

Draft Compatibility Determination

Title

Rights-of-Way Easement for Expansion of State Highway 36, Brothers River (Tract 57), Brazoria, TX

Refuge Use Category

Rights-of-way and Rights to Access

Refuge Use Type(s)

Rights-of-Way (road): the right to use and alter the landscape through construction, maintenance, and operation of a road.

Refuge

San Bernard National Wildlife Refuge

Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

San Bernard NWR was established on November 7, 1968 and managed under provisions of the Migratory Bird Conservation Act (16 U.S.C. 712d), the Refuge Recreation Act (16 U.S.C. 460k-1 and 16 U.S.C. 460k-2) and the Fish and Wildlife Act of 1956 (16 U.S.C. 742(a)(4) and 16 U.S.C. 742(b)(1)).

“...for use as an inviolate sanctuary... and for any other management purposes,... for migratory birds.” (Migratory Bird Conservation Act [16 U.S.C. 712d])

1. “...for the development, advancement, management, conservation, and protection of fish and wildlife resources...” [16 U.S.C. 742f(a)(4)] and “...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude...” [16 U.S.C. 742f(b)(1)] (Fish and Wildlife Act of 1956)
2. “...suitable for-(1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species...” [16 U.S.C. 460k-1]; “...the Secretary... may accept and use... real... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donor...” [16 U.S.C. 460k-2] (Refuge Recreation Act, as amended [16 U.S.C. 460k - 460k-4]).

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System, is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252).

Description of Use

Is this an existing use?

Yes. Initial purchase of units that collectively comprise the Brothers River Tract (acquisitions) for the refuge initially included a TxDOT rights-of-way for Highway 36 (SH 36). Therefore, a TxDOT road has, in part, bisected the Unit since the refuge acquired the properties in 2012-2013. Specifically, the Brother River Tract (Tract 57) will be further affected by this expanded rights-of-way.

What is the use?

Through a Rights-of-Way (ROW) Permit to Texas Department of Transportation (TxDOT), the refuge will allow the expansion of SH 36 along the Brothers River Tract, located between Brazoria and West Columbia, TX. TxDOT has requested an expansion of the existing road ROW inside the current refuge. The current proposed use is to widen the existing road (SH36) ROW in varying widths from 38'-144' to convert the two-lane road to a four-lane road. This expansion will increase the ability to meet current traffic volume, while softening the curves of the road for improving public safety based on accepted traffic speed and improve traffic flow.

And additional purpose of this expansion project is for increasing the capacity of SH36 for purposes of accommodating future anticipated Emergency Evacuation needs for Brazoria County residents in the event of extreme weather events. SH36 is the primary road between Fort Bend County and Freeport, TX, serving the Freeport Industrial Community and Port of Freeport. The road is the hurricane evacuation route for southern Brazoria County. Overall, the proposed use will widen the road and ROW for the road to accommodate the conversion of the existing two-lane road into a wider four-lane road.

Is the use a priority public use?

No.

Where would the use be conducted?

The use will be conducted solely within the lands identified in the expanded ROW associated with SH36 on the Brothers River Tract (Tract 57) of San Bernard National

Wildlife Refuge between the towns of Brazoria and West Columbia, TX. (see Figure 1). The Brothers River tract was acquired April 3, 2013, as part of the Columbia Bottomland Hardwood Forest conservation initiative. The tract is 1,440 acres of mixed-deciduous and evergreen hardwoods with a dense understory. This forest is seasonally flooded and is important habitat for Nearctic-neotropical migrants (songbirds) as well as many other species of resident wildlife. The tract includes approximately 1.66 miles of road frontage on the east side of SH 36. About 16 acres of habitat will be impacted if the ROW is granted. The northern point of the unit is 2.25 miles south of West Columbia, Texas. (see Figure 1).

When would the use be conducted?

Construction is expected to begin in the summer of 2023 and take approximately one year to complete. Construction activity occurring on the refuge expansion area could be completed in phases thereby minimizing the duration of impacts associated with road development and construction. The related noise, dust, and lighting associated with construction will likely occur in phases during the year and not occur throughout the entire year. Upon completion, the highway will be reopened to traffic 24 hours a day.

It is anticipated that TxDOT will perform annual basic maintenance and infrequent substantial maintenance (such as repaving) as needed to keep the road in safe operational order. The proposed ROW issuance will specify and require ongoing coordination with TxDOT and the refuge to ensure maintenance of vegetation in the ROW does not negatively impact surrounding refuge lands or wildlife. A Special Use Permit will need to be obtained for maintenance within the ROW.

How would the use be conducted?

Construction would be initiated by removal of the existing refuge boundary fence and reestablishment of the fence along the new boundary of the expanded ROW. The expanded ROW will be mechanically cleared of all vegetation and soil imported to elevate the expanded roadway to match the current highway elevation allowing for a second two lane concrete road to be constructed immediately adjacent to the existent established road. The highway is approximately 5 – 15 feet above- ground elevation adjacent to the Brothers River Tract (Tract 57) and requires the additional roadway width be built at the current roadway elevation (which varies as described in *Environmental Assessment SH36 / Spur 10, 2007*) will construct or expand three bridge crossings (currently one bridge is in place) which will enhance drainage and allow wildlife to move safely between refuge lands on both sides of the highway. This component of the expanded ROW will be a significant improvement for wildlife conservation by reducing wildlife mortality associated with vehicle collision incidents.

TxDOT will use industry standard equipment and utilize best management practices

throughout the duration of construction to expand SH36. Equipment types anticipated to be used include dozers, graders, rakes, chainsaws, rollers, pavers, skidsteers, and soil compaction equipment is expected or anticipated. Following the preliminary work remove vegetation and build the road foundation, road paving equipment will be used including semi-trucks and trailers, dump trucks and haul trucks. Cranes or pile drivers may be needed to install or expand the three bridges (wildlife crossings) identified in the original design.

TxDOT and its contractors will not use areas outside of the proposed ROW for turnarounds, vehicle staging or any other temporary use during the construction phase of the project. Other sites located along SH36 will be utilized for these purposes.

Upon completion of the expanded SH36 roadway project, the road will continue to provide for refuge personnel and the general public to have access to the Brothers River Tract and to traverse between Freeport and Richmond, TX. Traffic volume will be more safely accommodated, particularly in the event of a mandatory Brazoria County hurricane evacuation. Upon completion of all additional road construction for the expanded roadway, TxDOT will maintain the road shoulders similarly as they are maintained currently—by ongoing tractor mowing of the sides of the road so that vegetation is maintained at a short growth stage of native grasses. Any future ROW maintenance that requires mowing, tree-trimming, and/or herbicide treatments will require coordination with the refuge manager. Issuance of a Special Use Permit (SUP) in the future will ensure maintenance activities are conducted in a manner that avoids impact to refuge resources and area/regional conservation objectives.

Why is this use being proposed or reevaluated?

TxDOT initiated planning for the expansion of SH 36 from Freeport, TX to Richmond, TX in 1999 and completed the EA in 2008. In addition, three re-evaluations were conducted and completed in January 2020. Section 4(f) De Minimis findings were determined by the Texas Mid-coast NWR Complex Project Leader (a requirement for public parks, recreation lands, wildlife and waterfowl refuges, and historic properties) was completed and signed in 2019. This compatibility determination is being established to evaluate the proposed ROW expansion as pertains specifically to the refuge lands impacted by the highway construction. This is not an evaluation of the entire project covered in the TxDOT Environmental Assessment.

The expansion of SH36 is being proposed in order to create two additional lanes for purposes of meeting current traffic volume levels, meeting the needs of the public in the event of a future hurricane evacuation, and to improve public safety for existing and future traffic volume needs/expectations. Added benefits of the ROW expansion and forthcoming construction is to install 2 additional bridges that will serve as “wildlife crossings” in this area that is densely forested on both sides of SH36.

Although the refuge will lose about 16 acres of habitat if this use is found compatible and the ROW granted. The refuge supports improvements to public safety associated

with motor vehicle travel and as an overall benefit to further improve an important Brazoria County public safety evacuation route. However, for this use to be found compatible, no net habitat loss must occur. To that end, TxDOT will transfer funding to a 3rd party non-profit partner of the refuge, such as the Friends of Brazoria Refuges. Friends and other partners have been active in purchasing lands within the refuge's acquisition boundary and then transferring the lands to the Service through donations. The total amount of funding to be transferred will be based on current appraisal value of nearby parcels and the amount of acres of habitat lost (about 16). The funds will be held in trust by the 3rd party and applied to land acquisition within five years.

Availability of Resources

Refuge staff prepared this Compatibility Determination (CD) to evaluate refuge impacts, prepared an SUP, and coordinated with TxDOT. The regional realty staff have reviewed and processed the 299 ROW application from TxDOT. TxDOT completed the initial required National Environmental Policy Act compliance, a Section 7 evaluation, and the required cultural and archaeological planning documents. refuge and regional Service staff have reviewed these documents and found them acceptable. Service staff will also prepare a Finding of No Significance and adopt the Environmental Assessment completed by TxDOT and updated in 2018.

Participation in the project has occurred over a 20-year period so exact time investment is difficult to quantify a general estimate of \$5000.

If the ROW is granted as proposed, refuge staff will monitor construction activities and ensure compliance with all listed stipulations in this CD, the ROW permit and SUP. Time investment for this considered to be minimal totally \$500 per year. Existing resources are adequate to administer the ROW and SUP.

As lands are added to the refuge through the funding provided from TxDOT to a 3rd party, regional realty staff would invest time to support those transactions.

Anticipated Impacts of the Use

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use.

Short-term impacts

Construction activities will displace wildlife near the highway that have become accustomed to normal traffic along the two-lane road. Concentrated activity,

including heavy equipment, bridge construction and paving will disturb normal wildlife activity along the proposed ROW. There could be direct impacts to wildlife from the expanded ROW construction due to the timing of vegetation removal. Additional short-term impacts include direct mortality of wildlife, and elevated levels of noise, pollution (exhaust fumes), and lighting. Higher levels of short-term impacts could occur if construction occurs during crepuscular or nocturnal periods.

Loss of vegetation and ground clearing could lead to erosion and establishment of invasives species. TxDOT will follow best management practices to minimize these potential impacts.

Long-term impacts

About 16 acres of forested habitat, adjacent to SH36, will be permanently lost as the ROW, which varies between 38'-144' along the length of the highway, is cleared and the new road is constructed. Acres lost will be replaced through funding by TxDOT and a 3rd party refuge partner. The total amount of funding to be transferred will be based on current appraisal value of nearby parcels and the amount of acres of habitat lost (about 16). The refuge has an active land acquisition program. The funds would be spent on lands within the refuge's acquisition boundary and offset the loss of habitat from the proposed ROW expansion.

The construction of two additional bridge crossings will facilitate movement of wildlife across SH36, thus reducing mortality from vehicular collisions. While the road will be widened to accommodate improving public safety, wildlife in the Brothers River Tract will benefit from the three bridges to safely navigate crossing the road.

Cumulative continued growth among southern Brazoria County communities and industry add strain to wildlife populations and natural habitats. Since 1997, the Austin's Woods Land Protection Plan enabled the refuge to conserve more than 40,000 acres of wildlife habitats in a four-county area to protect some of the remaining stands of Columbia Bottomland forests. Tracts like the Brothers River are often bounded or transected by public roads that create hazards for wildlife and the public due to collisions. The SH 36 expansion is needed to improve public safety for daily traffic and during emergency evacuation events. The mitigation measures for the issuance of the ROW will protect wildlife from collisions, enabling them to safely go under the road between refuge tracts and result in no net loss of habitat through the transfer of funds, purchase, and donation of lands to the NWRS.

Public Review and Comment

The draft compatibility determination will be made available for public review and comment for fourteen (14) days from (June 23, 2023) to (July 7, 2023). The draft CD will be posted at the Refuge Headquarters, 6801 County Road 306 Brazoria, TX 77422, on the refuge [website](#), and distributed to local news and media. Comments Concerns expressed during the public comment period will be addressed and/or incorporated

into the final version of the Compatibility Determination. Email comments to mailto:R2_plancomments@fws.gov.

This CD only addresses the road expansion on refuge lands. TxDOT conducted public review and comment on the full project as required by the Environmental Assessment. Additionally, public scoping meetings were held in 2000 and 2001 to provide preferred alignment and alternatives to citizens. All Section 106 and Tribal consultations were also completed in 2011 and 2018 to satisfy Federal Highways Administration public notification criteria.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

In order to ensure that the ROW approval remains a compatible use on the Refuge, the following stipulations are necessary:

1. TX DOT will obtain the necessary permits (federal, state and local permits), terms and conditions for the ROW Permit will allow for modification to ensure compatibility (603 FW 2.11(H)(3)).
2. TxDOT will coordinate with refuge staff and obtain a SUP for construction, annual, and operational maintenance.
3. TxDOT will re-establish the refuge boundary fence.
4. TxDOT will mitigate the loss of refuge habitat by transferring funds to a 3rd party non-profit partner of the refuge, such as the Friends of Brazoria Refuges. The total amount of funding to be transferred will be based on current appraisal value of nearby parcels and the amount of acres of habitat lost (about 16) The funds will be held in trust by the 3rd party, applied to land acquisition, and subsequent donation of lands to the NWRs.

Justification

Granting the proposed right of way would not materially interfere with the purposes of the refuge or the mission of the National Wildlife Refuge System. The existing highway ROW currently fragments refuge lands on either side for the roadway in the proposed area. While the construction of an additional ROW would permanently remove about 16 acres of bottomland hardwood forest, the loss of this habitat would not materially interfere with the purposes of the refuge. The expansion of the roadway would increase public safety.

In addition, the impacted refuge land will be offset through the transfer of funds and purchase of additional bottomland hardwood forest that provides equal to or greater

habitat value, is contiguous with other refuge, and falls within the refuge's acquisition boundary. Therefore, the Service believes no net loss of habitat would result in granting the ROW to TxDOT to expand SH36.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2033

Literature Cited/References

State of Texas, Department of Transportation (2007). *Environmental Assessment SH36 / Spur 10*.
<https://ftp.dot.state.tx.us/pub/txdot/get-involved/hou/sh36/0907-ea-report.pdf>

Figure



Figure 1: San Bernard NWR, Tract 57 (Green). General Project Area/ROW outlined in red.

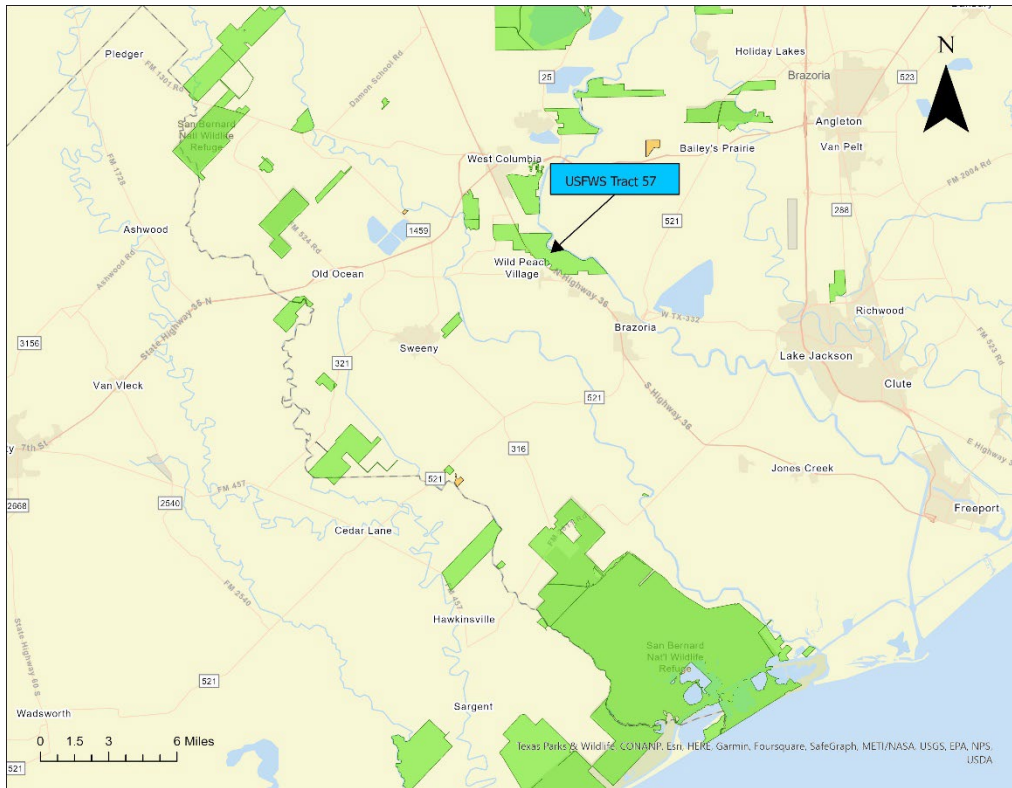


Figure 2: Location of Tract 57 in relation to all units of the San Bernard NWR and surrounding communities.