The lark bunting is a small bird that prefers to inhabit wide-open habitats such as plains, prairies, meadows, and sagebrush. It utilizes grasslands of low to moderate height as cover and avoids urban areas. Nesting occurs in mixed-grass and shortgrass areas where sagebrush is dominant. The presence of vegetation cover may be influential in its reproductive success. Various observations of the lark bunting have been recorded in Ector and Midland counties. It is likely for the lark bunting to be present where suitable habitat exists within the study area (Cornell, 2024; eBird, 2024; NatureServe Explorer, 2024).

The mountain plover is a compact ground bird that nests on high plains or shortgrass prairie. Nests are constructed on the ground in shallow depressions. Non-breeding habitat includes shortgrass plains and bare dirt (plowed) fields. This species is considered migratory through the study area. Given the wide migration corridor, there is potential for the mountain plover to use suitable stopover habitat within the study area (Cornell, 2024; eBird, 2024; Sibley, 2003).

The western burrowing owl occurs in the western half of North America. Nesting takes place in warmer temperate and sub-tropical regions from southern California to west Texas and south into Mexico. Typical habitat consists of open grasslands, especially prairie, plains, and savanna. Sometimes the western burrowing owl is found in open areas, such as vacant lots near human habitation or airports. Preferred habitat is typified by shorter vegetation accompanied by abandoned small mammal burrows, which the owl modifies for its own use. This species rarely creates its own burrows and is thus associated with known habitat for prairie dog, ground squirrel, fox, and similar ground-dwelling mammals. Species decline is primarily due to habitat loss and fragmentation. Due to the presence of black-tailed prairie dog communities within the study area, there is potential for the western burrowing owl to occur within the study area (Cornell, 2024; eBird, 2024; Sibley, 2003).

The American bumble bee occupies open farmland and fields throughout much of the plains, as well as temperate forests in the eastern United States and deserts of the western United States. A colonial breeding species, it typically nests at the surface of the ground among long grass mixes while occasionally nesting underground (United States Forest Service [USFS], 2024). Limited habitat may still be found in the study area to support the

occurrence of the American bumble bee. There is a limited possibility this species could occur in the study area.

The big free-tailed bat is a seasonal migrant in the region. Little data is available on the habitat preference of the species. Studies have suggested that preferred maternity roosts may be in crevices and cracks found in high canyon walls, trees, caves, or buildings and suggest high rates of site fidelity. Female bats congregate in nursery colonies and give birth to a single offspring from late June to early July. Wintering habitat preferences are currently undetermined. Most individuals observed within the U.S. have been documented within Big Bend National Park. While no observations have been recorded within the study area, the county distribution for this species includes the study area, which they may use during migration (Schmidly and Bradley, 2016; TPWD, 2024f).

The black-tailed prairie dog inhabits dry, flat, short grasslands with low, relatively sparse vegetation, including areas overgrazed by cattle. These mammals live in large family groups. The NDD includes numerous black-tailed prairie dog records throughout the region near the study area, the closest of which is within the southwestern portion of the study area (TPWD, 2024c). Aerial imagery investigations identified active mound or burrow structures indicative of black-tailed prairie dog communities within the study area. There is potential for the black-tailed prairie dog to be present where suitable habitat exists within the study area (Schmidly and Bradley, 2016; TPWD, 2024f).

The cave myotis bat is found throughout north and central Texas during summer migration, often in areas dominated with creosote bush, palo verde (*Cercidium* spp.), brittlebush (*Encelia farinose*), and cactus. Maternity colonies average between 1,000 and 5,000 individuals, where females give birth to one offspring in April to May. Breeding and hibernating individuals prefer limestone caves of the Edwards Plateau and gypsum caves in the Panhandle of Texas. The cave myotis bat is primarily a crevice dweller during other times of the year, preferring crevices, pockets, bridges, and culverts. Reports have documented individuals foraging over dense riparian vegetation, as well as along drier desert washes. The county distribution for this species includes Midland County. Due to the wide variety of habitat preferences within Texas, there is potential for the cave myotis bat to occur in the study area for foraging and during migration. However, there is limited potential for the cave myotis bat to utilize the study area for breeding or hibernation (Schmidly and Bradley, 2016; TPWD, 2024f).

The eastern red bat is found among a wide variety of habitats throughout the state of Texas but is typically associated with woodland environments, as well as foraging along edges of pastures, croplands, and fence lines. This solitary species often roosts in the open in trees and does not associate with caves, mine tunnels, or underground features common among other bat species. The eastern red bat will often utilize trees as roost sites during the summer and while migrating, where they mimic dead leaves. The eastern red bat is a permanent resident throughout most of Texas, but only potentially migrates to western Texas during the summer months, particularly females with offspring. There is limited potential for the eastern red bat to utilize the open rangeland and scattered trees for foraging and migration within the study area (IUCN, 2024; Schmidly and Bradley, 2016; TPWD, 2024f).

The greater western mastiff bat inhabits arid and semi-arid ecosystems and rocky canyon country of the Chihuahuan Desert. This subspecies roosts in crevices of rock canyon walls or cliffs and occasionally will occupy small spaces in old buildings or hollow trees. Suitable roosting sites require a minimal fall height with an unobstructed exit for bats. The greater western mastiff bat does not appear to have a strong daily roost site fidelity. There is limited potential for the greater western mastiff bat to occur within the study area, as the study area is near the presumed range of the subspecies (IUCN, 2024; TPWD, 2024f).

The hoary bat is a solitary migrant that frequently inhabits wooded environments, as the species roosts in the open while hanging from a branch or twig, as well as croplands and arid deserts. Some individuals are known to migrate to montane and riparian woodlands in the Trans-Pecos region, whereas others may migrate to the forests and woodlands of central and eastern Texas. The species prefers to forage in open croplands, over forest canopy cover, or in small forest openings. The hoary bat could migrate through or stopover in the winter wherever trees exist within the study area (IUCN, 2024; TPWD, 2024f).

The hooded skunk is commonly found in arid lowlands, deciduous forests, ponderosa forest, pastures, rocky canyons, riparian habitats, and even human-disturbed areas. This species inhabits rocky ledges or vegetation along streams but will also burrow in the banks of washes. There is potential for the hooded skunk to be present where suitable habitat exists within the study area (IUCN, 2024; NatureServe Explorer, 2024; Schmidly and Bradley, 2016).

The kit fox prefers open desert, shrubby, or shrubland-grassland mixed environments and tends to avoid rugged or rocky terrain and woodlands. The kit fox has adapted well to pasture, agricultural cropland, and fencerows, where prey items may be abundant. The species burrows into the soil for denning, where young will be born. The kit fox could occur where suitable habitat exists within the study area (IUCN, 2024; Schmidly and Bradley, 2016).

The long-tailed weasel may be found residing in a wide range of habitats throughout most of Texas, including shrubland, fencerows, upland and bottomland woods, forest edges, and rocky desert scrubland. Typically, the species presides along with pocket gophers and ground squirrels. The long-tailed weasel is a strong swimmer and often lives close to water. There is potential for the long-tailed weasel to be present where suitable habitat exists within the study area (IUCN, 2024; Schmidly and Bradley, 2016).

The mountain lion once was found throughout most of Texas but today often is associated with montane and remote areas. Habitat preferences are wide and variable, including swamps, open riparian woodlands, shrublands, canyons, escarpments, and rimrocks. Riparian corridors with an open understory are important for the mountain lion to travel between habitats. Dense woodlands or thick shrublands are usually avoided by this species. Mule deer is the primary prey item for the mountain lion. With the presence of open grasslands and shrublands, there is potential for the mountain lion to be present within the study area (IUCN, 2024; Schmidly and Bradley, 2016).

The pronghorn prefers hilly and plateau grasslands, sagebrush plains, and desert-grass-shrub environments. This species tends to avoid woodlands or dense shrublands. The pronghorn is adapted to environments with limited water availability, so presence of water is not required. The species has an aversion to jumping over fence lines, so they tend to occupy remote areas. Historically, pronghorn occupied most of the region where the study area lies, but it may be an infrequent visitor today. There is limited potential for the pronghorn to be present within the study area (IUCN, 2024; Schmidly and Bradley, 2016).

The swift fox almost exclusively resides among shortgrass prairies on top of open prairies or arid plains. Potentially, the species tolerates winter wheat crops but may avoid irrigated agricultural fields and non-native grasslands. Historical range once was more widespread across Texas but now appears limited to the western and northern portions of the

Panhandle. Individuals may either dig or utilize previously occupied burrows from another species. These burrows typically are found in sandy soils near fencerows, in open prairies, or occasionally near a plowed field. The NDD includes one record for swift fox. However, this record does not provide clarification on the date the specimen was observed or specifics of location. This record location is suggested to be approximately 28 miles northeast of the study area (TPWD, 2024c). With the presence of farmland and prairies in the vicinity of the study area, the swift fox could be present within the study area (IUCN, 2024; Schmidly and Bradley, 2016).

The western hog-nosed skunk inhabits a wide range of environments, including woodlands, grasslands, deserts, shrublands, and rocky canyons in mountainous regions up to 7,200 feet amsl. This species prefers to den in rock crevices, in hollow logs, in underground burrows, in caves, in mine shafts, or under buildings. As the species utilizes a wide range of habitat, there is potential for the western hog-nosed skunk to be present within the study area (IUCN, 2024; Schmidly and Bradley, 2016).

The western spotted skunk inhabits a wide range of environments, including semi-arid shrublands with shrubby canyons, rocky outcrops on hillslopes, canyons, grasslands, and agricultural croplands. The species prefers rocky bluffs, cliffs, and canyons near streambeds. As the species utilizes a wide range of habitat, there is potential for the western spotted skunk to be present within the study area (IUCN, 2024; Schmidly and Bradley, 2016).

The gray-checkered whiptail inhabits sparsely vegetated areas, such as canyon slopes, bluffs, gullies, and flatlands. This lizard species seeks shelter underground or beneath rocks, where soil textures are typically sandy, gravelly, or rocky. Common vegetative cover includes pinyon pine (*Pinus* spp.) and juniper woodlands, yucca-grassland mixtures, mesquite-creosote bush shrublands, or cottonwood-salt cedar-willow riparian woodlands. This species reproduces asexually through a process called parthenogenesis, essentially creating an all-female clonal species. It is believed that different clone variants may have different habitat preferences within the species, explaining the range of habitats. As the species may occupy a wide range of open, prairie, or shrubland habitat, the gray-checkered whiptail could be present where suitable habitat exists within the study area (Conant and Collins, 1998; IUCN, 2024).

The ornate box turtle is generally a terrestrial prairie species but is occasionally known to inhabit shallow streams or creek pools. This species can be found in prairie grasslands, pastureland, fields, sandy plains, and rolling country in scattered brushlands. This species is known to burrow into soil or utilize burrows created by other species. As the species utilizes a wide range of habitat, there is potential for the ornate box turtle to be present within the study area (IUCN, 2024; NatureServe Explorer, 2024).

The plateau spot-tailed earless lizard is found in central and southern Texas and adjacent Mexico. This lizard inhabits moderately open brushland. This species prefers relatively flat areas free of vegetation or other obstructions, including disturbed areas. The NDD includes two historical records for the plateau spot-tailed earless lizard, the closest of which is within the eastern portion of the study area (TPWD, 2024c). Given the predominance of brushland in the study area, it is possible for the plateau spot-tailed earless lizard to occur within the study area (Conant and Collins, 1998; IUCN, 2024).

The roundtail horned lizard prefers various desert grasslands and shrublands with generally sparse shrub cover. The species utilizes gravelly to rocky soils like those found near bajadas (i.e., a broad alluvial slope at the foot of an escarpment mountain), desert flats, and arid to semi-arid hills. The roundtail horned lizard has been noted to utilize rodent burrows. There is potential for the roundtail horned lizard to be present where suitable habitat exists within the study area (Conant and Collins, 1998; IUCN, 2024).

The western box turtle inhabits prairie grasslands, pasturelands, fields, sandhills, and open woodlands. They are essentially terrestrial but sometimes enter slow, shallow streams and creek pools. For shelter, they burrow into soil or utilize burrows previously used by other animals. The species prefers soils that are sandy in texture. The NDD included several records, the closest of which is approximately 11 miles northeast of the study area (TPWD, 2024c). With the wide prairie habitat association utilized by the western box turtle, there is potential for the species to be found within the study area (NatureServe Explorer, 2024).

The western hognose snake prefers sandy, loamy, or gravelly soils over prairies, sandhills, wide valleys, river floodplains, bajadas, low intensity cultivated lands, or margins of irrigated ditches. This species periodically burrows into the soil or utilizes previously occupied dens made by other species. The NDD includes two records, the closest of

which is approximately 15 miles northeast of the study area (TPWD, 2024c). This species utilizes a wide range of habitats from arid, rocky deserts to grasslands and prairies, so there is potential for the western hognose snake to be present within the study area (Conant and Collins, 1998; IUCN, 2024).

The western subspecies population of the massasauga rattlesnake inhabits grasslands, herbaceous wetlands, low rocky hillslopes, mesquite shrubland plains, oak-grass savannahs, desert grasslands, and dry prairies. This rattlesnake tends to occupy habitats near moist wetlands or riparian areas. The western massasauga may den in underground burrows previously occupied by other animals. Due to the presence of prairies and wildlife burrows, the western massasauga could occur within the study area (Center for North American Herpetology [CNAH], 2024; Conant and Collins, 1998; IUCN, 2024).

The western rattlesnake inhabits a wide range of habitats from arid basins, to wooded montane environments, to prairies. Occasionally, this species is found climbing trees and shrubs, although it is primarily terrestrial. It utilizes previously occupied burrows, crevices, caves, and secluded rocky spaces during times of inactivity. The NDD included one record of the species approximately two miles northwest of the study area (TPWD, 2024c). There is potential for the western rattlesnake to utilize the abundance of grassland prairies found within the study area (CNAH, 2024; Conant and Collins, 1998; IUCN, 2024).

3.6 Community Values and Community Resources

The term "community values" is included for the consideration of transmission line certification under Section 37.056(c)(4) of the Texas Utilities Code. The PUCT CCN application requires an assessment of values and resources important to the local community. At times, community values and resources could include the following:

- habitable structure locations;
- AM, FM, microwave, and other electronic installations in the study area;
- FAA-registered airstrips, private airstrips, and heliports located in the study area;
- irrigated pasture or croplands utilizing center-pivot or other traveling irrigation systems;
- approvals or permits required from other governmental agencies; and
- comments received from community leaders and members of the public.

In addition to the above-listed items, Halff evaluated the proposed project for community resources that may not be listed by the PUCT, but that may also be important to particular communities as a whole. Halff defines the term "community resources" to be areas or other natural resources recognized by a national, regional, or local community. Examples of community resources would be parks, recreation areas, historical or archeological sites, or a scenic vista. As discussed in **Section 2.2.1**, Halff mailed consultation letters to elected and appointed officials within the study area and collected information regarding community values and community resources. The above-listed values and resources important to the local community are discussed in the appropriate sections of this document.

3.7 Land Use

3.7.1 Urban/Residential Areas

The study area is situated on the boundary of Ector and Midland counties, with a portion of the City of Odessa extending into the northwest portion of the study area. No unincorporated towns or communities are located within the study area. The vast majority of the study area consists of rural, undeveloped land used primarily for livestock grazing or oil and gas production. Residential development is represented by two isolated developments along Bates Field Road (Ector County Road [CR] 1285) and Midland CR 171, respectively. Commercial developments are generally associated with the City of Odessa in the northwestern corner of the study area. Development in the central portion of the study area is associated with oil and gas operations.

Halff solicited information from municipal officials, county officials, and other regional entities/officials as mentioned in **Section 2.2.1**. Halff also solicited information from school districts and various state and federal agencies regarding environmental and/or land use constraints within the study area. Copies of all written responses received are contained in **Appendix A**, and information received is noted in appropriate discussions in **Section 3.0** and/or **Section 5.0** of this report, relevant to resource-specific comments made by the agency (e.g., NRCS regarding soils and TPWD regarding wildlife). Permian Basin Regional Planning Commission provided support for the project, recommending notification of the Ector and Midland County Judges.

3.7.2 Recreation Areas

A review of federal, state, and local websites and maps, as well as a field reconnaissance survey, found no park/recreational facilities within the study area. A review of the U.S. National Park Service (USNPS) website indicated that no USNPS parks, wild and scenic rivers, national battlefields, historic trails, or national historic sites open to the public are located within the study area (USNPS, 2024a; 2024b). There are no TPWD parks or public hunting units located within or near the study area (TPWD, 2024g; 2024h). No parks, recreation areas, scientific areas, wildlife refuges, or historic sites funded by the U.S. Land and Water Conservation Fund Act (LWCF) were found within the study area (LWCF Coalition, 2024).

No conservation easements or wildlife management associations have been identified in the study area (National Conservation Easement Database [NCED], 2024; Nature Conservancy, 2024; Texas Land Conservancy [TLC], 2024; USGS, 2024c).

3.7.3 Agriculture

Agriculture in the region is represented primarily as ranchland and pastureland, as indicated by representative agricultural statistics from the USDA 2022 Census of Agriculture in **Table 3-13** (USDA, 2022). The 2022 Census of Agriculture identified cattle as the primary livestock and forage production as the primary crop in Ector and Midland counties. In terms of statewide significance, crop sales or livestock inventory do not rank substantially among other Texas counties for these categories. Center-pivot irrigation systems were observed in the southwestern corner of the study area.

Table 3-13. Agricultural Statistics for Ector and Midland Counties

Statistical Category	Ector County	Midland County
Market Value of Products Sold (in $ millions)		
Crop Sales	$0.2M	$8.3M
Livestock Sales	$3.6M	$10.9M
TOTAL SALES	$3.822	$19.2M
Top Crop Types and Livestock Inventory		
1st Crop Type and Acreage	Forage [1] 315	Forage [1] 5,979
2nd Crop Type and Acreage	D[2] –	Cotton 3,694
3rd Crop Type and Acreage	D[2] –	Corn (grain) 2,801
4th Crop Type and Acreage	D[2] –	Wheat for grain 2,285
1st Livestock Type and Number of Animals	Cattle and calves 4,176	Cattle and calves 7,025

Table 3-13. Agricultural Statistics for Ector and Midland Counties – Continued

Statistical Category	Ector County	Midland County
2nd Livestock Type and Number of Animals	Horses and ponies 990	Goats 2,188
3rd Livestock Type and Number of Animals	Layers 872	Layers 1,310

Source: USDA, 2022.
Notes:
[1] Land used for all hay, grass silage, and greenchop.
[2] Withheld to avoid disclosing data for individual operations.

3.7.4 Industry

Oil and natural gas production is prominent in Ector and Midland counties, with over 59,000 registered records within RRC databases; of those, 437 records occur within the study area (RRC, 2024). The number of records is distributed throughout the study area between the project endpoints. The pipeline network is proportionately abundant within the study area. Multiple long-distance pipelines cross the study area, whereas several smaller-sized pipelines terminate in the study area, servicing individual well sites. Field reconnaissance supports that this land use constraint is very dynamic and subject to change, depending on the date of observation.

3.7.5 Aesthetics

Aesthetics are included as a factor for consideration in the evaluation of transmission facilities in Section 37.056(c)(4)(A)-(D) of the Texas Utilities Code. For the purposes of this study, the term "aesthetics" is utilized by Halff to address the subjective perception of natural beauty in a landscape. This evaluation attempts to define and evaluate the scenic qualities of an area.

Consideration of the visual environment includes a determination of aesthetic values (where the major potential effect of an action on the resource is considered visual) and recreational values (where the location of a transmission line could potentially affect the scenic enjoyment of the area). Halff considered the following aesthetic values in this study, which combine to give an area its aesthetic identity:

- topographical variation (hills and valleys);
- prominence of water in the landscape (rivers and lakes);
- vegetation variety (woodlands, meadows);
- diversity of scenic elements;
- degree of human development or alteration; and

- overall uniqueness of the scenic environment compared to the larger region.

The study area is intermixed between open shrublands and shortgrass prairies. The Monahans Draw and playa depressions depicted on historical and current USGS topographic maps are the only ephemeral or intermittent waterbody features within the study area. No permanent rivers or streams were identified in the study area. The primary aesthetic of the study area is the abundance of oil and gas industry activities prevalent in the area. The public road network is sparse compared to private road access to individual well locations and well facilities. The vehicles that service these facilities are persistent and visually prominent from most public viewsheds.

Halff conducted a review of Texas scenic drive locations that are identified as having particularly strong aesthetic views or settings and found that none of these 18 scenic drives were located within the study area (TripAdvisor, 2024). In 1997, the THC designated Heritage Trail Regions throughout the state of Texas to create a statewide heritage tourism program centered on the original 10 scenic driving routes identified in the 1968 Texas Heritage Trails Program. These Heritage Trail Regions incorporate the historic highways, historic sites, hiking and biking paths, natural beauty, and cultural attractions unique to the 10 regions (THC, 2024a). The study area is within the Pecos Trail Region. The suggested driving trail for this region incorporates IH 20, which bisects the northwest corner of the study area (THC, 2009). The nearest suggested attraction within the Pecos Trail Region is in the City of Odessa (THC, 2024a). A review of the USNPS website identified no wild and scenic rivers, historic trails, national parks, national monuments, or national battlefields within the study area (USNPS, 2024a; 2024b). The Odessa Meteor Crater is the only national natural landmark identified in Ector County and is located approximately 10 miles west of the study area. No other aesthetic resources, designated as scenic views, scenic roadways, or unique visual elements, were identified from the literature review or field reconnaissance of the study area.

3.7.6 Transportation/Aviation

A road network of one interstate highway (IH 20), a state highway (Loop 338), FM 3503, numerous county roads, public residential roads, and private ranch roads facilitates transportation throughout the study area. However, many of the county and private ranch roads appear to be integrated into the oil and gas developments, where access may be restricted. Only one rail line was identified within the study area, consisting of a terminal

system servicing a cement plant. The rail line enters the study area north of the planned Reiter Switch and does not otherwise extend substantially into the study area (RRC, 2024; TxDOT, 2024a).

Field reconnaissance, coupled with a review of the FAA Southwest Region Airport Directory (FAA, 2024a; 2024b), TxDOT Airport Directory (TxDOT, 2024b), USGS topographic maps (USGS, 1954-1981), and recent aerial photography (NearMap, 2023), revealed no aircraft landing facilities of any type within 20,000 feet of the study area. No heliports were identified within 5,000 feet of the study area. No proposed aviation projects were identified during the information gathering process.

3.7.7 Communication Towers

Seven communication towers were located within the study area as shown in **Figure 3-1** (**Appendix D**). Communication towers commonly include a mix of cellular phone communication towers, microwave towers, and other similar electronic installations. No AM or FM radio transmitters were identified within the study area. No AM radio transmitters were located within 10,000 feet of the study area. No FM radio transmitters were located within 2,000 feet of the study area. Numerous microwave and cellular transmitters were identified within the study area (Homeland Infrastructure Foundation-Level Data [HIFLD], 2024a; 2024b).

3.8 Cultural Resources

A records review of previously recorded archeological historical properties was conducted to determine the likelihood of impacts to cultural resources within the study area. The research was conducted using the THC Texas Archeological Sites Atlas (TASA) database, which contains published and unpublished data on prior cultural resources surveys, districts and properties listed in or eligible for the National Register of Historic Places (NRHP), State Antiquities Landmarks (SALs), Official Texas Historical Markers (OTHMs), cemeteries, and previously recorded archeological historical properties, including those listed in or eligible for listing in the NRHP or SAL (THC, 2024b).

3.8.1 Cultural Chronology

The project area is located in the Southern High Plains Archeological Region of Texas (Perttula, 2004). The cultural chronology for the Southern High Plains is synthesized from previous studies (Boyd, 1995; Hays et al., 1989; Hofman, 1989; Johnson and Holliday,

1995) and is divided into five general periods: Paleoindian (11,500 to 8500 years before present [BP]), Archaic (8500 to 2000 BP), Ceramic (2000 to 500 BP), Protohistoric (hereafter identified as European Contact Period [500 to 300 BP]), and Historic (300 to 50 BP [circa (ca.) *anno Domini* (after Christ) (AD) 1950]) as shown in **Table 3-14** below.

Table 3-14. Southern High Plains Cultural Chronology

Time Period	Years Before Present (BP)	Years BC/AD
Historic	300-50 BP	AD 1650-1950
European Contact	500-300 BP	AD 1450-1650
Ceramic	2000-500 BP	100 BC - AD 1450
Late Archaic	4500-2000 BP	2600 BC - 100 BC
Middle Archaic	6500-4500 BP	4600-2600 BC
Early Archaic	8500-6500 BP	6600-4600 BC
Paleoindian	11,500-8500 BP	9600-6600 BC

3.8.1.1 Paleoindian Period (11,500 to 8500 BP)

The earliest irrefutable evidence of human occupation in the Southern High Plains is ca. 11,500 to 11,000 BP and represented by distinctive Clovis points recovered at several sites throughout the region. The projectile point type and material cultural derives its distinction from the Clovis site in eastern New Mexico along the western edge of the Southern High Plains region. There are examples of Clovis points discovered in nearby Ward County (Bever and Meltzer, 2007). Other early Paleoindian sites are found in the region near draws, playas, and dune environments and were originally occupied at the close of the Pleistocene when the regional climate was cooler and more humid than it is today (Holliday, 1997).

The importance of now-extinct megafauna as part of early Paleoindian subsistence is represented at many Clovis sites such as the Yellow Hawk Site (41TA148), which suggests hunting was common on the uplands of the Callahan Divide along the southern edge of the Great Plains to the north. The subsistence reliance on highly-mobile animal species resulted in a high degree of Paleoindian mobility across the Southern High Plains. This lifeway persisted as the climate became warmer and drier, which coincided with the appearance of Folsom (10,800 to 10,300 BP) and Plainview (ca. 10,000 BP) projectile point types. At the Plainview site, large scale and seasonal bison kills are evident in the archeological record. One of the best-known Paleoindian sites reported in Midland County is the Scharbauer site, which is in the southwestern corner of the county in a dune blowout

along Monahans Draw containing partial human remains dating to the Late Pleistocene (Wendorf and Krieger, 1959).

3.8.1.2 Archaic Period (8500 to 2000 BP)

The warming and drying trend marking the end of the Pleistocene continued to intensify with episodic aeolian sedimentation throughout the Southern High Plains (Johnson and Holliday, 1995). One of the few excavated Early Archaic (8500 to 6500 BP) sites in the region is Lubbock Lake, where archeological data suggest the continuance of hunting and butchering small herds of bison; however, information on other Early Archaic subsistence activities is sparse (Johnson and Holliday, 1995). The Middle Archaic coincides with the peak of the drying trend, or Altithermal, from ca. 6500 to 4500 BP (Johnson and Holliday, 1995). Archeological evidence of a potential response to the dry environmental conditions during the Altithermal was the excavation of wells at some Middle Archaic sites. Excavations at Lubbock Lake demonstrated an intensive Middle Archaic occupation despite the harsh conditions as numerous camping, bison kill or butchering, and cooking areas were observed.

Paleoenvironmental data for the Southern High Plains indicate that the Late Archaic period climate was slightly drier than modern conditions, but considerably more hospitable than the long droughts of the Middle Archaic (Boyd, 1997). The beginning of the Late Archaic is marked by a more stable landscape due to a decrease in wind erosion and aeolian sedimentation, ushering in a mixed grass prairie for grazing herds of bison (Johnson and Holliday, 1995). Bison hunting and its nomadic lifeway was a critical subsistence activity of Late Archaic hunter gatherers on the Southern High Plains, who used a series of broad-bladed, corner- to side-notched, straight- to expanding-stemmed dart points such as Ellis, Marcos, and Ensor varieties (Boyd, 1997; Hughes, 1977; Hughes 1989). Boyd (1997) noted that there is considerable stylistic variability among the dart points at bison kill sites from the same general time span, suggesting a higher population and increased inter-group interaction. Late Archaic site types on the Southern High Plains include valley and mesa-top campsites, rock shelters, bison kill sites, and lithic procurement areas.

3.8.1.3 Ceramic Period (2000 to 500 BP [ca. AD 1450])

The Ceramic Period on the Southern High Plains is marked by the advent of ceramics, the bow and arrow, and significant cultural change. Most notably the Ceramic Period lifeway was the product of establishing semi-permanent villages, developing small-scale horticulture, and interactions between Eastern Woodland groups and Puebloan peoples

of the Southwest (Boyd, 1995), none of which were mutually exclusive. The Caprock Canyonlands northeast of present-day Midland County were the focus of pivotal inter-group interaction during the Ceramic Period, and as Boyd (1995) posits, "the two traditions met, or perhaps collided, along the eastern margins of the Llano Estacado (Southern High Plains)." Paleoclimate interpretations suggest that the early part of the Ceramic Period may have been wetter than the preceding Late Archaic period and conditions were less favorable for bison (Boyd, 1995), which could have played a role in subsistence diversification through marginal horticulture.

The study area is situated between the geographic ranges of the Eastern Jornada Mogollon of south-central New Mexico and the Palo Duro Complex concentrated around the Red River and Brazos River valleys. The Palo Duro Complex was defined based on excavations at Deadman's Shelter (Willey and Hughes, 1978). The findings at Deadman's Shelter prompted Willey and Hughes (1978) to propose that the site represented a widespread cultural manifestation characterized mainly by Mogollon brownware pottery and a distinctive basal-notched arrow point called Deadman's that is often accompanied by corner-notched Scallorn-like arrow points (Boyd, 1997; Hughes, 1991). Campsites, residential villages, and rock shelters characterize most excavated Palo Duro sites, but human burials have also been documented (Boyd, 1995). The residential villages include pithouses where people lived and possibly practiced limited horticulture.

The settlement patterns, types of sites, and artifact assemblages suggest that Palo Duro Complex peoples were semisedentary and maintained a high degree of residential mobility to exploit a wide range of locally available resources on a seasonal basis (Boyd, 1995). Palo Duro occupations were contemporaneous with the Plains Woodlands occupations in the northern Texas Panhandle and lasted until around 900 BP. Plains villager occupation during the latter part of the Ceramic Period is focused on the northern portion of the Southern High Plains where sites are concentrated within the broad and fertile Canadian River Valley. This northward migration is poorly understood but could have been spurred by migrating bison populations, availability of arable land, and/or access (or territorial control) of the highly revered Alibates chert, which outcrops ubiquitously along the northeast margin of the Southern High Plains and has been mined by indigenous groups for stone tool manufacture dating to the Paleoindian Period.

3.8.1.4 European Contact Period (AD 1450 to 1650)

The European Contact Period was an interval of considerable change marked by the encroachment of Spanish and French explorers into the region. Given the influx of Indigenous and European players into the Southern High Plains, this period was one of dynamic cultural interaction. According to Drass and Baugh (1997), the migration of Apache into the region during the period has presented problems in determining whether changing technologies in the archeological assemblages resulted from the migration of people, indigenous adaptations to changing social, economic, and environmental circumstances, or a mixture of both. Although the European Contact Period is characterized by some of the earliest written accounts of life in the Southern High Plains, the limited and sporadic nature of these accounts has led to confusion in tying archeologically derived complexes with historic ethnic groups (Drass and Baugh, 1997).

The period technically begins with Francisco Vásquez de Coronado's first Spanish entrada into the Southern High Plains in 1541 (Hofman, 1989). Coronado entered the region from New Mexico in search of the Seven Cities of Cíbola and the entrada may have passed east of Midland (Donoghue, 1994). The following is from a historical marker located at the intersection of FM 89 and United States Highway (US) 277 in Midland County:

> *In 1541, the Spanish explorer Coronado is thought to have passed this way en route from New Mexico to the fabled Indian villages of 'Quivira', though his path across vast Texas plains is now difficult to determine. Upon finding that his Indian guide, 'The Turk,' had taken him too far south, Coronado halted at a small canyon or barranca. Here he conferred with his captains and decided to follow the compass directly north. When they reached 'Quivira' (possibly in Kansas), no gold was found – only the poor, grass huts of a Wichita village (Historical Marker 2626, erected in 1968).*

Spanish contact with local Indigenous peoples was sporadic and the next well-documented visit to the area was not until 1632 when Fray Juan de Salas and Father Juan de Ortega passed through the region (Blake, 1995). Although numerous sites from this period are known in the region, few have good stratigraphic context (Johnson and Holliday, 1995). Most are north of Midland around Lubbock Lake and in Garza County (Hofman, 1989). Indigenous occupations at sites in the Southern High Plains typically have Garza arrow points and a high frequency of Southwestern ceramic sherds (Hofman,

1989). Occasionally, other artifacts of Southwestern origin appear, including obsidian, turquoise, and Olivella shell beads (Hofman, 1989).

Major cultural events occurred during the European Contact Period that resulted in changes to Indigenous lifeways in the Southern High Plains. Apache groups occupied the region for most of the period, before being displaced by the Comanches ca. 300 BP (Campbell, 1983). Indigenous peoples witnessed the introduction of the horse, which greatly changed many aspects of Indigenous life. In addition, the spread of European diseases decimated Indigenous populations and disrupted the interaction between both Native American hunting societies and horticulturalists and Spanish and Anglo-American economic spheres (Hofman, 1989).

3.8.1.5 Historic Period (AD 1650 to 1950)

By the beginning of the Historic Period, the Comanche had moved into the area, displacing the Apache to the south and west (Campbell, 1983; Hays et al., 1989). In 1787, Juan de Ugalde led an extensive expedition through the region in an effort to subdue the displaced Apaches as part of a new Spanish policy for securing the northern frontier. The policy was brutal and ultimately ineffective, and both the Comanche and Apache continued to dominate the area well into the middle of the 19th century. One main Comanche trail originated in Mexico and merged with another trail near present-day Fort Stockton (Holden, 1994; Sheffield, 2001). The presence of Comanche groups in the area delayed Anglo Americans from settling permanently in the Southern High Plains until the latter half of the 19th century (Hays et al., 1989).

European exploration was proceeded by early Anglo-American settlers from 1820 to 1860 in the Southern High Plains (Hays et al., 1989). Though the Civil War (1860-1865) was an important period of political and social upheaval, there was only limited military action in the region. Settlement increased after the Civil War following changes in the southern economy, population growth, immigration, the release of large numbers of men from military conscription, and the development of railroads. Regional drought and the Great Depression impacted the region heavily, with economic and ecological disaster provoking massive migration from West Texas, Oklahoma, and Kansas to California (Hays et al., 1989). While many West Texas counties remain sparsely populated, large scale ranching and farming were viable industries in the region and the oil industry brought various economic booms.

3.8.2 Records Review

3.8.2.1 Previous Archeological Investigations

According to a review of the TASA database on March 19, 2024, one previously recorded archeological site is documented in the study area. Site 41EC7 was recorded in 1992 and is an open campsite characterized by a scattering of burnt rock and lithic debitage. In addition, the TASA records search revealed several previous linear surveys for cultural resources. The previous investigations consist of: a linear survey conducted in 1976 on behalf of the EPA; a 1992 linear survey for the Loop 338 construction on behalf of the Federal Highway Administration and TxDOT; a 2011 linear survey on behalf of the PUCT; and a 2013 linear survey for the proposed realignment of FM 3503 on behalf of TxDOT.

3.8.2.2 Historic Period Sites

The TASA records searched revealed that no NRHP properties/districts, SALs, OTHMs or cemeteries are documented within the study area. In addition, no state historical sites, century farms, or ranches are mapped in the study area.

The earliest available historical USGS topographic maps, the 1964 Pecos and the 1966 Odessa SE Texas Topographic Quadrangles, were examined for historical structures and farm/ranching features. The topographic maps show mostly open terrain with limited land development depicted other than unimproved and secondary roads. FM 3503 and IH 20 are mapped as the primary roadways in the study area. Other indicators of land use activity are intermittent oil wells mapped along lease roads, which characterizes the overall historical setting of the study area. One concentration of structures or features indicating historical residences or farmsteads is depicted on the historical topographic maps along East San Benito Drive and the nearby section of East Hammett Drive (USGS, 1954-1981).

Historical aerial photography available from the Nationwide Environmental Title Research (NETR) website (NETR, 2024) shows a mostly undeveloped setting with intermittent land clearings indicative of lease roads and oil tanks during the mid-1950s. The oil and gas development appears to increase steadily into subsequent decades and continues to be the prevailing present-day land use in the study area.

Known and perceived disturbances within the study area include those associated with intensive oil and gas activities, roadway construction and maintenance, installation of overhead and underground utilities, clear cutting of vegetation, limited residential

development, and other commercial and industrial development. However, the study area contains areas that have not been affected by the aforementioned development, potentially retaining some of its historical context.

This page left blank intentionally.

4.0 IDENTIFICATION OF PRELIMINARY ALTERNATIVE ROUTE LINKS

Upon completion of the various data collection activities and constraints mapping process, the next step for the proposed project was to identify preliminary alternative routes to connect the planned Reiter Switch to the existing Tesoro Switch. Potential alternative route links were plotted on recent aerial photography (NearMap, 2023) based on the findings of the reconnaissance survey; information from local, state, and federal officials; property boundary maps; and other environmental and land use constraints data. The initial property boundary maps utilized to locate apparent property boundaries consisted of GIS data from the county tax offices and appraisal districts. Digital gas and petroleum pipeline data obtained from the RRC (2024) were used to identify pipeline corridors and other oil and gas facilities (e.g., natural gas pads, individual well sites). Where practical, Halff verified the location of some of the pipelines and above-ground oil and gas facilities either by reviewing aerial photography or by field reconnaissance, but did not alter the RRC digital data. The environmental and land use constraints map, **Figure 3-1** (**Appendix D**), shows the locations of pipelines and oil and gas well sites, based on the data as received from the RRC. In the development of preliminary alternatives, Halff considered existing corridors (e.g., existing utility rights-of-way, public roadways) and apparent property and land use boundaries, in accordance with the provisions of PUCT Substantive Rules Section 25.101. Pipelines were not considered as existing compatible corridors.

Oncor defined a specific point of origin at each station to which the terminal link would connect. The layout of the station defines each point of origin and the general route link progression from the station. A link is defined as a route segment that progresses in a generally forward progressing direction, prior to diverging, or branching, in at least two different directions, or new links. Each branch location is defined as a node. Ultimately, Halff identified numerous preliminary alternative route links that, when combined, form an assortment of preliminary alternative routes to connect the project endpoints.

As shown in **Figure 3-1** (**Appendix D**), routing constraints such as oil and gas wells, pipelines, electrical transmission lines, transportation corridors (e.g., Loop 338 and FM 3503), residential subdivisions, and the City of Odessa urban area, influenced the development of preliminary alternative route links. Routing constraints, specifically oil and

gas wells, are more numerous near the existing Tesoro Switch compared to the planned Reiter Switch, which provides more open space, allowing a greater variety of routing possibilities. Therefore, the routing approach and link assignments described below start from the region of fewer constraints (i.e., planned Reiter Switch) and progress to a region of more constraints (i.e., existing Tesoro Switch).

Progression from the planned Reiter Switch is generally eastward due to a large open field north and east of the planned Reiter Switch, which contains few apparent constraints, allowing multiple eastward progressing route links from the switch to east of Loop 338. Some of these route links follow apparent tract boundaries. The county boundary line within the study area is marked as a tract boundary to reflect the associated county tax records. However, this is not considered an apparent property boundary as a factor for routing analysis. Commercial/industrial development associated with the City of Odessa and a residential subdivision north of Bates Field Road (Ector CR 1285) limited northern progressing route links to east of Loop 338.

East of Loop 338, the Link E, G, and I series corridors progress northward, while the Link F and H series corridors provide interconnections between these corridors. The Link E series corridor is offset from Loop 338 but does not directly parallel this roadway due to oil and gas wells, a communication tower, an existing electric transmission line, and developments located adjacent to the roadway. Link E6, the northernmost Link E series link, diverts eastwardly from Loop 338 and parallels the south side of a private access road and an existing electric transmission line as it progresses toward the existing Tesoro Switch. The Link F series provide interconnections between the south-to-north corridors of the Link E and G series, with the majority of these links being direct paths that avoid oil and gas well sites. Link F2 parallels apparent property boundaries while Link F6 and Link F7 parallel the north side of an existing electric transmission line. Link F9 parallels the south side of an existing Oncor electric transmission line progressing toward the existing Tesoro Switch. Most of the Link G series corridor parallels apparent property boundaries as it progresses north. The Link H series provide several west-to-east interconnections between the Link G and I series, which are routed to avoid oil and gas well sites. Link H2 parallels an apparent property boundary, and Link H7 parallels the south side of Oncor's existing electric transmission line progressing toward the existing Tesoro Switch. The Link I series progresses northward and are the most eastward corridor, routed to avoid the high

prevalence of oil and gas well sites, a wastewater utility line, and a residential subdivision occurring east of Midland CR 1325.

As noted in **Section 2.5**, a property ownership abstractor contracted by Oncor used the preliminary alternative route links to identify potentially affected landowners in preparation for public meeting notification. Because the total number of directly affected landowners is less than the threshold established by PUCT Procedural Rule Section 22.52(a)(4), no public meeting was held. The development of preliminary alternative route links incorporated feedback received by Oncor from landowners requesting additional options to the south. The preliminary alternative route links herein were adopted as final for the evaluation of impacts in **Section 4.0**.

This page left blank intentionally.

5.0 EVALUATION OF THE ALTERNATIVE ROUTES

The environmental evaluation presented in this section addresses impacts to the environment in consideration of the requirements of Section 37.056(c)(4)(A)-(D) of the Texas Utilities Code; the PUCT Substantive Rules Section 25.101 including the PUCT policy of prudent avoidance; reconnaissance survey; and the information and responses obtained from local officials and state and federal agencies. Measurements for many of the environmental criteria were obtained from mosaics of ortho-rectified images (NearMap, 2023), whose capture process utilizes global positioning system and precise point positioning technologies to achieve sub-meter (or approximately 2.2 - 7.8 inches) horizontal accuracy to true ground location.

Halff professionals with expertise in different environmental disciplines (e.g., geology/soils, hydrology, terrestrial ecology, wetland ecology, and land use/aesthetics) evaluated the proposed transmission line routes based upon environmental conditions present along each route and the general routing factors developed by Oncor and Halff. In addition, Halff evaluated potential impacts to archeological and other historical sites. Each researcher independently analyzed the routes defined in **Table 5-1** (**Appendix B**) and the environmental and land use data presented in **Table 5-2** for the researcher's technical discipline. Environmental data presented in **Table 5-2** are also provided by link in **Table 5-3** (both tables are found in **Appendix C**). Evaluations by Halff for route impacts are discussed below.

5.1 Impacts on Physiography and Geology

Construction of the proposed project would have no significant effect on the physiographic or geologic features/resources of the area. The erection of the structures would require the removal and/or minor disturbance of small amounts of surface and near-surface materials but would have no measurable impact on the geologic resources or features along any of the alternative routes, and no geologic hazards are anticipated.

5.2 Impacts on Soils

5.2.1 Soil Associations

The construction and operation of transmission lines normally create very few long-term adverse impacts on soils. The major potential impact upon soils from transmission line construction would be erosion and soil compaction. The potential for soil erosion is generally greatest during the initial clearing of the ROW until vegetation cover reestablishes.

To provide adequate space for construction activities, to improve reliability, and to minimize corridor maintenance problems, most woody vegetation would be removed from the ROW of the proposed project. In these areas, only the leaf litter and a small amount of herbaceous vegetation would remain, and both would be disturbed by the movement of heavy equipment during construction, service, and maintenance activities. The most important factor in controlling soil erosion associated with construction activity is to revegetate areas immediately following construction. Natural succession should revegetate most of the ROW. Critical areas, such as steep slopes and areas of shallow topsoil, may similarly require erosion control blankets and additional seeding to maintain soil stability.

The ROW will be inspected both during and after construction to ensure that problem erosion areas are identified. In addition, Oncor will develop a Storm Water Pollution Prevention Plan (SWPPP), if required, which will detail measures to minimize impacts associated with potential soil erosion and downstream sedimentation, as well as measures to be taken following construction to revegetate disturbed areas.

5.2.2 Prime Farmland

As discussed in **Section 3.3.2**, there are several soil classifications within the Amarillo and Reakor-Ratliff-Holloman soil associations considered prime farmland, if irrigated. These primary soil classifications within these soil associations encompass approximately 27 percent of the study area. All alternative routes cross soils categorized as farmland of statewide importance or farmland of statewide importance, if irrigated. None of the alternative routes cross irrigated soils categorized as prime farmland or any active agricultural cropland. Other than potential construction-related erosion (mitigated per

SWPPP, if required), impacts to prime farmland soils are anticipated to be insignificant and limited to the physical occupation of small areas at the base of support structures.

The NRCS does not normally consider transmission lines to be a conversion of farmland because the site can still be used for agriculture after construction. The construction of the project would be considered exempt from the Farmland Protection Policy Act. Construction of the transmission line will not result in loss of prime farmland, and no significant impact to prime farmland is anticipated. The NRCS generally recommends that approved erosion control methods be used during construction.

5.3 Impacts on Water Resources

5.3.1 Surface Water and Floodplains

The construction of the proposed project would have no significant impact to surface water resources (e.g., streams, open water lakes, wetlands) in the study area. No stream would be crossed by the proposed project, and no supporting structures would be placed in any streambed. The main potential impacts to surface waters and floodplains by any major construction project are siltation resulting from erosion and pollution resulting from spillage of petroleum products (e.g., fuel or lubricants) or other chemicals. Vegetation removal could result in increased erosion potential of the affected areas, so that slightly higher than normal sediment yields may be delivered to area streams following a heavy rainfall. However, these short-term effects should be minor, as a result of: the relatively small area to be disturbed at any particular time; the short duration of the construction activities; preservation of stream side vegetation where practical; Oncor's efforts to manage runoff from construction areas through the use of best management practices (BMPs); and implementation of the SWPPP, if required. TPWD recommends that erosion control measures should be implemented prior to construction and maintained until disturbed areas are permanently revegetated with site-specific native vegetation where feasible (TPWD, 2024i). Oncor will revegetate disturbed areas after construction is completed as specified in the TCEQ SWPPP permit, if required.

FEMA has conducted a detailed floodplain analysis for Ector County. An analysis has not been conducted for Midland County so modeled floodplain data are not available for that portion of the study area. However, transmission line structures are unlikely to be placed within any floodplain, as the proposed transmission line routes traverse the flat uplands of

the study area. Construction of the proposed project should not have significant impacts on the function of floodplains.

The USACE regulates the discharge of dredged and fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (Section 404). USACE regulations implementing Section 404 include specific authorization under Nationwide Permit (NWP) 57 - *Electric Utility Line and Telecommunications Activities*. NWP 57 authorizes the construction, maintenance, or repair of utility lines (including overhead transmission lines), associated foundations, access roads, and substations, in all jurisdictional water features. An overhead transmission line must not result in a loss greater than 0.5-acre of waters of the United States. Generally, transmission lines are designed to span stream or wetland crossings in most instances, thereby minimizing impacts to waters of the United States. NWP 57 specifies certain conditions that necessitate filing a pre-construction notification (PCN) to the USACE and obtaining written approval before construction activities may begin. NWP 57 requires the submittal of a PCN to the USACE if either a Section 10 permit is required, or the discharge will result in the loss of greater than 0.1 acre of waters of the United States. The USACE Fort Worth District responded in duplicate to the solicitation for information (see **Section 2.2.1**). Future correspondence, if necessary, will be directed to the regulatory division and provide requested information referencing project number SWF-2024-00190 as outlined in the USACE Fort Worth District response in **Appendix A**.

Field verification may be required to document the absence of wetland criteria under the Section 404 program. If wetlands are cleared during construction for the proposed project, there should be no change in pre-construction contours or local drainage patterns, and wetlands should eventually re-establish within the ROW.

Oncor will implement a SWPPP, if required, and will seek to minimize impacts to surface waters during construction of the proposed project. Oncor will also comply with any compensatory mitigation requirements that may be required as part of the Section 404 permitting process. From a water resources perspective, the proposed project should have no significant impacts to surface water.

5.3.2 Groundwater/Aquifer

The construction, operation, and maintenance of the proposed project are not expected to adversely affect groundwater resources in the study area or its vicinity. The amount of recharge area disturbed by construction is insignificant compared with the total amount of recharge area available for the groundwater systems in the region. No measurable alteration of aquifer recharge capacity should occur, and the likelihood of groundwater contamination would not be significant.

The main potential impact on groundwater resources from any construction project is pollution resulting from the accidental spillage of petroleum or other chemical products. Use of industry standard BMPs during construction for proper control and handling of any petroleum or other chemical products will be implemented. Therefore, the project should have no significant impacts to groundwater.

5.4 Impact on Ecosystems

5.4.1 Vegetation

5.4.1.1 Terrestrial Vegetation

The primary impact to vegetation resulting from the site preparation and construction of the proposed project would be the removal of existing woody vegetation from the areas required for the ROW. **Table 5-2 (Appendix C)** presents the linear extent of different land cover types crossed by each of the alternative routes. All of the alternative routes cross rangeland pasture, which typically consists of a mixture of upland grasses and shrub growth, but insufficient woody structure to provide a canopy that would be generally associated with forested types. Therefore, the clearing of woody shrub vegetation would be realized in the rangeland type in **Table 5-2** and **Table 5-3**.

A substantial portion of the proposed project would be constructed on land utilized primarily as rangeland pasture. Consistent with project-specific recommendations from TPWD, construction within the ROW will be performed in such a manner as to minimize adverse impacts to vegetation and to retain existing ground cover wherever feasible (TPWD, 2024i). The clearing of these communities could cause some degree of habitat fragmentation, although existing habitats are already fragmented. Soil and plant conservation practices will be undertaken to protect native vegetation and ensure a

successful restoration program for disturbed areas emphasizing native species where possible. Erosion and stream sedimentation will be controlled as required by procedures set forth in the SWPPP, if required.

5.4.1.2 Aquatic/Hydric Vegetation

Based on interpretation of aerial photography, review of USGS topographic maps (USGS, 1954-1981), and review of NWI maps (USFWS, 2024a), impacts to aquatic vegetation are not anticipated. Potential wetlands near the proposed project include isolated depression wetlands, which may or may not be considered jurisdictional wetlands by the USACE. Delineation of wetlands would require detailed, site-specific examination of vegetation, hydrology, and soils. No disturbance in these areas is proposed.

5.4.1.3 Commercially or Recreationally Important Vegetation

Commercially important cropland vegetation within the study area includes forage and row crops. However, no cropland was identified within any alternative route ROW; therefore, no impacts to commercially or recreationally important vegetation are anticipated.

5.4.1.4 Endangered and Threatened Plant Species

There are no federally listed endangered or threatened plant species known to occur within the study area (TPWD, 2024c; TPWD, 2024d; USFWS, 2024b; USFWS, 2024c). In addition, the TPWD NDD search found no records of occurrences within the study area of plant species on the state or federal threatened and endangered species lists (TPWD, 2024c). The Cory's ephedra, neglected sunflower, and sticky tansy aster have either records near the study area or records more distant documenting presence in habitat conditions that are common to the study area. These species may be found in the study area if suitable habitat exists. For these species and others listed in **Table 3-3**, TPWD recommends surveying the proposed project where suitable habitat may be present to minimize potential impacts to these rare resources. If species are found, TPWD recommends establishment of work avoidance and instruction of construction crews prior to construction, maintenance, and operation activities (TPWD, 2024c; 2024d; 2024i).

5.4.2 Fish and Wildlife

5.4.2.1 Terrestrial Wildlife

The primary impact of construction activities on wildlife would be the result of vegetation clearing and associated ground disturbances. Increased noise and activity levels during construction may also affect wildlife outside the perimeter of the construction area, temporarily displacing animals for a short distance on either side of the transmission line corridor. The impacts of transmission lines on wildlife can be divided into short-term effects resulting from physical disturbance during construction, and long-term effects resulting from habitat modification. The net effect on local wildlife of these two types of impacts is usually minor given the narrow focus of transmission line corridors. A general discussion of the impacts of transmission line construction and operation on terrestrial wildlife is presented below.

The increased noise and activity levels during construction could potentially disturb breeding or other activities of species inhabiting the areas adjacent to the ROW. Wildlife should be minimally affected by dust and gaseous emissions. Although the normal behavior of many wildlife species would be disturbed during construction, little permanent damage to the populations of such organisms should result.

Any required clearing and other construction-related activities would directly and/or indirectly affect most animals that reside or wander within the transmission line ROW. Some small, low-mobility animals may be harmed by the heavy machinery. These include several species of amphibians, reptiles, and mammals. If ROW clearing and construction occur during the breeding season, impacts may occur to the young of many species, including nestling and fledgling birds. Impacts to nesting birds will require mitigating measures to ensure compliance with the Migratory Bird Treaty Act (MBTA). TPWD provided recommendations corresponding with the MBTA by avoiding vegetation clearing between mid-March and mid-September. If clearing activities are unavoidable during this time, then TPWD recommends surveying disturbance areas for eggs or young birds in nests. If an active nest is identified, TPWD suggests a 100-foot disturbance-free buffer from the nesting location until the eggs have hatched and the young have fledged (TPWD, 2024i).

Fossorial animals, such as mice and gophers, may be harmed or displaced because of soil compaction caused by heavy machinery. Larger, more mobile species, such as birds, deer, rabbits, and coyotes, would likely vacate the area upon initial clearing and move into adjacent areas outside the ROW. Wildlife in the immediate area may experience a slight loss of browse or other forage material. However, the prevalence of similar habitats in adjacent areas and regrowth of vegetation in the ROW following construction would minimize the effects of this loss.

After construction is completed and grasses, forbs, and shrubs are able to recover, many forms of wildlife are anticipated to re-occupy the ROW area. Periodic vegetation maintenance within the ROW may temporarily cause some negative impacts to wildlife habitat. Maintenance clearing activities during the breeding season may destroy some nests and broods. With the increase in sunlight penetration to a previously dense shrub/tree stratum, more perennial forbs and grasses would be expected to germinate. Such edge habitats are preferred by many species, such as the eastern cottontail rabbit, white-tailed deer, and northern bobwhite quail.

Transmission line structures could benefit some bird species, particularly raptors, by providing resting and hunting perches, especially in open, treeless habitats (Avian Power Line Interaction Committee [APLIC], 2006). Study area resident raptors, such as the American kestrel and the red-tailed hawk, often utilize the support structures as nesting sites, as well as hunting or resting perches. By such benefits, transmission lines have increased raptor populations in some areas of the U.S. (APLIC, 2006). The danger of electrocution to birds would be insignificant because the distance between conductors, or between conductor and ground wire on 345 kV transmission lines, is greater than the wingspan of any bird in the area (i.e., greater than 8 feet). Also, it is Oncor's standard practice to install devices at appropriate locations to deter bird landings on the insulator between the conductor and structure. This standard practice is consistent with agency-recognized guidelines for minimizing bird collision risks (APLIC, 2006; 2012).

Transmission lines (both structures and wires) could present a hazard to flying birds, particularly migrants, and especially near crossings of water features. Collisions tend to increase in frequency during the fall when migrating flocks are denser and flight altitudes are lower in association with cold air masses, fog, or inclement weather. Studies indicate that higher rates of mortality exist during periods when poor light and weather conditions

persist (Bevanger and Brøseth, 2004; Electric Power Research Institute [EPRI], 1993). This is important to note, given that most migratory species will continue to migrate regardless of weather conditions (Gauthreaux, 1971). Overall, wire strikes are greatly reduced during bright daylight hours (Pandey et al., 2008). Species at higher risk for wire strikes are those that fly in fast-moving and/or tight flocks and larger-bodied birds with more awkward flight characteristics (Winning and Murray, 1997; Rusz et al., 1986). For resident birds or for birds during periods of non-migration, those most prone to collision are often the most common raptors in a given area because of a greater number of repeated flights across power lines, particularly when in pursuit of prey (APLIC, 2006). Nevertheless, resident birds and those in an area for an extended period may learn the location of power lines and become less susceptible to wire strikes (Janss, 2000).

All the alternative routes cross grass- and shrub-dominated rangeland pasture, and therefore may potentially impact wildlife. However, these impacts are anticipated to be temporary and minimal. The greatest potential impact to wildlife from the proposed project would result from the clearing of brushland pasture habitat. Direct impacts to wildlife and habitat fragmentation are greatly reduced by utilizing or paralleling existing ROW to the greatest practical extent.

5.4.2.2 Fish and Aquatic Wildlife

Potential impacts to aquatic systems by an action of this nature mainly involve the effects of increased erosion and sedimentation. Land clearing and/or construction activities may result in increased suspended solids entering streams traversed by the transmission line, which in turn may negatively affect many aquatic organisms that require relatively clear water for feeding and reproduction. The proposed project will not cross stream features. However, erosion controls would be utilized to minimize any impacts to aquatic systems, if necessary.

In evaluating impacts to aquatic systems, factors taken into consideration include the amount of potential wetlands crossed, the amount of ROW within 100 feet of streams, the number of stream crossings, and the amount of open water crossed. Although streams and wetlands can usually be spanned, increased sedimentation and turbidity could result during rainfall. A route parallel to and within 100 feet of a stream could have a similar effect. The proposed alternative routes do not cross any open water features, or emergent wetlands, and do not parallel any stream within 100 feet. In light of the avoidance

measures used to plan and construct the proposed project, no significant impact to the study area aquatic resources is anticipated.

5.4.2.3 Commercially or Recreationally Important Fish and Wildlife Species

Construction of the proposed project is not expected to have significant impacts on commercially or recreationally important species occurring within the study area. Furbearers, such as the common raccoon, Virginia opossum, common gray fox, coyote, bobcat, and striped skunk, and game species like the white-tailed deer, mourning dove, white-winged dove, northern bobwhite quail, and javelina are very mobile and would leave the immediate vicinity during the initial construction phase. Wildlife in the immediate area may experience a temporary loss of browse or other forage vegetation during construction; however, the abundance of similar habitats in adjacent areas would minimize the effect of the loss. As noted in **Section 5.4.1.2**, impacts to aquatic habitat would be minimal, thereby minimizing any impacts to fish in the study area.

5.4.2.4 Endangered and Threatened Fish and Wildlife Species

Although federally listed threatened or endangered wildlife species may occur within the study area, it is unlikely that any federally listed wildlife species would be affected by the proposed project. This conclusion is based on consultation with TPWD (2024i) and field reconnaissance of the study area. Information from the USFWS (2024c) also indicates there is no designated critical habitat for any federally listed threatened or endangered species within the study area. As shown in **Figure 3-1** (**Appendix D**), the alternative routes avoid the observed playa depressions and adjacent habitats. It is not expected that the proposed project would affect the species that would utilize these habitats. Regarding all listed and otherwise rare wildlife species, TPWD advised that precautions should be taken if any endangered, threatened, or rare animal species that are included on county rare species lists (see listing in **Table 3-12**) are known to occur in the study area or have been documented there in the recent past (TPWD, 2024i).

Many of the endangered or threatened species and unlisted rare species of potential occurrence in the study area are either migratory and present only for brief periods, or highly mobile. These include the chestnut-collared longspur, Franklin's gull, golden eagle, lark bunting, mountain plover, western burrowing owl, white-faced ibis, monarch butterfly, big free-tailed bat, cave myotis bat, eastern red bat, greater western mastiff bat, hoary bat, kit fox, mountain lion, pronghorn, and swift fox. The red knot and piping plover are

uncommon migratory species, and USFWS limits the assessment of affect to projects that expose risk to the species during migration. Since this project is not a wind energy project, it may be concluded that there will be no impacts to these species. Species such as the Woodhouse's toad, American bumble bee, black-tailed prairie dog, hooded skunk, long-tailed weasel, western hog-nosed skunk, western spotted skunk, gray-checkered whiptail, ornate box turtle, plateau spot-tailed earless lizard, roundtail horned lizard, Texas horned lizard, western box turtle, western hognose snake, western massasauga, and western rattlesnake are possible residents of the study area, which have more limited mobility and could be impacted by heavy machinery (TPWD, 2024c; TPWD, 2024d; USFWS, 2024b; USFWS, 2024c). TPWD (2024i) requested that personnel involved in the construction of the proposed project be informed of the potential presence of rare species and how to avoid potential habitat, in particular the Texas horned lizard, plateau spot-tailed earless lizard, and black-tailed prairie dog. TPWD provided specific recommendations for the monarch butterfly. TPWD (2024i) recommended planting native wildflower habitats (e.g., milkweed) in the ROW.

Endangered, threatened, or rare species listed in **Table 3-12**, but not mentioned in this section, are unlikely to be affected by construction and operation of the proposed project. Construction of transmission lines that would span aquatic habitats would not appreciably affect the quality or quantity of such habitat. Therefore, the populations of rare species that may be present are not expected to be affected.

5.5 Summary of Natural Resources Impacts

Several natural resource areas have been evaluated to determine the relative ecological impacts of the alternative routes. For the proposed project, these areas primarily included potential impacts to vegetation and wildlife. Although all alternative routes have the potential to impact natural resources, none of the alternative routes for the proposed project are anticipated to have any significant impacts to the natural resources of the area.

5.6 Impacts on Community Values and Community Resources

Impacts on community resources can be classified into two categories: (1) direct effects, which are those effects that would occur if the location and construction of a transmission line results in the removal of a valued resource or loss of public access to a valued resource; and (2) indirect effects, or those effects that would result from a loss in the

enjoyment or use of a resource due to the characteristics (primarily aesthetic) of the proposed transmission line, structures, or ROW.

Impacts on community resources, whether direct or indirect, can be more accurately gauged as they affect recreation areas, recreational resources, or the visual environment of an area (aesthetics). The sections that follow discuss impacts to community values and community resources.

5.7 Land Use Impacts

Land use impacts from transmission line construction are determined by the amount of land (of whatever use) displaced by the actual ROW and by the compatibility of electric transmission line ROW with adjacent land uses. During construction, temporary impacts to land uses within the ROW could occur due to the movement of workers and materials through the area. Noise and dust from construction, as well as disruption of traffic flow, may also temporarily affect residents and businesses in the area immediately adjacent to the ROW. Coordination between Oncor, its contractors, and landowners regarding access to the ROW and construction scheduling should minimize these disruptions. Most existing land uses may continue during construction.

The primary factors considered to measure potential land use impacts from the proposed project include overall route length, proximity to habitable structures, and length parallel to existing corridors (including apparent property boundaries).

5.7.1 Urban/Residential Areas

Important measures of potential land use impacts include the number of habitable structures located near each alternative route and the proximity of each habitable structure to the alternative route. Halff determined the number and distance of habitable structures located within 500 feet of the centerline of each alternative route through the interpretation of aerial photography and verification during the reconnaissance survey, where practical. To account for this level of accuracy, Halff identified all habitable structures within a measured distance of 520 feet of the alternative route centerlines. Habitable structures within the study area proximal to the alternative routes consist of single-family residences and structures associated with the operation of oil and gas facilities. However, no habitable structures were identified within 520 feet of any alternative route as shown in **Figure 3-1** (**Appendix D**).

PUCT Substantive Rules Section 25.101(b)(3)(B) requires, among other things, that the PUCT consider whether new transmission line routes parallel existing compatible ROW, property lines, or other natural or cultural features in selection of a route. The length of alternative routes parallel to existing corridors (including apparent property boundaries) ranges between 3 to 71 percent of the total route length for the proposed project. This is achieved through paralleling existing transmission lines and apparent property boundaries. Given the general isolation of the study area from urban centers, the proposed project would have no impacts on urban or residential areas.

5.7.2 Recreation Areas

As noted at the bottom of **Table 5-2 (Appendix C)**, parks and recreation areas are identified as areas owned by a governmental body or an organized group, club, or church. Potential impacts to recreation areas include the disruption or preemption of recreational activities. No parks, trails, or recreational points of interest are located within the study area. No parks, trails, or recreational points of interest are within 1,000 feet of any alternative route. Therefore, no impacts to parks or recreational areas are anticipated as a result of the proposed project.

5.7.3 Agriculture

Impacts to agricultural lands can generally be ranked by degree of potential impact, with the least potential impacts occurring in areas where grazing is the primary use (pasture or rangeland) and the highest degree of potential impact occurring to cultivated cropland. Given that agriculture is the predominant land use for areas not in oil and gas production, the alternative routes cross a substantial length of pastureland. Because Oncor will not fence the ROW for the proposed project or otherwise separate the ROW from adjacent lands, there would be no long-term or significant displacement of farming or grazing activities. Most existing land uses may be resumed following construction. There are no mobile irrigation systems traversed by any alternative route for the proposed project. Furthermore, no above-ground mechanical components (e.g., windmills or water troughs) will be adversely affected as a result of the proposed project.

5.7.4 Industry

As noted in **Section 3.7.4**, there are numerous oil and gas facilities within the study area consisting of pipelines, well locations, electric lines, and other associated above-ground components. No well locations will be crossed by any alternative route for the proposed

project. Construction of the proposed project will have no adverse effect on any other pipeline or electric lines that may be crossed by any alternative route.

5.7.5 Aesthetics

Aesthetic impacts, or impacts on visual resources, exist when the ROW, lines and/or structures of a transmission line system create an intrusion into, or substantially alter the character of, the existing view. The significance of the impact is directly related to the quality of the view in the case of natural scenic areas. In the case of valued community resources and recreation areas, the significance of the impact is related to the importance of the existing setting in the use and/or enjoyment of an area.

Construction of the proposed project could have both temporary and permanent aesthetic effects. Temporary impacts may include views of the actual assembly and erection of the structures. Where wooded areas are cleared, the brush and wood debris could have an additional negative temporary impact on the local visual environment. Permanent aesthetic impacts from the proposed project may include the views of the structures and lines.

To evaluate aesthetic impacts, a reconnaissance survey was conducted to determine which segments of the proposed project would be visible from selected publicly accessible areas. These areas included those of potential community value, community resources, public recreation areas, and federal and state highways that cross the study area. Measurements were made to estimate the length of each alternative route that would fall within a recreational or major highway foreground visual zone (i.e., one-half mile, unobstructed by topography, structures, or vegetation). This determination of the visibility of the transmission line from various points was calculated from USGS maps and recently flown aerial photography (NearMap, 2023).

Halff's evaluation of potential aesthetic impacts generally considers any alternative route that would be within the foreground visual zone of the federal and state highways (e.g., IH 20 and Loop 338) within the study area. Parts of 23 out of the 52 alternative route links are within the one-half mile foreground visual zone of Loop 338. Given the location of the planned Reiter Switch west of Loop 338, all alternative routes will have some portion within the foreground visual zone of this roadway.

The evaluation of potential aesthetic impacts also includes the proximity of the proposed project within the foreground visual zone of public parks and recreation areas. The discussion in **Section 5.7.2** considered potential interference of the alternative routes with activities occurring in parks and recreation areas within 1,000 feet of any alternative route for the proposed project. In contrast, this evaluation considers the parks and recreation areas within the foreground visual zone, and whether any alternative route for the proposed project would affect aesthetic views from these areas. Given the absence of public parks and recreation areas in or near the study area, there will be no impacts to the aesthetic views of these areas.

5.7.6 Transportation/Aviation

Potential impacts to transportation could include temporary disruption of traffic and conflicts with proposed roadway and/or utility improvements and may include slightly increased traffic during construction of the proposed project. However, such impacts are usually temporary and short-term. Halff attempted to identify any planned improvements proposed by TxDOT or by local agencies.

Transmission line structure heights will be approximately 120 to 180 feet. According to Federal Aviation Regulations (14 CFR Part 77), notification of the construction of the proposed project is required if structure heights exceed the height of an imaginary surface extending outward and upward at a slope of: 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of a public or military airport having at least one runway longer than 3,200 feet in length; 50 to 1 for a horizontal distance of 10,000 feet from the nearest runway of a public or military airport where all runways are less than 3,200 feet in length; or 25 to 1 for a horizontal distance of 5,000 feet for heliports.

Halff's review of federal and state aviation/airport maps and directories, aerial photo interpretation, and reconnaissance survey identified:

- no FAA-registered airport with a runway greater than 3,200 feet in length within 20,000 feet of any alternative route for the proposed project;
- no FAA-registered airport with all runways less than 3,200 feet in length within 10,000 feet of any alternative route for the proposed project;
- no private airstrips within 10,000 feet of any alternative route for the proposed project; and
- no heliport within 5,000 feet of any alternative route for the proposed project.

5.7.7 Communication Towers

As noted in **Section 3.7.7**, seven communication towers were identified within the study area. No commercial AM radio transmitters were identified within the study area; no alternative route for the proposed project is located within 10,000 feet of any AM radio transmitter. No FM radio transmitters were identified in the study area; no alternative route for the proposed project is within 2,000 feet of any FM radio transmitter. There is one other communication tower that is within 2,000 feet of the alternative route links. Please refer to **Table 5-4** below for a summary of tower distances in relation to alternative route links.

Table 5-4. Electronic Installations within 2,000 feet of a Route Link

Map ID	Installation Type	Licensee	Link	Distance (ft)	Direction to Link
1	Unknown	Unknown	B4	1,930	Southwest
			C2	1,930	Southwest
			D3	610	South
			E3	740	Southeast
			E4	420	East
			F4	740	Southeast
Sources: HIFLD, 2024a; 2024b.					

5.8 Cultural Resources Impacts

Construction activities associated with the proposed project have the potential to adversely impact cultural resources through changes in the quality of the archeological, historical, or cultural characteristics that qualify a property under the eligibility requirements for listing in the NRHP. Adverse impacts occur when an undertaking alters the integrity of location, design, setting, materials, construction, or association that contribute to a resource's significance in accordance with the NRHP criteria.

As discussed in Title 36 CFR Part 800, adverse impacts on the NRHP listed or eligible properties may occur under conditions that include, but are not limited to:

- destruction or alteration of all or part of a property;
- isolation from or alteration of the property's surrounding environment (setting); or
- introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting.

Direct impacts typically occur during construction, whereas indirect impacts include those caused by construction that occur later in time or are farther removed but foreseeable.

These impacts may include alterations in the pattern of land use, changes in population density, or accelerated growth rates, all of which may have an impact on properties with historical, architectural, archeological, or cultural significance.

The preferred form of mitigation for direct or indirect impacts for cultural resources is avoidance. An alternative form of mitigation of direct impacts can be developed for archeological and historical sites with the implementation of a program of detailed data retrieval. Additionally, relocation may be possible for some historical structures. Indirect impacts on historical properties and landscapes can be lessened through careful design considerations and landscaping.

The method utilized to assess an area for potential archeological resources is outlined in the pre-approved research design developed by Oncor and THC for new transmission line studies. This method involves the preliminary identification of high probability areas (HPAs) through background research performed ahead of any fieldwork. Locations in the Southern High Plains region of West Texas that are identified as HPAs for the occurrence of archeological sites include summits overlooking alluvial valleys, lower slope components adjacent to alluvial valleys, natural levees, alluvial terraces, rises within floodplains, upland edges adjacent to alluvial valleys and stream confluences, near springs, and local outcrops of workable lithic resources.

The underlying geology of the study area is mapped almost entirely as Windblown Cover Sand (Qcs). This formation was first documented in 1957 (Frye and Leonard, 1957) and was described as fine- to medium-grained quartz, silty, calcareous, sand with caliche nodules. More recent research proposes renaming the formation to the Blackwater Draw Formation due to evidence indicating multiple periods of soil formation. The surface sediments in the Blackwater Draw Formation likely predate human occupation (Johnson et al., 2004).

HPAs are typically defined by a distance relationship of approximately 1,000 feet from any of the above resource areas or landforms, which may have attracted past human activity and are therefore deemed appropriate for the presence of cultural resources. Areas identified as HPAs are to undergo intensive pedestrian archeological surveys. Survey methods in these areas include careful ground surface inspection and survey transects no more than 49 feet apart, with shovel tests to be placed arbitrarily in locations determined at the discretion of the project archaeologist in the field with no maximum distances

between shovel tests. Identification of HPAs for historical sites depends on the results of archival and historical research, which is conducted prior to conducting any fieldwork.

As a formal cultural resources survey has not been conducted for any of the alternative routes, the possibility of affecting unknown archeological sites exists. Correspondence from THC (2024c) assigned THC Tracking # 202409490 and advised that a qualified archeologist survey the alternative routes and further recommended that any work occurring over land owned or managed by a state agency or political subdivision of the state requires a Texas Antiquities Permit prior to initiation of fieldwork. The THC also advised that any state-owned buildings 50 years old or older located within the alternative routes should be photographed and included in the archeological survey.

As part of this environmental assessment, a qualified archeologist identified HPAs along the alternative routes using USGS topographic maps and soil survey data. Following PUCT approval of a route for the proposed project, a cultural resources survey will be conducted in accordance with the pre-approved research design developed by Oncor and THC for new transmission line studies. Any cultural resources discovered during this initial survey will be mitigated, if required, during consultation with the THC. In the event Oncor or its contractors encounter any archeological artifacts or other cultural resources during construction of the proposed project, Oncor will cease work in the immediate vicinity of the resource and report the discovery to the THC. It is anticipated that the proposed project will have no substantial impacts to cultural resources.

5.8.1 Historical Summary

There are no sites in the study area that have been recorded in the NRHP or designated as an SAL for either Ector or Midland counties. As described in **Section 3.8.2.2**, the study area does not include a farm or ranch recorded as a century farm or ranch (Texas Department of Agriculture [TDA], 2024). In addition, no cemeteries or OTHMs were identified within or in a 1,000-foot vicinity of the study area.

According to the USGS Pecos and Odessa Southeast topographic maps from 1954 and 1964, respectively, there were over 50 historical resources within the study area during that time. These resources typically included intact farms or remnants thereof, with structures such as farmhouses, associated barns, outbuildings, fencing, and other components like water storage tanks, troughs, animal pens, and windmills.

Additionally, most of the study area and its surroundings have been extensively developed for oil and gas wells, resulting in a landscape marked by noticeable disturbances. What was once primarily rangeland and agricultural land has been significantly altered by historical and ongoing industrial activity, as evidenced by the terrain. The ground surface shows marks of drilling and extraction activities, including well pads, access roads, and associated infrastructure. These elements disrupt the natural topography, creating a patchwork of cleared areas and compacted soils. The introduction of heavy machinery during well construction and maintenance has further contributed to soil disturbance, altering the composition and structure of the archeological context. The visual impact of the oil and gas wells is amplified by the presence of extraction equipment, storage tanks, and pipelines.

These elements not only modify the visual aesthetics of the landscape but also have implications for the preservation of subsurface archeological features. Excavation and trenching associated with pipeline installation may have exposed stratigraphic layers, potentially impacting the integrity of archeological deposits. These observations are based on views of areas in the region from public roadways, so additional potentially historical features may be found in areas that are not visually accessible. The exception is the southwestern quadrant of the study area, closest to Monahans Draw, which, while still disturbed, is not as extensively affected. Aerial imagery depicts this quadrant as a mesquite and creosote bush scrubland.

5.8.2 Archeological Summary

As documented in **Section 3.8.2**, one previously recorded archeological site has been identified within the study area, and a formal cultural resources survey has not covered a significant portion of the study area. Therefore, the possibility of impacts to undocumented archeological resources exists. No sites listed on the NRHP or designated as SALs were identified within or proximal to the study area. No previously recorded archeological historical properties have been documented in the study area. One historical-aged windmill and multiple historical-aged oil wells are located throughout the study area.

Significant sites recorded in the region are generally associated with rock outcrops containing lithic materials useful for making stone tools or with significant water sources. Although permanent water sources are infrequent throughout the surrounding area, the proximity to tributaries of Monahans Draw lends to the potential for intact archeological

materials. HPAs typically contain buried soils and lie within 300 meters (nearly 1,000 feet) of natural water sources. However, in this more arid environment, these areas include:

- uplands overlooking bodies of water (typically a major stream or river);
- terraces and bluffs adjacent to stream channels;
- outcrops containing lithic materials useful for making stone tools; and
- structures (including windmills) identified on historical maps.

Atlas Data (THC, 2024b; 2024c) revealed that the study area vicinity contains one previously recorded archeological site, 41EC7. This site was recorded in 1992 as an open campsite with cultural materials such as fire-cracked rock and debitage. NRHP or SAL eligibility is undetermined. Given the history of agricultural activities, including plowing, oil and gas exploration, and gravel pit mining in the region, the soils within the study area are likely to be disturbed. As shown in **Table 5-5**, most HPAs in relation to alternative route link crossings are due to their location being proximal to historical-aged structures (e.g., gas wells and a windmill).

Table 5-5. Alternative Link Proximity to High Probability Areas for Archeological Sites

Link	High Probability Area	Distance (feet)
A	Rise in upland setting overlooking Monahan Draw	630
A1	Rise in upland setting overlooking Monahan Draw	140
A2	Rise in upland setting overlooking Monahan Draw	810
A3	Rise in upland setting overlooking Monahan Draw	140
A4	Rise in upland setting overlooking Monahan Draw	3,640
B0	Rise in upland setting overlooking Monahan Draw	580
B1	Rise in upland setting overlooking Monahan Draw	2,920
B2	Rise in upland setting overlooking Monahan Draw	2,660
B3	Rise in upland setting overlooking Monahan Draw	3,220
B4	Rise in upland setting overlooking Monahan Draw and proximal to historical-aged structure	2,010
C1	Proximal to historical-aged structure	1,350
C2	Proximal to historical-aged structure	600
D3	Proximal to historical-aged structure	750
E0	Rise in upland setting overlooking Monahan Draw	1,260
E4	Proximal to historical-aged structure	130
F1	Proximal to historical-aged structure	500
F4	Proximal to historical-aged structure	660
F5	Proximal to historical-aged structure	980
F9	Proximal to historical-aged structure	1,340
G7	Proximal to historical-aged structure	190
H1	Proximal to historical-aged structure	480
H3	Proximal to historical-aged structure	260
H4	Proximal to historical-aged structure	710
H5	Proximal to historical-aged structure	580
H6	Proximal to historical-aged structure	1,310
I2	Proximal to historical-aged structure	690
I5	Proximal to historical-aged structure	440

Following PUCT approval of a route for the proposed project, a cultural resources survey will be conducted in accordance with the pre-approved research design developed by Oncor and THC for new transmission line studies. Any cultural resources discovered during this initial survey will be mitigated, if required, through consultation with the THC. In the event Oncor or its contractors encounter any archeological materials or other cultural resources during construction of the proposed project, Oncor will cease work in the immediate vicinity of the resource and report the discovery to the THC. Given the relatively small study area and short distance traversed by the alternative routes for the proposed project, it is anticipated that the proposed project will have no substantial impacts to cultural resources.

This page left blank intentionally.

6.0 LIST OF PREPARERS

Halff prepared this Environmental Assessment and Alternative Route Analysis for Oncor; **Table 6-1** provides a list of the project team with primary responsibilities for the preparation of this document.

Table 6-1. List of Preparers

Responsibility	Name	Title
Project Manager	Jody Urbanovsky	Project Manager
Physiography and Geology	Margaret Harpe	Environmental Scientist
Water Resources and Soils	Margaret Harpe	Environmental Scientist
Vegetation Ecology	Margaret Harpe	Environmental Scientist
Fish and Wildlife Ecology	Margaret Harpe	Environmental Scientist
Land Use/Aesthetics	Margaret Harpe	Environmental Scientist
Maps/Figures/Graphics	Alicin McCloud Margaret Harpe	GIS Project Manager Environmental Scientist
GIS Data Management	Alicin McCloud Margaret Harpe	GIS Project Manager Environmental Scientist
Cultural Resources	Michael Mudd	Archeologist
Quality Review	Russell Marusak	Senior Project Manager

This page left blank intentionally.

7.0 REFERENCES

AmphibiaWeb. 2024. University of California, Berkely, California, United States. *https://amphibiaweb.org* accessed May 20, 2024.

Audubon Texas. 2024. Website for the Texas program of the National Audubon Society. *https://tx.audubon.org/* accessed May 20, 2024.

Avian Power Line Interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, DC and Sacramento, CA.

_____. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute and APLIC. Washington, D.C.

Bevanger, K. and H. Brøseth. 2004. Impact of Power Lines on Bird Mortality in a Subalpine Area. *Animal Biodiversity and Conservation* 27(2).

Bever, Michael R. and David J. Meltzer. 2007. Exploring Variation in Paleoindian Life Ways: The Third Revised Edition of the Texas Clovis Fluted Point Survey. *Bulletin of the Texas Archeological Society* 78:65-100.

Blake, Robert B. 1995. Salas, Juan De. The Handbook of Texas Online. Texas State Historical Association, Austin. *https://www.tshaonline.org/handbook/entries/salas-juan-de* accessed May 20, 2024.

Boyd, Douglas K. 1995. The Palo Duro Complex: Redefining the Early Ceramic Period in the Caprock Canyonlands. *Bulletin of the Texas Archeological Society 66:461–518.*

_____.1997. Caprock Canyonlands Archeology: A Synthesis of the Late Prehistory and History of Lake Alan Henry and the Texas Panhandle Plains Volume II, Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State 1997(47).

Bureau of Economic Geology (BEG). 1976. *Geologic Atlas of Texas Pecos Sheet*. The University of Texas at Austin.

_____.1996. Physiographic Map of Texas. The University of Texas at Austin, Austin, Texas.

Campbell, Thomas N. 1983. The Coahuiltecans and Their Neighbors. Handbook of North American Indians 10:343-358.

Center for North American Herpetology (CNAH). 2024. [Online information.] *http://www.cnah.org* accessed May 20, 2024.

Conant, Roger and Joseph T. Collins. 1998. *A Field Guide to Reptiles and Amphibians of Eastern and Central North America*. Houghton Mifflin Company, Boston, MA.

Cornell Lab of Ornithology (Cornell). 2024. All About Birds, Bird Guide [Online Information]. Cornell University. *https://www.allaboutbirds.org/news/* accessed May 20, 2024.

Donoghue, David. 1994. Coronado Expedition. The Handbook of Texas Online. Texas State Historical Association, Austin. *https://www.tshaonline.org/handbook/entries/coronado-expedition* accessed May 20, 2024.

Drass, Richard R. and Timothy G. Baugh. 1997. The Wheeler Phase and Cultural Continuity in the Southern Plains. Plains Anthropologist 42(160):183-204.

eBird. 2024. eBird. [Online maps and information] An online database of bird distribution and abundance [web application]. Ithaca, New York. *https://ebird.org/home* accessed May 20, 2024.

Electric Power Research Institute (EPRI). 1993. Proceedings: Avian Interactions with Utility Structures. International Workshop, Miami, FL, 13-16 Sep. 1992. EPRI TR – 103268. Palo Alto, CA.

Elliott, Lee. 2014. Descriptions of Systems, Mapping Subsystems, and Vegetation Types and Texas. Texas Parks and Wildlife Department. *https://tpwd.texas.gov/gis/programs/landscape-ecology/supporting-documents/all-systems-descriptions* accessed May 20, 2024.

Elliott, Lee F., Amie Treuer-Kuehn, Clayton F. Blodgett, C. Diane True, Duane German, and David D. Diamond. 2014. Ecological Systems of Texas: 391 Mapped Types. Phase 1-6, 10-meter resolution Geodatabase, Interpretive Guides, and Technical Type Descriptions. Texas Parks and Wildlife Department (TPWD) and Texas Water Development Board (TWDB), Austin, Texas. [Downloaded data]. *https://tpwd.texas.gov/landwater/land/programs/landscape-ecology/ems/* accessed May 20, 2024.

Federal Aviation Administration (FAA), U.S. Department of Transportation. 2024a. Aeronautical Data Delivery Service. *https://adds-faa.opendata.arcgis.com/* downloaded April 30, 2024.

_____. 2024b. ArcGIS REST Search Directory. [Online data]. *https://services6.arcgis.com/ssFJjBXIUyZDrSYZ/arcgis/rest/services* accessed May 20, 2024.

Federal Emergency Management Agency (FEMA). 2024. FEMA's National Flood Hazard Layer. [Interactive map database]. *https://www.fema.gov/flood-maps/national-flood-hazard-layer* accessed May 20, 2024.

Frye, John C. and Leonard, A. Byron. 1957. Studies of Cenozoic geology along eastern margins of Texas High Plains, Armstrong to Howard Counties. Texas Bureau of Economic Geology Report of Investigations.

Gauthreaux, S. A., Jr. 1971. A Radar and Direct Visual Study of Passerine Spring Migration in Southern Louisiana. *The Auk*. 88:343-365.

George, Peter, G., Mace, Robert E., Petrossian, Rima. 2011. Aquifers of Texas. TWDB Report 380. *www.twdb.texas.gov/publications/reports/numbered_reports/doc/R380_AquifersofTexas.pdf?d=8409.647515236109* accessed May 20, 2024.

Griffith, Glen, Sandy Bryce, James Omernik, and Anne Rogers. 2007. Ecoregions of Texas. Project AS-199 Report to Texas Commission on Environmental Quality. Austin, Texas.

Hays, Joe S., Robert L. Brooks, and Jack L. Hofman. 1989. Historical Archeology in the Southern Great Plains. *Clovis to Comanchero: Archaeological Overview of the Southern Great Plain*, pp. 101-110. Arkansas Archeological Research Series, No. 35. Fayetteville, Arkansas.

Holden, William C. 1994. Comanche Trail. Handbook of Texas Online. Texas State Historical Association, Austin. *https://www.tshaonline.org/handbook/entries/comanche-trail* accessed May 20, 2024.

Hofman, Jack L. 1989. Prehistoric Culture History—Hunters and Gatherers in the Southern Great Plains. *Clovis to Comanchero: Archeological Overview of the Southern Great Plains*, pp. 25-60. Arkansas Archeological Research Series, No. 35. Fayetteville, Arkansas.

Holliday, Vance T. 1997. Paleoindian Geoarchaeology of the Southern High Plains. University of Texas Press, Austin, Texas.

Homeland Infrastructure Foundation-Level Data (HIFLD). 2024a. ArcGIS REST Search Directory. [Online data]. *https://services1.arcgis.com/Hp6G80Pky0om7QvQ/arcgis/rest/services* accessed May 20, 2024.

_____. 2024b. ArcGIS REST Search Directory. [Online data]. *https://services2.arcgis.com/421NhGs3DjS37UQN/arcgis/rest/services* accessed May 20, 2024.

Hughes, David T. 1977. Analysis of Certain Prehistoric Bison Kills in the Texas Panhandle and Adjacent Areas. Unpublished Master's thesis, University of Arkansas, Fayetteville, Arkansas.

_____. 1989. Terminal Archaic Bison Kills in the Texas Panhandle. In In Light of Past Experience: Papers in Honor of Jack T. Hughes, edited by Beryl Cain Roper, pp. 183-204. Publication No.5. Panhandle Archeological Society, Amarillo, Texas.

Hughes, Jack T. 1991. Prehistoric Cultural Developments on the High Texas Plains. Bulletin of the Texas Archeological Society 60:1-55.

International Union for Conservation of Nature and Natural Resources (IUCN). 2024. The IUCN Red List of Threatened Species. *https://www.iucnredlist.org/* accessed May 20, 2024.

Integra Realty Resources (Integra). 2024. Publicly available tax office and appraisal district data regarding the Reiter Switch—Tesoro Switch 345 kV Transmission Line Project. Received on May 30, 2024.

Janss, Guyonne F.E. 2000. Avian mortality from power lines: a morphologic approach of a species-specific mortality. *Biological Conservation* 95:353-359.

Johnson, Eileen, and Vance T. Holliday. 1995. Archeology and Late Quaternary Environments of the Southern High Plains. Bulletin of the Texas Archeological Society 66:519-540.

Johnson, Eileen, and Vance T. Holliday. 2004. Archeology and Late Quaternary Environments of the Southern High Plains. In Prehistory of Texas, edited by Timothy K. Perttula, pp. 283-295. Texas A&M University Press, College Station.

Land and Water Conservation Fund (LWCF) Coalition. 2024. Past Projects. [Online maps and information]. *https://lwcf.tplgis.org/mappast/* accessed May 20, 2024.

National Conservation Easement Database (NCED). 2024. NCED Mapping Application [Online maps and information]. *https://site.tplgis.org/NCED/planningapp/* accessed May 20, 2024.

Nationwide Environmental Title Research (NETR). 2024. Historic Aerials. Electronic document, *https://www.historicaerials.com/viewer* accessed May 20, 2024.

National Geographic Society (NGS). 2019. USA Topographic Maps [Mature Support]. *https://www.arcgis.com/home/item.html?id=99cd5fbd98934028802b4f797c4b1732* accessed May 20, 2024.

Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. U.S. Department of Agriculture. Digital General Soil Map of Texas. *https://websoilsurvey.nrcs.usda.gov/app/* downloaded April 9, 2024.

_____. 2022. Land Resource Regions (LRR) and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. *https://www.nrcs.usda.gov/sites/default/files/2022-10/AgHandbook296_text_low-res.pdf* accessed May 20, 2024.

_____. 2024. Major Land Resource Area (MLRA). U.S. Department of Agriculture. [Online interactive map and information]. *https://www.nrcs.usda.gov/resources/data-and-reports/major-land-resource-area-mlra* accessed May 20, 2024.

Nature Conservancy. 2024. Texas. Places We Protect [Online maps and information]. *https://www.nature.org/en-us/get-involved/how-to-help/places-we-protect/* accessed May 20, 2024.

NatureServe Explorer. 2024. [Online natural history information]. *https://explorer.natureserve.org/* accessed May 20, 2024.

NearMap. 2023. NearMap Imagery. [Interactive Map]. *https://www.nearmap.com/us/en,* accessed May 20, 2024.

Pandey, Arun, Richard Harness, and Misti Kae Schriner. 2008. *Bird Strike Indicator Field Deployment at the Audubon National Wildlife Refuge in North Dakota: Phase Two.* California Energy Commission, PIER Energy Related Environmental Research Program. CEC-500-2008-020.

Perttula, Timothy K. 2004. Introduction to Texas Prehistoric Archeology. In The Prehistory of Texas, edited by Timothy K Perttula, pp. 5-14. Texas A&M University Press, College Station, Texas.

Railroad Commission of Texas (RRC). 2024. Information Technology Services Division Digital Map Information. [Digital Data]. *https://rrc.texas.gov/resource-center/research/data-sets-available-for-download/* downloaded May 30, 2024.

Rusz, P. J., H. H. Prince, R. D. Rusz, and G. A. Dawson. 1986. Bird Collisions with Transmission Lines Near a Power Plant Cooling Pond. Wildlife Society Bulletin 14: 441-444.

Schmidly, David J and Robert D. Bradley. 2016. The Mammals of Texas – Online Edition. Seventh Edition: Texas Parks and Wildlife Department (TPWD). Second Edition: University of Texas Press. *https://www.depts.ttu.edu/nsrl/mammals-of-texas-online-edition/Table_of_Contents/Table_of_Contents.php* accessed May 20, 2024.

Sheffield, William J., Jr. 2001. *Historic Texas Tours: A Guide for Tracing Early Routes and Trails*. Eakin Press, Austin, Texas.

Sibley, David Allen. 2003. *The Sibley Field Guide to Birds of Western North America*. Random House, Inc.: New York.

Soil Conservation Service (SCS) (currently the Natural Resources Conservation Service), U.S. Department of Agriculture. 1973. Soil Survey of Midland County, Texas (1973). U.S. Government Printing Office, Washington, D.C.

_____. 1978. Soil Survey of Ector and Crane Counties, Texas (1978). U.S. Government Printing Office, Washington, D.C.

Texas Commission on Environmental Quality (TCEQ). 2022. 2022 Texas Integrated Report of Surface Water for Clean Water Act Sections 305(b) and 303(d). *https://www.tceq.texas.gov/waterquality/assessment/22twqi/22txir* accessed May 20, 2024.

_____. 2024. Surface Water Quality Viewer. [Online maps and information]. *https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=b0ab6bac411a49189106064b70bbe778* accessed May 20, 2024.

Texas Department of Agriculture (TDA). 2024. Family Land Heritage. Electronic Document. *https://www.texasagriculture.gov/News-Events/Family-Land-Heritage* accessed May 20, 2024.

Texas Department of Transportation (TxDOT). 2024a. TxDOT Roadways. [Downloadable data]. *https://gis-txdot.opendata.arcgis.com/datasets/txdot-roadways* downloaded April 29, 2024.

_____. 2024b. TxDOT Airport Directory. [Online maps and information]. *https://maps.dot.state.tx.us/TADSMap/* accessed May 20, 2024.

Texas Historical Commission (THC). 2009. Texas Pecos Trail Region. *https://www.thc.texas.gov/public/upload/publications/pecos.pdf* accessed May 20, 2024.

_____. 2024a. Texas Pecos Trail Region. *https://texastimetravel.com/regions/pecos-trail/* accessed May 20, 2024.

_____. 2024b. Texas Archeological Sites Atlas (TASA). [Electronic document]. *https://atlas.thc.state.tx.us/* accessed May 20, 2024.

_____. 2024c. Email response from THC dated May 9, 2024 (Bradford Patterson), regarding Oncor-Reiter Switch to Tesoro Switch (see also **Appendix** A).

Texas Land Conservancy (TLC). 2024. [Online maps and information] *https://texaslandconservancy.org* accessed May 20, 2024.

Texas Legislature Online. 2024. Parks and Wildlife Code. *https://www.capitol.state.tx.us/Home.aspx* accessed May 20, 2024.

Texas Natural Resources Information System (TNRIS). 2024. DataHub [Digital Data]. *https://data.tnris.org/* downloaded April 2, 2024.

Texas Parks and Wildlife Department (TPWD). 1984. The Vegetation Types of Texas (including Cropland) Map. [Report and map]. *https://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_mp_e0100_1070n_34.pdf* accessed May 20, 2024.

_____. 2002. Ecologically Significant Stream Segments for Region F. *https://tpwd.texas.gov/landwater/water/conservation/water_resources/water_quantity/sigsegs/media/region_f_map.pdf* accessed May 20, 2024.

_____. 2011. Gould Ecoregions of Texas. [Online maps and information.] *https://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_mp_e0100_1070ac_34.pdf* accessed May 20, 2024.

_____. 2012. Texas Conservation Action Plan 2012-2016: High Plains Handbook. Editor, Wendy Connally, Texas Conservation Action Plan Coordinator. Austin, Texas. *https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/nongame/tcap/documents/hipl_tcap_2012.pdf* accessed May 20, 2024.

_____. 2014. Ecological Mapping Systems of Texas (EMST): Summary Report. *https://tpwd.texas.gov/gis/programs/landscape-ecology/supporting-documents/final-summary-report* accessed May 20, 2024.

_____. 2016. Texas Monarch and Native Pollinator Conservation Plan. *https://tpwd.texas.gov/publications/pwdpubs/media/pwd_rp_w7000_2070.pdf* accessed May 20, 2024.

_____. 2024a. Texas Watershed Viewer. [Online maps and information.] *https://tpwd.maps.arcgis.com/apps/Viewer/index.html?appid=2b3604bf9ced441a98c500763b8b1048* accessed May 20, 2024.

_____. 2024b. Texas Ecosystem Analytical Mapper (TEAM). [Online maps and information]. *https://tpwd.texas.gov/landwater/land/programs/landscape-ecology/team/* downloaded April 2, 2024.

_____. 2024c. Texas Natural Diversity Database (NDD). Unpublished data and maps received via email from TPWD [*txndd@tpwd.state.tx.us*] in response to request for threatened and endangered species information within the project study area.

_____. 2024d. Rare, Threatened, and Endangered Species of Texas. [Online information]. *https://tpwd.texas.gov/gis/rtest/* downloaded April 2, 2024.

_____. 2024e. 2023-2024. Outdoor Annual Manual Seasons by County. [Online information]. *https://tpwd.texas.gov/regulations/outdoor-annual/hunting/seasons/county-listing/* accessed May 20, 2024.

_____. 2024f. Wildlife Fact Sheets [Online information]. *https://tpwd.texas.gov/huntwild/wild/species/* accessed May 20, 2024.

_____. 2024g. Texas State Parks [Online information]. *https://tpwd.texas.gov/state-parks/* accessed May 20, 2024.

_____. 2024h. Texas Locator Map of Public Hunting Areas [Online information]. *https://www.tpwd.state.tx.us/huntwild/hunt/public/lands/maps/* accessed May 20, 2024.

_____. 2024i. Letter from TPWD dated May 15, 2024 (Rick Hanson, Wildlife Division), with attachments, re Oncor's Proposed Reiter Switch to Tesoro Switch 345-kV Transmission Line Project in Ector and Midland Counties, Texas (see also **Appendix A**).

Texas Turtles. 2024. Texas Turtles. *https://www.texasturtles.org/* accessed May 20, 2024.

Texas Water Development Board (TWDB). 2006. Major Aquifers of Texas [Digital Data]. *www.twdb.texas.gov/mapping/gisdata.asp* downloaded April 23, 2024.

_____. 2017. Minor Aquifers of Texas [Digital Data]. *www.twdb.texas.gov/mapping/gisdata.asp* downloaded April 23, 2024.

_____. 2019. Groundwater Conservation Districts of Texas *www.twdb.texas.gov/mapping/doc/maps/GCDs_8x11.pdf* accessed May 20, 2024.

_____. 2021. Summary of the 2021 Region F Regional Water Plan. *https://www.twdb.texas.gov/waterplanning/swp/2022/docs/2021_RegionalSummary_F.pdf* accessed May 20, 2024.

_____. 2022. 2022 Texas State Water Plan. Texas Water Department Board. [Online Information]. *https://www.twdb.texas.gov/waterplanning/swp/2022/index.asp* accessed May 20, 2024.

_____. 2024. Groundwater Management Area #7. *https://www.twdb.texas.gov/groundwater/management_areas/gma7.asp* accessed May 20, 2024.

TripAdvisor. 2024. Scenic Drives in Texas. TripAdvisor, LLC. *https://www.tripadvisor.com/Attractions-g28964-Activities-c47-t74-Texas.html* accessed May 20, 2024.

U.S. Department of Agriculture (USDA). 2022. Census of Agriculture for 2022. [Online information]. *https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Texas/index.php* accessed May 5, 2024.

United States Fish and Wildlife Service (USFWS). 2022. 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. *https://digitalmedia.fws.gov/digital/collection/document/id/2321/rec/1* accessed May 20, 2024.

_____. 2024a. National Wetlands Inventory (NWI) Digital Maps [Interactive Map]. *https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper* accessed May 20, 2024.

_____. 2024b. Endangered Species List for Ector County and Midland County, Texas. *https://ecos.fws.gov/ecp/* downloaded April 2, 2024.

_____. 2024c. IPaC: Information for Planning and Conservation. *https://ipac.ecosphere.fws.gov/* downloaded April 4, 2024.

United States Forest Service (USFS). 2024. The American Bumble Bee (*Bombus pensylvanicus*). *https://www.fs.usda.gov/wildflowers/pollinators/pollinator-of-the-month/american-bumble-bee.shtml* accessed May 20, 2024.

United States Geological Survey (USGS), Department of the Interior. 1954-1981. Topographic Maps in Texas. The table below shows the map quadrangle name, year of original map publication, and year of map photorevision (if any) for the five quadrangles within the study area. *https://ngmdb.usgs.gov/topoview/viewer/#4/40.00/-100.00* accessed May 20, 2024.

Map Name	Original Map	Photo-Revision	Scale
Odessa SE	1964	1966	1:24,000
Odessa SE	1964	1981	1:24,000
Parks	1964	1967	1:24,000
Parks	1964	1975	1:24,000
Pecos	1954	1964	1:250,000

_____. 2017. The State Geologic Map Compilation Geodatabase of the Conterminous United States. [Digital data]. *https://mrdata.usgs.gov/geology/state/* accessed May 20, 2024.

_____. 2024a. Pocket Texas Geology. Developed in conjunction with Texas Natural Resources Information System (TNRIS) and the Bureau of Economic Geology (BEG). [Interactive Map Web Viewer]. *https://txpub.usgs.gov/txgeology/* accessed May 20, 2024.

_____. 2024b. National Hydrography Dataset (NHD). [Online maps and information]. *https://www.usgs.gov/core-science-systems/ngp/national-hydrography/access-national-hydrography-products* accessed May 20, 2024.

_____. 2024c. Protected Areas. Protected Areas Database of the United States (PAD-US). *https://www.usgs.gov/programs/gap-analysis-project/science/protected-areas* accessed May 20, 2024.

United States National Park Service (USNPS), Department of the Interior. 2024a. Texas Parks Mapping [Online information]. *https://www.nps.gov/state/tx/index.htm* accessed May 20, 2024.

_____. 2024b. National Natural Landmarks [Online information]. *https://www.nps.gov/subjects/nnlandmarks/nation.htm* accessed May 20, 2024.

Wendorf, Fred and Alex D. Krieger. 1959. New Light on the Midland Discovery. American Antiquity 25(1): 66-78.

Willey, Patrick S., and Jack T. Hughes. 1978. The Deadman's Shelter Site. In Archeology at Mackenzie Reservoir, edited by Jack T. Hughes and Patrick S. Willey, pp. 149-190. Office of the State Archeologist Survey Report No. 24. Texas Historical Commission.

Winning, Geoffrey and Michael Murray. 1997. Flight Behavior and Collision Mortality of Waterbirds Flying Across Electricity Transmission Lines Adjacent to the Shortland Wetlands, Newcastle, NSW. *Wetlands* 17(1): 29-40.

This page left blank intentionally.

Appendix A

Agency Correspondence

This page left blank intentionally

APPENDIX A
AGENCY CORRESPONDENCE

APPENDIX A
AGENCY CORRESPONDENCE

halff

April 5, 2024

The Honorable Javier Joven
Mayor
City of Odessa
P.O. Box 4398
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Mayor Joven:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

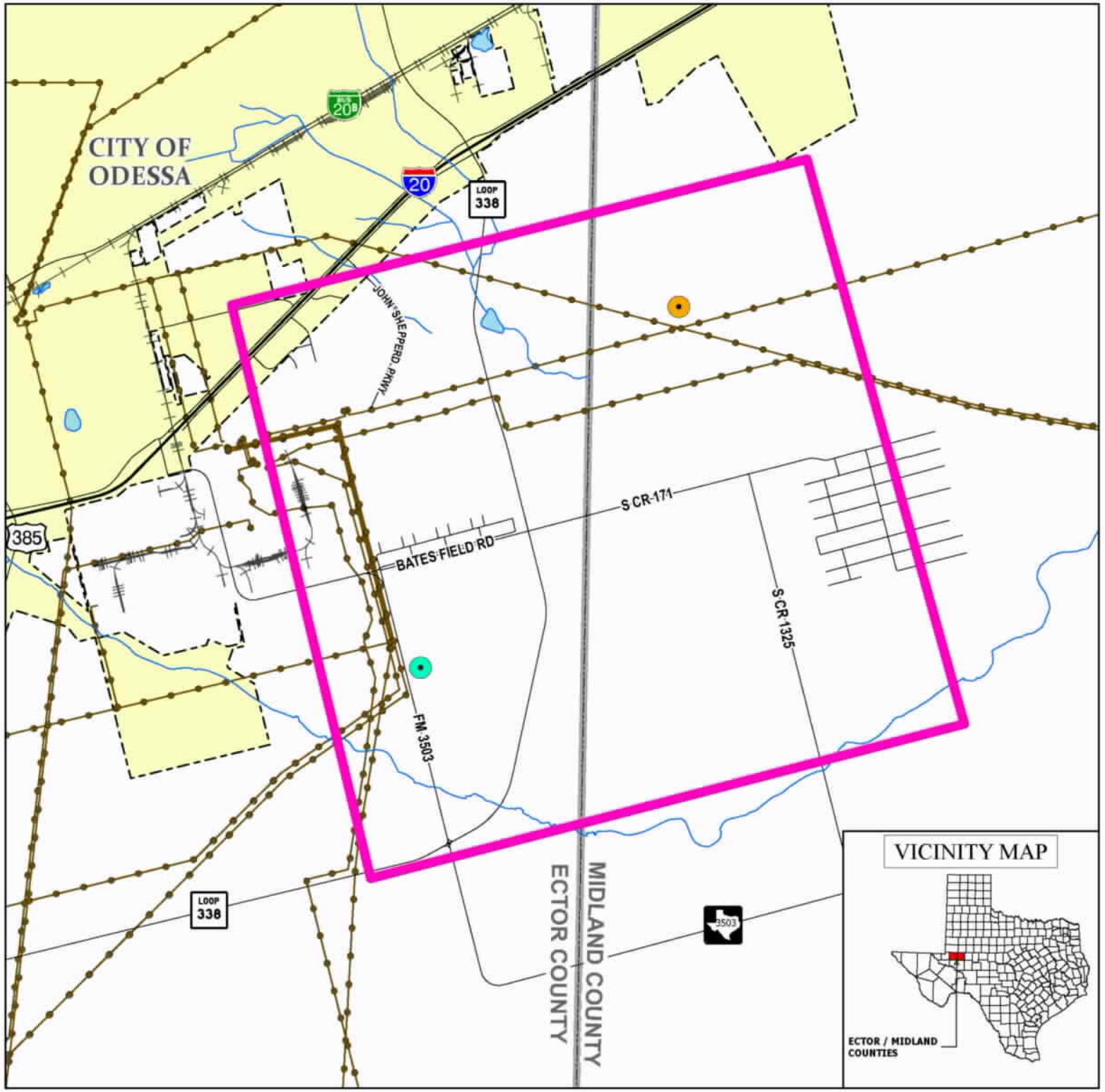
Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area



REITER SWITCH — TESORO SWITCH
345 kV TRANSMISSION LINE PROJECT

LEGEND

- PROPOSED STUDY AREA
- REITER SWITCH
- TESORO SWITCH
- EXISTING TRANSMISSION LINE
- COUNTY BOUNDARY
- ODESSA CITY LIMITS
- WATERBODY
- STREAM
- ROADWAY
- RAILROAD

Notes:

1. Some legend symbols are enlarged for easier identification.

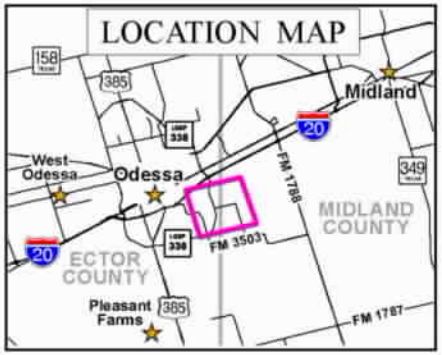
2. Data is for display purposes only. All features and boundaries have been approximated based on information gathered from review of public resources and from field reconnaissance.

Date Plotted: 03/28/2024

Date Revised: 03/28/2024

VICINITY MAP

LOCATION MAP



0 5,000 10,000

FEET

halff

halff

April 5, 2024

The Honorable Denise Swanner
Councilwoman At-Large
City of Odessa
P.O. Box 4398
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Councilwoman Swanner:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Mark Matta
City Council, District 1
City of Odessa
P.O. Box 4398
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Councilman Matta:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Steven P. Thompson
City Council, District 2
City of Odessa
P.O. Box 4398
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Councilman Thompson:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Gilbert Vasquez
City Council, District 3
City of Odessa
P.O. Box 4398
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Councilman Vasquez:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Greg Connell
City Council, District 4
City of Odessa
P.O. Box 4398
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Councilman Connell:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Chris Hanie
City Council, District 5
City of Odessa
P.O. Box 4398
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Councilman Hanie:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Dustin Fawcett
Judge
Ector County Judge
1010 East 8th Street, Suite 500
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Judge Fawcett:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Mike Gardner
Precint 1 Commissioner
Ector County Commissioner's Court
1010 East 8th Street, Suite 500
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Gardner:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Greg Simmons
Precint 2 Commissioner
Ector County Commissioner's Court
1010 East 8th Street, Suite 500
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Simmons:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Don Stringer
Precint 3 Commissioner
Ector County Commissioner's Court
1010 East 8th Street, Suite 500
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Stringer:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Billy Hall
Precint 4 Commissioner
Ector County Commissioner's Court
1010 East 8th Street, Suite 500
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Hall:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Terry Johnson
County Judge
Midland County
500 North Loraine Street, Suite 1100
Midland, Texas 79701

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Judge Johnson:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Scott Ramsey
Precinct 1 Commissioner
Midland County Commissioner's Court
500 North Loraine Street, Suite 1100
Midland, Texas 79701

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Ramsey:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Jeff Somers
Precinct 2 Commissioner
Midland County Commissioner's Court
500 North Loraine Street, Suite 1100
Midland, Texas 79701

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Somers:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Luis D. Sanchez
Precinct 3 Commissioner
Midland County Commissioner's Court
500 North Loraine Street, Suite 1100
Midland, Texas 79701

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Sanchez:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

The Honorable Dianne Anderson
Precinct 4 Commissioner
Midland County Commissioner's Court
500 North Loraine Street, Suite 1100
Midland, Texas 79701

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Anderson:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

From: Joseph Thomason <JThomason@mcounty.com>
Sent: Wednesday, April 10, 2024 8:42 AM
To: Jody Urbanovsky
Cc: Andrew Avis; Dianne Anderson
Subject: Reiter/Tesoro Project

Mr. Urbanovsky,

I've been forwarded the letter you sent to Commissioner Anderson regarding your proposed Reiter Switch and Tesoro Switch. Upon initial review of the map/detail you provided the project does not appear to affect any county ROW's or subdivision regulations. If the project ends up requiring work in a county ROW there are permits necessary that can be found on the county website: www.co.midland.tx.us Departments>Public Works>Permits. If work in a FEMA floodplain or playa becomes necessary there are permits for that as well. Thank you for providing notice of your upcoming project, if any questions arise feel free to contact me.

Joe Thomason

Regulations Manager

Public Works Department

Midland County

500 North Loraine, 11th Floor

Midland, TX 79701

jthomason@mcounty.com

Office 432-742-7374

Cell 432-294-4541

halff

April 5, 2024

Dr. Scott Muri
Superintendent
Ector Independent School District
802 North Sam Houston
Odessa, Texas 79791

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Dr. Muri:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

Dr. Stephanie Howard
Superintendent
Midland Independent School District
615 West Missouri Avenue
Midland, Texas 79701

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Dr. Howard:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

Mr. Rob Lowe
Southwest Region Regional Administrator
Federal Aviation Administration
10101 Hillwood Parkway
Fort Worth, Texas 76117

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Mr. Lowe:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

Mr. Tony Robinson
Region 6 Administrator
Federal Emergency Management Agency - Region VI
800 North Loop 288
Denton, Texas 76209

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Mr. Robinson:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

Ms. Virginia Belew
Executive Director
Permian Basin Regional Planning Commission
P.O. Box 60660
Midland, Texas 79711

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Ms. Belew:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

From: Miranda Boler <mboler@pbrpc.org>
Sent: Friday, May 3, 2024 3:50 PM
To: Jody Urbanovsky
Subject: RE: Request for Information
Attachments: REQUEST FOR INFORMATION_HALL ENGINEERING FIRM_PBRPC.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Jody,

Apologies for the incorrect information sent in the first letter. Please see attached corrected letter.

Thank you,
Miranda

Miranda Boler
Regional Services Director
Permian Basin Regional Planning Commission
P.O. Box 60660, Midland, TX 79711
Direct Line: (432) 262-4945 Work Cell: (432) 813-4542
Email: mboler@pbrpc.org

http://www.pbrpc.org/

From: Jody Urbanovsky<jurbanovsky@halff.com>
Sent: Monday, April 29, 2024 12:21 PM
To: Miranda Boler
Subject: RE: Request for Information

Good afternoon,

The letter attached mistakenly referenced the wrong endpoints. The existing Coyanosa substation and the existing Leon Creek substations are not part of this project. The project endpoints for this project are the Reiter Switch and Tesoro Switch. Can you please update the previously sent letter to include the Reiter and Tesoro switches?
Thanks,
Jody

Jody Urbanovsky
Project Manager

Halff
O: 214.346.6357
E: jurbanovsky@halff.com

We improve lives and communities
by turning ideas into reality.

From: Miranda Boler <mboler@pbrpc.org>
Sent: Friday, April 12, 2024 5:14 PM
To: Jody Urbanovsky <jurbanovsky@halff.com>
Subject: Request for Information

Good afternoon,

Please see attached letter regarding proposed Reiter Switch to Tesoro Switch 345kV Transmission Line Project in Ector and Midland Counties.

Thank you,

Miranda Boler
Regional Services Director
Permian Basin Regional Planning Commission
P.O. Box 60660, Midland, TX 79711
Direct Line: (432) 262-4945 Work Cell: (432) 813-4542
Email: mboler@pbrpc.org

http://www.pbrpc.org/

Permian Basin Regional Planning Commission
P.O. BOX 60660 • 2910 LAFORCE BOULEVARD • MIDLAND, TEXAS 79711-0660 • (432) 563-1061 • FAX (432) 563-1728

May 3, 2024

Mr. Jody Urbanovsky, Project Manager
Halff Engineering Firm
1201 N. Bowser Road
Richardson, TX 75081

Mr. Urbanovsky,

The Permian Basin Regional Planning Commission (PBRPC) has received your notice and request for comment regarding the proposed design and construction of the proposed transmission line project in Ector and Midland Counties with the endpoints of Reiter Switch in Ector County and Tesoro Switch in Midland County. The PBRPC has no comment, as it has no environmental and land use constraints information regarding land issues, proposed developments, or other areas of interest to this agency within the project study area.

I recommend that the following chief elected officials' offices be notified of the project, as they may have related information:

The Honorable Dustin Fawcett, Ector County Judge: 300 North Grant, Room 227, Odessa, Texas 79761, 432-498-4100, ext. 1202

The Honorable Terry Johnson, Midland County Judge: 500 N Loraine Street, Midland, Texas 79701, 432-688-4310.

Please contact me if you require any additional information.

Sincerely,

Miranda Boler

Miranda Boler, Regional Services Director

halff

April 5, 2024

Ms. Karen Sanchez
Program Specialist
Railroad Commission of Texas
P.O. Box 12967
Austin, Texas 78711

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Ms. Sanchez:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

From: Karen Sanchez <Karen.Sanchez@rrc.texas.gov>
Sent: Wednesday, April 10, 2024 12:44 PM
To: Jody Urbanovsky
Subject: Open Records Request with Railroad Commission of Texas
Attachments: 4071_001.pdf

Ms. Urbanovsky,

We do not file out information by address, property description or approximations. All our information is filed by lease number, API number, T-4 pipeline permit number to other RRC identifying numbers.

Public GIS Viewer (Map) (texas.gov)

You can go to our online GIS mapping system to determine if there are any RRC regulated facilities in the area that you are interested in. Once you have the identifying numbers, we will be happy to search for any responsive information.

Sincerely,

Karen Sanchez

Legal Assistant

Office of General Counsel

Railroad Commission of Texas

halff

April 5, 2024 Transmitted via Email: arabela.baer@austin.utexas.edu

Ms. Arabela Baer, MA, RPA, Atlas Coordinator
Texas Archeological Research Laboratory
The University of Texas at Austin
1 University Station, R7500
Austin, Texas 78712

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Ms. Baer:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

From: Baer, Arabela <arabela.baer@austin.utexas.edu>
Sent: Tuesday, April 9, 2024 11:28 AM
To: Jody Urbanovsky
Subject: RE: Reiter -- Tesoro 345 kV Transmission Line Project (Ector/Midland County, Texas)
Attachments: Halff_TesoroTransmission_345kV.pdf

Hi Jody,

Please see the document attached for the results of your request regarding the project area located in Ector and Midland County, Texas. Please let me know if you have any questions.

Thank you,
Arabela

Arabela Baer, MA, RPA (she/her)
Head of Records
Texas Archeological Research Laboratory
University of Texas at Austin
1 University Station R7500
Austin, Texas 78712
arabela.baer@austin.utexas.edu

I live and work in Austin, Texas and would like to acknowledge the Alabama-Coushatta, Caddo, Carrizo/Comecrudo, Coahuiltecan, Comanche, Kickapoo, Lipan Apache, Tonkawa and Ysleta Del Sur Pueblo, and all the American Indian and Indigenous Peoples and communities who have been or have become a part of these lands and territories in Texas.

From: Jody Urbanovsky <jurbanovsky@halff.com>
Sent: Friday, April 5, 2024 8:24 AM
To: Baer, Arabela <arabela.baer@austin.utexas.edu>
Subject: Reiter -- Tesoro 345 kV Transmission Line Project (Ector/Midland County, Texas)

Good morning Arabela,
Please see the attached formal letter and study area map for the referenced transmission line project in Ector/Midland County, Texas. Consistent with past notifications to TARL please also see the attached GIS shapefile for the project study area. If you have any questions, please don't hesitate to let me know. Thanks, and have a great day.
-Jody

Jody Urbanovsky
Project Manager

Halff
O: 214.346.6357
E: jurbanovsky@halff.com
We improve lives and communities
by turning ideas into reality.

Texas Archeological Research Laboratory
College of Liberal Arts

1 University Station •R7500 • Austin, TX 78712 • 512-471-5960 • FAX 512-232-6563
https://liberalarts.utexas.edu/tarl/

9 April 2024

Jody Urbanovsky
Halff Associates, Inc.
1201 North Bowser Rd.
Richardson, TX 75081-2274

Re: Oncor's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Ms. Urbanovsky:

This letter is provided in response to a constraints analysis request received by the Texas Archeological Research Laboratory (TARL) on 5 April 2024 concerning the above referenced project and the possible location of archeological sites within the study area boundaries on the 7.5' USGS Odessa SE quadrangle in Ector County and 7.5' USGS Parks quadrangle in Midland County, Texas. Please note that information regarding archeological site locations is not intended for public disclosure; site location information is protected by the National Historic Preservation Act of 1966, Title III, §304, and by §191.004 of the Texas Antiquities Code. If you have any questions regarding this policy, please feel free to contact me at the email address below.

An examination of the maps, records and spatial data at TARL found one known archeological site (41EC7) within the study area. Located in the southwestern-most portion of the study area, site 41EC7 is an open campsite of an unknown date. In 1992, the site was determined "to not meet the criteria of significance for SAL status."

TARL does not maintain cultural resource information other than the archeological site files and spatial data. As a courtesy, however, the current constraints analysis included a search of the Texas Historical Commission's (THC) restricted online Texas Archeological Sites Atlas and the publicly accessible Texas Historic Sites Atlas. The Atlas data indicates that there are no documented cemeteries, historical markers or properties listed in the NHRP present in the study area.

For regulatory matters pertaining to your project, contact the Archeology Division of the Texas Historical Commission at 512/463-6096. For any other questions, please contact me at arabela.baer@austin.utexas.edu.

Sincerely,

Arabela Baer, M.A., RPA
Head of Records
Texas Archeological Research Laboratory
The University of Texas at Austin

References Cited:

Haefner, Josh
2013 *Short Report on the Archeological Investigations of the Proposed Realignment of FM 3503: From 0.1 Miles West of JBS Parkway to FM 3503, TxDOT Odessa District, CSJ 0906-06-048.* Hicks & Company, Archeology Series #243.

halff

April 5, 2024

Mr. Dan Harmon
Aviation Division Director
Texas Department of Transportation
6230 E. Stassney Lane
Austin, Texas 78744

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Mr. Harmon:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

Mr. Eric Lykins, P.E.
Odessa District Engineer
Texas Department of Transportation
3901 East U.S. Highway 80
Odessa, Texas 79761

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Mr. Lykins:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

Texas Department of Transportation

3901 E HIGHWAY 80, ODESSA, TEXAS 79761 | 432.498.4697 | WWW.TXDOT.GOV

April 15, 2024

HALFF
Mr. Jody Urbanovsky
Project Manager
1201 N Browser Road
Richardson, Tx 75081

Re: Oncor Electric Delivery Company LLC's proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas.

To Whom It May Concern:

The Odessa District of the Texas Department of Transportation (TxDOT) has completed its review of the proposed project information received on 04/08/2024 , concerning the above transmission line project.

Due to lack of specific project information, the Odessa District can only speculate as to the additional potential environmental and land use issues and impacts within the broad corridor shown and, as such, no additional comments are offered. However, Oncor Electric should be advised of potential required coordination with other state, federal and local entities.

Oncor Electric should also be made aware that utility installation requests are required for accommodation of utility facilities on the state highway right of way. All requests must be submitted through the Right of Way Utility and Leasing Information System (RULIS) found at https://www.txdot.gov/business/right-of-way/rulis.html

Additionally, driveway/access permits are required for access connections to the state highway system. TxDOT Form 1058 - Permit to Construct Access Driveway Facilities on Highway Right of Way, coupled with the Commercial and Industrial Driveway Access Request Form shall be completed and submitted to TxDOT for consideration of each proposed access/driveway location.

Thank you for affording TxDOT the opportunity to comment on this proposed project. If you have any questions or require further assistance, please contact me at (432) 498-4772 or robert.ornelas@txdot.gov.

Sincerely,

DocuSigned by:
3811713A844D484...

Robert Ornelas, P.E.
Director of Transportation
Planning and Development
Odessa District

Received on
APR 19 2024
Halff

OUR VALUES: *People • Accountability • Trust • Honesty*
OUR MISSION: *Connecting You With Texas*

An Equal Opportunity Employer

halff

April 5, 2024

Mr. Doug Booher
Environmental Affairs Division Director
Texas Department of Transportation
6230 E. Stassney Lane
Austin, Texas 78744

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Mr. Booher:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area

halff

April 5, 2024

Dr. Dawn Buckingham, M.D.
Commissioner
Texas General Land Office
1700 North Congress Avenue
Austin, Texas 78701

Re: Oncor Electric Delivery Company LLC's Proposed Reiter Switch to Tesoro Switch 345 kV Transmission Line Project in Ector and Midland Counties, Texas

Dear Commissioner Buckingham:

Oncor Electric Delivery Company LLC (Oncor) proposes to build a 345 kilovolt (kV) transmission line between Oncor's Reiter Switch in Ector County, Texas, and Oncor's Tesoro Switch in Midland County, Texas. The Reiter Switch property is located approximately 1.2 miles north of the intersection of Loop 338 and Farm-to-Market Road 3503. The Tesoro Switch property is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and Loop 338 near Odessa, Texas. Please refer to the attached map depicting the study area.

Halff is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support Oncor's application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUC). Halff is currently gathering data on the existing environment and identifying environmental and land use constraints within the study area that will be used in the creation of an environmental and land use constraints map. Halff will identify potential alternative routes that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of potential impacts. Upon certification for the proposed project, Oncor will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, Oncor will contact your office following route certification.

Thank you for your assistance with this proposed transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data or responses may also be shared at jurbanovsky@halff.com. Your earliest reply will be appreciated.

Sincerely,
Halff

Jody Urbanovsky

Mr. Jody Urbanovsky, Project Manager

Attachment – Map of the Project Study Area