

## Wildlife Protection Plan

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### ACACIA 13-17HZ OIL AND GAS LOCATION Weld County, Colorado

**August 22, 2023**

Prepared for:

**Kerr-McGee Oil & Gas Onshore, LP**

1099 18<sup>th</sup> Street

Denver, CO 80202



Prepared By:

**Apex Companies, L.L.C.**

1746 Cole Blvd., Suite 250

Lakewood, CO 80401

Apex Job No.: OCC005-0312042-23003751.PRE0045

## 1. Introduction

In support of Kerr McGee Oil & Gas Onshore LP's (KMOG) permitting effort for the proposed Acacia 13-17HZ Oil and Gas Location (Location), Apex Companies (Apex) completed a wildlife protection plan for the Energy and Carbon Management Commission (ECMC) *Protection of Wildlife Resources* Rules (1200 Series). This effort included a desktop review and site survey, performed on September 6, 2022, to identify sensitive resources that could be affected by the construction of the Location and subsequent operations. This effort and report provide KMOG with an assessment of potential adverse impacts to sensitive natural resources, including vegetative communities, surface waters, and wildlife. The desktop review sources included the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (FEMA 2023), the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Mapper (USFWS 2021), the USFWS Information for Planning and Consultation (IPaC) system (USFWS 2023), the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) (USGS 2020), Colorado Parks and Wildlife (CPW) Species Activity Mapping (SAM) data (CPW 2023), CPW High Priority Habitat (HPH) data layers (CPW 2021), recent and historical aerial imagery, and Apex's proprietary database of over 1,500 mapped raptor nests throughout the Denver-Julesburg (DJ) Basin.

## 2. Oil and Gas Location Description & Background

The proposed Location is within a fallow agricultural field within the city limits of the Town of Keenesburg, located within Section 17, Township 2 North, Range 63 West in Weld County, Colorado (Figure 1). The Location will be accessed off Weld County Road (WCR) 398, approximately 0.36 miles northeast of WCR 63. The Location includes a 12.04-acre Working Pad Surface, 9.61-acre Well Pad, a 1.86-acre facility pad, and an Operational Disturbance Area of 19.33 acres (Figure 2). The Interim Reclamation Area is approximately 5.18 acres. Sixteen (16) extra-long lateral wells are proposed for the Location, capturing 3,200 acres of minerals. The land encompassing the Location is owned by Margaret and Melecio Chavez. The topography within the Location is relatively flat, gently sloping upward from west to east within the proposed disturbance area.

## 3. ECMC: High Priority Habitats and Other Protected Resources

### Findings

The Location does not occur within any High Priority Habitats (HPH) designated by CPW pursuant to the ECMC's Series 1200 rules and no HPHs are located within one (1) mile of the Location. The closest HPH to the Working Pad Surface is a Mule Deer Severe Winter Range, approximately 2.11 miles northeast of the proposed Location. The next closest HPH is a Pronghorn Winter Concentration Area, approximately 5.25 miles north of the proposed Location<sup>1</sup>.

The nearest ordinary high-water mark (OHWM) is not known but appears to be within a wetland/pond complex for Ennis Draw approximately 6,450 feet to the northeast (Figure 4). It was confirmed that there

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<sup>1</sup> Distances to HPHs based on the proposed 2023 HPH data.

are no OHWMs within 500 feet from the proposed Location, therefore it is not subject to restrictions described in ECMC 1200 Series Rule 1202.a(3).

### Best Management Practices

There are no HPHs within 1200 Series Rule restricted distances, and also no OHWMs within 500 feet; therefore, no further action is recommended.

## 4. Raptors

### Findings

There are no trees or other habitats suitable for nesting bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*) within 0.5 miles of the Location. The nearest mapped bald eagle nest is approximately 7.62 miles to the southwest of the Location. The nearest CPW-mapped bald eagle winter night roost area is approximately 7.86 miles south-southeast of the Location.

There are trees suitable for nesting non-eagle raptors within 0.5 miles of the Location, and additional habitats suitable for nesting non-eagle raptors within 0.5 miles, but no raptor nests were present at the time of the initial site inspection. Additional suitable nesting habitats include but are not limited to utility poles, oil and gas equipment, and other miscellaneous structures.

### Best Management Practices

If project activities start between February 1 and August 15, CPW recommends surveys for nesting non-eagle raptors.

## 5. Burrowing Owls

### Findings

A prairie dog colony providing potential burrowing owl habitat (BUOW\_A602; Figures 2 and 3) was observed within 0.25 miles of the Location. One (1) burrowing owl was incidentally observed within this colony during the September 6, 2022 initial site inspection; no burrowing owls were observed during 2023 site inspections and the habitat appears slightly degraded. Aerial imagery also suggests that this colony extends eastward; however, the elevated Burlington Northern Santa Fe railroad tracks restrict viewing of this area from ground-level.

### Best Management Practices

For ground disturbances beginning between March 15 and August 31, the full three-survey CPW-protocol will be completed no more than seven (7) days prior to the start of work. If burrowing owls are observed using burrows visible within 0.25 miles of the Location, KMOG will consult with CPW to determine appropriate mitigation measures.

## 6. Agriculture

### Findings

Aerial imagery suggests that this property has alternated between active cropland and fallow since at least 1999 (Google Earth 2021). No evidence of ongoing agricultural activity was observed during the site survey.

### Best Management Practices

None.

## 7. Summary of Findings

Following a review of sensitive resources with potential to be affected by proposed pad construction and drilling operations at the Acacia 13-17HZ Location by KMOG, potential adverse impacts to the ecosystem are anticipated to be minimal and include disturbances to nesting raptors, nesting burrowing owls, and ground-nesting birds. Construction at the Location would not impact surface waters, federally threatened or endangered species, or CPW High Priority Habitats.

## 8. General Operating BMPs

### Rule 1202 Compliance

**Rule 1202.a.(1):** The Location is not in black bear habitat; therefore use of bear-proof dumpsters is not necessary.

**Rule 1202.a.(2).A. and B.:** KMOG will disinfect water suction hoses and water tanks withdrawing from or discharging into natural surface waters using a CPW-approved disinfectant or with water greater than 140° F for at least 10 minutes.

**Rule 1202.a.(3):** The Location is greater than 500 feet from the nearest river, perennial or intermittent stream, lake, pond, or wetland; therefore the restriction against situating new staging, refueling, or chemical storage areas at new and existing locations within 500 feet of those features will not apply.

**Rule 1202.a.(4).A., B., and C.:** KMOG does not utilize pits in the DJ Basin; therefore the directive to fence and net or install other CPW-approved exclusion devices on new or existing drilling pits, production pits, and other pits does not apply.

**Rule 1202.a.(5):** KMOG will install wildlife escape ramps for trenches that are left open for more than 5 consecutive days.

**Rule 1202.a.(6):** KMOG will use CPW-recommended seed mixes for Reclamation and use CPW-recommended fence designs when consistent with the Surface Owner's approval and any local soil conservation district requirements.

**Rule 1202.a.(7):** KMOG will use CPW-recommended fence designs when consistent with the Surface Owner's approval and any Relevant Local Government requirements.

**Rule 1202.a.(8):** KMOG will conduct all vegetation removal necessary for operations outside of the nesting season for migratory birds (April 1 to August 31) or will need to conduct pre-construction nesting migratory bird surveys within the approved disturbance area prior to any vegetation removal during the nesting if hazing or exclusion devices were not installed prior to April 1.

**Rule 1202.a.(9):** KMOG does not utilize pits in the DJ Basin; therefore the directive to treat drilling pits, production pits, and any other pits to control mosquito larvae that may spread West Nile virus to Wildlife Resources does not apply.

**Rule 1202.a.(10).A. thru E.:** KMOG will employ the following minimum BMPs on new locations with a Working Pad Surface located between 500 feet and 1000 feet hydraulically upgradient from a High Priority Habitat identified in Rule 1202.c.(1).Q-S:

- A. contain flowback and stimulation fluids in tanks with downgradient perimeter berming;
- B. construct lined berms or other lined containment devices pursuant to Rule 603.o around any new crude oil, condensate, and produced water storage tanks that are installed after January 15, 2021;
- C. inspect locations on a daily basis, unless the approved Form 2A provides for different inspection frequency or alternative method of compliance;
- D. maintain adequate spill response equipment at the location during drilling and completion operations; and
- E. not construct or utilize any pits, except existing previously approved pits that were operated and maintained in compliance prior to January 15, 2021.

**Rule 1202.b.:** The project does not intersect an HPH or perennial stream; therefore the directive to bore, rather than trench, pipeline/utility crossings of perennial streams identified as aquatic High Priority Habitat does not apply.

### Site-specific BMPs

The following site-specific wildlife BMPs will be implemented at the Location:

1. Inform and educate employees and contractors on wildlife conservation practices, including no hunting, harassment or feeding of wildlife.
2. Consolidate and centralize fluid collection and distribution facilities to minimize impact to wildlife.
3. Adequately size infrastructure and facilities to accommodate both current and future gas production.
4. Protect culvert inlets from erosion and sedimentation and install energy dissipation structures at outfalls.
5. Implement fugitive dust control measures.
6. Install screening or other devices on the stacks and on other openings of heater treaters or fired vessels to prevent entry by migratory birds.
7. Mow or brush hog vegetation where appropriate, leaving root structure intact, instead of scraping the surface, where allowed by the surface owner.
8. Limit access to oil and gas access roads where approved by surface owners, surface managing agencies, or local government.
9. Post speed limits and caution signs to the extent allowed by surface owners, Federal and state regulations, local government, and land use policies.
10. Use wildlife-appropriate fencing where acceptable to the surface owner.

11. Use topographic features and vegetative screening to create seclusion areas, where acceptable to the surface owner.
12. Use remote monitoring of well production to the extent practicable.
13. Reduce traffic associated with transporting drilling water and produced liquids through the use of pipelines, large tanks, or other measures.
14. Install automated emergency response systems (e.g., high tank alarms, emergency shutdown systems).

## 9. References

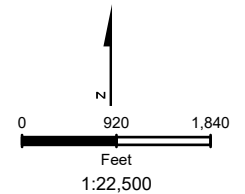
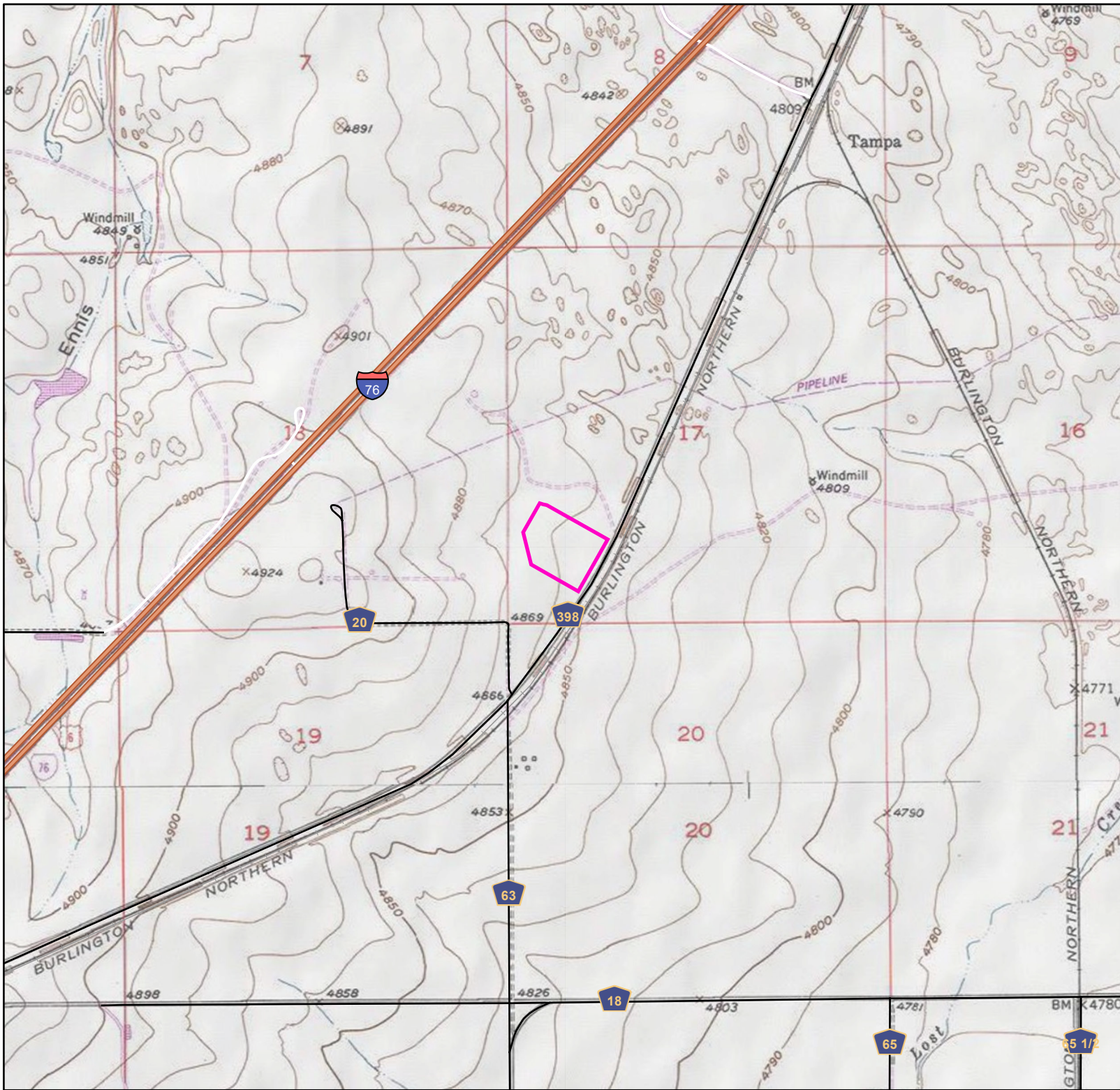
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### Acacia 13-17HZ

### Figure 1 - Vicinity Map

**Legend**

Proposed Location



**Inspector:** KD  
**Inspection Date:** 7/18/2023

**Site Characteristics**

**Legal Location:** NESW Sec 16, T2N R63W  
**County:** Weld

*Feature symbols not to scale*

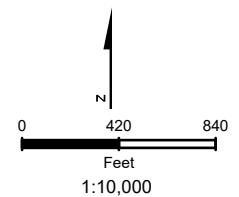
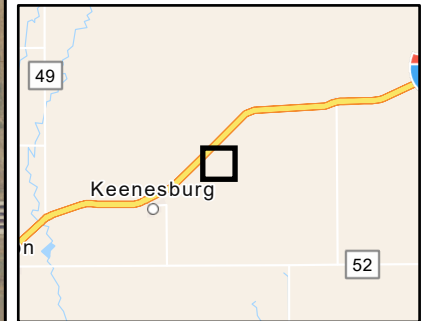
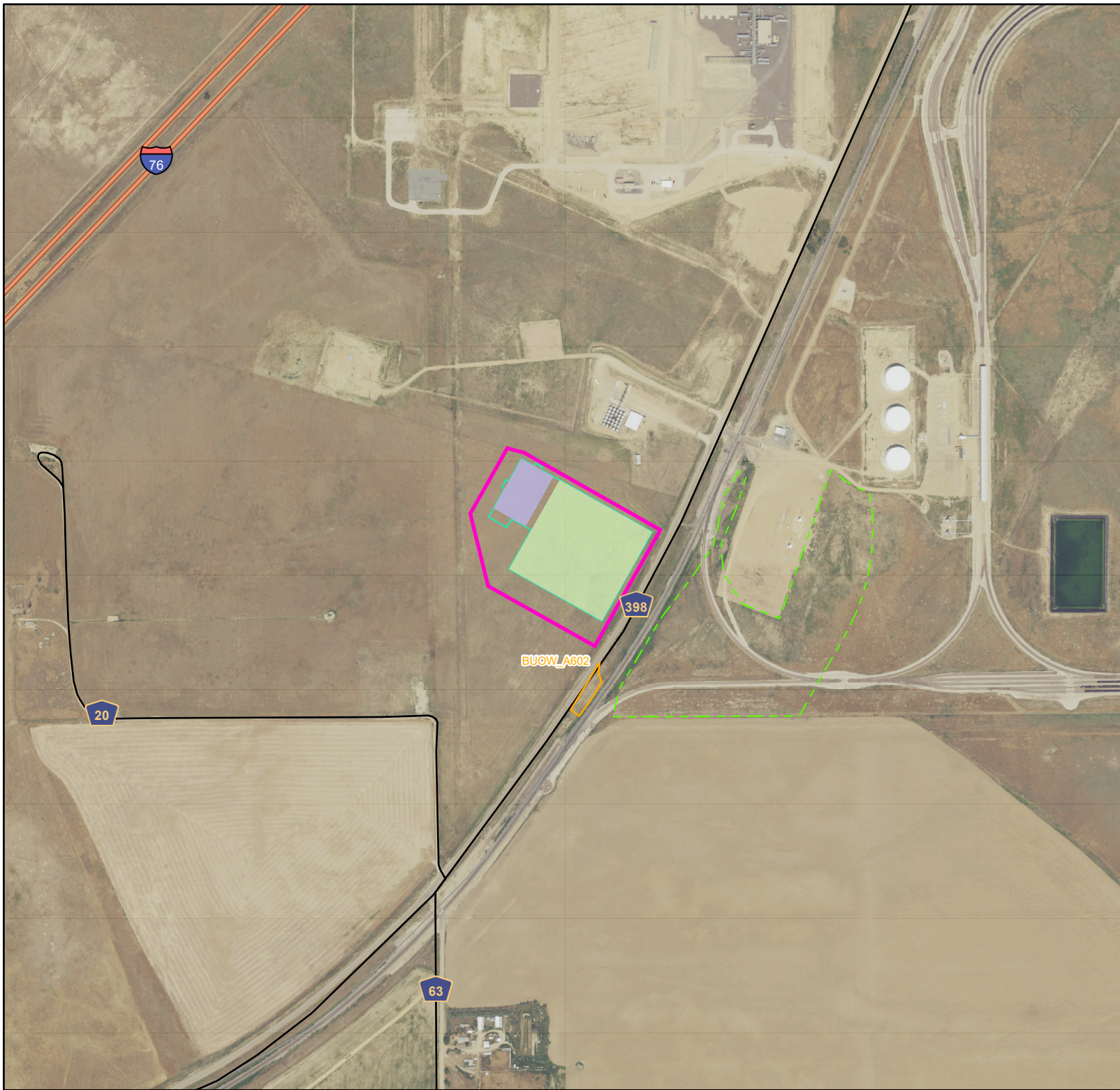
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7/20/2023	MJW	Natural Resources Map

## Acacia 13-17HZ

### Figure 2 - Site Map

**Legend**

- Possible BUOW Habitat – Unable to View From Ground-Level Due to Raised Railroad
- BUOW Habitat
- Facility Pad Surface (1.9 acres)
- Well Pad Surface (9.6 acres)
- Working Pad Surface (12.0 acres)
- Proposed Location (19.3 acres)



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**Inspection Date:** 7/18/2023

**Site Characteristics**

**Legal Location:** NESW Sec 16, T2N R63W  
**County:** Weld

*Feature symbols not to scale*

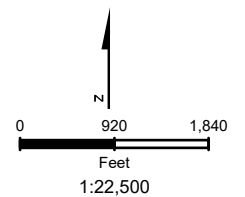
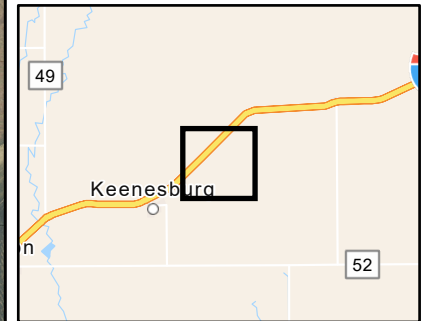
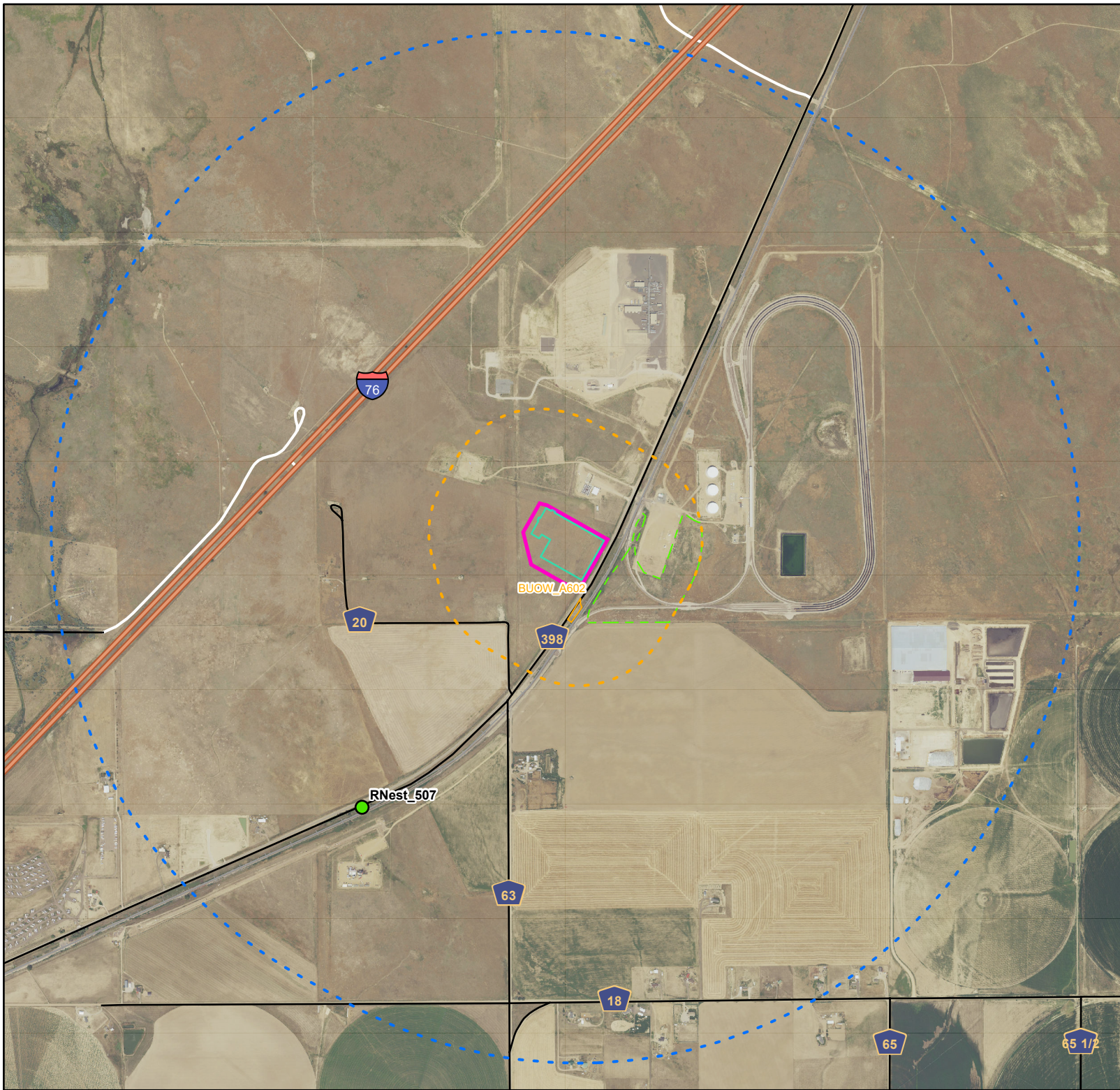
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7/20/2023	MJW	Natural Resources Map

## Acacia 13-17HZ

### Figure 3 - HPH Map

#### Legend

- Raptor Nest - Inactive
- 1/4-mile Potential BUOW Habitat Buffer
- 1-mile HPH Review
- Possible BUOW Habitat - Unable to View From Ground-Level Due to Raised Railroad
- Potential BUOW Habitat
- Working Pad Surface
- Proposed Location



Inspector: **KD**  
 Inspection Date: **7/18/2023**

#### Site Characteristics

Legal Location: **NESW Sec 16, T2N R63W**  
 County: **Weld**

*Feature symbols not to scale*

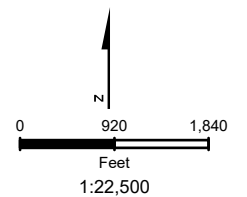
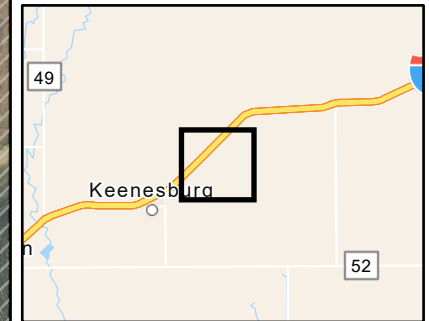
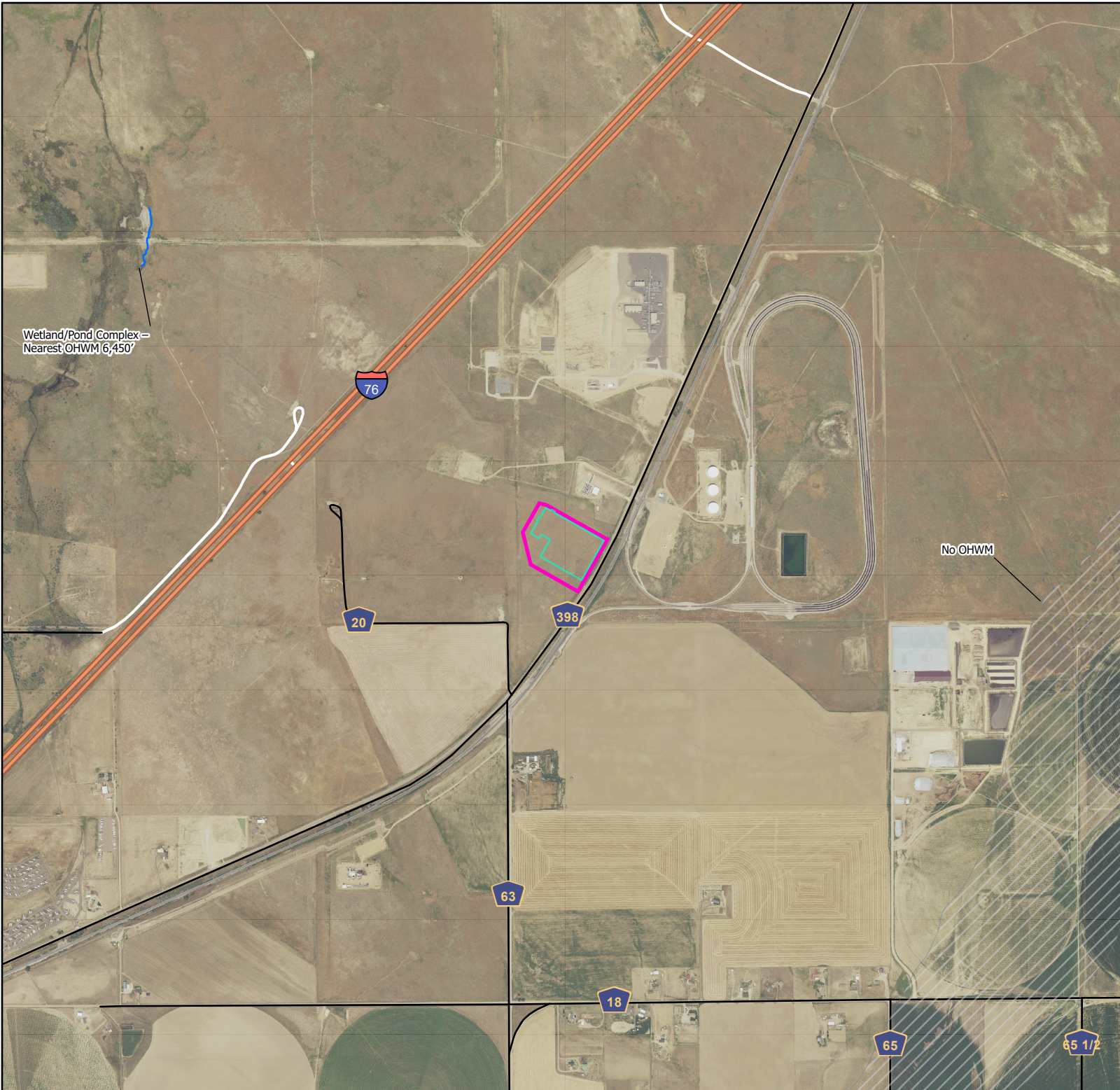
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7/21/2023	MJW	Natural Resources Map

# Acacia 13-17HZ

## Figure 4 - Nearest OHWM

### Legend

- OHWM – Estimated
- Working Pad Surface
- Proposed Location
- Floodplain - 100 yr



**Inspector:** KD  
**Inspection Date:** 7/18/2023

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**County:** Weld

*Feature symbols not to scale*

REVISED	BY	COMMENT
7/20/2023	MJW	Natural Resources Map