Biological Assessment / Biological Evaluation

for the

NV FLAP US 50(1) Round Hill Pines Access

Douglas County, Nevada

Prepared for:

Federal Highway Administration
Central Federal Lands Highway Division
12300 West Dakota Avenue St. 380 N
Lakewood, CO 80228

Revised
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Acronyms and Abbreviations

CFLHD	Central Federal Lands Highway Division
ESA	Endangered Species Act
FHWA	Federal Highways Administration
FLAP	Federal Lands Access Program
IPaC	Information for Planning and Consultation
LCT	Lahontan Cutthroat Trout
LTBMU	Lake Tahoe Basin Management Unit
MIS	management indicator species
NNHP	Nevada Natural Heritage Program
SNYLF	Sierra Nevada Yellow-legged Frog
SGCN	species of greatest conservation need
STA	station
TRPA	Tahoe Regional Planning Agency
TYC	Tahoe yellowcress
US	U.S. Route
USC	United States Code
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service

1.0 Introduction

The Federal Highway Administration, Central Federal Lands Highway Division (FHWA-CFLHD), in cooperation with the U.S. Forest Service Lake Tahoe Basin Management Unit (LTBMU), the Nevada Department of Transportation (NDOT), and the Tahoe Regional Planning Authority (TRPA), is proposing to construct improvements to a 0.45-mile segment of U.S. Route 50 (US 50) and relocate the current access road into the Round Hill Pines Beach Resort along a new alignment. The purpose of the project is to increase safety and improve accessibility for motorists, pedestrians, and bicycles entering and exiting Round Hill Pines Resort from US 50 in Douglas County, Nevada. Funding for the project is provided through the Federal Lands Access Program. Construction is currently programmed to begin in 2022.

The following are the purposes of this biological assessment/biological evaluation:

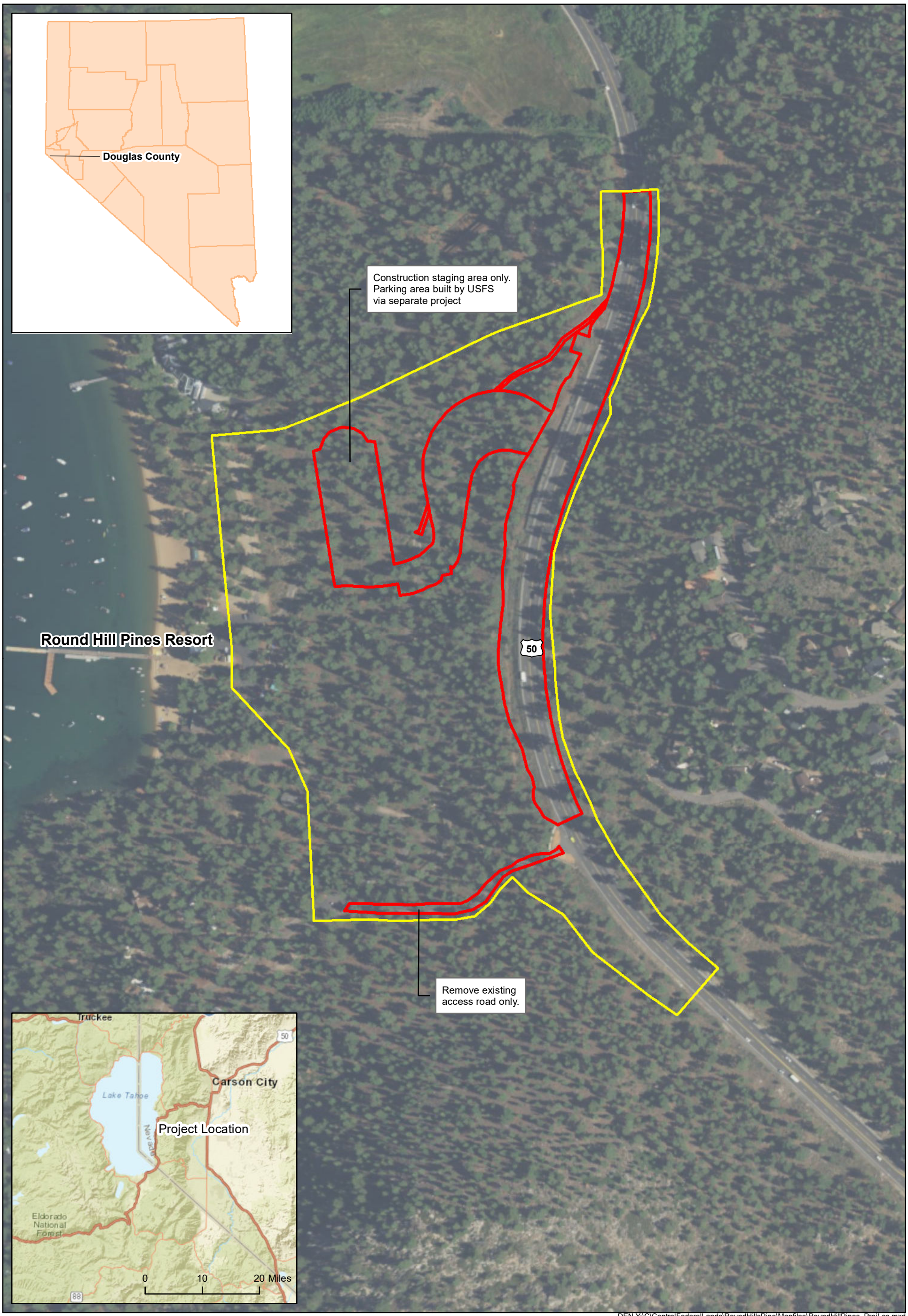
1. Review the proposed improvements to US 50 and relocation of the Round Hill Pines access road sufficiently to determine if the proposed action may affect threatened, endangered, proposed, or candidate species and their designated or proposed critical habitat requiring informal or formal consultation or conference with the U.S. Fish and Wildlife Service (USFWS) pursuant to the Endangered Species Act of 1973 ([ESA] 16 United States Code [USC] 1531 et seq.)
2. Determine whether the proposed action would impact LTBMU and TRPA sensitive species and State Species of Greatest Conservational Need (SGCN)
3. Determine the occurrence of wetlands, waterbodies, noxious weeds, potential impacts to migratory birds, and wildlife migration patterns

2.0 Description of the Proposed Action

As part of the Proposed Action, the Round Hill Pines Resort access road and US 50 intersection would be relocated approximately 0.2 mile further to the north from the existing location. U.S. Highway 50 would be widened at the relocated intersection to accommodate a new median left turn bay and eastbound US 50 acceleration lane. The US 50 cross section at the relocated intersection would consist of two 12-foot eastbound lanes two 12-foot westbound lanes, a 12-foot wide median left turn bay and eastbound US 50 acceleration lane. Shoulder widths along US 50 would remain the same as existing and would consist of 4-foot along US 50 westbound and 6-foot along US 50 eastbound. The US 50 alignment would not change as part of the proposed project. The remaining areas of US 50 adjacent to the relocated intersection would receive a pavement mill and overlay, lane striping, pavement markings and a safety edge in addition to the widening.

An existing concrete slab retaining wall is located along the west US 50 slope embankment facing into the Round Hill Pines Resort. The existing retaining wall would remain in place and the slope paving would be removed. Guardrail would be used at this location along with 1:2 slopes to minimize the construction footprint. A curb section with minimal ditching would be added along the west side of US 50 and no ditches would be constructed along the east side of US 50. Roadway slopes would be constructed using boulders and vegetation to enhance visual aesthetics and blend into the natural setting.

Existing 18- and 36-inch culverts within the project area would be replaced as well as armored with riprap where feasible. The clear zone, which is the area available for safe use by errant vehicles, would be improved through removal of obstructions, including clearing vegetation adjacent to the roadway as feasible. All traffic control signs would be reviewed and replaced, if needed, to meet current standards.



DEN Y:\C\CentralFederalLands\RoundHillsPine\Mapfiles\RoundHillPines_ProjLoc.mxd

Legend

Project Study Area (8.89 acres)

Survey Area

IMAGE SOURCE: ESRI, World Topographic Map
Made in accordance with the
Updated Map and Drawing Standards for the
South Pacific Division Regulatory Program,
as amended on February 10, 2016.
Figure created by Jill Rosenberger, revised 8/14/2020.

NAD_1983_StatePlane_Nevada_
West_FIPS_2703_Feet
Projection:Transverse_Mercator
False_Easting:2624666.66666667
False_Northing:13123333.33333333
Central_Meridian:-118.58333333
Scale_Factor:0.99990000
Latitude_Of_Origin:34.75000000
Linear Unit: Foot_US
USGS Quads: Banks

N

0 250 500 Feet

1 in = 250 ft

Figure 1
Project Study Area
Noise Analysis
Round Hill Pines
Central Federal Lands Highway Division
Douglas County, NV

The Round Hill Pines access road would be constructed on new alignment. The access road would be reconstructed to accommodate two 12-foot lanes with 2-foot wide shoulders. The new access road would have barn-roof slopes consisting of 1:4 within the clear zone (12 feet from edge of traveled way) with 1:2 slopes to reduce construction impacts (L. Edgar, pers. comm. 2020).

3.0 Species Considered and Evaluated

3.1 Pre-field Review

On May 29 and June 5, 2019, and July 15, 2020, Jacobs Engineering Group Inc. (Jacobs) requested a list of federal ESA-listed species, critical habitat, and state SGCN that may occur in the action area, and/or may be affected by the proposed project from the following sources (see Appendix B):

- USFWS's Information for Planning and Consultation (IPaC) online system
- Nevada Natural Heritage Program (NNHP) Data Request Tool
- Tahoe Regional Planning Agency (TRPA)
- Lake Tahoe Basin Management Unit (LTBMU)

According to the NNHP (2019a), wildlife and plant species are prioritized into five tiers within the state: S1, S2, S3, S4, and S5. Tier S1 contains those species at very high risk of extirpation in the jurisdiction because of very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors. Tier S2 contains species at high risk of extirpation in the jurisdiction because of restricted range, few populations or occurrences, steep declines, severe threats, or other factors. Tier S3 contains species at moderate risk of extirpation in the jurisdiction because of a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. Only Tiers S1, S2, and S3 species are analyzed in this report, Tiers S4 and S5 species were not analyzed because of their stable population status and lower conservation need.

State of Nevada Protected Species are prioritized into 23 categories within the state (NAC 503 and 527). Species identified to potentially occur within the project area fall into the Critically Endangered Plant (CE), the Protected Mammal (PM), the Game Fish (GF), the Endangered Bird (EB), the Fur-bearing Mammal (FM), the Game Mammal (GM), the Sensitive Bird (SB), Sensitive Mammal (SM), and the Nevada State Symbol (EM) categories.

U.S. Forest Service LTBMU sensitive species were identified through email correspondence with FHWA-CFLHD (L.Edgar, 2019b) and by reviewing the *Integrated Management and Use of Roads, Trails, and Facilities Project (Lake Tahoe Basin Management Unit, El Dorado, Placer, Washoe, Carson City and Douglas Counti*es). Species requiring further analysis are included in Table 1, other species considered, but not further analyzed are included in Appendix D.

TRPA special interest species occurrence and mapping were accessed via TRPA website, on May 29 as well as TRPA environmental checklist to review locally important species and features for consideration during project development (TRPA 2019).

According to the IPaC and NNHP Data Request Tool results, seven ESA- or state-listed species were identified as potentially occurring within the action area (Table 1). All seven of these species will be evaluated further for the presence of suitable habitat (e.g., soils, climate, disturbance, and plant communities) within the action area based on desktop analysis, project scoping, and field surveys. Sources of data reviewed included the following:

- USFWS Species Profiles (species status, distribution, and ecology) (2019a, 2019b)
- NNHP species abstracts (2019b)
- Field studies and personal knowledge of the action area and ecological setting

Table 1 summarizes the habitat and range information for each listed species evaluated during this analysis.

Table 1. Federal and State Listed Species Considered for Further Analysis

Scientific Name	Common Name	Regulatory Status[1]		General Habitat Description[2]
		Federal	Special Status	
Gulo gulo luscus	North American Wolverine	PT	USFS	Uses caves, hollows, logs, rock outcrops, and burrows for cover. Presence is positively associated with higher elevation snow pack, snags, talus, and remote undisturbed wilderness with minimal motorized access and low human population densities.
Rana sierra	Sierra Nevada Yellow-legged frog	E	USFS	Large permanent water bodies or streams that are fishless and >4,000 feet. Associated with high-elevation water bodies, but they are capable of long-distance travel. Within water bodies, adults and tadpoles prefer shallower areas and shelves with solar exposure (features rendering these areas warmer).
Oncorhynchus clarkia henshawi	Lahontan Cutthroat Trout	T	GF, EM, S3	Inhabits lakes and streams and requires cool, well-oxygenated water. It is adapted to highly mineralized waters. In streams, the LCT uses rocky areas, riffles, deep pools, and areas under logs and overhanging banks.
Rorippa subumbellata	Tahoe yellowcress	-	CE, S1, USFS	Coarse sand and sandy soils of active beaches, stream inlets, beach dunes, and backshore depressions, generally within a few feet of the local water table, endemic to the shore zone of Lake Tahoe.
Myotis thysanodes	Fringed myotis	-	PM, S2, USFS	Roosts in crevices in rocks, cliffs, buildings, underground mines, caves, bridges, and in large, decadent trees. Mostly found in dry habitats (grasslands or deserts) interspersed with mature forests (especially ponderosa pine, piñon-juniper, or oak).
Thomomys monticola	Mountain pocket gopher	-	S3	Occur in mountain meadows and rocky slopes in pine, fir, and spruce. In rich moist soil, as well as gravelly or rocky ground. They can generally be found on open forest floor and at the edge of meadows. Mountain pocket gophers are found at high altitudes where temperatures are lower than the habitat of other pocket gopher species.
Zapus princeps	Western jumping mouse	-	S2	Occur in mountain meadows, marshes, and along banks of streams and ponds, in dense cover of tall grasses and herbs. They nest in burrows in well-drained mound or elevated banks or on the surface among vegetation.

[1] **Regulatory Status**

- = No Status
CE = critically endangered plant
E = federally listed as endangered
EM = Nevada state symbol
GF = game fish
PM = protected mammal
PT = federally proposed threated
S1 = NNHP state rank 1
S2 = NNHP state rank 2
S3 = NNHP state rank 3
T = federally listed as threatened
USFS = USFS Lake Tahoe Basin Management Unit [LTBMU] sensitive

[2] **Sources**:

NNHP's Species Information (2019b)

NatureServe Species Profiles (2019)

3.2 Field Review and Surveys

Jacobs biologists conducted site visits to perform a habitat assessment for ESA-listed species, state SGCN, USFS-sensitive and management indicator species (MIS) and TRPA special interest species within the action area on June 5, 2019. During the habitat assessment, information about hydrology, vegetation, and habitat suitability for special-status species were photographed (see Appendix C) and recorded.

4.0 Agency Coordination to Date

The following agency coordination has been completed to date:

- An official species list of threatened or endangered species that may occur in the action area was requested through the USFWS IPaC online system on May 29, 2019 and July 15, 2020.
- A listing of sensitive species known to occur in Douglas County was pulled from the NNHP website on May 29, 2019.
- An official species list of sensitive species that may occur in the action area was requested through the NNHP data request online system on June 5, 2019.
- Integrated Management and Use of Roads, Trails, and Facilities Project (Lake Tahoe Basin Management Unit, El Dorado, Placer, Washoe, Carson City and Douglas Counties) was reviewed in May 2019

5.0 Action Area/Biological Setting

The regulations governing consultations under the ESA define the "action area" as "*all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action*" (51 Federal Register 19957). The action area should be determined based on consideration of all direct and indirect effects of the proposed agency action (project) (50 Code of Federal Regulations 402.02 and 402.14[b][2]). Therefore, the action area (proposed action) is typically larger than the area directly affected by the action. For this project, the action area consists of a 1-mile radius from the proposed survey because of the potential for noise impacts and visual disturbance from construction activities. All direct and indirect effects are expected to be contained within this 1-mile radius. For plants, the action area consists of all areas confined within the survey area.

The project would occur on USFS land along a developed highway in the Sierra Nevada Ecoregion, characterized by a deeply dissected block fault that rises sharply from the arid basin and range ecoregions on the east and slopes gently toward the Central California Valley to the west (NFWS 2014). The vegetation is mixed conifer and are predominately white fir (*Abies concolor*) and lodgepole pine (*Pinus contorta*) on the western side and Jeffery pine (*Pinus jefferyi*) and lodgepole pine on the eastern side. Higher elevations include red fir (*Albies magnifica*), mountain hemlock (*Tsuga martensiana*), and western white pine (*Pinus monticola*). There are many high mountain lakes, streams, and meadow/riparian areas. Alpine conditions exist at the highest elevations (NFWS 2014). The project is located within the montane coniferous forest community (USDA NRCS 2006) at approximately 6,250 to 6,380 feet in elevation. The topography through the action area is generally sloped, east to west, down towards Lake Tahoe.

Montane coniferous forest vegetation within the action area consists mainly of Ponderosa pine (*Pinus ponderosa*), Jeffery pine, Douglas fir (*Pseudotsuga menziesii*), western juniper (*Juniperus occidentalis*), snowbrush (*Ceanothus velutinus*), antelope bitterbrush (*Purshia tridentata),* whiteleaf manzanita (*Arctostaphylos viscida*), serviceberry (*Amelanchier spp.),* mountain big sagebrush (*Artemisia tridentata*

ssp. vaseyana), prickly phlox (*Leptodactylon pungens*), fireweed (*Chamerion angustifolia*), threadleaf sedge (Carex philifolia), needlegrass (*Stipa occidentalis*), Sandberg bluegrass (*Poa secunda*), smooth brome (*Bromus inermis*), cheatgrass (*Bromus tectorum*), and bulbous bluegrass (*Poa bulbosa*).

The action area is in the Lake Tahoe sub-section of Great Basin Watershed (USGS 2019). Surface runoff of the project area drains from east to west with the slope of the project area, towards Lake Tahoe. Lake Tahoe is located approximately 3,000 feet west of project boundary. Delineations were performed by Jacobs and CFLHD environmental staff, using the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version 2.0) (USDS NRCS 2019). One culvert exists within the project boundary, where water from rain events flows under the paved trail currently existing in the project area. Flow from rain events through this culvert has created an unvegetated swale that lacks an ordinary high water mark or other jurisdictional features. We can conclude that this project will not impact any jurisdictional wetlands, waterbodies, or other waters of the United States.

6.0 Species Evaluation

The action area was evaluated for the presence of, and potential to support, ESA-listed species and state SGCN. The action area includes the area that could be directly impacted by project actions plus the surrounding land adjacent to the project limits that may be disturbed by project activities. Most of the potential direct project-related habitat disturbance would occur within the proposed project boundaries. In addition, indirect effects related to the project, including cumulative effects, will be described and evaluated.

6.1 ESA-Listed Species

Based upon site visits and extensive literature research and review, it has been determined that the proposed project would have **no effect** on any federally listed, proposed, or candidate species or any proposed critical habitat.

This section contains background information, potential project-related effects, and ESA Section 7 determinations for the three federal ESA-listed species that have a potential to occur within or near the action area. These species and the effect determinations for each are described in the following sections.

- North American wolverine (*Gulo gulo luscus*) – ESA Proposed Threatened
- Sierra Nevada yellow-legged Frog (SNYLF) (*Rana sierra*) – ESA Endangered with Final Critical Habitat (project site is outside of final critical habitat)
- Lahontan cutthroat trout (LCT) (*Oncorhynchus clarkia henshawi*) – ESA Threatened

6.1.1 North American Wolverine

6.1.1.1 Status and Distribution

The North American wolverine is the largest terrestrial member of the family Mustelidae, with adult males weighing 26 to 40 pounds and adult females weighing 17 to 26 pounds. It resembles a small bear with a bushy tail. It has a round, broad head; short, rounded ears; and small eyes. There are five toes on each foot, with curved and semi-retractile claws used for digging and climbing. The species' historical range includes California, Colorado, Idaho, Oregon, Minnesota, Montana, Nevada, North Dakota, Utah, Washington, and Wyoming. The USFWS currently lists the North American wolverine as a proposed threatened species under the ESA. (2019b)

6.1.1.2 Life History and Habitat Relationships

Wolverines are limited to alpine tundra and boreal and mountain forests (primarily coniferous) in the western mountains, especially large wilderness areas. However, dispersing individuals have been found

far outside of usual habitats. They are usually in areas with snow on the ground in winter. Riparian areas may be important winter habitat. When inactive, wolverines occupy dens in caves, rock crevices, under fallen trees, in thickets, or similar sites. Wolverines are primarily terrestrial but may climb trees. (2019b)

Breeding generally occurs from late spring to early fall. Females undergo delayed implantation until the following winter to spring, when active gestation lasts from 30 to 40 days. Litters are born between February and April, containing one to five kits, with two to three kits being the most common number. Female wolverines use natal (birthing) dens that are excavated in snow. Persistent, stable snow greater than 5 feet deep appears to be a requirement for natal denning, because it provides security for offspring and buffers cold winter temperatures. Female wolverines go to great lengths to find secure den sites, suggesting that predation is a concern. Natal dens consist of tunnels that contain well-used runways and bed sites and may naturally incorporate shrubs, rocks, and downed logs as part of their structure. Occupation of natal dens is variable, ranging from approximately 9 to 65 days. (2019b)

6.1.1.3 Population Trend

On February 28, 2008, a detection of a lone male wolverine occurred approximately 14 to 19 miles northwest of the LTBMU near Truckee, California. This was the first verified record of a wolverine from California since 1922. Agency biologists and researchers used genetic samples (i.e., hair and scat) to determine that the wolverine was most closely related to, and most likely came from, a population on the western edge of the Rocky Mountains rather than either the historical California population (compared to samples taken from museum specimens) or contemporary northern Cascades (Washington) population. This attempted dispersal event may represent a continuation of the wolverine expansion in the contiguous United States and other wolverines may have traveled to the Sierra Nevada and remain undetected. However, there is no evidence that California currently hosts a wolverine population or that female wolverines have made, or are likely to make, similar dispersal movements. There are no current occurrences on the LTBMU. There are approximately 50,000 acres of wolverine habitat on the LTBMU. (USFS LTBMU 2016)

6.1.1.4 Occurrence in the Action Area

The North American wolverine it is not known to currently occur on the LTBMU (USFS LTBMU 2016).

6.1.1.5 Determination

The proposed threatened North American wolverine does not occur on the LTBMU. No direct, indirect, or cumulative effects are expected to occur because of the proposed project. Therefore, it is the determination of this report that the proposed project is not likely to jeopardize the proposed threatened wolverine.

6.1.2 Sierra Nevada Yellow-legged Frog

6.1.2.1 Status and Distribution

SNYLF occupy the western Sierra Nevada north of the Monarch Divide (in Fresno County) and the eastern Sierra Nevada (east of the crest) in Inyo and Mono counties. The body length (snout to vent) of the SNYLF ranges from 1.5 to 3.25 inches. Females average slightly larger than males, and males have a swollen, darkened thumb base (USFWS 2013a). The SNYLF was listed as an endangered species January 10, 2014, by USFWS under the ESA. (USFWS 2014)

6.1.2.2 Life History and Habitat Relationships

SNYLF are rarely found more than 3 feet from water, usually near rocky stream beds, lakes, ponds, and tarns, typically with grassy or muddy banks and edges. Both adults and larvae overwinter for up to 9 months in the bottoms of lakes that are at least 5.5 feet deep (some evidence that lakes at least 8.2 feet are ideal), under ledges of stream or lake banks, or in rocky streams. Mating and egg-laying occur from May to August. Egg-laying sites must be connected to permanent lakes or ponds that do not freeze to the

bottom in winter, because the tadpoles overwinter, possibly taking as many as three or four summers before they transform. (NNHP 2019b)

6.1.2.3 Population Trend

The SNYLF is presently in danger of extinction throughout its entire range, based on the immediacy, severity, and scope of the threats to its continued existence. These include habitat degradation and fragmentation, predation and disease, climate change, inadequate regulatory protections, and the interaction of these various stressors impacting small remnant populations. There has been a range-wide reduction in abundance and geographic extent of surviving populations of SNYLF following decades of fish stocking, habitat fragmentation, and most recently, a disease epidemic. Surviving populations are smaller and more isolated, and recruitment in disease-infested populations is much reduced relative to historical norms. This combination of population stressors makes persistence of the species precarious throughout the currently occupied range in the Sierra Nevada. (USFWS 2013a)

6.1.2.4 Occurrence in the Action Area

Although the SNYLF is known to occur nearby in the Desolation Wilderness and has final critical habitat approximately 10 miles southwest in the Crystal Mountain range, it is not known to occur in the action area (USFWS 2016), nor is there suitable habitat for SNYLF within the action area. therefore, we can conclude that the SNYLF does not occur within the action area.

6.1.2.5 Determination

Because of lack of suitable aquatic features such as fishless streams and lakes, and lack of breeding and foraging habitat for the SNYLF within the action area, no direct, indirect, or cumulative effects are expected to occur as a result of the proposed project. Therefore, it is the determination of this report that the proposed project will have **no effect** on this species and will not be addressed further in this report.

6.1.3 Lahontan Cutthroat Trout

6.1.3.1 Status and Distribution

LCT historically occupied large freshwater and alkaline lakes, small mountain streams and lakes, small tributary streams, and major rivers of the Lahontan Basin of northern Nevada, eastern California, and southern Oregon, including the Truckee, Carson, Walker, Susan, Humboldt, Quinn, Summit Lake/Black Rock Desert, and Coyote Lake watersheds (USFWS 1995, 2009). Large lakes included Lake Tahoe, Fallen Leaf Lake, and Cascade Lake in the Tahoe watershed; Donner Lake, Independence Lake, Winnemucca Lake (now dry), and Pyramid Lake in the Truckee River watershed; Walker Lake in the Walker River watershed; and Summit Lake in the Black Rock Desert watershed (Gerstung 1988; USFWS 2009).

6.1.3.2 Life History and Habitat Relationships

LCT inhabit lakes and streams but are obligatory stream spawners. Distance traveled to spawning sites varies with stream size and strain of LCT (strain refers to locally adapted populations in a particular area or environment). Populations in Pyramid and Winnemucca Lakes migrated as far as 100 miles up the Truckee River into Lake Tahoe and its tributary streams, Small, intermittent, tributary streams and headwater reaches are sometimes used as spawning sites. Spawning generally occurs from April through July, depending upon stream flow, elevation, and water temperature. LCT in fluvial environments generally become sexually mature around 3 years while LCT in lacustrine environments become sexually mature between 3 and 4 years of age. (USFWS 2019a)

Optimal stream habitat is characterized by clear, cold water with silt-free substrate and a 1:1 pool-riffle ratio. Streams should have a variety of habitats including areas with slow deep water, abundant instream cover (i.e., large woody debris, boulders, undercut banks), and relatively stable streamflow and temperature regimes. Streambanks should be well vegetated to provide cover, shade, and bank

stabilization. Lacustrine LCT populations have adapted to a wide variety of lake habitats from oligotrophic (with low nutrient levels and primary productivity) alpine lakes (e.g., Independence Lake) to large, productive desert terminal lakes (e.g., Pyramid Lake). Unlike most freshwater fish species, LCT have been reported to tolerate alkalinity and total dissolved solid levels as high as 3,000 milligrams/liter (mg/L) (3,000 parts per million [ppm]) and 10,000 mg/L (10,000 ppm), respectively (USFWS 2019a). In 1970, the LCT was listed as endangered, but in 1975 it was reclassified as threatened under the ESA (USFWS 2013b). The LCT is also listed as a SGCN rank S3 species (NNHP 2019b).

6.1.3.3 Population Trend

The LCT was once the top fish predator in Lake Tahoe. In the mid-1800s when settlers first began arriving at Lake Tahoe, the water was teaming with native cutthroat. By 1880, over fishing, the damage to the LCT's habitat, and the introduction of non-native lake trout began to take their toll. Commercial fishing was banned in 1917, but LCT in Lake Tahoe did not survive. LCT outside of the Lake Tahoe Basin also declined. In 1844, there were 11 lake-dwelling populations of Lahontan cutthroat trout and 400 to 600 stream-dwelling populations in over 3,600 miles of streams within the major basins of historical Lake Lahontan. Today, they only occur in 10.7 percent of their historical stream habitat and 0.4 percent of their lake habitat. LCT was listed as endangered in 1970 and reclassified as threatened in 1975. In 1997, during the Lake Tahoe Presidential Forum, former President Bill Clinton and Interior Secretary Bruce Babbitt called for the Lahontan cutthroat trout to be restored to the Lake. (USFWS 2013b)

6.1.3.4 Occurrence in the Action Area

Lahontan cutthroat trout were introduced to the headwaters of the Upper Truckee River in Meiss Meadows in the late 1980s and early 1990s through a cooperative effort between the California Department of Fish and Wildlife, USFS, and USFWS. The Meiss Meadow population is one of the only high-elevation meadow populations of LCT in the Sierra Nevada mountain range, and it also functions as a source population for LCT in lower river segments of the Upper Truckee River. This is the only self-sustaining population in the LTBMU. Expansion efforts were initiated to increase the range of this population in 2009 and will continue through 2016. Additional recovery actions for LCT are ongoing in Fallen Leaf Lake and Glen Alpine Creek (USFS 2016). All these locations are on the southern shore of Lake Tahoe, while the analysis area is on the eastern shore. No suitable habitat for the LCT occurs within the action area, and the LCT does not occur in the action area.

6.1.3.5 Determination

Habitat for the threatened LCT does not occur within the action area. No direct, indirect, or cumulative effects are expected to occur because of the proposed project. Therefore, the proposed project will have **no effect** upon this species and will not be addressed further in this report.

6.2 State Species of Greatest Conservational Need

Based on the site evaluation and a review of available occurrence data for state SGCN, it was determined that potential suitable habitat for the following four species may be found in the action area:

- Tahoe yellowcress (TYC) (*Gopherus morafkai*) – Nevada State Protected Species – Critically Endangered, NNHP S1
- Fringed myotis (*Myotis thysanodes*) – Nevada State Protected Species – Protected Mammal, NNHP S2
- Western jumping mouse (*Zapus princeps*) – NNHP S2
- Mountain pocket gopher (*Thomomys monticola*) – NNHP S3

These species and the effect determination for each are described in the following section. For further information, Appendix B includes the species list received via the NNHP report, and Appendix D includes a comprehensive review of the species list and justification for inclusion or exclusion for a detailed analysis in this document.

6.2.1 Tahoe Yellowcress

6.2.1.1 Status and Distribution

TYC is a herbaceous perennial from deeply buried rhizomes that stems several from the base, generally prostrate, 2 to 8 inches long. Its overall color is dark to purplish green (sometimes yellowish), with pinnately lobed leaves, small yellow flowers, and short, shiny, hairless fruits. It can be found in Carson City, Douglas and Washoe counties, Nevada; also, in California. This species is restricted to the shore zone of Lake Tahoe (NNHP 2001). The TYC is listed as an SGSN rank S1 and is fully protected and designated an endangered species by the state of Nevada (NNHP 2019b).

6.2.1.2 Life History and Habitat Relationships

Unlike many rare plants, TYC is both a prolific seeder and exhibits vigorous clonal growth. Fruit and seed development are continuous during the growing season from May through October. At maturity, the silique opens (dehisces) and expels 10 to 50 tiny dark brown seeds. The fruits mature starting at the base of the stem and progress toward the tip. A variety of generalist pollinators have been observed visiting TYC, mainly flies and bees, but there is no evidence that pollinators are required for successful seed production. The high proportion of flowers that produce fruit suggests that the species can self-fertilize. In the summer, large accumulations of seed have been observed under and around TYC plants, and seeds are likely transported by both wind and water. (NNHP 2015)

6.2.1.3 Population Trend

In Nevada, there are four extent occurrences mapped with at least 0.6 mile of separation. These populations have a total estimated count believed to be greater than 420 individuals. These populations are trending in a decline. (NNHP 2001)

6.2.1.4 Occurrence in the Action Area

The TRPA study site open data for TYC at Round Hill shows populations of this species documented in 2016, but it shows no individuals recorded at this site in 2017 or 2018. This study site is located outside of the action area, approximately 150 feet to the west at the Round Hill Beach, on the shore of Lake Tahoe. No suitable habitat for the TYC falls within the action area.

6.2.1.5 Determination

Habitat of sandy beaches for the TYC does not occur within the action area. No direct, indirect, or cumulative effects are expected to occur because of the proposed project. Therefore, this project will not jeopardize the continued existence of the TYC nor lead to a decrease in population or potential federal listing.

6.2.2 Fringed Myotis

6.2.2.1 Status and Distribution

This species is found in western North America from south-central British Columbia to central Mexico and to the western Great Plains. In California, it is distributed statewide except the Central Valley and the Colorado and Mojave Deserts and is associated with piñon-juniper, valley foothill hardwood and hardwood-conifers (USFS LTBMU 2016). The fringed myotis is listed as an SGSN rank S2 and is designated a protected mammal by the state of Nevada (NNHP).

6.2.2.2 Life History and Habitat Relationships

The fringed myotis uses caves, crevices, cliffs, mines, large decadent trees, and bridges and buildings for roosting, hibernacula, and maternity colonies. They day and night roost under bark and in tree hollows, and in northern California they day roost in snags only. Medium to large diameter snags are important day and night roosting sites. There is increased likelihood of occurrence of this species as snags greater than 1 inch-diameter increases and percent canopy cover decreases. Large snags and low canopy cover, typical of mature, forest habitat types, offer warm roost sites. Decay classes were two to four in ponderosa pine, Douglas-fir, and sugar pine (*Pinus lambertiana*). (USFS LTBMU 2016)

6.2.2.3 Population Trend

There is little information on population size, abundance, and trends. It is suggested this is a widespread, but locally rare species; however, there are areas where it is abundant. Like other bat species, it appears there have been declines in numbers and colonies. (USFS LTBMU 2016)

6.2.2.4 Occurrence in the Action Area

Fringed myotis are dependent on older forest types. Keinath (2004) summarized this in the USFS Region 2 conservation assessment for the fringed myotis, indicating that this species depends on abundant large diameter snags and trees with thick loose bark. Thus, harvesting old growth and removal of snags for safety or fuel reduction reasons may reduce available roost sites (USFS LTBMU 2016). The action area is in an area with high human traffic, and because of this, the vegetation within the action area has been highly managed. The action area lacks old growth trees and the snags have been removed. The nearest documented roost site (Castle Rock, located in 2017) is approximately 2 miles east of the action area (TRPA 2019). Acoustic bat surveys were conducted in the LTBMU during 2004 and 2006 to 2008 by Michael Morrison and his graduate students through University of Nevada, Reno, and Texas A&M University. These surveys took place at stream and meadow sites throughout the LTBMU. Mist netting surveys were also conducted by the USFS, Pacific Southwest Research Station Multi-Species Inventory and Monitoring program in 2001 and 2002 at 24 sites throughout the LTBMU. The LTBMU conducted roost exit surveys and acoustic monitoring at several sites from 2009 to 2015. There are many detections of fringed myotis in the LTBMU (USFS LTBMU 2016). Of these detections, one was approximately 1 mile north of the action area, near Zephyr Cove, Nevada and another was approximately 2.5 miles north near the town of Skyland, Nevada.

6.2.2.5 Determination

Although this site has appropriate forage habitat, there is not suitable habitat for roosting. There is also suitable forage habitat available adjacent to the action area. No direct, indirect, or cumulative effects are expected to occur as a result of the proposed project. Therefore, this project will not jeopardize the continued existence of the fringed myotis, nor will it lead to population declines or potential federal listing.

6.2.3 Western Jumping Mouse

6.2.3.1 Status and Distribution

The western jumping mouse is distributed through western North America: southern Yukon to eastern North Dakota and northeastern South Dakota, south to east-central California, central Nevada, Utah, and north-central New Mexico (NatureServe 2019). The western jumping mouse is listed as a SGSN rank S2 (NNHP 2019b).

6.2.3.2 Life History and Habitat Relationships

Western jumping mice occur in mountain meadows, marshes, and along banks of streams and ponds, in dense cover of tall grasses and herbs. They nest in burrows in well-drained mounds, elevated banks, or on the surface among vegetation. In spring, this species feeds on insects and other invertebrates. By mid-summer, it's diet may shift to mostly grass seeds and small fruits. Adults may enter hibernation

September through October, emerging May to July depending on elevation and location. They begin breeding soon after females emerge from hibernation. Gestation lasts 18 days. Most young are born late June to early July. They produce apparently only one litter per year. Litter size is estimated at two to seven (average five). Some females bear their first litter at 1 year (NatureServe 2019).

6.2.3.3 Population Trend

Primarily solitary. Home range in Utah averaged 0.2 to 0.6 hectare in different areas in different years. Adult density was 8 to 32 per hectare in different areas. Fragmentation appears to be a contributing factor to this species decline. Major waterways and highways pose barriers for this species. (NatureServe 2019)

6.2.3.4 Occurrence in the Action Area

Suitable riparian habitat does not occur within the action area. Therefore, we can conclude that the western jumping mouse does not occur within the action area.

6.2.3.5 Determination

Riparian habitat for the western jumping mouse does not occur within the action area. No direct, indirect, or cumulative effects are expected to occur because of the proposed project. Therefore, this project will not jeopardize the continued existence of the western jumping mouse, nor does it lead to population declines or potential federal listing.

6.2.4 Mountain Pocket Gopher

6.2.4.1 Status and Distribution

Mountain pocket gophers are distributed through the Sierra Nevada mountains of central and northern California and extreme west-central Nevada (NatureServe 2019). The mountain pocket gopher is listed as a SGSN rank S3 (NNHP 2019b).

6.2.4.2 Life History and Habitat Relationships

Mountain pocket gophers are active throughout the year. They are fossorial and solitary, except during the breeding season. Their underground burrow system may cover 200 square feet for young animals to 2000 square feet for old females. Winter nest may be above ground in snow. Gestation probably lasts about 18 to 19 days. Females produce one litter of three to four young per year. Young are born in July to August. Individuals may live up to 4 years in the wild. Mountain pocket gophers occur in mountain meadows and rocky slopes in pine, fir, and spruce, in rich, moist soil as well as gravelly or rocky ground. They can generally be found on open forest floor and at the edge of meadows. Mountain pocket gophers are found at high altitudes where temperatures are lower than the habitat of other pocket gopher species. Overground dispersal is difficult for pocket gophers because of heavy predation. Mountain pocket gophers probably rely on deep snow to allow animals to disperse to new territories. Pocket gophers are ecologically important as prey items and in influencing soils, microtopography, habitat heterogeneity, diversity of plant species, and primary productivity (NNHP 2019b).

6.2.4.3 Population Trend

Population density can be 10 to 35 per hectare (NNHP 2019b).

6.2.4.4 Occurrence in the Action Area

Suitable habitat of open forest floor or mountain meadows is not present within the action area. It is the determination of this report that the mountain pocket gophers will not occur within the action area.

6.2.4.5 Determination

Habitat for the mountain pocket gopher does not occur within the action area. No direct, indirect, or cumulative effects are expected to occur because of the proposed project. Therefore, this project will not jeopardize the continued existence of the mountain pocket gopher nor will it lead to population declines or potential federal listing.

6.3 Other Resources of Concern

6.3.1 Migratory Birds

Migratory birds are protected by a variety of federal laws but are primarily protected by the Migratory Bird Treaty Act of 1918 (16 USC 703-712) and Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds). The project limits include open canopy coniferous forest with an understory consisting mainly of snowbrush, whiteleaf manzanita, and antelope bitterbrush shrubs with smooth brome and pine straw as dominant grass species. Except for the existing roadways and parking lot, suitable foraging and/or potential nesting habitat for migratory birds is found within the action area, as well as adjacent to the action area. Because of vegetation removal throughout the project limits, impacts to nesting migratory birds may occur. To comply with these acts and to avoid any impacts on nesting birds, nest surveys will be performed if vegetation removal would occur during the breeding season (see Appendix D for further information and dates). If birds or nests are observed in the project area or seen during construction, contact the project biologist. Because of frequent human activity in the area and suitable habitat adjacent to the project area, it is unlikely that the Project will have any effect on current or future migratory bird populations in the area that could lead to federal listing of any species.

6.3.2 Wildlife Movement

Overall, the project is not expected to impede or create new barriers for wildlife movement. The proposed project is in an area of heavy human activity and existing roadways. The new access road would slightly fragment existing habitat and possibly disrupt current patterns or behaviors, but it would not introduce barriers (such as right-of-way fencing) that would restrict their movement or ability to cross the road. A stream corridor is located north of the project, but given the high amount of traffic in the area, it is unlikely this area would be used as a migration corridor. Black bears are known to occur within the Tahoe Basin and around the project. With high human activity in the area, it is likely that these bears are already habituated to humans and alternative food sources such as human foods, trash, and other known attractants.

6.3.3 Noxious and Invasive Species

The project limits were surveyed for the presence of noxious weeds during the 2019 field surveys. No weeds from the Nevada Department of Agriculture noxious weed list or the LTBMU invasive plant list have been identified on site. Review of the LTBMU *Terrestrial Invasive Plant Species Treatment Project EA* indicates that bull thistle (*Cirsium vulgare*) was the only noxious weed identified on USFS lands near the project area. Although no noxious weeds were found during field surveys, the implementation of best management practices, consistent with FHWA standard project specifications 107.1(c) which requires contractors to clean all dirt and foreign material before mobilizing equipment and vehicles onsite, maintain inspection records, and follow state and federal land management agency requirements, will aid in preventing the introduction and spread of noxious and invasive species. The use of native seed mix in restoration will further aid in reducing the potential for introduction of these undesirable species.

7.0 Conservation/Minimization Measures

FHWA-CFLHD's *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects* (FP-14) effectively addresses protection of environmental resources and includes standard best management practices. The following project-specific conservation measures would be implemented for the project to further avoid and minimize potential impacts to species.

- Work will occur within bear habitat. During construction, ensure food scraps or other trash or garbage are deposited in covered or closed trash containers. Promptly remove garbage or trash produced from construction activities to avoid creating attractive wildlife nuisances. Recommend storing antifreeze, petroleum products, or other attractants in hard-sided container or storage building. Notify the project manager if any bears are observed or if any animal carcasses are found.
- If vegetation clearing must occur between April 15 and August 31, a qualified biologist will complete pre-construction surveys for active migratory bird nests in all suitable habitat that will be disturbed.
- If active bird nests are identified within the survey area, a qualified biologist will determine the appropriate avoidance strategy, subject to approval by the contracting officer, and determine whether a no-work buffer is required. If necessary, no work shall occur until the young have fledged or the nest is no longer active as determined by a qualified biologist.
- Revegetation seed mix composition will be coordinated with the USFS.

8.0 Summary of Findings

FHWA-CFLHD, in cooperation with LTBMU, NDOT, and TRPA, is proposing highway improvements to the Round Hill Pines Resort access road and US 50 intersection in Douglas County, Nevada. The Round Hill Pines Resort access road would be relocated approximately 0.2 mile further to the north from the existing location. U.S. Highway 50 would be widened at the relocated intersection to accommodate a new median left turn bay and eastbound US 50 acceleration lane. The purpose of the project is to increase safety and improve accessibility for motorists, pedestrians, and bicycles entering and exiting Round Hill Pines Resort from US 50. The action area was evaluated for the presence of, and potential to support, three ESA-listed species and four state SGCN for the potential to occur in the action area:

- North American Wolverine (*Gulo gulo luscus*) – ESA Proposed Threatened
- SNYLF (*Rana sierrae*) – ESA Endangered with Final Critical Habitat, Project site is outside of Final Critical Habitat.
- LCT (*Oncorhynchus clarkia henshawi*) – ESA Threatened
- TYC (*Rorippa subumbellata*) – Nevada SPSC Critically Endangered, NNHP S1
- Fringed Myotis (*Myotis thysanodes*) – Nevada SPSC Protected Mammal, NNHP S2
- Mountain Pocket Gopher (*Thomomys monticola)* – NNHP S3
- Western Jumping Mouse (*Zapus princeps*) – NNHP S2

Based on the onsite field review findings and a desktop research and review, it has been determined that the proposed project would not jeopardize the proposed threatened wolverine, and have **no effect upon**, LCT or SNYLF. In addition, the proposed project *will not jeopardize the continued existence nor lead to a decline in population that could lead to federal listing* of the TYC, fringed myotis, mountain pocket gopher, or western jumping mouse.

9.0 References

Edgar, Lindsay (L. Edgar). 2020. Central Federal Lands Highway Division. "RE: NV FLAP US 50(1) Round Hill Pines." Personal communication (email) with Pat Basting, Jacobs. 16, July.

Edgar, Lindsay (L. Edgar). 2019a. Central Federal Lands Highway Division. "RE: NV FLAP US 50(1) Round Hill Pines." Personal communication (email) with Pat Basting, Jacobs. 23, May.

Gerstung, E.R. 1988. "Status, life history, and management of the Lahontan cutthroat trout." American Fisheries Society Symposium 4:93-106.

Keinath, D. 2004. *Fringed Myotis (Myotis thysanodes): a technical conservation assessment*. USDA Forest Service, Rocky Mountain Region. July 2019. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5181913.pdf

NatureServe, An Online Encyclopedia of Life (NatureServe). 2019. *Species Profiles.* June 2019. http://explorer.natureserve.org/index.htm

Nevada Natural Heritage Program (NNHP). 2001. *Rare Plant Fact Sheet – Tahoe Yellowcress*. June 25, 2001. July 2019. http://heritage.nv.gov/sites/default/files/atlas/roripsubum.pdf

Nevada Fish and Wildlife Service (NFWS). 2014. *Nevada's Ecoregions*. June 2019. https://www.fws.gov/nevada/habitats/ecoregions_html.htm

Nevada Natural Heritage Program (NNHP). 2015. *Conservation Strategy for Tahoe Yellowcress*. Alison E. Stanton. October 23. http://heritage.nv.gov/sites/default/files/library/Conservation%20Strategy%20for%20Tahoe%20yellow%20cress.pdf

Nevada Natural Heritage Program (NNHP). 2019a. *Data Symbols and Definitions, key to codes used by the Nevada Natural Heritage Program*. July 2019. http://heritage.nv.gov/definitions

Nevada Natural Heritage Program (NNHP). 2019b. Species Information. June/July 2019. http://heritage.nv.gov/species/

Tahoe Regional Planning Agency (TRPA). 2019. *Published Open Data.* May 29, 2019. http://data-trpa.opendata.arcgis.com/search

United States Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). 2006. *Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin*. U.S. Department of Agriculture Handbook 296.

United States Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region.* Version 2.0. May. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046494.pdf

U.S. Fish and Wildlife Service (USFWS). 1995. *Lahontan cutthroat trout,* Oncorhynchus clarki henshawi*, Recovery Plan*. Portland, Oregon. 147 pp.

U.S. Fish and Wildlife Service (USFWS). 2009. *Lahontan cutthroat trout, (*Oncorhynchus clarki Henshawi*), 5-Year Review: Summary and Evaluation*. Nevada Fish and Wildlife Office, Reno, Nevada. March 30, 2009.

U.S, Fish and Wildlife Service (USFWS). 2013a. *Endangered and Threatened Wildlife and Plants; Endangered Status for the Sierra Nevada Yellow-Legged Frog and the Northern Distinct Population Segment of the Mountain Yellow Legged Frog, and Threatened Status for the Yosemite Toad.* Proposed Rules, Federal Register Vol. 78, No. 80. Thursday, April 25, 2013. https://www.govinfo.gov/content/pkg/FR-2013-04-25/pdf/2013-09600.pdf#page=1

U.S, Fish and Wildlife Service (USFWS). 2013b. *The Lahontan cutthroat trout was once a dominant fish at Lake Tahoe.* January 14, 2013. https://www.fws.gov/lahontannfhc/tahoe_basin.html

U.S, Fish and Wildlife Service (USFWS). 2014. *Endangered and Threatened Wildlife and Plants; Endangered Status for the Sierra Nevada Yellow-Legged Frog and the Northern Distinct Population Segment of the Mountain Yellow-Legged Frog, and Threatened Status for the Yosemite Toad and Designation of Critical Habitat.* Proposed Rules, Federal Register Vol. 79, No. 7. Friday, January 10, 2014. https://www.govinfo.gov/content/pkg/FR-2014-01-10/pdf/2014-00281.pdf#page=1

U.S, Fish and Wildlife Service (USFWS). 2016. *Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Sierra Nevada YellowLegged Frog, the Northern DPS of the Mountain Yellow-Legged Frog, and the Yosemite Toad*. Proposed Rules, Federal Register Vol. 81, No. 166. Friday, August 26, 2016. https://www.govinfo.gov/content/pkg/FR-2016-08-26/pdf/2016-20352.pdf#page=1

U.S, Fish and Wildlife Service (USFWS). 2019a *Species Profiles: Lahontan cutthroat trout (Oncorhynchus clarkia henshawi).* July 2019. https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=3964

U.S, Fish and Wildlife Service (USFWS). 2019b. *Species Profiles: North American wolverine (Gulo gulo luscus).* July 2019.https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=5123

U.S. Forest Service (USFS). 2008. *Sierra Nevada Forests Bioregional Management Indicator Species (MIS) Report: Life history and analysis of Management Indicator Species of the 10 Sierra Nevada National Forests: Eldorado, Inyo, Lassen, Modoc, Plumas, Sequoia, Sierra, Stanislaus, and Tahoe National Forests and the Lake Tahoe Basin Management Unit.* Pacific Southwest Region, Vallejo, CA. January 2008.

U.S. Department of Agriculture-Forest Service Lake Tahoe Basin Management Unit (USFS LTBMU).2010. *Environmental Assessment - Terrestrial Invasive Plant Species Treatment Project, Lake Tahoe Basin Management Unit, US Forest Service.*

U.S. Forest Service (USFS). 2016. Biological Assessment for Burke Creek Highway 50 Crossing and Realignment Project. USDA Forest Service, Lake Tahoe Basin Management Unit. July 2019. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd509992.pdf

U.S. Department of Agriculture-Forest Service Lake Tahoe Basin Management Unit (USFS LTBMU). 2016. *Integrated Management and Use of Roads, Trails, and Facilities Project (Lake Tahoe Basin Management Unit, El Dorado, Placer, Washoe, Carson City and Douglas Counti*es). Shay Zanetti, U.S. Forest Service.

U.S. Geological Survey (USGS). 2019. *Science in Your Watershed*. June 2019. https://water.usgs.gov/wsc/acc/150301.html

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Appendix A
Project Design Figures

STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	A01

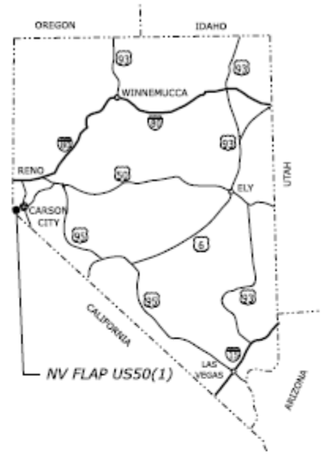
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

PLANS FOR PROPOSED

NV FLAP US50(1)

ROUND HILL PINES ACCESS

LAKE TAHOE BASIN NATIONAL FOREST
DOUGLAS COUNTY
LENGTH 0.59 miles



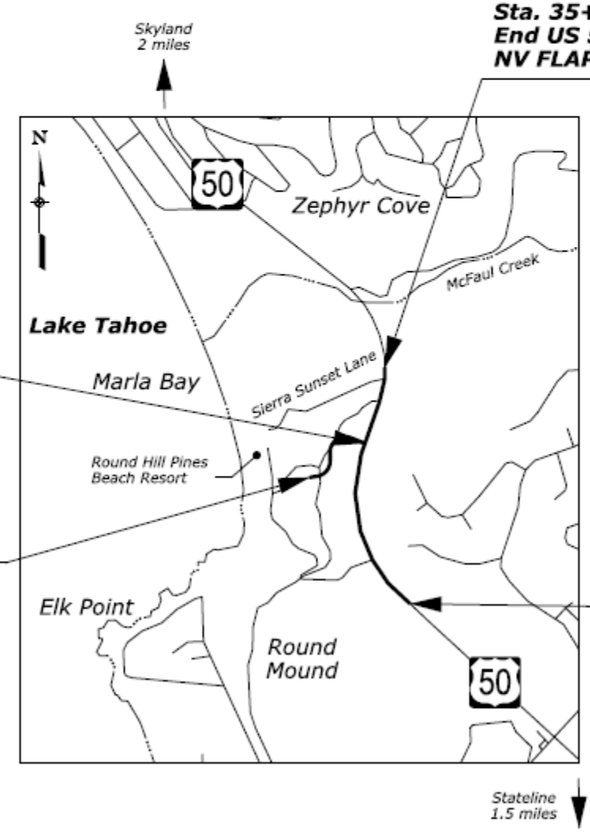
KEY MAP OF NEVADA

TYPE OF CONSTRUCTION:
Mill, overlay, and widen US-50, drainage improvements, new access road to Round Hill Pines Resort

DESIGN DESIGNATIONS (US 50):		DESIGN DESIGNATIONS (Access Road):	
ADT (2016)	20,000	ADT (2016)	1,200
ADT (2036)	25,641	ADT (2036)	1,784
DHV	3,077	DHV	214
D	50%	D	50%
T	5.5%	T	2%
V	50 mph	V	25 mph
e(max)	6%, match existing	e(max)	6%

U.S. CUSTOMARY DIMENSIONS:
Slopes are expressed as RISE:RUN

SPECIFICATIONS:
"STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, FP-14"



Sta. 35+00
End US 50
NV FLAP US50(1)

Sta. 107+57.13
End Access Road
NV FLAP US50(1)

Sta. 100+60
Begin Access Road
NV FLAP US50(1)

Sta. 11+00
Begin US 50
NV FLAP US50(1)

PRELIMINARY 30%
APRIL 2019
NOT FOR CONSTRUCTION

Know what's below. Call before you dig.
www.call811.com

PROJECT MANAGER	LEAD DESIGNER
T. PARKER	R. MATHIS

INDEX TO SHEETS

SHEET	DESCRIPTION
A1	Title Sheet
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A5-A7	Typical Sections - Mainline
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B3	Drainage, Grading, and Surfacing Summaries
B4	Miscellaneous Summaries
B5	Signing Summary
B6	Pavement Marking Summary
B7	Temporary Traffic Control Summary
C1-C6	Mainlire Plan and Profile Sheets
E1-E2	Detail C157-51 Temporary Inlet Protection
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F1	Detail C204-50 Embankment Benching and Furrow Ditch
F2	Special 211-A Roadway Obliteration
G1	Detail C251-50 Placed Riprap at Culvert Outlets
T1	Standard 602-1 Metal Pipe Culvert
T2	Standard 602-2 Metal Pipe Culvert Coupling Band
T3	Standard 602-3 Metal and Plastic Pipe Culvert Bedding
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T5	Special 604-A Inlet Details
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T7-T11	Special 617-A,B,C,D,E Guardrail Details
T12	Standard 635-1 Temporary Traffic Control Advance Signing
T13	Standard 635-2 Temporary Traffic Control Temporary Pavement Markings
T14	Standard 635-3 Temporary Traffic Control Delineatior for Unmarked Pavements
T15	Standard 635-6 Temporary Traffic Control Single Lane Closure Layout (With Flaggers)
T16	Standard 635-10 Temporary Traffic Control Shoulder Closure Layout
T17	Standard 635-14 Temporary Traffic Control Sign Installation Wood Posts
V1-V3	Signage and Striping Plan Sheets
V4-V5	Special 634-A Pavement Marking Details
X1-X62	Mainlire Cross Sections

PLANS PREPARED BY

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION
DENVER, COLORADO

APPROVED:

DATE:

CHIEF OF ENGINEERING
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

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9:00:42 AM N:\NV\us50(1)\Roadway\CADD_Sheets\4-Gen_sh\177L_US50(1).dgn
4/19/2019

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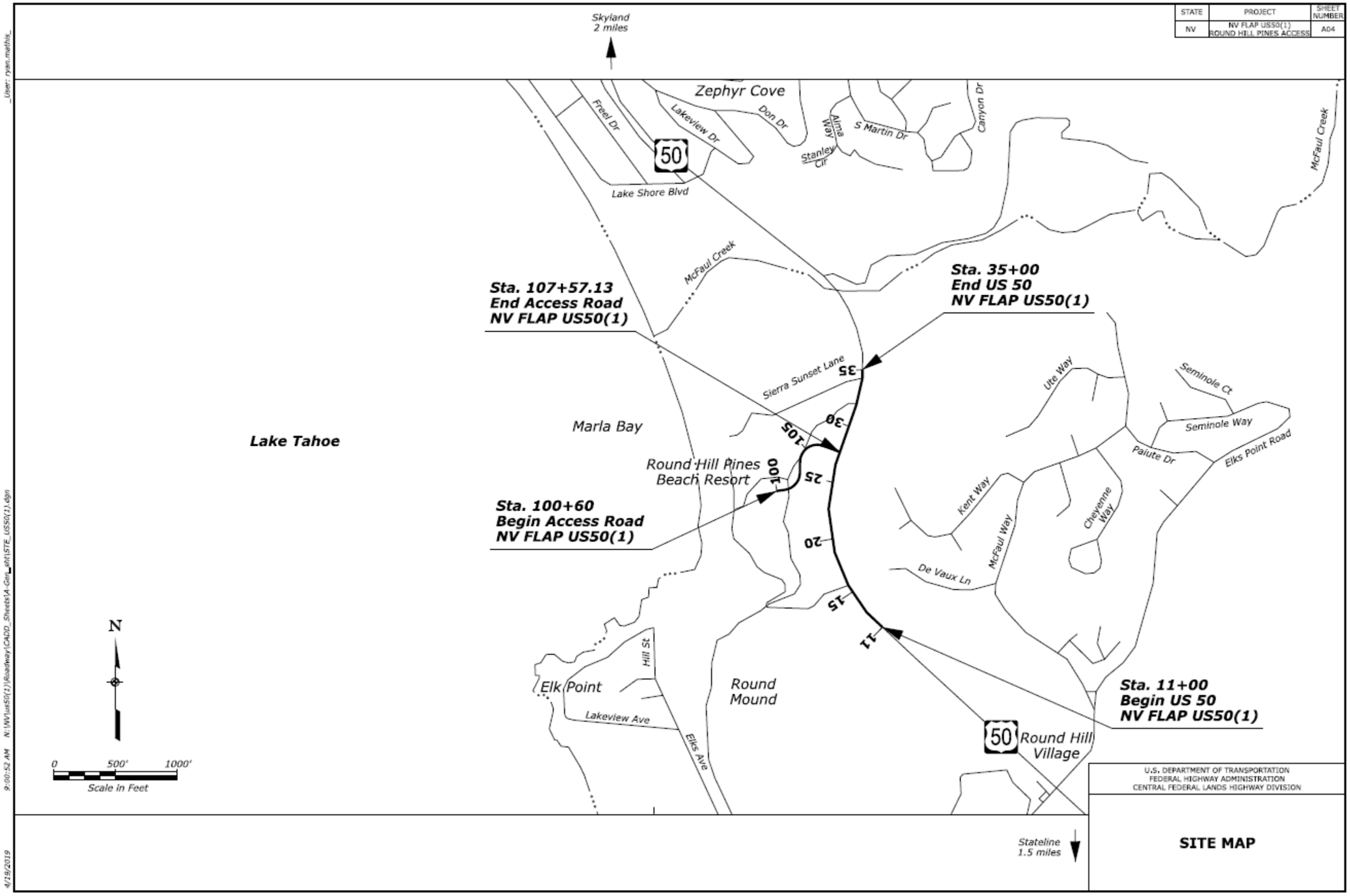

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

SITE MAP

User: ryan.mathis
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4/19/2019

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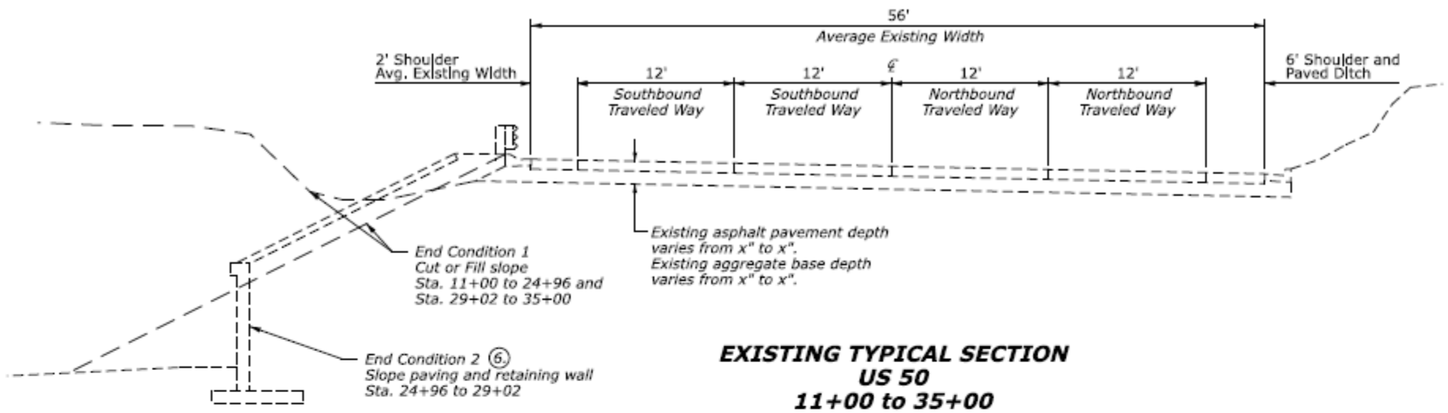
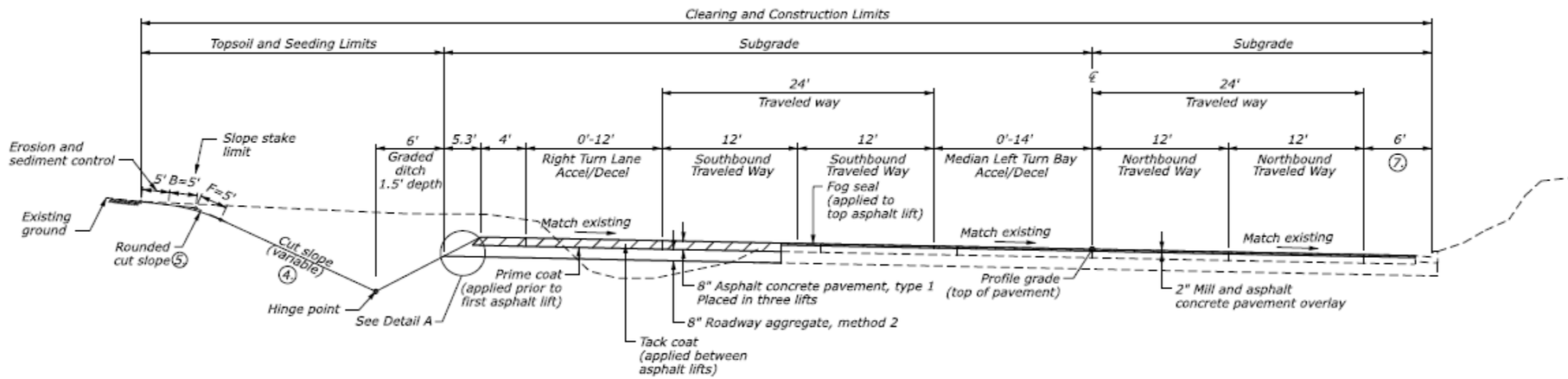


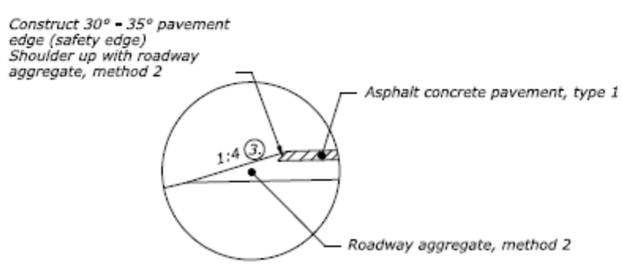
EXISTING TYPICAL SECTION
US 50
11+00 to 35+00

NOTE:

1. *Existing superelevated and widened sections are not shown.*
2. *Dimensions shown are approximate and may be varied by the CO.*
3. *Construct a 1:4 foreslope unless otherwise directed by the CO.*
4. *The gradient and width of roadway ditches and the excavation and embankment slope ratios may be adjusted by the CO to assure adequate drainage and stability. See the cross sections for cut and fill slope ratios.*
5. *Round all earth slopes and all rippable rock slopes. For cut heights less than B, reduce the B and F dimensions to the actual cut height.*
6. *Existing wall LT from approximate Sta. 24+96 to 29+02. Leave wall in place. Remove slope paving.*
7. *2' shoulder and 4' paved ditch.*



TYPICAL SECTION
US 50
11+00 to 15+88



DETAIL A

LENGTH OF PROJECT		
Station to Station	Roadway (ft)	Bridge (ft)
11+00 - 35+00	2,400	-
100+60 - 107+57	697	-
TOTAL (ft)	3,097	-
TOTAL (mi)	0.59	

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

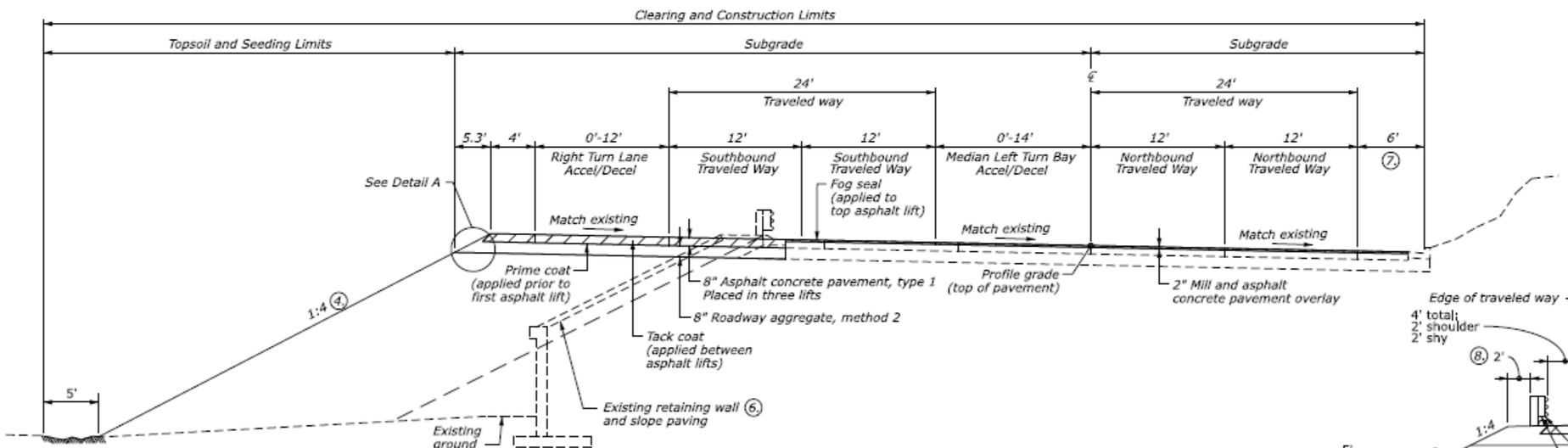
TYPICAL SECTIONS
MAINLINE
Sheet 1 of 3

User: ryan.mathis
9:00:56 AM N:\NV\us50(1)\Roadway\CADD_Sheets\A-Gen_sht\TYP_US50(1).dgn
4/19/2019

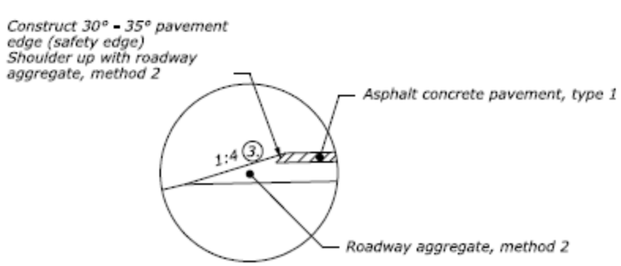
STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	A06

NOTE:

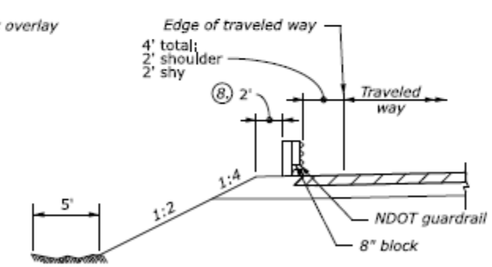
1. Existing superelevated and widened sections are not shown.
2. Dimensions shown are approximate and may be varied by the CO.
3. Construct a 1:4 foreslope unless otherwise directed by the CO.
4. The gradient and width of roadway ditches and the excavation and embankment slope ratios may be adjusted by the CO to assure adequate drainage and stability. See the cross sections for cut and fill slope ratios.
5. Round all earth slopes and all rippable rock slopes. For cut heights less than B, reduce the B and F dimensions to the actual cut height.
6. Existing wall LT from approximate Sta. 24+96 to 29+02. Leave wall in place. Remove slope paving.
7. 2' shoulder and 4' paved ditch.
8. Provide 4' min. between center of guardrail post and 1:4 slope break at terminal sections per Special 617-B.



TYPICAL SECTION
US 50
15+88 to 35+00



DETAIL A



GUARDRAIL TYPICAL SECTION DETAIL

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

TYPICAL SECTIONS
MAINLINE
Sheet 2 of 3

User: ryan.mathis
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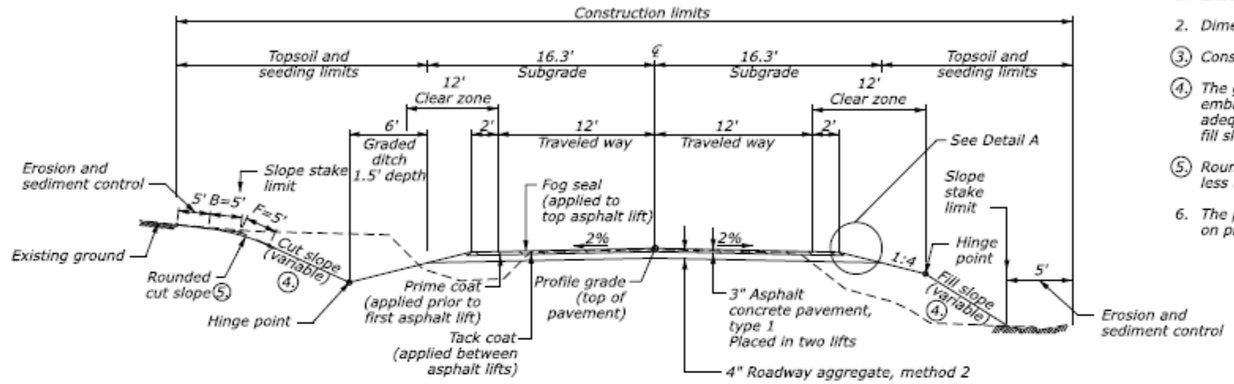
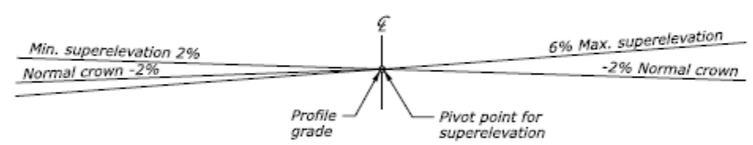
STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	A07

NOTE:

1. Existing superelevated and widened sections are not shown.
2. Dimensions shown are approximate and may be varied by the CO.
3. Construct a 1:4 foreslope unless otherwise directed by the CO.
4. The gradient and width of roadway ditches and the excavation and embankment slope ratios may be adjusted by the CO to assure adequate drainage and stability. See the cross sections for cut and fill slope ratios.
5. Round all earth slopes and all rippable rock slopes. For cut heights less than B, reduce the B and F dimensions to the actual cut height.
6. The proposed Round Hill Pines Access Road is a new roadway built on previously undisturbed land.

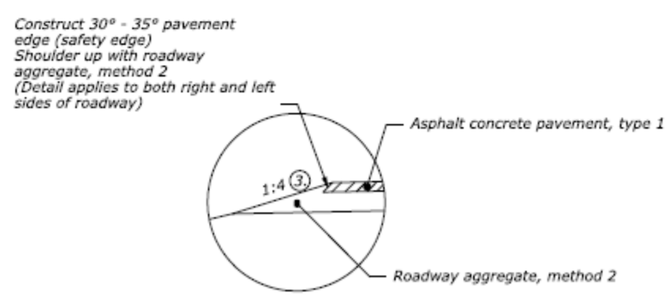


TYPICAL SECTION
ROUND HILL PINES ACCESS ROAD
100+60 to 107+57.13



METHOD OF SUPERELEVATION ON CURVES

See plans for locations of curves
Superelevations not shown for 30% submittal



DETAIL A

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

TYPICAL SECTIONS
MAINLINE
Sheet 3 of 3

User: ryan.mathis
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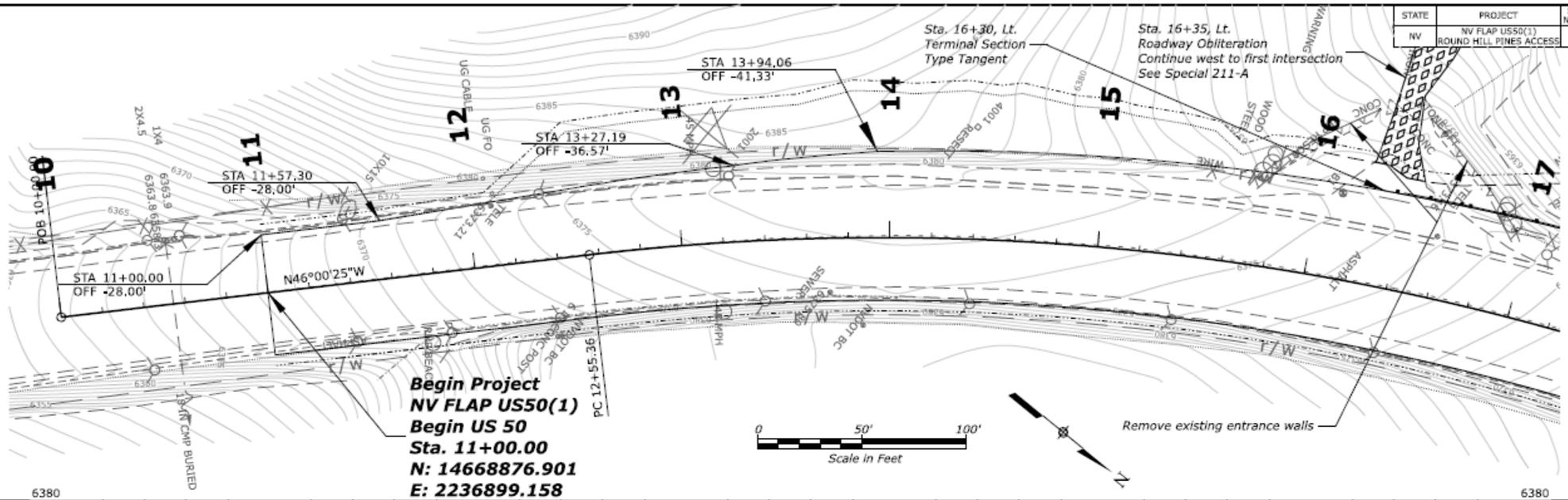
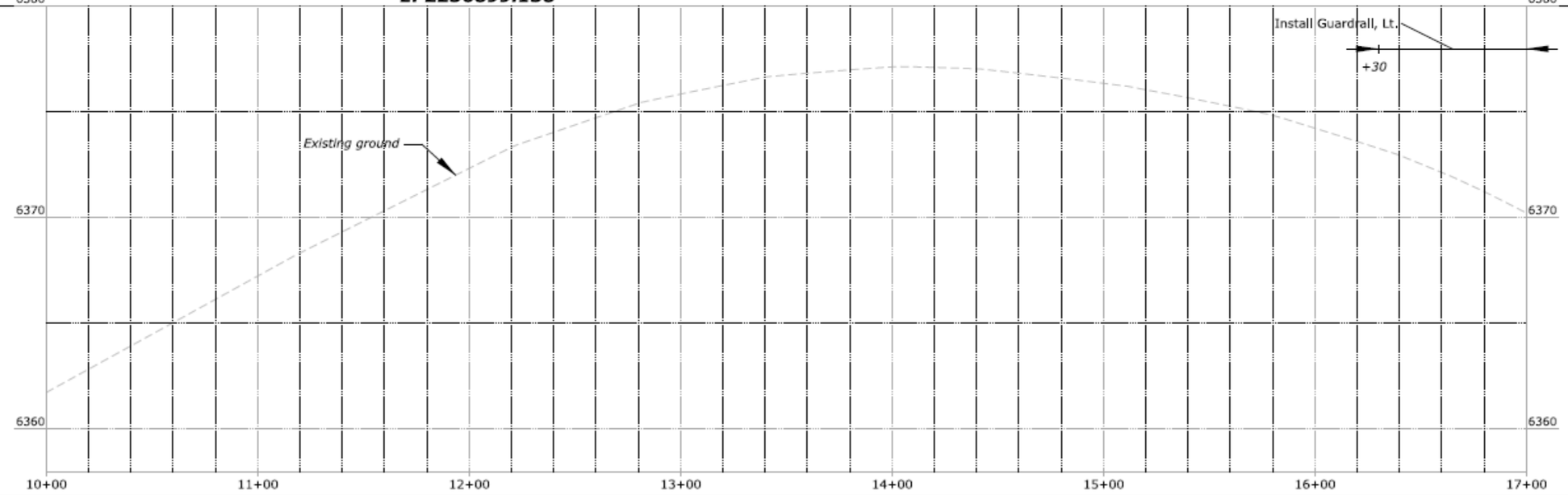
STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	C01





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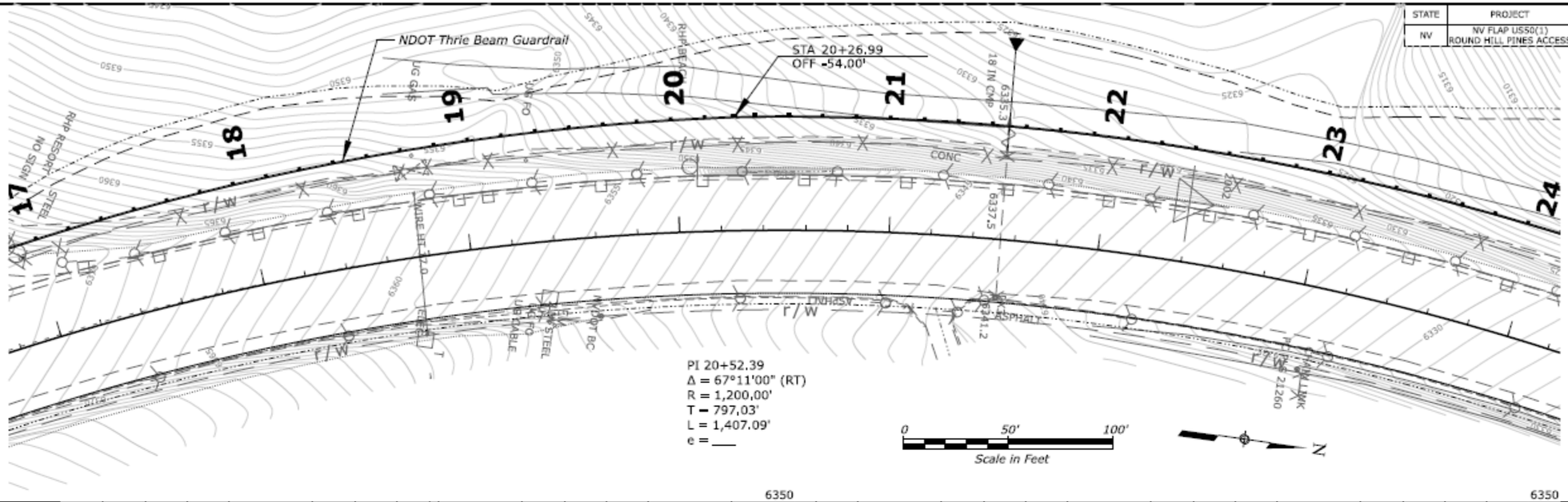
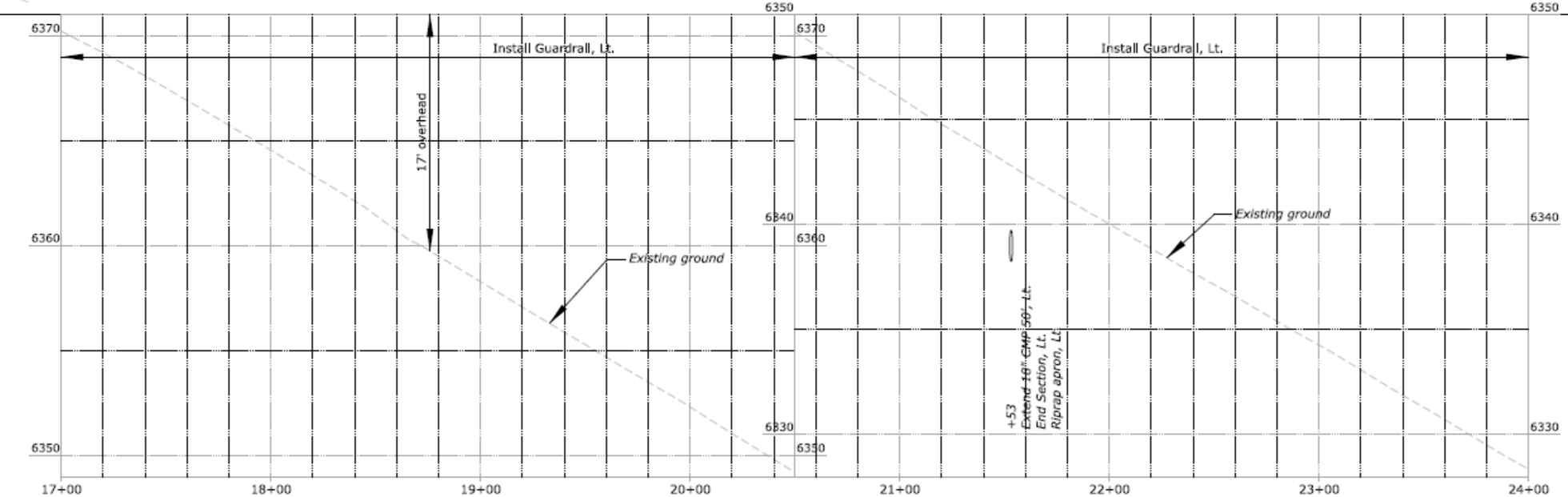
4/19/2019

STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	C02





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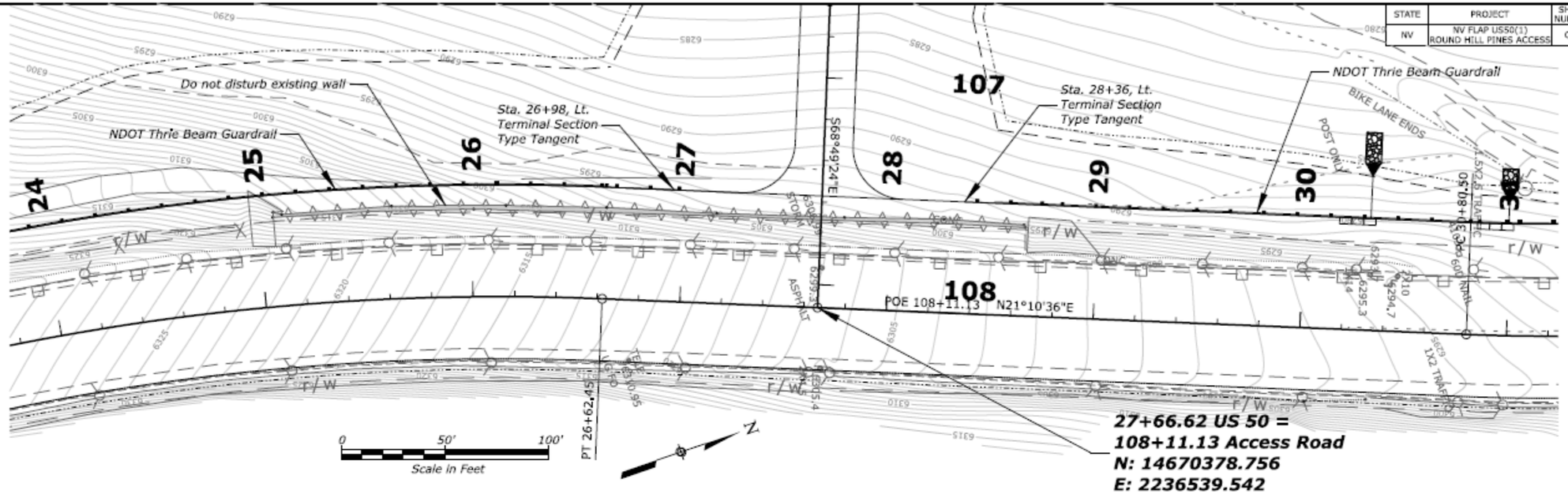
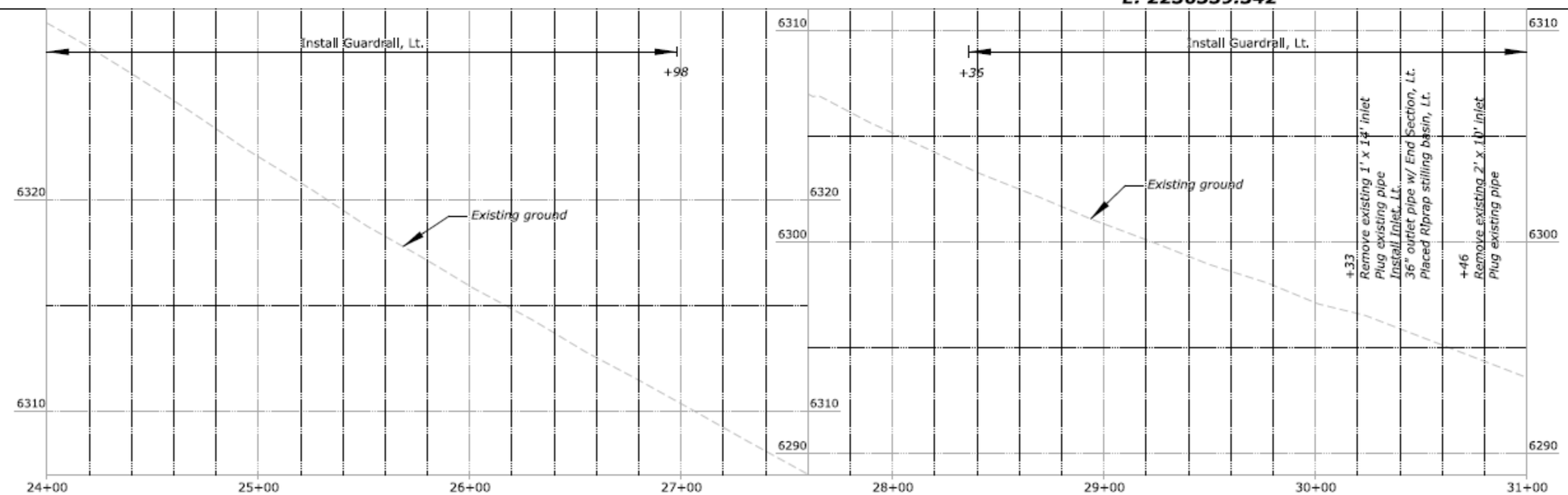
4/19/2019

STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	C03





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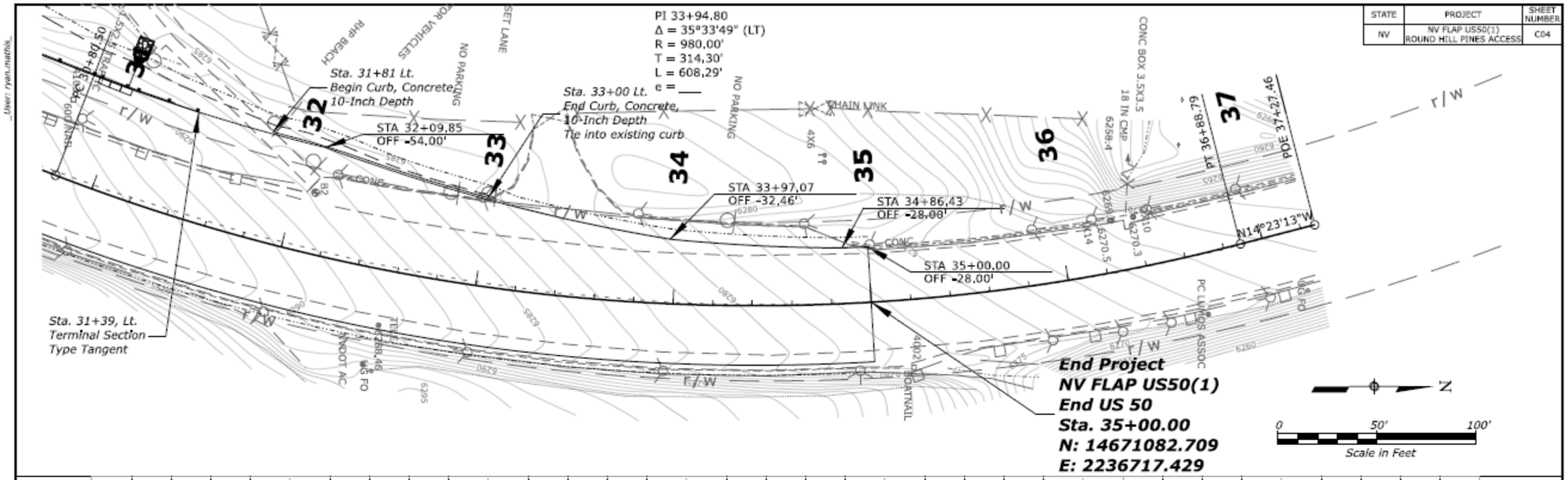
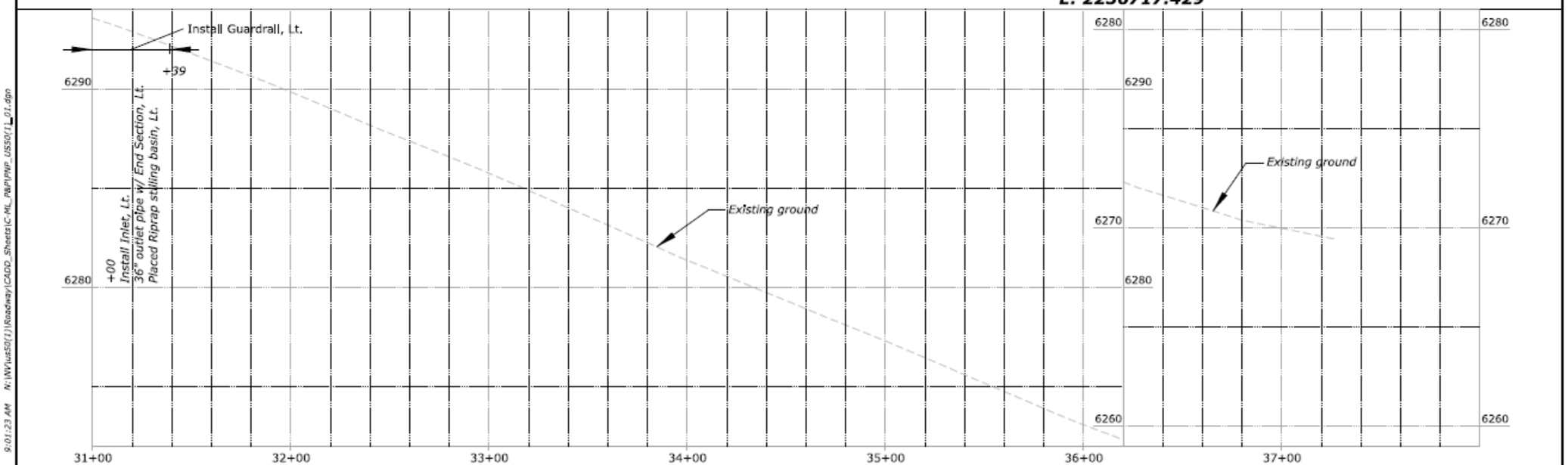
4/19/2019

STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	C04





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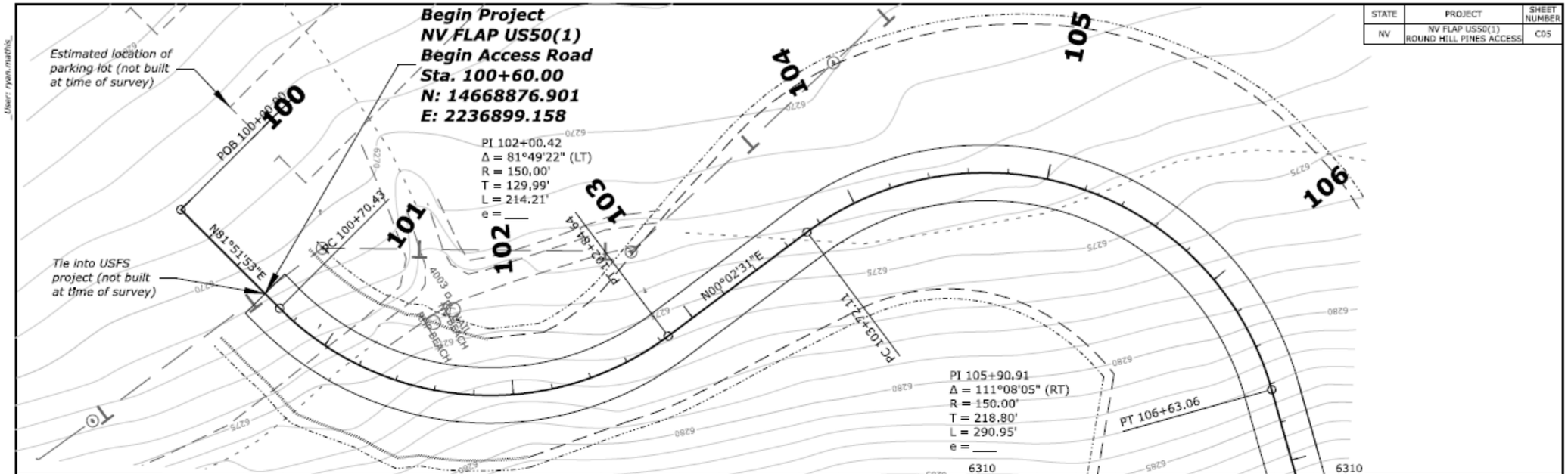
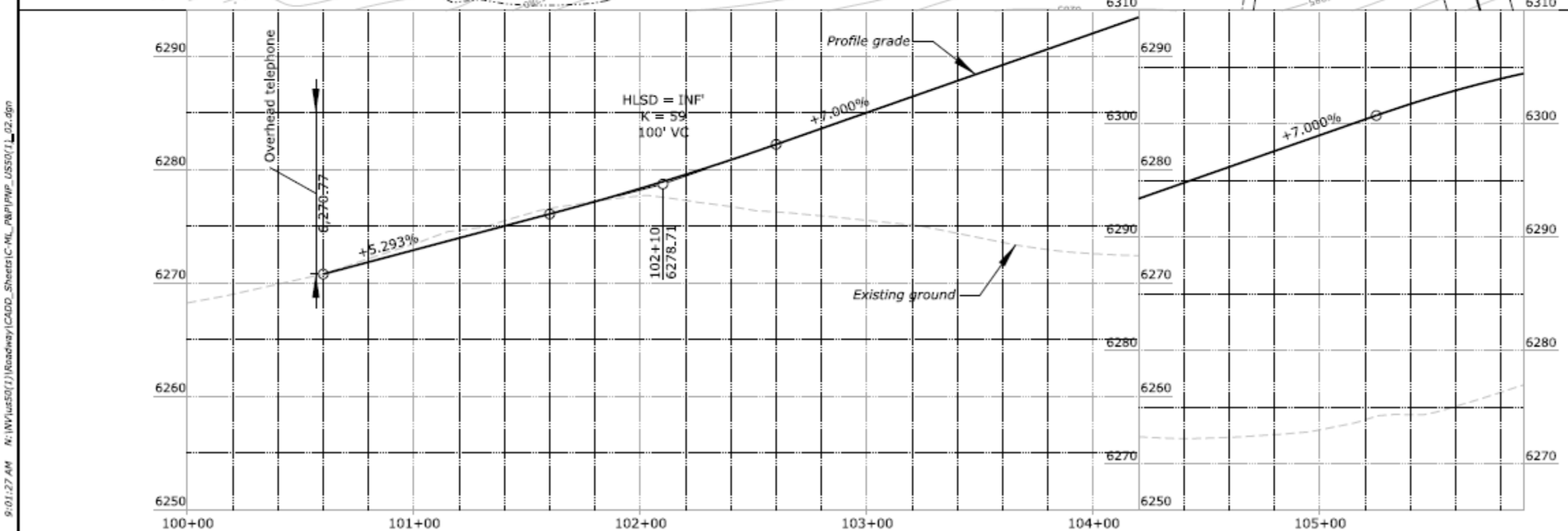
4/19/2019

STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	C05





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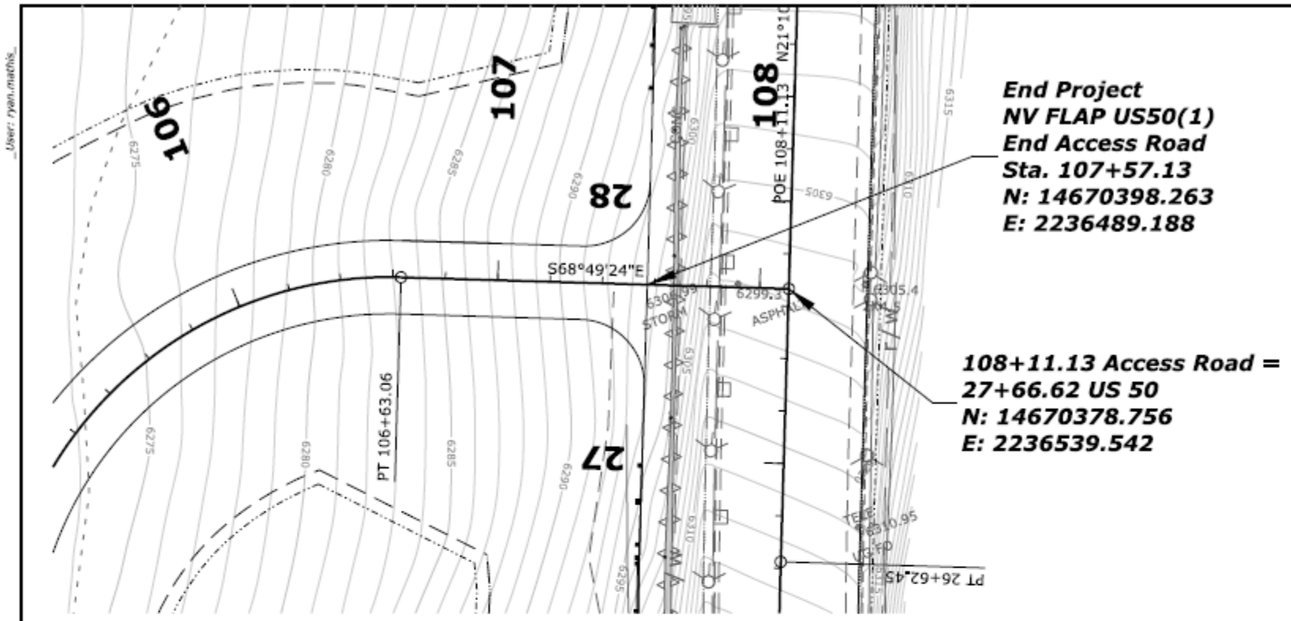
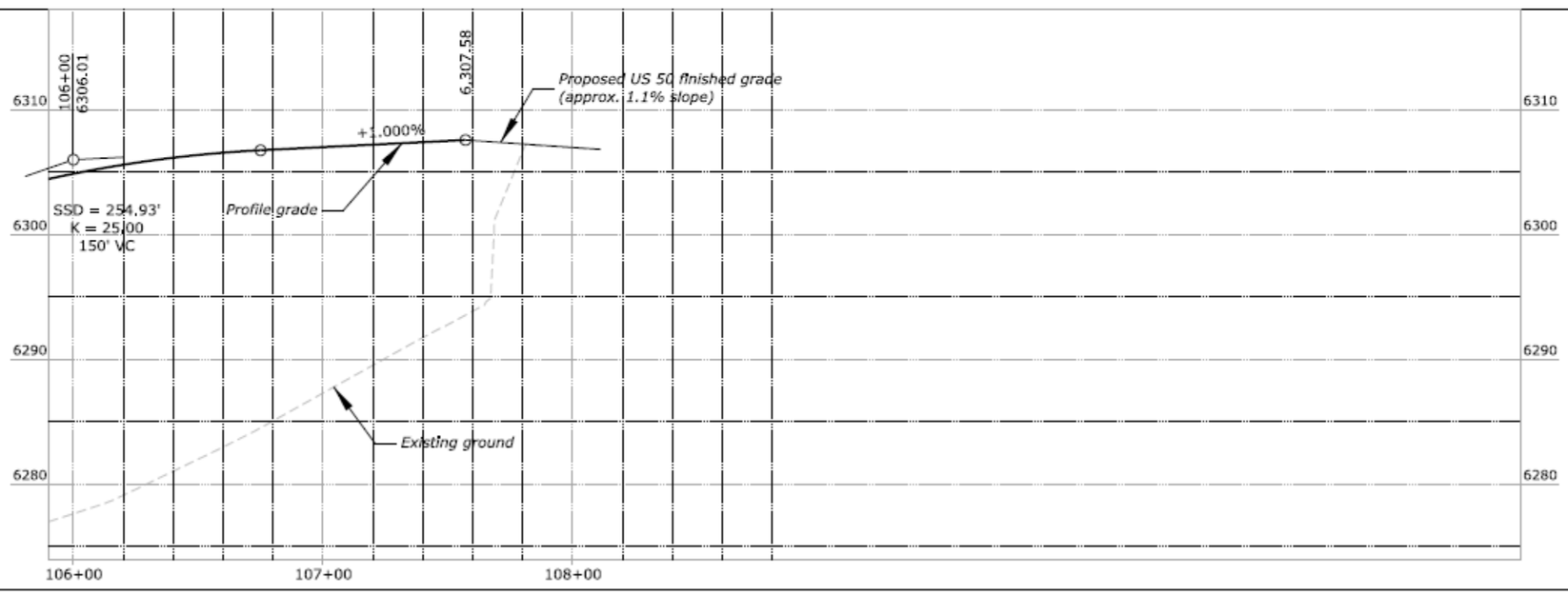
4/19/2019

STATE	PROJECT	SHEET NUMBER
NV	NV FLAP US50(1) ROUND HILL PINES ACCESS	C06





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4/19/2019

Appendix B
Agency Coordination

Steve Sisolak
Governor

Bradley Crowell
Director

Kristin Szabo
Administrator

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
Nevada Natural Heritage Program

14 June 2019

Brett Hartmann
Jacobs
9191 South Jamaica Street
Denver, CO 80112

RE: Data request received 13 June 2019

Dear Mr. Hartmann:

We are pleased to provide the information you requested on endangered, threatened, candidate, and/or at risk plant and animal taxa recorded within or near the Round Hill Pines Project located in Douglas County. We searched our database and maps for the following, a two kilometer radius around:

Township 13N Range 18E Section 15

The enclosed printout list the taxa recorded within the given area. The Lahontan cutthroat trout, *Oncorhynchus clarkii henshawi*, a Federally Threatened Taxon is known to occur in Lake Tahoe and several tributaries to the lake, and should be considered if disturbances are anticipated in the area. Additionally, all sandy beach habitat around Lake Tahoe is potential habitat for Tahoe yellowcress (*Rorippa subumbellata*), a State protected species. When disturbance or alteration of such habitat is anticipated, surveys for Tahoe yellowcress to determine potential impacts should be conducted at times of year appropriate to its detection, and avoidance or mitigation measures should be considered. The Nevada Department of Wildlife (NDOW) manages, protects, and restores Nevada's wildlife resources and associated habitat. Please contact Bonnie Weller, NDOW GIS Biologist (775 688-1439) to obtain further information regarding wildlife resources within and near your area of interest. Removal or destruction of state protected flora species (NAC 527.010) requires a special permit from Nevada Division of Forestry (NRS 527.270).

Please note that our data are dependent on the research and observations of many individuals and organizations and in most cases are not the result of comprehensive or site-specific field surveys. Natural Heritage reports should never be regarded as final statements on the taxa or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

Thank you for checking with our program. Please contact us for additional information or further assistance.

Sincerely,

Eric S. Miskow
Biologist/Data Manager
Prepared by Kim Williams (Biologist III)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
Phone: (775) 861-6300 Fax: (775) 861-6301
http://www.fws.gov/nevada/

In Reply Refer To: May 29, 2019
Consultation Code: 08ENVD00-2019-SLI-0440
Event Code: 08ENVD00-2019-E-01132
Project Name: CFLHD - Round Hill Pines

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list indicates threatened, endangered, proposed, and candidate species and designated or proposed critical habitat that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act of 1973, as amended (ESA, 16 U.S.C. 1531 *et seq*.), for projects that are authorized, funded, or carried out by a Federal agency. Candidate species have no protection under the ESA but are included for consideration because they could be listed prior to the completion of your project. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions. For additional information regarding species that may be found in the proposed project area, visit http://www.fws.gov/nevada/es/ipac.html.

The purpose of the ESA is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq*.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or

designated or proposed critical habitat. Guidelines for preparing a Biological Assessment can be found at: http://www.fws.gov/midwest/endangered/section7/ba_guide.html.

If a Federal action agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this species list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally listed, proposed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally, as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation, for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the attached list.

The Nevada Fish and Wildlife Office (NFWO) no longer provides species of concern lists. Most of these species for which we have concern are also on the Animal and Plant At-Risk Tracking List for Nevada (At-Risk list) maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's At-Risk list and are partnering with them to provide distribution data and information on the conservation needs for at-risk species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or in serious decline. In addition, in order to avoid future conflicts, we ask that you consider these at-risk species early in your project planning and explore management alternatives that provide for their long-term conservation.

For a list of at-risk species by county, visit Heritage's website (http://heritage.nv.gov). For a specific list of at-risk species that may occur in the project area, you can obtain a data request form from the website (http://heritage.nv.gov/get_data) or by contacting the Administrator of Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, (775) 684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the ESA. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (http://www.leg.state.nv.us/NAC/NAC-503.html). You must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife (NDOW) to take, or possess any parts of protected fish and wildlife species. Please visit http://www.ndow.org or contact NDOW in northern Nevada (775) 688-1500, in southern Nevada (702) 486-5127, or in eastern Nevada (775) 777-2300.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq*.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Service's wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

The Service's Pacific Southwest Region developed the *Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities* (Interim Guidelines). This document provides energy facility developers with a tool for assessing the risk of potential impacts to wildlife resources and delineates how best to design and operate a bird- and bat-friendly wind facility. These Interim Guidelines are available upon request from the NFWO. The intent of a Bird and Bat Conservation Strategy is to conserve wildlife resources while supporting project developers through: (1) establishing project development in an adaptive management framework; (2) identifying proper siting and project design strategies; (3) designing and implementing pre-construction surveys; (4) implementing appropriate conservation measures for each development phase; (5) designing and implementing appropriate post-construction monitoring strategies; (6) using post-construction studies to better understand the dynamics of mortality reduction (*e.g.*, changes in blade cut-in speed, assessments of blade “feathering” success, and studies on the effects of visual and acoustic deterrents) including efforts tied into Before-After/Control-Impact analysis; and (7) conducting a thorough risk assessment and validation leading to adjustments in management and mitigation actions.

The template and recommendations set forth in the Interim Guidelines were based upon the Avian Powerline Interaction Committee's Avian Protection Plan template (http://www.aplic.org/) developed for electric utilities and modified accordingly to address the unique concerns of wind energy facilities. These recommendations are also consistent with the Service's wind energy guidelines. We recommend contacting us as early as possible in the planning process to discuss the need and process for developing a site-specific Bird and Bat Conservation Strategy.

The Service has also developed guidance regarding wind power development in relation to prairie grouse leks (sage-grouse are included in this). This document can be found at: http://www.fws.gov/southwest/es/Oklahoma/documents/te_species/wind%20power/prairie%20grouse%20lek%205%20mile%20public.pdf.

Migratory Birds are a Service Trust Resource. Based on the Service's conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act of 1918, as amended (MBTA; 16 U.S.C. 703 *et seq*.), we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to

avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Guidance for minimizing impacts to migratory birds for projects involving communications towers (*e.g.*, cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

If wetlands, springs, or streams are are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit. For projects located in northern Nevada (Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, and Washoe Counties) contact the Reno Regulatory Office at 300 Booth Street, Room 3060, Reno, Nevada 89509, (775) 784-5304; in southern Nevada (Clark, Lincoln, Nye, and White Pine Counties) contact the St. George Regulatory Office at 321 North Mall Drive, Suite L-101, St. George, Utah 84790-7314, (435) 986-3979; or in California along the eastern Sierra contact the Sacramento Regulatory Office at 650 Capitol Mall, Suite 5-200, Sacramento, California 95814, (916) 557-5250.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*

Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO
Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO
El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Humboldt	All except Shasta Trinity National Forest	All	AFWO

Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Modoc	Modoc National Forest	All	KFWO
Modoc	BLM Alturas Resource Area	All	KFWO
Modoc	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Modoc	BLM Surprise and Eagle Lake Resource Areas	All	RFWO

Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
Napa	All ownerships but tidal/estuarine	All	SFWO
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)
Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO

San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO
Siskiyou	Shasta Trinity National Forest	All	YFWO

Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO

Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
(775) 861-6300

Project Summary

Consultation Code: 08ENVD00-2019-SLI-0440

Event Code: 08ENVD00-2019-E-01132

Project Name: CFLHD - Round Hill Pines

Project Type: TRANSPORTATION

Project Description: Round Hill Pines Access is located on Route 50, in Zephyr Cove, NV. Round Hill Pines entrance at US 50 - Forest Service has identified opportunity to reconfigure current highway entrance to resort because of its precarious location. Widen southbound US 50 to provide acceleration and deceleration lanes and a dedicated left turn in for northbound, as well as an acceleration/refuge area out. Round Hill Pines entrance road, circulation, and parking - realign entrance road, add parking, and improve layout for better circulation for visitors and transit.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.990390729725306N119.9507042634491W

Counties: Douglas, NV

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
North American Wolverine *Gulo gulo luscus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Proposed Threatened

Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog *Rana sierrae* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9529	Endangered

Fishes

NAME	STATUS
Lahontan Cutthroat Trout *Oncorhynchus clarkii henshawi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3964 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/233/office/14320.pdf	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Cassin's Finch *Carpodacus cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15

NAME	BREEDING SEASON
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird *selasphorus rufus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Williamson's Sapsucker *Sphyrapicus thyroideus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8832	Breeds May 1 to Jul 31
Willow Flycatcher *Empidonax traillii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/3482	Breeds May 20 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for

that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

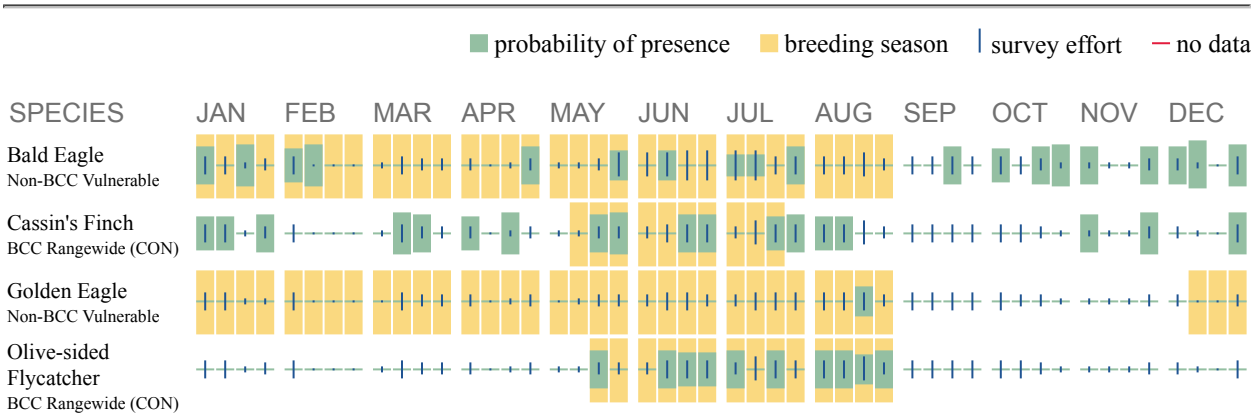
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

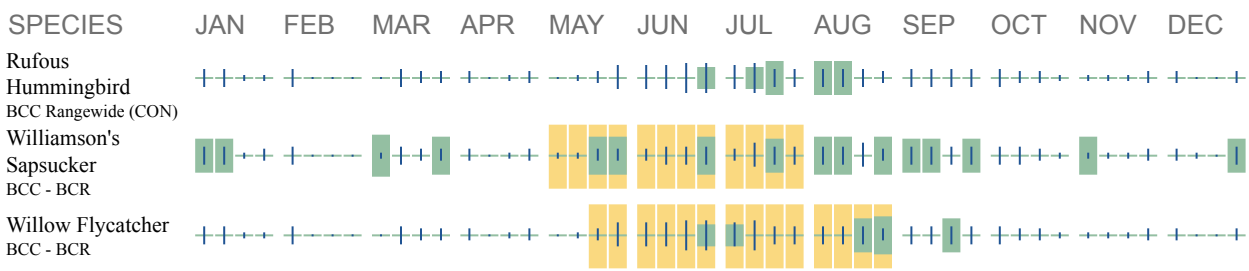
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.
Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?
The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
Phone: (775) 861-6300 Fax: (775) 861-6301
http://www.fws.gov/nevada/

In Reply Refer To: July 15, 2020
Consultation Code: 08ENVD00-2019-SLI-0440
Event Code: 08ENVD00-2020-E-01432
Project Name: CFLHD - Round Hill Pines

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list indicates threatened, endangered, proposed, and candidate species and designated or proposed critical habitat that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act of 1973, as amended (ESA, 16 U.S.C. 1531 *et seq*.), for projects that are authorized, funded, or carried out by a Federal agency. Candidate species have no protection under the ESA but are included for consideration because they could be listed prior to the completion of your project. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions. For additional information regarding species that may be found in the proposed project area, visit http://www.fws.gov/nevada/es/ipac.html.

The purpose of the ESA is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq*.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or

designated or proposed critical habitat. Guidelines for preparing a Biological Assessment can be found at: http://www.fws.gov/midwest/endangered/section7/ba_guide.html.

If a Federal action agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this species list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally listed, proposed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally, as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation, for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the attached list.

The Nevada Fish and Wildlife Office (NFWO) no longer provides species of concern lists. Most of these species for which we have concern are also on the Animal and Plant At-Risk Tracking List for Nevada (At-Risk list) maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's At-Risk list and are partnering with them to provide distribution data and information on the conservation needs for at-risk species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or in serious decline. In addition, in order to avoid future conflicts, we ask that you consider these at-risk species early in your project planning and explore management alternatives that provide for their long-term conservation.

For a list of at-risk species by county, visit Heritage's website (http://heritage.nv.gov). For a specific list of at-risk species that may occur in the project area, you can obtain a data request form from the website (http://heritage.nv.gov/get_data) or by contacting the Administrator of Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, (775) 684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the ESA. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (http://www.leg.state.nv.us/NAC/NAC-503.html). You must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife (NDOW) to take, or possess any parts of protected fish and wildlife species. Please visit http://www.ndow.org or contact NDOW in northern Nevada (775) 688-1500, in southern Nevada (702) 486-5127, or in eastern Nevada (775) 777-2300.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq*.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Service's wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

The Service's Pacific Southwest Region developed the *Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities* (Interim Guidelines). This document provides energy facility developers with a tool for assessing the risk of potential impacts to wildlife resources and delineates how best to design and operate a bird- and bat-friendly wind facility. These Interim Guidelines are available upon request from the NFWO. The intent of a Bird and Bat Conservation Strategy is to conserve wildlife resources while supporting project developers through: (1) establishing project development in an adaptive management framework; (2) identifying proper siting and project design strategies; (3) designing and implementing pre-construction surveys; (4) implementing appropriate conservation measures for each development phase; (5) designing and implementing appropriate post-construction monitoring strategies; (6) using post-construction studies to better understand the dynamics of mortality reduction (*e.g.*, changes in blade cut-in speed, assessments of blade “feathering” success, and studies on the effects of visual and acoustic deterrents) including efforts tied into Before-After/Control-Impact analysis; and (7) conducting a thorough risk assessment and validation leading to adjustments in management and mitigation actions.

The template and recommendations set forth in the Interim Guidelines were based upon the Avian Powerline Interaction Committee's Avian Protection Plan template (http://www.aplic.org/) developed for electric utilities and modified accordingly to address the unique concerns of wind energy facilities. These recommendations are also consistent with the Service's wind energy guidelines. We recommend contacting us as early as possible in the planning process to discuss the need and process for developing a site-specific Bird and Bat Conservation Strategy.

The Service has also developed guidance regarding wind power development in relation to prairie grouse leks (sage-grouse are included in this). This document can be found at: http://www.fws.gov/southwest/es/Oklahoma/documents/te_species/wind%20power/prairie%20grouse%20lek%205%20mile%20public.pdf.

Migratory Birds are a Service Trust Resource. Based on the Service's conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act of 1918, as amended (MBTA; 16 U.S.C. 703 *et seq*.), we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to

avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Guidance for minimizing impacts to migratory birds for projects involving communications towers (*e.g.*, cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

If wetlands, springs, or streams are are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit. For projects located in northern Nevada (Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, and Washoe Counties) contact the Reno Regulatory Office at 300 Booth Street, Room 3060, Reno, Nevada 89509, (775) 784-5304; in southern Nevada (Clark, Lincoln, Nye, and White Pine Counties) contact the St. George Regulatory Office at 321 North Mall Drive, Suite L-101, St. George, Utah 84790-7314, (435) 986-3979; or in California along the eastern Sierra contact the Sacramento Regulatory Office at 650 Capitol Mall, Suite 5-200, Sacramento, California 95814, (916) 557-5250.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*

Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO
Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO
El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Humboldt	All except Shasta Trinity National Forest	All	AFWO

Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Modoc	Modoc National Forest	All	KFWO
Modoc	BLM Alturas Resource Area	All	KFWO
Modoc	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Modoc	BLM Surprise and Eagle Lake Resource Areas	All	RFWO

Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
Napa	All ownerships but tidal/estuarine	All	SFWO
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)
Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO

San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO
Siskiyou	Shasta Trinity National Forest	All	YFWO

Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO

Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
(775) 861-6300

Project Summary

Consultation Code: 08ENVD00-2019-SLI-0440

Event Code: 08ENVD00-2020-E-01432

Project Name: CFLHD - Round Hill Pines

Project Type: TRANSPORTATION

Project Description: Round Hill Pines Access is located on Route 50, in Zephyr Cove, NV. Round Hill Pines entrance at US 50 - Forest Service has identified opportunity to reconfigure current highway entrance to resort because of its precarious location. The proposed action will include the relocation of the entrance road to the north and providing a northbound left turn lane and northbound acceleration lane along US 50. The US 50 through lanes will remain 12 feet wide, the median left turn bay/acceleration lane will be 12 feet wide ,
and the shoulders will remain 4 feet (west) and 6 feet wide (east) to match existing widths.
Acceleration/deceleration lanes along SB US 50 will not be part of the proposed action.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.990390729725306N119.9507042634491W

Counties: Douglas, NV

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
North American Wolverine *Gulo gulo luscus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Proposed Threatened

Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog *Rana sierrae* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9529	Endangered

Fishes

NAME	STATUS
Lahontan Cutthroat Trout *Oncorhynchus clarkii henshawi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3964 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/233/office/14320.pdf	Threatened

Conifers and Cycads

NAME	STATUS
Whitebark Pine *Pinus albicaulis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1748	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Cassin's Finch *Carpodacus cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15

NAME	BREEDING SEASON
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird *selasphorus rufus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Williamson's Sapsucker *Sphyrapicus thyroideus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8832	Breeds May 1 to Jul 31
Willow Flycatcher *Empidonax traillii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/3482	Breeds May 20 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for

that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

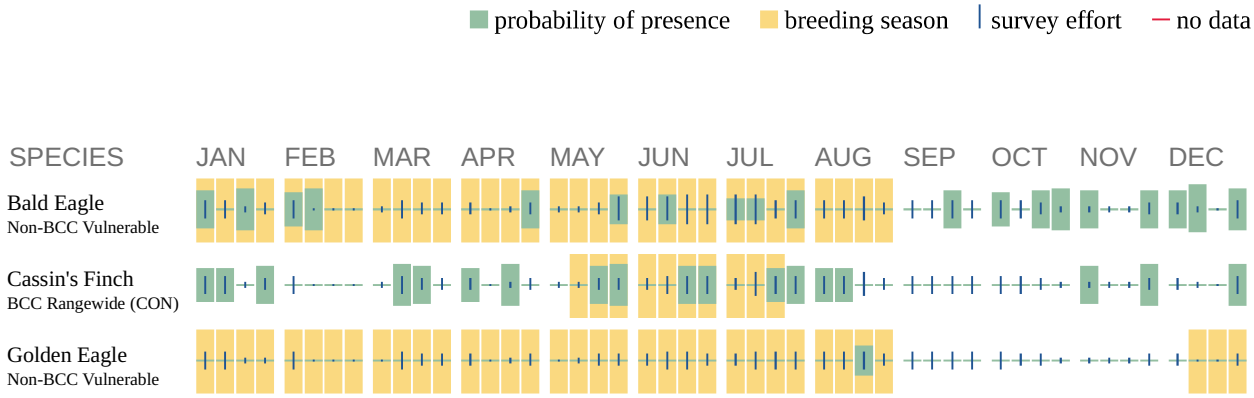
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

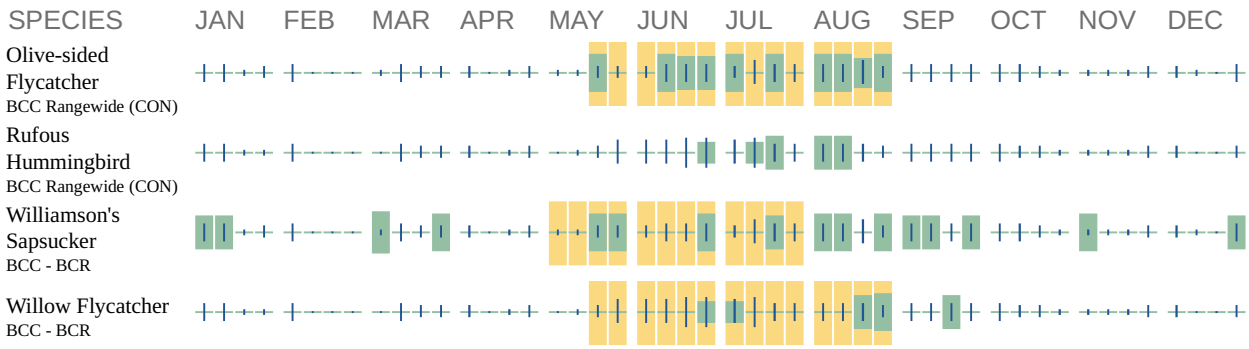
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.
Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?
The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act

requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can

implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

Appendix C
Project Area Photographs

Photo 1. Facing east through the project from the paved path currently running through the project area. Vegetation through the project area consists mainly of ponderosa pine and Jeffery pine

Photo 2. Facing east, looking up the unvegetated swale towards the paved trail and a culvert running underneath it.

Photo 3. Facing west, looking down the dry wash from the paved trail, towards the existing access road. Swale has no ordinary high water mark or defined bed/bank.

Photo 4. Facing northeast from the current parking Round Hill Pines parking lot. Paved trail from US 50 to Round Hill Pines Beach Resort is visible.

Photo 5. Facing south, looking through the project area. Vegetation adjacent to the path consists of ponderosa pine and Jeffery pine.

Photo 6. Facing west, looking down the paved path, towards the existing parking lot.

Photo 7. Facing north, looking down the paved path, toward the northeastern project boundary and US 50.

Photo 8. Facing east, looking at US 50 and where the proposed access road would tie into the highway (station [STA] 107+57.13).

Photo 9. Facing south, looking along US 50 from near the northeastern project boundary (STA 35+00).

Photo 10. Facing southeast, looking along US 50 from near the southeastern project boundary (STA 11+00).

Photo 11. Facing northwest, looking along US 50 from near the southeastern project boundary (STA 11+00).

Appendix D
ESA Listed Species and State Species of Greatest Conservation Concern

Table D-1. ESA Listed Species and State Species of Greatest Conservational Need from the Action Area

Species	Federal Status	Special Status[1]	Vegetation Community	Habitat	Potential to Occur in Project Area[2]	Will Be Analyzed Further
Amphibians						
Rana sierrae Sierra Nevada Yellow-legged Frog	Listed Endangered	US	Wetlands, riparian, meadows	Typically inhabits large permanent water bodies or streams that are fishless and >4,000 feet. They tend to stay closely associated with high-elevation water bodies, but they are capable of longer distance travel, whether along stream courses or over land in between breeding, foraging, and overwintering habitat within lake complexes. Individuals may use different water bodies or different areas within the same water body for breeding, foraging, and overwintering. Within water bodies, adults and tadpoles prefer shallower areas and shelves with solar exposure (features rendering these areas warmer).	None. Suitable habitat is not present on the project site. No wetlands, streams, or riparian communities are present.	No
Birds						
Accipiter gentilis Northern goshawk	-	SB, S3, US, TRPA	Deciduous or coniferous forests	Typically inhabits late seral or old growth forests that have closed canopies (greater than 40 percent) and a relatively open understory. In central Nevada, goshawks use a wide variety of habitats for foraging; however, goshawks are primarily found nesting in aspen. Goshawks prey on a variety of small mammals and birds. Breeding usually occurs between early April and mid-June, with peak activity occurring at the end of April through May.	None. Although suitable forage habitat is present within the project area, no nests were detected during survey and the project area is over a 0.25 mile from any known nest sites. The nearest known nest site being Burke Creek, over 1 mile to the east.	No
Pandion haliaetus Osprey	-	TRPA	Shore, bays, wetlands, riparian, rivers, cliffs	Typically inhabits rivers, lakes, reservoirs, and seacoasts. They often cross land between bodies of water. They typically build large stick nests on living or dead trees and also use numerous man-made structures such as utility poles, wharf pilings, windmills, microwave towers, chimneys, and channel markers. Nests are usually near or above water.	None. Although suitable forage habitat is present within the project area, no nests were detected during survey and the project area is over a 0.25 mile from any known nest sites. The nearest known nest site is located approximately 5 miles north.	No
Falco peregrinus anatum Peregrine falcon	-	EB, S3 US	Forested habitats with cliffs/canyons, urban settings	Typically inhabits bare rock/talus/scree slopes, cliffs, shrubland/chaparral, and conifer, hardwood, and mixed woodlands.	None. Suitable nesting habitat of bare rock or cliffs are not present in the project area.	No

Table D-1. ESA Listed Species and State Species of Greatest Conservational Need from the Action Area

Species	Federal Status	Special Status[1]	Vegetation Community	Habitat	Potential to Occur in Project Area[2]	Will Be Analyzed Further
Haliaeetus leucocephalus Bald eagle	-	EB, S2 (Only while breeding), TRPA, US	Coniferous forest and intermountain rivers and streams	Nests in large trees near water, such as rivers, lakes, and coast shorelines, where they prey upon fish and waterfowl. During nesting season, establish and maintain territorial boundaries.	None. Although suitable forage habitat is present within the project area, no nests were detected during field survey, and the action area is outside of known TRPA or LTBMU wintering bald eagle range, and the project area is over a 0.5 mile from any known nest sites.	No
Aquila chrysaetos Golden Eagle	-	TRPA	Alpine, cliffs, shrublands, open woodlands, meadows	Found generally in open country, in prairies, arctic and alpine tundra, open wooded country, and barren areas, especially in hilly or mountainous regions. In Nevada, it nests predominantly on the rock ledge of a cliff or occasionally in a large tree. Pairs may have several alternate nests and may use same nest in consecutive years or shift to alternate nest used in different years.	None. Suitable habitat is not present on the project site. No appropriate nesting habitat. The nearest known nest site is approximately 10 miles to the southwest.	No
Carpodacus cassinii Cassin's Finch	-	S3	Coniferous and deciduous forest and woodlands, Shrubland/chap arral	Habitat consists of open coniferous forest; in migration and winter, it may also be found in deciduous woodland, second growth, scrub, brushy areas, partly open situations with scattered trees, and sometimes suburbs near mountains. Usually nests in conifer, 10 to 83 feet above ground, on the outer end of limb. It may sometimes nest in deciduous tree or in shrub. It may return to same nesting area in successive years, though this may be unusual.	Fair. Suitable habitat is present. Sightings of this species have been reported adjacent to the project site. We recommend preconstruction nesting surveys in compliance with the Migratory Bird Act if disturbance activities will take place between May 15 and July 15.	No
Contopus cooperi Olive-sided Flycatcher	-	S2 (Only while breeding)	Conifer, hardwood, and mixed woodland and forest	Habitat includes a variety of forest, woodland, and open situations with scattered trees, especially where tall dead snags are present; subalpine coniferous forest and mixed coniferous-deciduous forest. Birds also forage along small mountaintop ponds. Nests are placed most often in conifers, on horizontal limbs from 6 to 50 feet from the ground.	Low. Species may occasionally occur in the project area. However, the habitat in the project area is not considered preferable because of the lack of deadfall and snag along with heavy human presence. Sightings of this species have been reported adjacent to the project site. We recommend preconstruction nesting surveys in compliance with the Migratory Bird Act if disturbance activities will take place between May 20 and August 20.	No

Table D-1. ESA Listed Species and State Species of Greatest Conservational Need from the Action Area

Species	Federal Status	Special Status[1]	Vegetation Community	Habitat	Potential to Occur in Project Area[2]	Will Be Analyzed Further
Selasphorus rufus Rufous Hummingbird	-	S3	Conifer, hardwood, mixed forests and woodlands, brushy hillsides; meadows abundant with nectar flowers	Breeding habitat includes coniferous forest, second growth, thickets, and brushy hillsides, with foraging extending into adjacent scrubby areas and meadows with abundant nectar flowers. Its habitat is chiefly secondary succession communities and forest openings.	Low. This species may occasionally occur in the project area. However, the habitat in the project area is not considered preferable because of the lack of flowering forbs and closed canopy. Sightings of this species have been reported adjacent to the project site. This species is not known to nest near the project area.	No
Sphyrapicus thyroideus Williamson's Sapsucker	-	S2	Montane and subalpine coniferous forest, primarily pine and fir with quaking aspen	Habitat includes middle to high elevation montane and subalpine coniferous forest, including spruce-fir, Douglas-fir, western larch (e.g., British Columbia), lodgepole pine, and ponderosa pine, and mixed deciduous-coniferous forest with quaking aspen. Nests are in tree cavities. Individuals usually excavate a hole 6 to 60 feet above ground, usually in dead or decaying pine, fir, larch, or aspen.	Fair. Suitable habitat is present. Sightings of this species have been reported adjacent to the project site. We recommend preconstruction nesting surveys in compliance with the migratory bird act if disturbance activities take place between May 1 and July 31.	No
Empidonax traillii Willow Flycatcher	-	S3	Willows, wetlands and waterbodies	Nests in dense willow habitat on edge of wet meadows, ponds, or backwaters	Low. This species may occasionally occur in the project area. However, the habitat in the project area is not considered preferable because of the lack wetlands or willow habitat. Sightings of this species have been reported adjacent to the project site.	No
Strix nebulosa Great gray owl	-	US	Dense coniferous forests.	Prefer pine and fir forest below 7,400 feet in elevation, with an affinity for stands near meadows. Nests are typically located in large, broken-topped snags and old raptor nests.	None. This species is not known to occur on Lake Tahoe Basin Management Unit (LTBMU). Therefore, this species is not considered to occur in the project area and the project will have no impact on this species.	No

Table D-1. ESA Listed Species and State Species of Greatest Conservational Need from the Action Area

Species	Federal Status	Special Status[1]	Vegetation Community	Habitat	Potential to Occur in Project Area[2]	Will Be Analyzed Further
Strix occidentalis occidentalis California spotted owl	-	S1, US	Old-growth coniferous forests, usually dominated by ponderosa pine, douglas-fir, and/or white fir	At higher elevations (>3,200 feet), California Spotted Owls tend to occupy conifer-dominated stands. This species shows a preference for stands with complex structure and a large (>35-inch) diameter at breast height, old growth tree component.	None. Suitable habitat is not present.	No
Waterfowl	-	TRPA	Open-water, shore, riparian, wetland	Often found in open-water, riparian, wetland, shore-line, streams, lakes.	None. Suitable nesting habitat is not present on the project site and human activity is too high. No wetlands, riparian areas, or grasslands present. The action area is located outside of any waterfowl habitat identified by Tahoe Regional Planning Agency (TRPA).	No
Fish						
Gila bicolor pectinifer Lahontan Lake Tui Chub	-	S3, US	Freshwater	Often found in large deep lakes that may differ significantly from each other in physio-chemical conditions. In Lake Tahoe, larger individuals occupy deeper water during the day and shallow water at night, but they always stay in the upper water column in summer. They move deeper in the water column in winter. When young reach 1 to 2 centimeters, they move from beds of aquatic vegetation to deeper offshore areas.	None. Suitable habitat is not present on the project site.	No
Oncorhynchus clarkia henshawi Lahontan Cutthroat Trout	Listed Threatened	GF, EM, S3	Freshwater	Inhabits lakes and streams and requires cool, well-oxygenated water. It is adapted to highly mineralized waters. In streams, it uses rocky areas, riffles, deep pools, and areas under logs and overhanging banks.	None. Suitable habitat is not present on the project site.	No
Mammals						
Odocoileus hemionus Mule Deer	-	GM, TRPA	Sagebrush, bitterbrush, serviceberry, snowbrush, and snowberry	Occur in diverse habitat types throughout Nevada but occur in highest densities in montane shrub dominated communities. They are often associated with successional vegetation. They are often found on open south-facing slopes in winter.	None. Suitable forage habit is present, but the project site is located outside of modelled fawning habitat, as shown in the Carson River and Truckee/Loyalton Deer Herd range maps.	No

Table D-1. ESA Listed Species and State Species of Greatest Conservational Need from the Action Area

Species	Federal Status	Special Status[1]	Vegetation Community	Habitat	Potential to Occur in Project Area[2]	Will Be Analyzed Further
Corynorhinus townsendii Townsend's big-eared bat	-	SM, S2, US	Piñon-juniper, mahogany, white fir, blackbrush, sagebrush, salt desert scrub, and agricultural lands	Found in diverse habitat types including desert, native prairies, coniferous forests, mid-elevation mixed conifer, and riparian communities. Species is dependent on cavern dwellings including mines, caves, trees, and buildings from 693 to 11,550 feet. They are loyal to natal sites and generally do not venture beyond 6 miles from a roost site.	None. While there is suitable foraging habitat in the Round Hill Pines project site, there are no structures or substrate (e.g., caves, mines, buildings) that could potentially support roosting.	No
Gulo gulo luteus North American Wolverine	Proposed Threatened	US	Dense mixed-conifer forests in high elevations and areas with persistent snow cover	Uses caves, hollows, logs, rock outcrops, and burrows for cover. Presence is positively associated with higher elevation snow pack, snags, talus, and remote undisturbed wilderness with minimal motorized access and low human population densities.	None. This species is not known to occur on LTBMU. Therefore, this species is not considered to occur in the project area and the project will have no impact on this species.	No
Zapus princeps Western Jumping Mouse	-	S2	Mountain meadows, marshes, banks of streams and ponds	Occur in mountain meadows, marshes, and along banks of streams and ponds, in dense cover of tall grasses and herbs. They nest in burrows in well-drained mound or elevated banks or on the surface among vegetation.	None. Suitable habitat is not present on the project site. No wetlands or waterbodies present.	No
Thomomys monticola Mountain Pocket Gopher	-	S3	Mountain meadows, rocky slopes in pine, fir, and spruce	Occur in mountain meadows and rocky slopes in pine, fir, and spruce; in rich moist soil, as well as gravelly or rocky ground. They can generally be found on open forest floor and at the edge of meadows. Mountain pocket gophers are found at high altitudes where temperatures are lower than the habitat of other pocket gopher species.	Low. Suitable coniferous forest habitat is present but mountain meadows are not present and soils are not suitable for burrowing.	No
Myotis thysanodes Fringed Myotis	-	PM, S2, US	Piñon-juniper, mixed woodlands and forests, deserts, shrublands, riparian, and orchards	Roosts in crevices in rocks, cliffs, buildings, underground mines, caves, bridges, and in large, decadent trees. Mostly found in dry habitats (grasslands or deserts) interspersed with mature forests (especially ponderosa pine, piñon-juniper, or oak).	Low. While there is suitable foraging habitat in the Round Hill Pines project site, structures or substrate (e.g., caves, buildings, decadent trees) that could potentially support roosting are very limited.	No

Table D-1. ESA Listed Species and State Species of Greatest Conservational Need from the Action Area

Species	Federal Status	Special Status[1]	Vegetation Community	Habitat	Potential to Occur in Project Area[2]	Will Be Analyzed Further
Martes caurina Pacific Marten	-	FM, S2S3	Coniferous and mixed forest and woodland, rocky alpine	Martens occur in coniferous forest and may use rocky alpine areas. Use of habitat is related to food availability, especially in winters with deep snow. When inactive, they occupy holes in dead or live trees or stumps, abandoned squirrel nests, conifer crowns, rock piles, burrows, or snow cavities. In winter, much of a marten's activity occurs under the snow, often in coarse woody debris.	None. Suitable habitat of dense coniferous forests or rocky alpine is not present. The project area is heavily traffic by humans and highly disturbed. The nearest known den is located approximately 8 miles southwest, near Fallen Leaf Lake.	No
Plants						
Boechera rigidissima Galena Creek Rockcress	-	S2, US, TRPA	Aspen groves, brushy slopes	Sandy to rocky soils or outcrops derived from granitic or volcanic materials, mostly on moderate to steep northerly aspects, often in drainage ways, near meadow edges, or in other moisture accumulating microsites, generally in dry openings in Abies - Pinus - Populus tremuloides associations.	None. Suitable habitat of drainageways, other moisture accumulating microsites, and aspen stands are not present.	No
Draba asterophora var. asterophora Tahoe Draba	-	S1S2, US, TRPA	Alpine, bare rock/talus/scree, barrens	Granite rock crevices, talus, scree, or rocky decomposed granite or volcanic soils on steep slopes, mostly on northern to eastern aspects, in the subalpine conifer zone with a very sparse understory.	None. Suitable habitat of bare rock, talus, or scree is not present.	No
Pinus albicaulis Whitebark Pine	Candidate	S3, US	Subalpine, peaks, ridges, piñon-juniper	Found in areas with thin rocky soils mostly on peaks, ridges, and exposed northerly aspects, usually in the subalpine zone, but descending on acidic altered andesite and other specialized soils well into the piñon-juniper zone.	None. Suitable habitat of ridges, peaks, and exposed faces are not present.	No
Rorippa subumbellata Tahoe Yellowcress	-	S1, CE, US, TRPA	Riparian, wetland, sand/dune	Found in areas with coarse sand and sandy soils of active beaches, stream inlets, beach dunes, and backshore depressions, generally within a few feet of the local water table, endemic to the shore zone of Lake Tahoe.	None. Suitable habitat of sandy beach shores are not present on the project site.	No

Table D-1. ESA Listed Species and State Species of Greatest Conservational Need from the Action Area

Species	Federal Status	Special Status[1]	Vegetation Community	Habitat	Potential to Occur in Project Area[2]	Will Be Analyzed Further
Lewisia longipetala Long-Petaled Lewisia	-	US, TRPA	Alpine, rocky	Endemic to alpine snowfield communities along the crest of the northern Sierra Nevada between elevations of 7800 and 12,470 feet. It grows in moist, rocky habitats directly below persistent snowfields, typically on north-facing and leeward slopes where snow accumulations are greatest. Plants easily become water-stressed when snowmelt ceases to reach them. Populations usually occur on gentle gravelly or bouldery slopes but are also found in the crevices of large rock slabs. Soils are derived from granitic or basaltic parent materials. (USFS 2011)	None. Suitable habitat of alpine snowfield is not present. The Projects action area is not within any known populations within the LTBMU. All known populations in the LTBMU occur within the Desolation Wilderness.	No
Draba asterophora var. macrocarpa Cup Lake Draba	-	US, TRPA	Alpine, bare rock/talus/scree	Occurs on exposed talus and boulder slopes with minimal groundcover and a sparse understory, at elevations above 8,200 feet. Soils are typically of granitic parent material but can also be volcanic in origin. (USFS 2013)	None. Suitable habitat of bare rock, talus, or scree is not present. The project's action area is not within any known populations within the LTBMU.	No
Invertebrates						
Bombus occidentais Western Bumble Bee	-	US	Food plants include ceanothus, centaurea, chrysothamnus, cirsium, geranium, grindellia, lupinus, melilotus, monardella, rubus, solidago, and trifolium.	Habitats for this species include open coniferous, deciduous, and mixed-wood forests, wet and dry meadows, montane meadows and prairie grasslands, meadows bordering riparian zones, and along roadsides in taiga adjacent to wooded areas, urban parks, gardens and agricultural areas, subalpine habitats and more isolated natural areas.	Fair. Suitable habitat is present. There is a potential to occur but with construction disturbance in the area, likelihood is low. There is also enough suitable habitat adjacent that the project will have no effect on current or future populations on this species.	No
Helisoma newberryi Great Basin rams-horn	-	US	Watercress	Habitat includes larger lakes and slow rivers, including larger spring sources and spring-fed creeks burrowing in soft mud just beneath the surface	None. Suitable habitat is not present. No wetlands or waterbodies.	No

Table D-1. ESA Listed Species and State Species of Greatest Conservational Need from the Action Area

Species	Federal Status	Special Status[1]	Vegetation Community	Habitat	Potential to Occur in Project Area[2]	Will Be Analyzed Further

[1] Nevada State Status, USFS LTBMU Status, State of Nevada Protected Statues, TRPA Status

CE = State of Nevada Protected Critically Endangered Plant, EB = State of Nevada Protected Endangered Bird, EM = State of Nevada Protected Nevada State Symbol, GF = State of Nevada Protected Game Fish, FM = State of Nevada Protected Fur-bearing Mammal, GM = State of Nevada Protected Game Mammal, PM = State of Nevada Protected Mammal, S1 = NNHP State Rank 1, S2 = NNHP State Rank 2, S3 = NNHP State Rank 3, SB = State of Nevada Protected Sensitive Bird, SM = State of Nevada Protected Sensitive Mammal, TRPA = TRPA special interest species, US = US Forest Service LTBMU Sensitive

[2] Sources:

eBird. 2019. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: http://www.ebird.org. July 2019

Nevada Natural Heritage Program (NNHP). 2019b. Species Information. http://heritage.nv.gov/species/ June/July 2019

NatureServe, An Online Encyclopedia of Life (NatureServe). 2019. *Species Profiles.* http://explorer.natureserve.org/index.htm June 2019

Tahoe Regional Planning Agency (TRPA). 2019. *Published Open Data.* http://data-trpa.opendata.arcgis.com/search July 2019

U.S. Forest Service (USFS). 2011. *Long-Term Monitoring Plan: Lewisia longipetala*. USDA Forest Service, Lake Tahoe Basin Management Unit. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5337950.pdf June 2019

U.S. Forest Service (USFS). 2013. *Long-Term Monitoring Plan: Draba asterophora var. asterophora & Draba asterophora var. macrocarpa*. USDA Forest Service, Eldorado National Forest, Humbolt -Toiyabe National Forest & Lake Tahoe Basin Management Unit. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5444261.pdf June 2019

At Risk and Data Sensitive Taxa Recorded Near the Round Hill Pines Project Area in Douglas County

Compiled by the Nevada Natural Heritage Program for Jacobs

14 June 2019

Scientific name	Common name	Usfws	Blm	Usfs	State	Srank	Grank	UTM E	UTM N	Loc Uncert	Uncert Dist (m)	Last Obs
Plants												
Rorippa subumbellata	Tahoe yellowcress		S	R5S	CE	S1	G1	24XXXX	432XXXX	Estimated	20	2004-09-09
Rorippa subumbellata	Tahoe yellowcress		S	R5S	CE	S1	G1	24XXXX	431XXXX	Estimated	161	1994-SUM
Rorippa subumbellata	Tahoe yellowcress		S	R5S	CE	S1	G1	24XXXX	431XXXX	Estimated	161	2005-09
Mammals												
Myotis thysanodes	fringed myotis		S		PM	S2	G4	244031	4319380	Estimated	1609	1954-05-23
Thomomys monticola	mountain pocket gopher		S			S3	G5	244571	4321153	Estimated	1609	1946-Pre
Zapus princeps	western jumping mouse		S			S2	G5	245678	4321834	Estimated	1609	1946-Pre

Bureau of Land Management (Blm) Species Classification:

S Sensitive Species- Species designated Sensitive by State Director of Nevada BLM

United States Forest Service (Usfs) Species Classification:

R5S Region 5 (Inyo National Forest or Lake Tahoe Basin Management Unit) Sensitive or Watch Status

Nevada State Protected (State) Species Classification:

PM Protected Mammal (NAC 503.030.1)

Flora:

CE Critically endangered - species whose survival requires assistance because of overexploitation, disease or other factors, or because their habitat is threatened with destruction, drastic modification or severe curtailment (NRS 527.260-.300)

Locational Uncertainty:

Based on the uncertainty associated with the underlying information on the location of the observation.

Estimated uncertainty varies in more than one dimension; true location of the observation can be visualized as floating within an area for which boundaries cannot be specifically delimited

Nevada Natural Heritage Program Global (**Grank**) and State (**Srank**) Ranks for Threats and/or Vulnerability:

- G Global rank indicator, based on worldwide distribution at the species level
- T Global trinomial rank indicator, based on worldwide distribution at the infraspecific level
- S State rank indicator, based on distribution within Nevada at the lowest taxonomic level
  - 1 Critically imperiled and especially vulnerable to extinction or extirpation due to extreme rarity, imminent threats, or other factors
  - 2 Imperiled due to rarity or other demonstrable factors
  - 3 Vulnerable to decline because rare and local throughout its range, or with very restricted range
  - 4 Long-term concern, though now apparently secure; usually rare in parts of its range, especially at its periphery
  - 5 Demonstrably secure, widespread, and abundant
    - A Accidental within Nevada
    - B Breeding status within Nevada (excludes resident taxa)
    - H Historical; could be rediscovered
    - N Non-breeding status within Nevada (excludes resident taxa)
    - Q Taxonomic status uncertain
    - U Unrankable
    - Z Enduring occurrences cannot be defined (usually given to migrant or accidental birds)
    - ? Assigned rank uncertain