

January 19, 2021

**To:** Jordan Swisher, Brue Baukol Capital Partners (Brue Baukol)  
**From:** Heidi Gerstung, ERO Resources Corporation (ERO)  
**Re:** Redtail Ridge Baseline Burrowing Owl Survey

On behalf of Brue Baukol, ERO conducted baseline burrowing owl surveys on the Redtail Ridge development site (project area; Figure 1, Figure 2) on May 22, June 1, and June 8, 2020 (2020 surveys). The project area is northwest of Highway 36 and 96<sup>th</sup> Street in Broomfield and Boulder Counties, Colorado (Figure 2).

## Background

Migratory birds, as well as their nests, are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 United States Code 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 Code of Federal Regulations (CFR) Part 10, or its feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The burrowing owl is a migratory bird species protected by international treaty under the MBTA. The burrowing owl has also been listed as a Colorado threatened species by Colorado Parks and Wildlife (CPW). According to CPW survey protocols, burrowing owls are typically present in Colorado between March 15 and October 31 (Colorado Division of Wildlife (CDOW) 2008). Federal and state laws, including the MBTA, prohibit the intentional killing of burrowing owls. Inadvertent killing of burrowing owls could occur during prairie dog poisoning, construction, or earthmoving projects.

## Methods

ERO conducted the surveys following CPW's Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls (CDOW 2008). ERO conducted the 2020 surveys from vantage points that provided visibility of the prairie dog colonies in the project area as well as prairie dog colonies within 150 feet of the project area.

The 2020 surveys consisted of visual observations and recorded playback of burrowing owl calls (auditory surveys). The May 22 survey began at 6:45 a.m. and ended at 12:30 p.m. MST, and temperatures ranged from 46°F to 77°F with wind speeds of 0 to 8 miles per hour. The June 1 survey began at 6:30 a.m. and ended at 12:15 p.m. MST, and temperatures ranged from 64°F to 86°F with wind speeds of 2 to 5 miles per hour. The June 8 survey began at 7:05 a.m. and ended at 12:50 p.m. MST, and temperatures ranged from 62°F to 83°F with wind speeds of 3 to 7 miles per hour.

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The burrowing owl surveys were conducted by three observers from multiple vantage points to view the prairie dog colonies within and adjacent to the project area. ERO biologists scanned the surrounding burrows with binoculars or a spotting scope. The 2020 survey locations were visited one time during each survey date. At the completion of the 2020 surveys, ERO walked the entire prairie dog colony within the project area searching for signs (e.g., droppings, pellets, and prey remains) of burrowing owls.

## Results

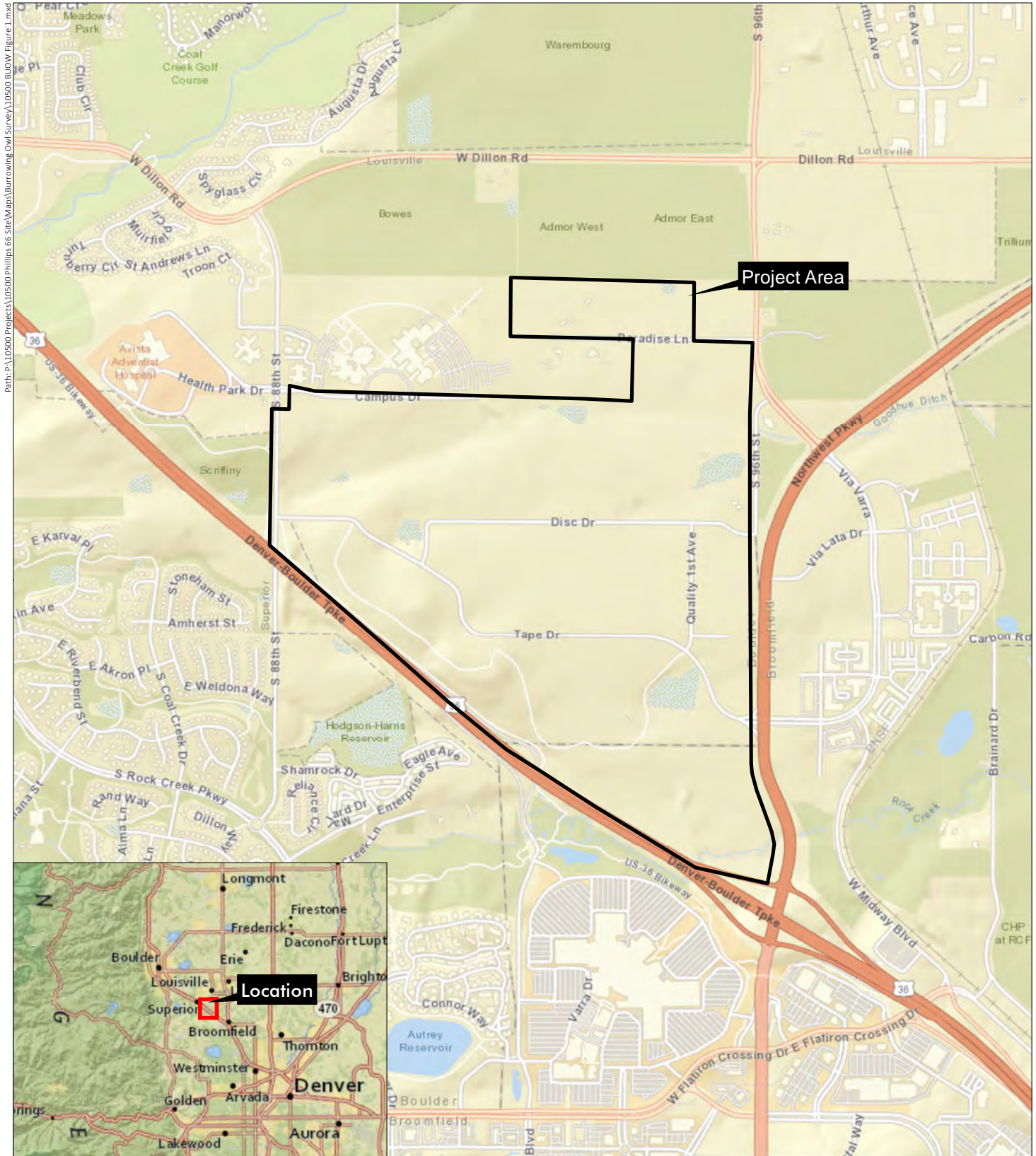
ERO did not observe burrowing owls during the 2020 surveys of the project area and immediate vicinity.

## Conclusion

Based on the results of the 2020 surveys, burrowing owls do not currently occupy the project area. ERO also determined that no burrowing owls or active burrowing owl nests are within the previously recommended 150-foot buffer (CDOW 2008) of the project area (Figure 2). In June 2020, changes in CPW guidance provided a new recommended buffer of 1,320 feet from active burrowing owl burrows for large industrial disturbances such as drilling rigs and residential developments, and a 660-foot buffer from active burrowing owl burrows for other activities (CPW 2020). ERO recommends that any future burrowing owl surveys be conducted to include an expanded survey area in accordance with the new CPW buffer guidelines. The results of the 2020 surveys are only valid for the 2020 breeding season and provide a baseline for burrowing owl activity at the Redtail Ridge development site.

## References

- Colorado Division of Wildlife (CDOW). 2008. Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls. <https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/RecommendedSurveyOwls.pdf>. Last accessed May 5, 2020.
- Colorado Parks and Wildlife (CPW). 2020. Recommended buffer zones and seasonal restrictions for Colorado raptors. June.



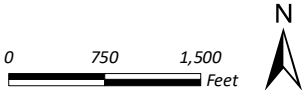
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**Redtail Ridge Baseline Burrowing Owl Survey**

Sections 20, 21, 28, and 29, T1S, R69W; 6th PM  
 UTM NAD 83: Zone 13N; 488402mE, 4421737mN  
 Longitude 105.135760°W, Latitude 39.945675°N  
 USGS Louisville, CO Quadrangle  
 Boulder and Broomfield Counties, Colorado

**Figure 1  
 Vicinity Map**

Prepared for: Brue Baukol  
 File: 10500 BUOW Figure 1.mxd (GS)  
 December 18, 2020






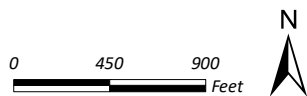
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### Redtail Ridge Baseline Burrowing Owl Survey

-  Active and Inactive Prairie Dog Colony
-  Project Area
-  Unincorporated Boulder County



### Figure 2 Existing Conditions

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