
Chapter 3: Affected Environment and Environmental Consequences

3.1 Introduction

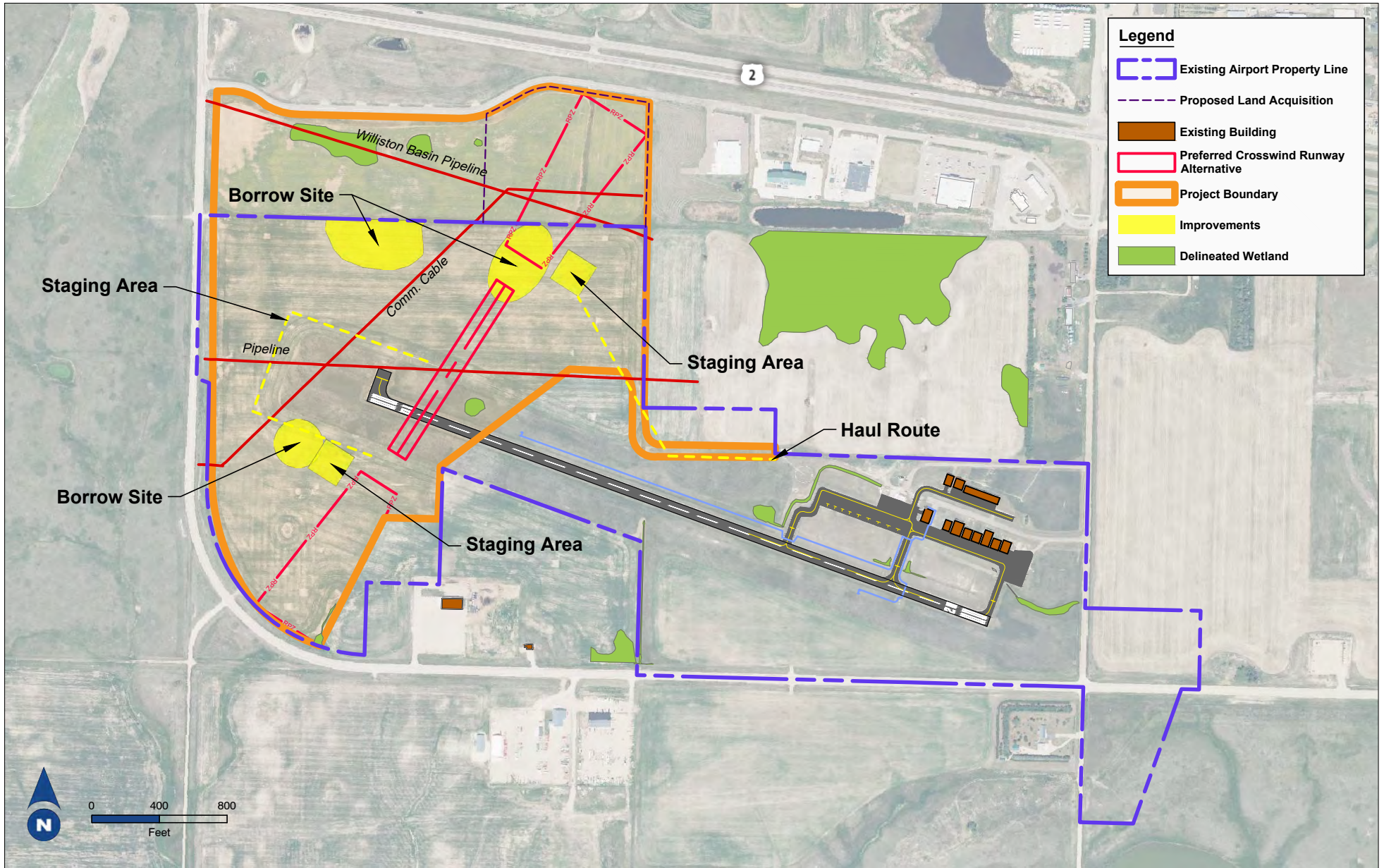
This chapter provides background information regarding the surrounding community and environment at Stanley Municipal Airport (“Airport”) and compares the environmental consequences of the preferred alternative to the no-action alternative. The chapter includes appropriate analysis of all environmental impact categories required by FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures implementing NEPA*. A detailed analysis of each resource category includes a discussion of the regulatory setting, affected environment, environmental consequences, mitigation, and significance determination.

3.1.1 Regulatory Setting

The regulatory setting section under each resource category discusses the requirements for assessing the resource and applicable federal, state, and local laws and regulations.

3.1.2 Affected Environment

The affected environment section under each resource category describes the existing environment in the project boundary. This information establishes the baseline conditions for each resource category against which to evaluate potential impacts of the preferred alternative. To provide background about the proposed project’s affected environment, **Figure 3-1** and **Figure 3-2** are included below.



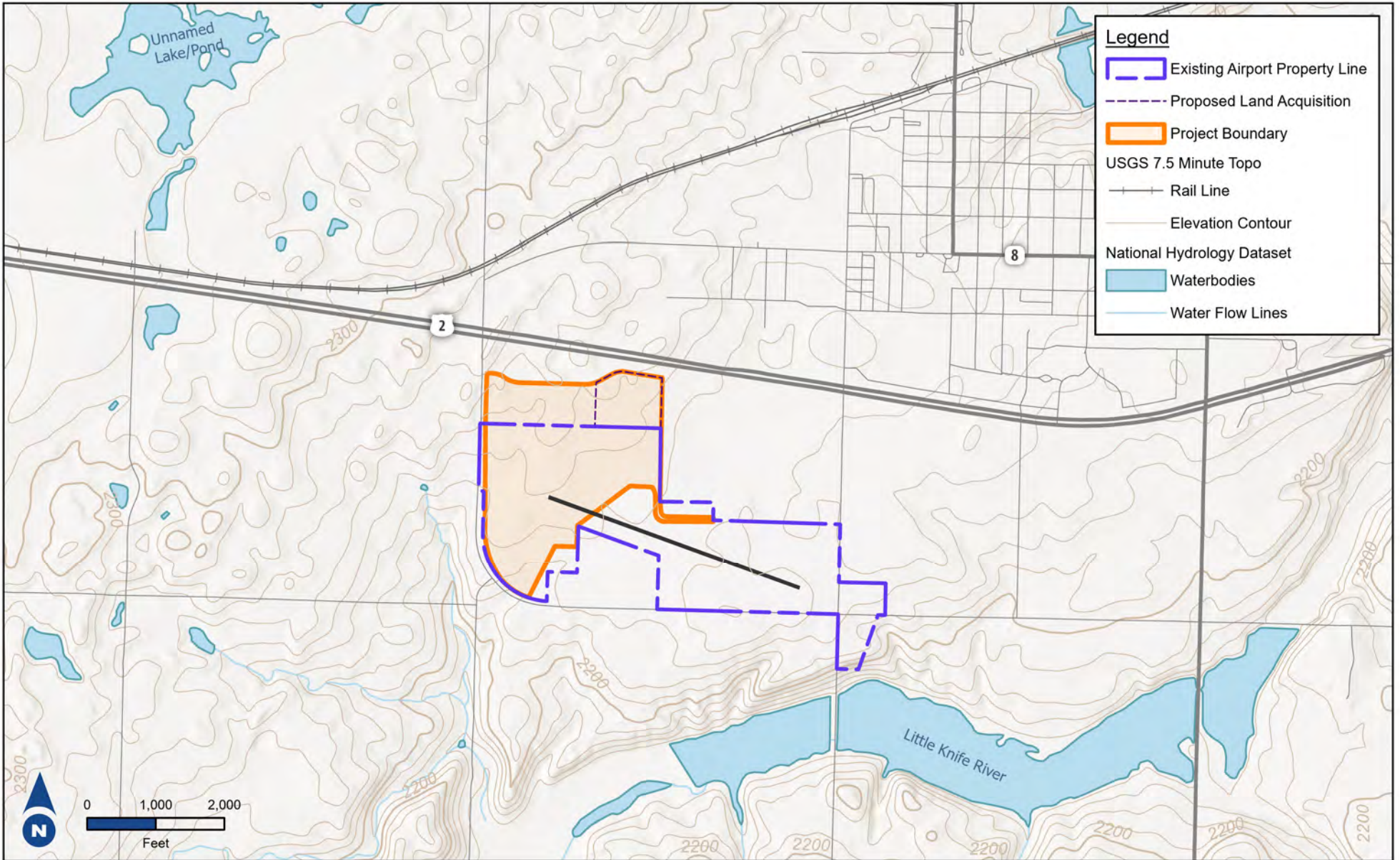
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PROJECT BOUNDARY



FIGURE 3-1



STANLEY MUNICIPAL AIRPORT
STANLEY, ND

TOPOGRAPHY MAP

**Mead
& Hunt**

FIGURE 3-2

3.1.3 Environmental Consequences

The environmental consequences section under each resource category assesses the potential impacts of the no-action and preferred alternative. Environmental consequences include all direct, indirect, and cumulative impacts, as the NEPA defines those terms.

3.1.4 Mitigation

The mitigation section under each resource category describes mitigation measures, if applicable. This section provides guidance on types of mitigation that may be used to reduce the potential impact of the proposed project.

3.1.5 Significance Determination

The significance determination section under each resource category considers environmental consequences with reference to specific thresholds at which the FAA considers an environmental impact to be significant. This section summarizes factors to consider when evaluating the significance of potential impacts.

3.2 Environmental Impact Categories Not Analyzed in Detail

The resource categories in this section were analyzed following NEPA guidelines. During this analysis, the proposed action was found to have either minimal or no impacts on these resource categories. Each of the following resource categories includes a summary describing the findings and why the resource category was not analyzed in further detail.

3.2.1 Air Quality

The Air Quality section was not analyzed in detail because the proposed action is located in Mountrail County, which is in attainment for all criteria pollutants. These pollutants, called criteria pollutants, include ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide. The EPA sets National Ambient Air Quality Standards (NAAQS) for the criteria pollutants. Further, operational emissions are expected to be very minor as a result of the proposed action and construction emissions would be minimal and would not change the current attainment status. Agency correspondence regarding air quality can be found in **Appendix C**.

3.2.2 Biological Resources

The Biological Resources section was not analyzed in further detail after completing the North Dakota DKey for project review and guidance for Federally-listed species within the Information for Planning and Consultation (IPaC) system. Based on the DKey, it was determined that the proposed action would have No Effect on federally listed, proposed, or candidate species, or designated critical habitat, as indicated in the USFWS Consistency letter dated December 7, 2023. This includes the piping plover (*Charadrius melodus*), rufa red knot (*Calidris canutus rufa*), whooping crane (*Grus americana*), and dakota skipper (*Hesperia dacotae*). The monarch butterfly (*Danaus plexippus*) is a candidate species. As stated in the Threatened, Endangered, Proposed, Candidate Species and Critical Habitat Affect Determination Table (see **Appendix A**), ESA Section 7 consultation is not required for the candidate species.

Further, it was determined that the alternatives would have no impacts to species protected under the Migratory Bird Treaty Act, including bald eagles (*Haliaeetus leucocephalus*) and peregrine falcons (*Falco peregrinus*).

3.2.3 Climate

The Climate section was not analyzed in further detail because the proposed action would not increase operations and therefore would not result in greenhouse gas (GHG) emissions.

3.2.4 Coastal Resources

The Coastal Resources section is not analyzed in detail because the resource is not present on or near the Airport.

3.2.5 DOT Section 4(f) Lands

The DOT Section 4(f) Lands section is not analyzed in detail because there are no Section 4(f) properties located on or near the Airport, including publicly owned park and recreation areas, wildlife and waterfowl refuges, or historic sites. Agency correspondence regarding Section 4(f) properties is found in **Appendix C**.

3.2.6 Farmland

The Farmland section is not analyzed in detail based on the following:

- The existing Airport property is exempt from FPPA because construction of the proposed project will occur within an existing right-of-way purchased on or before August 4, 1984. The existing Airport property was purchased in 1970.
- The proposed land acquisition is exempt from FPPA because the parcel is situated entirely within an urbanized area (the City of Stanley). See Figure 3-4 in Section 3.3.3.

Agency correspondence regarding Farmland is found in **Appendix C**.

3.2.7 Noise

Noise and noise-compatible land use also does not include a detailed analysis in this chapter. According to the FAA Order 1050.1F Desk Reference, no noise analysis is needed for projects involving Design I and II airplanes in Approach Categories A through D operating at airports whose forecast operations in the period covered by the NEPA document do not exceed 90,000 annual propeller operations or 700 annual jet operations. Because the Airport is not expected to cross either of these activity thresholds, no noise analysis was conducted.

3.2.8 Visual Effects

The Visual Effects section was not analyzed in detail because the proposed action would not add additional lighting that may affect light sensitive areas nor would the proposed action affect any scenic views or vistas.

3.2.9 Water Resources

3.2.9.1 Floodplains

The Floodplains section was not analyzed in detail because the proposed action is not located in a FEMA NFIP identified or mapped floodplain.

The local floodplain administrators, Mountrail County Planning & Zoning and the City of Stanley Planning & Zoning, were contacted about the proposed project. Mountrail County deferred to the City of Stanley for

comments. The City of Stanley did not provide comments or concerns on the proposed project. Agency correspondence regarding Floodplains is found in **Appendix C**.

3.2.9.2 *Groundwater*

The Groundwater section was not analyzed in detail because the proposed action would not result in contaminants infiltrating the groundwater.

According to USGS National Water Information System the depth to water level in North Dakota ranges from approximately 7 and 25 feet². The City of Stanley's water source is drawn from the Ray Aquifer, purchased from the R & T Water Supply Commerce Authority. The water is treated using a lime softening process, chlorine is added for disinfection, and fluoride and phosphate are added for corrosion control. R&T also receives and blends treated water from the Williston Water Treatment Plant. As stated in the 2022 City of Stanley Annual Drinking Water Quality Report, the R&T Water Association, in cooperation with the ND NDDEQ, has completed a delineation and contaminant/land use inventory elements of the ND Source Water Protection Program. Based on this inventory, the ND NDDEQ determined that the City of Stanley's source water is non susceptible to potential contaminants. The City of Stanley routinely monitors for contaminants in drinking water in compliance with Federal and State laws³.

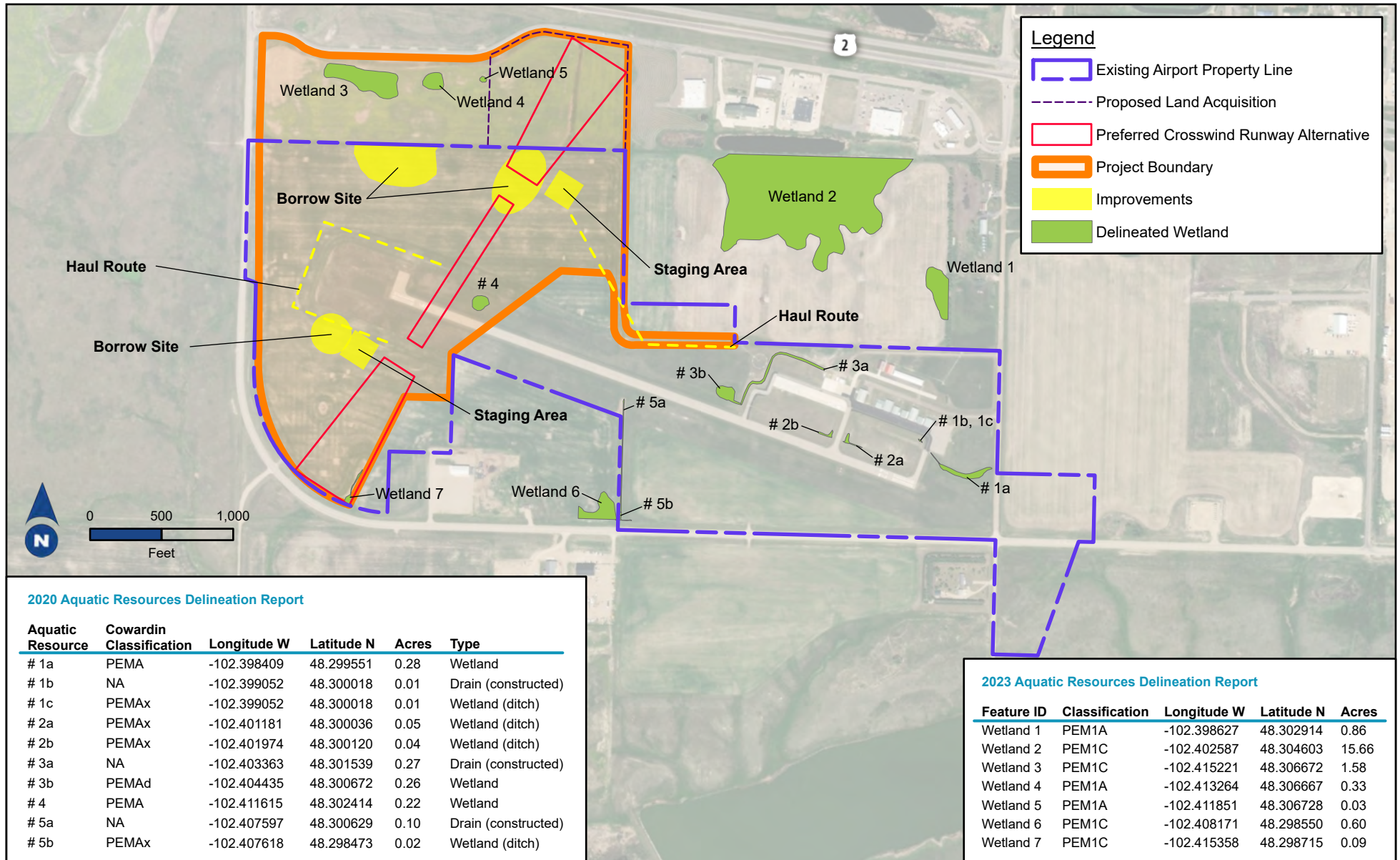
3.2.9.3 *Wetlands*

The Wetlands section was not analyzed in detail because the proposed action would not result in impacts to wetlands delineated within the project boundary.

Delineated wetlands are shown in **Figure 3-3**, below. The Aquatic Resources Delineation Reports dated 2020 and 2023 are appended by reference. Agency correspondence regarding wetlands is found in **Appendix C**. While the proposed project does include minor drainage pattern changes, these are not anticipated to impact wetlands.

² USGS National Water Information System: <https://nwis.waterdata.usgs.gov/nd/nwis/current/?type=gw>

³ Annual Drinking Water Quality Report, Stanley, North Dakota, 2022



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WETLANDS MAP



FIGURE 3-3

3.2.10 Wild and Scenic Rivers

The Wild and Scenic Rivers section was not analyzed in detail because the Airport is not located on or near a Wild and Scenic River.

3.3 Environmental Impact Categories Analyzed in Detail

3.3.1 Hazardous Materials, Solid Waste, and Pollution Prevention

Hazardous materials, solid waste, and pollution prevention includes an evaluation of waste streams generated by the proposed project, potential hazardous materials that could be used during construction and operation, the potential to encounter existing hazardous materials during construction and operation, and the potential to interfere with ongoing remediation of existing contaminated sites at or in the vicinity of the project boundary.

3.3.1.1 *Regulatory Setting*

Various federal regulations apply to this resource category, including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or “Superfund”), the Emergency Planning and Community Right to Know Act (EPCRA), the Hazardous Materials Transportation Act, Pollution Prevention Act, Resource Conservation and Recovery Act (RCRA), and more as described in the FAA 1050.1F Desk Reference.

In North Dakota, “the Legislative Council publishes the Administrative Code, which is the codification of all rules of state administrative agencies, as that term is defined by North Dakota Century Code Section 28-32-01.” Title 33.1 of North Dakota’s Administrative Code regulates solid waste and hazardous waste.

3.3.1.2 *Affected Environment*

The study area for hazardous materials is the project boundary and the area for potential ground disturbance. The EPA’s Superfund Site Information website was reviewed and found no sites within Mountrail County. Mead & Hunt completed a Phase I Environmental Site Assessment (ESA) in January 2024.

The Phase I ESA, which is appended by reference, found six potentially hazardous materials sites within or near Airport property. Site 1 was a Leaking Underground Storage Tank (LUST) site that was cleaned up and permanently removed in 1991. Sites 2 through 5 are located to the north of Airport property. These sites either have underground or aboveground storage tanks or are listed as a Very Small Quantity Generator (VSQG); however, there are no known or recorded spills associated with these sites, and there was no evidence of contamination found during the site reconnaissance. Site 6 is the fuel depot for the Airport, which includes four aboveground storage tanks. This site has no known or recorded hazardous materials incidents and there was no evidence of contamination found during the site reconnaissance. The Phase I ESA found no recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the Airport. The approximate locations of these potentially hazardous materials sites are found in **Figure 3-4**.



-  Finding Sites
-  Proposed Project Area
-  Airport Property Boundary

Figure 3-4: Potentially Hazardous Materials Sites Map

3.3.1.3 *Environmental Consequences*

The proposed project should be assessed to determine if any laws or regulations regarding hazardous waste would be violated, if contaminated sites are involved, if an appreciable amount of hazardous waste would be produced, or if solid waste would be generated that would exceed local capacity. An assessment of the proposed project found:

- The proposed project would produce construction debris such as dirt, existing runway bituminous millings, and electrical cable. This would be associated with the construction of the crosswind runway where it intersects with the existing asphalt runway. For the electrical cable, the proposed project would require the removal of one primary runway edge light, as its current location lies within the crosswind runway footprint.
- Construction materials and other solid waste not able to be recycled on-site would be disposed of at a commercial landfill or recycling facility capable of handling disposal as required by North Dakota rules.
- Local disposal facilities are expected to have capacity to accept solid waste volumes that would be produced by construction and operation of the proposed action.
- No laws or regulations regarding hazardous waste would be violated.
- There would be no hazardous wastes generated by the proposed project.

As stated above, the Phase I ESA found no recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the Airport. This means that the potentially hazardous materials sites found within and near Airport property were determined to have no impact on the proposed project and, conversely, the proposed project would not impact these sites. Based on the information above, there are no significant impacts anticipated to hazardous materials with the no-action or preferred alternative.

3.3.1.4 *Mitigation*

Because the contaminated sites are not located within the proposed project boundary, and because generated waste would not exceed local capacity, mitigation efforts are not needed for the proposed project.

3.3.1.5 *Significance Determination*

The FAA has not established a significance threshold for hazardous waste, solid waste, or pollution prevention. However, there are factors to consider when evaluating the context and intensity of potential environmental impacts for hazardous materials, solid waste, or pollution prevention. **Table 3-1** below lists these factors and discusses how they are applicable to the proposed project.

Table 3-1: Hazardous Materials, Solid Waste, and Pollution Prevention Factors for Consideration	
Factors with the potential to:	Applicability to Proposed Project
Violate applicable federal, state, tribal, or local laws or regulations	No laws or regulations regarding hazardous waste would be violated
Involve a contaminated site	No contaminated sites are located within the proposed project boundary

Produce an appreciably different quantity or type of hazardous waste	There would be no hazardous waste generated by the proposed project
Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity	It is anticipated that the local disposal facility would have enough capacity to handle solid wastes that are generated by the proposed project
Adversely affect human health and the environment	Based on the Phase I ESA results and the above information, the proposed project is not anticipated to adversely affect human health and the environment

Based on the above analysis, there are no significant hazardous materials, solid waste, or pollution prevention impacts anticipated with the preferred alternative or the no-action alternative.

3.3.2 Historical, Architectural, Archaeological, and Cultural Resources

3.3.2.1 *Regulatory Setting*

Section 106 of the National Historic Preservation Act (NHPA) is the principal statute concerning historical, architectural, archaeological, and cultural resources. Other applicable cultural resources laws include, but are not limited to, Archaeological Resources Protection Act, Executive Order 11593 – Protection and Enhancement of the Cultural Environment, American Indian Religious Freedom Act, Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments, and more.

Section 106 of the National Historic Preservation Act of 1966 requires federal agencies to consider effects to historic properties. Historic properties are considered those included on the National Register of Historic Places (NRHP) or those that meet one or more of the four criteria (A-D) for inclusion on the NRHP.

3.3.2.2 *Affected Environment*

The Area of Potential Effects (APE) is the area within which an undertaking may affect a historic property, either directly or indirectly. The APE was defined to include approximately 210 acres in nine individual survey areas surrounding the airport.

A literature review of the archives at the State Historical Society of North Dakota was conducted on June 13, 2023, for a one-mile radius around the APE. The literature review found 50 previously recorded cultural resources and 30 previous cultural resource investigations located within a one-mile radius of the proposed project boundary. None of the previously recorded cultural resources lie within the APE and none would be impacted by the proposed project.

A Class III Cultural Resource Inventory was conducted by Juniper Environmental Consulting (Juniper). Juniper conducted the inventory to State Historical Society of North Dakota Class III Intensive Pedestrian Inventory standards (SHSND 2020). The APE is illustrated within the Stanley Municipal Airport ALP Update: Class III Cultural Resource Inventory in Mountrail County, North Dakota Report, which is appended by reference. The field survey was conducted on June 29-30, 2023, by Juniper and a Traditional Cultural Specialist from the Fort Peck Tribal Historic Preservation Office (THPO) that provided the tribal perspective and interpretations of the proposed undertaking.

The field survey found one new cultural resource during the inventory. Site 32MN1718 is an historic period trash dump within a field pile. The TCS representative expressed no concerns. Site 32MN1718 was recommended *not eligible* for inclusion in the National Register of Historic Places because it lacks significant aspects of physical and spatial integrity and does not meet the guidelines to be eligible under Criterion A-D.

A Notice of Federal Undertaking was provided by the FAA to the Tribal Chair/President(s) and THPO offices on November 1, 2023, to 18 tribes within the northern plains who have affiliation to this area. The Tribal distribution list and correspondence are found in **Appendix D**.

3.3.2.3 *Environmental Consequences*

On November 1, 2023, the FAA submitted a Section 106 finding of *No Historic Properties Affected* to the State Historic Preservation Office (SHPO) for review and concurrence. On November 30, 2023, SHPO concurred with the FAA's finding that 32MN1718 is *Not Eligible* for listing in the NRHP. Additionally, SHPO concurred with the determination of *No Historic Properties Affected* for the proposed project. The SHPO concurrence letter (SHPO Ref. #24-5123) is attached in **Appendix D**.

3.3.2.4 *Mitigation*

Based on the results of the literature review and Cultural Resources Inventory, and SHPO's concurrence with the findings, mitigation efforts are not needed for the proposed project.

3.3.2.5 *Significance Determination*

The FAA does not have a significance threshold for Cultural Resources but does consider whether or not a finding of adverse effect is made under Section 106 of the NHPA. Based on the finding of *No Historic Properties Affected*, no significant impacts would occur.

3.3.3 **Land Use**

3.3.3.1 *Regulatory Setting*

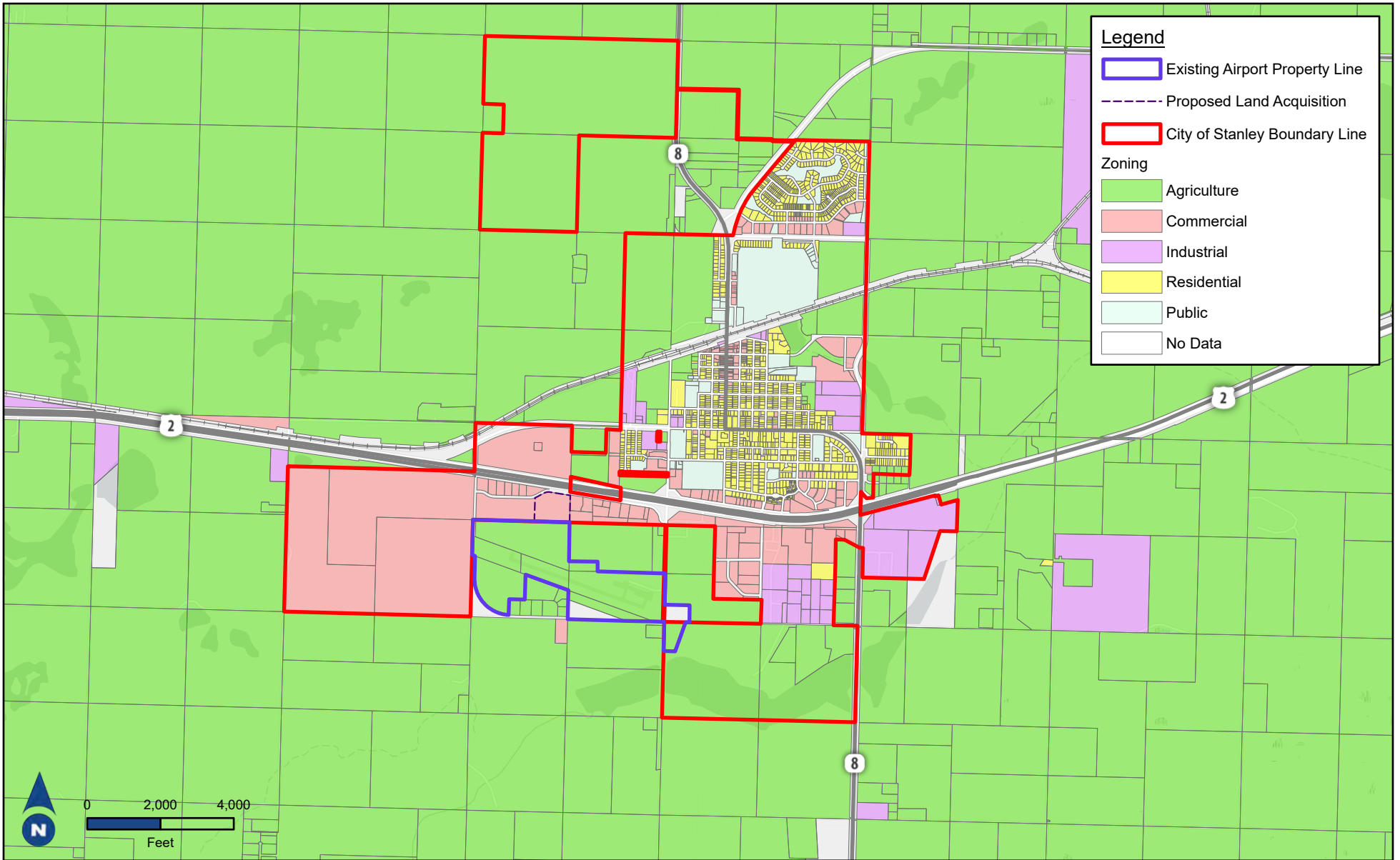
This section will demonstrate actions that the Airport has been or will take, to the extent reasonable, to restrict existing and planned land use next to and near the Airport to activities compatible with airport operations.

Local Zoning Ordinances

The Airport property is zoned by the City of Stanley as Agricultural. The Airport is surrounded by several zoning uses designated by the City of Stanley and Mountrail County, including:

- AG – Agricultural
- C2 – General Commercial
- C3 – Corridor/Highway Commercial
- I2 – Medium Industrial
- I3 – Heavy Industrial
- I4 – Oil field industrial
- MH – Manufactured Home District
- P – Public
- R1 – Single Family, Detached Housing
- R2 – Single Family
- R3 – Low Density, Multifamily
- R6 – Transitional Housing

Figure 3-5 shows zoning districts and jurisdictions.



Sources: State of North
Dakota, Esri, TomTom,
Garmin, SafeGraph,
GeoTechnologies, Inc, METI/
NASA, USGS, EPA, NPS,
USDA, USFWS, Mountrail
County, City of Stanley

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ZONING MAP



FIGURE 3-5

FAA Land Use Guidance

Land use regulations near airports typically focus on safety for airport users and the surrounding community, along with minimizing negative impacts such as noise disturbance, and zoning regulations generally discourage or prohibit land use that is incompatible with airports. The authority to enact zoning codes lies at the local level. However, the FAA offers guidance documents and grants that fund airport planning and land use studies.

Specific guidance offered by the FAA concerns land uses within the RPZ. An RPZ is a trapezoidal shaped area beyond a runway end with the purpose of protecting pilots as well as individuals and property on the ground. The size of this zone is determined by the design of the runway, the types of aircraft most frequently using the runway, and the visibility minimums for runway instrument approach procedures.

FAA Advisory Circular (AC) 150/5300-13A, Airport Design, states that, “It is desirable to clear the entire RPZ of all above-ground objects. Where this is impractical, airport owners, at a minimum, should maintain the RPZ clear of all facilities supporting incompatible activities.” On September 27, 2012, the FAA Office of Airports issued the memorandum “Interim Guidance on Land Uses Within a Runway Protection Zone,” which further clarifies incompatible land uses. Consultation with the FAA is required when there are new or changed uses planned within an RPZ, or a planned change to an RPZ size or location. Land uses planned within an RPZ that require FAA consultation include:

- Buildings and structures
- Recreational land uses
- Transportation facilities
- Fuel storage facilities
- Hazardous material storage
- Wastewater treatment facilities
- Above-ground utility infrastructure, including solar panel installations.

State of North Dakota Land Use Guidance and Joint Airport Zoning Board

The North Dakota Century Code contains all currently effective laws in the state. Aeronautics laws are provided in Title 2, and specific Airport Zoning laws are found in Chapter 2-04. The purpose of airport zoning regulations is to prevent the creation or establishment of airport hazards. As stated in Century Code 2-04-03, every political subdivision that has an airport hazard area within its limits may adopt airport zoning regulations. These regulations typically divide airport hazard areas into zones where each zone has specific land uses. For example, these zones may restrict the height to which structures may be built or trees may grow. North Dakota Century Code 2-04-03-2 authorizes a joint airport zoning board (JAZB) to enact zoning ordinances if an airport hazard zone falls within two or more political subdivisions. There is currently no JAZB in place for Stanley Municipal Airport. Additional guidance specific to airport runway approach hazards is provided in North Dakota’s Administrative Code 6-02-03.1.

3.3.3.2 Affected Environment

A one-mile radius of the project boundary and the Airport property were analyzed for this resource category. Land use in the project boundary is made up of paved airport facilities, mowed short grasses on Airport property, agricultural uses, and local roadways.

Lands adjacent to the project boundary are primarily in agricultural production. Sporadic business uses are found northeast and east of the Airport, such as hotels, grocery and hardware stores, and gas stations. The City of Stanley limits surround the Airport to the north, east, and west, with most of the residential areas located northeast of the proposed project boundary. Specifically, the FAR Part 77 Approach Surface for the proposed runway does not affect noise-sensitive land uses such as the residential areas within the City of Stanley.

Planned Land Use

The Mountrail County 2030 Comprehensive Plan provides valuable information about priority growth areas and preferred development types. The Comprehensive Plan includes a Future Land Use Map, which is meant to be a guide for future zoning decisions. The Future Land Use Map shows that Stanley and surrounding areas are prioritized as an “Urban Growth Area”. The Plan explains that most of the County’s recent growth can be attributed to the growing Cities of Parshall, New Town, and Stanley, and future growth is anticipated to continue in these areas⁴.

Wildlife Attractants

A Wildlife Hazard Management Plan has not been prepared for Stanley Municipal Airport. The FAA Wildlife Strike Database was reviewed. As of January 5, 2023, there were no results for the Airport, therefore, it is assumed that there are limited wildlife hazards at the Airport.

Land cover within the project boundary contains no sensitive habitat and consists of short, regularly mowed grasses surrounding RWY 10/28 and croplands for hay production in the surrounding area of Airport property. Other land uses on the Airport include impervious surfaces, such as the runways, taxiways, and roadways, that are used for regular airport operations. These land uses are not wildlife attractants. The Airport maintains grass height, as applicable, to avoid wildlife attractants.

On November 24, 2023, the North Dakota Game and Fish Department stated, “We do not believe [the proposed project] will have significant adverse effects on wildlife or wildlife habitat.” Agency correspondence regarding wildlife is found in **Appendix C**.

RPZ

Airport property currently contains the RPZs for Runway 10/28. The Airport currently owns the land that the proposed crosswind runway alternative would be built upon, as well as the land over which the Runway 2 RPZ would sit. The preferred alternative would require the acquisition of approximately 17 acres of land over which part of the Runway 20 RPZ would sit. Land acquisition is required so the Airport can have complete governing control of the land except for the underground utilities.

Transportation

Stanley Municipal Airport is located south of US Highway 2, and surrounded by 82nd Ave NW, 61st St NW, and 83rd Ave NW. The main access road for all Airport facilities is off 82nd Ave NW. This road provides access to the terminal and hangar area on the east side of the Airport. Unofficial access points exist on

⁴ Mountrail County ND, 2030 Comprehensive Plan: <http://www.co.mountrail.nd.us/Documents/Uploads/2030-Mountrail-County-Comprehensive-Plan.pdf>

61st St NW and 83rd Ave NW, which are mainly used for agricultural equipment to operate within their leased land areas on Airport property.

Utilities

Three underground utilities are located within or near the proposed project boundary: a Williston Basin Interstate (WBI) natural gas pipeline, a Montana-Dakota Utilities Company (MDU) natural gas pipeline, and a U.S. Air Force missile communication cable (AFCC) (see **Figure 2-1** in **Chapter 2**).

3.3.3.3 *Environmental Consequences*

The project is not anticipated to impact the existing underground utilities. Agricultural use is expected to continue on land above these utilities, except in areas where the proposed runway would be constructed and within the Runway Object Free Area (ROFA).

Zoning

Land acquisition is proposed with this project to restrict existing and planned land use next to and near the Airport to activities that are compatible with airport operations.

Wildlife Attractants

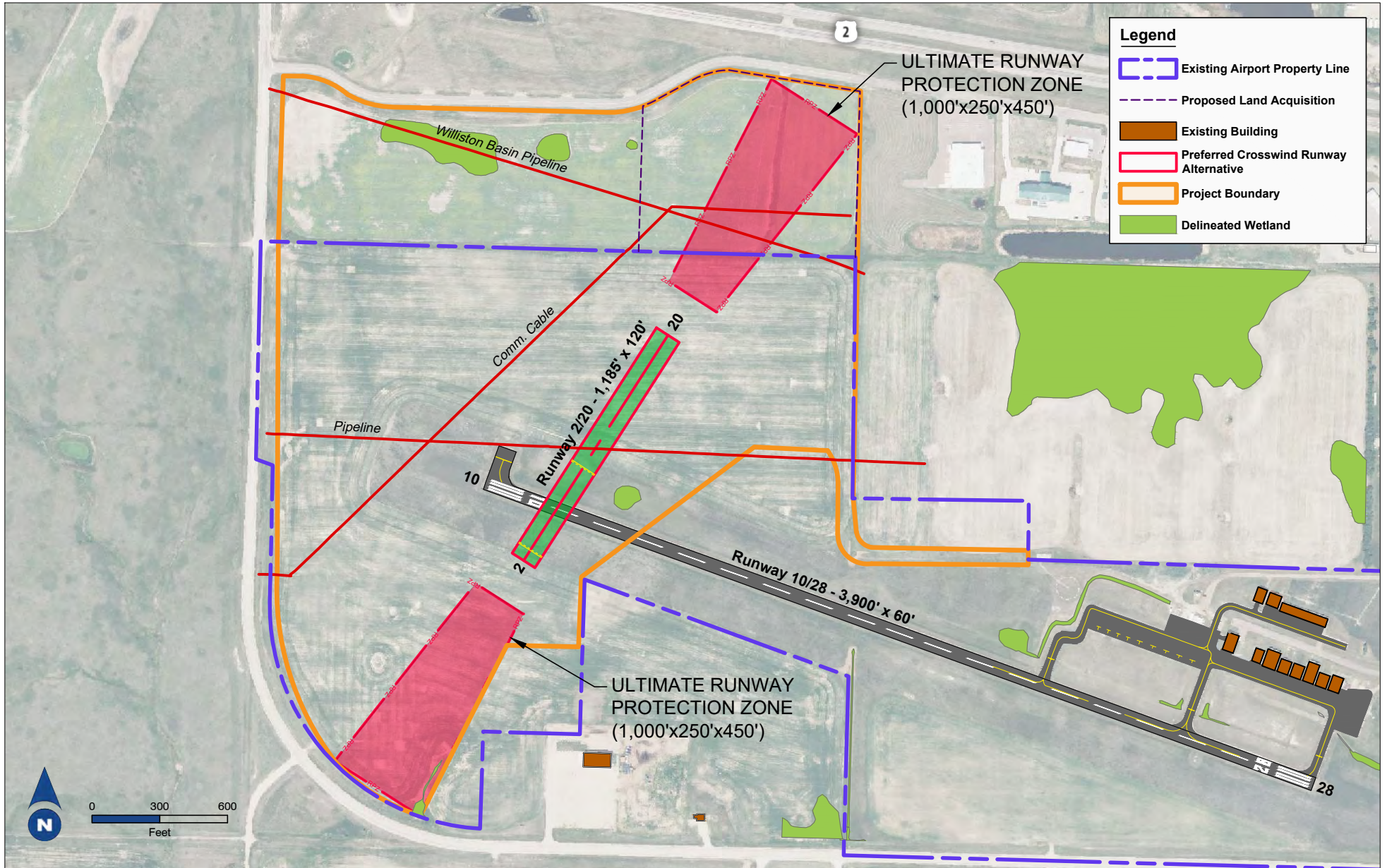
Vegetation management post-construction would continue with regular mowing, unless the area would be cropland, which serves to minimize wildlife hazards while also minimizing the introduction and establishment of invasive species. Introduction and spread of invasive species at the Airport would also be minimized prior to, during, and after construction of the proposed project through a variety of best management practices. Areas disturbed during construction would follow the FAA specifications for seeding (T-901) and will use an ND State seed mix that would not attract wildlife.

Because the agricultural land on and surrounding Airport property is not the sole source of agriculture nearby, it does not necessarily serve as a greater wildlife attractant than adjacent agricultural properties. The proposed project is not anticipated to result in an increase in wildlife attractants.

RPZ

Figure 3-6 shows the existing and future RPZs. The existing RPZs for Runway 10/28, the land that the proposed Runway 2/20 would be built upon, and the land over which the proposed Runway 2 RPZ would sit are all located within Airport property. The RPZ for the proposed Runway 20 end would require land acquisition to be fully located within Airport property. Because the land needed for the proposed project is currently used for agricultural purposes, there are no anticipated removals required to clear the RPZ for the proposed project.

Per 49 U.S.C. §47107(a)(10), appropriate action must be taken to restrict the use of land next to or near airports to uses that are compatible with normal airport operations. The proposed land acquisition would satisfy this requirement so the Airport can have complete governing control of the land, except for the underground utilities, that would be consistent with normal airport operations.



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RUNWAY PROTECTION ZONE (RPZ)

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FIGURE 3-6

Transportation

No permanent additional trip generation or parking is anticipated from the proposed project. No additional congestion is anticipated, and no new traffic would be generated. The flow of traffic for US Highway 2, 82nd Ave NW, 61st St NW, and 83rd Ave NW are not anticipated to change due to the proposed project. No public road signs indicating construction traffic are anticipated with the proposed project. If design requires additional hauling, signs will be required, and the contractor will be required to follow Manual on Uniform Traffic Control Devices (MUTCD) requirements for signage.

Utilities

Project information was sent to MDU, WBI, and the Minot Air Force Base (AFB) in October 2023. On October 31st, 2023, MDU/WBI sent a map depicting the locations of the gas services and mains in the airport area, as well as the WBI pipeline location. On November 1st, 2023, MDU/WBI stated that the proposed project would not affect the nearby utilities. Continued coordination with Minot AFB occurred in November 2023. This coordination included a list of questions from Minot AFB and responses to the questions from the project team. Minot AFB did not provide follow up questions or comments after November 20, 2024. Agency correspondence regarding utilities is found in **Appendix C**.

Based on this coordination, the three underground utilities (WBI pipeline, MDU pipeline, and AFCC) would not be impacted by the proposed project. Existing rights of way and easements would not be changed.

3.3.3.4 *Mitigation*

Through the proposed land acquisition, the Airport is taking all appropriate action, to the extent reasonable, to restrict the use of land next to or near the Airport to uses that are compatible with normal airport operations. Additionally, post-construction vegetation management would be consistent with practices that minimize wildlife attractants, and the existing underground utilities would not be impacted by the proposed project.

3.3.3.5 *Significance Determination*

The proposed project is consistent with North Dakota Century Code 2-04 by preventing the creation or establishment of airport hazards, as described above. The FAA has not established a significance threshold for land use, or factors to consider when determining significance of a project's effect on land use. Consistent with NEPA guidance, because there are minimal to no impacts in the other resource categories, there are no significant land use impacts anticipated with the preferred alternative or the no-action alternative.

3.3.4 Natural Resources and Energy Supply

3.3.4.1 *Regulatory Setting*

The CEQ regulations implementing NEPA at 40 CFR § 1502.16(e)-(f) require consideration of a proposed project's energy requirements and natural resource requirements in NEPA documents. Airport construction projects often change an airport's demand on local energy and natural resource supplies. The following impact categories should be included in an EA/EAW, as needed:

- Impacts of the proposed project on local electric, gas, and water utilities
- Construction material required for the proposed project, and its availability from local suppliers
- Impact of the proposed project on aircraft and ground vehicle fuel use.

3.3.4.2 *Affected Environment*

The project boundary was reviewed for the natural resources and energy supply resource category. Aeronautical facilities affected by the preferred alternative do not consume natural gas or water. Existing runway and taxiway lighting systems on the airfield require electricity supply. These systems include runway end identifier lights, medium-intensity edge lighting, a navigation aid (NAVAID) beacon, and 2-light visual glide slope indicator lights on each runway end.

3.3.4.3 *Environmental Consequences*

No additional lighting is proposed for the preferred alternative; therefore, no significant impacts are anticipated on the electricity supply.

No increase in aircraft operations is expected as a result of the preferred alternative. Operation and maintenance of the proposed runway are expected to require minor increases in fuel usage, but these increases would be minimal and within local supply levels. Because of these reasons, no significant impacts on fuel usage are anticipated.

Consumption of energy and natural resources during the construction phase of the proposed project would consist mainly of construction machinery fuel and construction materials. This consumption is not anticipated to exceed locally available supplies. Construction materials that are anticipated to be brought from off-site include concrete storm pipe, asphalt bituminous pavement, asphalt tack coat, aggregate base, paint for markings, retroreflectors, erosion control fiber-rolls, seed, mulch, concrete for sign pads, and electrical components for relocation of existing runway lights.

3.3.4.4 *Mitigation*

Because there are no lighting additions or increase in aircraft operations, and because consumption of energy and natural resources will be temporarily limited to construction, mitigation efforts are not needed for the proposed project.

3.3.4.5 *Significance Determination*

The FAA has not established a significance threshold for natural resources and energy supply; however, situations where the proposed project would potentially cause demand to exceed available or future supplies of energy or natural resources should be considered. The proposed project would not cause demand to exceed available or future supplies of these resources.

Based on the above analysis, there are no significant natural resources and energy supply impacts anticipated with the preferred alternative or the no-action alternative.

3.3.5 Socioeconomics, Environmental Justice, & Children's Environmental Health and Safety

3.3.5.1 *Regulatory Setting*

Statutes related to socioeconomic impacts include the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970. Environmental justice, as defined by the EPA, is the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation." Title VI of the Civil Rights Act of 1964, Executive Orders, and other federal guidance have been issued to address environmental justice and children's environmental health and safety risks.

3.3.5.2 Affected Environment

Areas directly adjacent to the project boundary and affected jurisdictions were analyzed for this resource category. The Airport is located in Mountrail County, approximately one mile southwest of downtown Stanley, 55 miles west of Minot, and 70 miles east of Williston. Population growth in these jurisdictions, as compared to the State of North Dakota, is shown in **Table 3-2**.

The area near the Airport, the county, and neighboring cities are steadily growing in population and are growing at a faster rate than the state as a whole.

	2010	2015	2020	Compound Annual Growth Since 2010
North Dakota	672,591	756,928	779,094	1.48%
Mountrail County	7,673	9,253	9,809	2.48%
Stanley	1,458	2,118	2,321	4.76%
Minot	40,888	46,194	48,377	1.70%
Williston	14,716	22,015	29,160	7.08%

Source: U.S. Census Bureau 2015, 2015 American Community Survey 1-year Estimates, 2010 Decennial Census, and 2020 Decennial Census

Income and household size are useful indicators for understanding the potential sensitivity of a community to socioeconomic impacts. **Table 3-3** summarizes per capita and median household income for the cities, county, and state in 2020. Stanley is at approximately the same per capita income level as the state but has significantly higher median household incomes than the state and all other jurisdictions analyzed.

Area	Per Capita Income	Median Household Income	Average Household Size
North Dakota	\$41,800	\$71,970	2.93
Mountrail County	\$36,141	\$76,520	3.61
Stanley	\$41,704	\$97,000	3.26
Minot	\$37,644	\$68,543	2.99
Williston	\$40,942	\$75,061	3.17

Note: ACS Per Capita Income does not measure interest, dividends, rent, insurance, or transfer payments.
Source: U.S. Census Bureau, 2022 American Community Survey 1-Year Estimates, and 2020 Decennial Census.

An understanding of baseline demographic and socioeconomic conditions also helps to determine whether environmental justice populations exist near the Airport. Certain demographic groups often experience more exposure to environmental stressors than the general population. Executive Order 12898 defines environmental justice populations as minority populations, low-income populations, and

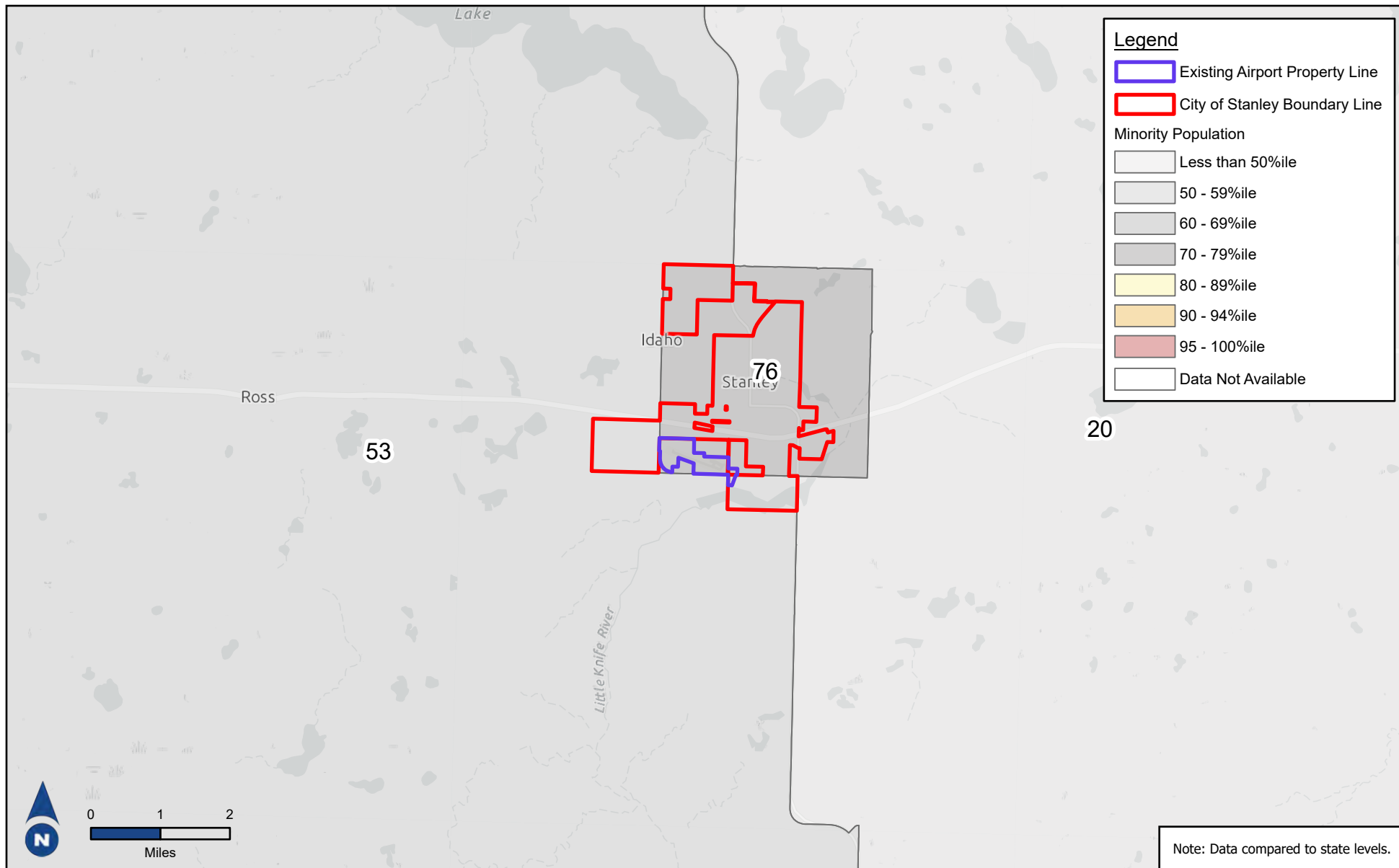
indigenous peoples. FAA Order 1050.1F and CEQ Guidance from 1997 further define minority as, “individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.” A minority population exists if, “either (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.” Minority populations in the analyzed jurisdictions are summarized in **Table 3-4**.

Table 3-4: Population by Race					
Area	Black or African American	American Indian	Asian	Hispanic or Latino	Minority Population
North Dakota	3.4%	4.9%	1.6%	4.2%	17.1%
Mountrail County	1.2%	28.9%	1.0%	7.8%	33.6%
Stanley	0.8%	1.9%	0.8%	12.7%	7.3%
Minot	5.1%	2.8%	1.8%	6.8%	12.1%
Williston	6.7%	2.6%	1.9%	10.8%	15.9%
<p><i>Note: Total minority population may not be equal to the total of the previous columns due to overlap in Hispanic/Latino identifying respondents with other categories.</i> <i>Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates, and 2020 Decennial Census.</i></p>					

All jurisdictions analyzed, except Mountrail County, have minority populations similar to or lower than the state as a whole. As identified in **Table 3-4**, Stanley has a minority population of 7.3%, which does not exceed 50%, nor is it greater than the minority population percentage compared to the County at 33.6%, and the State at 17.1%. Mountrail County is the only analyzed jurisdiction that has a higher minority population, which can be attributed to the significantly higher percent of American Indian minorities in the county, which includes a portion of the Fort Berthold Reservation.

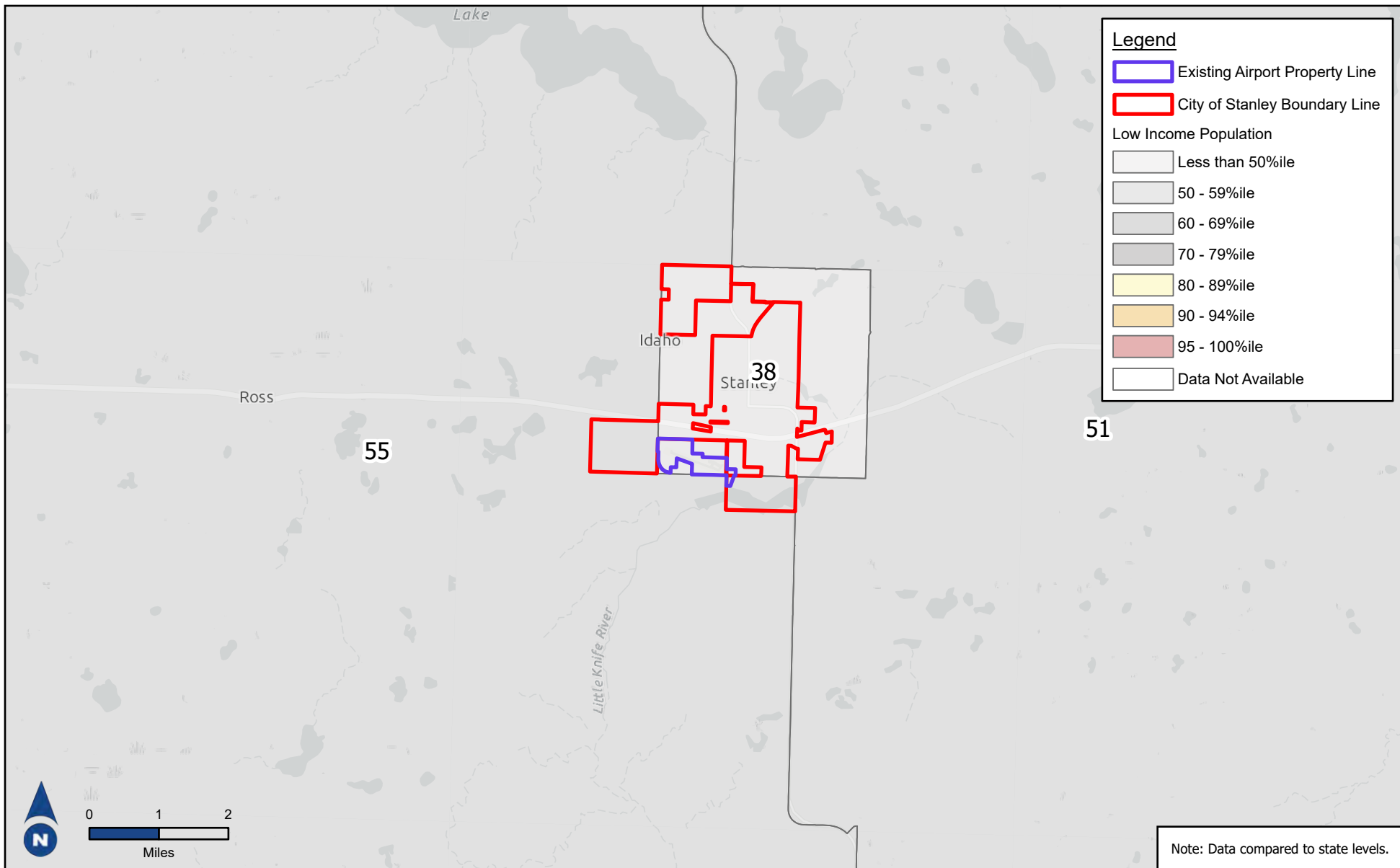
EJScreen, the US EPA environmental justice screening and mapping tool, was consulted to determine if there are any concentrations of communities of color or low-income populations near the project boundary. Similarly, as identified in the EJScreen Community Report, which is found in **Appendix A**, the minority population within a 1-mile boundary of the Airport was 21%, which does not exceed 50%, nor is it meaningfully greater than the minority population percentage compared to the state average of 16%, and the U.S. average of 39%.

Further, as identified in **Figure 3-7**, the minority population in the areas surrounding the Airport and project boundary were within the 50-79th percentile in the State (53rd and 76th percentile), which means that 24-47% of the State has a higher value. **Figures 3-7** shows the EJScreen Index for minority compared to state levels. The EJScreen Community Report can be found in **Appendix A**.



Compared to the state, all areas surrounding the Airport and project boundary were below the 60th percentile for low-income residents. **Figure 3-8** shows the EJScreen Index for low-income populations compared to state levels. The EJScreen Community Report can be found in **Appendix A**.

Area	Low Income Level
United States	31%
North Dakota	26%
Mountrail County	30%
Stanley	20%
<p><i>Note: EJSCREEN defines “low income” as individuals living with incomes below 200 percent of the federal poverty level, which differs from the DOT definition used by the FAA. As a result, when using this tool, practitioners should ensure that they can convert the results so that they can be compared to the DOT definition.</i></p> <p><i>Source: EJSCREEN Community Report</i></p>	



Sources: State of North
Dakota, Esri, TomTom,
Garmin, SafeGraph,
GeoTechnologies, Inc, METI/
NASA, USGS, EPA, NPS,

STANLEY MUNICIPAL AIRPORT
STANLEY, ND

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1/25/2024

CENSUS MAP - LOW-INCOME POPULATIONS



FIGURE 3-8

3.3.5.3 *Environmental Consequences*

Socioeconomics

Factors to consider when analyzing the context and magnitude of potential impacts include whether the proposed project has the potential to:

- Induce substantial economic growth in an area
- Disrupt or divide the physical arrangement of an established community
- Cause extensive relocation
- Disrupt traffic patterns and reduce the level of service of roads serving a surrounding community
- Substantially change a community's tax base.

The preferred alternative is not expected to significantly influence economic activity in the area, nor will it disrupt or cause any relocation of the established community. Additionally, the proposed project will not disrupt traffic patterns or change the community's tax base.

Land Acquisition

The Airport would purchase approximately 17 acres of land adjacent to the existing property for the RPZ required for Runway 20. Land purchased for the proposed project would comply with the Uniform Relocation Assistance and Real Property Acquisition Policy Act.

This land acquisition may slightly decrease the tax base; however, these impacts are not significant within the context of the activity occurring in the larger area.

Environmental Justice

A review of census information and EJScreen showed that all areas surrounding the Airport and project boundary were below the 50th percentile compared to the nation for minority populations and low-income residents. Based on this information, the no-action and the preferred alternative are not expected to result in a disproportionately high and adverse effect to environmental justice populations.

Children's Environmental Health and Safety

Areas affected by Airport noise do not include schools, playgrounds, or other facilities that would otherwise be primarily accessed by children. Under the preferred alternative, there are no significant impacts to air quality or water resources that may influence the health of the surrounding population, including children. There are no disproportionate safety risks associated with the proposed project, which will not occur near residential areas that may be home to children or public facilities such as parks that may attract children. No disproportionate health or safety risks to children are expected.

3.3.5.4 *Mitigation*

Because there are no disproportionately high or adverse impacts to socioeconomics, minority and/or low-income communities, or children's health and safety, mitigation efforts are not needed for the proposed project.

3.3.5.5 *Significance Determination*

The FAA has not established a significance threshold for socioeconomics, and the proposed project is not anticipated to impact the consideration factors listed above.

In most cases, the significance of environmental justice impacts is dependent on the significance of impacts in other environmental categories that may affect environmental justice populations. These categories can include noise, air and water quality, and Section 4(f) impacts, among others. Impacts to other resource categories are not considered significant, therefore, environmental justice impacts are also not anticipated to be significant.

In most cases, the significance of impacts to children's environmental health and safety is dependent on the significance of impacts in other environmental categories. The FAA has not established a significance threshold for this category but requires consideration of whether the proposed project will lead to disproportionate health or safety risks to children. Impacts in other resource categories are not considered significant.

No disproportionately high or adverse effects are anticipated on socioeconomics, environmental justice, or children's environmental health and safety for the preferred alternative and no-action alternative.

3.3.6 Water Resources

3.3.6.1 Regulatory Setting

Surface Waters

Surface waters include streams, rivers, lakes, ponds, estuaries, and oceans. The Clean Water Act (CWA) was established to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The CWA allows states to adopt water quality standards. North Dakota has done so under Century Code 23.1-11 and Administrative Code 33.1-16, which is administered by the NDDEQ.

The North Dakota Century Code "establishes a degradation prevention program to protect ground water resources, encourages the wise use of agricultural chemicals, provides for public education regarding preservation of ground water resources, and provides for safe disposal of wastes in a manner that will not endanger the state's ground water resource." North Dakota Administrative Code 33.1-16-02.1 determines systems and standards for waters of the state. These standards assign beneficial uses, known as designated uses, for every water body. North Dakota waters and their assigned designated uses are to be protected whether for drinking water, recreation, fish consumption, or aquatic life. Not only do water quality standards establish designated uses, but they also establish criteria that must be met within the bodies of water, so water quality is maintained to support their designated uses.

So-called "impaired waters" are any bodies of water that do not meet water quality standards or fully support the water body's beneficial use. Section 303(d) of the CWA requires states to assess and list impaired waters and establish priority ranking by considering the water's uses and pollutant levels. The NDDEQ submits an Integrated Report to EPA every two years that includes Section 303(d) list of impaired waters and Section 305(b) water quality assessment report.

Stormwater

For stormwater and other activities, Article 33.1-16-01 of the Administrative Code describes the North Dakota Pollutant Discharge Elimination System (NDPDES) Program or Permits Program. The Permits Program is administered by the NDDEQ and provides a permitted structure to address wastewater discharged from point source facilities. Regulated activities include municipal/industrial wastewater,

stormwater, pretreatment, septic pumper, and concentrated animal feeding operations⁵. A stormwater permit for construction activity is required for activities disturbing 1 or more acres of soil. Permittees are required to control runoff from construction sites and develop a construction SWPPP that includes erosion prevention and sediment control BMPs.

3.3.6.2 *Affected Environment*

The Little Knife River is located approximately 0.3 miles south of the Airport and is a tributary of Lake Sakakawea (Missouri River). The Little Knife River Watershed is within the Upper Missouri River Basin, and, more specifically, within the Lake Sakakawea Subbasin⁶.

3.3.6.3 *Environmental Consequences*

Surface Waters

The most recent 2020-2022 Integrated Report from the NDDEQ determined that impaired waters are found in the James River Basin, Missouri River Basin, Red River of the North Basin, and Souris River Basins. The Little Knife River is listed as an impaired 303(d) waterbody in the NDDEQ's most recent report. Specifically, 44.6 miles of the Little Knife River from Stanley Reservoir moving downstream to Lake Sakakawea is impaired by the pollutant of Fecal Coliform. As required by CWA Section 303(d), the state is required to assign a priority for development of TMDLs based on the severity of the pollution and sensitivity of the uses of the waters. The Little Knife River is listed as a low priority to develop a Total Maximum Daily Load (TMDL)⁷. The proposed project is not anticipated to impact surface waters. On November 7, 2023, the NDDEQ provided the following comments on the proposed project related to surface waters:

“Care is to be taken during constructure activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance and/or the handling of fuels on the site.”

Stormwater

The proposed project includes minor drainage pattern changes, such as storm pipe installation and on-site excavation to meet FAA grading standards.

3.3.6.4 *Mitigation*

Surface Water

The NDDEQ letter includes guidelines (Construction and Environmental Disturbance Requirements) for minimizing degradation to waterways during construction, which can be found in **Appendix C**. The proposed project would follow all NDDEQ Construction and Environmental Disturbance Requirements, as applicable.

⁵ North Dakota Department of Environmental Quality (DEQ), NDPDES – Permits Program: https://deq.nd.gov/WQ/2_NDPDES_Permits/default.aspx

⁶ North Dakota Department of Environmental Quality, Interactive Watershed Mapping Tool: https://deq.nd.gov/WQ/3_Watershed_Mgmt/

⁷ North Dakota Department of Environmental Quality, North Dakota 2020-2022 Integrated Section 305(b) Water Quality Assessment Report and Section 303(d) List of Waters Needing Total Maximum Daily Loads: [2020_2022_Final_ND_Integrated_Report_20230824.pdf](https://deq.nd.gov/WQ/2020_2022_Final_ND_Integrated_Report_20230824.pdf)

Stormwater

During design, an Erosion Control plan will be developed to assist the contractor in submitting and completing their required SWPPP. Erosion control measures such as the use of straw wattles, staked silt fence, inlet protection, seeding and mulching will be utilized as needed. Best management practices for dust control will be utilized, which may include the use of water trucks or other approved methods. The contractor will be responsible for obtaining and maintaining an approved SWPPP. The project specific SWPPP, completed by the selected contractor prior to beginning construction, will identify all potential pollution sources that could come into contact with stormwater that is leaving the site, describe Best Management Practices and control measures for preventing pollution, and procedures for conducting inspections and monitoring to ensure the SWPPP measures are successful.

3.3.6.5 *Significance Determination*

Based on the above analysis and mitigation measures, there are no significant surface water or stormwater impacts anticipated with the preferred alternative or the no-action alternative.

3.3.7 **Cumulative Impacts and Cumulative Potential Effects**

3.3.7.1 *Regulatory Setting*

NEPA requires the analysis of “cumulative impacts.” Cumulative impacts are impacts on the environment that result from the incremental impact of the action when added to past, present, and reasonably foreseeable development in the area that is not directly associated with the preferred alternative, regardless of what agency or person undertakes such actions. According to FAA Order 5050.4B, reasonably foreseeable actions include those “on or off-airport that a proponent would likely complete and that has been developed with enough specificity to provide meaningful information to decision makers and the interested public.”

3.3.7.2 *Past, Present, and Reasonably Foreseeable Projects*

On-Airport Projects

Projects that have occurred at Stanley Municipal Airport in the last five years include 2018 PCC Apron Construction, 2019 Taxiway Asphalt Mill/Overlay, 2020/2021 Jet Fuel Farm Construction, and 2022 Runway 10/28 PAPI Installation. Additionally, pavement maintenance to seal coat and crack seal asphalt pavements have occurred in this timeframe.

The Airport is currently updating its Airport Layout Plan (ALP) to guide future on-Airport projects. A Capital Improvement Plan (CIP) meeting was held on August 31, 2023 to discuss current and future Airport needs and projects, along with other topics such as a sponsor report, environment and safety topics, and administrative items. Projects recommended in the CIP meeting included apron rehabilitation, jet fuel relocation, terminal building parking lot, medivac apron construction, seal coat pavement, access road pavement, and perimeter fence installation.

Off-Airport Projects

Current and future NDDOT projects near the Airport include preventative maintenance on US Highway 2, which is directly north of Airport property.

3.3.7.3 Cumulative Environmental Consequences

The recent and planned actions described above, when combined with the proposed project at the Airport, do not have significant cumulative effects on environmental impact categories within the project boundary.

Impacts of the proposed project when considered with past or future actions do not constitute a significant impact that cannot be mitigated. All future actions will be subject to avoidance and minimization studies and will undergo agency review and permitting as required. Every effort will be made to avoid or minimize impacts where feasible. No significant cumulative impacts or cumulative potential effects are associated with the preferred alternative.

3.4 Summary

A summary of the impacts presented in this section is presented in **Table 3-6**. The table includes the impacts from the no-action and preferred alternatives, as well as any required mitigation, permits, or associated actions.

Environmental Impact Category		No-Action Alternative	Preferred Alternative	Permitting/Mitigation & Associated Actions
Hazardous Materials, Solid Waste, and Pollution Prevention		No impact	No impact	Dispose of construction materials and solid waste in accordance with state and local laws.
Historical, Architectural, Archaeological, and Cultural Resources		No impact	No Historic Properties Affected	-
Land Use	Zoning	No impact	No impact	-
	Ground Transportation	No impact	No impact	-
	RPZ	No impact	No substantial impacts	Land acquisition would establish governing control of RPZ, except for the underground utilities. Project team to send grading design information to Minot AFB, when available.
	Utilities	No impact. Underground utilities on Airport property.	No impact	-
	Wildlife Attractants	No impact. Agricultural use within Airport property, for production of hay.	No impact	To minimize wildlife attractants, vegetation management post-construction would continue with regular mowing, unless the area would be cropland.
Natural Resources and Energy Supply		No impact	No impact	-

Socioeconomic, Environmental Justice, and Children's Health and Safety		No impact	No impact	Land acquisition in compliance with Uniform Relocation Assistance and Real Property Acquisitions.
Water Resources	Surface Waters and Stormwater	No impact	No impact	A project specific SWPPP would be developed. The proposed project would follow all NDDEQ Construction and Environmental Disturbance Requirements, as applicable.
Cumulative Impacts		No substantial impacts.	No substantial impacts.	-