Environmental Assessment

Department of Commerce

National Telecommunications and Information Administration

May 2025

Old Pearson Road (US-MS-5200) – Proposed 211-Foot Tall Self-Supporting Lattice Telecommunications Structure – Middle Mile Grant Award # 08-40-MM228

2622 S Pearson Road
Richland, Rankin County, Mississippi
Latitude: N 32° 12’ 53.1" Longitude: W 90° 7’ 46.3"

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1.0 Executive Summary

The Towers, LLC, is utilizing Middle Mile Grant Program funding, provided by the National Telecommunications and Information Administration (NTIA), for the construction of a proposed 211-foot tall overall height self-supporting lattice telecommunications structure within Rankin County, Mississippi. The Proposed Action is being completed as part of a larger initiative to improve communications infrastructure within the State of Mississippi.

The proposed tower facility would support wireless antennas and associated equipment necessary to provide wireless voice and data communications. The Proposed Action is needed to offload wireless traffic currently being served by existing on-air macro tower sites to the north, west, east, and south of the Proposed Action that have been exhausted with heavy usage stemming from massive expansion in customer demand in recent years. Current wireless coverage in these areas is weak, and without the Proposed Action, coverage is likely to get worse as demand in the areas is anticipated to increase. The Proposed Action would improve access to reliable and modern wireless communications capabilities for surrounding areas of Rankin County, Mississippi in the vicinity of the Proposed Action site and allow users to continue to have reliable service over the long term. Benefits to the population would include, but are not limited to, improved communications infrastructure, increased educational and economic opportunities, and better access to healthcare services, including telehealth services.

The Proposed Action includes a proposed 211-foot-tall self-supporting lattice telecommunications structure and associated ground-level equipment that would be constructed within a proposed 75-foot by 75-foot fenced compound which would be situated within an 80-foot by 80-foot proposed lease area. The proposed facility would include an approximate 263-foot long by 30-foot-wide access/utility easement. Ground level equipment within the compound would include two equipment cabinets and an associated canopy, two utilities H-frames, and a 50kw backup generator. The proposed cabinets and generator would be placed on concrete slabs. Further, two, three-inch underground power conduits would be installed at an approximate depth of 36 inches within the access/utility easement from the proposed compound to a new power pole within the access/utility easement. From the power pole, overhead power lines would extend to an existing power pole located east of Old Pearson Road in order to avoid additional ground disturbance within the right-of-way. Underground fiber would be installed in the access/utility easement within two, two-inch conduits from the proposed compound to a new handhole located where the access/utility easement meets the Old Pearson Road right-of-way.

In addition, to manage stormwater runoff, The Towers, LLC, proposes a temporary 1-foot by 100-foot silt fence barrier to the west of the lease area, a 3-foot-wide swale installed within a 5-foot by 90-foot installation area to the south of the lease area, and a 3-foot-wide swale and a 15-foot long by 12-inch diameter culvert installed within a 5-foot by 80-foot installation area to the north of the lease area. An additional approximate 30-foot long by 18-inch diameter culvert would be installed north of the proposed lease area. The proposed swale and culverts would extend across the proposed access and utility easement. For purposes of the Environmental Assessment documentation, the footprint of the Proposed Action includes the entire lease, easement, silt fence, swale areas and the proposed power pole. In total, the Proposed Action area would total approximately 0.4 acres. Throughout the planning process, special care was taken to select site locations that were deemed to have a low likelihood to result in adverse

impacts to the natural or human environment. Adverse impacts on all resources were determined to be less than significant.

The Proposed Action is subject to the National Environmental Policy Act (NEPA) codified at 42 U.S.C. 4321, et seq; this Environmental Assessment is prepared in accordance with NEPA.

2.0 Purpose and Need

Purpose

The purpose of the Proposed Action is to improve and enhance reliable wireless voice and data communications to surrounding areas of Rankin County, Mississippi. The enhanced capabilities and reliability of voice and data communications resulting from the proposed action would provide additional economic and educational opportunities and access to previously inaccessible telehealth care services for the surrounding communities.

Need

Rural areas are consistently underserved communities as it relates to access to fiber and broadband communications infrastructure, which at one time was considered a luxury, but is now a basic utility for households and businesses. While improvements to communications technologies continue to evolve and improve, rural communities are geographically isolated with low population density, resulting in a lack of the necessary investment in communications infrastructure. Further, the use of alternative means of such communication (such as satellite internet access) are prohibitively expensive for members of these communities. The lack of investment in such infrastructure results in disparities in education, economic opportunities, health, and overall quality of life for current and future members of these communities.

Current wireless coverage in residential areas to the north, west, east, and south of the Proposed Action is weak, and without the Proposed Action, coverage is likely to get worse as demand in the areas is anticipated to increase. The Proposed Action is needed to offload wireless traffic currently being served by existing on-air macro tower sites to the north, west, east, and south of the Proposed Action that have been exhausted with heavy usage stemming from massive expansion in customer demand in recent years. The Proposed Action would improve access to reliable and modern wireless communications capabilities for surrounding areas of Rankin County, Mississippi in the vicinity of the Proposed Action site and allow users to continue to have reliable service over the long term. Benefits to the population would include, but are not limited to, improved communications infrastructure, increased educational and economic opportunities, and better access to healthcare services, including telehealth services.

The specific search ring used to identify a suitable site for a proposed communications facility to meet the needs discussed above is an approximate 0.5-mile radius as shown in Figure 2-1 below. It was determined that a tower height of no less than 200’ would be required to satisfy the coverage needs. The heat maps included in Figures 2-2 and 2-3 below show the existing coverage and anticipated coverage that would be provided by the proposed action. As shown in Figure 2-3, wireless coverage would be improved within areas where wireless coverage is currently weak.

Figure 2-1 Search Ring

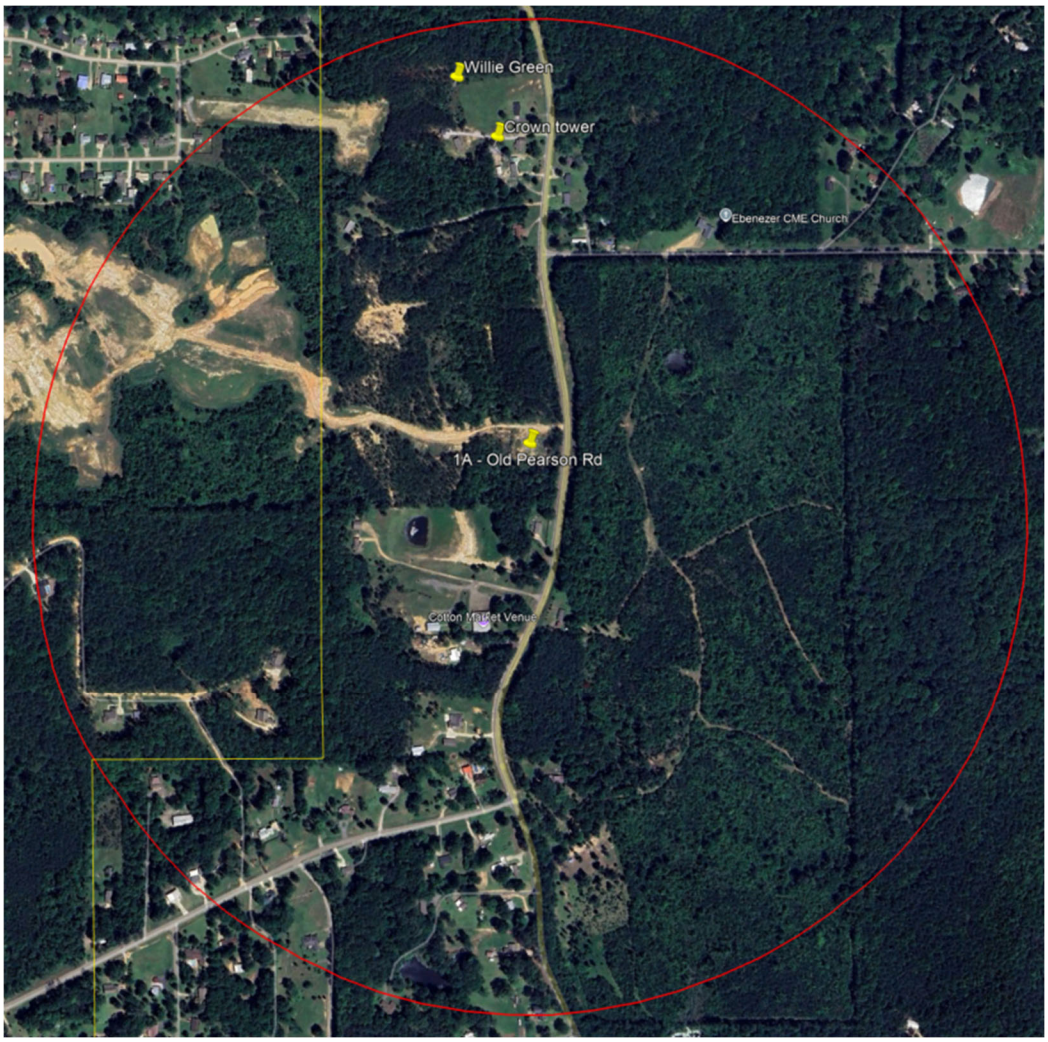
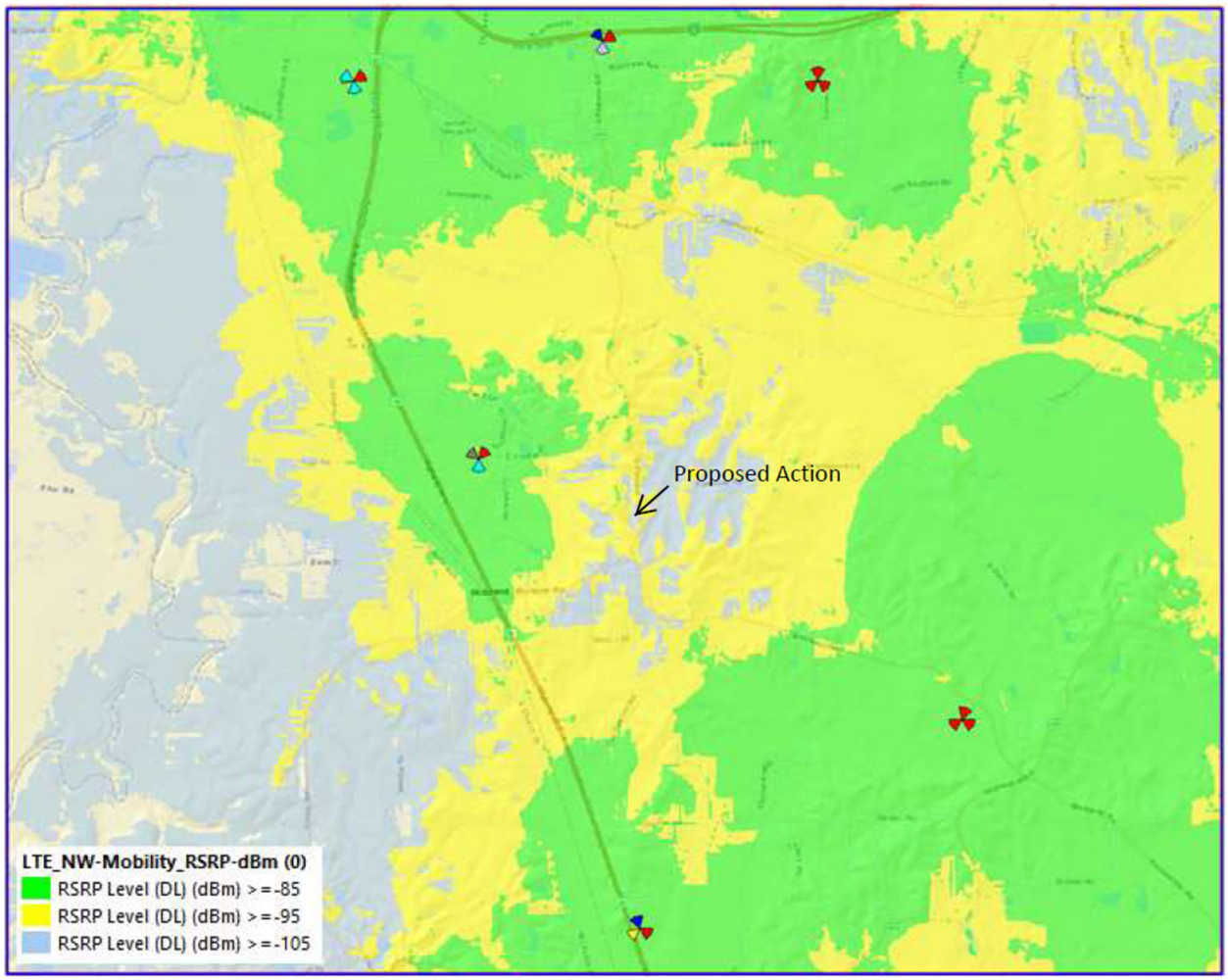
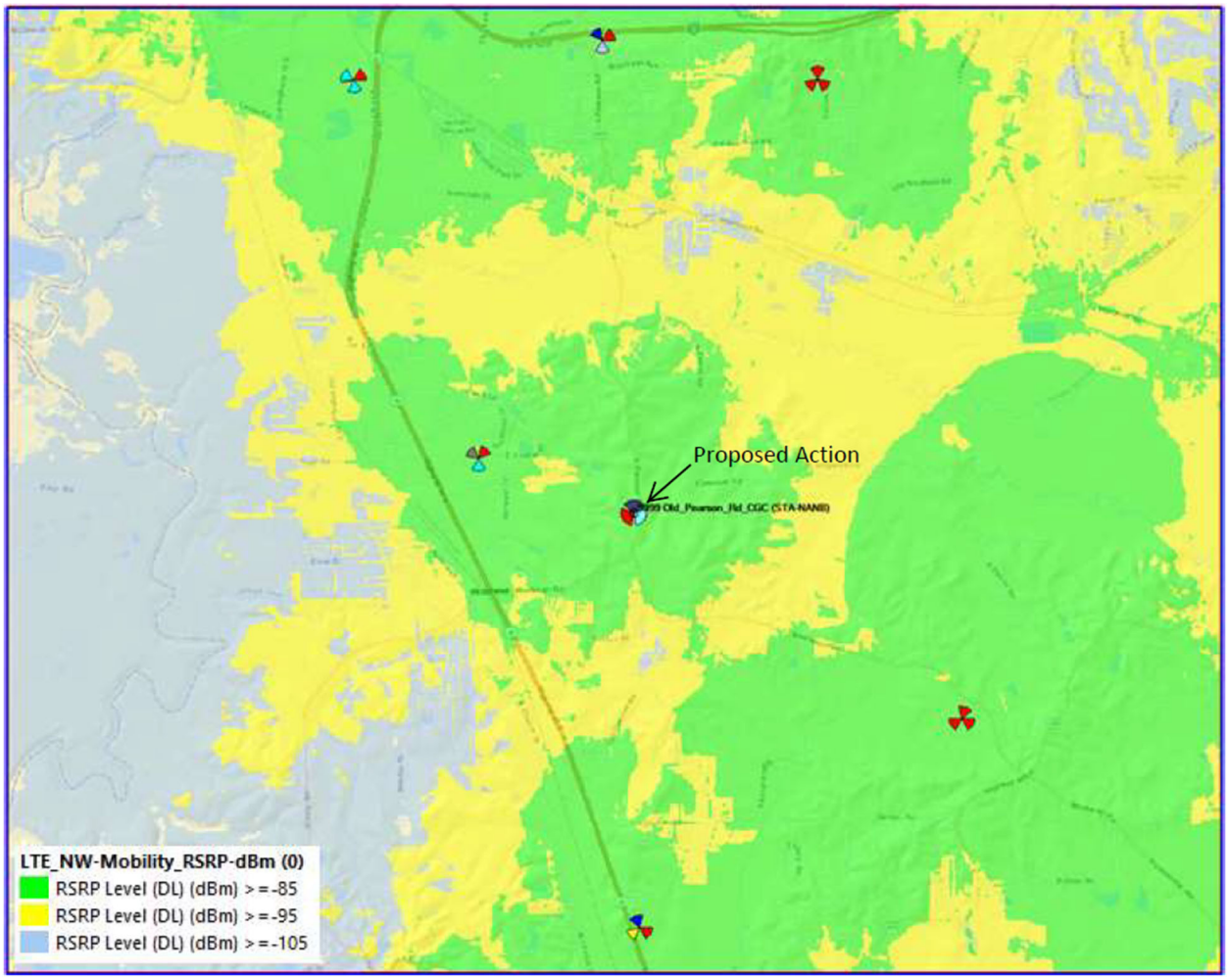


Figure 2-2 Existing Heat Coverage Map



RSRP – Reference Signal Received Power in which >=85 dBm is considered excellent and 85-95 dBm is considered good.

Figure 2-3 Proposed Heat Coverage Map



RSRP – Reference Signal Received Power in which >=85 dBm is considered excellent and 85-95 dBm is considered good.

3.0 Description of Proposed Action and Alternatives

3.1 Introduction

NEPA requires that the NTIA evaluate both the Proposed Action as well as reasonable alternatives that would also accomplish the purpose and need of the Proposed Action. At minimum, a No Action Alternative must be considered as part of the Alternatives Analysis.

3.2 Proposed Action

The Proposed Action is comprised of a single telecommunications facility located within western Rankin County, Mississippi. The Proposed Action is located on privately-owned land. The project area is located in a formerly wooded area that appears to have been cleared in 2021 in relation to a larger development and is currently occupied by a dirt drive and a cleared/vacant area (Figure 3-1). The Proposed Action includes a proposed 211-foot-tall self-supporting lattice telecommunications

structure and associated ground-level equipment that would be constructed within a proposed 75-foot by 75-foot fenced compound which would be situated within an 80-foot by 80-foot proposed lease area. The proposed facility would include an approximate 263-foot long by 30-foot-wide access/utility easement. Ground level equipment within the compound would include two equipment cabinets and an associated canopy, two utilities H-frames, and a 50kw backup generator. The proposed cabinets and generator would be placed on concrete slabs. Further, two, three-inch underground power conduits would be installed at an approximate depth of 36 inches within the access/utility easement from the proposed compound to a new power pole within the access/utility easement. From the power pole, overhead power lines would extend to an existing power pole located east of Old Pearson Road in order to avoid additional ground disturbance within the right-of-way. Underground fiber would be installed in the access/utility easement within two, two-inch conduits from the proposed compound to a new handhole located where the access/utility easement meets the Old Pearson Road right-of-way.

In addition, to manage stormwater runoff, including sediment and erosion control, The Towers, LLC, proposes a temporary 1-foot by 100-foot silt fence barrier to the west of the lease area, a 3-foot-wide swale installed within a 5-foot by 90-foot installation area to the south of the lease area, and a 3-foot-wide swale and a 15-foot long by 12-inch diameter culvert installed within a 5-foot by 80-foot installation area to the north of the lease area. An additional approximate 30-foot long by 18-inch diameter culvert would be installed north of the proposed lease area. The proposed swale and culverts would extend across the proposed access and utility easement. For purposes of the Environmental Assessment documentation, the footprint of the Proposed Action includes the entire lease area, access/utility easement, silt fence, swale areas, and overhead utilities extending to an existing utility pole on the east side of Old Pearson Road. In total, the Proposed Action area would total approximately 0.4 acres. No tree clearing or trimming is anticipated for the Project, though removal of minimal ruderal vegetation (grasses and weeds) within the previously cleared and graded site footprint would occur. Site Plans are provided in Figures 3-2, 3-3, and 3-4 below.

Construction work for the Proposed Action would begin with the project areas being cleared and graded as necessary using a mini-excavator / skid steer and three 4-foot diameter caissons being drilled at the proposed tower legs to a depth of approximately 15 feet below ground surface. Proposed silt fencing would also be installed during this initial phase. Additional excavation activities would include preparation for tower grounding and fiber and power vaults and associated conduits. The standard workday for this project is expected to last from 7am to 7pm. The skid steer is expected to be required for three workdays, the excavator is expected to be required for three workdays, and the drill rig is expected to be required for five workdays.

Following initial civil work, concrete would be poured for the tower foundation and generator and equipment pads to be located in the tower compound. Following curing, concrete inspection and strength testing would be completed.

Once concrete inspections and strength testing are completed, a crane would be utilized to assemble the proposed lattice tower. The crane would be staged within the proposed project area and would be required for two workdays. Ice bridges, antennas and cables, vaults and conduits, generators, and the grounding systems would then be installed, followed by backfill and compaction activities, and installation of the proposed swales and culverts. Following completion of equipment installation and

power and fiber connection, power up and testing activities would be completed. Installation of gravel and landscaping (as necessary), barbed-wire fencing, security hardware, and site signage would mark the completion of construction for the Proposed Action site. In total, construction activities are anticipated to last approximately 60 days and are expected to begin in 2025.

The site location and additional site-specific design details are depicted below. Site maps, plans, and photographs are also provided in Appendix A.

Figure 3-1 Aerial Photograph

Figure 3-2 Site Plan with Power Utilities

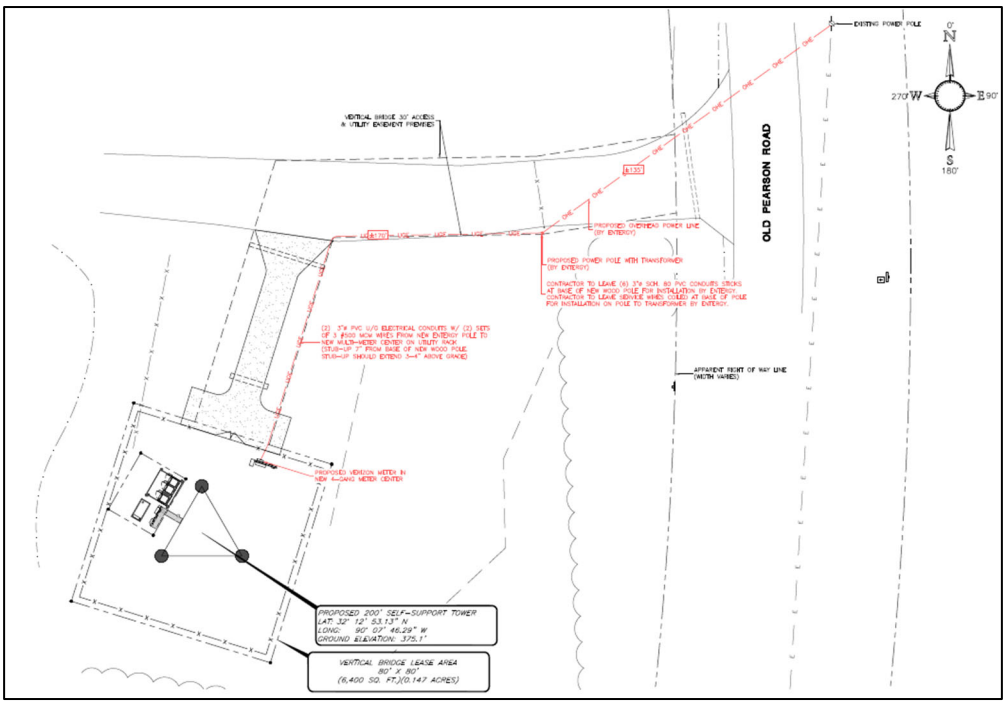


Figure 3-3 Site Plan with Fiber Utilities

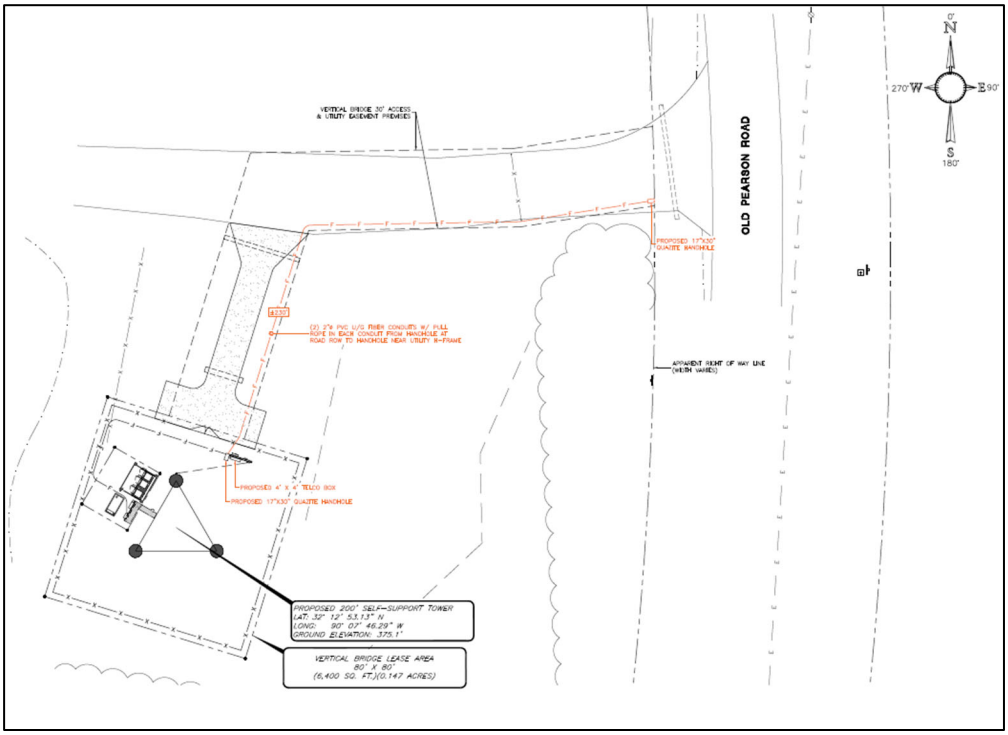
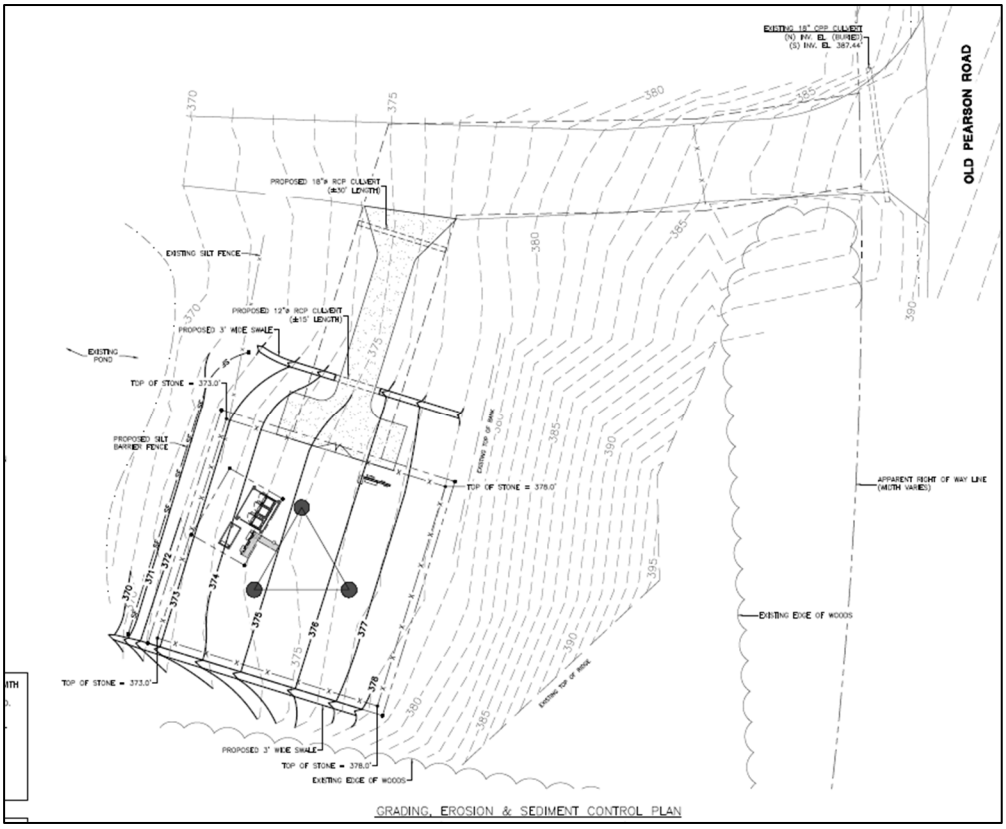


Figure 3-4 Site Plan with Stormwater and Sediment Controls



3.3 No Action Alternative

The "No Action" Alternative, which must be assessed in accordance with Federal NEPA regulations, assumes no Federal funding is provided by the Middle Mile Grant Program for the construction of the wireless telecommunications facility. The existing communications infrastructure in areas surrounding the Proposed Action would continue to operate in their current capacity with no changes to communications capabilities for the surrounding communities and would provide no relief to the unserved or underserved rural communities.

Benefits of the No Action Alternative would include avoiding any potential impacts to the project site location as a result of construction activities for the new tower facility (such as the generation of emissions of particulate matter, noise, and solid waste or impacts to any cultural resources) as well as any potential impacts to aesthetics in the area surrounding the project site.

3.4 Alternatives

Based on the purpose and need of the Proposed Action, a total of three alternatives were considered during the EA Process:

1. Proposed Action Alternative: Construction, operation, and maintenance of the Proposed Action in order to best satisfy the carrier's coverage objective within the search ring.
2. Other Tower Locations: Two other site locations within the search ring were considered. The first alternative location considered was an existing self-supporting lattice telecommunication

structure located at 32.219188°N, 90.130048°W, approximately 1,600 feet north of the Proposed Action location. The second location was a new tower located at 32.220053°N, 90.130730°W, approximately 1,950 feet to the northwest of the Proposed Action location.

3. No Action Alternative: The Proposed Action would not be constructed, and residents in the surrounding area would remain underserved in regard to voice and data communications.

While all three alternatives were considered, only the Proposed Action Alternative and the No Action Alternative are being carried forward for analysis in this EA. The "Other Tower Locations" alternative is further discussed below in Section 3.5, Alternatives Considered but Eliminated from Further Discussion.

3.5 Alternatives Considered but Eliminated from Further Discussion

The first Other Tower Location that was considered but eliminated from further discussion was an existing tower located north of the Proposed Action location. The tallest available colocation height on this tower was 168 feet, which would not satisfy the 200-foot height the carrier required to meet their coverage objectives. The second Other Tower Location that was considered but eliminated from further discussion was a new tower located to the northwest of the Proposed Action site, within the proposed search ring. This location has a ground elevation approximately 20 feet less than the Proposed Action location. The tower height required to match the height needed to satisfy the coverage objectives would not have been feasible due to zoning restrictions in the area.

4.0 Description of the Affected Environment

4.1 Noise

Noise can be broken into two groups, ambient and anthropogenic. Ambient noise tends to originate from natural sources such as wind and wildlife. Ambient noise levels in and around the general Proposed Action are primarily low and limited due to the rural and residential nature of the project area. Anthropogenic noise levels around the Proposed Action originate from adjacent roadways and rural residential developments. Data from the Mississippi Department of Transportation's Traffic Count Application estimates an Annual Average Daily Traffic count of 3,600 vehicles along Old Pearson Road in 2023 (MDOT 2024). The typical sound level of road traffic from approximately 50 feet away is about 85 dBA (Center for Environmental Excellence 2025). The Proposed Action Area is zoned as Residential Estate mix (Rankin County Map Viewer 2025). According to the Rankin County Ordinances, there is no applicable sound ordinance for this zoning category. Development in the immediate area surrounding the project is very low density, however, there is an increased number of residential developments further away from the Proposed Action area. Numerous residences and a church which may be considered sensitive receptors are located within 0.5 miles of the Proposed Action. The nearest residence is approximately 300 feet south of the Proposed Action and fronts Old Pearson Road. A church, Ebenezer CME Church, is located approximately 1,400 feet northeast of the Proposed Action. These resources each front roadways and would experience similar anthropogenic noise levels from typical roadway traffic. In addition, there are no passive parks, preserves or other sensitive receptors within 0.5 miles of the project site.

4.2 Air Quality

Under the Clean Air Act (CAA), the US Environmental Protection Agency (USEPA) establishes National Ambient Air Quality Standards (NAAQS) to protect public health and welfare (see 40 CFR 50). The CAA requires states to regulate air pollution emission sources to meet and maintain NAAQS, which establish maximum acceptable concentrations for criteria pollutants, including nitrogen dioxide (NO2), carbon monoxide (CO), sulfur dioxide (SO2), particulate matter with an aerodynamic diameter of 10 microns or less (PM10), particulate matter with an aerodynamic diameter of 2.5 microns or less (PM2.5), ozone (O3), and lead. According to the Mississippi Department of Environmental Quality (MDEQ) Air Quality Division, the state implementation plan strategy for NO2, CO, SO2, PM10, PM2.5, O3, and lead meet the national ambient air quality standards (MDEP 2024). In addition, no applicable permits are required for any stationary or operational equipment, including the proposed generator.

The Proposed Action site is located in an attainment area for the above listed criteria pollutants (EPA Nonattainment and Maintenance Area Dashboard).

4.3 Geology and Soils

Geologically, Proposed Action site is located within the Jackson Prairie Physiographic Region of the Coastal Plain Physiographic Province. This region is characterized by broad hills and irregular plains. Historically, vegetation consisted of mixed hardwoods and pine forests with irregular prairies. Today, the region has several uses, including grazing, livestock, agriculture, and forested and pine plantations (Natural Atlas 2025).

The Proposed Action site is located within the Loess Plains of the Mississippi Valley Loess Plains ecoregion, specifically within the Loess Plains Plain subregion. This region is characterized primarily of irregular plains and some gently rolling hills. Oak-hickory, oak-hickory-pine, and some mixed mesophytic forests were the dominant natural vegetation. Today, there is a mosaic of forest and cropland. Once a highly productive agricultural area in Mississippi, the Loess Plains ecoregion is now reverted to a mixed forest landscape with many areas now in pine plantations (U.S. Environmental Protection Agency 2024). According to the USDA Web Soil Survey (Appendix C), soils located within the Proposed Action site consists of Tippah silt loam, 2 to 5% slopes (35B2) and Smithdale-Providence complex, 8 to 17% slopes (65D). Tippah is classified as “All areas are prime farmland” and Smithdale is classified as “Not prime farmland.” Portions of the Proposed Action footprint that are mapped as prime farmland soils are occupied by an existing dirt drive which would be utilized for access and utilities routing for the proposed facility. Additionally, the Proposed Action site was not identified on the Protected Agricultural Lands Database.

A Geotechnical Investigation Report prepared for the Proposed Action by Delta Oaks Group and dated November 18, 2024, noted drill refusal and weathered rock at 38 to 40 feet below ground surface (bgs), suggesting the presence of bedrock at this approximate depth (Appendix C). Soils lying above refusal depths consisted of sandy clay, lean clay, and clayey sand with limestone fragments encountered at 20 to 30 feet bgs.

4.4 Water Resources

Surface Water

According to the Natural Resources Review Update (NR Update) prepared November 4, 2024, the Proposed Action site is not located within or near surface waters. A pond is noted on the provided

Construction Drawings; however, this feature is better characterized as an area of standing water. A review of aerial photographs shows that this feature formed within the past five years in association with the dirt road that was constructed in relation to the previous land use of the parent tract for what appear to be borrow operations further to the west. This feature is located approximately 25 feet to the west of the edge of the proposed lease area. The nearest mapped feature is a stream located approximately 1,300 feet to the west. Additionally, the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory indicated no wetlands within or in the immediate vicinity of the footprint of the Proposed Action site (Appendix D).

Groundwater

According to the USEPA, the Proposed Action site is not located near a Sole Source Aquifer (USEPA Map of Sole Source Aquifer Locations, 2025). Based on a review of USGS's National Water Information System data, depth to groundwater at the Proposed Action area is likely greater than 90 feet. The most recent regional groundwater depth measurement is from a well located approximately 0.10-miles southwest of the proposed action area, with a well depth of 760 feet. The Geotechnical Investigation Report referenced in Section 4.3 did not encounter groundwater to 40 feet bgs.

Coastal Zone, Estuary and Inter-tidal Areas

The Proposed Action site is not located within or near coastal zones, estuaries, or inter-tidal areas (USFWS Coastal Barrier Resource System 2024) (Mississippi Office of Coastal Resources Management 2025).

Floodplains

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 28121C0309F dated June 9, 2014, the Proposed Action area would not be located within a Special Flood Hazard Area of the 100-year floodplain (Appendix D).

Wild and Scenic Rivers

According to the National Wild and Scenic Rivers System, the Proposed Action site is not located within or adjacent to a Wild and Scenic River corridor (National Wild and Scenic Rivers System 2024). The nearest Wild and Scenic River is Black Creek, located approximately 100 miles from the Proposed Action site.

4.5 Biological Resources

Threatened and Endangered Species

The Endangered Species Act (ESA) requires that federal agencies, in consultation with the U.S. Fish and Wildlife Service (USFWS), must ensure that projects they fund, authorize, or carry out are not likely jeopardize the continued existence of listed species nor result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any species listed under the ESA.

Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) regulates state-listed threatened and endangered animal species. The capture, trap, take, or killing of state-listed threatened and

endangered animal species is unlawful unless expressly authorized under a permit issued by the USFWS or MDWFP.

The proposed action area is most cleared and graded land and an existing dirt drive. Vegetation, if present, is generally ruderal in nature and consists of successional weeds and grasses. Adjoining areas consist of mixed pine/hardwood forest and disturbed areas. Based on the disturbed nature of the Proposed Action area, wildlife utilization is expected to be minimal but may consist of typical wildlife species of the area including songbirds, deer, racoons, opossums, racoons, squirrels, snakes, and lizards.

An Official Species List generated from the US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool was reviewed for federally listed and proposed threatened and endangered species that may be present at the Proposed Action site. Further, The MDWFP Rare, Threatened, and Endangered Species report was reviewed for state and federally listed species that have been documented by MDFWP as occurring in Rankin County. A list of these species is provided in Table 4-1 below. Further discussion of specific habitat generally occupied by the identified species is included in Section 5.5 and within the Natural Resources Review and Natural Resources Review Update prepared for the Proposed Action site and included in Appendix E.

Table 4-1: Federally and State Endangered or Threatened Species

Common Name	Scientific Name	Federal Status (IPaC)	State Status
Tri-colored Bat	*Perimyotis subflavus*	Proposed Endangered	Candidate
Alligator Snapping Turtle	*Machrochelys temminckii*	Proposed Threatened	-
Monarch Butterfly	*Danaus plexippus*	Proposed Threatened	-
Gulf Sturgeon	*Acipenser oxyrinchus desotoi*	Threatened*	Endangered
Ringed Map Turtle	*Graptemys oculifera*	Threatened*	Endangered
Inflated Heelsplitter	*Potamilus inflatus*	Threatened*	Endangered
Louisiana Black Bear	*Ursus americanus luteolus*	-	Endangered

*Federal status per MDWFP Rare, Threatened, and Endangered Species report; Not included on Federal IPaC Official Species list

Critical or Threatened / Endangered Habitat

The Proposed Action is located within the Mississippi Valley Loess Plains ecoregion. This region is characterized by primarily of irregular plains and some gently rolling hills (see discussion in Section 4.3) (USEPA 2024).

According to the USFWS Critical Habitat Mapper and the IPaC Official Species List reviewed, no designated or proposed critical habitat is located within the vicinity of the Proposed Action site. Additionally, no suitable habitat for endangered or threatened species exists within the footprint of the Proposed Action site (See Table 5-1).

Migratory Birds, Eagles, and Their Habitat

Executive Order 13186 requires Federal agencies to work with the USFWS to provide protection for migratory birds. These species are protected under the 1918 Migratory Bird Treaty Act (MBTA) (16 USC 703), which prohibits the taking of any migratory birds, their parts, nests, or eggs.

Eagles are protected by the MBTA and the Bald and Golden Eagle Protection Act (BGEPA). This law, originally passed in 1940, provides for the protection of the bald eagle and the golden eagle (as amended in 1962) by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). "Take" includes pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb (16 U.S.C. 668c; 50 CFR 22.3).

A list of Migratory Birds identified by IPaC can be found Appendix E. The Proposed Action site is located within the Mississippi North American Migratory Bird Flyway. Based on the cleared nature of the Proposed Action site, it is anticipated that the site would provide less than optimal habitat for migratory birds. Minimal vegetation is present that could provide opportunities for migratory bird nesting or foraging or the general presence of migratory birds.

Breeding territories for bald eagles in Central Mississippi are located mostly along rivers and near reservoirs with large, tall (40 – 120 ft) trees for nesting and roosting. Nests are usually located within one mile of water, such as lakes, reservoirs, creeks, or rivers, and are often located in the ecotone between forest and water. The Proposed Action site is surrounded primarily by cleared and wooded land and residential development. The nearest large body of water is over twelve miles to the northeast (Ross R Barnett Reservoir). Based on a review of data available through iNaturalist.org and ebird.org data, the nearest eagle observation is approximately 8 miles to the north of the Proposed Action.

Wetlands Habitat

The Proposed Action site does not include areas that would provide wetlands habitat for protected species or other wetland-dependent species. As discussed in Section 4.4, a man-made wetland area may be present within approximately 25 feet to the west of the proposed lease area. Although wetland dependent species such as frogs and turtles may utilize this apparently disturbed area, the area is not anticipated to provide suitable habitat for protected species.

4.6 Historic and Cultural Resources

Archaeological and Architectural Resources

The Proposed Action site is not occupied by historic structures.

In July of 2020, the Advisory Council on Historic Preservation (ACHP) approved amendments to the *Program Comment to Avoid Duplicative Reviews for the Wireless Communications Facilities Construction and Modification*. This Program Comment allows select agencies, including NTIA, to rely on existing Federal Communications Commission (FCC) Section 106 procedures for those undertakings also subject to *Section 106 review under the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the FCC* (FCC Nationwide PA) and the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas*, as amended (FCC Collocation PA).

A Phase I Cultural Resources Survey was originally conducted in 2022 per the Mississippi Department of Archives and History (MDAH) state guidelines and the FCC Nationwide PA for the Proposed Action site for the purpose of identifying and addressing potential impacts to historic and cultural resources that may be located within the areas of potential effects (APEs) for the Proposed Action. Cultural

records and databases were reviewed and identified no cultural resources and no surveys within the APE for direct effects. No Historic Properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP) were identified within the ¾-mile APE for visual effects. The Phase I survey did not uncover cultural resources within the APE for direct effects. The Proposed Action site is not occupied by historic structures.

Subsequently, two addendum letters were submitted to the MDAH to address changes to the proposed undertaking. An Archaeology Addendum to the original FCC Form 620 was submitted to the MDAH on October 25, 2024. An Addendum to FCC Form 620 was also submitted to the MDAH on November 5, 2024, addressing changes to the proposed design and stating that the tower would now be constructed by The Towers, LLC instead of by Verizon Wireless (Appendix F). No responses were received from the MDAH within the Nationwide PA mandated 30-day review period. The updated cultural records and databases were reviewed and identified no cultural resources on one survey (22-0371) within the APE for direct effects. No Historic Properties that are listed in or eligible for listing in the NRHP were identified within the ¾-mile APE for visual effects. A new Phase I survey was not conducted within the APE for direct effects as the alterations to the project plans do not significantly alter the archaeological findings of the 2022 Phase I Cultural Resources Survey, and the Proposed Action site is not occupied by historic structures.

Native American Traditional, Cultural or Religious Resources

Eleven federally recognized Tribes were identified that may attach religious and cultural significance to historic properties within the area of the Proposed Action site. Each interested tribe received initial notification from the Tower Construction Notification System (TCNS) system by August 26, 2022. Additionally, tribes were provided with updates to the proposed site plans on October 31, 2024, with their review period completed on November 30, 2024. All tribal responses and requests for information were met as shown in the Appendix F table "Tribal Correspondence Summary Table." Further discussion of Tribal consultation efforts is provided in Section 5.6.

4.7 Aesthetic and Visual Resources

The Proposed Action site is located within a dirt drive extending west from S Pearson Road and within a cleared/vacant lot. The surrounding area is generally characterized by rural, residential development, wooded, and grassed lands, and transportation development. Utilizing the ¾-mile Area of Potential Effects for Historic Resources, there were no sensitive visual receptors identified.

A review of the Mississippi Department of Archives and History HRID mapper, the National Map Viewer, the National Park Service Map Finder, and Google Earth indicated no recreational areas, natural features, notable architectural features, designated wilderness or wilderness study areas, national scenic or historic trails, or national or state parks are located within the vicinity of the Proposed Action site.

4.8 Land Use

Based on a site visit completed in 2022 and a review of recent aerial photography (2020-2023) the Proposed Action site consists of an area that was previously cleared and used as a borrow operation (soil and/or gravel). The Proposed Action site is zoned as Residential Estate mix (Rankin County Map Viewer 2025), is not currently developed, and does not appear to have been used for borrow

operations since 2022. Surrounding land use for the site is characterized by wooded and grassed land, and residential and transportation development.

4.9 Infrastructure

Infrastructure within close proximity to the Proposed Action site generally consists of a public road (S Pearson Road) from which access to the proposed facility would be provided. No additional infrastructure, such as power, water, or communications, are located within the footprint of the Proposed Action site, though the potential exists for buried utilities along the S Pearson Road right-of-way. A proposed power pole would be located within the proposed access/utility easement that would connect to an existing power pole across the S Pearson Road via overhead power lines. Any existing buried utilities within the S Pearson Road right-of-way, would be identified prior to construction via the state 811 calls as discussed below in Section 5.11.

4.10 Human Health and Safety

The Proposed Action site is currently a dirt drive adjacent to S Pearson Road and a cleared/vacant lot. The current operations at the Proposed Action site present no concerns to human health and safety. The Proposed Action site appears to have been cleared/graded, and a road constructed in association with a borrow operation but no longer has any current use and remains undeveloped and occupied by an unimproved dirt road. No hazardous waste sites or registered USTs were identified within the immediate vicinity of the Proposed Action (GARD database and EPA UST Finder).

Human health and safety concerns for the Project Area may results from the proximity of the proposed infrastructure and individual residences where damage to human health or property could occur if a tower were to fall. The local jurisdiction requires a 200-foot setback radius from residences. The proposed tower would be 361 feet from the nearest residence. Utilities servicing the towers would be buried along easements and would be extended overhead across S Pearson Road. Buried utilities would be marked with tracer lines, warning tape, and contained within conduit. Federal regulatory requirements addressing worker safety, protection, and health are administered and enforced by the Occupational Safety and Health Administration (OSHA). OSHA establishes worker protection standards that must be followed to prevent and minimize potential safety and health risks. Mississippi is not a state with an approved OSHA state plan, meaning federal OSHA regulations apply directly within the state. During construction, OSHA safety standards will be enforced for contractors and their employees. Following construction, there would be no threats to human health and safety from either the tower or the broadband equipment. The tower site will be fenced and posted to prevent unauthorized access to the tower. “NO TRESPASSING” signs will be posted. Climbing pegs will be removed from the tower below 10'. The installation of broadband will likely have a positive impact on the health of residents in the community, since they will be able to access telehealth services. Electromagnetic energy emitted by antennas will be below the permissible limits under the FCC’s exposure limits, as required.

5.0 Analysis of Environmental Impacts

5.1 Noise

The Proposed Action would result in a negligible and temporary increase in anthropogenic noise levels during construction and installation activities. Anthropogenic noise sources have the highest potential to generate noise pollution and are further described below with the specification noise

levels for such equipment per Federal Highway Administration Construction Noise Handbook ([FHWA] 2017).

Anthropogenic potential noise from the construction of the Proposed Action could include the following temporary noise:

• Mobile equipment (i.e., equipment that operates in a cyclic fashion in which a period of full power is followed by a period of reduced power), including earth moving equipment such as an excavator (85 a-weighted decibels [dBA]), a crane (85 dBA), a skid steer (80dBA) a trencher or other equipment greater than 5 horsepower (85 dBA), haul or dump trucks (84 dBA), a concrete mixer truck (85 dBA), and passenger vehicles such as pickup trucks (55 dBA).

Anthropogenic potential noise from the operations of the Proposed Action could include the following:

• Stationary equipment (i.e., equipment that generates noise from one general area), including a backup generator (67 dBA with Sound Attenuated Enclosure).

• Mobile equipment including passenger vehicles such as pickup trucks (55 dBA).

No impact equipment (i.e., equipment that generates impulsive noise) is expected.

Construction activities would occur five days per week only during daytime hours. Following construction, increases in anthropogenic noise levels would also be negligible and would result from occasional and temporary noise associated with the operation of backup generators in the event of a power outage in the project location. The generator used would be the Kohler 30REOZK which runs a self-test lasting approximately 30 minutes and would occur monthly. The test runs at a lower, quieter RPM (67dBA) to ensure the system is running properly while consuming less fuel. The generator is expected to produce 81 dBA during maximum operating load. Additionally, technicians would visit the site once per month on average for standard maintenance. In the case of emergencies or the need to service or replace equipment, more frequent visits would be required, although the increased frequency would be temporary and insignificant in nature. The decibel level of the generator at maximum operating load would be considered high if a sensitive receptor were in the immediate vicinity of the generator and were to experience prolonged exposure. The nearest sensitive receptor is a residence located approximately 300 feet south of the Proposed Action and fronting Old Pearson Road. A church, Ebenezer CME Church, is located approximately 1,400 feet northeast of the Proposed Action. Neither of these sensitive receptors would experience prolonged exposure to anthropogenic noise levels, as these increase noise levels would be temporary in nature. Further, a dense forest buffer is located between the Proposed Action and the nearby residence, further buffering the anticipated equipment/generator noise. Based on distance, noise associated with the project is not anticipated to be perceptible from Ebenezer CME Church. Therefore, no appreciable level of sustained increased noise is anticipated to affect sensitive receptors either during construction or the operation and maintenance of the Proposed Action.

A No Action Alternative would not result in a change in noise levels at the Proposed Action site and would therefore have no adverse noise impacts.

5.2 Air Quality

The Proposed Action would result in negligible and temporary increase in air emissions at and near the Proposed Action site during construction and installation activities as a result of equipment operation and ground disturbing activities. Both equipment operation and ground disturbing activities would be temporary and would occur during the 60 days of anticipated construction at the Proposed Action site. During construction, emissions from the excavator, skid steer, and crane would occur only for a few days and are anticipated to be minimal in the context of State of Mississippi air quality standards, which are consistent with the Primary and Secondary National Ambient Air Quality Standards. During the operation phase, air emissions may occur only periodically in association with operation of the proposed back-up generator. Further, considering that the Proposed Action is located within an air quality attainment area, there are no specific non-attainment or maintenance area restrictions associated with air emissions at the Proposed Action location. Only generator engines meeting current EPA air quality standards would be utilized. No air quality permits are required for construction or operation of the Proposed Action, including the proposed back-up generator (Mississippi Commission on Environmental Quality 2025). Once construction is complete, a minor source of air pollution may be the occasional use of the back-up generator for monthly 30-minute self-testing and during power outages.

In order to minimize the generation of airborne particulate (dust) emissions as a result of ground disturbance, best management practices (BMPs) (e.g. wetting and stabilizing exposed soils, minimizing exposed soils, and minimizing traffic across unpaved areas) would be implemented. Additionally, the maximum footprint of the Proposed Action site would total approximately 0.4 acres, thus minimizing the amount of exposed soil subject to dust generation. Further, development activities would be subject to both state and local air quality regulations in accordance with the Ambient Air Quality Standards for Mississippi.

A No Action Alternative would result in no construction or operations activities at the project location and therefore would have no impact to the air quality within the vicinity of the Proposed Action site.

5.3 Geology and Soils

The Proposed Action would result in ground disturbing activities measuring approximately 0.4-acres. There are no unusual geologic features, known occurrences of important minerals, or known sensitive geologic features present within the Proposed Action area. No sinkholes, fissures, or other karst features were observed nearby the project area. No impacts on geologic resources are anticipated. According to a Geotechnical Investigation Report dated November 18, 2024, auger refusal was met at an approximate depth of 38 to 40 feet, likely indicating the top of bedrock. The potential for soil erosion would be addressed through the implementation of erosion and sediment control best management practices, including the installation of drainage swales and silt fencing downslope of the Proposed Action area. No adverse impacts to soils are anticipated as a result of the Proposed Action. A majority of the Proposed Action area would not occur within soils designated as prime or unique farmlands or farmlands of statewide or local importance (See Appendix C). However, a small portion of the proposed access/utility easement overlays soil classified as prime farmland. This area is currently occupied by a dirt drive which would be utilized for access and utilities routing to the proposed facility. Based on the small scale of soil disturbance that would be required for the Proposed Action and the unchanged uses of mapped areas of prime farmland (existing dirt drive),

impacts to the quality of soil or surrounding soil and geologic conditions would be negligible and no adverse impacts to prime farmland would occur.

A No Action Alternative would result in no construction or installation activities at the Proposed Action site and therefore no impact to geologic conditions or soils.

5.4 Water Resources

The Proposed Action would not result in impacts to wetlands or surface waters and is not located within a sole source aquifer area or within a Special Flood Hazard Area of the 100-year floodplain. The anticipated regional groundwater levels at the Proposed Action site would be well beneath the extent of any excavation activities, no water withdrawals are proposed, and the passive use of the proposed communications tower is not anticipated to result in adverse effects to groundwater quality. Based on the small footprint and relatively flat terrain of the Proposed Action site, changes to existing stormwater runoff rates or impacts to water resources as a result of erosion and sediment runoff are expected to be non-existent or negligible. Where applicable, sediment and erosion control best management practices would be implemented, such as silt fencing or sediment traps, and erosion control mats. The proposed implementation of stormwater management measures are expected to minimize the effects to water resources. A pond is noted on the provided Construction Drawings, however, this feature is better characterized as an area of standing water. A review of aerial photographs shows that this feature formed within the past five years in association with the dirt road that was constructed in relation to the parent tracts previous land use. Therefore, no impacts to water resources are likely to result from the Proposed Action.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to water resources.

5.5 Biological Resources

Based on a review of the information provided by IPaC, MDWFP, site inspections, and a Natural Resources Review and Natural Resources Review Update, the Proposed Action site would not provide suitable habitat for federally or state listed or proposed species (See Table 5-1). However, potentially suitable habitat for the proposed endangered tricolored bat (*Perimyotis subflavus*) is present within 1,000 feet of the proposed action area. The tricolored bat roosts in clusters of leaves from live or recently dead deciduous hardwood trees. The area surrounding the Proposed Action area consists of hardwood trees that may provide suitable roosting habitat for the tricolored bat, however, no suitable tricolored bat habitat is present within the footprint of the Proposed Action, and no tree trimming or removal is proposed. No sinkholes, fissures, or other karst features were observed nearby the project area nor were large culverts or bridges.

Proposed species are not protected by the take prohibitions of the Endangered Species Act (ESA). However, under Section 7(a)(4) of the ESA, federal agencies must confer with the USFWS if their action will jeopardize the continued existence of a proposed species. Based on the small size of the proposed project and the lack of suitable habitat within the project footprint, the Proposed Action is not likely to jeopardize the continued existence of the tricolored bat.

According to a recently published (October 23, 2024) Northern Long-Eared Bat and Tricolored Bat Range-Wide Determination Key (DKey), for actions that may affect a proposed species, agencies cannot consult, but they can confer under the authority of section 7(a)(4) of the ESA. Such

conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the TCB be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the TCB range that previously received a No effect (NE) or may affect, not likely to adversely affect (MANLAA) determination from the key to confirm that the determination is still accurate.

On October 25, 2024, the above-referenced DKey (Appendix E) and was completed and a MANLAA finding was returned. The 15-day review period for the Dkey elapsed without comment from the USFWS, therefore no further coordination with their office is required for this species unless either of the following occurs:

- New information reveals effects of the action that may affect the northern long-eared bat or tricolored bat in a manner or to an extent not previously considered; or,
- The identified action is subsequently modified in a manner that causes an effect to the northern long-eared bat or tricolored bat that was not considered when completing the determination key.

Considering the age of the IPaC Official Species list generated on October 25, 2024, an updated list was generated on February 11, 2025. No changes to the previous list were noted except that the monarch butterfly, which was previously a federal candidate species, is now a proposed threatened species. Considering the small size of the proposed project and the lack of suitable habitat, the project would not jeopardize the continued existence of this species and no further consultation with the USFWS is needed.

Additionally, a consultation request was submitted to the MDWFP for the Proposed Action. The MDWFP responded on October 7, 2022, concluded that there are no records of rare, threatened, or endangered species or communities in the vicinity of the proposed cell tower project. However, the MDWFP recommended best management practices (BMPs) be property implemented, maintained, and monitored (particularly measures to prevent, or at least, minimize negative impacts to water quality). A Natural Resources Review Update dated November 4, 2024 was prepared to address minor modifications to the proposed communications facility design. Due to the minor increase in size of the proposed development, and the existing conditions at the site, and the presence of cleared land and an existing dirt drive in the Proposed Action footprint, it was concluded that no further consultation with MDWFP would be necessary. Documentation of the Natural Resources Review and Natural Resources Review Update prepared for the Proposed Action site and MDWFP consultation is provided in Appendix E. A current list of species identified by USFWS as potentially occurring at the Proposed Action site along with suitable habitat descriptions and a finding of effect for each is provided in Table 5-1 below.

Table 5-1: Federally Endangered or Threatened Species Findings Summary

Common Name	Scientific Name	Federal Status (IPaC)	State Status	Habitat	Finding of Effect
Tricolored bat	*Perimyotis subflavus*	Proposed Endangered	Candidate	Proposed Action located in Zone 1 year-round active zone; Primarily roost among living or dead leaf clusters of live or recently dead deciduous hardwood trees; Winter torpor in culverts, tunnels, bridges and trees	No suitable habitat within Proposed Action footprint; May affect, not likely to adversely affect finding determined through completion of IPaC DKey; No jeopardy while species remains proposed
Alligator snapping turtle	*Macrochelys temminickii*	Proposed Threatened	-	Slow-moving, deep water of rivers, sloughs, oxbows, and canals or lakes associated with rivers; Nest adjacent to such waters	No suitable habitat; No jeopardy
Monarch butterfly	*Danaus plexippus*	Proposed Threatened	-	Overwintering habitats of the eastern North American population consist of high altitude Mexican conifer forests; Within eastern North America, breeding areas are virtually all patches of milkweed	No suitable habitat; No jeopardy

**List includes only species identified within the Federal IPaC Official Species List; State listed species excluded based on MDWFP consultation*

Migratory Birds and their Habitats

Per the USFWS *Recommended Best Management Practices for Communication Tower Design, Siting Construction, Operation, Maintenance, and Decommissioning* (USFWS, 2021), "evidence suggests that night-migrating songbirds are either attracted to or disoriented by tower obstruction warning lighting systems, especially during overcast (i.e., low cloud ceiling), foggy, or otherwise low visibility conditions. Birds aggregate in larger numbers at towers with non-flashing lights compared to those with flashing lights, although birds aggregate at flashing lights during the "on" phase, they disperse during the "off" phase. Additionally, birds moving across the landscape at night (e.g. owl and seabirds) can collide with communications tower wires when they are placed in high movement areas." Further, communication towers may cause direct and indirect bird mortality through collisions with towers or guy wires or from exhaustion from circling a tower;

through construction, operation, and maintenance activities; and significant loss of fat reserves spent while circling towers, leading to reduced survival during long migrations.

The Grantee has proposed to construct a 211-foot tall (overall height) self-supporting lattice telecommunications structure. Based on the specifications of the proposed tower structure, the Grantee has conformed to USFWS-recommended siting and construction measures for new towers including 1) avoiding the use of guy wires, 2) utilizing the preferred lighting scheme for tower structures (flashing white/red lights), 3) selecting already degraded areas for tower placement, 4) not siting the tower in or near known bird concentration areas, or in known migratory bird movement routes, daily movement flyways, areas of breeding concentration, in habitat of threatened or endangered species, key habitats for birds of conservation concern, or near breeding areas of prairie grouse, 5) avoiding ridgelines, coastal areas, wetlands, or other known bird concentration areas, and 6) designing tower and associated facilities so as to avoid or minimize habitat loss within and adjacent to the tower footprint. The presence of migratory birds engaged in migrating activities cannot be ruled out in the general vicinity of the Proposed Action site and the proposed tower structure may provide opportunities for nesting and/or perching. Further, considering the habitat present on site which consists of a dirt drive and a cleared/graded vacant lot, the Proposed Action site is not expected to provide quality migratory bird habitat, thus pre-construction nest clearance surveys are not deemed necessary. Considering the USFWS guidance and the specification of the Proposed Action, the Grantee has committed to mitigation measures that would decrease risks to migratory birds.

Considering the proposed measures, the project is not anticipated to adversely affect migratory birds.

Bald and Golden Eagles

The Applicant would comply with the Bald and Golden Eagle Protection Act, which prohibits the take of bald or golden eagles without authorization from the Secretary of Interior. Based on the data reviewed (inaturalist.org, 2024) and the lack of suitable breeding/foraging habitat within at least three miles of the Proposed Action, no impacts to eagles are anticipated. Should bald eagle nesting occur within 660 feet of the proposed site in the future, guidance provided in the *National Bald Eagle Management Guidelines* would be followed to minimize the potential for impacts to nesting eagles.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to biological resources.

5.6 Historic and Cultural Resources

In July of 2020, the Advisory Council on Historic Preservation (ACHP) approved amendments to the *Program Comment to Avoid Duplicative Reviews for the Wireless Communications Facilities Construction and Modification*. This Program Comment allows select agencies, including NTIA, to rely on existing Federal Communications Commission (FCC) Section 106 procedures for those undertakings also subject to *Section 106 review under the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the FCC* (FCC Nationwide PA) and the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas*, as amended (FCC Collocation PA).

The Mississippi Department of Archives and History (MDAH) was provided with a Phase I Cultural Resources Survey for the Proposed Action in 2022. The MDAH issued a "no cultural resources listed in or eligible for listing in the NRHP will be directly or visually affected" determination for above ground and archaeological resources for the Proposed Action. Subsequently, Addendum letters were sent to the MDAH in 2024 addressing changes to the proposed design and stating that the tower would now be constructed by The Towers, LLC instead of by Verizon Wireless. No response from MDAH was received within the 30-day review period. Based on the lack of response from MDAH and in accordance with the procedures set forth in the NPA, concurrence with their previous conclusion that "No Historic Properties are located within the Area of Potential Effect" was assumed. Documentation of MDAH consultation is included in Appendix F.

Eleven federally recognized tribes were identified that may attach religious and cultural significance to Historic Properties within the areas of each proposed undertaking. All Native American Tribes that have expressed interest within this area have either concurred with the project or expressed no further interest. Documentation of THPO consultation is included in Appendix F.

The No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to historic and cultural resources.

5.7 Aesthetic and Visual Resources

The Proposed Action would include the installation of a proposed 211-foot tall self-supporting lattice telecommunications tower. The proposed tower would be lighted with medium-intensity dual red/white flashing lights. Tower lights would be white during the day and red at night. Construction would occur only during daytime hours, thus there would be no construction-related lighting associated with the Proposed Action. No sensitive aesthetic or visual receptors are located within the viewshed of the Proposed Action, thus no adverse impacts to aesthetic and visual resources are anticipated.

A No Action Alternative would result in no construction activities or new additions to the landscape at the Proposed Action site and therefore would have no impact to aesthetic and visual resources.

5.8 Land Use

The Proposed Action would result minimal changes to the overall land use for the larger tract on which the Proposed Action would take place, and the Proposed Action would result in no changes to surrounding property land uses.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to land uses.

5.9 Infrastructure

The Proposed Action would require additional energy demands for the wireless facility, including a temporary increase during construction and installation activities. However, the overall increase in energy demand for the Proposed Action would be within the existing capabilities of local electrical distribution providers during construction and implementation as well as for continued operation of the wireless facilities. No new public roadways would be required for the construction of the Proposed Action, and since the Proposed Action involves unmanned wireless facilities, no water and sewer infrastructure would be required. While minimal impacts to local traffic would potentially

occur during the staging and construction portions of the Proposed Action, there would be no long-term impacts to traffic as a result of the operation of Proposed Action.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore would have no impact to infrastructure.

5.10 Human Health and Safety

Impacts to human health and safety under the Proposed Action alternative are expected to be minor and adverse over the short term; and beneficial over the long term with safety mitigation efforts included. During construction activities impacts to human health may occur. Impacts related to traffic management, utility line strikes, decreased air quality from dust and utility services, and accidental release of hazardous materials (i.e., fuels) could occur. However, mitigation efforts to manage traffic, identify buried utilities, dust management, and general protection of existing infrastructure will be in place under the Proposed Action alternative. Such measures would include performing utility locations prior to construction, discussing traffic management plan with State Department of Transportation agency officials, and dust suppression efforts. To reduce the potential for accidental releases of hazardous materials, fuels or other chemicals would be stored and maintained in designated staging areas. Additionally, an emergency spill kit containing absorption pads, material, shovel, and other cleanup items would be readily available for cleanup of chemical or fuel releases. Construction activities would be completed in a relatively short period. Additionally, during the operations and maintenance period of the tower, mitigation measures such as fencing and controlled access would be implemented. Limiting access to potentially dangerous equipment would mean that the operations of the towers does not lead to any adverse impacts to human health and safety over the long-term. No hazardous waste sites or registered USTs were identified within the vicinity of the Proposed Action (EPA Enviromapper 2025, MSDEQ, 2025). No ground disturbance is proposed within the S Pearson Road right-of-way, therefore, encounters with buried public utilities within the public right-of-way are not anticipated. Prior to conducting ground disturbing activities within the Proposed Action area, the Grantee would identify buried utilities through the use of 811 (call before you dig) and a private utility locator if necessary and would utilize permit-only workers qualified by training or experience to operate heavy machinery and equipment. During construction, Occupational Safety and Health Administration (OSHA) safety standards would be enforced for contractors and their employees. Following construction, the tower would be surrounding by chain-link fencing that would include gate access secured by a padlock to prevent and discourage public access to the site. Further, tower setbacks from individual residences required by the local jurisdiction (200 feet) would be followed to minimize the potential for human health and safety concerns in the event that tower would fall. Electromagnetic emissions (EME) from the proposed antennas would be reviewed by the carrier to ensure that emission levels are below the FCC exposure limits outlined in 47CFR § 1.1307, § 1.1310. The Proposed Action would result in no adverse impacts to human health and safety. The enhanced capabilities and reliability of voice and data communications resulting from the Proposed Action would be beneficial to human health by providing additional economic and educational opportunities and improved access to telehealth care services for Rankin County residents.

A No Action Alternative would result in no construction activities at the Proposed Action site and therefore negatively impact Rankin County and surrounding communities, who would continue to have diminished access to healthcare services.

6.0 Cumulative Impacts

Cumulative impacts are the incremental impacts on the environment from the Proposed Action, in addition to the environmental impacts from other past, present, and reasonably foreseeable future (i.e., 20 years) actions. Cumulative impacts can result from individually insignificant but collectively significant actions taking place over a period of time for a particular resource type or area of concern.

The Proposed Action is comprised of the construction and operation of a proposed 211-foot tall self-supporting lattice type tower and an associated facility that would be constructed within an area of less than 0.4-acres in size.

Based on a review of the Rankin County Comprehensive Plan 2023, there are no specific present or foreseeable actions for the Proposed Action area or adjoining areas. Impacts to the environment from the Proposed Action and associated actions, when combined with other past, present, or potential future actions, would be minimal. Further, the minimal negative impacts to the environment from the Proposed Action and associated actions would be greatly outweighed by the benefit to quality of life for the population surrounding the Proposed Action area. There are therefore no foreseeable cumulative effects that would result from the Proposed Action.

7.0 Applicable Environmental Permits and Regulatory Requirements

Table 7-1: Potential Applicable Statutory, Regulatory, and Other Requirements

Potentially Applicable Requirement	Relevant Project Information
All Resources	
National Environmental Policy Act (NEPA) of 1969 42 U.S.C. § 4321 et seq. Federal Aviation Administration Filing 14 CFR § Part 777 Section 77.9	NEPA requires all federal agencies to assess the environmental effects of their proposed actions; this Environmental Assessment fulfills that requirement. A draft EA was provided to the public for review for a 30-day comment period beginning 4/9/2024. No comments were received. FAA Aeronautical Study No. 2024-ASO-6349-OE Issue Date: 05/22/2024.
Vegetation, Wildlife, and Fish	
Endangered Species Act of 1973 16 U.S.C. § 1531 et seq.	Sections 7(a)(1) and 7(a)(2) of the Endangered Species Act requires federal agencies to aid in the conservation of listed species and ensure activities are not likely to jeopardize the continued existence of federally listed or proposed species or destroy or adversely modify designated critical habitat.
Waters, Wetlands, and Floodplain Protection	
Clean Water Act 33 U.S.C. § 1251 et seq. Floodplain Management Executive Order 11988 Protection of Wetlands Executive Order 11990	The Clean Water Act prohibits the discharge of any pollutant from a point source into navigable waters; no surface waters have been identified within or near the Proposed Action site. Executive Order 11988 requires federal activities to avoid adverse impacts to wetlands where practicable, and Executive Order 11990 requires federal activities to elevate structures located within floodplains above the base flood level where practicable; no wetlands or floodplains have been identified within or near the Proposed Action site. A pond is noted on the provided Construction Drawings; however, this feature is better characterized as an area of standing water. A review of aerial photographs shows that this feature formed within the past five years in association with the dirt road that was constructed in relation to the parent tracts previous land use
Cultural and Historic Resources	
National Historic Preservation Act (NHPA), as amended, inclusive of Section 106 54 U.S.C. § 306108 et seq.	Section 106 NHPA requires federal agencies to identify and assess the effects its actions may have on historic properties; the Section 106 review process has revealed no adverse effects on historic properties as a result of the Proposed Action.

Noise, Public Health, and Safety	
Federal Communications Commission (FCC)	47 CFR 1.1310 provides radiofrequency radiation exposure limits from FCC; the Proposed Action would comply with the criteria set forth in 47 CFFR 1.1310.

8.0 Consultations

Table 8-1: Agency Consultations

Agency and Name	Consultation	Status
United States Fish and Wildlife Service	Information for Planning and Consultation	Updated list pulled February 12, 2025.
Mississippi Department of Wildlife, Fisheries, and Parks	Protected Species and Natural Resources Consultation	Complete: MDWFP response received 10/7/2022
Mississippi Department of Archives & History – Hal Bell (601) 576-6940	Section 106 Historic Preservation Consultation	Complete: SHPO response received 10/19/2022 Addendum Letters sent October 25, 2024, and November 5, 2024. No response received from MDAH
Crow Creek Sioux Tribe Tribal Historic Preservation Office – Merle Marks (605) 245-2221	Section 106 Historic Preservation Consultation	Complete: THPO response received 8/24/2022
Alabama Coushatta Tribe Tribal Historic Preservation Office – Bryant J Celestine (936) 563-1100	Section 106 Historic Preservation Consultation	Complete: Final follow-up attempt = 10/27/2022 and cleared via Escalation on 11/11/2022
Coushatta Indian Tribe Tribal Historic Preservation Office - Dakota John (337) 584-1401	Section 106 Historic Preservation Consultation	Complete: Final follow-up attempt = 10/27/2022 and cleared via Escalation on 11/11/2022
Jena Band of Choctaw Indians Tribal Historic Preservation Office – Lille Williamson (318) 992-8258	Section 106 Historic Preservation Consultation	Complete: THPO response received 9/30/2022. Additional clearance received 11/7/2024
Mississippi Band of Choctaw Indians Tribal Historic Preservation Office – Kenneth H Carleton (601) 650-7316	Section 106 Historic Preservation Consultation	Complete: Final follow-up attempt = 10/27/2022 and cleared via Escalation on 11/11/2022
Bad River Band of Lake Superior Tribe of Chippewa Indians Tribal Historic	Section 106 Historic Preservation Consultation	Complete: No interest if no response within 30 days of 8/26/2022, cleared 9/25/2022

Agency and Name	Consultation	Status
Preservation Office – Edith Leoso (715) 682-7123		
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin Tribal Historic Preservation Office – Marvin Defor (715) 779-3761	Section 106 Historic Preservation Consultation	Complete: Final follow-up attempt = 10/27/2022 and cleared via Escalation on 11/11/2022
Choctaw Nation of Oklahoma Tribal Historic Preservation Office – Vangie Robinson (850) 924-8280	Section 106 Historic Preservation Consultation	Complete: THPO response received 9/21/2022. Additional clearance received 11/19/2024
Cherokee Nation Tribal Historic Preservation Office – Gwen Terrapin (918) 772-4165	Section 106 Historic Preservation Consultation	Complete: THPO response received 9/23/2022
Alabama Quassarte Tribal Town Tribal Historic Preservation Office – Mary Tiger (405) 452-3987	Section 106 Historic Preservation Consultation	Complete: Cleared via NOO on 8/26/2022
Tunica-Biloxi Tribe of LA Tribal Historic Preservation Office – Earl J Barbry Jr (318) 240-6451	Section 106 Historic Preservation Consultation	Complete: No interest if no response within 30 days of 8/26/2022, cleared 9/25/2022

9.0 References

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