U.S. Department of Transportation
Federal Aviation Administration

Southwest Region
Airports Division
Arkansas/Oklahoma Airports District Office

FAA ASW-630
10101 Hillwood Parkway
Fort Worth, Texas 76177

November 6, 2023

Aaron Burkes
Chief Operating Officer
Northwest Arkansas National Airport (XNA)
One Airport Blvd., Suite 100
Bentonville, AR 72713

Dear Mr. Burkes:

Enclosed is a copy of the completed environmental Finding of No Significant Impact – Record of Decision (FONSI-ROD) for the proposed construction of the new air traffic control tower at Northwest Arkansas National Airport (XNA). The FONSI-ROD should be attached to the Final Environmental Assessment to form the completed FONSI-ROD package.

If you intend to follow through with the project as planned, you are requested to announce the availability of the FONSI-ROD by way of legal notice or other suitable announcement. The announcement should be similar to the following:

> The Federal Aviation Administration (FAA), Southwest Region, after careful and thorough consideration of all facts and after coordination with appropriate local, state, and Federal agencies approved on November 6, 2023, an environmental Finding of No Significant Impact – Record of Decision (FONSI-ROD) for the proposed construction of the new air traffic control tower at Northwest Arkansas National Airport. The FONSI-ROD package is available for review at the Northwest Arkansas National Airport, located at One Airport Blvd., Suite 100, Bentonville, AR and online at https://flyxna.com.

Please provide our office a copy of the notice after publication in at least one newspaper of general circulation for the project area.

Also attached to the Final EA is the Preparer's Certification and Federal signature, making it a Federal document. Please ensure that this page is included in the final EA with the FONSI-ROD attached when it is made available for public review.

Thank you for your cooperation in this matter. If you need any additional assistance, feel free to contact me.

Sincerely,

KELLY MARIE OLIVER-AMY
Digitally signed by KELLY MARIE OLIVER-AMY
Date: 2023.11.06 14:47:56 -06'00'

Kelly Oliver-Amy
Environmental Protection Specialist

Attachments:
Finding of No Significant Impact – Record of Decision (FONSI-ROD)
Airport Traffic Control Tower (ATCT) Relocation, Northwest Arkansas National Airport

Environmental Assessment
Northwest Arkansas National Airport Air Traffic Control Tower (ATCT)
Northwest Arkansas Regional Airport Authority
Bentonville, AR

U.S. Department of Transportation
Federal Aviation Administration
Southwest Region

FINDING OF NO SIGNIFICANT IMPACT
And
RECORD OF DECISION

Airport Traffic Control Tower (ATCT) Relocation
Northwest Arkansas National Airport
Bentonville, AR

November 1, 2023

I. INTRODUCTION

The purpose of this Finding of No Significant Impact and Record of Decision (FONSI/ROD) is to briefly present the reasons why the approval of Federal actions supporting the proposed Airport Traffic Control Tower (ATCT) relocation at Northwest Arkansas National Airport (XNA), which serves the City of Bentonville, Arkansas, will not have a significant effect on the human environment. The Northwest Arkansas Regional Airport Authority, the owner of the airport, requested the following Federal actions:

- Federal Aviation Administration's (FAA) approval of the revised Airport Layout Plan with the proposed development.
- Implementation of the following actions: 1) construction of a new 155-foot tall ATCT on a new location near the existing ATCT, 2) relocation of utilities and equipment, 3) modifications to the airport's security fence, 4) construction of an access drive and associated landside parking, 5) removal of the existing ATCT and associated buildings, 6) beacon installation, and 7) changes in approach procedures.
- Federal funding for eligible components of the above development.

The FAA is the Federal agency responsible for the approval of the proposed federal actions outlined above and analyzed in the Environmental Assessment (EA). The FAA has determined that the Proposed Action will have no significant impact on the human environment.

Attached to this FONSI/ROD is the EA on which the finding is made.

II. SUMMARY

The EA was prepared pursuant to the provisions of the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality (CEQ) regulations (40 C.F.R. Parts 1500-1508). Additionally, the EA meets the guidelines identified in FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures* and 5050.4B, *NEPA Implementing Instructions for Airport Actions*.

No thresholds of significance were found to be exceeded in the EA. After review of the EA and other supporting documentation, the FAA determined that a FONSI/ROD was justified for the proposed airport improvements.

The Proposed Action is located entirely on the airport property and impacts do not rise to the level of significance or meet special purpose reporting requirements for all potentially impacted resources; therefore, the Draft EA was not disseminated for public review.

III. BACKGROUND

The Northwest Arkansas National Airport is a public use airport located southwest of the city of Bentonville, Arkansas just north of State Highway 264. The airport is owned and operated by the Northwest Arkansas Regional Airport Authority and is approximately 2,225 acres in size. The existing 57.7-foot tall ATCT at XNA has Line of Sight and Angle of Incidence deficiencies, limiting visual observations of current and future air traffic movement areas.

IV. PURPOSE AND NEED

An update to the Airport Layout Plan (ALP) was completed in April 2022. This update provided the location of the existing ATCT and proposed ATCT. A Siting Report (AJT Engineering Inc., 2022) identified Line of Sight and Angle of Incidence deficiencies associated with the existing ATCT when considering all current and future movement areas on the airport, examined alternatives, and recommended a new ATCT location.

A. Need for the Proposed Project

The need for the Proposed Action is described in Chapter 1 in the EA. The need is supported based on Northwest Arkansas National Airport's role within the National Plan of Integrated Airport Systems (NPIAS) as an air carrier airport. Northwest Arkansas National Airport's designation as an air carrier airport translates to the airport's level of importance within the national aviation system. Forecasts and facility requirements contained within the NPIAS assume that the airport will continue to fulfill its role within the national aviation system. In order to allow Northwest Arkansas National Airport to continue to fulfill its assigned role, it needs to be able to accommodate the existing and future requirements of the air carriers and all other aircraft operating out of the airport by providing a safe operating environment. To help do that, the airport needs to provide a fully functional and compliant ATCT to provide safety considering all current and future movement areas on the airport.

B. Purpose of the Proposed Project

The proposed solution to the need is to establish a newly functional ATCT with a height required to meet current FAA Line of Sight and Angle of Incidence requirements as specified in FAA Order 6480.4B for all movement areas on the airport and for the ultimate conditions presented in the most recent ALP update. All elements associated with the proposed solution are described in Chapter 2 in the EA.

V. ALTERNATIVES

The FAA explored and objectively evaluated reasonable alternatives that were considered practical and feasible in meeting the purpose and need. Chapter 2 of the EA describes the alternatives considered to meet the airport's purpose and need.

Two alternatives were proposed in the EA. These consisted of the Proposed Action as described above and the No Action Alternative. A detailed explanation of each alternative is provided in the EA and will not be repeated herein. Note that the No Action Alternative is always required to be analyzed in accordance with the CEQ regulations 40 CFR § 1502.14.

The FAA has determined in this FONSI/ROD that the Proposed Action is the FAA's preferred and selected alternative. In arriving at this decision, the FAA considered all pertinent factors, including the environmental impacts.

VI. ENVIRONMENTAL CONSEQUENCES

A. Potential Impact Resource Categories

The EA analyzed relevant environmental categories based on FAA Order 5050.4B, "*National Environmental Policy Act Implementing Instructions for Airport Projects*" (NEPA). Those resource categories that the selected alternative has the potential to impact are discussed below. Any mitigation measures proposed are discussed in Section VIII.

i. Air Quality

The Proposed Action will not affect future aircraft activity or operations, changes in runway use patterns, and taxi times. Temporary increases in emissions resulting from construction and demolition activities may occur for a limited period of time. This temporary increase will not rise to the level of significance.

ii. Biological Resources

The Proposed Action would directly affect approximately two acres of land located within a groundwater recharge zone that is within the range of the Ozark Cavefish and Benton County Cave Crayfish habitat. The U.S. Fish and Wildlife Service concurred with FAA's May Affect, Not Likely to Adversely Affect determinations for both species, as well as the Eastern Black Rail, the Neosho Mucket, Piping Plover, and Red Knot. Table 4 in the EA provides an impact summary for federally listed species habitat.

iii. Climate

Based on only a temporary influence on greenhouse gases (GHGs) during construction, no significant environmental impacts are expected concerning climate. The proposed construction and development activities are expected to include a temporary increase in GHG emissions; however, this increase will have minimal impacts to emissions of GHGs and any emissions of GHGs as a result of the proposed construction and development activities would be considered negligible compared to the annual U.S. emissions of GHGs. GHG emissions will not rise to the level of significance.

iv. Hazardous Materials, Solid Waste, and Pollution Prevention

The Proposed Action would have no direct impacts to known hazardous materials, solid waste, or hazardous waste sites. Short-term and temporary impacts may occur as a result of construction activities. Construction best management practices will be implemented during construction. Any waste generated will be handled according to applicable local, state, and federal guidelines.

v. Historical, Architectural, Archeological, and Cultural Resources

The Proposed Action will have no impacts to historic, architectural, archaeological, or cultural resources sites listed on or eligible for listing on the National Register of Historic Places. The Osage Nation concurred the project would not adversely affect any sacred properties or properties of cultural significance.

vi. Land Use

All elements of the Proposed Action are located on airport-owned property. The Proposed Action will not affect land use around the airport. No conflicts in land use planning are anticipated according to the Airport Layout Drawing (ALD). No direct or indirect land use changes are anticipated.

vii. Natural Resources and Energy

No adverse effects or exceedances of local or regional natural resources and energy supplies are anticipated. As the Proposed Action would relocate the existing ATCT and other proposed improvements do not require extensive energy demands, no substantial changes in energy requirements would result from the Proposed Action.

viii. Noise and Noise-Compatible Land Use

The Proposed Action will not result in any changes in aircraft operations, nighttime operations, airfield configuration, runway use, or aircraft fleet mix during construction or after the project is completed. The Proposed Action would have no effect on surrounding land uses as it is located entirely on airport-owned property and is fully compatible with airport operations. No noise or noise-compatible land use impacts will occur as a result of the Proposed Action.

ix. Socioeconomics

The Proposed Action is in alignment with future growth of the regional Northwest Arkansas economy and is not anticipated to directly impact airside or landside traffic patterns. Two new additional positions are anticipated in long-term airport planning; however, no new positions are anticipated by implementing the Proposed Action. No direct effects related to residential/business acquisitions or relocations, disruptions in established communities or planned developments, or children's environmental health and safety are anticipated as a result of the Proposed Action. Based on the analysis, no disproportionately high or adverse impacts to EJ populations are anticipated as a result of the Proposed Action.

x. Visual Effects and Visual Character

The Proposed Action would not produce additional light emissions other than those experienced from the existing ATCT as visible within the direct study area. The Proposed Action will adhere to lighting standards that would help mitigate potential light pollution. The overall setting of the airfield would not change drastically; therefore, no visual impacts to aircraft operations are anticipated. Temporary and additional safety lighting during construction is anticipated and will comply with design plans as developed. The Proposed Action would not change the visual character of the direct study area and is compatible with the existing visual character of the airport. The visual landscape as viewed looking toward the airport may change as viewed from the six residential locations; however, these residences may already see the existing ATCT. The new ATCT would not obstruct views of receptors around the airport and is not anticipated to provide stark contrast of the visual character surrounding the airport.

xi. Water Resources

The Proposed Action would not impact any surface waters, the emergent wetland in the study area, or floodplains. The Proposed Action requires approximately 2 acres of ground disturbance. Soil borings completed near the Proposed Action as part of a geotechnical report did not encounter subterranean voids. The Proposed Action, when incorporating construction and post-construction BMPs as identified in the Karst Area Initiative Species Protective Measures, is not likely to adversely affect groundwater within the Hewlett's Spring Recharge Area or the adjacent wetland.

All surface water leaving the area of the Proposed Action flows into stormwater detention and retention basins located on the airport and is stored and sampled before release.

B. Resource Impact Categories Unaffected by the Proposed Action or Alternatives

The other five environmental resources identified in FAA Orders 1050.1F and 5050.4B were determined not be impacted by the Proposed Action and the No Action Alternatives. These resources include coastal resources, Section 4(f), farmlands, Noise and Noise-Compatible land use, and wild and scenic rivers.

VII. AGENCY COORDINATION AND PUBLIC INVOLVEMENT

Consultation for the Proposed Action occurred with the State Historic Preservation Office (SHPO) regarding the presence of cultural historic and/or archaeological sites located within or near the Proposed Action. The SHPO responded with a finding of no historic properties affected (Appendix D of the EA). The Arkansas Natural Heritage Commission (ANHC) reviews included federal and state species and elements of special

concern. Their findings showed no records within the Proposed Action area, but noted it falls within the Hewlett's Spring Hole recharge area. ANHC correspondence is provided in Appendix D of the EA and are summarized in Section 3.4.1 of the EA. Consultation with the U.S. Fish and Wildlife Service (USFWS) resulted in findings of "no effect" and "may affect, not likely to adversely affect" for all currently listed federal threatened and endangered species. Coordination with the U.S. Army Corps of Engineers resulted in issuance of an Approved Jurisdictional Determination verifying the on-site wetland is non-jurisdictional under Section 404 of the Clean Water Act.

The Proposed Action is located entirely on the airport property and impacts do not rise to the level of significance or meet special purpose reporting requirements for all potentially impacted resources; therefore, the Draft EA was not disseminated for public review. The Proposed Action was discussed at several board meetings that were open to the public. The FONSI-ROD and final EA will be made available on the airport's website (*www.flyxna.com*) for the duration of the project.

VIII. CONDITIONS AND MITIGATION

As prescribed by 40 CFR §1505.3, the FAA must take steps as appropriate to the action, such as through special conditions in grant agreements, property conveyance deeds, releases, airport layout plan approvals, and contract plans and specifications, and must monitor these as necessary to assure that representations made in the EA and FONSI will be carried out. With respect to the Proposed Action, the following mitigation measure is a condition of approval:

- The Northwest Arkansas National Airport is responsible for obtaining all applicable construction permits and certifications, including the construction stormwater discharge permit identified in Section 6 of the EA, and completing mitigation as identified in Section 5.2 of the EA.

IX. AGENCY FINDINGS

The FAA makes the following determinations for this project based upon a careful review of the attached FEA, the supporting administrative record, and appropriate supporting information. The FAA weighed both the potential positive and negative consequences that this Proposed Action may have on the quality of the human environment. The FAA has determined that the Proposed Action meets the purpose and need of the proposed project and best implements necessary airfield modifications to meet FAA design standards.

The following determinations are prescribed by the statutory provisions set forth in the Airport and Airway Improvement Act of 1982, as codified in 49 USC §47106 and 47107.

- The FAA has determined the Proposed Action would result in safe and efficient use of U.S. airspace as prescribed in 49 U.S.C. §40103(a).
- The Proposed Action is reasonably necessary for use in air commerce (49 U.S.C. §44502(b)).
- The Proposed Action is reasonably consistent with existing plans of public agencies responsible for development of the area surrounding the airport (49 U.S.C. §47106(a)(1)).
- The interests of the community in or near where the Proposed Action is located have been given fair consideration (49 U.S.C. §47106(b)(2)).

X. DECISION AND ORDER

After careful and thorough consideration of the facts contained herein, the undersigned finds the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental

requirements. The undersigned also finds the proposed Federal action is not a major federal action significantly affecting the quality of the human environment or including any condition requiring any consultation pursuant to section 102(2)(C) of NEPA. As a result, the FAA will not prepare an Environmental Impact Statement for this action.

This decision does not constitute a commitment of funds under the Airport Improvement Program or Infrastructure Investment and Jobs Act of 2021 (IIJA), Public Law 117-58 (also referred to as the Bipartisan Infrastructure Law (BIL)) however, it does fulfill the environmental prerequisites to approve applications for grants of AIP or BIL funds for the proposed project in the future. (49 U.S.C § 47101)

Accordingly, under the authority delegated to me by the Administrator of the FAA, I approve and direct that agency action be taken to implement the proposed relocation of the ATCT presented to the FAA by the Northwest Arkansas National Airport. The approved action is specifically described in Part IV of this FONSI/ROD and identified in the EA as the Proposed Action. This approval is to be taken under the authority of 49 U.S.C. 40104, 44701, 46110, 47101, and 47122.

D CAMERON BRYAN

Digitally signed by D CAMERON BRYAN
Date: 2023.11.06 11:34:54 -06'00'

Cameron Bryan
Acting Airports Division Director
FAA, Southwest Region

Right of Appeal

This FONSI/ROD constitutes a final order of the FAA Administrator and is subject to the exclusive judicial review under 49 USC§ 46110 by the US Circuit Court of Appeals for the District of Columbia or the US Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate US Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 USC§ 46110. Any party seeking to stay implementation of the ROD must file an application with the FAA prior to seeking judicial relief as provided in Rule 18(a) of the Federal Rules of Appellate Procedure.

Environmental Assessment

Northwest Arkansas National Airport
Air Traffic Control Tower (ATCT)

Northwest Arkansas Regional Airport Authority
Bentonville, AR

Prepared by:

4300 J.B. Hunt Drive, Suite 240
Rogers, AR 72758

October 2023

Preparer's Certification

I hereby certify that this Environmental Assessment for the Northwest Arkansas National Airport (XNA) was prepared by Garver under my direct supervision for the Northwest Arkansas Regional Airport Authority.

Prepared by: Garver, LLC

Prepared for: Northwest Arkansas Regional Airport Authority

This Environmental Assessment becomes a Federal document when evaluated, signed, and dated by the responsible FAA official.

Responsible FAA Official

11/06/2023
Date

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1.0 Purpose and Need

1.1 Introduction

This Environmental Assessment (EA) has been prepared per the National Environmental Policy Act (NEPA) of 1969, Council on Environmental Quality (CEQ) implementing regulations (40 Code of Federal Regulations (CFR) Parts 1500-1508), Federal Aviation Administration (FAA) Order 5050.4B, FAA Order 1050.1F, and the FAA Environmental Desk Reference for Airport Actions involving the relocation of the existing Airport Traffic Control Tower (ATCT) at the Northwest Arkansas National Airport (XNA or Airport). The resumes for the preparers of this EA are found in **Appendix A**.

Northwest Arkansas National Airport is a public use airport located southwest of the City of Bentonville, Arkansas just north of State Highway 264. **Figure 1** shows the Airport's location in the region and proximity to other airports in the surrounding cities. The Airport is owned and operated by the Northwest Arkansas Regional Airport Authority and is approximately 2,225 acres in size. The existing 57.7-foot tall ATCT is located just south of Tower Drive and east of Taxiway B near the Airport Rescue and Fire Fighting (ARFF) facility. Refer to **Figure 2** for the XNA Airport Diagram.

Figure 1: Site Location Map

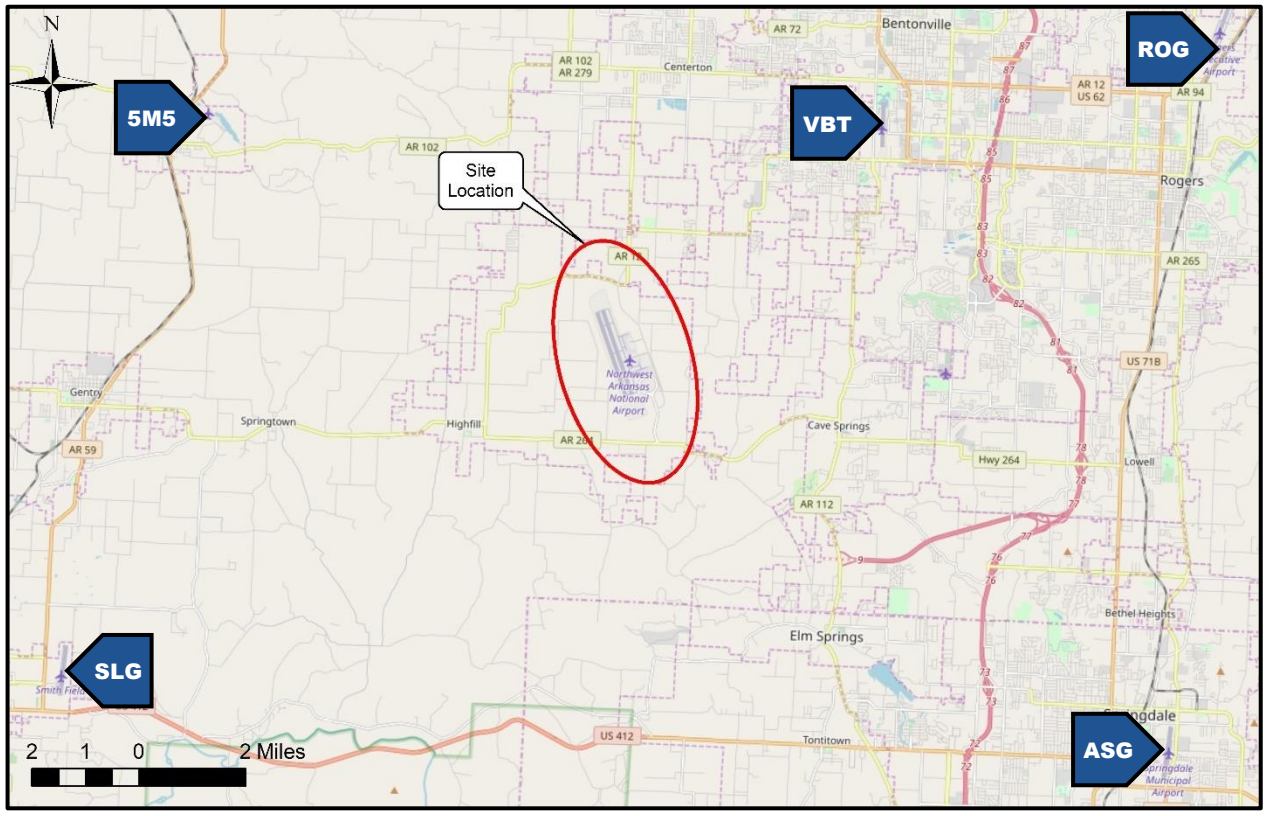
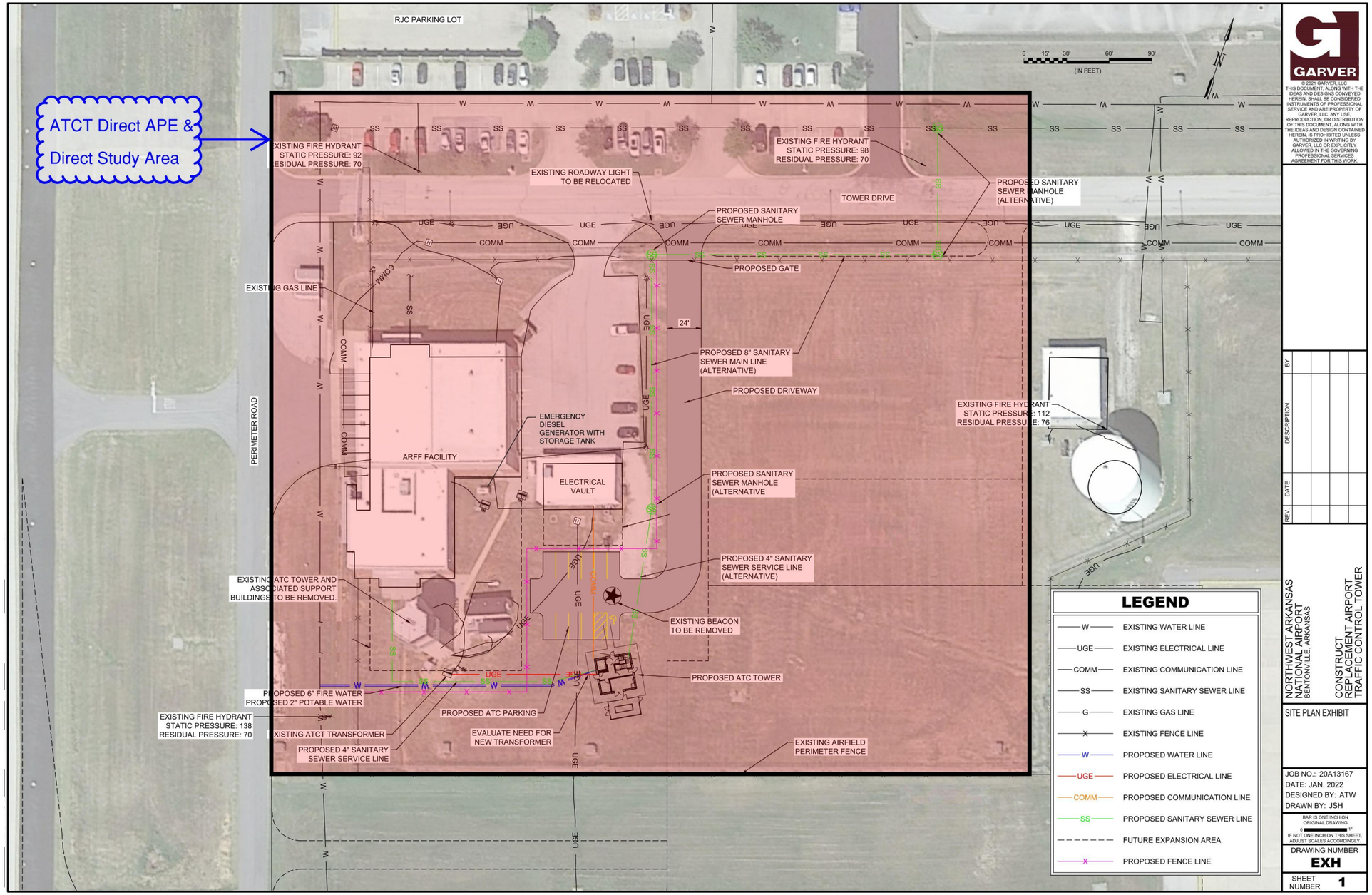


Figure 2: XNA Airport Diagram and Proposed Action



1.2 Purpose

The purpose of the Proposed Action is to establish a newly functional ATCT with a height required to meet current Federal Aviation Administration (FAA) Line of Sight and Angle of Incidence requirements as specified in FAA Order 6480.4B for all movement areas on the airport and for the ultimate conditions presented in the most recent Airport Layout Plan (ALP) update. All design and development associated with the Proposed Action, including connected actions identified in **Section 2**, would meet current FAA Airport Design Standards per Advisory Circular (AC) 150/5300-13A, 14 Code of Federal Regulations (CFR) Part 77 airspace regulations, AC 150/5325-4B, and other appropriate FAA ACs.

1.3 Need

A Siting Report (AJT Engineering Inc., 2022), located in **Appendix C**, identified Line of Sight and Angle of Incidence deficiencies associated with the existing ATCT when considering all current and future movement areas on the airport. As a result of these deficiencies, replacement of the existing ATCT is needed to bring the tower into compliance with FAA standards. Removal and relocation of associated utilities, equipment, buildings, access road, parking, and security fence associated with the ATCT is needed to support a fully functional and compliant ATCT.

1.4 Proposed Action

The following actions are included as the Proposed Action and needed to comply with the airport development standards set forth by FAA for the safe and efficient operation of aircraft at the airport:

- Relocation of associated utilities (water, sanitary sewer, electric, gas, and telecommunications) and equipment are needed to support functionality of the new ATCT.
- Removal of approximately 30 feet of airport perimeter fence is needed for relocating the ATCT and associated buildings.
- Installation of a new access drive from Tower Drive and associated parking area is needed to provide access to the new ATCT.
- Installation of approximately 515 feet of airport perimeter fence and an access gate is needed to provide a secure area around the new ATCT.
- Construction of a new 155-foot tall ATCT is needed to accommodate Line of Sight and Angle of Incidence requirements for all movement areas.
- Decommissioning and possible demolition of the existing ATCT and associated support buildings is needed to accommodate maximum reuse of equipment and infrastructure.
- Installation of a new beacon on top of the new ATCT is required to maintain location and identification of the airport.
- Two approach procedures, as identified below, require amendments due to the proposed ATCT penetrating Section 1 of the missed approach surface.
    - RNAV (GPS) RWY 34
    - ILS OR LOC RWY 34

2.0 Alternatives

The Siting Report (provided in **Appendix B**) prepared for this project considered seven (7) ATCT alternatives as part of a comprehensive evaluation. The evaluation included both a siting team and airport staff. The seven sites (alternative locations) identified in the Siting Report and reasons for their elimination from further study are summarized in **Table 1**. As raising the existing tower would require airport commercial flight closures and the foundation replaced, this was not considered a feasible alternative.

Table 1: Alternatives Screening Matrix

Alternatives *	General Location	Major Elimination Factors
Site W	West of Runway 17-35	Located in an undeveloped area, this site would require a tall ATCT height for Line of Sight to movement areas. High costs.
Site X	Near Corporate Drive	Located in developed area and does not fit well with surrounding commercial development.
Site Z	North of North Apron	Located in developed area and does not fit well with surrounding commercial development.
Site 1	East of Fuel Road	Located in developed area, this site would require a tall ATCT height for Line of Sight to movement areas. High costs. Vicinity to maintenance and fuel tanks.
Site 2	South of Tower Road	No hazards, but not as advantageous to airport development as the location conflicts with a future air freight facility.
Site 3	East of ARFF Parking	No hazards, but not as advantageous to airport development as the location conflicts with a future water storage facility.
Site 4**	**South of ARFF Parking**	**No hazards, but most advantageous to airport development due to providing Line of Sight to majority of non-movement areas and proximity to the existing tower. This site will have the least impact on current procedures.**

*Detailed information on each site/alternative can be found in the Siting Report.
**Proposed Action.

Two alternatives were evaluated in this EA; the Proposed Action, as shown in **Figure 2** and detailed in Section 2.1**,** and the No Action Alternative. The No Action Alternative will not meet the purpose and need for the project; however, it was retained to satisfy the requirements of National Environmental Policy Act (NEPA) and maintain a baseline to allow for a comparison of impacts.

2.1 Proposed Action (Site 4)

The Proposed Action includes the following components:

2.1.1 Relocation of Utilities and Equipment

Relocation of water, sewer, communication, underground electrical, gas, and HVAC systems is required and will provide service to the new ATCT. All utilities to be relocated occur within the direct study area. Airport and FAA-owned equipment listed in **Appendix C** will be relocated from the existing ATCT to the new ATCT.

2.1.2 Removal and Installation of Airport Security Fence

The Proposed Action will remove 30 feet and install 515 feet of security fence around the new ATCT, associated parking, and support buildings. A new security access gate will be installed along Tower Drive at the access drive to the new ATCT.

2.1.3 Construction of an Access Drive and Associated Parking

A new 24-foot-wide paved access road will be constructed that will connect Tower Drive to a 10 to 12 space landside transportation parking area located adjacent to the new ATCT. The proposed access drive and parking area consist of approximately 11,000 square feet of new paved areas.

2.1.4 Construction of a New ATCT

The new ATCT will have a 500 square foot, eight-sided cab mounted on a square shaft, and have an overall height of 155 feet with a controller eye height of 130 feet. The unobstructed view of all movement areas and view of the majority of non-movement areas will be achieved to meet FAA Line of Sight and Angle of Incidence requirements. The new ATCT will reuse equipment as necessary from the existing ATCT. Additional details of the new ATCT can be found in the Siting Report.

2.1.5 Beacon Installation

A new rotating beacon will be positioned on the top of the new ATCT.

2.1.6 Removal of the Existing ATCT and Associated Buildings

The existing 57.7-foot tall ATCT and support buildings will be removed after appropriate equipment has been removed for reuse in the new ATCT. Removal of the existing ATCT is required to provide Line of Sight to movement areas from the new ATCT. Two metal exterior equipment housing buildings will be removed and relocated closer to the new ATCT. Removal of the existing ATCT will also include removal and relocation of one pad-mounted electrical transformer and heating, venting, and cooling (HVAC) system.

2.1.7 Approach Procedures

The following approach procedures will be amended to accommodate the location of the new ATCT:

- RNAV RWY 34 CAT E DA 1550 to 1567
- ILS/LOC RWY 34
- SI LOC MDA 1600 to 1620
- FUTURE ILS/LOC to Parallel RWY 34 SI LOC MDA 1620

2.2 Proposed Action Construction Phasing

The Proposed Action's anticipated construction timeline is outlined below:

- Advertise and Open Bids: 3rd Quarter 2023
- Begin Construction: 4th Quarter 2023
- Complete Construction and Demolition of Existing Tower: 1st Quarter 2025
- Open Tower for Operations: 2nd Quarter 2025

2.3 No Action Alternative

Although the No Action Alternative will not meet the needs of the project, it is retained to satisfy the requirements of NEPA and maintain a baseline to allow for a comparison of impacts with the Proposed Action alternative. The No Action Alternative would leave the ATCT at a deficient height thereby not meeting FAA Line of Sight and Angle of Incidence requirements for ATCTs, which could lead to loss of service and inability to meet future ultimate ALP infrastructure demands. No environmental impacts are anticipated with this alternative.

3.0 Affected Environment, Environmental Consequences, and Mitigation

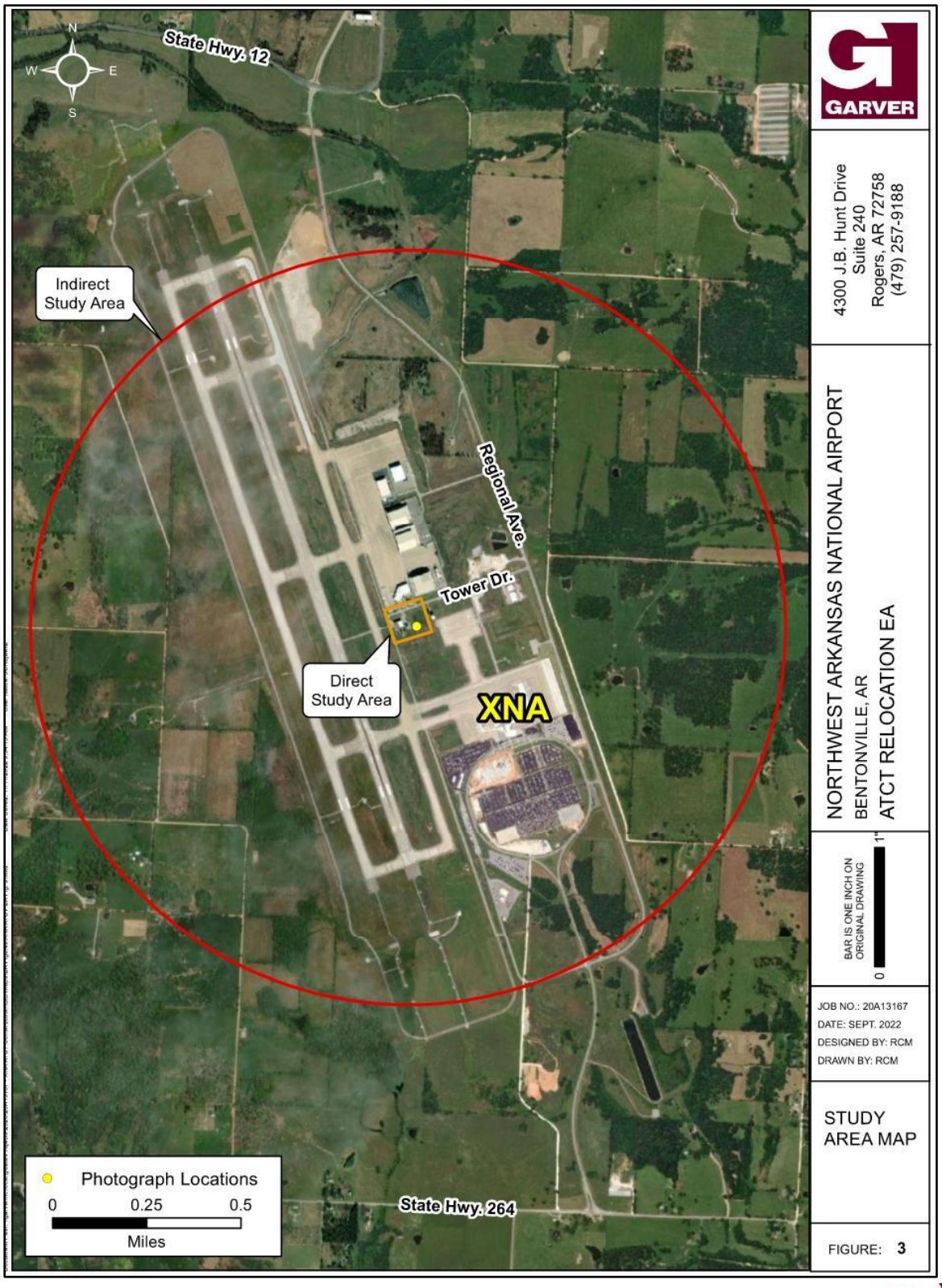
3.1 Introduction and Study Area

This section describes the existing environment within the study area, which is also referred to as the direct study area for resources that could be affected by the Proposed Action. The direct study area contains 6.1 acres and is entirely on airport-owned and maintained property. Due to the nature of the Proposed Action in that there are no land use changes or acquisition, the direct study area was determined based on the potential for ground disturbance that may be required to construct the Proposed Action. The direct study area currently contains airport buildings (constructed within the last 25 years) and maintained grassed airfield that was previously disturbed with the construction of the airport. A larger, indirect study area is proposed to encompass potential changes in visual effects of the project and includes a one-mile radius around the proposed ATCT as also shown in **Figure 3**. The indirect study area outside of the developed airfield, contains hayfields and undeveloped wooded areas located on and off the airport. Refer to **Figure 3** for aerial photography depicting the two study areas. The area surrounding the airport is rural in nature and contains natural drainage features and wooded and open areas with few residences in the immediate vicinity. Site visits were performed on September 23 and October 20, 2022 to document the existing conditions around the ATCT and environmental resources located within the direct study area that could be affected by the Proposed Action. A cursory review was also conducted within the surrounding airport property. Site photographs representing current conditions within the direct study area are provided on page 13. The descriptions, photographs, and figures in this section depict current conditions within the direct study area and the areas that will be affected as the project moves forward through design and into construction.

3.2 Impact Assessment

Assessing impacts also includes documenting agency comments and concerns regarding agency-managed resources that may be affected by the project. In September and October 2022, letters were sent to applicable local, state, and federal agencies to assess the level of environmental consequences based on the purpose and need of the project.

Figure 3: Study Areas Exhibit



This section describes the existing natural and social environmental resources that could be affected by or could affect the Proposed Action or the No Action Alternatives. Only those specific resources relevant to potential impacts are described in detail. Resources potentially impacted by the Proposed Action and the No Action Alternatives are evaluated in this section in accordance with FAA Order 1050.1F. Resources not impacted by the Proposed Action are listed below.

- Coastal Resources
- Section 4(f)
- Farmlands
- Noise and Noise Compatible Land Use
- Wild and Scenic Rivers

◄ Photograph 1 – View to the west of the existing ATCT, beacon, support buildings, and security fence.

▼ Photograph 2 – View to the north of the existing beacon and support buildings. This location will support the proposed access road and landside transportation parking area.

◄ Photograph 3 – View of the existing beacon to be removed.

3.3 Air Quality

3.3.1 Affected Environment

The U.S. Environmental Protection Agency (EPA) developed the National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) for the six most common air pollutants: carbon monoxide (CO), nitrogen dioxide (NOx), ozone, particulate matter (PM), sulfur dioxide, and lead. These pollutants are regulated by the EPA through human health-based (primary standards) and environmental-based (secondary standards) criteria. The NAAQS are applicable to all areas of the United States. Areas of the United States with poor air quality that have ambient concentrations of these criteria pollutants above the NAAQS are designated as "nonattainment areas". A nonattainment area is required to have an applicable State Implementation Plan (SIP) that sets mitigation measures and timelines to bring ambient concentrations of the criteria pollutants below the NAAQS. When ambient concentrations in a nonattainment area meet the NAAQS, the EPA designated the area as a "maintenance area" and the applicable SIP ensures that the ambient concentrations of criteria pollutants do not increase above the NAAQS again. With regard to aviation-related Federal actions planned to occur in a nonattainment or maintenance area, the proposed impacts to air quality must conform to the conditions of the applicable SIP. The EPA does not currently list Benton County as an area of nonattainment or maintenance for NAAQS.

EPA air quality monitoring occurs in the region in Washington County (one county south of the Proposed Action). DEQ also has an ambient air quality monitoring station in Springdale, Arkansas (approximately 12 miles to the southeast). These locations, criteria air pollutants, and most recent results are included in **Table 2**.

Table 2: EPA and DEQ Outdoor Air Quality Statistics Results

Location	Year	CO 8hr	CO 1hr	O_3 8hr	NOx	SO_2 (typ)	PM_{10} (µg/m^3)	$PM_{2.5}$ (µg/m^3)
Washington Co.*	2022	--	--	0.067	--	--	15	8.1
Springdale, AR**	2021	--	--	0.060	--	1,006	36.7***	7.7

*Most recent monitoring information provided by EPA (EPA Outdoor air quality statistics report for Washington County, Arkansas). **From DEQ Ambient Air Monitoring Network, SLAMS report average of 2019-2021 data. ***3-year average.

Meteorological conditions and trends in Benton County indicate that annual rainfall has increased over 15 inches between 1900 and 2023 with an average of 45.7 inches. Average temperatures in the same span of years indicate an increase of 1.6° Fahrenheit (F) with average temperature of 57.5°F (USA FACTS, 2023). Topographically, the study area is relatively flat and slightly sloping to the southeast. The land around the airport has rolling hills and pastures. These factors would not significantly influence the dispersal of emissions in the study area.

3.3.2 Environmental Consequences

No Action Alternative

The No Action Alternative would not directly or indirectly impact air quality as there would be no change in the amount of aircraft activity, runway use patterns, taxi times, or vehicles accessing the airport. Since the No Action Alternative does not involve construction activities, no additional impacts to air quality would be expected to occur.

Proposed Action

- Direct Impacts

  Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for air quality. A significant impact would occur if the Proposed Action would cause pollutant concentrations to exceed one or more of the NAAQS or if it were to increase the frequency or severity of any such existing violations. The Proposed Action does not affect future aircraft activity, changes in runway use patterns, aircraft taxi times, or operational effects from ground access vehicles; therefore, no aircraft or surface transportation emissions are expected to rise to the level of significance. Temporary increases in emissions resulting from construction activities may occur for a limited period of time at the project site and in the immediately adjacent areas. Potential emissions from commercial and construction vehicles were calculated for the Proposed Action using proposed construction years, activities, and equipment. Results are provided in **Table 3**. The most common air pollutants generated from construction activities are CO, volatile organic compounds (VOCs), NOx, and particulate matter with a diameter of less than 10 microns (PM10). Construction air emissions are well below NAAQS de minimis thresholds.

Table 3: Proposed Action Construction Air Emissions

Year	Emission Source	Tons per Year					
		CO	VOC	NOx	SOx	PM_{10}	$PM_{2.5}$
2024	Non-Road	1.31	0.95	3.32	0.02	0.14	0.13
2024	On-Road	0.41	0.02	0.17	0.00	0.01	0.01
2024	Fugitive	0.00	0.00	0.00	0.00	0.03	0.00
2024	**TOTAL**	**1.72**	**0.97**	**3.49**	**0.02**	**0.18**	**0.14**

- Indirect Impacts

  Indirect effects on air quality on and around the airport are anticipated to be based on projected growth in the region and are associated with construction. A review of the before overall air quality data that is continually monitored by the Division of Environmental Quality (DEQ) was conducted and the closest ambient air quality measurement station for any of the criteria air pollutants is in Washington County, Arkansas for Ozone, PM 2.5, and PM 10.

- Mitigation and Best Management Practices (BMPs)

  Air quality effects resulting from the implementation of the Proposed Action or No Action Alternative are anticipated to be below threshold levels of significance. No mitigation measures are proposed because air quality thresholds are not anticipated to be exceeded due to construction.

3.4 Biological Resources

3.4.1 Affected Environment

The study area for biological resources is the direct study area as shown in **Figure 3** and contains routinely mowed and maintained grassed areas with a dominance of upland herbaceous grasses as documented in

the habitat assessment prepared for the Proposed Action, which is located in **Appendix E**. An estimated 3.7 acres of maintained airfield is present within the study area and includes dominant herbaceous vegetation including broomsedge (*Andropogon virginicus*), little bluestem (*Schizachyrium scoparium*), bermudagrass (*Cynodon dactylon*), millet (*Echinochloa cruss-galli*), spike rush (*Eleocharis* species), dallisgrass (*Paspalum dilatatum*), and fescue (*Festuca* species). There are no trees or shrubs within the study area. The remainder of the study area is developed and includes buildings, Tower Drive, parking areas, and utilities. Overall, the direct study area provides very limited biotic resources. As there are no relatively permanent waters within the study area, no fish or aquatic species are present. Similarly, the presence of wildlife within the study area is limited to the herbaceous maintained area which also contain a small emergent wetland. Wildlife that could be expected in the area include small mammals, birds, reptiles, amphibians, and terrestrial invertebrates.

Federal and State Listed Species

The United States Department of the Interior, Fish and Wildlife Service (USFWS), Arkansas Ecological Services Field Office was consulted early during the development of this document. Agency responses are located in **Appendix D**. The USFWS Information for Planning and Consultation (IPaC) on-line tool was used to identify potential habitat for 12 federally listed endangered, threatened, and candidate species that may occur in or pass through the study area within Benton County and are listed in **Table 4**. No critical habitats were identified within or near the study area.

Table 4: Federally Listed Species

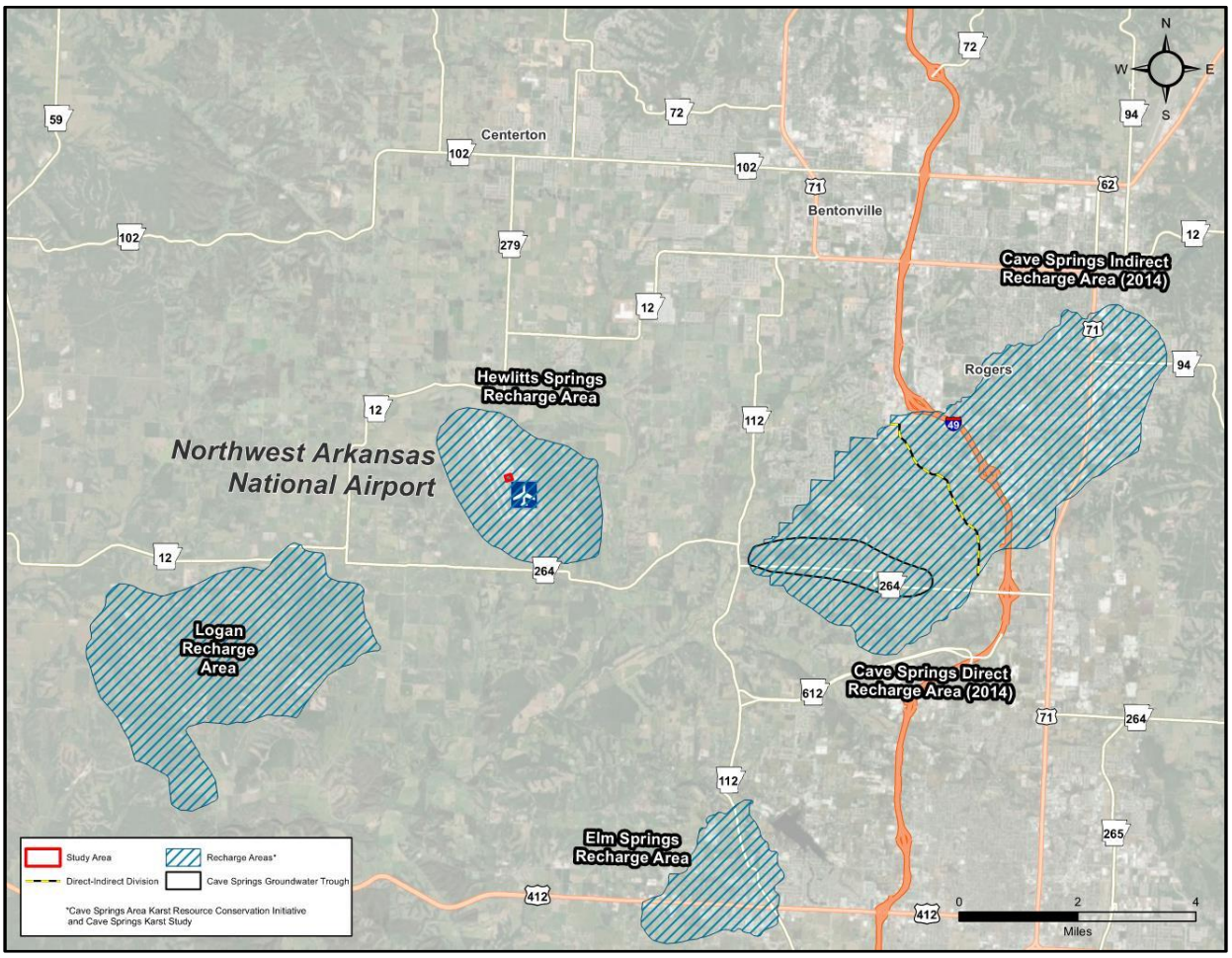
Species/Status *Endangered **Threatened	**Habitat Requirements**	**Suitable Habitat within Direct Study Area (SA)**	**Preliminary Effect Determination**
Gray Bat* (*Myotis grisescens*)	The gray bat occurs in limestone karst areas and primarily uses caves throughout the year, although they move from one cave to another seasonally. Smaller colonies also occasionally roost under bridge structures.	No caves, bridges, or suitable roosting structures are located within or adjacent to SA.	No effect
Indiana Bat* (*Myotis sodalis*)	The Indiana bat hibernates in cool caves and mines in the winter and wooded areas in the spring and summer. During summer, colonies are found behind slabs of exfoliating bark of dead trees, often in bottomland or floodplain habitats, or uplands.	No caves, mines, or trees are located within or adjacent to SA.	No effect

Species/Status *Endangered **Threatened	Habitat Requirements	Suitable Habitat within Direct Study Area (SA)	Preliminary Effect Determination
Northern Long-eared Bat** (*Myotis septentrionalis*)	In winter, northern long-eared bats use caves, mine portals, abandoned tunnels, protected sites along cliff lines and similar situations that afford protection from cold. During the summer they roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees.	No caves, mines, tunnels, cliffs, or trees are within or adjacent to SA.	No effect
Ozark Big-eared Bat* (*Corynorhinus townsendii ingens*)	The Ozark big-eared bat inhabits caves year-round, typically located in oak-hickory hardwood forests.	No known caves or forested areas are located within or directly adjacent to SA.	No effect
Piping Plover** (*Charadrius melodus*)	Piping plovers are usually found along sandbars of major rivers, salt flats, and mudflats of reservoirs.	No sandbars, salt flats, or mudflats are located within or adjacent to the SA.	Not likely to adversely affect
Red Knot** (*Calidris canutus rufa)*	Red knots are usually found along mudflats associated with reservoirs.	No mudflats are located within or adjacent to the SA.	Not likely to adversely affect
Eastern Black Rail** (*Laterallus jamaicensis*)	Eastern black rails typically inhabit emergent shallow wetlands. They require dense vegetative cover that allows movement underneath the canopy such as rushes, sedges, and grasses.	No emergent shallow wetlands with dense vegetation are located within or adjacent to the SA. The area is routinely mowed and includes a small isolated emergent wetland.	Not likely to adversely affect
Ozark Cavefish** (*Amblyopsis rosae*)	The Ozark cavefish occurs in dark cave waters, primarily clear upwelling streams with chert or rubble substrate, and occasionally in pools over silt and sand. They have also been found in wells, springs, and sinkholes.	Benton County is in a Karst region with documented caves. However, no caves, springs, wells, or flowing and/or losing streams have been observed in the SA. Geotech borings completed did not indicate any subterranean voids within the area of the proposed ATCT.	Not likely to adversely affect
Neosho Mucket* (*Lampsilis rafinesqueana)*	This species is associated with streams having shallow riffles and runs composed of gravel substrate and moderate to swift currents.	No streams occur within or directly adjacent to the SA.	Not likely to adversely affect
Monarch Butterfly (*Danaus plexippus*) Candidate	Monarch butterflies require the presence of milkweed (*Asclepias spp.*), flowering or potentially flowering nectar plants (defined as forbs that can provide nectar for monarchs at some point in the growing season), and additional native habitat such as meadows, prairies, and grasslands.	No native grassland or presence of flowering plants was observed within or adjacent to the SA.	No Impact (Candidate)

Species/Status *Endangered **Threatened	Habitat Requirements	Suitable Habitat within Direct Study Area (SA)	Preliminary Effect Determination
Benton County Cave Crayfish* (*Cambarus aculabrum*)	The Benton County cave crayfish occurs in clean cave springs, near walls of pools, or in stream edges in chert/limestone cave streams.	Benton County is in a Karst region with documented caves. However, no caves, springs, or flowing and/or losing streams have been observed in the SA. Geotech borings completed near the project did not indicate any subterranean voids.	Not likely to adversely affect
Missouri Bladderpod** (*Physaria filiformis*)	Missouri bladderpods are usually found in open limestone glades, barrens, and outcrops within unglaciated prairie areas. Glades are naturally dry, treeless areas with shallow, loose soil and areas of exposed rock. They are occasionally in dolomitic glades and are often associated with grazed pastures. Cedar invasion of glade sites is common. Sometimes the bladderpod is found on highway right-of-way and pastures where mowing and grazing have kept the area open. Occasionally it is found in open rocky woods.	No dry limestone or dolomitic glades or barrens occur within the SA.	No effect

No suitable habitats for any of the federally listed species are present within the study area; however, the entire airport is located within the groundwater recharge area of Hewlett's Springs Hole as identified in the *Cave Springs Area Karst Resource Conservation Initiative* (Northwest Arkansas Regional Planning Commission, *Cave Springs Area Karst Resource Conservation Study.pdf (nwarpc.org)*) and shown in **Figure 4**.

Figure 4: Groundwater Recharge Areas



The Arkansas Natural Heritage Commission (ANHC) was contacted to identify the location of any known records for state species of concern within their Natural Diversity Database. ANHC has no records at the present time for this area but did report that the Proposed Action is located within the recharge area for Hewlett's Spring Hole, which supports the Ozark Cavefish. ANHC also provided information related to elements documented within a five-mile radius of the project. Many state-listed species have a status of "inventory element" that indicates the ANHC is conducting active inventory work on the species. No detailed habitat was described for species with inventory element status. Coordination with ANHC is provided in **Appendix D**.

3.4.2 Environmental Consequences

No Action Alternative

Since the No Action Alternative does not involve construction activities, there would be no direct or indirect impacts to fish, wildlife, or plant species within the study area.

Proposed Action

- Direct Impacts

  The Proposed Action would directly affect approximately 1.3 acres of a maintained grassed areas in addition to 0.7 acres of developed areas, both of which contain no fish or aquatic species and limited amount potential for wildlife species. Approximately 2.0 acres of ground would be disturbed by the Proposed Action and is located within a groundwater recharge zone as shown in **Figure 4**. However, there is no surface habitat for any of the federal and state listed species. The Proposed Action would have a May Affect, Not Likely to Adversely Affect determination for the Eastern Black Rail, Neosho Mucket, Ozark Cavefish, Benton County Cave Crayfish, Piping Plover, and the Red Knot. Informal Section 7 consultation was completed for these species on December 16, 2022. USFWS concurred with the determination, and therefore no further consultation is required. Refer to correspondence provided in **Appendix D**. The proposed project would have a No Effect determination for the Gray Bat, Indiana Bat, Missouri Bladderpod, Northern Long-eared Bat, and Ozark Big-eared Bat.

- Indirect Impacts

  No indirect impacts are anticipated concerning federally or state listed threatened and endangered species. As noted previously, the surrounding land contains developed areas and fragmented grassed airfield areas.

- Mitigation and BMPs

  In compliance with the USFWS response, the use of water quality control measures to prevent sedimentation and water quality effects downstream of the Proposed Action is required. The USFWS provided Species Protective Measures (SPMs) for the Benton County Cave Crayfish and Ozark Cavefish. Refer to **Appendix F** for a listing of SPMs, which will be followed prior to, during construction, and maintained throughout construction. BMPs and provisions for water quality protection in accordance with the Airport's Industrial Stormwater Pollution Prevention Plan (SWPPP) per National Pollutant Discharge Elimination System (NPDES) regulations, and in compliance with the anticipated construction SWPPP will be implemented for the Proposed Action. The required construction SWPPP will be obtained prior to construction.

3.5 Climate

Climate is addressed in this separate section of the EA per the Order 1050.1F and Desk Reference. According to FAA guidance, the EPA data indicates that the aviation industry contributes 4.1% of the world's green-house gas (GHG) emissions. The Council on Environmental Quality (CEQ) developed guidance on reporting GHG emissions and NEPA guidance. However, FAA has not identified significance thresholds. The U.S. Aviation Climate Goal (United States 2021 Aviation Climate Action Plan, 2021) has established a goal of achieving net-zero greenhouse gas (GHG) emissions by 2050. These GHGs include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Emissions primarily result from anthropogenic sources predominantly from the combustion of fossil fuels. Energy consumption also contributes to GHG production. Per guidance provided in Executive Order (EO) 13990, the depth of the GHG analysis is proportional to the project, which is identified below.

3.5.1 Affected Environment

The Proposed Action would consist of a new ATCT with the same number of ground vehicles accessing the airport. No changes in aircraft, or changes in runway use or taxi times are expected to occur that would be anticipated to influence climate impacts from ground vehicles or aircraft. Energy usage by the new ATCT would increase slightly as much of the existing equipment is proposed for reuse.

The study area for evaluating GHG is considered the greater Northwest Arkansas area. In accordance with the CAA and EO 13514 and EO 13990, construction air quality emissions were determined for the Proposed Action. However, no specific GHG data is available for the region for providing a baseline for comparison beyond data provided in **Table 2**.

3.5.2 Environmental Consequences

No Action Alternative

Since the No Action Alternative does not involve construction activities, no new impacts to climate would be expected to occur.

Proposed Action

- Direct Impacts

  According to Exhibit 4-1 of FAA Order 1050.1F, the FAA has not established a significance threshold for climate. Based on only a temporary influence on GHGs during construction, no significant environmental impacts are expected concerning climate. The proposed construction and development activities are expected to include only a slight temporary increase in GHG emissions as shown **Section 3.3.2**; however, this increase will have minimal impacts to emissions of GHGs and any emissions of GHGs as a result of the proposed construction and development activities would be considered negligible compared to the annual U.S. emissions of GHG. For example, the Proposed Action's equivalent CO_2 production would be comparable, in terms of gallons of gasoline consumed, to 200 gallons of gasoline used by passenger vehicles. As such, emissions of GHGs would not be expected to have a significant impact on global climate change. Additionally, climate change is not anticipated to have a significant impact on the ATCT as a result of construction being compliant with current design requirements. The Proposed Action is not expected to increase issues related to flooding, erosion, or temperature increase.

- Indirect Impacts

  As there are no significant direct environmental impacts expected concerning climate, indirect impacts are not anticipated.

- Mitigation and BMPs

  No mitigation or BMPs are proposed as no direct or indirect climate impacts are anticipated.

3.6 Coastal Resources

The project is not located in or near coastal resources. Therefore, no coastal resources will be impacted by the Proposed Action or the No Action Alternative.

3.7 Department of Transportation, Section 4(f)

There are no Section 4(f) properties within or near the direct study area. Therefore, no Section 4(f) resources will be impacted by the Proposed Action or the No Action Alternative.

The Proposed Action will have no indirect adverse impacts on historic, architectural, archaeological or cultural resource sites. The new ATCT does not provide size or contrast to diminish any aspects of the historic integrity of the barn that is eligible for listing as documented in the Cultural Resources Survey as mentioned in Section 3.10. The Proposed Action meets the criteria for a finding of No Historic Properties Affected as per 36 CFR 800.4 (d)(1), and therefore does not impact Section 4(f) resources.

3.8 Farmlands

There are no prime or unique farmlands or farmlands of statewide importance within the direct study area. Although there are prime or unique farmlands or farmlands of statewide importance within the indirect study area, the Proposed Action will not have any impacts on these resources. Therefore, no farmland resources will be impacted by the Proposed Action or the No Action Alternative.

3.9 Hazardous Materials, Solid Waste, and Pollution Prevention

Federal actions require consideration of hazardous material, solid waste, and pollution prevention impacts in NEPA documentation. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) defines a hazardous material as any substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The term hazardous material includes both hazardous wastes and hazardous substances, as well as petroleum and natural gas substance and materials. The Resource Conservation and Recovery Act (RCRA) defines solid waste as any discarded material that meets specific regulatory requirements and can include items such as refuse, scrap metal, spent material, chemical-by-products, and sludge from industrial and municipal wastewater and water treatment plants. Pollution prevention describes methods used to avoid, prevent, or reduce pollutant discharges or emissions through strategies such as using fewer toxic inputs, redesigning products, altering manufacturing and maintenance processes, and conserving energy. The direct study area was assessed for the presence of hazardous material, hazardous waste, and hazardous substances. If the Proposed Action would include generation of hazardous waste or the use of fuel storage tanks, federal, state, and or local statutes and regulations may apply.

3.9.1 Affected Environment

The Arkansas Division of Environmental Quality's EnviroView tool and the EPA NEPAssist tool were used to identify the location of any Superfund sites, hazardous waste generator facilities, or solid waste sites

within or near the direct study area, which is used for determination of hazardous materials sites. No sites related to hazardous wastes were identified within the study area. The airport's ARFF facility is located within the study area, which contains equipment and supplies to respond to emergencies on the airport, including hazardous materials spills. Several pad-mounted electrical transformers are located within the study area that contain oil but do not contain polychlorinated biphenyls (PCB). The study area also contains one emergency diesel generator with an attached above-ground storage tank located adjacent to the ARFF facility and one small propane tank.

Pollution Prevention

The airport accomplishes pollution prevention through the implementation of a site-specific industrial SWPPP and individual NPDES permit. The airport's individual NPDES permit and SWPPP have identified several potential pollution sources, some of which occur within or adjacent to the study area, such as aircraft anti-icing/deicing, aircraft fueling, aircraft lavatory services, building and grounds maintenance, cargo handling, chemical storage, construction areas, equipment cleaning/degreasing, equipment fueling, equipment storage, fuel storage, ground vehicle fueling, ground vehicle washing, pesticide/herbicide storage, runway anti-icing/deicing, and salt and sand storage and usage.

3.9.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, no impacts to hazardous materials, solid waste, or hazardous waste are expected to occur. The airport would continue to operate its facilities in compliance with the same regulations associated with transport, storage, and use of existing hazardous materials as it does today. No increase in stormwater runoff or pollution would be expected by the No Action Alternative. Deicing operations would continue to occur as they have; however, runoff from the airport is captured in detention and retention ponds and sampled before release to downstream environments.

Proposed Action

- Direct Impacts

  The Proposed Action would have no direct impacts to known hazardous materials, solid waste, or hazardous waste sites. The above-ground storage tank attached to a generator will not be affected. The Proposed Action would increase the amount of impervious area by adding approximately 11,000 square feet of pavement associated with the access road and landside transportation parking and by adding approximately 1,716 square feet of paved/building surface associated with the new ATCT. These improvements would increase the volume of stormwater runoff that may contain sources of potential pollutants. No outfall modifications would occur as a result of the Proposed Action.

  Short-term and temporary impacts may occur as a result of construction activities for the Proposed Action and include the temporary increase of petroleum fuels on-site that are utilized by construction equipment and the production of solid waste. Potential solid waste produced as a result of demolition of the existing ATCT includes concrete block, scrap steel, metal, and/or wood. During construction grading activities associated with the Proposed Action, the primary potential

pollutant is sediment and silt entering stormwater and receiving waters at the airport. This could affect biotic communities on airport property or downstream of the airport; however, on-site stormwater will be directed to existing detention and retention basins, which have capacity to receive the additional runoff from the increased impervious areas (11,000 square feet).

- Indirect Impacts

  Potential indirect impacts on the water quality of downstream environments are discussed in subsequent sections of this document.

- Mitigation and BMPs

  Prior to initiating construction activities associated with the Proposed Action, the airport will obtain permit coverage for construction activities. General construction BMPs including silt fences, check dams, herbaceous buffers, and other controls as appropriate will be incorporated into construction plans to help prevent erosion and protect water quality in compliance with local erosion and sediment control regulations. Construction BMPs for the Proposed Action will include designating specific areas for construction equipment staging, maintenance, and fueling. These areas will be designed to provide appropriate secondary containment (temporary dikes or impervious containers) and other control measures to avoid and/or minimize potential, inadvertent, releases of fuels, oils, and other contaminants to stormwater, soil, and groundwater within the project area. Wastes associated with construction and operations at the site will be handled in accordance with the Solid and Hazardous Waste Rules and Regulations of the state. This includes all materials that would be classified as solid and/or hazardous wastes and would be disposed of at a regional landfill that has capacity to receive solid waste produced by the Proposed Action. Any temporary fuel tanks or the temporary storage of other regulated materials will comply with federal, state, and local regulations.

  If any hazardous materials are encountered on the site during excavation, they will be appropriately identified and properly disposed of in accordance with applicable regulations.

3.10 Historical, Architectural, Archeological, and Cultural Resources

The National Historic Preservation Act of 1966 requires that an initial review be made to determine if any properties are on, or eligible for inclusion in, the National Register of Historic Places (NRHP). The FAA initiated consultation pursuant to Section 106 with the State Historic Preservation Office (SHPO) and Tribes in accordance with 40 CFR 1507.2, Section 106 of the National Historic Preservation Act, and FAA Order 1050.1E. SHPO was consulted on September 27, 2022. Tribes were consulted through FAA on November 2, 2022. Consultation letters referencing Government to Government consultation and responses are included in **Appendix D**. Although there is no significance threshold for this category, the FAA has identified a factor that includes if the Proposed Action would result in a finding of Adverse Effect through the Section 106 process.

3.10.1 Affected Environment

The direct APE is the same as the direct study area and includes areas where ground disturbance is proposed, which was entirely disturbed during construction of the airport and subsequent developments at

the airport. The existing grades have been altered and soils stripped at some point. The buildings located within the direct APE include the existing ATCT, support buildings, ARFF facility, and electrical vault, all of which were constructed less than 25 years ago.

A review of the Arkansas Historic Preservation Program (AHPP) geographic information system National Register was conducted to identify the location of any historic properties, as defined by 36 CFR 800.16(l)(1), within a one-mile radius, which represents the indirect APE. The following Native American Tribes were consulted during the preparation of this EA: Cherokee Nation, United Keetoowah Band of Cherokee Indians, Osage Nation, and Shawnee Tribe. One historic structure and eight archaeological sites were identified within the indirect APE. No historic or archaeological properties were identified within the direct APE.

3.10.2 Environmental Consequences

The Proposed Action's APEs were reviewed by the SHPO regarding historic properties and archaeological sites, and on September 28, 2022, the SHPO concurred with the finding of no historic properties affected pursuant to 36 CFR 800.4 (d)(1). The AHPP did not require a cultural resources investigation. However, the Osage Nation requested a cultural resources survey be completed for the Proposed Action. A cultural resources survey was completed and did not find any cultural materials of significance. Potential construction, operational, and visual impacts were factors considered in determining impacts to historic, architectural, archaeological, and cultural resources.

No Action Alternative

The No Action Alternative would not impact any historic, architectural, archaeological, or cultural resources.

Proposed Action

- Direct Impacts

  The Proposed Action will have no direct impacts to historic, architectural, archaeological, or cultural resources sites listed on or eligible for listing on the NRHP as identified in the Cultural Resources Survey. Consultation with the SHPO concurred that there are no historic properties affected due to direct impacts. A concurrence letter was received from Ms. Kathryn Bryles, Section 106 Archeologist with SHPO, dated September 28, 2022, and is provided in **Appendix D**. Comments from Tribal Historic Preservation Officers (THPO) and Tribal contacts indicated no concerns with the proposed project. The Osage Nation reviewed the cultural resources survey and concurred the Proposed Action would not adversely affect any sacred properties and/or properties of cultural significance to the Osage Nation. Coordination with AHPP regarding the completed cultural resources survey resulted in their concurrence of No Historic Properties Affected. Consultation letters and responses are in **Appendix D**.

- Indirect Impacts

  The Proposed Action will have no indirect adverse impacts on historic, architectural, archaeological or cultural resource sites. The new ATCT does not provide size or contrast to diminish any aspects of the historic integrity of the barn that is eligible for listing as documented in the Cultural Resources

Survey. The Proposed Action meets the criteria for a finding of No Historic Properties Affected as per 36 CFR 800.4 (d)(1).

- Mitigation and BMPs

  If construction work uncovers buried archeological materials, work will be halted in the area of discovery and the THPOs, SHPO, and the FAA Project Manager will be immediately notified.

3.11 Land Use

3.11.1 Affected Environment

The direct study area is approximately 6.1 acres in size and is located entirely on airport-owned property that currently functions for aeronautical use. No changes in zoning or land use are planned within the direct study area.

The indirect study area includes a one-mile radius around the proposed ATCT as also shown in **Figure 3**. The indirect study area outside of the developed airfield contains hayfields and undeveloped wooded areas located on and off the airport. The area surrounding the airport is rural in nature and contains natural drainage features and wooded and open areas with few residences in the immediate vicinity.

3.11.2 Environmental Consequences

No Action Alternative

- Direct Impacts

  The No Action Alternative would retain the existing ATCT height and therefore further restrict future ALP developments containing movement areas as a result of maintaining inadequate Angle of Incidence and Line of Site. There would be no changes to existing or planned land uses at or surrounding the airport. No direct or indirect land use changes are anticipated.

- Indirect Impacts

  The No Action Alternative will have no indirect impacts associated with land use.

Proposed Action

- Direct Impacts

  All elements of the Proposed Action are located on airport-owned property. The Proposed Action will not affect land use around the airport. No conflicts in land use planning are anticipated according to the Airport Layout Drawing (ALD). No direct or indirect land use changes are anticipated.

- Indirect Impacts

  The Proposed Action will have no indirect impacts associated with land use.

3.12 Natural Resources and Energy

This section provides an evaluation of the consumption of natural resources such as fuel, water, wood, asphalt, aggregate, and other construction material supplies as well as energy supply effects.

3.12.1 Affected Environment

The airport receives electrical service from Carroll Electric, and water and sewer services from the City of Highfill. Natural resources such as water, asphalt, and aggregate that would be utilized are located onsite and/or would be provided for the project from offsite quarries/entities with available clean materials. The direct study area contains the existing ATCT, beacon, and support buildings that are supplied with electricity from the airport.

3.12.2 Environmental Consequences

FAA Order 1050.1F Exhibit 4-1 shows that FAA has not established a significance threshold for this impact category. However, a factor to consider is if the action would have the potential to cause demand to exceed available or future supplies of these resources.

No Action Alternative

- Direct Impacts

  The No Action Alternative would not change the future supply of natural resources or energy demands at the airport.

- Indirect Impacts

  The No Action Alternative would not have any indirect impacts.

Proposed Action

- Direct Impacts

  No adverse effects or exceedances of local or regional natural resources and energy supplies are anticipated. As the Proposed Action would relocate the existing ATCT and other proposed improvements do not require extensive energy demands, no substantial changes in energy requirements would result from the Proposed Action. Regardless, any additional energy uses are anticipated to be met by local energy suppliers. Petroleum fuel (for construction equipment) and consumable materials are not considered to be scarce and increased usage of these resources during construction would be met by current and/or future suppliers. The Proposed Action would not increase airside capacity or change aircraft or vehicle traffic patterns during construction or operations that could substantially alter fuel usage. The nearby runway will remain open throughout

construction and aircraft will continue to use existing facilities with no effect on aircraft traffic patterns. No substantial operational energy demands are anticipated.

- Indirect Impact

  Indirect effects associated with the Proposed Action are also anticipated to be met by local energy and utility providers as the population of the region increases.

3.13 Noise and Noise-Compatible Land Use

A noise analysis is not deemed necessary because neither the Proposed Action nor the No Action Alternative is expected to substantially alter existing noise levels. Changes in flight procedures are unlikely to have a significant impact on noise levels for the following reasons.

The proposed changes to two flight procedures, RNVA (GPS) RWY 34 and ILS OR LOC RWY 34, are not anticipated to result in significant changes in noise levels within the approach areas. These two procedures are rarely used at XNA. Coordination with the ATCT manager at XNA indicates that these changes are expected to affect fewer than 5 operations per year, primarily involving missed approach procedures, which are infrequent at XNA. Moreover, the adjustment to the Runway 34 LNAV procedure only impacts Category E aircraft, which do not operate at XNA. Similarly, the modification to the Runway 34 ILS or LOC procedure only affects the LOC minimums, and it would only be utilized if the Glideslope is temporarily unavailable for maintenance. Additionally, the proposed changes result in minimal adjustment to the decision altitudes (LNAV/VNAV from 1,550 AGL to 1,567 LOC from 1,600 to 1620 AGL). Detailed information about these procedure changes, approved by the Airport Terminal Office (ATO) Terminal Program Operations, and XNA, and accepted by the Obstruction Evaluation/Airport Airspace Analysis (OEAAA) evaluation, can be found on page 28 of the Siting Report in Appendix B. A temporary increase in ambient noise levels is anticipated during construction; however, no short-term or long-term impacts to noise sensitive land uses are anticipated.

The Proposed Action will not result in any changes in aircraft operations, nighttime operations, airfield configuration, runway use, or aircraft fleet mix during construction or after the project is completed. The Proposed Action would have no effect on surrounding land uses as it is located entirely on airport-owned property and is fully compatible with airport operations. Therefore, no noise or noise-compatible land use impacts will occur as a result of the Proposed Action or the No Action Alternative.

3.14 Socioeconomics, Environmental Justice, and Children's Health and Safety Risks

FAA Order 1050.1F, describes the socioeconomic impacts associated with relocation or other community disruption, transportation, planned development, and employment. This evaluation includes effects on Environmental Justice (EJ) and children's health and safety. As directed by Executive Order (EO) 12898, the demographic profile of the surrounding area is considered with regards to EJ concerns.

EO 13045, dated April 21, 1997, pertains to "Protection of Children for Environmental Health and Safety Risks". This mandate requires federal agencies to identify and assess environmental health and safety risks that may affect children. EO 13045 states that to the extent permitted by law and appropriate, each federal agency shall make it a high priority to identify and assess environmental health risks and safety risks that

may disproportionately affect children and ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

3.14.1 Affected Environment

The study area used for the analysis of socioeconomics, EJ, and children's health and safety is the 1-mile radius indirect study area as shown in **Figure 3**.

An EJ review was performed in accordance with EO 12898. The EJ review was intended to identify and address any disproportionately high and adverse effects to low-income or minority populations within the study area. A low-income population was defined as a census block group whose median household income is at or below the 2020 Department of Health and Human Services (HHS) poverty guidelines for a family of four, which is $26,200. A high minority population, for the purposes of this study, was defined as a population equal to or greater than 50 percent of the total population.

According to the 2016-2020 American Community Survey (ACS), EJScreen estimates the off-airport indirect study area does not contain low-income or minority populations. The median household income for the census block group in the study area is significantly above the 2020 HHS poverty guideline. The minority population within the census block group in the study area is approximately 7 percent of the total population, which is lower than the minority population for the census track, which is 11 percent. The minority population for Benton County is 30% and 29% for the state of Arkansas. The percentage of the population within the study area that speaks English less than very well is approximately 1 percent.

ACS block group data indicate an estimated 567children (26% of the total population) of which 9% are under 5 years of age, 7 percent ages 5-9, 7 percent ages 10-14, and 3 percent ages 15-17. There are no schools, daycares, parks, or children's health clinics within the study area.

Area cities in close proximity to the airport include: Bentonville, Rogers, Springdale, Cave Springs, Centerton, and Highfill. These cities and respective population demographics are provided in **Table 5**.

Table 5: Local Population Centers**

City	Distance from Airport (mi)*	Total Population	Median Income	Minority Populations
Bentonville	8.2	54,164	$89,653	5,434
Rogers	10.5	69,908	$67,408	23,375
Springdale	11.6	84,161	$63,396	33,287
Cave Springs	4	5,495	$140,195	345
Centerton	5.6	17,792	$90,793	2,328
Highfill	3	1,587	$88,512	247

*Approximate distance to center of the city. **2020 ACS data.

3.14.2 Environmental Consequences

No Action Alternative

- Direct Impacts

  The No Action Alternative would not change enplanements or have a direct or indirect effect on socioeconomics, environmental justice, or children's health or safety, and would not impact EJ populations.

- Indirect Impacts

  The No Action Alternative would also not have EJ and children's health and safety risk impacts. However, potential loss of service incurred by maintaining the existing ATCT would lead to decreased use of the airport.

Proposed Action

- Direct Impacts

  The Proposed Action is in alignment with future growth of the regional Northwest Arkansas economy and is not anticipated to directly impact airside or landside traffic patterns. Two new additional positions are anticipated in long-term airport planning; however, no new positions are anticipated by implementing the Proposed Action. No direct effects related to residential/business acquisitions or relocations, disruptions in established communities or planned developments, or children's environmental health and safety are anticipated as a result of the Proposed Action. Based on the analysis, no disproportionately high or adverse impacts to EJ populations are anticipated as a result of the Proposed Action.

- Indirect Impact

  The Proposed Action would not have socioeconomics, environmental justice, or children's health or safety impacts.

3.15 Visual Effects

Visual effects associated with the Proposed Action take into account light emissions and visual resources and character. From the desk reference the factors to consider are the extent the action would have the potential to:

- Affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources;
- Contrast with the visual resources and/or visual character in the study area; and
- Block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

3.15.1 Light Emissions

3.15.1.1 Affected Environment

The location of the Proposed Action places improvements well inside the airport's property boundary and over 0.7-mile from the nearest potentially sensitive receptor (residences). The properties within the indirect study area include commercial properties, farmland or undeveloped land, and scattered residences. The airport is illuminated by lights from various sources on the airside and landside in compliance with FAA standards for security, apron flood lighting, obstruction clearance, and navigation lighting. According to FAA Order 1050.1F, Order 1050.1F Environmental Desk Reference, and Order 5050.4B, light emissions generated by the Proposed Action were evaluated. There are currently no special purpose laws or requirements for visual effects. Green, white, and red colored lights have been studied regarding bat species and how they respond. Some studies suggest that *Myotis* species, which occur in the area, are more sensitive to light emissions by making them more vulnerable to predators (Lara, et al. 2023).

3.15.1.2 Environmental Consequences

No Action Alternative

- Direct and Indirect Impacts

  The No Action Alternative would not change the existing visual character or have any additional light emission impacts.

Proposed Action

- Direct Impacts

  The Proposed Action would not produce additional light emissions other than those experienced from the existing ATCT as visible within the direct study area as a result of adhering to lighting standards that would help mitigate potential light pollution. The project will be compatible with the existing visual character around the airport. The overall setting of the airfield would not change drastically; therefore, no impacts to aircraft operations are anticipated. Temporary and additional safety lighting during construction is anticipated and will comply with design plans as developed.

- Indirect Impacts

  The proposed light emissions would not create an annoyance or interfere with normal residential activities at sensitive receptors and are not anticipated to contribute substantially to the indirect nature of light emissions experienced surrounding the airport. The visual landscape of the airport as viewed from the proposed 97-foot taller ATCT would change, which may increase overall light emissions from the airport. Six (6) sensitive receptors may see additional lighting effects within the viewshed of the Proposed Action but is dependent on the fragmented forested areas located between the residences and the ATCT. The highly variable forested areas and fencerows surrounding the airport would affect actual indirect light emission effects. These residences may already see lighting from the existing ATCT. An increase in light emissions on wildlife species is anticipated to be minimal due to the already illuminated nature of the area surrounding the airport.

Forested areas within the indirect study area could experience additional lighting impacts; however, canopy cover would limit light penetration into the understory.

3.15.2 Visual Resources and Character

3.15.2.1 Affected Environment

As mentioned previously, the visual character of the area surrounding the airport includes commercial properties, farmland or undeveloped land, and scattered residences. According to FAA Order 1050.1F, Order 1050.1F Environmental Desk Reference, and Order 5050.4B, the visual character of the Proposed Action was evaluated. There are currently no special purpose laws or requirements for visual resources and character.

3.15.2.2 Environmental Consequences

No Action Alternative

- Direct and Indirect Impacts

  The No Action Alternative would not change the existing visual character or have any additional light emission impacts.

Proposed Action

- Direct Impacts

  The Proposed Action would not change the visual character of the direct study area and is compatible with the existing visual character of the airport.

- Indirect Impacts

  The visual landscape as viewed looking toward the airport may change as viewed from the six residential locations; however, these residences may already see the existing ATCT. The new ATCT would not obstruct views of receptors around the airport and not anticipated to provide stark contrast of the visual character surrounding the airport.

3.16 Water Resources

3.16.1 Affected Environment

Water resources are surface waters and groundwater that are important in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. The direct study area was assessed for the presence of any wetlands, surface water resources, floodplains, and groundwater resources as these components function in concert as a single integrated system. Federal statutes or executive orders provide the framework to regulate potential impacts to surface water, groundwater, and wetlands. The following provides a list of statutes, regulations, and executive orders established to protect these resources:

- EO 11990 – Protection of Wetlands.
- EO 11988 – Floodplain management.
- Rivers and Harbors Act of 1899.
- The Clean Water Act.
- Section 401 of the Clean Water Act (CWA) requires that for any federally permitted project that may result in a discharge into water of the United States, a water quality certification be issued to ensure that the discharge complies with applicable water quality requirements.
- Section 402 forms the NPDES, which regulates pollutant discharges, including stormwater, into waters of the United States. NPDES permits set specific discharge limits for point-source pollutants and outline special conditions and requirements for projects to reduce water quality impacts. Permits require that projects be designed to protect waters of the United States. Construction projects that will disturb more than one acre of land must comply with the requirements of the NPDES.
- Section 404 regulates discharges of dredged or fill materials from construction activities into waters of the United States, including wetlands. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States.
- Fish and Wildlife Coordination Act

These statutes prevent/minimize the loss of wetlands, control discharges and pollution sources, establish water quality standards, protect drinking water systems, and protect aquifers and other sensitive ecological areas.

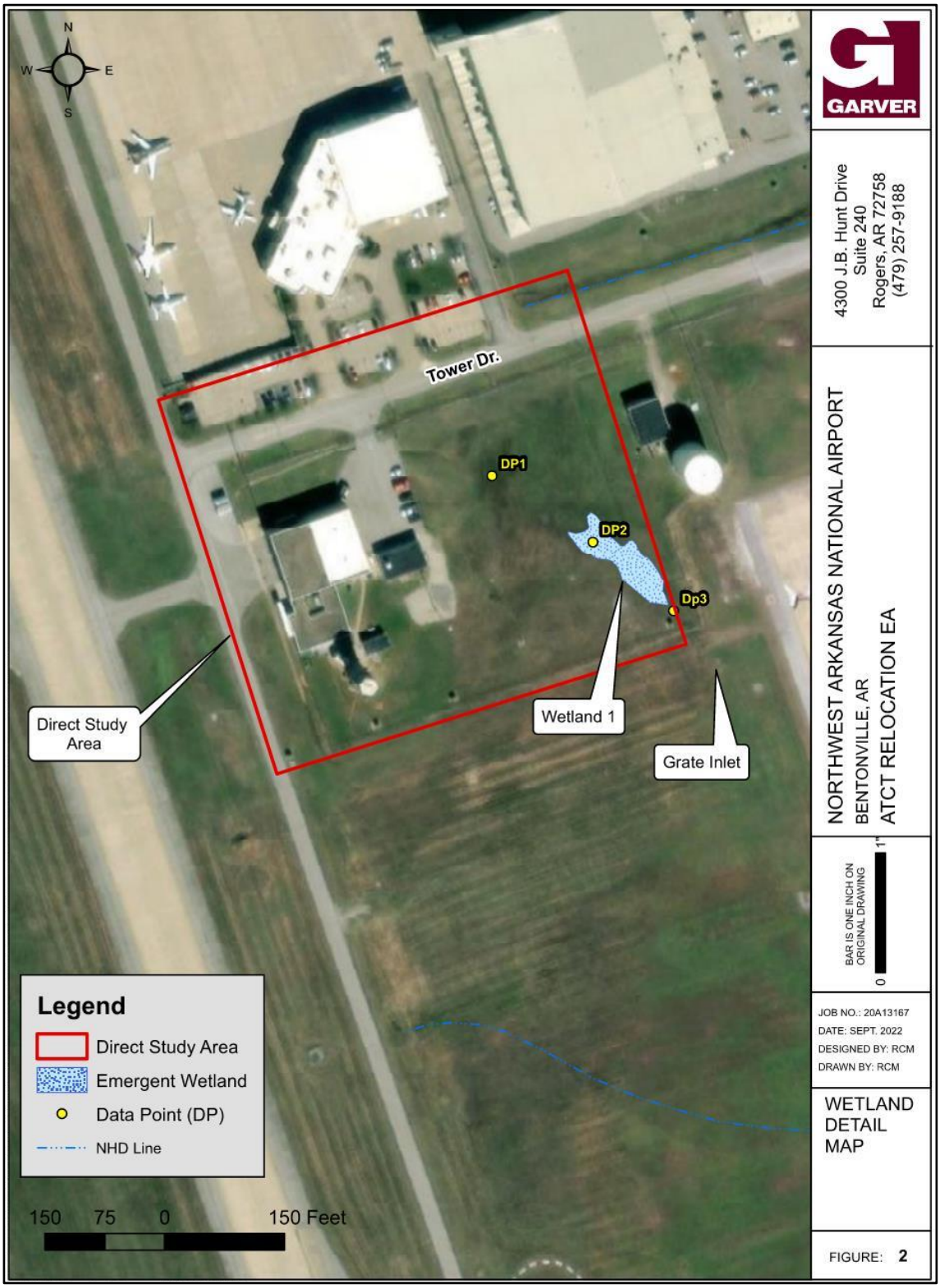
Surface Water

No streams or ponds are located within the study area.

Wetlands

A wetland delineation was completed for the study area and is located in **Appendix G**. One palustrine emergent/herbaceous wetland was identified in the study area (**Figure 5**). The wetland (Wetland 1) is routinely maintained by mowing, considered low quality, and likely a depressional area that holds water after precipitation. Dominant herbaceous species identified included millet/barnyard grass, spike rush, switchgrass (*Panicum virgatum*), sedges (*Carex* and *Cyperus* species), and dallisgrass. This wetland is not considered jurisdictional according to the most recent USACE guidance as there is not a surface water connection to down gradient waters of the United States. The Preliminary Wetland Delineation provided in **Appendix G** was submitted to the USACE for concurrence. The USACE provided an Approved Jurisdictional Determination (AJD) on January 27, 2023, confirming the wetlands in the project area are isolated and non-jurisdictional. This correspondence can be found in **Appendix D**.

Figure 5: Wetland Delineation Figure



Floodplains

No FEMA-mapped floodplains or floodways are present within the study area.

Groundwater

Four mapped spring recharge areas were identified near the project area and include the Cave Springs Recharge Area, Hewlett's Spring Recharge Area, Elm Springs Recharge Area, and Logan Springs Recharge Area. These spring recharge areas were delineated and mapped by the Ozark Underground Laboratory and are shown on **Figure 4**. The entire airport is located within a karst region and the known groundwater recharge area identified as Hewlett's Spring Recharge Area. The study area is located in an area underlain by the Mississippian Boone Formation, a host for karst features, which consists of very fine to coarse-grained limestone with interbedded chert. Karst refers to land underlain by soluble rocks where both groundwater and surface water have slowly dissolved the bedrock. Springs, sinkholes, sinking streams, and caves are included as karst features. Chert refers to a sedimentary rock with quartz. The presence of the chert in the Mississippian Boone Formation masks the traditional karst landforms at the surface (Brahana, 2018). In Arkansas, the Mississippian Boone Formation varies in thickness from 200 to 500 feet and exclusively represents the Springfield Plateau Aquifer (Hays et al., 2016). Caves are well known to have formed within the Mississippian Boone Formation.

Two common types of recharge in karst areas include diffuse recharge and concentrated recharge. **Diffuse recharge** slowly seeps through the soil and into the underlying bedrock. **Concentrated recharge** enters the subsurface through larger dissolved out openings in the bedrock. Water that enters the subsurface through areas of concentrated recharge, such as sink holes, moves through the subsurface more quickly due to the larger channels/conduits in the bedrock.

3.16.2 Environmental Consequences

No Action Alternative

- Direct and Indirect Impacts

  The No Action Alternative would not require construction and therefore no impacts to water resources would occur.

Proposed Action

- Direct Impacts

  The Proposed Action would not impact any surface waters, the emergent wetland in the study area, or floodplains. The Proposed Action requires approximately 2 acres of ground disturbance. Soil borings completed as part of a geotechnical report in the area of the Proposed Action did not encounter subterranean voids. Voids could provide direct or indirect access to the groundwater recharge zone. Therefore, the Proposed Action, when incorporating construction and post-construction BMPs as identified in the Karst Area Initiative Species Protective Measures, is not likely to adversely affect the Hewlett's Spring Recharge Area or the adjacent wetland. All surface water leaving the area of the Proposed Action flows into stormwater detention and retention basins located on the airport and stored and sampled before release.

- Indirect Impacts

  The Proposed Action will have no indirect impacts on floodplains or surface waters. Construction of the ATCT and associated parking area would increase the amount of impervious area by 0.3 acres within the recharge area which would reduce the amount the infiltration available for the underlying aquifer. However, because of the remaining amount of undeveloped land in the recharge area, combined with the stormwater retention practices of the airport, the Proposed Action would have negligible effect on groundwater recharge. Decreases in surface water quality may not necessarily result in groundwater impact. Additionally, the implementation of local, state, and federal regulatory programs to protect water quality will help prevent and/or reduce potential impacts.

- Mitigation and BMPs

  The Proposed Action will be subject to regulatory programs such as Section 402 of the CWA which protects surface waters by requiring improvements to meet water quality standards. Operational BMP measures and provisions and specifications of FAA AC 150/5370-10F *Standards for Specifying Construction of Airports* will be implemented to avoid and/or minimize adverse construction activities. Additionally, as required by the CWA Section 402 NPDES permitting process, a construction SWPPP for the Proposed Action will be developed and implemented. General construction BMPs (including silt fences, check dams, and other controls as appropriate) will be incorporated into construction plans to help prevent erosion, protect water quality, and ultimately to minimize potential impacts to surface water resulting from stormwater runoff. In addition, BMPs will require measures to prevent or minimize the potential release of contaminants into surface waters, provide swift response to accidental spills, and define acceptable on-site storage of fuel and lubricants. These BMPs (identified in **Appendix F**) are also consistent with the Species Protective Measures required by the USFWS and include the use of drip pans or other containment systems.

3.17 Wild and Scenic Rivers

There are no wild and scenic rivers present in or near the direct study area; therefore, no impacts to these resources will occur as a result of the No Action Alternative or the Proposed Action.

3.18 Cumulative Impacts

Past, present, and reasonably foreseeable future projects at the airport were evaluated to determine the cumulative impacts on the environment as a result of the following projects.

Projects that have occurred within the last five years at the airport include:

- Rehabilitate Taxiway (North one-third of Taxiway B)
- Gate Addition
- Rehabilitate Taxiway (Midfield one-third of Taxiway B)
- Rehabilitate Taxiway (South one-third of Taxiway B)
- Parking Lot Expansion

Present projects include:

- Concourse A Apron Expansion and Gate Addition
- Terminal Building Expansion and Improvements – Phase 1
- Maintenance Building Expansion

In addition to the proposed relocation of the ATCT under review in this EA, reasonably foreseeable actions within the next five-year term may include the below-listed actions depicted in the ALD and/or identified in the Airport Capital Improvement Program (ACIP) through 2027. The ALD reflects future improvements for XNA beyond those in the reasonably foreseeable future.

- Expand Commercial Apron for Western Concourse
- Airport Entrance Roadway Rehabilitation
- Western Concourse (B Concourse)
- General Aviation Apron Expansion

Overall, cumulative impacts of the recent past and reasonably foreseeable future actions, combined with the Proposed Action include ground disturbance and minor increases in additional paved surfaces on airport-owned property. All projects requiring more than one acre of ground disturbance will adhere to BMPs prescribed by the project SWPPP. BMPs prescribed to retain sediment may include silt fence, rolled fiber barriers, and inlet filter protection, all of which are monitored and enforced as part of the required NPDES permit. Special provisions related to threatened and endangered species are a commitment in this EA and enforceable as part of Section 7 compliance. Therefore, the Proposed Action will have only minor cumulative impacts on the surrounding natural or man-made environment. No adverse impacts are expected. This conclusion is based on the assumption that all projects will be implemented as planned and will comply with all applicable regulations and guidelines.

4.0 Scoping

4.1 Public Coordination

The Proposed Action was discussed at seven (7) airport board meetings and one (1) airport operations committee meeting on the dates listed in this section. These meetings were open to the public; however, no public comments were received.

- June 02, 2021
- September 22, 2021
- December 15, 2021
- February 23, 2022
- June 1, 2022
- March 7, 2023
- June 20, 2023
- September 19, 2023

The Final EA/Finding of No Significant Impact (FONSI)-Record of Decision (ROD) will be available on the airport's website at *www.flyxna.com* for the duration of construction.

4.2 Agency Coordination

The intent of the agency and tribal coordination is to solicit input early in the process regarding potential environmental, cultural, and archeological resources which could be impacted by the Proposed Action. The below-listed agencies and Native American Tribes were consulted during the preparation of this EA. All agency coordination is provided in **Appendix D**.

Agencies Consulted and Dates of Consultation:

- U.S. Army Corps of Engineers (USACE) – PM assignment letter received November 10, 2022
- U.S. Fish and Wildlife Service (USFWS) – IPaC Consistency letter received October 26, 2022 and Section 7 response (Concurrence Verification Letter) received December 16, 2022
- Arkansas Department of Parks, Heritage, and Tourism – Initial response received on October 31, 2022 and responses received November 16, 2022 and April 17, 2023

Tribes Consulted (Initial Tribal Consultation occurred November 2, 2022):

- Cherokee Nation
- United Keetoowah Band of Cherokee Indians
- Osage Nation – Response received April 3, 2023
- Shawnee Tribe

5.0 Mitigation

5.1 FAA Mitigation

- FAA equipment relocation is identified in **Appendix C**.
- If construction work uncovers buried archeological materials, work will be halted in the area of discovery and the THPOs, SHPO, and the FAA Project Manager will be immediately notified.

5.2 Airport Mitigation

The airport makes the following commitments as part of this EA:

- The airport will comply with all federal, state, and local floodplain regulations, Executive Orders, and permitting requirements as applicable to the Proposed Action.
- *Species Protective Measures for the Benton County Cave Crayfish, Hell Creek Cave Crayfish, and Ozark Cavefish* (located in **Appendix F**) will be applied, which include provisions for construction in sensitive areas and apply to:
    - Erosion and Sediment Control
    - Stream Crossings
    - Post Construction Stormwater Management
    - Reclamation of Construction Sites
    - Staging, Vehicle Maintenance, Petroleum, and Chemicals
- The airport will complete and maintain a construction SWPPP and associated BMPs throughout the duration of disturbance activities.
- A Notice to Airmen (NOTAM) noting flight procedure changes will be announced.

- If any hazardous materials are encountered on the site during excavation, they will be appropriately identified and properly disposed of in accordance with applicable regulations.
- BMPs such as silt fence, rolled fiber barriers, ditch checks, erosion control matting, and other standard practices will be implemented according to the construction SWPPP and NPDES permit.

6.0 Required Permits

- NPDES construction stormwater discharge permit.

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