

## INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

**Originating Person:** Imer De La Garza, STRC Deputy Project Leader

**Telephone Number:** 956-784-7561

**Date:** May 23, 2023

**I. Region:** Southwest Region 2

**II. Service Activity (Program):** The issuance of a special use permit and right of way permit to SpaceX for the installation of underground utilities (power and telecommunications) within an existing road easement (Massey Way Road) crossing 0.9 miles of the Lower Rio Grande Valley National Wildlife Refuge (Refuge), Cameron County, Texas.

**III. Pertinent Species and Habitat:**

A. Listed species and/or their critical habitat within the action area:

Lower Rio Grande Valley NWR (Boca Chica Tract) — Cameron County

Flora

None known from near or within action area.

Fauna

Ocelot *Leopardus pardalis* (E)

Gulf Coast Jaguarundi *Herpailurus yaguarondi cacomitli* (E)

Northern aplomado falcon *Falco femoralis septentrionalis* (E)

B. Proposed species and/or proposed critical habitat within the action area:

None

C. Candidate species within the action area:

Monarch Butterfly (*Danaus plexippus*)

D. Include species/habitat occurrence on a map: See Figure 1.

**IV. Geographic area or station name and action:** Lower Rio Grande Valley National Wildlife Refuge, Cameron County, Texas; SpaceX underground utility installation at Massey Way Rd.

**V. Location (attach map):** See Figure 1: Project Area Map.

- A. County and state: Cameron County, Texas
- B. Latitude and longitude: 25°57'25.15"N; 97°15'11.85"W
- C. Distance (miles) and direction to nearest town: Approximately 12 miles east of Brownsville, Texas.

**VI. Description of proposed action:**

The project area is approximately 0.9 miles in length along Massey Way (the length of the road) and shown in Figure 1. Impacts to Refuge lands would be minimal and temporary, as directional boring would be utilized and utilities would be installed in previously disturbed areas. Directional boring, also known as horizontal directional drilling, is a trenchless method of installing underground utilities. A drill rig would install a conduit carrying the utility lines underground. Pull boxes and vaults would be installed to provide access to the lines for any necessary maintenance and/or repair. Maintenance would occur periodically as needed after construction. Construction would occur during daylight hours and is anticipated to take 1 to 2 months after the permit is issued. The utility lines would be operational 24 hours a day, 365 days a year once construction is complete. Along the east side of Massey Way, 3 four-inch high density polyethylene (HDPE) conduits would be installed underground in an approximately nine-inch cylinder. Figure 2 represents how the conduit would typically be installed – the three conduits would be bundled and directionally bored a minimum depth of three feet underground. Final depth would be determined by field conditions during construction. One conduit would carry a thirty-five (35) kilovolt-amps power line, and one would carry a Corning 144EU4-T4701D20 fiber-optic cable. The third conduit along Massey Way would be a spare. Three sizes of underground vaults to provide maintenance access would be installed along the project route with the following sizes: 7 ft x 7 ft x 8 ft, 5 ft x 5 ft 5 x ft, and 3 ft x 2 ft x 2.5 ft. The tops of the utility vaults would be visible at ground level, in a manner similar to manhole covers.

**VII. Determination of Effects:**

- A. Explanation of effects of the action on species and critical habitat in item III A (attach additional pages as needed):

Ocelot/Jaguarundi

Ocelot and jaguarundi populations in Texas are very small with the northern

extent of their current ranges reaching into South Texas. Since the 1920s, more than 95% of the original native brushland in the LRGV has been converted to agricultural or urban use (Jahrsdoerfer and Leslie, 1988). The remaining native habitat as well as narrow connecting corridors or brushlines are therefore extremely important for the continued existence of species such as the ocelot and jaguarundi. Ocelots and jaguarundis are area-sensitive species which occur in dense thorn brush habitat, but will move between adjacent brush tracts using brush-lined canals, drainages, brushy fencelines, or other areas containing native vegetation as protected corridors of travel. Jaguarundis may also occur in dense grasslands associated near dense brush (Caso 1994), and they are typically associated with watercourses such as the nearby Rio Grande and rescaca systems (ox-bow meander channels of the Rio Grande). An estimate of less than 50 ocelot individuals are currently believed to exist in the U.S., and all are in southernmost Texas. Ocelots and Jaguarundis have been recorded in the past within or near the project area but there are no recent confirmed records. However, as long as there is potential habitat, then the likelihood exists that these endangered cats may be present. Dense native thornbrush habitat, whether on the lomas or along the Rio Grande, necessarily requires protection in order to ensure the continued existence and recovery of these species in South Texas. Brush clearing or similar impacts to dense native brush may adversely impact these species by removal of habitat essential to their existence. Although the proposed project does not involve impacts to brush; secondary concerns include human activities such as noise, lights, and equipment use which may cause disruption of these species' essential behavioral patterns including breeding, feeding, or sheltering. These impacts are anticipated to be temporary during project construction which is estimated to take about 1-2 months to complete.

#### Northern aplomado falcon

The federally-endangered northern aplomado falcon has recently been reestablished within the coastal grassland areas of South Texas, as part of a reintroduction plan. According to the most recent information, there are, on average, approximately 18-20 nesting territories each year in the LRGV (mainly in eastern Cameron and Willacy Counties); and to date, within the vicinity of the project site, there are currently 2 active territories generally northwest of the project location. There are no known territories within the proximity of the project site. Nonetheless, the species may occur within the project area within suitable habitat. In order to support downlisting criteria, current recovery goals are to establish approximately 30-35 pairs in South Texas. Overall recovery goals are to establish at least 60 self-sustaining breeding pairs in the United States for the species to be considered for downlisting to threatened status (USFWS 1990).

In South Texas, the northern aplomado falcon typically occurs in coastal prairie or savanna grasslands containing scattered, but prominent woody vegetation such as

yuccas or mesquites. This includes the “salt prairie;” a mosaic of open, vegetated flats and the slightly higher lomas containing yucca, grasses or mesquite savanna between Brownsville, Port Isabel, and Boca Chica. The Boca Chica tract does contain documented occurrences of aplomado falcons as well as their territories/habitat. Aplomado falcons may begin nesting activities in early March and extend through late August. However, since no known territories occur within the proximity of the project and the project will not adversely impact aplomado falcon habitat, it is unlikely adverse impacts to aplomado falcons or their nesting activities would occur.

#### Other Fish and Wildlife Resource Concerns

Regarding other important fish and wildlife resources of concern to the Refuge, many migratory bird species have been experiencing population declines. The Migratory Bird Treaty Act provides for a year-round closed season for non-game birds and prohibits the taking of migratory birds, nests, and eggs, except as permitted. However, no impacts to migratory birds or habitat are anticipated. There may be minor vegetation trimming or removal within the easement for installation of cable and bollard boundary marking. Therefore, if specific areas may require vegetation disturbance during the migratory bird nesting season, then those areas would first need to be surveyed by qualified persons for the presence of nesting birds and, if necessary, avoided until the nesting process is completed or work postponed until after the nesting season of March through August.

In 2020, the monarch butterfly became a candidate species for ESA listing (85 FR No. 243: 81813-81822). The Service will review its status each year until we are able to begin developing a proposal to list this species. Monarch butterflies breed and migrate throughout Texas. Peak fall migration through South Texas occurs in October. We recommend conservation of early successional native grasslands and other pollinator habitats by seeding and replanting existing rights-of-way or disturbed sites with native grasses, milkweeds, and nectar plants that are native to the area. Pesticides and herbicides that can destroy the monarchs or milkweeds, or use targeted herbicide methods should be avoided. For right-of-way maintenance, a mowing deck height of 12-inches is recommended to protect native vegetation communities and combat the establishment of invasive plant species. These considerations will be included in project work plans/stipulations.

#### *Overall Determination:*

As long as the proposed project activities: 1) remain within the already established road easement; 2) occur during the daylight hours only; and 3) adhere to the project descriptions as proposed; then the proposed project is not likely to adversely affect federally-listed and Candidate species shown at Section III, part A, above.

*Note: This evaluation and subsequent determination does not address any lands outside of the Refuge management authority. Any potential effects of the proposed activities on federally-listed species off the Refuge must be addressed separately with the appropriate entity or federal action agency.*

B. Explanation of actions to be implemented to reduce adverse effects:

1. The project, as proposed, is slated to occur within the already disturbed Massey Way Road easement and will not involve brush clearing that may be utilized by endangered species such as the ocelot and jaguarundi. Therefore, as no impacts to native vegetation are proposed or expected for the underground utility installation, no adverse impacts to endangered cats or their habitats are anticipated. Our Special Use Permit would be conditioned to reaffirm that impacts to brush would be avoided by the applicant (SpaceX) or their contractors as indicated in their Special Use Permit application.
2. The Special Use Permit will be conditioned to restrict construction activities to daylight hours from 8 am to 6 pm local time, to reduce or eliminate secondary impacts to endangered cats that may be caused by lights, noise, or machinery. No equipment and materials stockpiles will be placed on any refuge lands. We will also require that any equipment and materials staging areas for this project be limited to the disturbed ROW area only.
3. Because the utilities are to be placed underground and within the already disturbed road easement, it is not anticipated that aplomado falcons or their habitats are likely to be adversely affected by this project.
4. For the protection of migratory birds and their nests, IF there is any vegetation disturbance within the road easement, we recommend any area be surveyed for the presence of any nesting birds and that impacts to birds, nests, or eggs are avoided until the nesting process is completed or work postponed until after the nesting season (March-August) for adequate compliance with the Migratory Bird Treaty Act.
5. To reduce or eliminate the potential for introducing invasive, exotic, or noxious weeds or plants on the Refuge, the Special Use Permit would be conditioned to require that any heavy equipment used for this project be cleaned and free of foreign seeds, soil, or plant material that may have come from other areas, prior to bringing it into the project area.
6. Although no hazardous chemicals were noted for this project, we will nonetheless require that SpaceX and their contractors contain or clean up any

contaminants or hazardous substances spills from any equipment to prevent any contamination of adjacent Refuge habitats.

7. We will require resource protections described above be included in contractor work plans as per the Special Use Permit.

If modifications result in changes to the effects analysis, or include actions that are not considered in this document (e.g., impacts occurring anywhere outside of the Massey Way Road easement), the Refuge will re-initiate consultation or consult with the Corpus Christi Ecological Services (ES) Field Office or Alamo ES Sub-Office over any proposed actions that may affect federally-listed species and/or critical habitat.

**VIII. Effect determination and response requested:   [\* = optional]**

**A.   Listed species/designated critical habitat:**

Determination

Response Requested

No effect on species/critical habitat:  
(species n/a)

\_\_\_\_\_ \*Concurrence

May affect, is not likely to adversely affect species  
/critical habitat (species:  
(Ocelot, Gulf Coast Jaguarundi,  
Northern aplomado falcon)

  X   Concurrence

May affect, is likely to adversely affect species  
/critical habitat (species: n/a)

\_\_\_\_\_ Formal  
Consultation

**B.   Proposed species/proposed critical habitat:**

Determination

Response Requested

No effect on proposed species/critical habitat  
(species: none)

\_\_\_\_\_ \*Concurrence

Is not likely to jeopardize proposed species/  
adversely modify proposed critical habitat  
(species: n/a)

\_\_\_\_\_ Concurrence

Is likely to jeopardize proposed species/  
adversely modify proposed critical habitat  
(species: n/a)

\_\_\_\_\_ Conference

C. Candidate species:

Determination

Response Requested

May affect, not likely to adversely affect  
(species: Monarch Butterfly)

  X   Concurrence

Is not likely to jeopardize candidate species  
(species: n/a)

\_\_\_\_\_ Concurrence

Is likely to jeopardize candidate species  
(species: n/a)

\_\_\_\_\_ Conference

\_\_\_\_\_  
Signature  
Imer De La Garza,  
STRC Deputy Project Leader

\_\_\_\_\_  
Date

**IX. Reviewing ESFO Evaluations:**

A. Concurrence:   X   Nonconcurrence: \_\_\_\_\_

B. Formal consultation required: \_\_\_\_\_

C. Conference required \_\_\_\_\_

D. Informal conference required \_\_\_\_\_

E. Remarks (attach additional pages as needed):  
**Consultation Number: 02ETTX00-2023-I-0084737**

\_\_\_\_\_  
Signature  
Charles Ardizzzone, Project Leader,  
Texas Coastal ES Office

\_\_\_\_\_  
Date

**References Cited:**

Caso, A. 1994. Home range and Habitat Use of three Neotropical Carnivores in Northeast Mexico. M.S. Thesis, Texas A&M Kingsville. 87pp.

Jahrsdoerfer, S. and Leslie, D. 1988. Tamaulipan Brushland of the Lower Rio Grande Valley of South Texas: Description, Human Impacts, and Management Options. U.S. Fish and Wildlife Service, Biological Report 88 (36), November 1988.

U.S. Fish and Wildlife Service. 1990. Northern Aplomado Falcon Recovery Plan. U.S. Fish and Wildlife Service. Albuquerque, New Mexico. 56pp.



**Figure 1: Project Area.**

