

## **Appendix C**

### **ENVIRONMENTAL OVERVIEW**

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A review of the potential environmental impacts associated with proposed airport projects is an essential consideration in the Airport Master Plan process. The primary purpose of this appendix is to review the proposed improvement program at Salina Regional Airport to determine whether the proposed developments identified in the Master Plan could, individually or collectively, significantly affect existing environmental resources. The information contained in this section was obtained from previous studies, internet websites, and analysis by the consultant.

Construction of any and all improvements depicted on the Airport Layout Plan (ALP) will require compliance with the National Environmental Policy Act (NEPA) of 1969, as amended. This includes privately funded projects and those projects receiving federal funding. For projects not categorically excluded under FAA Order 1050.1E, Environmental Impacts: Policies and Procedures, compliance with NEPA is generally satisfied through the preparation of an Environmental Assessment (EA). In instances where significant environmental impacts are expected, an Environmental Impact Statement (EIS) may be required.

While this portion of the Master Plan is not designed to satisfy the NEPA requirements, it will provide a preliminary review of environmental issues that may need to be considered in more detail within the environmental review processes. This evaluation considers all environmental categories required as outlined within Federal Aviation Administration (FAA) Order 1050.1E and FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementation Instructions for Airport Actions.

The following sections describe environmental resources which could be impacted by the proposed ultimate airport development depicted on **Exhibit C1**. As discussed in Chapter One, it was determined that the following resources are not present within the airport environs:

- Coastal Barriers
- Coastal Zone Management Areas
- Wild and Scenic Rivers

## **AIR QUALITY AND CLIMATE**

For the purposes of satisfying NEPA and Clean Air Act requirements, two factors must be considered. NEPA requires that an air quality emissions inventory be prepared for federal actions at commercial service airports having more than 1.3 million enplanements or more than 180,000 general aviation and air taxi operations. Under the Clean Air Act, to ensure that a federal action complies with the NAAQS, the General Conformity Rule has been established for all general federal actions, which includes all airport improvement projects. The General Conformity Rule (40 CFR § 93) applies to federal actions that meet all of the following criteria:

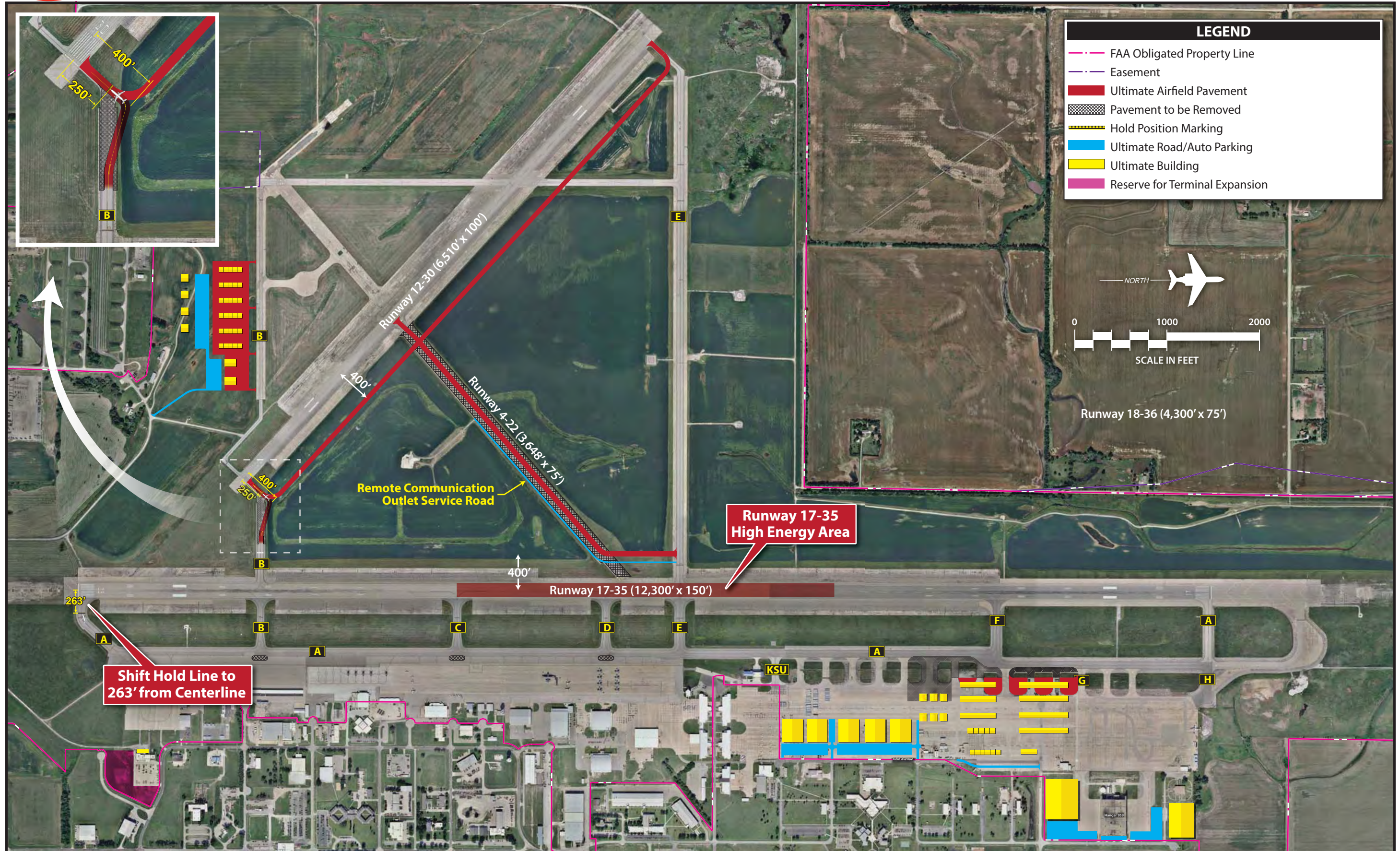
- Federally funded or federally approved;
- Not a highway or transit project;
- Not identified as an exempt project under the CAA and is not listed on the federal agency's Presumed to Conform list; and
- Located within a nonattainment or maintenance area.

Based on the forecasts prepared in Chapter Two, Salina Regional Airport does not meet the required operational levels of Clean Air Act criteria to necessitate air quality modeling as part of any environmental documentation that would be required for improvements proposed in the Master Plan. Additionally, in accordance with FAA Order 1050.1E, Guidance Memo #3 – Considering Greenhouse Gases and Climate Under the National Environmental Policy Act (NEPA): Interim Guidance, a quantitative analysis of climate would not be required as no modeling would be conducted as part of the environmental analysis.

Air quality thresholds were not exceeded; therefore, no computation of metric tons of CO<sub>2</sub> equivalent for greenhouse gas emissions inventory was needed or required.

Temporary impacts would result during Runway 4-22 pavement removal, Taxiway B realignment, infield taxiway construction, and hangar construction. Exhaust emissions from the operation of construction vehicles and fugitive dust from pavement removal are common air pollutants during construction. During evaluation of these specific projects, an emissions inventory using on-road and off-road construction emissions models may be required.







## Noise

Per federal regulation, the Yearly Day-Night Average Sound Level (DNL) is used in this study to assess aircraft noise. DNL is the metric currently accepted by the FAA, EPA, and Department of Housing and Urban Development (HUD) as an appropriate measure of cumulative noise exposure. These three agencies have each identified the 65 DNL noise contour as the threshold of incompatibility. Noise exposure contours are overlaid on maps of existing and planned land uses to determine areas that may be affected by aircraft noise at or above 65 DNL. The noise exposure contours are developed using the FAA-approved Integrated Noise Model (INM) which accepts inputs for several airport characteristics including: aircraft type, operations, flight tracks, time of day, and topography.

The standard methodology for analyzing noise conditions at airports involves the use of a computer simulation model. The Federal Aviation Administration (FAA) has approved the INM for use in EAs.

A variety of user-supplied input data is required to use the INM. This includes the airport elevation, average annual temperature, airport area terrain, a mathematical definition of the airport runways, the mathematical description of ground tracks above which aircraft fly, and the assignment of specific take-off weights to individual flight tracks.

Airport activity is defined as the take-offs and landings by aircraft operating at the facility; this is also referred to as aircraft operations. Activity is further described as either *local*, indicating aircraft practicing take-offs and landings (i.e., performing touch-and-go's), or *itinerant*, referring to the initial departure from or final arrival at the airport.

**Table C1** provides a summary of operations for the existing condition (2013) and forecast year (2033).

TABLE C1 Operations Summary and Fleet Mix Data Salina Regional Airport			
Aircraft Type	INM Description	2013 Operations	2033 Operations
<b>ITINERANT OPERATIONS</b>			
<b><i>Turbojet</i></b>			
Business Jet	CNA500	840	2,600
Business Jet	CNA510	840	2,600
Business Jet	CIT3	546	1,690
Business Jet	LEAR35	1,386	4,290
Business Jet	MU3001	420	1,300
Business Jet	GIV	84	260
Business Jet	GV	84	260
Subtotal		4,200	13,000
<b><i>Twin and Turboprop</i></b>			
Turboprop	1900D	495	1,050
Turboprop	DHC6	2,200	4,515
Multi-engine	CNA441	1,650	2,730
Turboprop	BEC58P	770	1,260
Turboprop	SD330	385	945
Subtotal		5,500	10,500
<b><i>Commercial</i></b>			
Turbojet	EMB145	8	20
Turbojet	CL600	16	40
Turbojet	737500	16	40
Turbojet	DC930	24	60
Turbojet	767300	16	40
Subtotal		80	200
<b><i>Helicopter</i></b>			
Helicopter	B206L	1,844.4	3,390
Helicopter	S70	1,229.6	2,260
Subtotal		3074	5,650
<b><i>Military</i></b>			
Turboprop Transport	C-130E	100	1,000
Fighter Jet	F-18	300	100
Jet Trainer	T-38A	600	25
Subtotal		1,000	1,125
<b><i>Piston</i></b>			
Single Engine Variable	GASEPV	11,887	12,009.5
Single Engine Fixed	GASEPF	11,887	12,009.5
Subtotal		23774	24,019
<b>TOTAL ITINERANT</b>		<b>37,628</b>	<b>54,494</b>
<b>LOCAL OPERATIONS</b>			
<b><i>Piston</i></b>			
Single Engine Fixed	GASEPF	25,348	33,750
Single Engine Variable	GASEPV	25,348	33,750
Multi-Engine Fixed	BEC58P	5,633	7,500
Subtotal		56,329	75,000
<b><i>Military</i></b>			
Fighter Jet	F-18	812	1,583
Jet Trainer	T-38A	1,894	3,692
Subtotal		2706	5,275
<b>TOTAL LOCAL</b>		<b>59,035</b>	<b>80,275</b>
<b>TOTAL ACTIVITY</b>		<b>96,663</b>	<b>134,769</b>
<i>Source: Coffman Associates analysis utilizing Integrated Noise Model (INM) v7.0d</i>			

The time of day during which operations occur is important as input to the INM due to the 10 decibel nighttime (10:00 p.m. to 7:00 a.m.) weighting of flights. In calculating airport noise exposure, one operation at night has the same noise emission value as 10 operations during the day by the same aircraft. **Table C2** summarizes the operational percentages for the airport.

<b>TABLE C2</b>		
<b>Day/Night Operational Percentages</b>		
<b>Salina Regional Airport</b>		
<b>Aircraft Type</b>	<b>Day</b>	<b>Night</b>
Single-Engine Piston	97%	3%
Turboprop	97%	3%
Business Jet/Commercial	97%	3%
Helicopter	97%	3%
Military	95%	5%
<i>Source: Coffman Associates analysis.</i>		

Runway usage data is another essential input to the INM. For modeling purposes, wind data analysis usually determines runway use percentages. **Table C3** summarizes the runway use assumptions used to prepare the noise exposure contours.

<b>TABLE C3</b>					
<b>Existing and Future Runway Use</b>					
<b>Salina Regional Airport</b>					
<b>Runway</b>	<b>Business Jet/Commercial</b>	<b>Turboprop</b>	<b>Piston</b>	<b>Local</b>	<b>Military</b>
<b>Existing Runway Use</b>					
18	0	0	10	50	10
36	0	0	10	50	10
12	10	15	10	0	10
30	10	15	10	0	10
04	0	0	0	0	0
22	0	0	0	0	0
17	40	35	30	0	30
35	40	35	30	0	30
<b>2033 Forecast Runway Use</b>					
18	0	0	10	50	10
36	0	0	10	50	10
12	10	15	10	0	10
30	10	15	10	0	10
04	0	0	0	0	0
22	0	0	0	0	0
17	40	35	30	0	30
35	40	35	30	0	30
<i>Source: Interviews with airport board and analysis of 10 years of wind data.</i>					

Using the previously discussed assumptions, noise exposure contours, depicted on **Exhibit C2** and **C3**, were calculated for 2013 and 2033. As shown on **Exhibit C2**, the existing noise contours extend off airport property primarily to the north and south. Based on a review of aerial photography, three residences are located within the 65 DNL noise contour on the west side of the airport. **Exhibit C3** depicts the future noise contours. Similar to the existing condition, the noise contours extend off airport property. In this scenario, three residences are encompassed by the contours, one of which is located within the 70 DNL contour.

As previously discussed, 65 DNL is the threshold of compatibility for noise-sensitive land uses such as single family residences. FAA generally requires a detailed noise analysis to be conducted to determine if any of the residences within the noise contours would be subjected to a 1.5 DNL or more increase when compared to a No Action alternative for the same timeframe if improvements such as a runway extension are planned. Based on the Master Plan development concept shown in **Exhibit C1**, it is unlikely that a detailed noise analysis would be required prior to implementation.

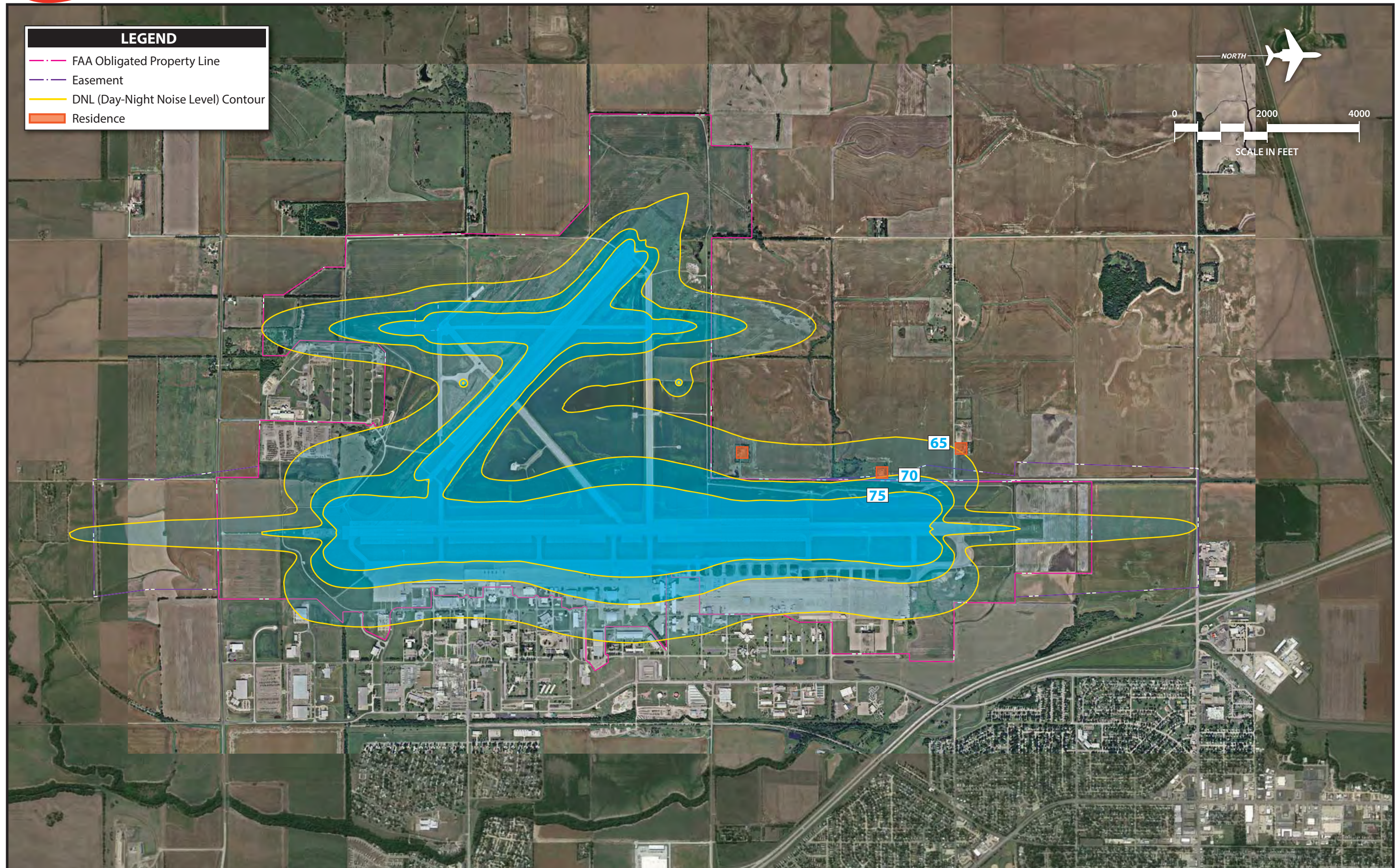
### **Compatible Land Use**

The compatibility of existing and planned land uses in the vicinity of an airport is typically associated with the extent of the airport's noise impacts. Noise impacts are generally evaluated by comparing the extent of an airport's noise exposure contours to the land uses within the immediate vicinity of the airport. As previously discussed, the existing and future noise contours for Salina Regional Airport extend off airport property and encompass residences in the existing and future condition. A detailed noise analysis is typically required when an improvement that would change the location of operations, such as a runway extension, is proposed. This Master Plan does not include any projects that would require a detailed noise analysis.

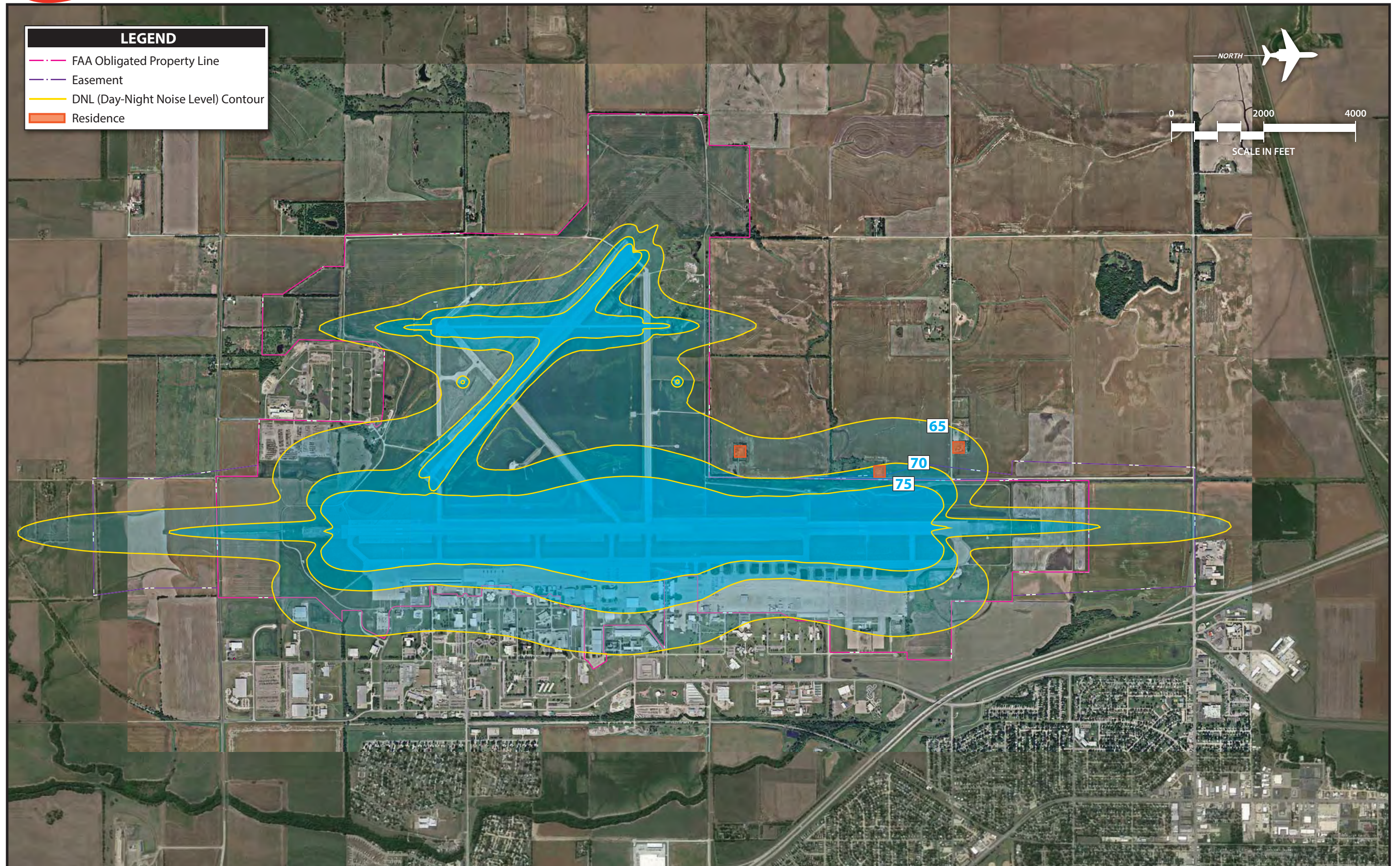
Land use compatibility also includes a consideration of wildlife attractants. Wildlife attractants include those land uses that bring wildlife into areas that can prove hazardous to aircraft operations. Wildlife attractants include landfills, wastewater treatment facilities, wetlands, agricultural crops, wildlife refuges, or any other land use that attracts wildlife. FAA AC 150/5200-33B states that the aforementioned land uses prove hazardous if they are located within:

- 5,000 feet of an airport serving piston-powered aircraft;
- 10,000 feet of an airport serving turbine-powered aircraft; and/or
- For all airports, the FAA recommends a distance of five miles between the farthest end of the airport's operating area and the hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the airport approach or departure airspace.











For all airports, the FAA recommends a distance of five miles between the farthest end of the airport operating area and the hazardous wildlife attractant if the attractant can cause hazardous wildlife movement into or across the airport approach or departure airspace.

With regard to FAA AC 150/5200-33B, there are no solid waste landfills, existing or proposed dredge spoil containment areas or wastewater treatment facilities within the immediate vicinity of the proposed airport site that would be considered wildlife attractants. However, numerous water features, including intermittent drainages and ponds, are located on the proposed development parcels.

## **SECTION 4(F) RESOURCES**

Section 4(f) properties include publicly owned land from a public park, recreational area, or wildlife and waterfowl refuge of national, state, or local significance; or any land from a historic site of national, state, or local significance.

As discussed in Chapter One, the public park nearest the Airport is Schilling Park, located approximately  $\frac{3}{4}$  miles to the east. The nearest historic site listed on the National Register of Historic Places (NRHP) is the John H. Prescott House located at 211 W. Prescott Avenue, approximately 2.5 miles northeast of the Airport. Based on the noise contours discussed previously in this appendix and the proposed development concept, neither of these properties would be affected by improvements to the airport outlined in the Master Plan development concept.

## **FISH, WILDLIFE, AND PLANTS**

Biotic resources include the various types of plants and animals that are present in a particular area. The term also applies to rivers, lakes, wetlands, forests, and other habitat types that support plants, birds, and/or fish. Typically, development in areas such as previously disturbed airport property, populated places, or farmland would result in minimal impacts to biotic resources.

The Fish and Wildlife Service (FWS) is charged with overseeing compliance with Section 7 of the *Endangered Species Act*. This Act was put into place to protect animal or plant species whose populations are threatened by human activities. The FAA and FWS review projects to determine if a significant impact to these protected species will result with implementation of a proposed project. Significant impacts occur when the proposed action could jeopardize the continued existence of a protected species or would result in the destruction or adverse modification of federally designated critical habitat in the area.

According to FWS's Information, Planning, and Conservation System (IPaC) web tool, there is one federally listed species that has potential habitat in Saline County, the whooping crane. Habitat for the whooping crane includes coastal marshes and estuaries, inland marshes, lakes, ponds, wet meadows and rivers, and agricultural fields. Since habitat for this species, including ponds, wetlands, and agricultural fields, do occur in the vicinity of



the Airport, further field investigations may be necessary prior to construction activities at the Airport. Coordination with the FWS and/or the Kansas Department of Wildlife and Parks may be necessary to determine the extent, if any, of field investigations prior to undertaking planned improvements at the airport.

## **FLOODPLAINS**

As defined in FAA Order 1050.1E, floodplains consist of “lowland and relatively flat areas adjoining inland and coastal water including flood prone areas of offshore islands, including at a minimum, that area subject to one percent or greater chance of flooding in any given year.” Federal agencies are directed to take action to reduce the risk of flood loss, minimize the impact of floods on human safety, health and welfare, and restore and preserve the natural and beneficial values served by floodplains. Floodplains have natural and beneficial values, such as providing ground water recharge, water quality maintenance, fish, wildlife, plants, open space, natural beauty, outdoor recreation, agriculture, and forestry. FAA Order 1050.1E (12) (c) indicates that “if the proposed action and reasonable alternatives are not within the limits of a base floodplain (100-year flood area),” that it may be assumed that there are no floodplain impacts. The limits of base floodplains are determined by Flood Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency (FEMA).

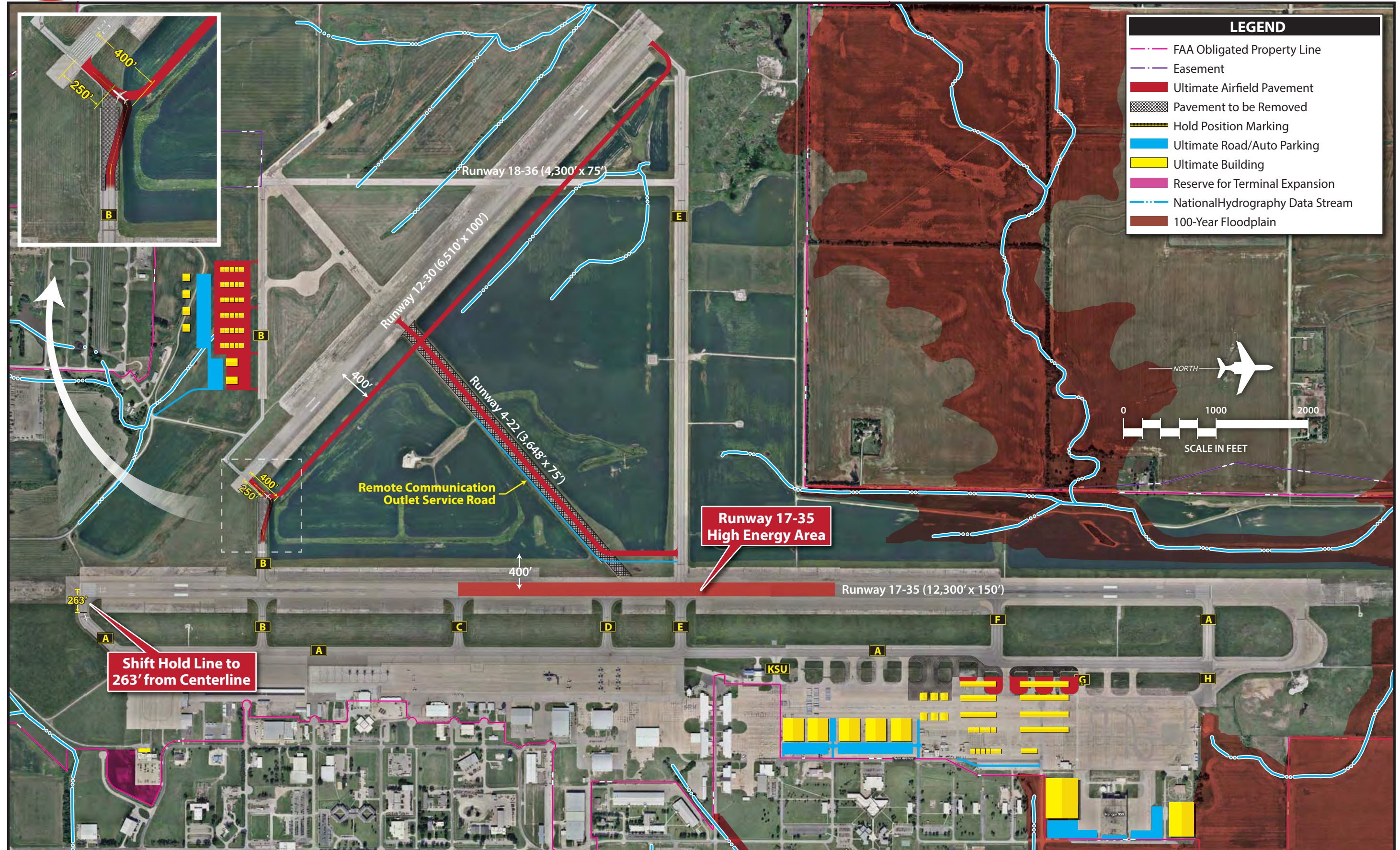
A review of FEMA FIRMs for Saline County indicates several areas designated as 100-year floodplain are located within the vicinity of the airport. The locations of the floodplains, associated with unnamed intermittent streams, are depicted on **Exhibit C4**. As indicated on the exhibit, a portion of the area identified as Segregated Government and Military Use in Support of Forward Operating Location (FOL) Operations at the north end of the apron area is located within the 100-year floodplain. As noted on the exhibit, one building is planned within the floodplain. Prior to construction, coordination with the City of Salina Floodplain Administrator should be undertaken to determine if a floodplain development permit is required. A floodplain development permit typically also includes a floodplain certificate which specifies the flooding characteristics within the disturbed area. If a floodplain development permit is necessary, FAA will also require a public hearing to satisfy NEPA requirements for development within a 100-year floodplain.

## **FARMLAND**

The *Farmland Protection Policy Act* (FPPA) was enacted to preserve farmland. FPPA guidelines apply to farmland classified as prime or unique, or of state or local importance as determined by the appropriate government agency, with concurrence by the Secretary of Agriculture.

Information obtained from the Natural Resource Conservation Service’s (NRCS) Web Soil Survey indicates that the airport property includes several soil types which are classified as







prime farmland<sup>1</sup>. However, lands which are identified as urbanized areas by the U.S. Census Bureau are exempt from FPPA provisions. Based on the most recent publication (2010) of the U.S. Census Bureau urban area map, the entire airport and all proposed project areas are located within the Salina, Kansas Urban Cluster and would therefore likely be exempt from FPPA requirements. Further coordination with the NRCS will be required to verify this exemption prior to undertaking the planned projects.

## **HAZARDOUS MATERIALS, POLLUTION PREVENTION, AND SOLID WASTE**

Federal, state, and local laws regulate hazardous materials use, storage, transport, and disposal. These laws may extend to past and future landowners of properties containing these materials. In addition, disrupting sites containing hazardous materials or contaminants may cause significant impacts to soil, surface water, groundwater, air quality, and the organisms using these resources.

As discussed in Chapter One, Dry Creek (EPA Water ID# KS-SS-10-640\_29), located approximately one mile east of the Airport, is impaired under Clean Water Act Section 303d. Copper and phosphorus are listed as the causes of impairment. Additionally, several businesses on and near the Airport, primarily on the east side, report to the EPA regarding handling of hazardous waste. None of the proposed improvements identified in the Master Plan will impact these locations.

According to *EJView*, there are no Superfund sites within a five-mile radius of the Airport; however, extensive groundwater contamination has occurred as a result of the military's operation of the Former Schilling Air Force Base (now Salina Regional Airport), which was closed in 1965. The source of contamination on the Airport includes 107 underground fuel storage tanks left behind by the military after Schilling Air Force Base (AFB) was closed. These underground storage tanks ultimately leaked jet fuel, contaminating the soil and groundwater. The underground storage tanks have since been removed by the Army Corps of Engineers; however, remediation of groundwater contamination is still in the beginning stages. In December 2012, it was announced that an agreement had been reached between the Salina Public Entities (made up of the City of Salina, Salina Airport Authority, USD 305 and Kansas State University) and the United States on the first steps towards a comprehensive environmental cleanup of the Former Schilling AFB in accordance with the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The current phase of the process includes remedial investigation of soil, groundwater, surface water, sediment, soil vapor, and indoor air. This information will be used to prepare a Corrective Action Decision (CAD) which will outline remediation for the area. Based on the information collected to date and the settlement agreement between Salina Public Entities and the United States, the environmental conditions in the area will not interfere with full implementation of the proposed development outlined in this Master Plan.

A construction-related National Pollutant Discharge Elimination System (NPDES) permit may be required prior to on-airport construction projects. The permit requires a Notice of

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<sup>1</sup> <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed January 2014

Intent for all construction activities disturbing one or more acre of land. In conjunction with the NPDES, a Storm Water Pollution Prevention Plan (SWPPP) may be required to outline the Best Management Practices to be used to minimize impacts to storm water conveyance systems.

## **HISTORICAL AND CULTURAL RESOURCES**

Determination of a project's impact to historical and cultural resources is made in compliance with the *National Historic Preservation Act* (NHPA) of 1966, as amended for federal undertakings. A historic property is defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). Properties or sites having traditional religious or cultural importance to Native American Tribes may also qualify. To satisfy the requirements of NHPA, further coordination with the Kansas State Historic Preservation Office (SHPO) may be necessary to determine the extent, if any, of field investigations prior to undertaking any of the planned improvements.

As previously discussed, the nearest historic site listed on the National Register of Historic Places (NRHP) is the John H. Prescott House located at 211 W. Prescott Avenue, approximately 2.5 miles northeast of the Airport. Based on the noise contours discussed in this appendix and the proposed development concept, this property will not be affected by improvements to the airport outlined in the Master Plan development concept.

## **LIGHT EMISSIONS AND VISUAL IMPACTS**

Airport lighting is characterized as either airfield lighting (i.e., runway, taxiway, approach and landing lights) or landside lighting (i.e., security lights, building interior lighting, parking lights, and signage). Generally, airport lighting does not result in significant impacts unless a high intensity strobe light, such as a REIL, would produce glare on any adjoining site, particularly residential uses.

Visual impacts relate to the extent that the proposed development contrasts with the existing environment and whether a jurisdictional agency considers this contrast objectionable. The visual sight of aircraft, aircraft contrails, or aircraft lights at night, particularly at a distance that is not normally intrusive, should not be assumed to constitute an adverse impact.

Additional security lighting may be constructed as part of planned hangar development at the north end of the apron area and south of Taxiway B. These lights would be shielded and focused on the taxilanes and hangars to minimize increases in off-airport illumination. Based on a review of existing land uses, there are no sensitive receptors that would be impacted by the additional lighting. If the potential for lighting or visual impacts is determined to be associated with the planned development, consultation with local residents and the owners of light-sensitive sites may be needed to determine possible alternatives to minimize these effects without risking aviation safety or efficiency. Additional coordina-



tion with State, regional, or local art or architecture councils, tribes, or other organizations having an interest in airport-associated visual effects may be necessary.

## **SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS**

Socioeconomic impacts known to result from airport improvements are often associated with relocation activities or other community disruptions, including alterations to surface transportation patterns, division or disruption of existing communities, interferences with orderly planned development, or an appreciable change in employment related to the project.

Executive Order 12898, *Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations*, and the accompanying Presidential Memorandum, and Order DOT 5610.2, *Environmental Justice*, require FAA to provide for meaningful public involvement by minority and low-income populations as well as analysis that identifies and addresses potential impacts on these populations that may be disproportionately high and adverse.

According to the U.S. Census Bureau, the block group<sup>2</sup> that includes the airport does not contain high percentages (above 50 percent) of minority populations or high percentages of residents below the poverty level.

Pursuant to Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, federal agencies are directed to identify and assess environmental health and safety risks that may disproportionately affect children. These risks include those that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products to which they may be exposed.

During construction of the projects outlined within the Master Plan, appropriate measures should be taken to prevent access by unauthorized persons to construction project areas. Additionally, best management practices should be implemented to decrease environmental health risks to children. There are no property acquisition or relocation projects identified within this Master Plan.

## **WATER QUALITY**

The *Clean Water Act* provides the authority to establish water quality standards, control discharges, develop waste treatment management plans and practices, prevent or minimize the loss of wetlands, and regulate other issues concerning water quality. Water quality concerns related to airport development most often relate to the potential for surface

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<sup>2</sup> U.S. Census Bureau, <http://www.census.gov/>, accessed January 2014

runoff and soil erosion, as well as the storage and handling of fuel, petroleum products, solvents, etc.

As previously discussed, Dry Creek is listed as a *Clean Water Act* Section 303(d) impaired water as pollutant levels in this water body violate established water quality standards. The proposed development projects identified in the Master Plan will not impact this watercourse.

During construction of any of the planned improvements at the airport, it is suggested that mitigation measures from FAA Advisory Circular 150/5370-10A, *Standards for Specifying Construction of Airports, Item P-156, Temporary Air and Water Pollution, Soil Erosion and Siltation Control*, be incorporated into project design specifications to further mitigate potential water quality impacts. These standards include temporary measures to control water pollution, soil erosion, and siltation through the use of berms, fiber mats, gravels, mulches, slope drains, and other erosion control methods.

Additionally, as development occurs at the airport, the SWPPP will need to be modified to reflect the additional impervious surfaces and any stormwater retention facilities. The addition and removal of impervious surfaces may require modifications to this plan should drainage patterns be modified.

## **WETLANDS**

Through the Clean Water Act, the USACE regulates the discharge of dredged or fill material into “Waters of the U.S.,” including wetlands. Waters of the U.S., defined in 33 CFR Part 328 of the Clean Water Act, include “intrastate lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds.” USACE jurisdiction is limited to those waters or wetlands that have a connection to a traditional navigable water. Wetlands or ponds that do not have such a connection are considered “non-jurisdictional.”

Wetlands are defined by Executive Order 11990, Protection of Wetlands, as “those areas that are inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.” Categories of wetlands include swamps, marshes, bogs, sloughs, potholes, wet meadows, river overflows, mud flats, natural ponds, estuarine area, tidal overflows, and shallow lakes and ponds with emergent vegetation. Wetlands exhibit three characteristics: hydrology, hydrophytes (plants able to tolerate various degrees of flooding or frequent saturation), and poorly drained soils.

A review of the National Wetland Inventory maps indicates that there are no potential wetlands within any of the proposed development areas<sup>3</sup>.

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<sup>3</sup> <http://www.fws.gov/wetlands/Data/Mapper.html>, accessed January 2014



Based on the National Hydrography Dataset, maintained by the United States Geological Survey to map water bodies, there is one unnamed intermittent stream which may be disturbed as a result of the hangar development proposed for the area south of Taxiway B. Prior to construction of these improvements, a wetland delineation will likely be required to identify any potentially jurisdictional wetlands within the project area. This information will be used to coordinate the U.S. Army Corps of Engineers to determine the level of permitting and mitigation necessary to comply with the Section 404 of the *Clean Water Act*.

## **CONSTRUCTION IMPACTS**

Airport construction impacts can include dust, air emissions, traffic, storm water runoff, and noise. Construction-related dust impacts are typically mitigated below a level of significance through the use of best management practices, some of which are identified in FAA Advisory Circular (AC) 150/5371-10, *Standards for Specifying Construction of Airports, Item P-156, Temporary Air and Water Pollution, Soil Erosion and Siltation Control*. The use of best management practices during construction is typically a requirement of construction-related permits such as the National Pollutant Discharge Elimination System (NPDES) permit. Use of these measures typically alleviates potential resource impacts.

A generalized list of best management practices is as follows:

### Site Preparation and Construction

- Minimize land disturbance
- Suppress dust on traveled paths which are not paved through wetting, use of watering trucks, chemical dust suppressants, or other reasonable precautions to prevent dust from entering ambient air
- Cover trucks when hauling soil
- Minimize soil track-out by washing or cleaning truck wheels before leaving construction site
- Stabilize the surface of soil piles
- Create windbreaks

### Site Restoration

- Revegetate or stabilize any disturbed land not used
- Remove unused material
- Remove soil piles via covered trucks or stockpile dirt in a protected area

In addition to the creation of dust, construction projects planned at the Airport could have temporary air quality impacts due to emissions from the operation of construction vehicles and equipment. Air emissions related to construction activities, although short-term in nature, should be included in any air emission inventories required for NEPA documentation efforts.

Finally, construction-related noise at the Airport is not expected to be significant since no noise-sensitive land uses are adjacent to portions of the airport where construction would occur.