownish green or bluish legs and feet. Black and white barring on back male has red cap on head. Buff-brown face, neck and breast with barred rump and central tail feathers.	Found in desert; likes to nest in large cacti or trees suitable for nesting such as cottonwoods, palm trees.	L none observed or heard.
Crissal thrasher *Toxostoma crissale*	CDFW: Species of Concern	Bill is black and long deeply down-curved; dull yellow eyes. Legs are blackish bird about 11.5 inches. Dark grayish brown over with rufuous undertail coverts dark malar stripes.	Likes dense low scrubby desert vegetation	L No desert habitat; none observed
Mountain plover *Charadrius montanus*	CDFW: Species of Concern	Medium-sized plover with pale brown upperparts, white underparts, and brown sides. Head has brown cap, white face, and dark eyestripe. Upperwings are brown with black edges and white bars; underwings are white. Tail is brown-black with white	Avoids high and dense cover. Uses open grass plains, plowed fields with little vegetation, and open sagebrush areas. Likes to follow livestock grazing or burned off fields.	L None observed; not expected – no habitat

		edges. Sexes are similar.		
American Badger *Taxidea taxus*	CDFW: Species of Concern	Burrowing animals that feed on ground squirrels, rabbits, gophers and other small animals. Prefer grasslands, agricultural areas.	Found in drier open areas with friable soils	L None seen; no burrows observed
Lowland leopard frog Lithobates yavapaiensis	CDFW: Species of Concern		Its natural habitats are temperate forests, rivers, intermittent rivers, freshwater lakes, and freshwater marshes.	L None observed; not expected – no habitat
Sonoran desert toad Incillius alvarius	CDFW: SC	Large: 7.5 inches or more in length. smooth, typically olive-green/brown skin, cranial crests, and prominent, elongated glands on both sides of the back of the head (parotoid glands) and on the hind legs. Young toads have small dark, orange-tipped spots on the back. Larger tadpoles are gray or brown with a rounded tail tip, and grow to about 2.25 inches.	Sonoran Desert scrub, semi-desert grasslands. Can be tied to permanent water, such as major rivers or the edges of agriculture. May be found many miles from water, particularly during the summer monsoons. Most Sonoran Desert toads are found at night during the monsoon season, but they may emerge a month or more before the summer rains begin, particularly in areas of permanent water. Can be found in rodent burrows or underground retreats.	L No habitat present on site. Not on edge of desert.
Northern Leopard frog Lithobates pipiens	CDFW: Species of Concern	Medium-sized slender frog. Adults are 2 - 4 3/8 in. long from snout to vent and the females are larger - males grow up to 3 1/8 in. Green, tan, or brown above.Have dark brown oval spots; well-defined edges and pale borders. No dark pigmentation. Cream-colored dorsolateral folds (well-defined)	Is found in grasslands, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, reservoirs. Likes permanent water with abundant aquatic vegetation. Range is from sea level to 11,000 ft.	L No habitat on site

		extend from the shoulders to the rump. whitish stripe on upper jaw . Young have few or no spots. Tadpoles are brown or grey with small gold spots, creamy below with a bronzy sheen and visible guts, and grow up to 3.5 in. in length		
Western Yellow *Lasiurus xanthinus*	CDFW: Species of Concern	Consumes small to medium-sized, night flying insects. Yellow color/short ears.	Roosts in leafy vegetation in the deserts of the southwestern United States. Roosts among the dead fronds of palm trees and cottonwoods	L Not expected
Pocketed free-tailed bat *Nyctinomops femorosaccus*	CDFW: SC	Bat has a free-tail which extends beyond the edge of the interfemoral membrane. With a forearm of 45-49 mm, it is smaller than all other North American molossid species except *Tadarida brasiliensis*. It is slightly larger than *T. brasiliensis* and has its ears joined at the midline. The body length measures 3 7/8 to 4 5/8", with a wingspan of 14". The fur is dark gray or brown above and below and nearly white at base. Ears are joined at base. Possesses a wrinkly upper lip; about half of the tail extends past edge of tail membrane	Lives in rocky areas of desert scrub or coniferous forests. During day roosts in crevices on cliff faces.	L Not expected; no cliff crevice habitat.
Big free tailed bat *Nyctinonmops macrotis*	CDFW: Species of Concern	Body length of 5 1/8 to 5 3/4", with a 17" wingspan, which makes it bigger than other free tailed bats. Fur is reddish brown to dark brown, with hairs white at base.	Lives in rocky areas of desert scrub or coniferous forests. During day roosts in crevices on cliff faces.	L Not expected; no habitat.

		Tail extends past membrane at least an inch. Big ears are joined at base and extend out over face like a hat. Eats mostly moths, some crickets, grasshoppers, ants, various other insects.		
Western mastiff bat *Eumops perotis californicus*	CDFW: Species of Concern	Biggest North American bat, with a body length of 5 1/2 to 7 1/2"; wingspan of over 22". Fur is thin,dark brown, hairs white at base.Huge ears, joined at base and extending out over forehead like a bonnet. Eats moths, insects. Forms small colonies of up to about 100 bats. Very vocal bat, emits many loud cheaping sounds while flying, audible to the human ear. Sometimes forages by crawling on the ground, with tail held up in the air. Bears a single young each year, in the early summer.	Southern California and Arizona, extending down to Mexico. Lives in rocky areas and cliff faces. Roosts in cliff crevices and buildings.	L Not expected no cliff crevice habitat.
Sonoran mud turtle *Kinosternon sonoriense*	CDFW: Species of Concern	A small (shell up to 175 mm or 7" in length) turtle with an olive or gray-brown, dome-shaped shell. The top part of the shell (carapace) has three mild lengthwise keels. The underside of the shell	It is found in Mexico and the It occurs across most of southeastern and sub-Mogollon Rim central Arizona. It is found in the Salt and Gila rivers and their tributaries, tributaries of the Colorado River in west-central Arizona, the Colorado River near	L Not expected; no habitat.

		(plastron) is usually yellow-brown and has two hinges so that the front and back can close when the turtle retreats inside. There are small, fleshy projections on the throat; head and neck are marked with yellow or cream colored reticulations on a dark olive background. The feet are webbed. These markings on the head and neck distinguish this turtle from other mud turtles.	Yuma, and several drainages flowing south into Mexico from southeastern and south-central Arizona United States.	
Colorado Desert fringe-toed lizard *Uma notata*	CDFW: Species of Concern	Color is white, with a contrasting pattern of broken black lengthwise lines and round, eye-like spots. The color and pattern create a successful camouflage which allows a lizard to blend into its sandy habitat.	Sparsely-vegetated arid areas with fine wind-blown sand, including dunes, flats with sandy hummocks formed around the bases of vegetation, washes, and the banks of rivers. Needs fine, loose sand for burrowing.	L Not expected; no habitat.
Yuma hispid cotton rat *Sigmodon hispidus eremicus*	CDFW: Species of Concern	Dark brown or blackish rat (head to tail length: 224-365 mm; weight: 100-225 grams grizzled fur. Shorter tail than roof rat (*Rattus rattus)*. Diet of vegetation and is active both day and night.	Favored habitat is wetlands with dense grass and herbaceous plants; travels on runways through vegetation.	L None observed; no habitat

Special Status Species that Occur in Imperial County (USFWS)

Common Name *Scientific Name*	Status[1] Federal/CDFW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
Plants				
Peirson's milk-vetch *Astragalus magdalenae* var. *peirsonii*	T/E/1B	Silvery, short-lived perennial plant that is somewhat broom like in appearance. A member of the pea and bean family, it can grow to 2.5 feet tall and is notable among milkvetches for its greatly reduced leaves. Peirson´s milkvetch produces attractive, small purple flowers , generally in March or April, with 10 to 17 flowers per stalk. It yields inflated fruit similar to yellow-green pea pods with triangular beaks.	Desert dune habitats. In California, known from sand dunes in the Algodones Dunes system of Imperial County. Was known historically from Borrego Valley in San Diego County and at a site southwest of the Salton Sea in Imperial County	L None observed. No dune habitat
Birds				
California brown pelican *Pelecanus occidentalis* No longer endangered	E/E/-	Large size and brown color. Adults weigh approximately 9 pounds, and have a wingspan of over 6 feet. They have long, dark bills with big pouches for catching and holding fish. Pelicans breed in nesting colonies on islands without mammal predators. Roosting and loafing sites provide important resting	Open water, estuaries, beaches; roosts on various structures, such as pilings, boat docks, breakwaters, and mudflats	L None observed. No open water

Common Name *Scientific Name*	Status[1] Federal/CDFW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		habitat for breeding and non-breeding birds.		
Southwestern willow flycatcher *Empidonax traillii extimus*	E/-/-	Small; usually a little less than 6 inches in length, including tail. Conspicuous light-colored wingbars. Lacks the conspicuous pale eye-ring of many similar *Empidonax* species. Overall, body brownish-olive to gray-green above. Throat whitish, breast pale olive, and belly yellowish. Bill relatively large; lower mandible completely pale. The breeding range of extimus includes Arizona and adjacent states.	At low elevations, breeds principally in dense willow, cottonwood, and tamarisk thickets and in woodlands, along streams and rivers. Migrants may occur more widely. Prefers riparian willow/cottonwood but will use salt cedar thickets	L None Observed No habitat
Yuma clapper rail (Ridgeway Rail) *Rallus longirostris yumanensis*	E/T/-	A chickenlike marsh bird with a long, slightly drooping bill and an often upturned tail. Light brownish with dark streaks above. Rust-colored breast; bold, vertical gray and white bars on the flanks; white undertail coverts. Very shy.	Lives in freshwater and brackish marshes. Prefers dense cattails, bulrushes, and other aquatic vegetation. Nests in riverine wetlands near upland, in shallow sites dominated by mature vegetation, often in the base of a shrub. Prefers denser cover in	L None observed or heard; Cattails not found in dense stands

Common Name *Scientific Name*	Status[1] Federal/CDFW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
			winter than in summer..	
Yellow-billed cuckoo *Coccyzus americanus*	C/E/-	Medium-sized cuckoo with gray-brown upperparts and white underparts. Eye-rings are pale yellow. Bill is mostly yellow. Wings are gray-brown with rufous primaries. Tail is long and has white-spotted black edges. Sexes are similar.	Found in forest and open woodlands, especially in areas with dense undergrowth, such as parks, riparian woodlands, and thickets	L None observed; no habitat on site.
Bald eagle *Haliaeetus leucocephalus*	T, PD/E/-	The distinctive white head and tail feathers Beak and eyes yellow. Bald Eagles are about 29 to 42 inches long, can weigh 7 to 15 pounds, and have a wing span of 6 to 8 feet.	Found on shores, lake margins, and near large rivers. Nests in large trees. Winters at lakes, reservoirs, river systems, and some rangelands and coastal wetlands (breeding range is mainly in mountainous habitats near reservoirs, lakes and rivers, mainly in the northern two-thirds of California)	L None observed; no habitat.
Least tern *Sterna antillarum*	E/E/-	Small tern. During breeding, black cap ending at white forehead. Short white eyestripe. Bill yellow with black tip. Back light gray.	Shallow areas of estuaries, lagoons, and at the joining points between rivers and estuaries	L None observed; no habitat

Common Name *Scientific Name*	Status[1] Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		Underside white. Black leading edge to wing. In nonbreeding plumage has black eyestripe extending to back of head, white top of head, and black bill. Size: 21-23 cm (8-9 in) Wingspan: 48-53 cm (19-21 in) Weight: 30-45 g (1.06-1.59 ounces)		
Least Bell's Vireo *Vireo bellii pusillus*	E/E/-	Drab gray to green above and white to yellow below. It has a faint white eyering and two pale wingbars; has pale whitish cheeks and forehead and greenish wings and tail. longer tail and subtle wingbars. The song is a varied sequence of sharp, slurred phrases that typically end with an ascending or descending note.	Formerly a common and widespread summer resident below about 2,000 feet in western Sierra Nevada. Also was common in coastal southern California, from Santa Barbara County south, below about 4,000 feet east of the Sierra Nevada. Prefers thickets of willow, and other low shrubs afford nesting and roosting cover	L None observed; no habitat on site.
Mountain plover *Charadrius montanus*	FPT/SC/-	Medium-sized plover with pale brown upperparts, white underparts, and brown sides. Head has brown cap, white	Avoids high and dense cover. Uses open grass plains, plowed fields with little	L No habitat on site and no

Common Name *Scientific Name*	Status[1] Federal/CDFW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		face, and dark eyestripe. Upperwings are brown with black edges and white bars; underwings are white. Tail is brown-black with white edges. Sexes are similar.	vegetation, and open sagebrush areas. Likes to follow livestock grazing or burned off fields.	adjacent fields that could be used for foraging.
Black rail *Laterallus jamaicensis coturniculus*	-/T/-	The smallest of all rails, the black rail is slate-colored, with a black bill, red eyes and a white-speckled back. The legs are moderately long and the toes are unwebbed. The sexes are similar.	Most commonly occurs in tidal emergent wetlands dominated by pickleweed or in brackish marshes with bulrushes in association with pickleweed. In freshwater, usually found in bulrushes, cattails, and saltgrass and in immediate vicinity of tidal sloughs. Typically occurs in the high wetland zones near upper limit of tidal flooding, not in low wetland areas with considerable annual or daily fluctuations in water levels. Nests are concealed in dense vegetation, often pickleweed, near upper limits of tidal flooding	L None observed; no habitat

Common Name *Scientific Name*	Status[1] Federal/CDFW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
Raptors				
Peregrine Falcon *Falco peregrinus*	D/E/-	Large, powerful falcon; pointed winged falcon silhouette. Strong shallow wingbeats may dive at speeds up to 100 mph. Dark with dark hooded effect. Blue gray below with narrow bars	Most often found along coastlines or marshy habitats. Nest in cliffs and have been known to nest in tall buildings	L None observed; rare visitors to area outside of the Salton Sea. No waterfowl for prey or cliffs/tall buildings for nesting
Northern Harrier *Circus cyaneus*	-/SC/-	Long-winged, long tailed hawk. Habitually flys low over open fields and marshes watching and listening for prey such as rodents and birds. (I observed Harrier with a white faced ibis as prey). Perches low or on ground. Low slow flight. Nests in reeds. Grey with black wingtips.	Marshes, open fields. Nests in reeds	L Low rodent, rabbit populations. Not observed on site.No nesting habitat.
Sharp-shinned Hawk *Accipiter striatus*	-/SC/-	Blue gray above pale reddish below; small size. Tip of tail squared off. Nesting occurs in dense	Sharp-shinned hawks may appear in woodland habitats	L Low rodent, rabbit

Common Name *Scientific Name*	Status[1] Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		tree stands which are cool, moist, well shaded and usually near water. Hunt in openings at the edges of woodlands and also brushy pastures.	during winter and migration periods and are often common in southern California in the coastal lowlands and desert areas; winters in woodlands and other habitats except alpine, open prairie and bare desert	populations. Not observed
White tailed Kite *Elanus leucurus*	/E/	Gray and white with black on lshoulders and under bend of wing. Graceful flyer. Adults have bright red eyes. Medium size hawk; aboaut 15 inches long and about 12 ounces.	Found in open country; like to perch on treetop. May be seen hovering prior to attack of a rodent.	L Low rodent, rabbit populations; None observed
Ferruginous hawk *Buteo regalis*	/SC/	Males pale with with rufous shoulders and thigh feathers. White tail washed with rufous. Wide head wings in shallow v when soaring.	Found in arid to semiarid regions, as well as grasslands and agricultural areas in southwestern Canada, western United States, and northern Mexico.	L Low rodent, rabbit populations; None observed

Common Name *Scientific Name*	Status[1] Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
Mammals				
Bighorn sheep *Ovis canadensis*	E/E/-	Sheep have short hair which is light gray to grayish brown, except around their stomachs and rump, where it is creamy white. Their tails are about four inches long. Full-grown rams weigh between 180 and 240 pounds,	Desert Bighorn sheep occupy a variety of plant communities, ranging from mixed-grass hillsides, shrubs. Avoids dense vegetation	L None observed; no habitat
Jaguar *Panthera onca*	-/-/-	Typically yellow-brown with black spots, called rosettes, but they can also be black with black spots. They are nocturnal and have a keen sense of smell and hearing. Excellent swimmers, tree climbers, and move easily on the ground.	Occurs in tropical rainforests, arid scrub, and wet grasslands. Prefers dense forests or swamps with a ready supply of water	L None observed; no habitat
Reptiles and Amphibians				
Desert tortoise *Gopherus agassizii*	T/T/-	A herbivore that may attain a length of 9 to 15 inches in upper shell (carapace) length. The tortoise is able to live where ground temperature may exceed 140 degrees F because of its ability to dig underground burrows and escape the heat. At least 95% of its life is spent in burrows.	Dry, flat, and gravelly or sandy ground in desert shrub communities where annual and perennial grasses are abundant. Frequent habitats with a mix of shrubs, forbs, and grasses	L None observed; habitat not favorable; no desert shrub

Common Name *Scientific Name*	Status[1] Federal/CD FW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		Their shells are high-domed, and greenish-tan to dark brown in color. Desert tortoises can grow from 4–6"in height and weigh 8–15 lb (4–7 kg) when fully grown. The front limbs have heavy, claw-like scales and are flattened for digging. Back legs are more stumpy and elephantine		
Flat-tailed horn lizard *Phrynosoma mcallii*	PT/-/-	Closely related to Desert horned lizard (scat indistinquishable); only found in Imperial, Riverside County,Ca and Yuma area, Az. Small round lizard with distinquishing round spots on back. Diet of ants; needs sandy soil, shade bushes to survive.	Desert washes/sandy areas with vegetative cover. Diet of ants	L No habitat; none observed; no sandy areas available
Fish				
Desert pupfish *Cyprinodon macularius*	E/E/-	Small, silvery-colored fish with 6 to 9 dark bands on its sides. Grows to a full average length of only 2.5 inches; develop quickly, sometimes reaching full maturity within 2	Springs, seeps, and slow-moving streams in Salton Sink basin and backwaters and sloughs of the Colorado River	L None observed; no habitat

Common Name *Scientific Name*	Status[1] Federal/CDFW / CNPS	DESCRIPTION OF SPECIES	Habitat	Suitability Of Habitat In Survey Area
		to 3 months. Although their average life span is 6 to 9 months, some survive more than one year. Pupfish have a short, scaled head with an upturned mouth. The anal and dorsal fins are rounded with the dorsal sometimes exhibiting a dark blotch. The caudal fin is convex at the rear.		
Razorback Sucker *Xyrauchen texanus*	Fed/CA: Endangered	One of the largest suckers in North America, can grow to up to 13 pounds and lengths exceeding 3 feet. The razorback is brownish-green with a yellow to white-colored belly and has an abrupt, bony hump on its back shaped like an upside-down boat keel	Colorado River	L None observed; no habitat

Sources: CDFW/CNDDB June,2017, California Wildlife 2016; CNPS 2017; USFWS, 2016

[1]Status: Federal:

E = Listed as an endangered species
T = Listed as a threatened species
C = Candidate for listing
D = Delisted
PD = Proposed for delisting/PT = Proposed for threatened status

State/CDFG:

E = Listed as an endangered species; or previously known as "rare, fully protected"
T = Listed as a threatened species
SC = species of special concern (designation intended for use as a management tool and for information; species of special concern have no legal status (www.dfg.ca.gov/wildlife/species/ssc/birds.html))

CNPS (California Native Plant Society):
1 = Rare, threatened, or endangered in California or elsewhere
2= Plants rare, threatened, or endangered in Ca, but more common elsewhere
3=Plants about which more information is needed
0.1 Seriously threatened in Ca (high degree/immediacy of threat)
0.2 Fairly threatened in Ca (moderate degree/immediacy of threat)
0.3 Not very threatened in Ca (low degree/immediacy of threats or no current threats known
Habitat Suitability Codes: H = Habitat is of high suitability for this species M = Habitat is of moderate suitability for this species L = Habitat is of low suitability for this species

USFWS BIRDS OF CONSERVATION CONCERN 2016

Common Name	Species Name	Region 8 Imperial County	National Rating	Habitat	Potential Onsite
Bald Eagle	*Haliaeetus leucocephalus*	X	X	Nests on tall trees or on cliffs in forested areas near large bodies of water. Winters in coastal areas, along large rivers, and large unfrozen lakes.	Low Not expected. No tall trees; not observed in area
Swainson's Hawk	*Buteo swainsoni*		X	Breeds in open country such as grassland, shrubland, and agricultural areas. Usually migrates in large flocks often with Broad-winged Hawks. Winters in open grasslands and agricultural areas of Southern America.	Low Not expected on site; no agriculture. May migrate through. Not observed in area
Peregrine Falcon	*Falco peregrinus*	X	X	Inhabits open wetlands near cliffs for nesting. Also uses large cities and nests on buildings.	Low No open wetlands or nesting area.

Black Rail	*Laterallus jamaicensis*	X	X	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Low No salt or freshwater marshes; no or sparse vegetation
Snowy Plover	*Chardrius alexandrinus*	X	X	Barren to sparsely vegetated sand beaches, dry salt flats in lagoons, dredge spoils deposited on beach or dune habitat, levees and flats at salt-evaporation ponds, river bars, along alkaline or sailne lakes, reservoirs, and ponds.	Low No habitat; not observed
Mountain Plover	*Charadrius montanus*	X	X	Breeds on open plains at moderate elevations. Winters in short-grass plains and fields, plowed fields, and sandy deserts.	Low on site No habitat; not observed
Black Oystercatcher	*Haematopus bachmani*	X	X	Rocky seacoasts and islands, less commonly sandy beaches.	Low No habitat; not observed
Solitary Sandpiper	*Tringa solitaria*		X	Breeds in taiga, nesting in trees in deserted songbird nests. In migration and winter found along freshwater ponds, stream edges, temporary ponds, flooded ditches and fields, more commonly in wooded regions, less frequently on mudflats and open marshes.	Low No habitat; not observed

Lesser Yellowlegs	*Tringa flavipes*		X	Breeds in open boreal forest with scattered shallow wetlands. Winters in wide variety of shallow fresh and saltwater habitats.	Low No habitat; not observed
Upland Sandpiper	*Bartramia longicauda*		X	Native prairie and other dry grasslands, including airports and some croplands.	Low No habitat; not observed
Whimbrel	*Numenius phaeopus*	X	X	Breeds in various tundra habitat, from wet lowlands to dry heath. In migration, frequents various coastal and inland habitats, including fields and beaches. Winters in tidal flats and shorelines, occasionally visiting inland habitats.	Low No habitat; not observed
Long-billed Curlew	*Numenius americanus*	X	X	Nests in wet and dry uplands. In migration and winter found on wetlands, grain fields, lake and river shores, marshes, and beaches.	Low on site No habitat; not observed.
Short-billed Dowitcher	*Limnodromus griseus*	X	X	Breeds in muskegs of taiga to timberline, and barely into subarctic tundra. Winters on coastal mud flats and brackish lagoons. In migration prefers saltwater tidal flats, beaches, and salt marshes. Also found in freshwater mud flats and flooded	Low No habitat; not observed

				agricultural fields.	
Aleutian Tern	*Sterna aleutica*		X	Nest on flat vegetated islands on or near the coast. Vegetation includes dwarf-shrub tundra, grass and sedgemeadows, and coastal marsh. Migration and winter habitat not known, probably pelagic.	Low No habitat; not observed
Least Tern	*Sterna antillarum*		X	Seacoasts, beaches, bays, estuaries, lagoons, lakes and rivers, breeding on sandy or gravelly beaches and banks of rivers or lakes, rarely on flat rooftops of buildings.	Low No habitat; not observed
Gull-billed Turn	*Sterna nilotica*		X	Breeds on gravelly or sandy beaches. Inters in salt marshes, estuaries, lagoons and plowed fields, along rivers, around lakes and in freshwater marshes.	Low No habitat; not observed
Black Skimmer	*Rynchops niger*	X	X	Breeds in large colonies on sandbars and beaches. Forages in shallow bays, inlets, and estuaries.	Low No habitat; not observed
Yellow-billed Cuckoo	*Coccyzus americanus*	X	X	Open woodlands with clearings, orchards, dense scrubby vegetation, mainly cottonwood, willow, and adler, often along water.	Low No habitat; not observed

Black Swift	*Cypseloides niger*	X	X	Nests on steep ledges on cliffs or canyons. Migrates and winters over coastal lowlands.	Low No habitat; no swifts observed in area
Costa's Hummingbird	*Calypte costae*	X	X	Primarily low deserts and arid brushy foothills, but also chaparral and coastal sage scrub closer to the coast. Often visits ornamental plantings and feeders in desert communities. In migration and winter frequents a wider variety of habitats, occasionally ranging into pine-oak woodlands in adjacent mountains.	Low No habitat; not observed – no feeders or nectar sources in area
Calliope Hummingbird	*Stellula calliope*	X	X	Open montane forest, mountain meadows, and thickets of willow and alder. In migration and winter also in chaparral, oak and pine-oak woodlands, deserts, and gardens.	Low No habitat; not observed
Rufous Hummingbird	*Selasphorus rufus*		X	Breeds in a variety of forested habitats where flowers are found. Frequents montane meadows and just about anywhere else with flowers or feeders during migration. Winters primarily in pine and pine-oak forests in Mexico, but most birds wintering	Low No habitat; not observed – no feeders or nectar in area.

				farther north are attracted either to flowers or feeders in gardens.	
Allen's Hummingbird	*Selasphorus sasin*	X	X	Breeds in coastal sage scrub, chaparral, and riparian corridors within coastal forests. In Mexico winters in forest edge and scrub clearings with flowers. The resident population on the mainland of southern California is largely restricted to suburban neighborhoods where feeders and flowers are plentiful.	Low No habitat; not observed. No feeders or nectar in area
Lewis's Woodpecker	*Melanerpes lewis*	X	X	Breeds in open arid conifer, oak, and riparian woodlands: rare in coastal areas. Winters in breeding habitat, and oak savannas, orchards, and even in towns.	Low No habitat; not observed
Olive-sided Flycatcher	*Contopus cooperi*	X	X	Montane and northern coniferous forests, at forest edges and openings such as meadows, and at ponds and bags. Winters at forest edges and clearings where	Low No habitat; not observed

				tall trees or snags are present.	
Willow Flycatcher	*Empidonax trailii*	X	X	Breeds in moist, shrubby areas, often with standing or running water. Winters in shrubby clearings and early successional growth.	Low No habitat; not observed
Loggerhead Shrike	*Lanius ludovicianus*	X	X	Open or brushy areas.	Low No habitat; not observed.
Bell's Vireo	*Vireo bellii*	X	X	Dense, low, shrubby vegetation generally early successional stages in riparian areas, brushy fields, young second-growth forest or woodland, scrub oak, coastal chaparral, and mesquite brushlands, often near water in arid regions.	Low No habitat; not observed
Gray Vireo	*Vireo vicinior*	X	X	Found in desert scrub, mixed oak-juniper and pinyon-juniper woodlands, dry chaparral, and thorn scrub in hot, arid mountains and high-plains.	Low No habitat; not observed
Horned Lark	*Eremophila alpestris*		X	Open, barren country including dirt fields, gravel ridges, and shores. Prefers bare ground to short grasses.	Low Habitat not favorable; none observed.
LeConte's Thrasher	*Toxostoma lecontei*	X	X	Desert scrub, mesquite, tall riparian brush and, locally, chaparral.	Low No habitat; not observed

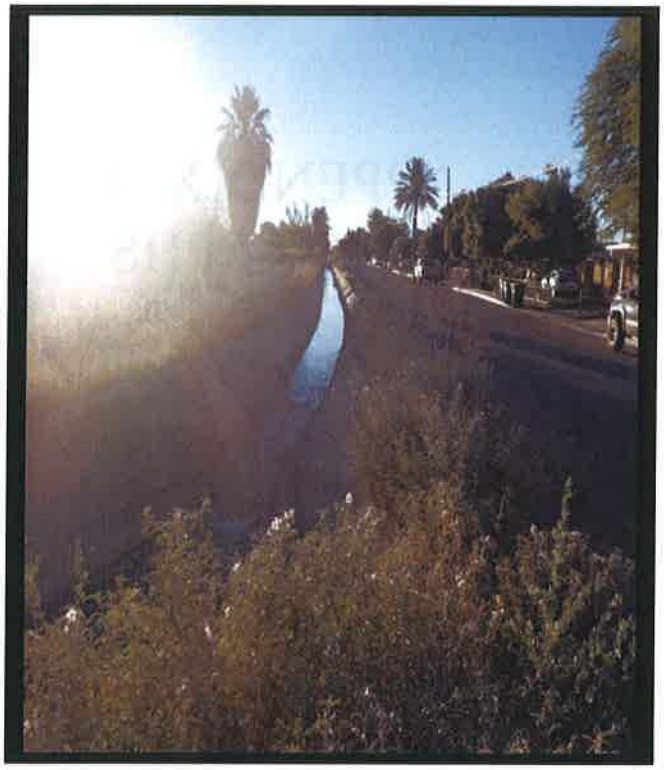
Yellow Warbler	*Dendroica petechia*	X		Breeds in wet, decidious thickets, especially in willows and adler. Also in shrubby areas, old fields, gardens and orchards. In southern Florida and farther south, found in mangroves.	Low No habitat; not observed
Common Yellowthroat	*Geothlypis trichas*	X		Thick vegetation from wetlands to prairies to pine forests. Frequently near water.	Low No habitat; not observed
Rufous-winged Sparrow	*Aimophila carpalis*		X	Found in flat areas of tall desert grass mixed with brush and cactus, and thorn scrub.	Low No habitat; not observed
Brewer's Sparrow	*Euphagus cyanocephalus*	X	X	Found in a variety of habitats, but prefers open, human-modified areas, such as farmland, fields, residential lawns, and urban parks.	Low Not observed
Black-chinned Sparrow	*Spizella atrogularis*	X	X	Arid brushland, commonly in tall and fairly dense sagebrush, and dry chaparral. Often in rocky, rugged country from sea level to around 8,900 ft (2700m).	Low No habitat; not observed

Tricolored Blackbird	*Agelaius tricolor*	X	X	Breeds in marsh vegetation, particulalry cattails, near grain fields, riparian scrubland, and forests, but always near water. Dairies and feedlots also commonly used for foraging. Urban and suburban areas occasionally utilized, particularly park lawns. Cultivated lands also suitable for foraging. Large night-time roosts form during nonbreeding season in cattail marshes near foraging grounds.	Low Sparse cattails; not observed
Lawrence's Goldfinch	*Carduelis lawrencei*	X	X	Prefers dry interior foothills, mountain valleys, open woodlands, chaparral, and weedy fields. Often found near isolated water sources such as springs and cattle troughs.	Low No habitat; not observed

APPENDIX B
PHOTOGRAPHS

PHOTOGRAPHS

1. Southwest corner of property looking north; site with quail bush on right



2. Southwest corner of property looking east; Pear Canal and residential area on right

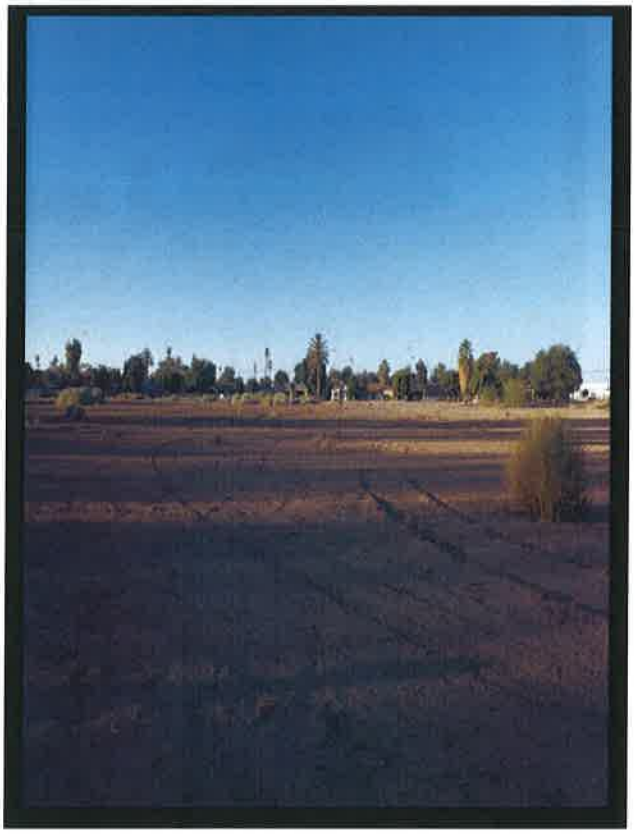
3. Gecko found on site

4. Vacant lot site with ruderal vegetation looking north

5. Palm tree and Paloverde trees found on site

6. Vacant lot site with ruderal vegetation looking east

7. Saltcedar found on eastern border of site



8. Ruderal lot site looing south from northern border of site

9. North boundary along 10th Street looking east

APPENDIX C
SPECIES OBSERVED ON AND VICINITY OF SITE

APPENDIX C

ZOOLOGICAL SPECIES OBSERVED ON AND VICINITY OF SITE

Common name	Scientific name
Doves	*Zenaidap macroura/Columbia passerine/Streptopelia decaocto*
Crickets (heard)	*Gryllodes sigulatus*
Gopher mounds	*Thomomys sp.*
Pigeon	*Columba livia*
Ants	*various*
Bees	*Apis mellifera*
Grackle	*Quiscalus mexiacanus*
Dog, cat, human tracks	
House sparrow	*Passer domesticus*
Domestic chickens	*various*
Banded Gecko	*Coleonyx*
Desert termite	*Apocrita*
Dragonfly/damselfly	*various*

BOTANICAL SPECIES OBSERVED ON AND VICINITY OF SITE

Common name	Scientific name
Bermuda grass	*Cynodon dactylon*
Saltcedar	*Tamarix sp.*
Quail bush	*Atriplex lentiformis*
Saltbush	*Atriplex canescens*
Mustards	*various*
Saltgrass	*Distichlis spicata*
Russian thistle	*Salsola sp.* (Invasive)
Prostrate pigweed	*Amaranthus blitoides*
Spiny aster	*Chloracantha spinosa*
White horse nettle	*Solanum elaeagnifolium*
Palo verde	*Cercidium floridum*
Residential trees	*various*

APPENDIX D
QUALIFICATIONS

GLENNA MARIE BARRETT

PO Box 636 Imperial, California 92251 (760) 425-0688 glennabarrett@outlook.com

PROFILE

Organized and focused individual, adept at implementing multifaceted projects while working alone or as an integral part of a team. Skilled in client/employee communications, report preparation, program analyses and development. Cost conscious, safety oriented and empathetic. A strong communicator with excellent interpersonal skills, which allows development of rapport with individuals on all levels. A sound professional attitude, strong work ethic and pride in personal performance.

WORK EXPERIENCE

Principal Business Consultant, Barrett Enterprises. Imperial, CA December 2001 - currently.
Compile information and complete local, state and federal government forms; such as conditional use permits, reclamation plan applications, Financial Assurance Cost Estimates, zone changes, CEQA, Environmental Evaluation committee responses, and 501 (c)(3) tax exemption applications. Act as liaison between local businesses and local, state, and federal government agencies. Certified to survey for Flat-Tailed Horned Lizards(FTHL) in California and Arizona. Certified to survey for Burrowing Owls (BUOW) and the Desert Tortoise.

Extensive knowledge in southwestern United States, non-migratory and migratory avian biology and ecology. Strong knowledge of common Flora and Fauna communities associated with Southern California and surrounding environs. CEQA, NEPA, MBTA, 401/404, 1600/1601 permit compliance, California Endangered Species Act (CESA) and Federal Endangered Species Act (ESA) knowledge gained through work experience. I have excellent analytical skills, multi-tasking and writing abilities. My past work experience has provided me with many years of hands on experience working with and managing others to find practical solutions to solve problems and achieve common goals.

FIELD EXPERIENCE

Ms. Barrett has done the field work and contributed to the required reports for the following projects:

- Sol Orchard - El Centro, CA: Successfully completed BUOW relocation and artificial burrow installation for six burrows.
- Burrtec – Salton City, CA: Team leader for eight people to complete a FTHL pre-construction site sweep for 320 acres in Imperial County.
- Applied Biological Consulting: Monitored for Desert Tortoise and nesting birds for the 500kV transmission line traverses approximately 153 mi from Blythe, CA to Menifee in Riverside County, CA. Crossing private, state and Federal lands, such as the Bureau of Land Management [BLM], U.S. Forest Service [USFS]. (November 2011 to May 31, 2013)

EDUCATION AND TRAINING

Received **Bachelor of Science in Business** with a focus on Management, along with Economics and Leadership minors, December 2000. Humboldt State University, Arcata, CA.

Special Status/listed species observed/ identified, surveyed, monitored, trapped and/or relocated:
Mohave desert tortoise, Coachella valley milk-vetch, American Badger, Desert kit fox, Mountain lion, Coachella valley fringe toed lizard, Mohave fringe toed lizard, Stephen's kangaroo rat, Mohave ground squirrel, Coast horned lizard, Flat-tailed horned lizard, Orange-throated whiptail, Burrowing Owl.

CERTIFICATIONS/ WORKSHOPS

- FTHL Workshop, 2008 El Centro BLM office. CDFG Certificate;
- USFW Desert Tortoise Egg Handling Desert Tortoise Council Survey Techniques Workshop Certificate, 2008 and 2010.
- Anza Borrego State Park Wildflower Identification Workshop, 2010.
- Southwest Willow Flycatcher Workshop Kernville, CA 2010.
- SCE TRTP Construction Monitoring Training Class and WEAP Redlands, CA 2011.
- DPV2 Construction Monitoring Training Class and WEAP Santa Ana, CA 2011.
- Helicopter/ flight trained on DPV2.
- Certified to handle/ move venomous snakes on DPV2.
- Bat monitoring with Ms. Pat Brown BLM El Centro, CA Office.
- Salton Sea International Bird Festival 2007 Coordinator
- Mountain Plover/ Long-billed Curlew surveys, L.A. Museum of Natural History.

MARIE S. BARRETT 2035 Forrester Road, El Centro, CA 92243 (760) 352 4159 mariebarrett@roadrunner.com

LICENSES/CERTIFICATES

Flat Tailed Horn Lizard Surveyor CDFG/BLM
Burrowing Owl Surveyor (CDFG/USFWS)
USFW Desert Tortoise Egg Handling Desert Tortoise Council Survey Techniques Workshop Certificate
BCI Bat Conservation and Management Workshop (Acoustic) Certificate
Southwestern Willow Flycatcher Workshop Kernville, CA 2010
California Pest Control Advisor #70373 California Pest Control Operator #103123
CA Scientific Collection Permit 126/USFWS Salvage Permit MB52633B-1

CAREER HISTORY

Barrett's Biological Surveys, El Centro, California ***BIOLOGIST*** **3/95 -present**

Helped established protocol and perform Vegetative Baseline Studies and Biological Surveys for Mining Reclamation Plans in Imperial County. Have performed numerous (over 20,000 acres) surveys involving varied wildlife including burrowing owl, nesting birds and plant species and writing reports and biological assessments. Certified to perform Flat Tailed Horned Lizard Surveys; completed Desert Tortoise workshops; approved to handle desert tortoise (American Girl Mine/BLM project, 1/2013). Work closely with governmental agencies such as such as Bureau of Land Management, State Office of Mining Reclamation, California Department of Fish and Game. Written over ten Environmental Assessments for BLM, El Centro office. Over 150 days spent in field monitoring/surveying for FTHL; 98 days in field monitoring/surveying for desert tortoise and 32,000 acres surveyed for burrowing owl and nesting birds; 2 IID Burrowing owl surveys with AECOM (2011/12- 226 hrs). Wrote Imperial Irrigation District Artificial Burrow Installation Manual (2009). Over 25 active burrowing owl burrows passively relocated and 50 artificial burrows installed. Volunteered for desert tortoise work (20 hrs) with Dr. Jeff Lovich. Coachella Valley Projects: Torres-Martinez (Desert Cahuilla Composting Facility Biological Resource Technical Report/Surveys 60 acres, SR 86/Ave 84, 2013; Augustine Tribe (Solar Farm Biological Resource Technical Report/Surveys 10 acres, La Quinta,CA, 2010); Benitez Family Trust Therapeutic Community, Dillon and Cabazon Roads, 10 acres,2008); Chandri Group (Dairy Queen Chill/Grill Project, 1.5 acres, Date Palm Drive/I-10, La Quinta, CA, 2014). Blythe 8Minutenergy Mt. Signal Solar 5000 acres Preconstruction surveys/construction monitoring and BUOW Post construction monitoring; Biological report. 2010-2017
Black Mt. MetTower Installation: desert tortoise survey and monitoring approved by BLM, El Centro office
Salton City Burrtec Landfill FTHL monitoring/clearance 2010-2014 (42.5 hrs); Superior Redi Mix: FTHL surveys, Oat Pit Environmental Assessment for BLM, El Centro, 2009-14. (20 hours) SDG&E La Rosite Pole Replacement FTHL Monitoring 2012-2013(410 hrs); Imperial County Department of Public Works, FTHL surveys for Coyote Mine Environmental Assessment, BLM, El Centro, 2008. (10 hours) All American Aggregates, FTHL surveys, Boyd Road Mine Environmental Assessment, BLM El Centro, 2007. (9.5 hours) All American Aggregates, FTHL surveys, Wheeler Road Mine Environmental Assessment, BLM, El Centro, 2006. (8.5 hours); ValRock, FTHL surveys, Ocotillo ByPass Road Environmental Assessment, County of Imperial/BLM, El Centro, 2004. (7 hours). USFWS Authorized desert tortoise biologist: American Girl Mine and Mesquite Mine.

Citizens' Congressional Task Force on the New River, Brawley, Ca ***PROGRAM COORDINATOR*** **1/98 - present**

Assisted with design, construction, planting and monitoring of four constructed wetlands in Imperial County. Responsible for coordinating activities relating to student and public outreach education to promote the water quality opportunities of wetlands ponding systems on the New River.

Imperial Valley College, Imperial, California ***ENVIRONMENTAL MANAGEMENT PROJECT COORDINATOR*** **9/95-12/99**

Responsible for establishing an Environmental Technology curriculum, presenting public forums, short courses and certificate courses in hazardous materials and safety areas. In conjunction with Division Chairman, established a budget for 96-98 program and obtained funding of $131,000 based on 95-96 program performance. Established short courses that trained over 700 people in hazardous materials safety programs. Compiled a survey of employers, which provided direction for the program.

VOLUNTEER ORGANIZATIONS

CALIFORNIA NATIVE PLANT SOCIETY: Imperial Valley Coordinator, 2006-2016.
SALTON SEA INTERNATIONAL BIRD FESTIVAL: Coordinator: 2001-2010. Organize bird festival in the Imperial Valley that attracts over 300 birders.
COLORDO RIVER WATER QUALITY CONTROL BOARD: Board member Dec 05-Sept 06.
FRIENDS OF SONNY BONO NATIONAL WILDLIFE REFUGE: Board Chairman, May 2015- 16

EDUCATION

University of Arizona, Tucson, Arizona
Masters of Science Degree – AGRICULTURAL EDUCATION
Thesis: Survey and training protocol for documenting burrowing owls and habitat in Imperial County, California
California State Polytechnic College, Kellogg-Voorhis Campus, Pomona, California
Bachelor of Science Degree.- AGRICULTURAL BIOLOGY
Imperial Valley College, Imperial, California *Associate of Science Degree. AGRICULTURE*

FIGURE 1
REGIONAL LOCATION
PROJECT VICINITY MAP

PROJECT STATEWIDE LOCATION

PROJECT REGIONAL LOCATION

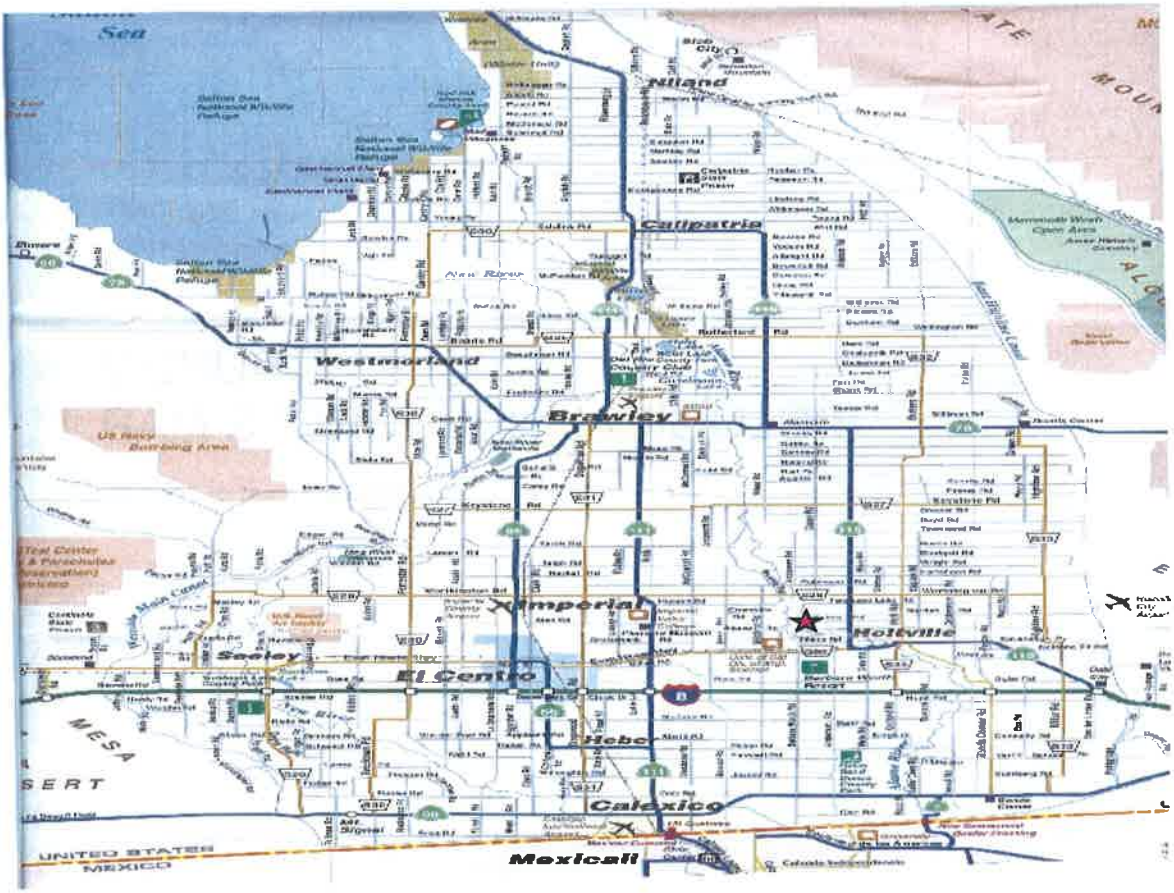


FIGURE 2
BIOLOGICAL RESOURCES MAP

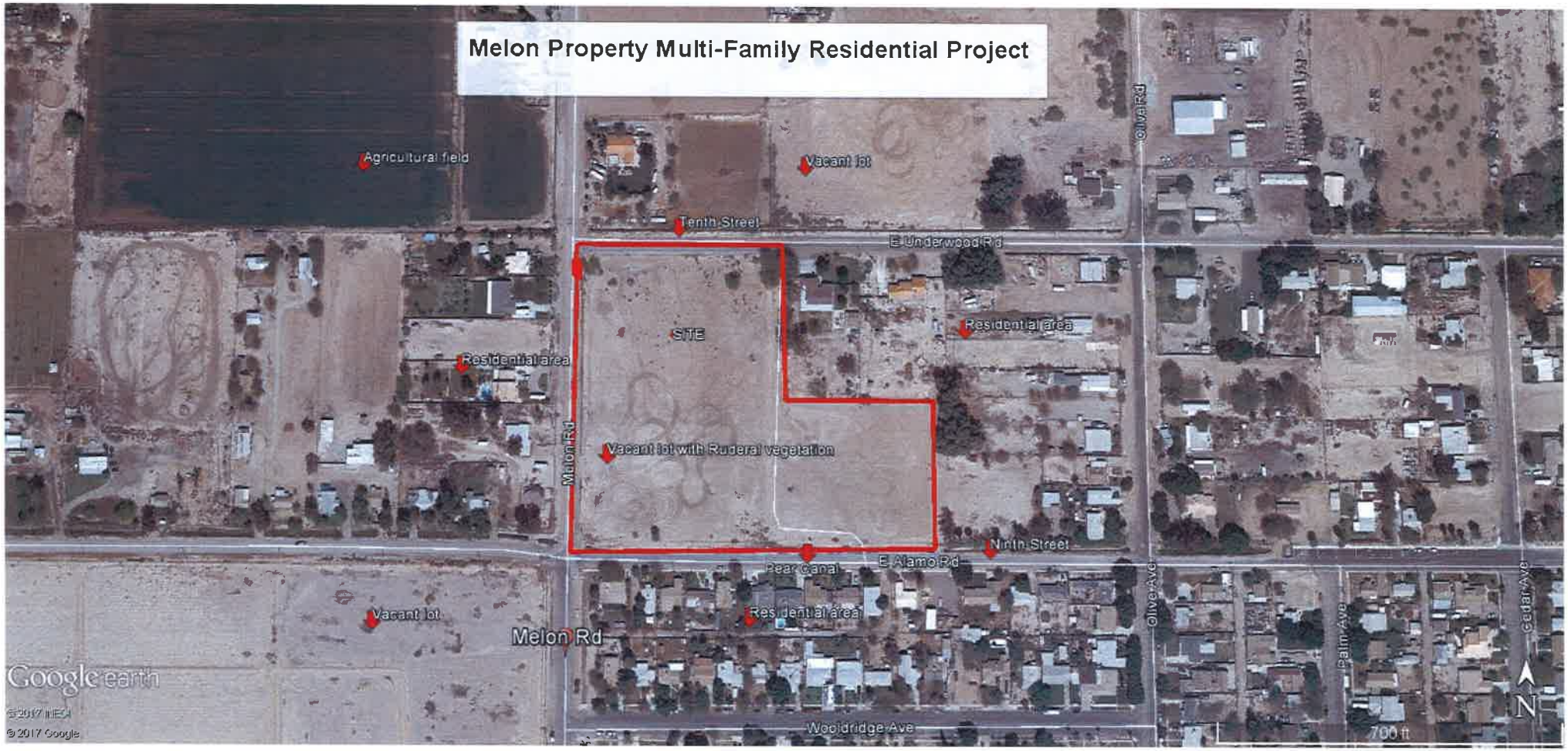
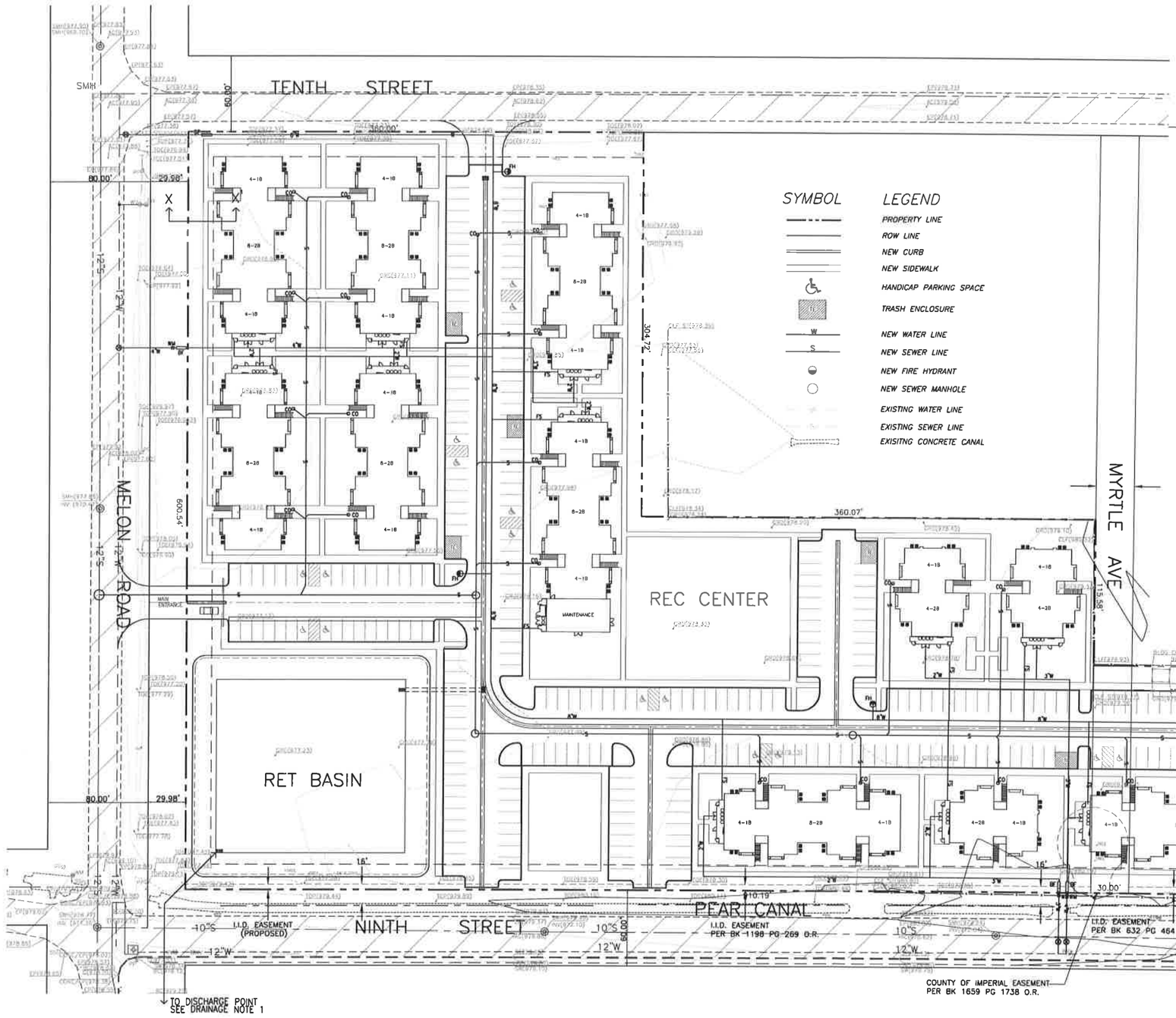
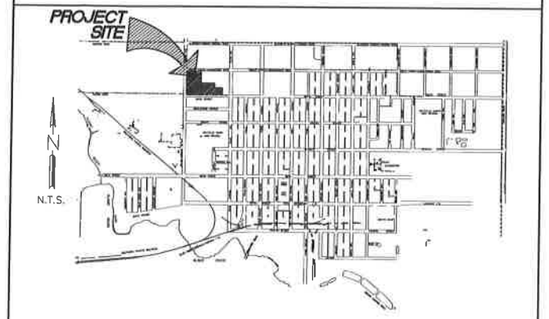

Melon Property Multi-Family Residential Project
Agricultural field
Vacant lot
Tenth Street
E. Underwood Rd
Olive Rd
SITE
Residential area
Residential area
Melon Rd
Vacant lot with Ruderal vegetation
Ninth Street
E. Alamo Rd
Rear Canal
Olive Ave
Palm Ave
Cedar Ave
Vacant lot
Residential area
Melon Rd
Google earth
© 2017 Google
Wooldridge Ave
700 ft
N

FIGURE 3
DESIGN MAP



VICINITY MAP

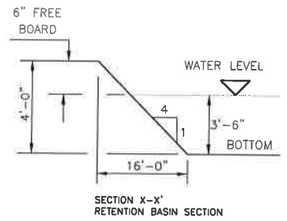


DRAINAGE:

A) RETENTION BASIN (STORAGE REQUIRED)
RETENTION BASIN DESIGN TO STORE 100% OF A 100 YEAR STORM (3 INCHES OF RAIN) FOR THE 8.19 AC. PROPERTY

V=CIA
C=RUNOFF COEFICIENT (1.0)
I=RAINFALL INTENSITY (3.0)
A=BASIN AREA (8.19 AC)
V=1 X 3/12 X 8.19 = 2.05 AC-FT

B) RETENTION BASIN (STORAGE PROVIDED)
TOP OF WATER AREA = 0.72 AC
BOTTOM AREA= 0.47 AC
AVERAGE= 0.60 AC
DEPTH= 4.25 FEET
VOL= 3.5x0.485 = 2.10 AC-FT



SECTION X-X'
RETENTION BASIN SECTION

DRAINAGE NOTES:

1. RETENTION BASIN DRAINAGE TO DISCHARGE TO AN APPROVED CITY OR IID DRAINAGE FACILITY OR TO DRAIN-OUT BY PRECOLATION.
2. RETENTION BASIN TO DRAIN-OUT IN LESS THAN 72 HRS. OTHERWISE A MOSQUITO ABATEMENT SHOULD BE IMPLEMENTED.

LEGAL DESCRIPTION

BEING A MERGER OF BLOCK 90 AND PARCELS 3 AND 4, PARCEL MAP M-1970 AS IN BOOK 8 PAGE 49 OF PARCEL MAPS ON FILE IN THE OFFICE OF THE IMPERIAL COUNTY RECORDER FOR IMPERIAL COUNTY AND THE WEST HALF OF LOTS 8, 9 AND 10, KENDLE'S HOME TRACT, EXCEPTING THEREFROM THE EAST 5 FEET OF SAID LOTS 9 AND 10, KENDLE'S HOME TRACT ACCORDING TO MAP ON FILE IN BOOK 3 PAGE 7 OF OFFICIAL MAPS IN THE OFFICE OF THE IMPERIAL COUNTY RECORDER, ALL IN THE CITY OF HOLTVILLE, STATE OF CALIFORNIA.

OWNER/DEVELOPER

MELON PROPERTIES, LLC
2316 MELON ROAD
HOLTVILLE, CA 92250
(760) 960-1473

ENGINEER

DEVELOPMENT DESIGN & ENGINEERING
1065 STATE STREET
EL CENTRO, CA 92243
(760) 353-8110

PROJECT AREA

A.P.N.	045-390-006, 044, 065, 066 & 067
LOT AREA	8.19 Ac.
ZONING	R3

BUILDINGS

UNIT TYPE 1	8 UNIT
UNIT TYPE 2	3 UNIT
COMMUNITY AREA	1 UNIT
MAINTENANCE	1 UNIT
TOTAL UNITS=	13 UNITS
TOTAL DWELLING UNITS=	152 UNITS

PARKING SPACES

32 (1) BEDROOM X 1.0 (SENIOR)	32
44 (1) BEDROOM X 1.5	66
76 (2) BEDROOM X 2.0	152
TOTAL REQ.	250
PROVIDED:	
HANDICAP	16 SPACES
OPEN	250 SPACES
TOTAL	266 SPACES

No.	DESCRIPTION	BY	DATE

SEAL

FOR PLAN CHECK AND CONSIDERED PRELIMINARY UNTIL APPROVED BY:

R.C.E. No.

DATE EXP. DATE

SEAL
REGISTERED PROFESSIONAL ENGINEER CARLOS CORRALES No. 55432 EXP. 12-31-16 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:

CARLOS CORRALES — 55432 R.C.E. No.

DATE — 12-31-16 EXP. DATE

BENCH MARK

Development DESIGN ENGINEERING
planning · civil engineering · land surveying · project management
t:760.353.8110 f:760.352.6408 1065 State Street El Centro, CA 92243 info@dde-inc.net www.dde-inc.net

SITE PLAN
MELON APARTMENTS
HOLTVILLE, CA
CLIENT JOHN HAWK
DATE 03/16/17 BY STAFF
FILE NAME 16029 SITEPLAN JOB NUMBER 16029
SHEET 1 OF 1