

July 2020



The Proposed Action (i.e., project) consists of designing and constructing a wastewater treatment system for the entire Airport to replace the existing wastewater lagoon.

**RAPID CITY REGIONAL AIRPORT
RAPID CITY, SOUTH DAKOTA**

Environmental Assessment

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THIS ENVIRONMENTAL ASSESSMENT BECOMES A FEDERAL DOCUMENT WHEN EVALUATED, SIGNED, AND DATED BY A RESPONSIBLE FAA OFFICIAL.

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TABLE OF CONTENTS

Table of CONTENTS.....	i
Federal Statutes, Regulations, Executive Orders, and Guidance, Including Advisory Circulars	v
Chapter 1 Purpose and Need	1
1.1 Introduction.....	1
1.1.1 Project Location	1
1.1.2 Background	3
1.2 Description of the Proposed Action	5
1.3 Purpose and Need for the Proposed Action.....	6
1.4 Design Criteria	6
1.4.1 Wastewater Flows Rates	7
1.4.2 Wildlife Considerations.....	7
Chapter 2 Alternatives.....	8
2.1 Introduction.....	8
2.2 Alternatives Carried Forward	8
2.2.1 Alternative A: No Action	8
2.2.1.1 Wastewater Flow Rates	8
2.2.1.2 Wildlife Considerations.....	9
2.2.2 Alternative B: Aerated Lagoon with Cover System and Ammonia Treatment.	10
2.2.2.1 Wastewater Flow Rates	12
2.2.2.2 Wildlife Considerations.....	12
2.2.3 Alternative C: Airport Collection System with Connection to the Rapid City Water Reclamation Facility	13
2.2.3.1 Wastewater Flow Rates	14
2.2.3.2 Wildlife Considerations.....	14
2.3 Alternative Costs Considerations	17
2.4 Additional Alternative Considerations	18
Chapter 3 Affected Environment, Environmental Consequences, and Mitigation	19
3.1 Biological Resources	19
3.1.1 Background	19
3.1.2 Affected Environment.....	20
3.1.3 Environmental Consequences & Mitigation	22
3.2 Hazardous Materials, Pollution Prevention, and Solid Waste.....	23
3.2.1 Background	23
3.2.2 Affected Environment.....	24
3.2.3 Environmental Consequences & Mitigation	24
3.3 Historical, Architectural, Archaeological, and Cultural Resources	25
3.3.1 Background.....	25

	3.3.2	Affected Environment.....	25
	3.3.3	Environmental Consequences & Mitigation	26
3.4		Land Use.....	27
	3.4.1	Background.....	27
	3.4.2	Affected Environment.....	27
	3.4.3	Environmental Consequences & Mitigation	27
3.5		Socioeconomics	28
	3.5.1	Background.....	28
	3.5.2	Affected Environment.....	28
	3.5.3	Environmental Consequences & Mitigation	29
3.6		Visual Effects	29
	3.6.1	Background.....	29
	3.6.2	Affected Environment.....	30
	3.6.3	Environmental Consequences & Mitigation	30
3.7		Water Resources – Wetlands, Floodplains, Surface Water, and Groundwater ...	30
	3.7.1	Background.....	30
	3.7.2	Affected Environment.....	31
	3.7.3	Environmental Consequences & Mitigation	35
	3.7.3.1	Wetlands Environmental Consequences & Mitigation	35
	3.7.3.1	Floodplain Environmental Consequences & Mitigation.....	45
	3.7.3.2	Surface Water and Groundwater Environmental Consequences & Mitigation	46
3.8		Cumulative Effects.....	47
	3.8.1	Environmental Resources Omitted from the Cumulative Effects Analysis	47
	3.8.2	Projects/Activities Considered for Potential Cumulative Effects	47
	3.8.2.1	Road Projects	47
	3.8.2.2	Airport Improvements	48
	3.8.3	Cumulative Effects Analysis	48
	3.8.3.1	Biological Resources.....	48
	3.8.3.2	Hazardous Materials, Pollution Prevention, and Solid Waste.....	49
	3.8.3.3	Land Use	49
	3.8.3.4	Socioeconomics	49
	3.8.3.5	Visual Effects.....	49
	3.8.3.6	Water Resources – Wetlands, Surface Water, and Groundwater..	49
3.9		Environmental Consequences Not Relevant to the Proposed Action	50
	3.9.1	Air Quality.....	50
	3.9.2	Climate.....	50
	3.9.3	Coastal Resources.....	50
	3.9.4	Farmland.....	50
	3.9.5	Natural Resources and Energy Supply	50
	3.9.6	Noise and Compatible Land Use	50
	3.9.7	Department of Transportation Section 4(f) and Section 6(f) Properties	51
	3.9.8	Environmental Justice.....	51
	3.9.9	Children’s Environmental Health and Safety Risks	51
	3.9.10	Water Resources –Wild and Scenic River	51
3.10		Commitments and Compliance	51
3.11		Selection of the Preferred Alternative	Error! Bookmark not defined.

Chapter 4	Preparers and Coordinating Parties	56
4.1	Introduction.....	56
4.2	Preparers and Qualifications.....	56
4.3	Coordination with Agencies, Organizations, and Parties to Whom SOVs were Sent 56	
4.3.1	Scoping	56
4.3.2	Advance Notification	57
4.4	Environmental Assessment Coordination	57
Chapter 5	References	58

FIGURES

Figure 1, Location Map.....	2
Figure 2, Project Area.....	3
Figure 3, Wastewater Lagoon Facing South.....	5
Figure 4, Alternative A - No Action	9
Figure 5, Alternative B – Aerated Lagoon with Cover System and Ammonia Treatment.....	11
Figure 6, Alternative B Lagoon and Reactor Layout	11
Figure 7, Alternative C – Airport Collection Connected to Rapid City WRF	15
Figure 8, Alternative Life Cycle Cost.....	18
Figure 9, Wetland Delineation Map	33
Figure 10, Flood Hazard Zone Map	34
Figure 11, Alternative B Wetland Impacts.....	37
Figure 12, Alternative C Wetland Impacts.....	38
Figure 13, Alternative C Wetland Impacts.....	39
Figure 14, Alternative C Wetland Impacts.....	40
Figure 15, Alternative C Wetland Impacts.....	41
Figure 16, Alternative C Wetland Impacts.....	42
Figure 17, Alternative C Wetland Impacts.....	43
Figure 18, Alternative C Wetland Impacts.....	44
Figure 19, Alternative B Floodplain Impacts.....	45
Figure 20, Alternative C (Option 1 and 2) Floodplain Impacts	46

TABLES

Table 1, Effluent Limits for an Industrial Discharge Permit at RAP	6
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Table 2, Collection Main Design Criteria	7
Table 3, Wastewater Feasibility Flow Rates Summary.....	7
Table 4, Alternative B Aerated Lagoon System Design Summary	12
Table 5, Alternative C Collection System Design Summary	14
Table 6, Alternative C Options Comparison.....	16
Table 7, Estimated Cost Summary	17
Table 8, Life Cycle Cost Comparison.....	17
Table 9, Population Summary (2010-2017)	28
Table 10, Summary of Wetland Information	32
Table 11, Wetland Impacts.....	36
Table 12, Summary of Environmental Impacts, Commitments, and Compliance	52
Table 13, Preparers	56

Appendix A: Advance Notification

Appendix B: Letters and Responses

Appendix C: Background Information

DOCUMENTS APPENDED BY REFERENCE AND AVAILABLE ON REQUEST THRU THE AIRPORT:

Wastewater Treatment Feasibility Report
Rapid City Regional Airport
October 2017

Aquatic Resources Delineation
Rapid City Regional Airport, Rapid City, South Dakota
October 2019

Rapid City Regional Airport: Sanitary Sewer System Project
A Level III Cultural Resource Inventory in Pennington County, South Dakota
May 2020

FEDERAL STATUTES, REGULATIONS, EXECUTIVE ORDERS, AND GUIDANCE, INCLUDING ADVISORY CIRCULARS

STATUTE	IMPLEMENTING REGULATIONS AND OTHER GUIDANCE
Air Quality	
<ul style="list-style-type: none"> Clean Air Act (CAA), as amended [42 U.S.C. 7401–7671] [PL 91–604, PL 101–549] 	<ul style="list-style-type: none"> Title 40 CFR parts 9, 50–53, 60–61, 66, 67, 81, 82, and 93 (which includes General Conformity)
Coastal Resources	
<ul style="list-style-type: none"> Coastal Barrier Resources Act of 1982 as amended by the Coastal Barrier Improvement Act of 1990 [16 U.S.C. 3501–3510] [PL 97–348] 	<ul style="list-style-type: none"> U.S. Department of Interior Coastal Barrier Act Advisory Guidelines (57 FR 52730 November 5, 1992)
<ul style="list-style-type: none"> Coastal Zone Management Act as amended [16 U.S.C. 1451–1464] [PL 92–583] 	<ul style="list-style-type: none"> 15 CFR part 930, subparts C and D 15 CFR part 923
<ul style="list-style-type: none"> Executive Order 13089, Coral Reef Protection (63 FR 32701, June 16, 1998) 	
Compatible Land Use	
<ul style="list-style-type: none"> Aviation Safety and Noise Abatement Act of 1979, as amended (49 U.S.C. 47501–47507) 	<ul style="list-style-type: none"> 14 CFR part 150
Department of Transportation Act	
<ul style="list-style-type: none"> Department of Transportation Act of 1966, Section 4(f) [recodified at 49 U.S.C. 303 (c)] 	
Farmlands	
<ul style="list-style-type: none"> Farmland Protection Policy Act [7 U.S.C. 4201–4209] [PL 97–98, amended by section 1255 of the Food Security Act of 1985, PL 99–198] 	<ul style="list-style-type: none"> 7 CFR part 658 (59 FR 331109, June 17, 1994) 7 CFR part 657 (43 FR 4030) CEQ Memorandum on Analysis of Impacts on Prime and Unique Agricultural Lands in Implementing the National Environmental Policy Act, August 11, 1980 (45 FR 59189, September 8, 1980)
Fish, Wildlife, and Plants	
<ul style="list-style-type: none"> Endangered Species Act of 1973 [16 U.S.C. §§1531–1544] [PL 93–205] Marine Mammal Protection Act of 1972 [16 U.S.C. §§1361–1421h] Related Essential Fish Habitat Requirements of the Magnuson-Stevens Act, as amended by the Sustainable Fisheries Act [16 U.S.C. §1855(b)(2)] 	<ul style="list-style-type: none"> 50 CFR parts 17 and 22 50 CFR part 402 50 CFR parts 450–453 50 CFR 600.920 MOU [among 14 Federal agencies] on Implementation of the Endangered Species Act, September 28, 1994 MOU on Using an Ecosystem Approach in Agency Decision-making, December 5, 1995 CEQ Guidance on Incorporating Biodiversity Considerations into Environmental Impact Analysis, January 1993.
<ul style="list-style-type: none"> Sikes Act Amendments of 1974 [PL 93–452] 	
<ul style="list-style-type: none"> Bald and Golden Eagle Protection Act of 1940, as amended [16 U.S.C. 669–668d] Fish and Wildlife Coordination Act of 1958 [16 U.S.C. §§661–666c] [PL 85–624] 	
<ul style="list-style-type: none"> Fish and Wildlife Conservation Act of 1980 [16 U.S.C. §§2901–2912] [PL 96–366] Executive Order 13112, Invasive Species (64 FR 6183, February 8, 1999) Migratory Bird Treaty Act of 1918 [16 U.S.C. §§703–712] 	<ul style="list-style-type: none"> 50 CFR part 83 DOT Policy on Invasive Species, April 22, 1999 50 CFR part 10 Environmental Protection Agency, Office of the Federal Environmental Executive, Guidance for Presidential

STATUTE	IMPLEMENTING REGULATIONS AND OTHER GUIDANCE
<ul style="list-style-type: none"> Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds [66 FR 3853, January 17, 2001] Presidential Memorandum on Environmentally and Economically Beneficial Landscape Practices on Federally Landscaped Grounds (April 26, 1994); Executive Order 13148, Greening the Government Through Leadership in Environmental Management (April 22, 2000). 	<p>Memorandum on Environmentally and Economically Beneficial Landscape Practices on Federal Landscaped Grounds (60 FR 40837, August 10, 1995)</p> <ul style="list-style-type: none"> Paragraph 3f of attachment 2; Order DOT 5610.1C
<ul style="list-style-type: none"> The Animal Damage Control Act of 1931 [7 U.S.C. 426–426c] [46 stat. 1468] 	
Floodplains	
<ul style="list-style-type: none"> Executive Order 11988, Floodplain Management, May 24, 1977 (42 FR 26951) Appropriate State and Local construction statutes 	<ul style="list-style-type: none"> Order DOT 5650.2, Floodplain Management and Protection Federal Emergency Management Agency "Protecting Floodplain Resources: A Guidebook for Communities," 1996
Hazardous Materials, Pollution Prevention, and Solid Waste	
<ul style="list-style-type: none"> Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (as amended by the Superfund Amendments and Reauthorization Act of 1986 and the Community Environmental Response Facilitation Act of 1992) [42 U.S.C. 9601–9675] 	<ul style="list-style-type: none"> 40 CFR parts 300, 311, 355, and 370
<ul style="list-style-type: none"> Pollution Prevention Act of 1990 [42 U.S.C. 1310–1319] 	<ul style="list-style-type: none"> CEQ Memorandum on Pollution Prevention and the National Environmental Policy Act, January 12, 1993 (58 FR 6478)
<ul style="list-style-type: none"> Toxic Substances Control Act of 1976, as amended (TSCA) [15 U.S.C. 2601–2692] [PL 94–469] 	<ul style="list-style-type: none"> 40 CFR parts 761 and 763
<ul style="list-style-type: none"> Resource Conservation and Recovery Act of 1976 (RCRA) [PL 94–580, as amended by the Solid Waste Disposal Act of 1980 (SWDA), PL 96–482, the Hazardous and Solid Waste Amendments of 1984, PL 98–616, and the Federal Facility Compliance Act of 1992, (FFCA) PL 103–386] [42 U.S.C. 6901–6992(k)] 	<ul style="list-style-type: none"> 40 CFR parts 240–280
<ul style="list-style-type: none"> Executive Order 12088, Federal Compliance with Pollution Control Standards, October 13, 1978 (43 FR 47707, amended by Executive Order 12580, January 23, 1987 (52 FR 2923) January 29, 1987 	
<ul style="list-style-type: none"> Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements (58 FR 41981, August 3, 1993) 	
<ul style="list-style-type: none"> Executive Order 12580, Superfund Implementation, amended by Executive Order 13016 and 12777 	
Historical, Architectural, Archeological, and Cultural Resources	
<i>Laws governing National Historic Preservation Programs, National Natural Landmarks, and National Historic Landmarks</i>	
<ul style="list-style-type: none"> National Historic Preservation Act of 1966, as amended, including Executive Order 11593, Protection and Enhancement of the Cultural Environment (36 FR 8921, May 13, 1971) [16 U.S.C. 470, 470 note] [PL 102–575 (1992)] 	<ul style="list-style-type: none"> 36 CFR parts 60 (National Register of Historic Places (NRHP)), 61 (State and Local Preservation Programs), 62.1 (National Natural Landmarks), 63 (NHRP), 65, 65.1 (National Historic Landmarks), 68 (standards) 73 (World Heritage Program), 78 (waiver of Federal agency section 110 responsibilities), 79 (curation) and 800 (consultation), as revised (65 FR 77697; December 12, 2000, effective January 1, 2001)

STATUTE	IMPLEMENTING REGULATIONS AND OTHER GUIDANCE
Laws governing the Federal Archeology Program	
<ul style="list-style-type: none"> Antiquities Act of 1906 [16 U.S.C. 431, 432, 433] [PL 59-209 (1906)] 	<ul style="list-style-type: none"> 43 CFR part 3 25 CFR part 261
<ul style="list-style-type: none"> Archaeological and Historic Preservation Act of 1974, as amended [16 U.S.C. 469-469c] [PL 89-665] 	<ul style="list-style-type: none"> Guidelines for Archeology and Historic Preservation: Standards and Guidelines (DOI) (48 FR 44716, September 29, 1983) 36 CFR part 68
<ul style="list-style-type: none"> Archaeological Resources Protection Act of 1979, as amended [16 U.S.C. 470aa-470mm] [PL 96-95 (1979)] 	<ul style="list-style-type: none"> 43 CFR parts 3 and 7 36 CFR part 79 25 CFR part 262 Federal Archeological Preservation Strategy
<ul style="list-style-type: none"> Native American Graves Protection and Repatriation Act of 1990 [25 U.S.C. 3001] [PL 101-601 (1990)] 	<ul style="list-style-type: none"> 43 CFR part 10 25 CFR 262.8
Other Major Federal Historic and Cultural Resource Preservation Laws and Executive Orders	
<ul style="list-style-type: none"> American Indian Religious Freedom Act of 1978 [42 U.S.C. 1996, 1996 note] [PL 95-341 (1978)] 	<ul style="list-style-type: none"> 43 CFR 7.7 and 7.32 25 CFR 262.7
<ul style="list-style-type: none"> Department of Transportation Act [49 U.S.C. 303] 	
<ul style="list-style-type: none"> Public Building Cooperative Use Act of 1976 [40 U.S.C. 601 (a), 601(a)(1), 606, 611(c), 612(a)(4)] [PL 94-541] 	<ul style="list-style-type: none"> 41 CFR parts 101-17, 101-17.002(l), (m), (n) (rural areas), 101.17.002(i)(2) (urban areas), and 101-19
<ul style="list-style-type: none"> Executive Order 13006, Locating Federal Facilities on Historic Properties in Our Nation's Central Cities (61 FR 26071, May 24, 1996) 	
<ul style="list-style-type: none"> Executive Order 13007, Indian Sacred Sites (61 FR 26771, May 29, 1996) 	
<ul style="list-style-type: none"> Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (65 FR 67249, November 9, 2000), and the Presidential Memorandum of April 29, 1994, Government-to-government Relations with Native American Tribal Governments. 	
<ul style="list-style-type: none"> Executive Order 11593, Protection and Enhancement of the Cultural Environment (36 FR 8921, May 13, 1971) (16 U.S.C. 470 note) 	
Noise	
<ul style="list-style-type: none"> 49 U.S.C. 47501-47507 (Aviation Safety and Noise Abatement Act of 1979, as amended) 49 U.S.C. 40101 et seq., as amended by PL 103-305 (Aug. 23, 1994) (The Federal Aviation Act of 1958) The Control and Abatement of Aircraft Noise and Sonic Boom Act of 1968 49 U.S.C. 47101 et seq., as amended by PL 103-305 (Aug. 23, 1994) (The Airport and Airway Improvement Act) 49 U.S.C. 2101 et seq. (Airport Noise and Capacity Act of 1990) 49 U.S.C. 44715 (The Noise Control Act of 1972) 	<ul style="list-style-type: none"> 14 CFR part 150 FAA Advisory Circular 150/5020, Noise Control and Compatibility Planning for Airports 14 CFR part 161 Notice and Approval of Airport Noise and Access Restrictions FAA Advisory Circular 91-53A, Noise Abatement Departure Profile
Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks	
<ul style="list-style-type: none"> Title VI of the Civil Rights Act of 1964 [16 U.S.C. 2000(d)-2000(d)(1)], as amended by the Civil Rights Restoration Act of 1987 	<ul style="list-style-type: none"> Order DOT 5610.2, Environmental Justice in Minority and Low-Income Populations, April 15, 1997 CEQ Environmental Justice: Guidance Under the National Environmental Policy Act, December 10, 1997

STATUTE	IMPLEMENTING REGULATIONS AND OTHER GUIDANCE
<ul style="list-style-type: none"> Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629, February 16, 1994) Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (62 CFR 19883, April 23, 1997) Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 [42 U.S.C. 4601] [PL 91-528 amended by the Surface Transportation and Uniform Relocation Act Amendments of 1987, PL 100-117] 	<ul style="list-style-type: none"> Final Guidance For Consideration of Environmental Justice in Clean Air Act 309 Reviews, July 1999 40 CFR 1508.27 FAA Advisory Circular 150/5100-17 49 CFR part 24 FAA Order 5100.37A, Land Acquisition and Relocation Assistance for Airport Projects
Water Quality	
<ul style="list-style-type: none"> Federal Water Pollution Control Act, as amended, known as the Clean Water Act [33 U.S.C. 1251-1387]; [PL 92-500, as amended by the Clean Water Floodplains and the Floodways Act of 1977, 33 U.S.C. 1252, PL 95-217, and PL 100-4]; as amended by the Oil Pollution Act of 1990 (section 311 of the Clean Water Act) Safe Drinking Water Act, as amended (SDWA, also known as the Public Health Service Act) [42 U.S.C. 300f to 300j-26] [PL 104-182] Fish and Wildlife Coordination Act of 1980 [16 U.S.C. 661-666c] [PL 85-624] 	<ul style="list-style-type: none"> 40 CFR parts 110-112, 116, 117, 122, 125, 129, 130, 131, 136, and 403
Wetlands	
<ul style="list-style-type: none"> Clean Water Act, section 404 [33 U.S.C. 1344] [PL 92-500, as amended by PL 95-217 and PL 100-4] Water Bank Act [16 U.S.C. 1301-1311] Rivers and Harbors Act of 1899, section 10 Executive Order 11990, Protection of Wetlands (May 24, 1977) (42 FR 26961) 	<ul style="list-style-type: none"> 33 CFR parts 320-330 Order DOT 5660.1A, Preservation of the Nation's Wetlands
Wild and Scenic Rivers	
<ul style="list-style-type: none"> Wild and Scenic Rivers Act of 1968 [16 U.S.C. 1271-1287] [PL 90-542 as amended by PL 96-487] 	<ul style="list-style-type: none"> 36 CFR part 297, subpart A (USDA Forest Service) Department of the Interior and Department of Agriculture, Wild and Scenic River Guidelines for Eligibility, Classification and Management of River Areas (47 FR 39454, September 7, 1982) CEQ Memorandum on Interagency Consultation to Avoid or Mitigate Adverse Effects on Rivers in the Nationwide Inventory, August 11, 1980 (45 FR 59190, September 8, 1980)
Additional Advisory Circulars and Regulations	
<ul style="list-style-type: none"> Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports Advisory Circular 150/5200-36A, Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports Advisory Circular 150/5300-13, Airport Design Advisory Circular 150/5370-10F, Standards for Specifying Construction of Airports 14 CFR Part 77, Objects Affecting Navigable Airspace FAA Order, 1050.1F, Environmental Impacts: Policies and Procedures FAA Order, 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions FAA Order 5100.38C, Airport Improvement Program Handbook 	

CHAPTER 1 PURPOSE AND NEED

1.1 Introduction

This Environmental Assessment (EA)¹ is prepared in accordance with Federal Aviation Administration (FAA) Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*. These documents prescribe the policies and procedures of the FAA for implementing the NEPA of 1969, as amended, and the regulations of the Council on Environmental Quality (CEQ), 40 Code of Federal Regulations (CFR) Parts 1500–1508. The EA is an informational document intended for use by both decision makers and the public. As such, it represents a disclosure of relevant environmental information concerning the Proposed Action.

The FAA is the lead federal agency, with South Dakota Department of Transportation (SDDOT) participating as a funding partner for the proposed project. The City of Rapid City (City) is the owner of the Rapid City Regional Airport (Airport). The FAA location identifier for the Airport is RAP.

The problem (the need) facing the Airport and the proposed solution to the problem (the purpose) are discussed in **Chapter 1, Purpose and Need**. This chapter also describes the project background and the Proposed Action.

1.1.1 Project Location

The Airport is located approximately nine miles east of the Rapid City central business district in Pennington County, South Dakota (SD) and is accessible via SD Highway 44. Rapid City is in the Black Hills of western South Dakota, approximately 20 miles northwest of Mount Rushmore National Memorial; 115 miles east of Gillette, WY; and approximately 145 miles west of Pierre, SD. Please refer to **Figure 1, Location Map**. The Airport's general aviation and terminal areas sit on top of a plateau, to the west of this area there is a broad valley that drains to the south towards Rapid Creek.

The Airport is in the Rapid City limits, but it is not contiguous to the remainder of the City. The Airport is subject to city zoning and permitting. There is a strip of land that is owned by the City of Rapid City located between Airport Road and County Road 212 (Radar Hill Road) that provides a continuous public right of way between the Airport and the Rapid City Sanitary Sewer Collection System via Dunn Road. Please refer to **Figure 2, Project Area**.

¹ The information and reference materials contained herein are intended to be read as a complete document.

Figure 1, Location Map

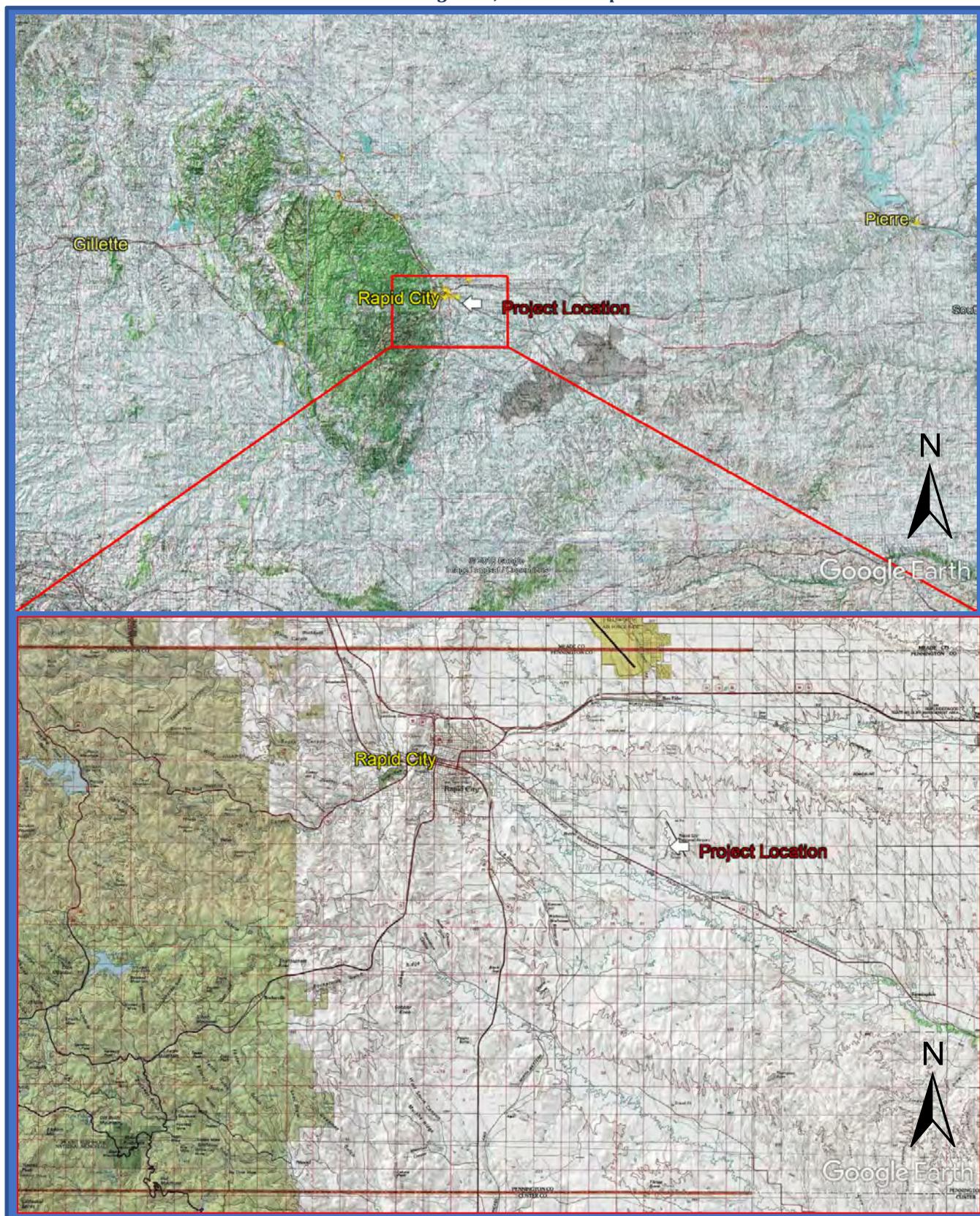
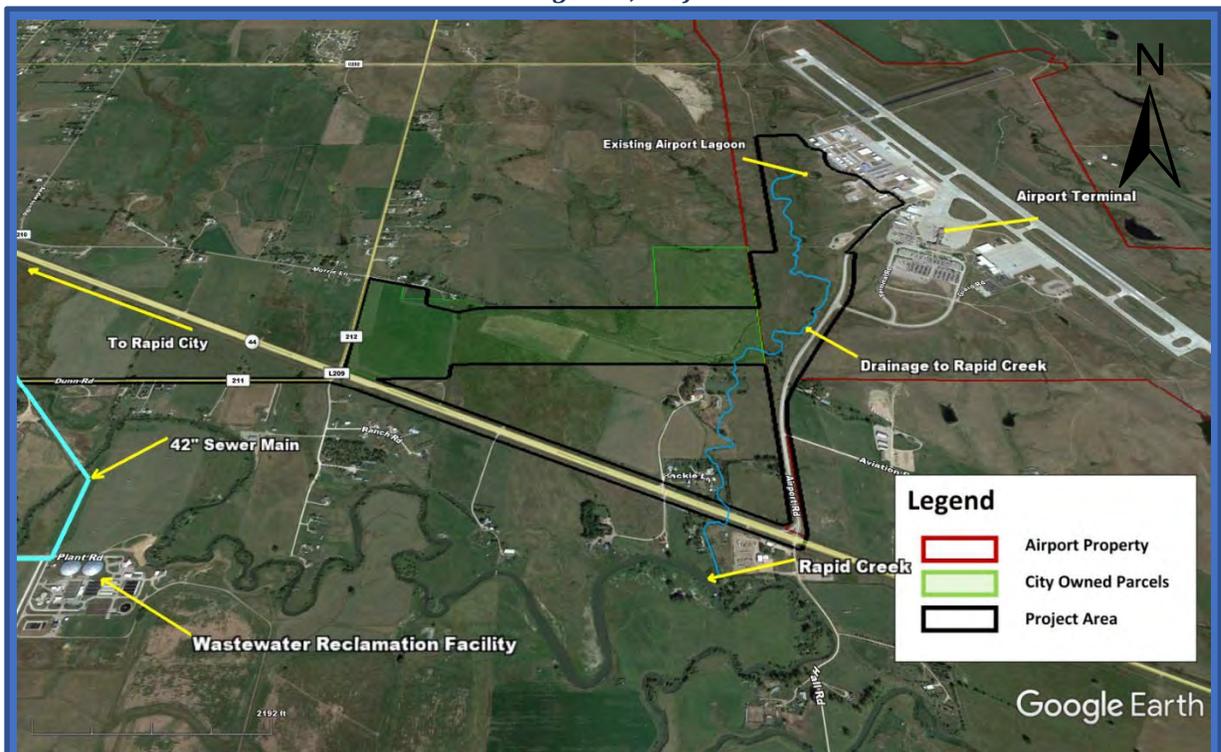


Figure 2, Project Area



Map data ©2018 Google

1.1.2 Background

Since 1950, Rapid City Regional Airport has expanded to accommodate the aviation needs of the community and has helped support the social and economic vitality of the City of Rapid City and the Black Hills region. Growth in tourism, travel related to Ellsworth Air Force Base, and thriving local industries in health care, finance, and agricultural-related businesses are substantial contributors to increased airport use and passenger enplanements. RAP is the second largest airport in the state of South Dakota serving four domestic airlines flying to up to 14 (seasonal) non-stop destinations. Airport records indicate that there were approximately 310,000 passengers enplaned in 2018 and as of June 2019 the Airport is on pace to hit approximately 370,000 passengers for 2019. The Airport is classified as a non-hub primary commercial service airport by the FAA. The terminal building was constructed in 1989 with renovations occurring in 2013 and a second project began in 2019 to accommodate growing passenger demands. The US Census Bureau indicated Pennington County had a population of 100,958 and Rapid City had 68,461 in 2010, with a 2017 population estimate of 110,141 and 74,421 respectively. (US Census Bureau 2018).

The Airport currently maintains a bi-level facultative stabilization lagoon acting as a total retention facility and it receives all the domestic wastewater from the Airport. The facultative stabilization lagoon is a clay lined, circular, 1.1-acre pond located on the west side of the Airport and down a hill so that wastewater will gravity flow into the lagoon. The existing wastewater

Facultative Stabilization Lagoons are a type of pond used for biological treatment of wastewater. The oxygen is used by aerobic and facultative bacteria to stabilize organic material in the upper layer of water. Anaerobic fermentation is the dominant activity in the bottom layer of the lagoon.

Total Retention: A facility sized to retain all incoming wastewater and precipitation for subsequent evaporation.

lagoon includes an emergency outlet pipe and structure. Any effluent discharged from the lagoon through this outlet would enter a natural drainage that flows south to Rapid Creek. Discharge has not been known to occur and there is currently no discharge permit, allowing discharge into the adjacent drainage, in place for the lagoon².

The Airport has experienced a substantial increase in use through the years. Since the lagoon was constructed in the late 1960's the Airport has built a new terminal building to accommodate the increased number of commercial airline travelers. The Fix Base Operator (FBO) and general aviation operations have also expanded. The increase in commercial and general aviation activity means there are many more airport support staff working at the airport today than there was in 1969. There have been numerous corporate hangars constructed. The South Dakota National Guard has expanded their facilities on the Airport and in 2019 broke ground on a new Readiness Center which is to be opened in 2020. There have been several office buildings constructed to support these activities. The Airport also has a rental vehicle car wash that contributes to the wastewater flows from the airport. As the Airport has grown the lagoon has been inundated and at times is not able to maintain adequate free storage. In 2019, and accompanied by above normal precipitation, the Airport had to pump and haul off wastewater from the lagoon to maintain operational levels.

The South Dakota Department of Environment and Natural Resources (DENR) conducted an inspection of the existing wastewater facility in late 2016 in response to a complaint of sewage odors on property located to the southwest of the Airport. The complaint cited concerns about groundwater and surface water contamination and sewage odors during rain events. Based on their inspection, DENR indicated that the wastewater lagoon appeared to be well-maintained, the dikes were in good condition and no areas of leakage were noted. Some sedimentation has occurred due to high winds blowing soil into the lagoon and some grassy vegetation has been established as a result. Please refer to **Figure 3, Wastewater Lagoon Facing South**.

² The Airport began the process to obtain a discharge permit for the existing sewer lagoon from DENR in the summer of 2019. DENR issued a temporary discharge permit that will not allow discharge into the drainage but would permit the Airport to land apply the effluent to an appropriate non-public contact area of Airport property. This permit is contingent on the Airport continuing to pursue a new sewage system and requires the Airport to have a new system in place by January 1, 2023.

Figure 3, Wastewater Lagoon Facing South



However, as a proactive measure, the Airport installed three groundwater monitoring wells located along the west half of the lagoon dike. Groundwater monitoring results indicated there may be leakage from the wastewater lagoon and additional up-gradient wells would be required to assist in verifying the situation. DENR has notified the Airport that the lagoon must be remediated to meet the South Dakota Recommended Design Criteria for Wastewater Collection and Treatment Facilities.

1.2 Description of the Proposed Action

Rapid City Regional Airport is a commercial service facility providing air travel for scheduled passenger service, cargo, and complete general aviation services. The Proposed Action (i.e., project) consists of designing and constructing a wastewater treatment system for the entire Airport to replace the existing wastewater lagoon. The intent of the Proposed Action is to:

- ◆ Accommodate existing demand and projected growth for wastewater treatment from the Rapid City Regional Airport.
- ◆ Provide a system that would not attract wildlife that may be hazardous to aircraft using the Airport.

1.3 Purpose and Need for the Proposed Action

The purpose of the Proposed Action is to provide a cost effective and reliable wastewater treatment system for the Rapid City Regional Airport that is designed to meet South Dakota Recommended Design Criteria for Wastewater Collection and Treatment Facilities. As noted, the Airport has grown substantially since the existing lagoon system was constructed in the late 1960's.

The purpose of the project is defined as what is to be achieved by carrying out the project. The need for the project is defined as the problem or opportunity that the project is intending to solve or satisfy.

The need for the Proposed Action is driven by analysis of ground water monitoring data that has identified potential leakage in the existing wastewater lagoon. Remediation of the wastewater system at the Airport must comply with DENR standards.

1.4 Design Criteria

The wastewater system at the Airport must comply with the standards outlined by DENR in South Dakota Recommended Design Criteria for Wastewater Collection and Treatment Facilities. A licensed operator and monthly effluent sampling and testing would be required for a discharging system. A new Industrial Discharge permit would be required from the DENR if treated wastewater is discharged to the natural drainage flowing south to Rapid Creek. Rapid Creek is classified by the *South Dakota Surface Water Quality Standards and Uses Assigned to Streams* with a classification code of "Warm Water Permanent Fishery" mean that it would require stringent effluent limits for Ammonia. Please refer to **Table 1, Effluent Limits for an Industrial Discharge Permit at RAP.**

Table 1, Effluent Limits for an Industrial Discharge Permit at RAP

Effluent Parameter	Effluent Limits
Total Suspended Solids (TSS)	10 mg/L
Biochemical Oxygen Demand (BOD)	10 mg/L
Ammonia	1 mg/L

Source: DENR

The Airport Sanitary Sewer Master Plan prepared by the City of Rapid City in 2015 outlined the possibility of a connection to the existing Rapid City collection system. All wastewater would be carried to the existing Water Reclamation Facility (WRF) located southwest of the Airport. Due to the existing sewer locations and ground elevations between the Airport and the WRF, a gravity main would not be possible for the entire distance. Therefore, under this scenario, sewage would need to be pumped at some point via a force main up to an existing gravity main, which would eventually discharge to the WRF. DENR's minimum design criteria for the collection system necessary to connect the Airport Terminal to the WRF is summarized in See **Table 2, Collection Main Design Criteria.**

Table 2, Collection Main Design Criteria

Gravity Main Design Criteria	
Parameter	Value
Minimum Gravity Main Collection Diameter	8 inches
Maximum Spacing Between Manholes for 15 inches and smaller	400 feet
Maximum Spacing Between Manholes for 18 inches and larger	500 feet
Lift Station Design Criteria	
Minimum Number of Pumps	2
Minimum Pumping Rate	4 times Average Design Flow
Maximum Wet Well Fill Time	30 Minutes
Force Main Design Criteria	
Minimum Flow Velocity	2 Feet/sec
Maximum Flow Velocity	8 Feet/sec

1.4.1 Wastewater Flows Rates

Wastewater flow rates for the Airport have been estimated based on the projected uses for the 2017 Wastewater Treatment Feasibility Report prepared by KLJ. Volumes generated by the different users are primarily based on the actual metered water usage. The flow estimates were projected out to 2038 and a 30 percent contingency was applied to the overall design flow estimate to account for uncertainties, such as the projected passenger numbers. The average daily flow rate as of 2017 was determined to be 14,500 gallons per day (gpd) and is estimated to reach 24,500 gpd by 2038 accounting for the future growth and projected increases in passengers. Peak hourly flow rates were calculated in the feasibility report based on a peaking factor of 3.6 and the corresponding Peak Hourly Flow is 61 gallons per minute.

Please refer to **Table 3, Wastewater Feasibility Flow Rates Summary**, for a comparison of summary of design flow rates from the feasibility report.

Table 3, Wastewater Feasibility Flow Rates Summary

Parameter	Rates
Average Daily Flows	24,500 gpd
Peak Hourly Flows	61 gpm

1.4.2 Wildlife Considerations

As the lead Federal Agency, FAA regulations related to the potential wildlife attraction from wastewater treatment systems need to be considered. The FAA Advisory Circular (AC) 150/5200-33B provides guidance on certain land uses that have the potential to attract hazardous wildlife on and near public airports this includes existing and proposed wastewater treatment facilities. The FAA recommends measures to minimize hazardous wildlife attractants. For new facilities the FAA recommends that they not be located within specific distances of public airports, for RAP this distance is 10,000 feet. Water management systems should be designed and operated so as not to create above-ground standing water. When it is not possible to place ponds away from the airport’s air operations area (AOA), physical barriers like wire grids, netting, or bird balls can be used to deter wildlife.

Air operations area (AOA). Any area of an airport used or intended to be used for landing, Takeoff, or surface maneuvering of aircraft. Such as runways, taxiways, and aprons.

CHAPTER 2 ALTERNATIVES

2.1 Introduction

This chapter provides information on the development and evaluation of project alternatives against the purpose and need defined in **Chapter 1**. These alternatives have been identified to determine the alternative that would best provide a cost effective and reliable wastewater treatment system for the Airport. This section includes an evaluation of a no action alternative and two build alternatives.

2.2 Alternatives Carried Forward

Three alternatives, including a no action alternative and two build alternatives, were considered for their ability to meet the purpose and need established for the Airport. The following sections provide a detailed description of the alternatives and their compatibility with the purpose and need.

2.2.1 Alternative A: No Action

Alternative A, the no action alternative, would consist of retaining the existing wastewater lagoon at the Airport in its current configuration as a total retention lagoon and maintaining it under the existing maintenance practices. The lagoon would not be abandoned, sedimentation that has been blown into the lagoon would be removed to provide a small increase in the overall volume that can be stored in the lagoon but no expansion of the dikes forming the lagoon would occur. Wildlife attracted to the existing lagoon would need to continue to be monitored and may need to be removed by hazing and/or depredation. As noted previously, the existing lagoon is potentially leaking into the ground and could require rehabilitation to prevent leakage from the lagoon. Based on the estimated Average Daily Flows coming from the Airport, the lagoon is not large enough to retain all wastewater until it can be evaporated away and it would eventually discharge through the emergency outlet pipe and flow into the drainage that flows into Rapid Creek. Please refer to **Figure 4, Alternative A - No Action**.

Design Criteria

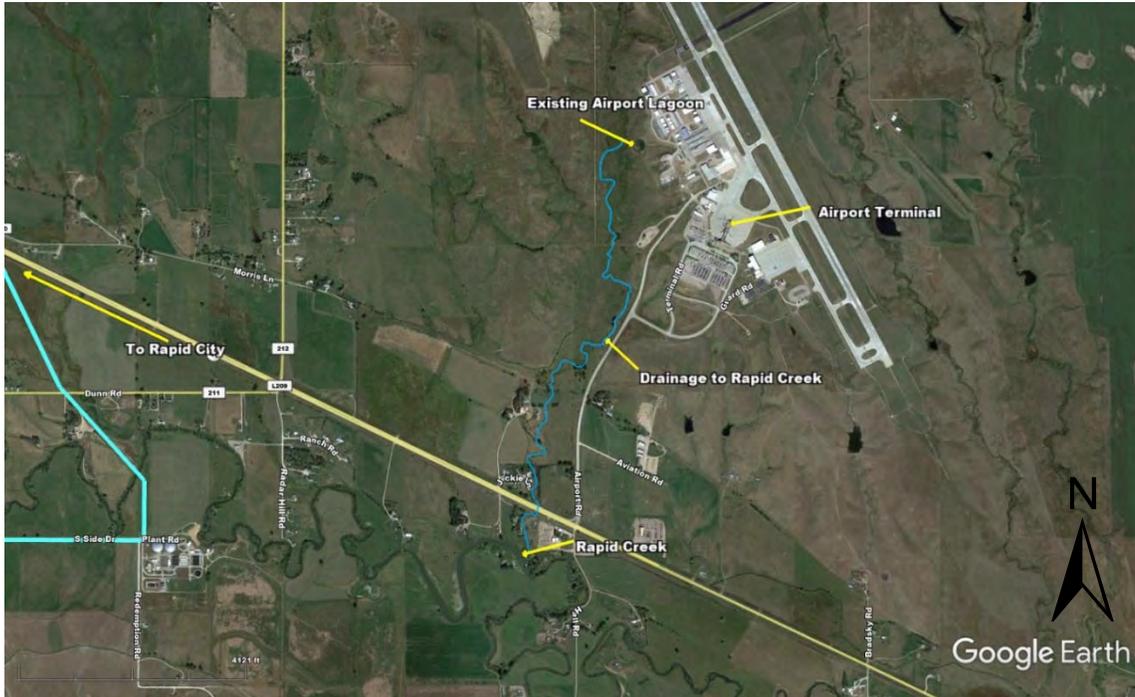
Alternative A would not meet the need to comply with South Dakota Recommended Design Criteria for Wastewater Collection and Treatment Facilities. The surface area of the lagoon is not large enough to allow the necessary evaporation required for a total retention (non-discharge) system. Based on the size of the existing lagoon and lack of any visible discharge the current seepage rate potentially exceeds the allowable rate of 1/8 inch per day. If the Airport does not address the rate of assumed seepage from the existing lagoon system, they could face financial penalties from DENR for violations to state water quality standards. Excessive seepage may also cause disputes with adjacent land owners, concerned with odors as well as health concerns for themselves and their livestock. Therefore, in order to maintain the existing lagoon, the lining of the lagoon would be rehabilitated. Additionally, the Airport would need to continue to pump and haul wastewater from the existing lagoon on a more frequent basis and the Airport would need to obtain a discharge permit.

2.2.1.1 Wastewater Flow Rates

The current average daily flow rate was determined to be 14,500 gpd and is estimated to reach 24,500 gpd by 2038 accounting for the future growth and projected increases in passengers. To meet the requirements of a total retention system the surface area of the lagoon would need to increase from

the 1.1-acre lagoon to approximately 12 acres and it would need to be expanded to approximately 20 acres by 2038. Alternative A does not address the wastewater flow rates of the Airport.

Figure 4, Alternative A - No Action



Map data ©2018 Google

2.2.1.2 Wildlife Considerations

Alternative A would leave the existing above ground open water pond within the 10,000 feet separation distances recommended by the FAA for wastewater facilities. Wildlife attracted to the existing lagoon would continue to be monitored and addressed as necessary by airport personnel. If wildlife attracted to the existing lagoon is determined to be a hazard to aircraft using the Airport, physical barriers could be installed to deter usage of the lagoon. If the existing lining of the lagoon were to be rehabilitated as part of maintenance (to prevent seepage), the lagoon effluent would most likely begin to discharge into a drainage that flows south towards Rapid Creek. Therefore, it would need to be pumped out and hauled away more frequently or it could be applied to a non-public contact area on the Airport once a permit has been granted by DENR. All three of these practices have the potential to attract additional wildlife. Therefore, the necessary maintenance of the lagoon could create new and expanded wildlife attractants on the Airport.

Alternative A Summary

Alternative A does not address issues related to the current wastewater system at RAP. If the current lagoon lining were to be maintained, to prevent excessive seepage, into the underlying soil formations per the requirements of DENR, it is anticipated that the current volume of the lagoon would not be sufficient to retain all the current wastewater flowing into the lagoon. Therefore, effluent would need to be pumped and hauled, or wastewater would be discharged into the drainage flowing into Rapid Creek, since the lagoon would not be expanded to the size needed for total retention. A total retention

lagoon system was evaluated as part of Wastewater Treatment Feasibility Report however due to the large surface area required and issues related to wildlife attractions it was not considered to be feasible.

The existing wastewater system was not covered by a discharge permit until February 2020. This permit does not allow discharge into the adjacent drainage but does allow the Airport to land apply the effluent to an appropriate non-public contact area of Airport property. A licensed operator would need to be hired and monthly effluent sampling would need to be conducted. Based on the size and treatment provided by the existing lagoon it is improbable that sufficient treatment to meet the stringent BOD and TSS requirements of the effluent would occur prior to it being discharged, much less the requirement for ammonia treatment and disinfection. Therefore, this alternative would not meet the purpose of the project to provide a system that meets DENR standards.

2.2.2 Alternative B: Aerated Lagoon with Cover System and Ammonia Treatment

Alternative B would include an aerated lagoon system constructed near the existing lagoon with discharge of treated effluent to the natural drainage that flows towards Rapid Creek. The existing lagoon would be abandoned. The Wastewater Treatment Feasibility Report identified a multi-celled aerated lagoon with an ammonia and BOD polishing reactor downstream of the lagoon. The new lagoon would be an excavated cell surrounded by earth dikes. To prevent seepage, the lagoon would be lined with high density polypropylene (HDPE). HDPE baffle curtains would be used to separate the lagoon into cells of decreasing aeration and mixing intensity. Aerating and mixing with a blower system and diffusers would remove the majority of BOD and Ammonia. The entire water surface of the lagoon would be covered by HDPE material with rigid insulation panels. The cover system would maintain heat with the cells to improve ammonia removal, block sunlight and eliminate algae growth (lowering TSS levels), and completely block access to the lagoon by wildlife.

Abandon/Eliminate the existing lagoon:

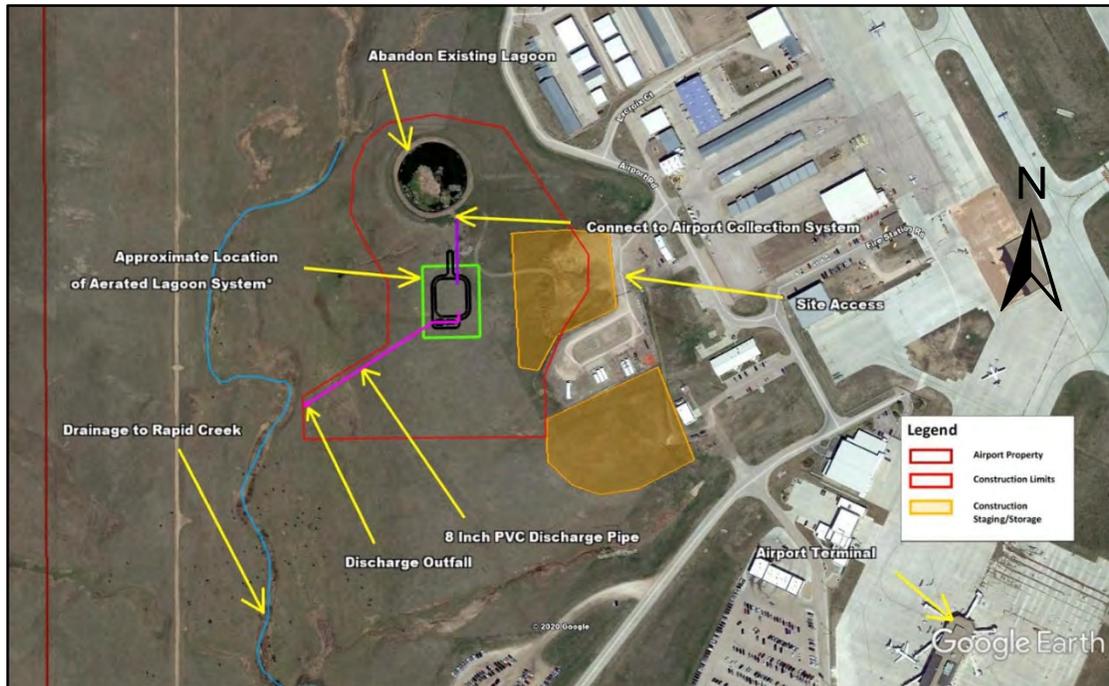
- 1. Remove wastewater from lagoon. Could be pumped and hauled to the treatment facility or allowed to evaporate.*
- 2. A small amount of sludge (approximately one foot or less wet depth) could be incorporated into the backfill and not be removed. If sludge needed to be removed, it would be hauled to a suitable disposable site such as the municipal landfill.*
- 3. Dikes would be pushed in and holes filled with suitable backfill. The area would be landscaped and groundcover established to prevent erosion and growth of noxious weeds.*

An Ammonia and BOD polishing reactor would be placed downstream of the lagoon. This system would be a continuous discharging system (year-round) and would therefore require disinfection between May and September. The disinfection system would be housed in a building with the aeration system blowers. Effluent would pass through the disinfection system and be discharged into the drainage that flows towards Rapid Creek. A security fence would be installed around the perimeter of the new treatment facility.

Please refer to **Figure 5, Alternative B – Aerated Lagoon with Cover System and Ammonia Treatment** for broad overview of this alternative and **Figure 6, Alternative B Lagoon and Reactor Layout** for a conceptual layout of this system. Additional details on how this system works and its components is available in the Wastewater Treatment Feasibility Study.

Alternative B would meet the purpose and need of the project for the reasons described in the following sections.

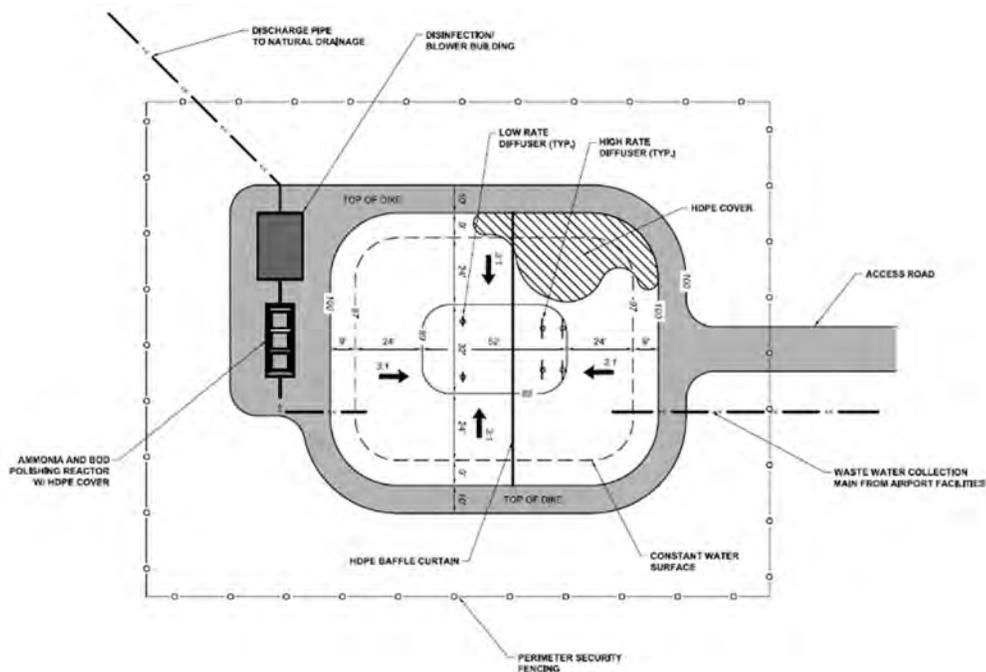
Figure 5, Alternative B – Aerated Lagoon with Cover System and Ammonia Treatment



Map data ©2018 Google

*See Figure 6 for Conceptual Design Details of the Aerated Lagoon with Cover System

Figure 6, Alternative B Lagoon and Reactor Layout



Design Criteria

Alternative B would be designed to comply with South Dakota Recommended Design Criteria for Wastewater Collection and Treatment Facilities. The newer technologies proposed with this system would be able to meet the stringent BOD and TSS limits of 10 mg/L and Ammonia limits of 1 mg/L for the effluent. As the system would be a discharging system the Airport would hire a licensed operator to run the system and sample effluent discharged into the drainage that flows into Rapid Creek. Design criteria for Alternative B is summarized in **Table 4, Alternative B Aerated Lagoon System Design Summary** below.

Table 4, Alternative B Aerated Lagoon System Design Summary

Parameter	Value
Total Detention Time	11 to 12 days
Lagoon Water Depth	8 feet
Lagoon Freeboard	3 feet
Water Surface Dimensions	Approx. 100 feet x 80 feet
Blower Horsepower	7.5 HP
BOD Effluent	10 mg/L
TSS Effluent	10 mg/L
Ammonia Effluent Limit	1 mg/L
Maximum Lagoon Cell Seepage	1/16 inch/day

2.2.2.1 Wastewater Flow Rates

The system would be designed to accommodate the projected average daily flow rate of 24,500 gpd by 2038 to account for future growth and projected increases in passengers. Alternative B addresses the wastewater flow rates of the Airport.

2.2.2.2 Wildlife Considerations

The covered system proposed in Alternative B would eliminate access to the lagoon cells by wildlife. Additionally, a security fence would be constructed around the perimeter of the facility, which would also reduce access to the area by wildlife. Alternative B would eliminate the existing above ground open water pond within the 10,000 feet separation distances recommended by the FAA for wastewater facilities. However, the system would continuously discharge treated water into a drainage. Discharge of treated effluent into this drainage is likely to cause an increase in the number of wildlife to be attracted to the area and could increase the potential for wildlife/aircraft collisions. The new discharge location and drainage would need to be monitored and, if necessary, wildlife issues would need to be addressed by airport personnel. Alternative B addresses wildlife hazard considerations by eliminating the open water lagoon, but it would also introduce a new, reduced, attractant by discharging treated wastewater into an existing drainage west of the Airport. If wildlife becomes attracted to the existing drainage due to lagoon discharge and it is determined to be a hazard to aircraft using the Airport, various physical barriers could be used to deter usage of this area, including the use of rip rap, steep side slopes, or piping it further down the hill before it discharges into the drainage.

Alternative B Summary

Alternative B would address the issues related to the current wastewater system at RAP. A new system would meet the requirements of DENR and would accommodate current and projected wastewater flowrates coming from the Airport. According to the Wastewater Treatment Feasibility Study this alternative would cost approximately \$1.0 million to construct. Alternative B would have an increased annual operation and maintenance cost associated with the cover, aeration, disinfection and polishing reactor system of approximately \$42,000 per year. It would require the Airport to acquire an Industrial Discharge Permit from DENR, with an annual fee of \$600 and to hire a licensed operator (estimated annual cost of \$22,500) for the facility. See **Figure 8, Alternative Life Cycle Cost** for the project cost of Alternative B over a period of 20 years. The Aerated Lagoon System was evaluated as part of Wastewater Treatment Feasibility Report it was both considered to be feasible and identified as the Airport's recommended alternative, at that time.

2.2.3 Alternative C: Airport Collection System with Connection to the Rapid City Water Reclamation Facility

Alternative C would eliminate the existing lagoon and replace it with a gravity main to carry all wastewater from the existing Airport collection system to the south along the Airport access road to a lift station. The Airport is considering two potential locations for the lift station (Lift Station Option 1 and Lift Station Option 2). The lift station for Option 1 would be constructed adjacent to the access road (approximately 0.5 miles north of Highway 44). A force main would be constructed to carry wastewater from this lift station to the west and into the existing Rapid City collection system. The force main would be constructed through property owned by the City of Rapid City and within the existing right of way along Dunn Road. Option 2 would construct a lift station near the intersection of Highway 44 and Airport Road. A force main would be constructed paralleling Highway 44 until it reaches Dunn Road and then it would follow Dunn Road. All wastewater coming from the Airport would be carried by this system to the existing WRF for treatment. Concrete surfacing and security fencing would be constructed around the lift station. A vehicle turnout and road would be constructed off the Airport Road to provide access to a vehicle gate in the new fence needed to provide access for maintenance of the lift station.

Please refer to **Figure 7, Alternative C – Airport Collection Connected to Rapid City WRF** for an overview of how the airport collection system would be connected to Rapid City's. Additional details on how this system works and its components is available in the Wastewater Treatment Feasibility Study.

Alternative C would meet the purpose and need of the project for the reasons described in the following sections.

Design Criteria

Alternative C would be designed to comply with South Dakota Recommended Design Criteria for Wastewater Collection and Treatment Facilities. All wastewater from the Airport would ultimately be discharged to the existing WRF and would utilize the high level of treatment at the existing facility. Design criteria for Alternative C is summarized in **Table 5, Alternative C Collection System Design Summary**.

Table 5, Alternative C Collection System Design Summary

Gravity Main Design Criteria	
Parameter	Value
Minimum Gravity Main Collection Diameter	8 inches
Maximum Spacing Between Manholes for 15 inches and smaller	400 feet
Maximum Spacing Between Manholes for 18 inches and larger	500 feet
Lift Station Design Criteria	
Minimum Number of Pumps	2
Minimum Pumping Rate	4 times Average Design Flow
Maximum Wet Well Fill Time	30 Minutes
Force Main Design Criteria	
Minimum Flow Velocity	8 Feet/sec
Maximum Flow Velocity	2 Feet/sec

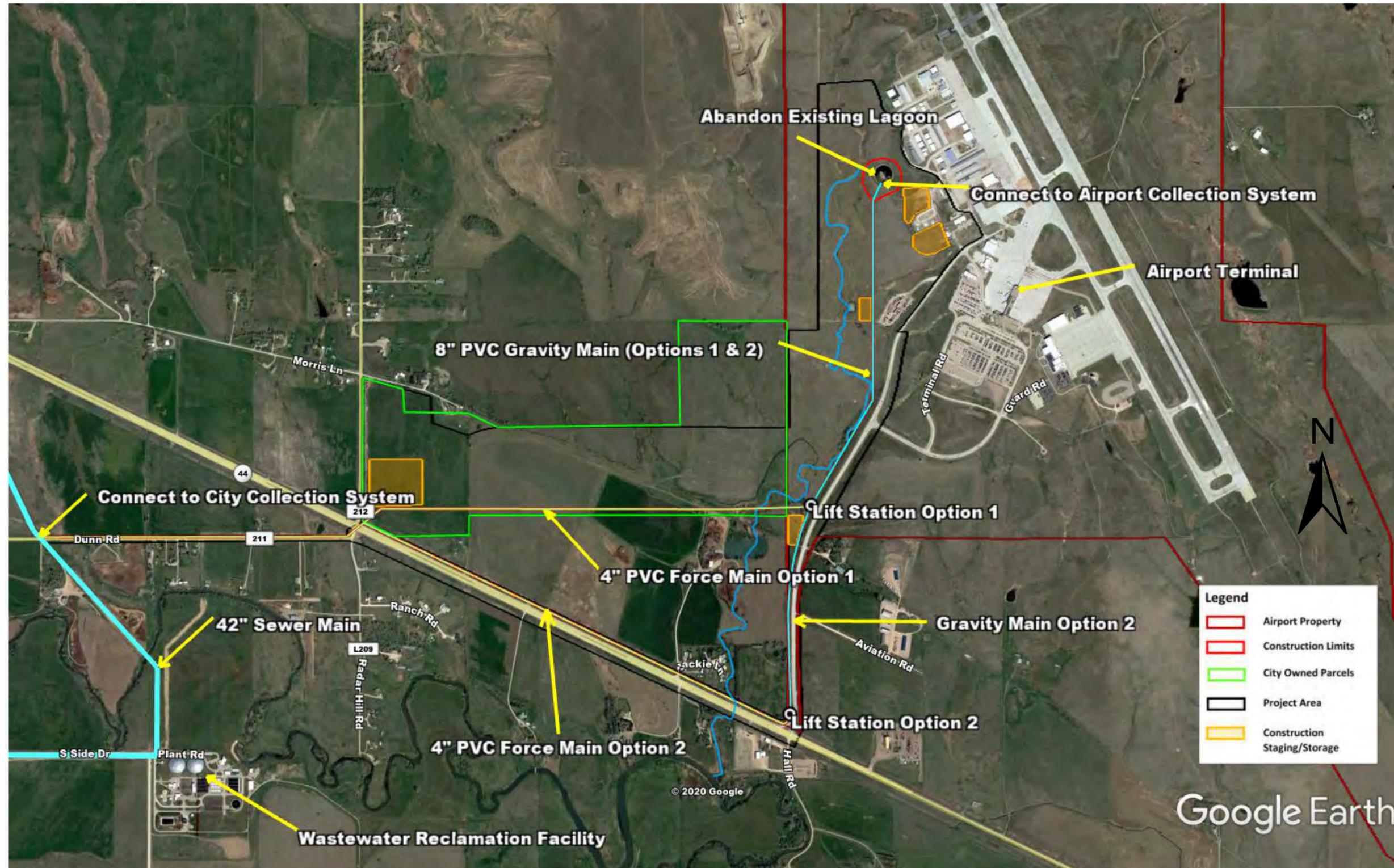
2.2.3.1 Wastewater Flow Rates

The system would be designed to accommodate the projected average daily flow rate of 24,500 gpd by 2038 to account for future growth and projected increases in passengers. Alternative C addresses the wastewater flow rates of the Airport.

2.2.3.2 Wildlife Considerations

Alternative C would eliminate the existing above ground open water pond within the 10,000 feet separation distances recommended by the FAA for wastewater facilities. Additionally, the system would continuously discharge treated water to the existing WRF located over 10,000 feet from the AOA. Alternative C addresses wildlife hazard considerations of the existing lagoon and it would not introduce any new attractants within the recommended separation distances.

Figure 7, Alternative C – Airport Collection Connected to Rapid City WRF



Map data ©2018 Google

Alternative C Summary

Alternative C would address the issues related to the current wastewater system at RAP. The new system would meet the requirements of DENR and would accommodate current and projected wastewater flowrates coming from the Airport. According to the Wastewater Treatment Feasibility Study Alternative C-1 would cost approximately \$1.6 million to construct. Alternative C-1 would also have an annual operation and maintenance cost of approximately \$8,500 per year. The estimated cost of Alternative C-2 were updated for this study and are included in **Table 6, Alternative C Options Comparison**. The Airport would not need to acquire an Industrial Discharge Permit from DENR or hire a licensed operator for the facility. See **Figure 8, Alternative Life Cycle Cost** for the project cost of Alternative C over a period of 20 years. The Airport Collection System was evaluated as part of the Wastewater Treatment Feasibility Study, and it was determined to be feasible.

Table 6, Alternative C Options Comparison

Alternative C Option Comparisons		
	Option C-1	Option C-2
Gravity Main Length	4,300 feet	6,500 feet
Force Main Length	9,700 feet	10,050 feet
Manholes	12	17
Costs	\$1.6 Million	\$1.8 Million
Annual Operation and Maintenance	\$8,500	\$9,500

2.3 Alternative Costs Considerations

Both build alternatives would be sized to meet the minimum requirements of the South Dakota Recommended Design Criteria for Wastewater Collection and Treatment Facilities. The existing lagoon would be eliminated under both build alternatives and the Airport tenants that are connected to existing lagoon system would need sewer service. The current users would not require the new system to be expanded beyond the minimum requirements of the State and would be allowed to connect to the new system as part of their lease agreements with the Airport. If flow rates from the Airport Terminal exceed the minimum size requirements and the system needs to be expanded in the future, then the cost of the expansion would need to be divided proportionately with other on Airport users of the system.

Table 7, Estimated Cost Summary

Alternative	Estimated Capital Cost
Alternative A	\$0.00
Alternative B ¹	\$1.0 million
Alternative C-1 ¹	\$1.6 million
Alternative C-2 ²	\$1.8 million

(1) Alternatives B and C-1 cost estimate are from the 2017 Feasibility Report, adjusted for inflation.

(2) Alternative C-2 are based on Alternative C-1 with adjustments for additional piping and manholes.

The estimated initial capital cost for the three alternatives are summarized above in **Table 7, Estimated Cost Summary**. The cost estimates do not include any ongoing operation and maintenance cost. Additionally, Alternative B would include the annual cost for a licensed operator. All annual costs are assumed to increase by 1 percent annually and have been brought back to a present worth using a 5 percent interest rate and a 20-year term. The costs were then added to the initial capital cost to allow for a comparison of total present worth for the alternatives. The life cycle costs are presented in **Table 8, Life Cycle Cost Comparison** and **Figure 8, Alternative Life Cycle Cost**

Table 8, Life Cycle Cost Comparison

Alternative	Annual O&M Cost	Annual Cost of Licensed Operator and/or Permit	Total Initial Cost	Present Worth of Annual O&M ⁽¹⁾	Present Worth of Operator Cost and/or Permit ⁽¹⁾	Present Worth of Total Cost ⁽²⁾
Alternative A	\$-- ⁽³⁾	\$600.00	\$0.00	-- ⁽⁴⁾	-- ⁽⁴⁾	-- ⁽⁴⁾
Alternative B	\$42,000	\$22,500 ⁽⁵⁾	\$1.0 million	\$567,129.37	\$311,296.63	\$1,878,426.00
Alternative C-1	\$8,500	\$0.00	\$1.6 million	\$114,776.93	\$0.00	\$1,714,776.18
Alternative C-2	\$9,500	\$0.00	\$1.8 million	\$128,279.26	\$0.00	\$1,928,279.26

(1) Present Worth Costs are based on an annually compounded interest rate of 5.00 percent over a 20-year period.

(2) The total present worth cost is equal to the initial costs plus the present worth of all annual costs.

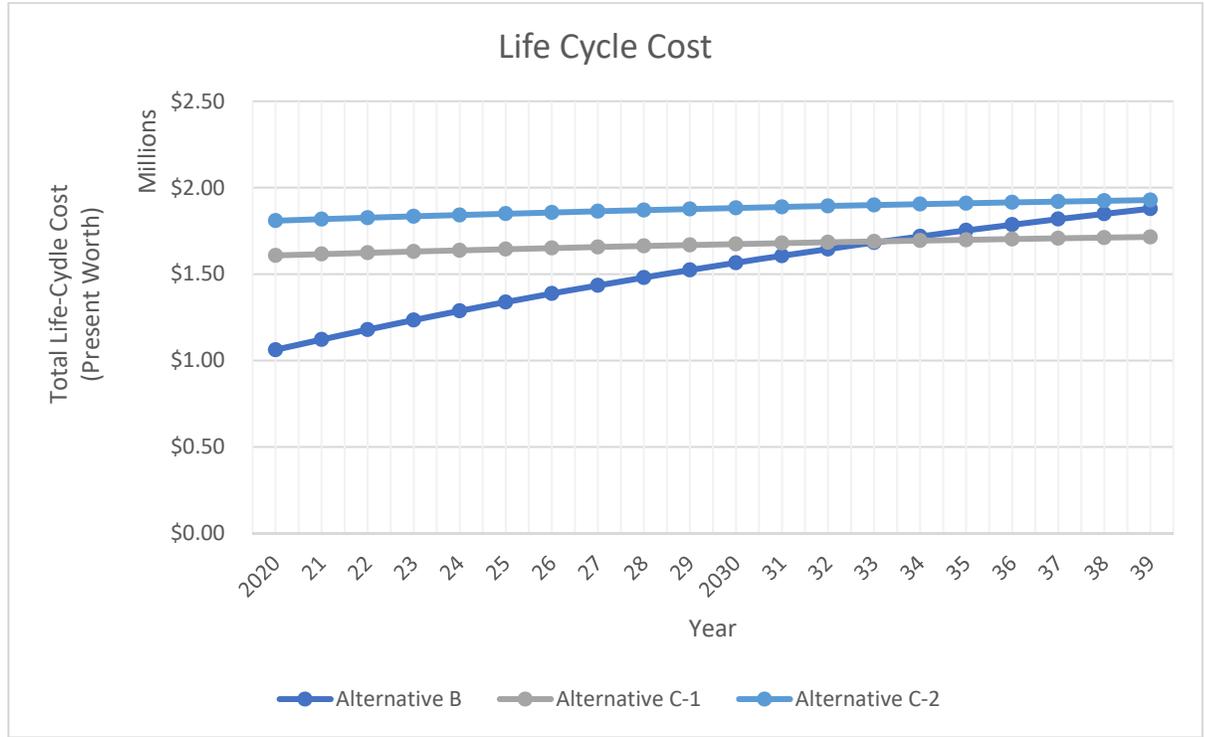
(3) In 2019, the Airport spent nearly \$100,000 on temporary modifications, pumping, and hauling effluent to remain in compliance with DENR.

(4) Present Worth of Alternative A is not considered as the Airport would be required to have a new system in place by January 1, 2023 per DENR requirements.

(5) The annual cost of a licensed operator was estimated to be approximately ½ the annual average salary for licensed water treatment plant operators in South Dakota according to careexplorer.com.

See **Figure 8, Alternative Life Cycle Cost** for the present value of each of the proposed alternatives over 20 years.

Figure 8, Alternative Life Cycle Cost



2.4 Additional Alternative Considerations

The Airport proposed to construct an alternative that would service only the Airport. A regional collection system that would have served residential areas to the west and east of the Airport was reviewed in the Wastewater Treatment Feasibility Study to see how the Airport would fit into a regional system. The Airport does not have the capacity to fund a system of this scale on its own and regional capital improvement funding for this system is many years away. Therefore, the regional system was not considered as an alternative to the Proposed Action.

CHAPTER 3

AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION

Chapter 3, Affected Environment, Environmental Consequences, and Mitigation, of this EA describes the existing conditions within the Project Area. Please refer to *Figure 2, Project Area*. The existing conditions, or affected environment, are the baseline conditions that may be affected by the alternatives. This chapter also summarizes the potential direct and cumulative impacts on environmental, cultural, socioeconomic, and human-made resources from the alternatives, as well as avoidance, minimization, and/or mitigation measures for adverse impacts. Indirect impacts are discussed in impact categories where relevant.

Direct impacts are caused by the action and occur at the same time and place.
(40 CFR § 1508.8)

This chapter is divided into sections for each impact category analyzed as part of this document. Some impact categories reference appendices where further information can also be found. The sections contain the following components, where applicable:

Indirect, secondary impacts are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.
(40 CFR § 1508.8).

- ◆ Background – discusses the impact category and contains information related to the applicable regulations or laws associated with the impact category.
- ◆ Affected Environment – discusses the existing conditions associated with the impact categories being addressed.
- ◆ Environmental Consequences and Mitigation – discusses the potential direct and indirect impacts associated with each alternative and mitigation, if required.

Cumulative impacts are impacts that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.
(40 CFR § 1508.7).

Cumulative impacts are analyzed for each resource category relevant to the project in **Section 3.8, Cumulative Effects**.

3.1 Biological Resources

3.1.1 Background

Pursuant to the *Fish and Wildlife Coordination Act* of 1980, if the proposed improvements would impound, divert, deepen, control, or modify any stream or water body, consultation with the US Fish and Wildlife Service (USFWS) and state agency having administrative responsibilities over wildlife resources must be initiated. In South Dakota, the state agency is the South Dakota Game, Fish, and Parks Department (GFP). Consultation is used to determine the possibility of damage to wildlife resources and the measures that should be adopted to prevent the loss of, or damage to, those resources, as well as to provide for the concurrent development and improvement of such resources.

The Act also provides protection of any publicly owned wildlife or waterfowl refuge of national, state, or local significance.

The *Migratory Bird Treaty Act* of 1918 protects migratory birds by implementing a treaty among the United States, Mexico, Canada, Japan, and former Soviet Union. The Act makes it unlawful to take, hunt, kill, or possess any migratory bird, nest, eggs, or any part thereof. The Secretary of the Interior has the discretion to decide when the above actions may be permitted.

The *Bald and Golden Eagle Protection Act* of 1940, as amended, was written with the intent to protect and preserve bald and golden eagles. The Act makes it unlawful to take, possess, import, export, or sell bald and golden eagles or any part thereof, including nests. The taking of bald and golden eagles can only be made allowable by the Secretary of Interior, who may deem taking necessary for scientific purposes.

Threatened and endangered species and their designated Critical Habitats are protected under the *Endangered Species Act (ESA)* of 1973. Section 7 of the ESA applies to federal agency actions and sets forth requirements for consultation to determine whether a Proposed Action would affect protected resources. If the agency determines that an action may affect protected resources, Section 7(a)(2) requires each agency to consult with the USFWS or National Marine Fisheries Service, as appropriate. The consultation is intended to ensure that any action the agency authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally listed endangered or threatened species or result in the destruction or adverse modification of Critical Habitat.

3.1.2 Affected Environment

The area contains numerous wetlands ditches and drainages that flow primarily to the south towards Rapid Creek and east in Murphy Ditch, which is used for irrigation. Vegetation within the area consists primarily of hay and pasture lands; mixed grassland, and some trees. Please refer to **Figure 2, Project Area** for an aerial image of the Project Area. For the Proposed Action the Action Area³ has been defined as the Project Area shown in **Figure 2, Project Area**, and depicted in the Effects Determination packet located in **Appendix C, Background Information**. The Project Area contains suitable habitat for many wildlife species throughout the year including deer, coyotes, rabbits, and prairie dogs. Many non-game bird species are known to fly through and inhabit this region. There are no known bald or golden eagle nests within the Project Area.

According to the USFWS Environmental Conservation Online System: Information for Planning and Conservation, the following threatened and endangered wildlife species and Critical Habitats occur within Pennington County. There are no ESA-listed plant species within Pennington County. See **Table 3-2, Threatened and Endangered Species** for a list of species that were evaluated.

³ The Action Area is defined by regulation (50 CFR 402.02) as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.

Table 3-2, Threatened and Endangered Species

Listed Species	Status	Habitat Preference	Presence or absence in Project Area
Whooping crane (<i>Grus americana</i>)	Endangered	Wetlands, marshes, mudflats, wet prairies, and fields. They use shallow, seasonally, and semi-permanently flooded, palustrine wetlands for roosting and various cropland and emergent wetlands for feeding. Past migratory stopover behavior studies indicate that whooping cranes will avoid human disturbance, such as access and section roads, wind development, and structures, from 0.5 miles to 0.75 miles (Austin and Richert 2005).	<i>Absent – No suitable habitat present due to the proximity to existing facilities, roadways, and the City of Rapid City.</i>
Least Tern (<i>Sterna antillarum</i>)	Endangered	Sandy shores and beaches, or rocky shores that are dry. Sparsely vegetated sand, shell, and gravely beaches, sand bars, islands, and salt flats associated with rivers and reservoirs.	<i>Absent – Found along the main stem of the Missouri River, no suitable habitat present.</i>
Rufa Red Knot (<i>Calidris canutus rufa</i>)	Threatened	Sandy shores and beaches, or rocky shores that are dry. Sparsely vegetated sand, shell, and gravely beaches, sand bars, islands, and salt flats associated with rivers and reservoirs.	<i>Absent – Found along the main stem of the Missouri River, has been identified on large permanent lakes and wetlands, no suitable habitat present.</i>
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Threatened	During the summer, suitable habitat includes forested areas, and during the winter, suitable habitat includes caves and mines that have high humidity, constant temperatures, and no air currents.	<i>Absent – The project is located in close proximity to existing human development, no suitable habitat present.</i>

- Whooping Crane (*Grus americana*), Endangered – Suitable habitat for the whooping crane includes wetlands, marshes, mudflats, wet prairies, and fields. Whooping cranes migrate annually through South Dakota along a band running north and south across the central part of the state where 95 percent of whooping cranes pass through. They use shallow, seasonally, and semi-permanently flooded, palustrine wetlands for roosting and various cropland and emergent wetlands for feeding.

Whooping cranes have been documented using a wide range of wetland sizes for roosting, including small, natural wetlands; manmade stock ponds; large lakes; and rivers without visual obstructions (e.g., high or dense vegetation). Roosting sites are often within 0.6 miles of suitable feeding habitat (CWS and USFWS 2007). Past migratory stopover behavior studies indicate that whooping cranes will avoid human disturbance, such as access and section roads, wind development, and structures, from 0.5 miles to 0.75 miles (Austin and Richert 2005). The wetlands located within the Project Area are in close proximity to active airport facilities and activities, access roads, and highways. This decreases the likelihood of wetland use by whooping cranes near the Project Area.

- Least Tern (*Sterna antillarum*), Endangered - Least tern breed in isolated areas along the Missouri, Mississippi, Ohio, Red, and Rio Grande River systems. They winter along coastal areas of Central and South America and the Caribbean Islands, but not a lot is known about their wintering areas. Suitable nesting habitat includes barren to sparsely vegetated sand bars along rivers, lake and reservoir shorelines, gravel rooftops, and sand and gravel pits. There is no suitable habitat within the Project Area.
- Rufa Red Knot (*Calidris canutus rufa*), Threatened – Rufa red knots require favorable habitat, food, and weather conditions within narrow seasonal windows as they migrate between wintering and breeding areas. Primary habitat for the rufa red knot includes sandy or gravelly beaches and sandbars, or alkaline wetlands. Although rufa red knots use primarily marine habitats on their breeding and wintering grounds, the species is known to utilize surface waters in South Dakota during migration. Red knots have been observed in the Missouri River system as well as large permanent freshwater wetlands, and alkaline and freshwater lakes. There is no suitable habitat for the species within the Project Area.
- Northern Long-eared Bat (*Myotis septentrionalis*), Threatened – The northern long-eared bat is found in the eastern and north-central United States and all Canadian provinces. During the summer, preferred habitat includes forested areas and adjacent open space for roosting and foraging. During the winter, preferred habitat includes caves and mines that have high humidity, constant temperatures, and no air currents for hibernation. There is no suitable habitat within the Project Area.

3.1.3 Environmental Consequences & Mitigation

Alternative A (No Action): No direct or indirect impacts on wildlife would be expected; no water bodies would be impounded, diverted, deepened, controlled, or modified; and no mitigation would be required.

Alternatives B and C (Build Alternatives): No lakes, rivers, streams, or creeks would be impounded, diverted, deepened, controlled, or modified by these alternatives; therefore, the *Fish and Wildlife Coordination Act* of 1980 would not apply to the project. Please refer to **Section 3.7, Water Resources – Wetlands, Floodplains, Surface Water**, and Groundwater, for more information.

Alternatives B and C are not anticipated to result in tree removal; however, any tree removal that may become necessary would be conducted outside of summer maternity season for the northern long-eared bat (April 1 to September 30). No direct or indirect impacts on bald and golden eagles would be expected due to the absence of nests within the Project Area.

Alternatives B and C would result in temporary impacts on vegetation and wildlife during construction activities. BMPs (e.g., berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains) would be implemented to prevent soil erosion and siltation. Increased noise levels and motion associated with construction activities may indirectly impact wildlife species utilizing areas adjacent to the project. Wildlife species near the Project Area are likely habituated to frequent and intense noise disturbances from vehicle and aircraft traffic in the area. As such, most wildlife species are anticipated to remain during construction. Other species may be temporarily displaced during construction.

The following summarizes the effect determinations for the threatened and endangered species that may occur within Pennington County. Please refer to **Appendix C, Background Information** for the ESA Section 7 Effect Determination Table.

- Whooping Crane – Due to the proximity of human developments, Alternative B and Alternative C were determined to have *No Effect* on the whooping crane or its associated habitat.
- Least Tern – Since there is no preferred habitat within the Project Area, Alternatives B and C were determined to have *No Effect* on the least tern or its associated habitat.
- Rufa Red Knot – Since there is no preferred habitat within the Project Area, Alternatives B and C were determined to have *No Effect* on the rufa red knot or its associated habitat.
- Northern Long-eared Bat – Since there is little suitable roosting habitat within the Project Area and tree removal, if needed, would be conducted outside of the summer maternity season, Alternatives B and C were determined to have *No Effect* on the northern long-eared bat or its associated habitat.

3.2 Hazardous Materials, Pollution Prevention, and Solid Waste

3.2.1 Background

The *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) of 1981 and *Resource Conservation and Recovery Act* (RCRA) of 1976, as amended, are two important statutes that govern actions to control hazardous waste.⁴ CERCLA provides for cleanup of any release of a hazardous substance (excluding petroleum) into the environment, while RCRA governs the generation, treatment, storage, and disposal of hazardous wastes.

Most hazardous materials and petroleum products used in support of aviation activities are associated with aircraft fueling and maintenance, and airfield maintenance. The most common materials consist of jet fuel, avgas, motor vehicle fuels, paints, paint removers, deicers and antifreeze, cleaning solvents, pesticides, herbicides, fertilizers, and a range of other miscellaneous items including batteries, filters, and electrical equipment, as described in 40 CFR Part 261.

Solid waste is defined by the implementing regulations of RCRA as any discarded material that meets specific regulatory requirements, which can include refuse, scrap metal, spent materials, chemical by-products, and sludge from wastewater treatment plants.

The broad mission of pollution prevention is to avert pollution at the source, promote the use of more efficient materials, and conserve natural resources. Pollution prevention offers important economic benefits, as pollution that is never created avoids the need for expensive investments in waste management and cleanup.

⁴ As amended by the *Superfund Amendments and Reauthorization Act of 1986* and the *Community Environmental Response Facilitation Act of 1992*, 42 U.S.C. 9601-9675.

3.2.2 Affected Environment

The Airport is in compliance with local, state, and federal rules and regulations regarding the use, generation, and storage of all chemicals and materials on the Airport property. Land not owned by the Airport within the Project Area has been used for agricultural production or county road rights-of-way since at least the early 1960s, and there is no evidence of spills or contamination.

During the scoping process, consultation with the DENR did not identify any National Priority List (NPL) sites or non-NPL sites within the Project Area. Please refer to **Appendix B, Letters and Responses**, for a copy of the DENR letter. The DENR maintains a database of underground storage tanks (USTs) and leaking underground storage tanks (LUSTs). According to the UST database, there are USTs at the Airport and the WRF. Although not intended to be an exhaustive survey, coordination with DENR and review of the UST database indicates that there are no significant hazardous material sites within the Project Area. In May 2017, the Airport reported a release of approximately 200 gallons of firefighting foam into a storm water drainage located approximately 1,200 feet south of the existing lagoon and north of Airport Road. The Airport implemented the requested remedial action to “recover impacted water, excavate impacted soils, and appropriately dispose the recovered and excavated substances”. The Airport has also implemented control measures to prevent future uncontrolled discharge of firefighting foam and aircraft deicing chemicals into the stormwater drainage.

It is possible that other unrecorded sites may contain hazardous materials, hazardous waste, and/or environmental contamination in the areas of the proposed Airport improvements. This is because not all sites, spills, and problems are reported or known to exist. Therefore, the information contained in this section is intended for planning purposes and is not meant to replace Environmental Audits or Environmental Site Assessments that are conducted prior to project construction or land acquisition.

The Rapid City Regional Landfill is located approximately seven miles west of the Airport on US Highway 79. The landfill is a Subtitle D facility permitted for operation by the South Dakota Department of Environment and Natural Resources. On an average day the landfill receives 700 tons of non-hazardous solid waste; household waste, construction and demolition debris, non-hazardous special wastes and non-infectious medical waste for disposal (City of Rapid City, 2019).

The Airport does not currently have a formal Pollution Prevention Plan for operation of the Airport.

3.2.3 Environmental Consequences & Mitigation

Alternative A (No Action): Alternative A would not result in any direct or indirect hazardous or solid waste-related impacts. Alternative A would not directly or indirectly impact pollution prevention at the Airport.

Alternative B and C (Build Alternatives): The project is not expected to involve hazardous materials or generate hazardous waste other than those generally associated with construction.

If previously unknown contaminants are discovered during construction or a spill occurs during construction, work would cease until the Contractor notifies the National Response Center (800-424-8802). If contamination is encountered, the Contractor must also notify the DENR at (605) 773-3296 or (605)773-3231 after hours. Any contaminated soil encountered would be temporarily stockpiled and sampled to determine disposal requirements.

3.3 Historical, Architectural, Archaeological, and Cultural Resources

3.3.1 Background

Section 106 of the *National Historic Preservation Act* of 1966, as amended, requires that federally funded projects be evaluated for their effects on historic and cultural properties included in, or eligible for listing on, the National Register of Historic Places (NRHP). The *Archaeological and Historic Preservation Act* of 1974 (ARPA) provides for the survey, recovery, and preservation of significant scientific, pre-historical, or archaeological data when such data may be destroyed or irreparably lost due to a federal, federally licensed, or federally funded project.

The *Native American Graves Protection and Repatriation Act* of 1990 (NAGPRA) is triggered by the possession of human remains or cultural items by a federally funded repository or by the discovery of human remains or cultural items on federal or tribal lands and provides for the inventory, protection, and return of cultural items to affiliated Native American groups. Permits are required for intentional excavation and removal of Native American cultural items from federal or tribal lands.

The *American Indian Religious Freedom Act* of 1978 (AIRFA) requires consultation with Native American groups concerning Proposed Actions on sacred sites on federal land or affecting access to sacred sites. It establishes federal policy to protect and preserve for American Indians, Eskimos, Aleuts, and Native Hawaiians their right to free exercise of their religion in the form of site access, use, and possession of sacred objects, and freedom to worship through ceremonial and traditional rites. The Act requires federal agencies to consider the impacts of their actions on religious sites and objects important to Native Americans, regardless of the eligibility for listing on the NRHP.

3.3.2 Affected Environment

The Area of Potential Effect (APE) on cultural resources was identified based on consideration of the following potential impacts: areas where the Proposed Action could create visual or audible impacts on historic properties, areas that could indirectly impact historic properties, and areas where the project could cause ground disturbance. Noise impacts and visual impacts that could change the setting or feel of the area are not anticipated to occur outside of the proposed project boundaries. All ground disturbance related to construction of the proposed lagoon, underground pipes, lift station, construction staging, access routes, and material storage is anticipated to be accomplished within the existing and proposed project boundaries. Therefore, the APE has been identified as the Project Area as shown on **Figure 2, Project Area**.

Pre-field Level I Literature Reviews conducted within one mile of Project Area to identify previously recorded sites identified six previously recorded cultural resources. Two of cultural resources, a historical earthwork (Murphy Ditch) and a historic railroad, are located inside the Project Area. The sites are *Eligible* for the National Register of Historic Places (NRHP).

A Level III Survey of the northern portion of the Project Area was completed on April 18-19, 2017 by KIJ archaeologist, Andrew Robinson. One new prehistoric site was recorded. A tribal inventory of that area was completed on August 15, 2017 by a tribal cultural specialist from the Cheyenne River Sioux Tribe accompanying KIJ archaeologist, Corey Yates. The traditional cultural specialist identified eight

Traditional Cultural Properties (TCPs). All sites recorded in the northern portion are recommended as Eligible for listing on the NRHP.

Additionally, a Level III Survey of the south portion of the Project Area was completed on August 19-20 and October 25, 2019 by KLJ archaeologist, Matt Hull, and tribal cultural specialist from the Rosebud Sioux Tribe and Cheyenne River Sioux Tribe. During the inventory, two previously recorded historical cultural resource (Murphy Ditch) and the historical railroad were updated and three newly recorded cultural resources, an archaeological site and two bridges, were documented within the surveyed area. In addition, the tribal cultural specialists identified three TCPs. All of them are potentially Eligible for listing on the NRHP.

In accordance with 16 United States Code (USC) 470hh(a), *Confidentiality of Information Concerning the Nature and Location of Archaeological Resources and Traditional Cultural Properties*, detailed information regarding the specific locations of archaeological and cultural resources is exempt from the Freedom of Information Act and is not included in this EA.

3.3.3 Environmental Consequences & Mitigation

Alternative A (No Action): No direct or indirect impacts on historical, architectural, archaeological, or cultural resources would be expected.

Alternatives B and C (Build Alternatives): Based on the findings of the Level III Cultural Resource and Tribal Inventory report and a review of the project alternatives, the State Historic Preservation Officer (SHPO) concurred with a *No Historic Properties Affected* determination on July 14, 2020. Please refer to **Appendix B, Letters and Responses**, for a copy of this concurrence letter.

TCPs important to the represented tribes would be avoided by construction activities associated with project. Protective measures would be required to ensure that no unintentional disturbances of these sites occur during construction. This would include the use of construction fencing or other markers placed under the observation of appointed TCS(s). Due to the potential for additional discoveries during construction, the Airport would be required to provide TCS(s) appointed by their Tribe an opportunity to observe ground-disturbing activities that remove the top 12 inches of topsoil and Holocene deposits, in accordance with guidelines to be provided by the FAA and prepared in consultation with the Tribes.

Material source clearance for borrow, aggregate, riprap, and staging areas would be required before materials could be taken from offsite. If any construction activity results in discovery of cultural resources, work would cease until the FAA Airports District Office (ADO) in Bismarck is notified per the *Discovery Plan for General Aviation (GA) Projects in the Dakotas*. The Contractor would be required to protect the material until cultural resource concerns have been addressed. Consultation with the SHPO and Tribes would take place and decisions regarding appropriate treatment would be made. Activities undertaken to address discoveries would comply with NEPA, the AIRFA, NAGPRA, and the ARPA, as appropriate to the situation.

3.4 Land Use

3.4.1 Background

Compatible land uses are those that typically are not influenced by normal airport operations. The compatibility of existing land uses near an airport is usually associated with the extent of noise impacts occurring from airport property and safety concerns. Incompatible land uses include fuel storage facilities, areas of public assembly, tree rows, high-density residential areas, and areas that have the potential to attract hazardous wildlife.

Pursuant to 49 USC § 47107 (a) (10) (AIR 21 *Wendell H. Ford Aviation Investment and Reform Act for the 21st Century*), formerly Section 511 (a) (5) of the *1982 Airport Act*, the adoption of zoning laws shall be taken to restrict the use of land adjacent to, or in the immediate vicinity of, an airport to activities and purposes compatible with normal airport operations, including aircraft landing and takeoff.

Hazardous wildlife attractants may also be considered incompatible land uses. FAA AC 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, provides guidance regarding land uses that may attract wildlife hazards near airports. The AC recommends wildlife attractants be at least 10,000 feet away from their AOA for turbine powered aircraft, and five miles from the AOA if they would cause wildlife to cross the approach/departure surface.

3.4.2 Affected Environment

The Project Area includes the existing 1.1-acre lagoon. It is an uncovered sewage lagoon and located about 500 feet from the AOA. The land is primarily zoned for the Airport and General Agriculture. SD Highway 44 is located within the Project Area, south of Airport property. Please refer to **Appendix C, Background Information** for a Rapid City – Pennington County Land Use map to see zoning in and around the Project Area.

3.4.3 Environmental Consequences & Mitigation

Alternative A (No Action): No changes to land use would occur, and no direct or indirect impacts on land use would be expected. However, land use compatibility would not be improved, as the uncovered sewage lagoon would remain within the AOA. Other than normal maintenance activities (e.g., grass and cattail management, pyrotechnics, wildlife monitoring and recording) there would be no changes to the airfield habitat features to reduce wildlife hazards under Alternative A.

Alternative B: The existing uncovered lagoon would be replaced with a covered lagoon in the same general vicinity as the existing lagoon. The cover is needed as part of the overall treatment process but would also prevent waterfowl and other wildlife from using the lagoon. This alternative would discharge treated water into a drainage on the airport. This discharge has the potential to promote vegetation growth that may become a wildlife attractant. This area would need to be monitored to ensure wildlife concerns are addressed. If hazardous wildlife is attracted to this area the Airport would need to implement hazing, harassment, and/or depredation techniques to prevent collisions between wildlife and aircraft. No land would be acquired for this alternative and no other changes to land use are expected.

Alternative C: The existing uncovered lagoon would be replaced with underground sewer lines connecting to City of Rapid City's WRF. Utility easements would be needed on property not owned by

the Airport. No land would be acquired for this alternative and no other changes to land use are expected. Any utilities running along or crossing SDDOT right of way would require a permit from the SDDOT Area Engineer in order to use SDDOT right of way.

3.5 Socioeconomics

3.5.1 Background

Socioeconomics is an umbrella term used to describe aspects of a project that are either social and/or economic in nature. The primary statute related to socioeconomic impacts is the *Uniform Relocation Assistance and Real Property Acquisitions Policy Act* of 1970. The Act contains provisions that must be followed if acquisition of real property or displacement of people would occur as a result of implementing a selected alternative (49 CFR Part 24).

For socioeconomics, the area evaluated may be larger than the area evaluated for other impact categories (e.g., evaluating the county as opposed to the Project Area). The principal social impacts to be considered are associated with relocation or other community disruption, transportation, planned development, and employment. The baseline conditions should include the size of local population centers, distance from a project site to these areas, and nature of the local economies.

3.5.2 Affected Environment

The Airport is approximately nine miles east of the central business center of Rapid City, SD. An estimated 27 percent of the total population of Pennington County lives in the City of Rapid City (US Census Bureau 2018). Please refer to **Table 9, Population Summary (2010-2017)**, for a summary of the population in Rapid City and Pennington County from 2010 to 2017.

Table 9, Population Summary (2010-2017)

Location	Population		
	2010	2017	Percent Change
City of Rapid City	67,956	74,421	8.7
Pennington County	100,948	110,141	9.1

Sources: US Census Bureau 2018

There were 79,345 jobs in Pennington County in 2017.⁵ The three largest industries were healthcare (11,010 individuals employed); retail trade (10,214 individuals employed); and accommodations and food service (8,310 individuals employed) (BEA, 2019).

There are over 3,700 commercial and industrial businesses located in Pennington County, including, but not limited to, restaurants, hotels/motels, gas stations, grocery/convenient stores, banks, retail stores, automobile/equipment repair shops, oil and gas service providers, and agricultural service providers.

⁵ Employment data for 2017 and 2018 are not yet available for Pennington County; therefore, data from the US Department of Commerce, Bureau of Economic Analysis 2017 estimates are used.

3.5.3 Environmental Consequences & Mitigation

Alternative A (No Action): No direct impacts would be expected. There would be no relocation of housing or businesses, community disruption, or impacts on transportation or planned development. Pennington County and Rapid City would not benefit from the improvements proposed to the Airport. Since construction of the proposed project would not occur under Alternative A, a temporary increase in construction employment opportunities and subsequent increase in payroll taxes, sales receipts, and indirect purchases of goods and services would not occur.

Alternative B and C (Build Alternatives): There would be no relocation of housing or businesses, community disruption, or impacts on transportation or planned development. The community of Rapid City would benefit from improvements to the Airport. Construction activities, anticipated to occur over two to three months, associated with Alternatives B and C would result in a minimal and temporary increased need for local construction contractors, which would result in an increase in construction employment opportunities. However, the demand for local services during construction is not anticipated to exceed the existing capacities of the local services in Rapid City. Construction would provide a small and temporary economic benefit to the region due to increases in payroll taxes, sales receipts, and the indirect purchase of goods and services.

Operation of construction equipment and transport of workers and materials to and from the project site would result in a minimal increase in vehicle traffic volume. However, this increase is not anticipated to result in congestion or degrade the current level of service. Traffic volumes would return to pre-project levels upon completion of construction.

3.6 Visual Effects

3.6.1 Background

Visual resources are the natural and human-made features that give a particular setting or area its aesthetic qualities. These features define the landscape character of an area and form the overall impression that an observer receives of that area.

The aesthetic value of an area is influenced by its landscape and the viewer's response to the view, scenic resource, or human-made feature. The extent of potential visual contrast or compatibility with adjacent landforms and land uses are addressed from the vantage point of those living adjacent to the Project Area or traveling through on Highway 44 and/or Airport Road.

Light emissions from the various types of lighting installed on, around, or related to an airport can be a potential annoyance for people living or working in the vicinity of the lighting. An annoyance can be often avoided by shielding, changing a beam angle, or considering the location of the lights or light system.

Evaluating the aesthetic qualities of an area is a subjective process because the value that an observer places on a specific feature varies depending on their perspective. In general, a feature observed within a landscape can be considered as characteristic (or character-defining) if it is inherent to the composition and function of the landscape.

3.6.2 Affected Environment

The area associated with the Project Area is generally characterized as rural, sparse residential development. Visual resources immediately surrounding the Project Area include hay and pastureland, local roadways, an abandoned railroad bed, and drainage/irrigation ditches. Visual resources within the Project Area includes Highway 44, Airport Road, the existing lagoon, hay and pastureland, and drainage/irrigation ditches.

3.6.3 Environmental Consequences & Mitigation

Alternative A (No Action): No direct or indirect impacts on the visual setting would be expected.

Alternative B (Build Alternative): Visual changes that would occur with this alternative include eliminating the existing sewage lagoon along with the fence surrounding it. A new covered lagoon would be built near the existing lagoon. Two small structures would be built adjacent to the new lagoon to house the blowers and the ammonia treatment with BOD polishing reactor. The new covered lagoon would be accessed by the existing access road and a new security fence would be constructed around the lagoon and structures.

Alternative C (Build Alternative): Visual changes that would occur with this alternative include eliminating the existing lagoon and the fence surrounding it. A lift station would be constructed to the west of Airport Road on Airport property. A security fence would be constructed around the lift station and a paved parking area. A vehicle turnout and road would be constructed off Airport Road to provide access to a vehicle gate in the new fence. These modifications would be compatible with the existing visual character of the Airport.

Minor impacts are anticipated on the overall viewshed within the Airport property and viewshed of the Airport from surrounding areas for each build alternative. The three closest residences are within approximately 1,000 feet of the southern end of Airport Road. Any increase in visual annoyance from the proposed improvements at these locations is anticipated to be minor.

3.7 Water Resources - Wetlands, Floodplains, Surface Water, and Groundwater

3.7.1 Background

Wetlands. Wetlands are defined in EO 11990, *Protection of Wetlands*, as areas inundated by surface or groundwater and under normal circumstances supports a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Three parameters that define a wetland, as outlined in the *Federal Manual for Delineating Jurisdictional Wetlands* (USACE, 1987), are hydric soils, hydrophytic vegetation, and hydrology. The term “wetlands” generally includes ponds, sloughs, prairie potholes, wet meadows, playa lakes, and vernal pools. Wetlands serve a variety of functions, including recharging groundwater, providing habitat for wildlife, aiding flood control by storing surface waters, sediment removal, and nutrient cycling.

Section 404 of the *Clean Water Act* (CWA) protects “waters of the United States,” which includes certain wetlands. Sponsors of projects proposing to impact waters of the United States must apply for, and receive a permit from, the US Army Corps of Engineers (USACE). In order to approve a permit, the sponsor must show that: (1) there are no practicable alternatives that exist that would be less damaging to the aquatic environment and (2) the project would not significantly degrade waters of the United States. Therefore, project sponsors must show they have taken steps to avoid wetland impacts, minimize any potential impacts that were unavoidable, and provide necessary compensation for any unavoidable wetland impacts. By following the proper steps, sponsors identify the Least Environmentally Damaging Practicable Alternative.

Jurisdictional wetlands refer to wetlands that are considered “waters of the United States” and require a Section 404 permit from the USACE.

Floodplains. Floodplains constitute lands situated along rivers and their tributaries subject to periodic flooding with a one percent chance of being flooded in any given year, on the average interval of 100 years or less. They are protected under EO 11988, *Floodplain Management*.

Surface Water and Groundwater. The *Federal Water Pollution Control Act* of 1972, as amended by the CWA, provides the authority to establish water quality standards, control discharges into surface and subsurface waters, develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and dredged or fill material (Section 404).

Airport activities can impact water quality, mainly due to stormwater runoff from paved areas. Typical pollutants found in airport runoff include spilled oil and fuel, loose debris, rubber tire deposits, and accidentally discharged chemicals. Water pollution problems can be intensified during winter if deicers are used to clear taxiways, runways, and apron areas. Additionally, washing and deicing agents used on aircraft can pollute stormwater runoff.

3.7.2 Affected Environment

Wetlands. An aquatic resource delineation was conducted on September 21 - 26, 2018 by wetland delineator, Kory Rude of KLJ, with a revisit conducted on October 3, 2018. A total of 23 wetlands totaling 13.61 acres were delineated within an approximate 352-acre study boundary. The findings were documented in an Aquatic Resource Delineation report (KLJ 2019). Please refer to **Figure 9, Wetland Delineation Map**, and **Table 10, Summary of Wetland Information**. A jurisdictional determination was requested in October 30, 2019, and a preliminary jurisdictional determination was issued by the USACE on December 18, 2019 for Waters of the United State and an approved jurisdictional determination for wetlands 4, 20, and 23. Please refer to **Appendix B, Letters and Responses**, for a copy of these letters.

Table 10, Summary of Wetland Information

Aquatic Resource Name	Size (acres)	Aquatic Type	Jurisdictional Determination
Wetland 1	0.13	Natural Drainage	Jurisdictional
Wetland 2	0.01	Artificial Ditch	Jurisdictional
Wetland 3	0.29	Natural Drainage	Jurisdictional
Wetland 4	0.44	Artificial Ditch	Non-jurisdictional
Wetland 5	2.74	Artificial Ditch	Jurisdictional
Wetland 6	1.32	Natural Drainage	Jurisdictional
Wetland 7	0.56	Natural Drainage	Jurisdictional
Wetland 8	0.69	Natural Drainage	Jurisdictional
Wetland 9	0.63	Natural Basin	Jurisdictional
Wetland 10	0.12	Natural Drainage	Jurisdictional
Wetland 11	0.42	Natural Drainage	Jurisdictional
Wetland 12	2.39	Natural Drainage	Jurisdictional
Wetland 13	0.85	Artificial Basin	Jurisdictional
Wetland 14	0.01	Natural Basin	Jurisdictional
Wetland 15	0.75	Artificial Drainage	Jurisdictional
Wetland 16	0.66	Natural Drainage	Jurisdictional
Wetland 17	0.06	Artificial Drainage	Jurisdictional
Wetland 18	0.19	Artificial Drainage	Jurisdictional
Wetland 19	0.24	Artificial Drainage	Jurisdictional
Wetland 20	0.08	Artificial Ditch	Non-jurisdictional
Wetland 21	0.05	Natural Drainage	Jurisdictional
Wetland 22	0.86	Artificial Ditch	Jurisdictional
Wetland 23	0.12	Artificial Ditch	Non-jurisdictional
Total	13.61 Acres		

Figure 9, Wetland Delineation Map

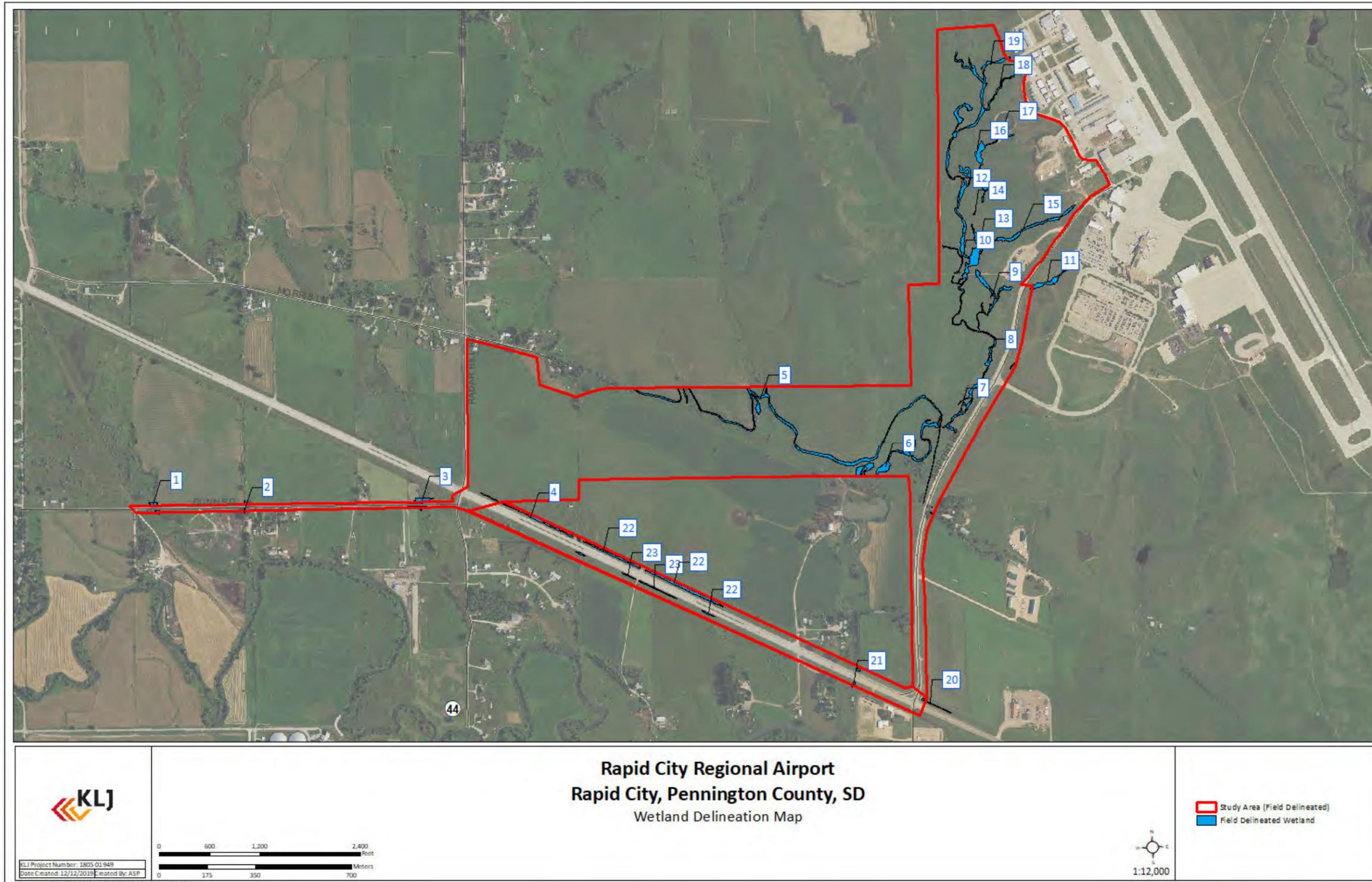
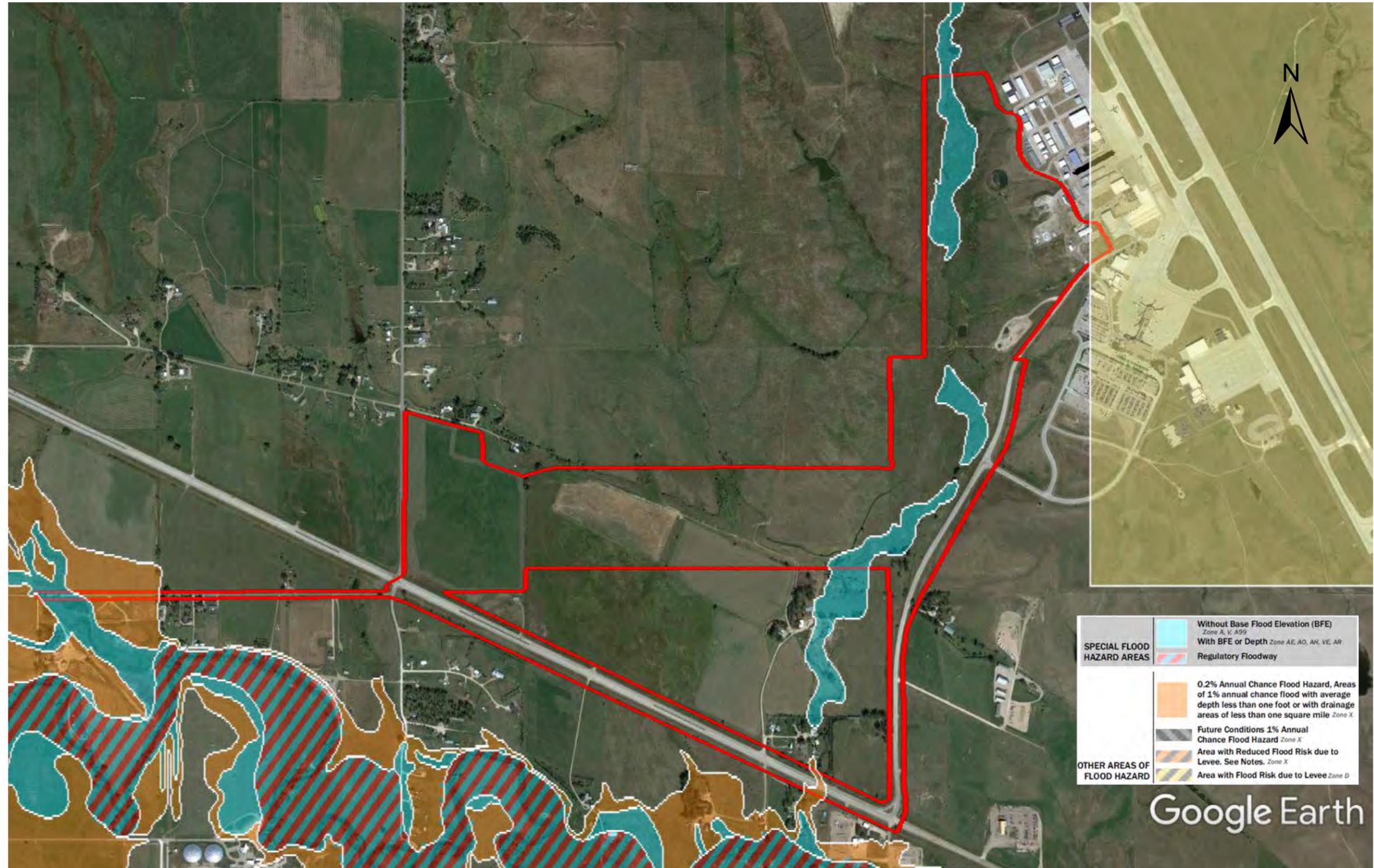


Figure 10, Flood Hazard Zone Map



Floodplains. Some areas of the Project Area are located within the 100 year floodplain and a floodway is located all along Rapid Creek in the southern portion of the Project Area. Please refer to **Figure 10, Flood Hazard Zone Map.**

Surface Water and Groundwater. This project would be in close proximity to Rapid Creek. This waterbody is classified by the South Dakota Water Quality Standards and Uses Assigned to Streams for the following beneficial uses:

- Warmwater permanent fish life propagation waters;
- Immersion contact recreation waters;
- Limited contact recreation water;
- Fish and Wildlife propagation, recreation, and stock watering waters; and
- Irrigation water.

Water resources in the Project Area include drainages that ultimately flow into Rapid Creek. Rapid Creek is a tributary of the Cheyenne River. The Airport is approximately 23 miles from the Cheyenne River. The Airport is permitted by DENR for storm water discharges. The existing property contains approximately 180 acres of impervious surfaces including runways, taxiways/taxilanes, roads, parking areas and buildings, or roughly 10 percent of the existing airport consists of impervious surfaces.

3.7.3 Environmental Consequences & Mitigation

3.7.3.1 Wetlands Environmental Consequences & Mitigation

Alternative A: No direct or indirect impacts on wetlands would be expected, and no mitigation would be required.

Alternative B and C (Build Alternatives): Impacts on aquatic resources would be avoided and minimized to the extent practicable by early wetland identification and design flexibility of each of the alternatives; however, due to the concentration of and locations of the wetlands throughout the Project Area, temporary impacts to wetlands would occur. Please refer to **Table 11, Wetland Impacts,** for a summary of impacts on wetlands from Alternatives B and C.

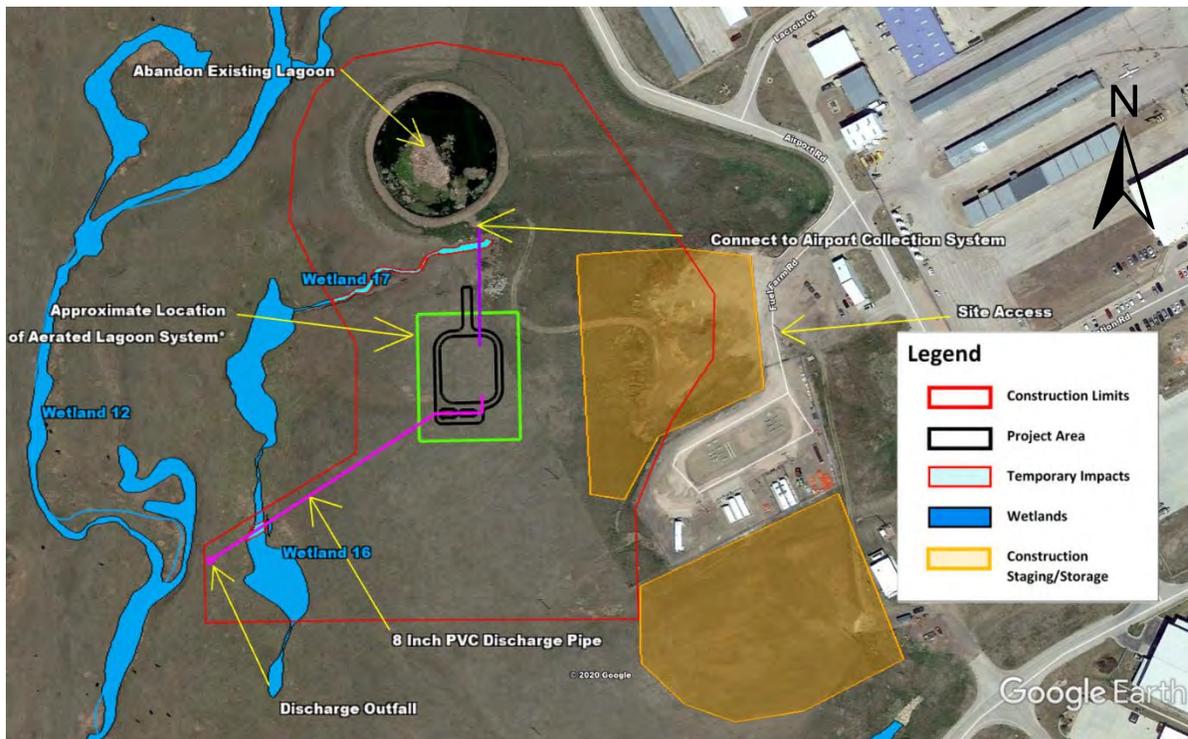
Table 11, Wetland Impacts

Aquatic Resource Name	Wetland Type	Wetland Impacts (Acres) (All impacts are expected to be temporary)		
		Alternative B	Alternative C (Option 1)	Alternative C (Option 2)
Wetland 1	Natural/JD	--	0.03	0.03
Wetland 2	Artificial/JD	--	0.004	0.004
Wetland 3	Natural/JD	--	0.03	0.03
Wetland 4	Artificial/Non-JD	--	--	0.20
Wetland 5	Artificial/JD	--	0.002	0.005
Wetland 6	Natural/JD	--	0.06	--
Wetland 7	Natural/JD	--	0.06	0.06
Wetland 9	Natural/JD	--	0.01	0.01
Wetland 15	Artificial/JD	--	0.003	0.003
Wetland 16	Natural/JD	0.005	--	--
Wetland 17	Artificial/JD	0.06	0.06	0.06
Wetland 21	Natural/JD			0.007
Wetland 22	Artificial/JD			0.42
Totals		0.065*	0.259*	0.829*
Natural/JD		0.005	0.25	0.137
Artificial/JD		0.06	0.009	0.492
Artificial/Non-JD				0.20

Note: *Some figures may differ due to rounding.

Alternative B would temporarily impact two wetlands totaling approximately 0.065 acres due to grading the new lagoon and trenching underground pipes for the new sewer system. Please refer to **Figure 11, Alternative B Wetland Impacts**. Mitigation is required if impacts would be permanent for on all natural wetlands under EO 11990 and for permanent impacts on jurisdictional wetlands greater than 0.10 acres under the CWA. Mitigation would not be required for Wetlands 16 and 17 because the impacts would be temporary, and the areas impacted would be returned to the original grade and contours prior to the end of construction. The discharge outfall for Alternative B would be located outside of the Wetland 12 boundary and would flow into Wetland 12. The discharge rate from the outfall is estimated to be average 10 to 17 gallons per minute (i.e. half the rate of a typical garden hose) with a peak flow rate estimated to be 61 gallons per minute (i.e. approximately twice the rate of a typical garden hose). Wetland 12 is a seasonally flooded (PEMC) and is anticipated to remain a PEMC wetland. Vegetation in Wetland 12 maybe influenced by the steady flow of effluent and could become lush, consequently having the potential to attract additional wildlife species to the area.

Figure 11, Alternative B Wetland Impacts



Map data ©2018 Google

Alternative C – Option 1 would temporarily impact nine wetlands totaling approximately 0.259 acres due to trenching underground pipes for the new sewer system. Please refer to **Figures 12 – 18, Alternative C Wetland Impacts** *Error! Reference source not found.*. Compensatory mitigation would not be required for Wetlands 1, 2, 3, 5, 6, 7, 9, 15, and 17 because impacts would be temporary, and any disturbed areas would be returned to the original grade and contours prior to the end of construction.

Alternative C – Option 2 would temporarily impact 11 wetlands totaling approximately 0.828 acres due to trenching underground pipes for the new sewer system. Please refer to **Figures 12 – 18, Alternative C Wetland Impacts** *Error! Reference source not found.*. Compensatory mitigation would not be required for Wetlands 1, 2, 3, 4, 5, 7, 9, 15, 17, 21, and 22 because impacts would be temporary, as the areas impacted would be returned to the original grade and contours prior to the end of construction.

Figure 12, Alternative C Wetland Impacts

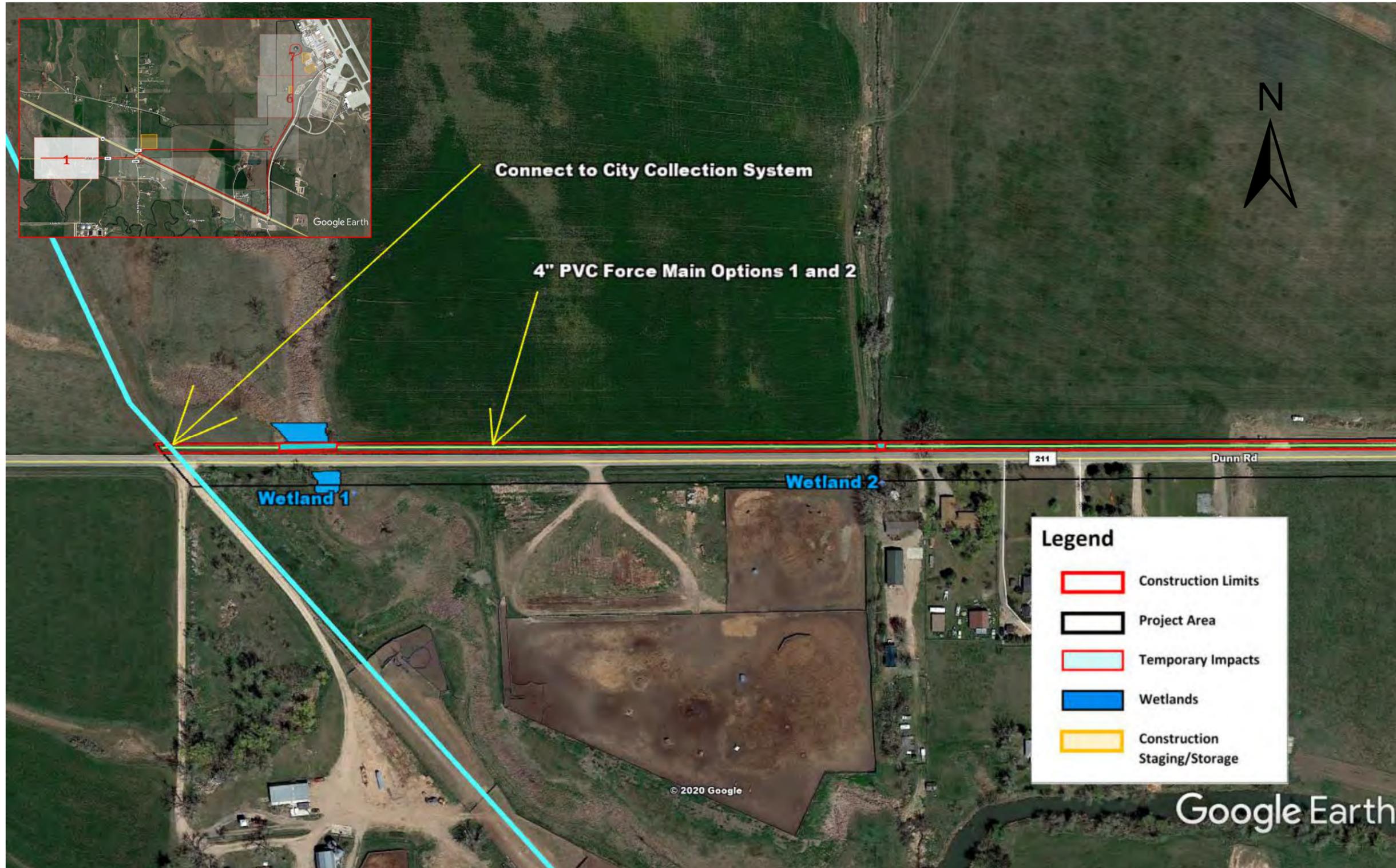
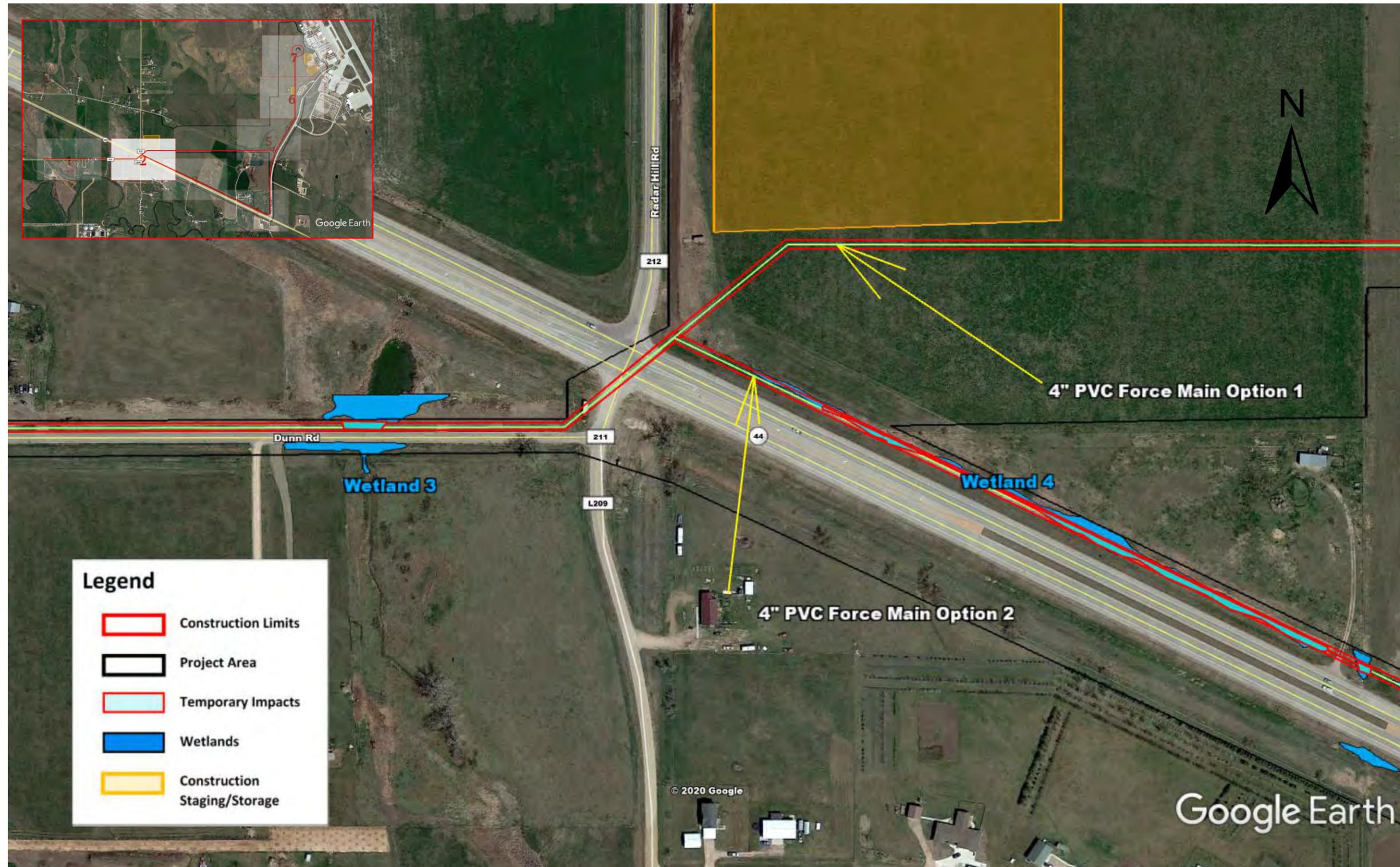


Figure 13, Alternative C Wetland Impacts



Map data ©2018 Google

Figure 14, Alternative C Wetland Impacts

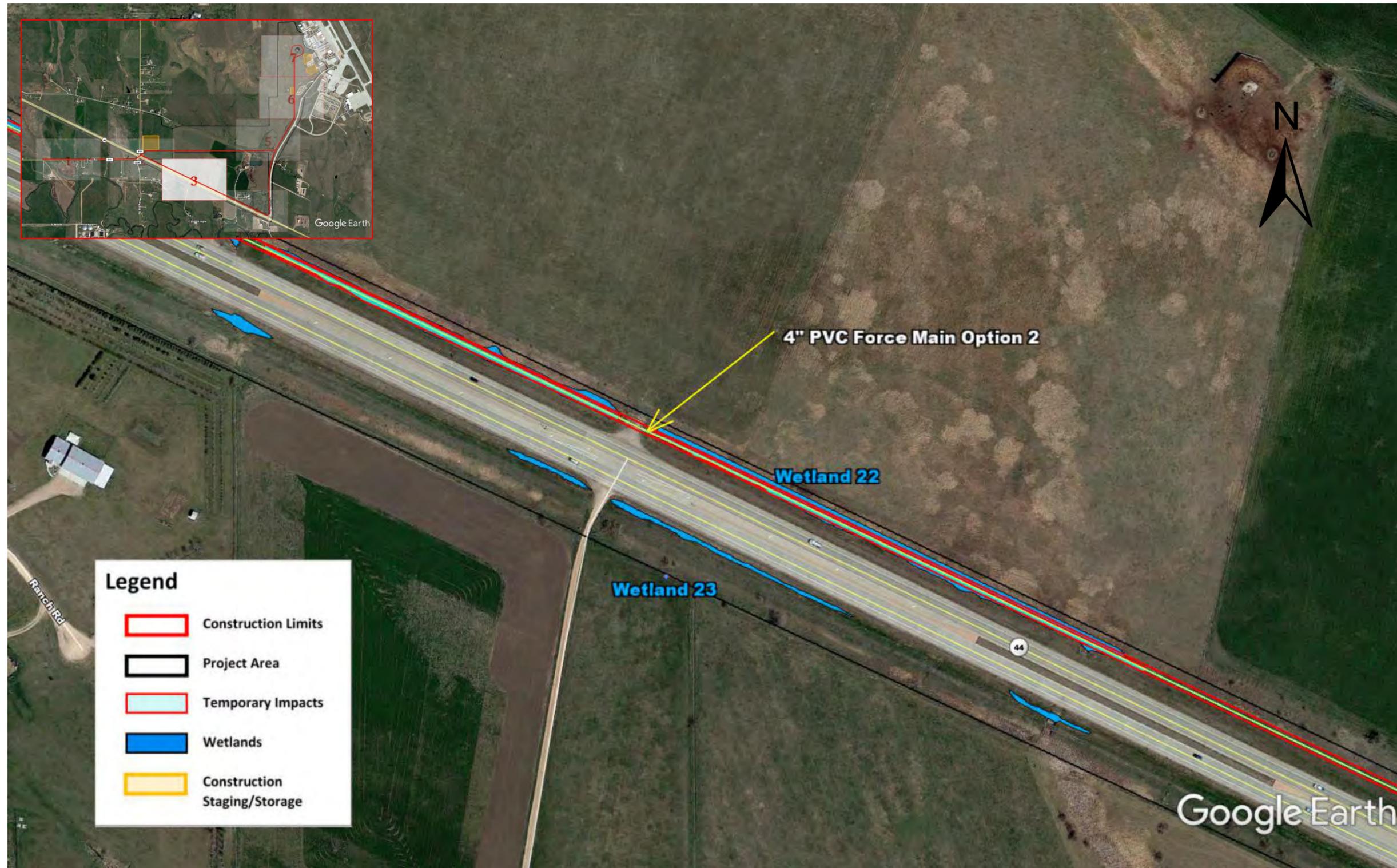


Figure 15, Alternative C Wetland Impacts



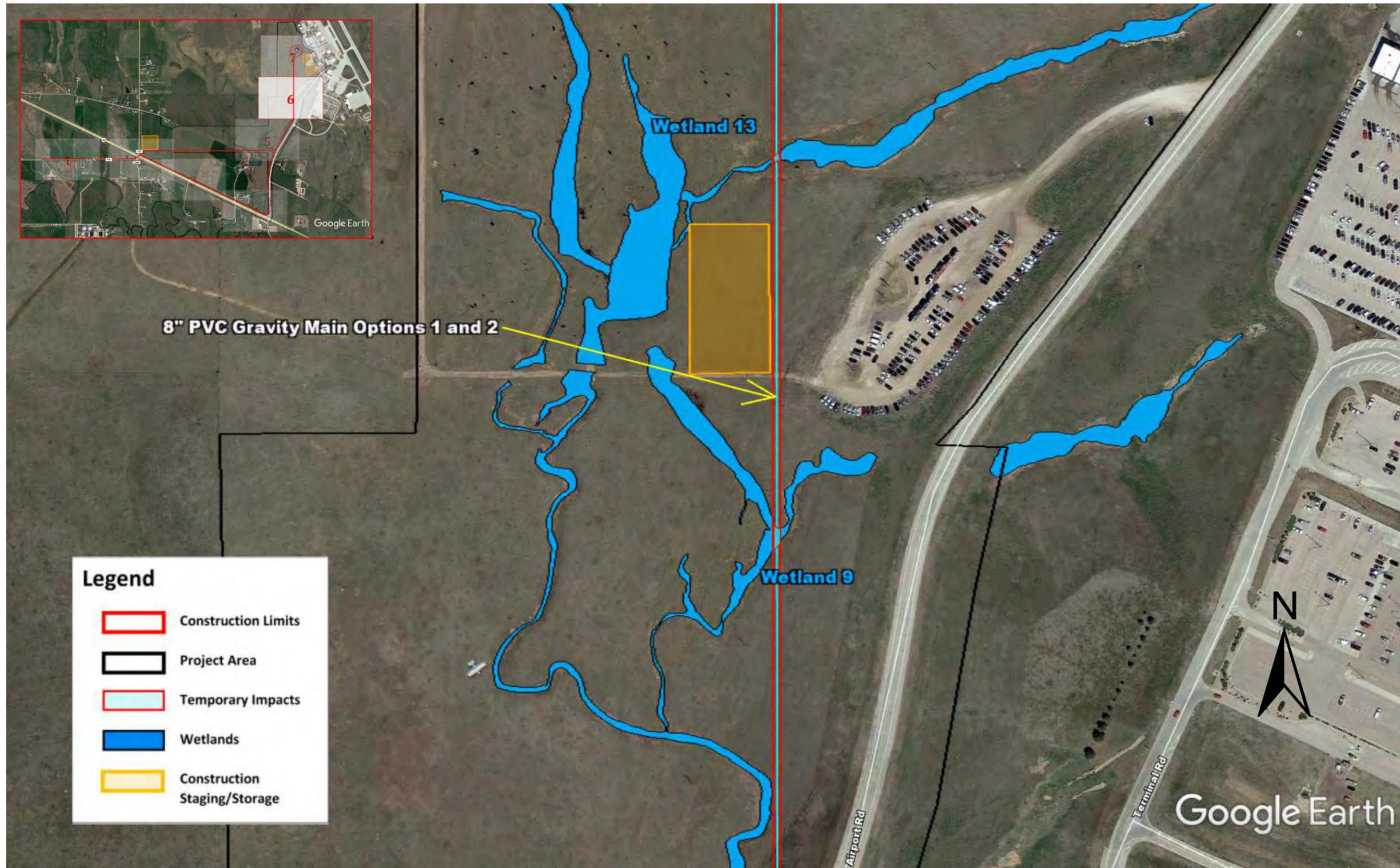
Map data ©2018 Google

Figure 16, Alternative C Wetland Impacts



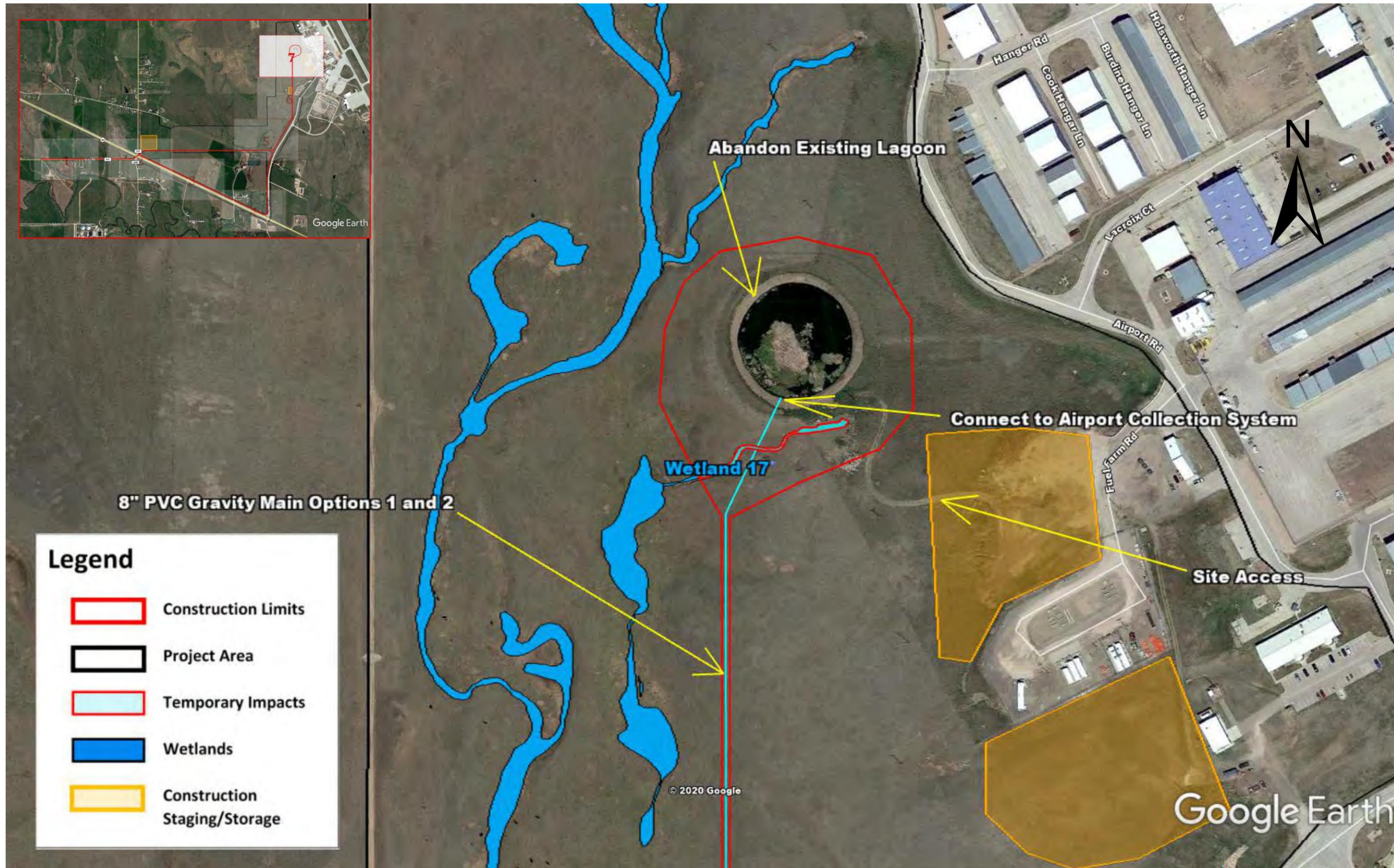
Map data ©2018 Google

Figure 17, Alternative C Wetland Impacts



Map data ©2018 Google

Figure 18, Alternative C Wetland Impacts



Map data ©2018 Google

Since, construction would occur within jurisdictional wetlands and would cause temporary impacts; a Section 404 permit would be needed for Alternatives B, C-1 and C-2. Coordination with the environmental resource agencies would be completed during the design/404 permitting phase of the project for impacted wetlands.

Final construction plans would include all practicable measures to minimize harm to adjacent wetlands, including the implementation of BMPs to control erosion and siltation.

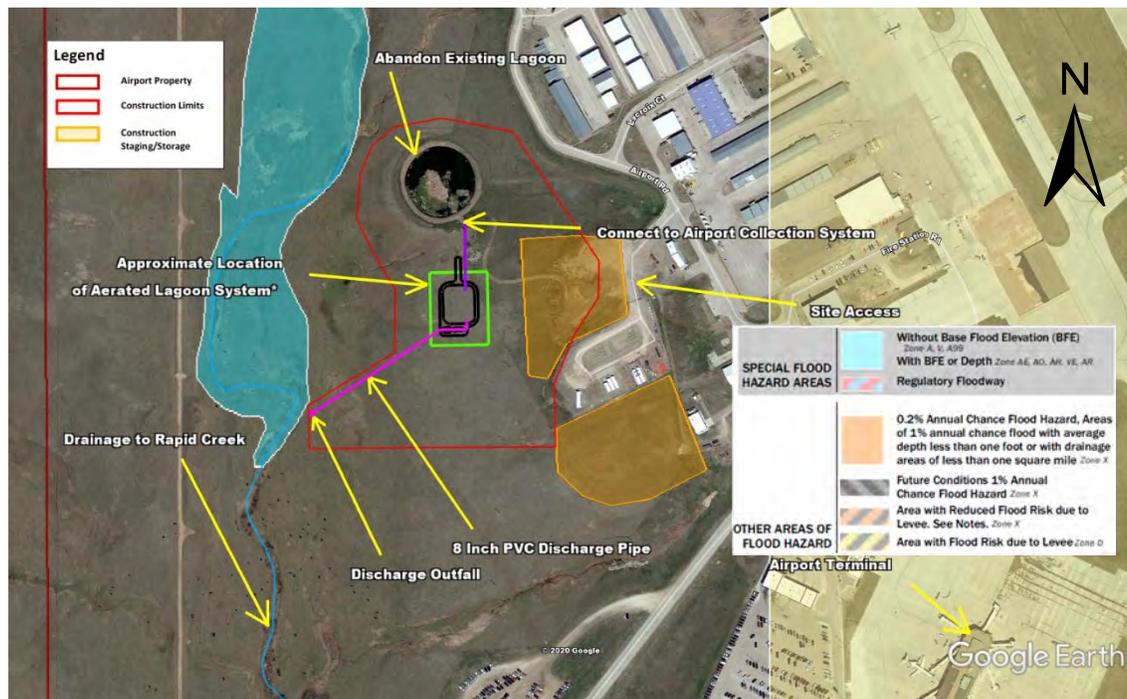
There are no practicable alternatives to avoid impacts on wetlands. The only alternative that would not impact wetlands is Alternative A (No Action), which does not meet the purpose of, and need for, the Project. Therefore, unavoidable wetland impacts would occur from Alternatives B and C.

3.7.3.1 Floodplain Environmental Consequences & Mitigation

Alternative A: No direct or indirect impacts on floodplains would be expected, and no mitigation would be required.

Alternative B: No direct or indirect impacts on floodplains would be expected, and no mitigation would be required. Please refer to **Figure 19, Alternative B Floodplain Impacts**.

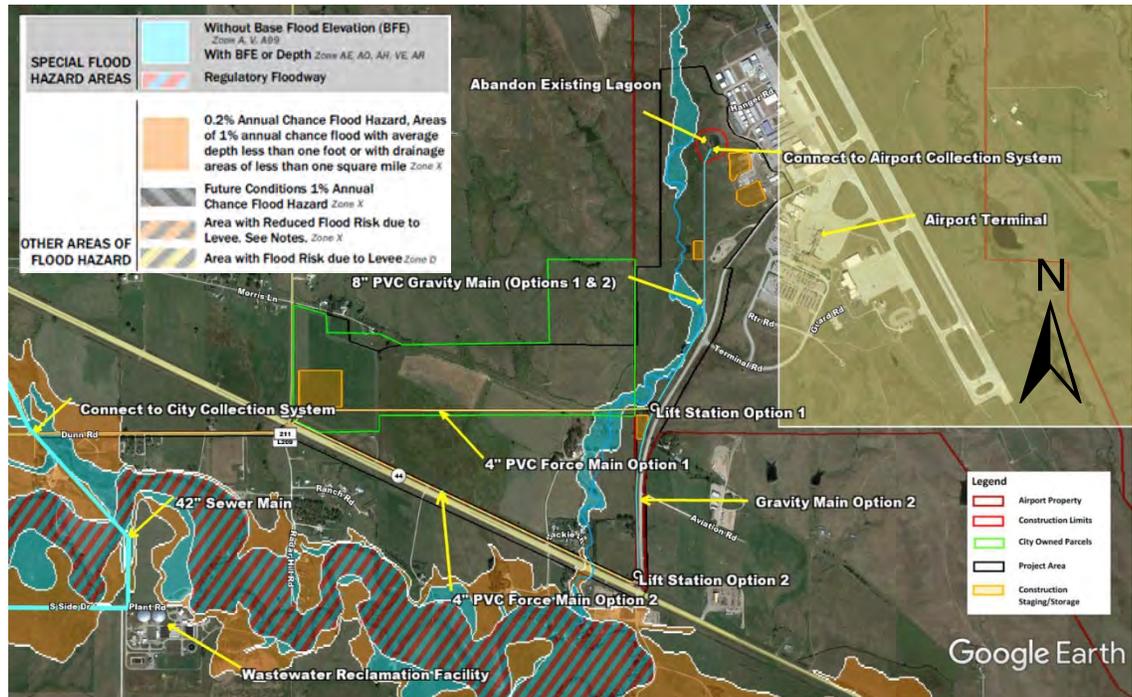
Figure 19, Alternative B Floodplain Impacts



Map data ©2018 Google

Alternative C: Both Options 1 and 2 would require underground pipes to be constructed in the FEMA DFIRM Zone A. A non-building floodplain permit would be required from the City of Rapid City. No mitigation would be required. Please refer to **Figure 20, Alternative C (Option 1 and 2) Floodplain Impacts**.

Figure 20, Alternative C (Option 1 and 2) Floodplain Impacts



Map data ©2018 Google

3.7.3.2 Surface Water and Groundwater Environmental Consequences & Mitigation

Alternative A (No Action): If the existing lagoon is not replaced or rehabilitated, effluent is expected to seep through the lining of the existing lagoon and may cause contamination to surface and groundwater in the area, including Rapid Creek. As discussed in Section 1.1.2, DENR has notified the Airport that the lagoon must be remediated to meet the South Dakota Recommended Design Criteria for Wastewater Collection and Treatment Facilities. Failure to complete this requirement could result in fines and possible could cause the State to shut down the existing lagoon leaving the Airport without a sanitary sewer system.

Alternative B and C (Build Alternatives): Stormwater drainage would be managed according to FAA AC 150/5320-5D, Airport Drainage Design. The proposed build alternatives are not expected to cause a substantial increase in the rate of stormwater runoff from the Airport.

No permanent changes are anticipated in drainage patterns and stormwater flow due to the proposed build alternatives. Temporary, minimal impacts on surface water quality may occur during construction. Since the disturbed areas associated with these alternatives would exceed one acre, the US Environmental Protection Agency (EPA) requires a National Pollutant Discharge Elimination System (NPDES) permit. The permit would require the implementation of BMPs to minimize erosion and siltation, such as silt fence or hay bales. Specifications for the project would include Item P-156 Temporary Air and Water Pollution, Soil Erosion, and Siltation Control, from FAA AC 150/5370-10F, Standards for Specifying Construction of Airports. Because of the beneficial uses of Rapid Creek, special construction measure may have to be taken to ensure that the 30-day average total suspended solids criterion of 90 mg/L is not violated. The Airport’s Contractor would be advised of the need to abide by

these specifications throughout the duration of the project. No direct impacts on water quality or groundwater would be expected.

3.8 Cumulative Effects

Federal regulations implementing NEPA (CEQ 40 CFR 1500–1508) require that the cumulative effects of a Proposed Action be assessed. Cumulative effects are defined as, “the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR 1508.7). A cumulative effect could be:

- ◆ Additive – the net adverse, cumulative effects are strengthened by the sum of individual effects,
- ◆ Countervailing – the net adverse, cumulative effect is less as a result of the interaction between beneficial and adverse individual effects, or
- ◆ Synergistic – the net adverse, cumulative effect is greater than the sum of the individual effects.

Cumulative effects can result from individually minor, but collectively significant actions that take place over time. Accordingly, a cumulative effects analysis identifies and defines the scope of other actions and their interrelationship with the alternatives if there is an overlap in space and time. Cumulative effects are most likely to occur when there is an overlapping geographic location and a coincidental or sequential timing of events. Because the environmental analysis required under NEPA is forward-looking, the aggregate effect of past actions is analyzed to the extent relevant and useful in analyzing whether the reasonably foreseeable effects of a Proposed Action could have a continuing, additive, and significant relationship to those effects.

The spatial area of consideration for potential cumulative effects varies by resource area. The spatial area of consideration for some resources might only include the proximity of the Airport (i.e., 0.5 miles), such as for visual effects. Projects that affect wetlands and floodplains might be important considerations for water resources in the region. Therefore, given the large geographical area that could be considered for potential effects, this cumulative effects analysis focuses on projects and actions at or near the Airport in the Rapid City area that affect common resources.

3.8.1 Environmental Resources Omitted from the Cumulative Effects Analysis

Based on the findings of the Level III Cultural Resource and Tribal Inventory report (KLJ, 2020) and review of Alternatives B and C, the SHPO concurred with a *No Historic Properties Effected* determination on July 14, 2020. Therefore, historical, architectural, and cultural resources were omitted from this cumulative effects analysis.

3.8.2 Projects/Activities Considered for Potential Cumulative Effects

3.8.2.1 Road Projects

The following SDDOT road projects have occurred or are planned near the Airport from 2000 to 2026.

- ◆ 2004 – Construct Elk Vale Road from US 79 to SD 44 (US 16 Bypass)

- ◆ 2008 – Widen SD 44 from two lanes to four lanes from Longview Drive to 0.1 miles east of Airport Road.

3.8.2.2 Airport Improvements

Several airport improvement projects have recently occurred at the RAP to support facility needs:

- ◆ 2015 – A NEPA Categorical Exclusion was approved in 2014 to demolish the old commercial terminal building.
- ◆ 2015 to 2018 – A NEPA Categorical Exclusion was approved in 2014 for the reconstruction and expansion of the General Aviation Apron.
- ◆ 2017 to 2018 - A NEPA Categorical Exclusion was approved in 2015 for reconstruction of the Commercial Apron (2010) and additional Categorical Exclusion was approved in 2016 for the expansion of the Commercial Apron.
- ◆ 2017 to 2019 – A NEPA Categorical Exclusion was approved in 2017 for the construction of a commercial deicing apron area.
- ◆ 2017 to 2020 - A NEPA Categorical Exclusion was approved in 2017 for the rehabilitation of the Rapid City Regional Main Terminal Building.
- ◆ 2018 – A NEPA Categorical Exclusion was approved in 2018 for the construction of a Parking Plaza and replacement of the exist gates.
- ◆ 2019 – A NEPA Categorical Exclusion was approved in 2019 for the redevelopment of general aviation corporate area.

3.8.3 Cumulative Effects Analysis

3.8.3.1 Biological Resources

Alternatives B and C would have no impacts on bald and golden eagles and *No Effect* on the whooping crane, least tern, rufa red knot, or northern long-eared bat; therefore, cumulative impacts on these species would not be expected.

Alternatives B or C when combined with other projects/activities at or near the Airport could contribute to local habitat loss and degradation. Overall habitat loss, degradation, and fragmentation could be expected from Alternatives B or C and other projects/activities at or near the Airport. However, most of the potential wildlife habitat at the Airport has been previously disturbed, and the airfield would continue to be mowed/cleared to control wildlife hazards. Noise and visual disturbance from construction activities associated with Alternatives B or C and other projects/activities at or near the Airport are not anticipated to cumulatively impact wildlife species, as wildlife species near the Airport are assumed to be habituated to frequent and intense noise and visual disturbances from aircraft using the runway.

Construction of Alternatives B or C when combined with other projects/activities at or near the Airport could result in temporary, cumulative impacts on vegetated areas from construction equipment traveling to and from the area. Temporary impacts from Alternatives B or C would be minimized with implementation of BMPs (e.g., berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains) to prevent soil erosion and siltation.

3.8.3.2 Hazardous Materials, Pollution Prevention, and Solid Waste

Construction of Alternatives B or C when combined with other projects/activities near the Airport could result in minimal, cumulative impacts involving hazardous materials and solid waste. The alternatives would not produce large increases in hazardous materials or solid waste collection, control, or disposal other than that which is associated with construction activities. Such waste would have a minimal effect on the community's collection, control, and disposal system, based on the relative size of the Airport and other waste generators.

3.8.3.3 Land Use

Alternatives B or C when combined with other projects/activities near the Airport would result in minor, cumulative impacts due to permanent land conversion. There are no zoning changes associated with Alternatives B or C and other projects/activities would be coordinated with city of Rapid City and Pennington County, as appropriate; therefore, a trend toward modification of existing regional land use patterns would not be expected.

3.8.3.4 Socioeconomics

Temporary, cumulative impacts from the operation of construction equipment and transport of workers and materials to and from the area would be expected from Alternatives B or C and other projects/activities at or near the Airport. However, the variations in the timing of cumulative construction operations and activities would moderate impacts over space and time.

There would be minimal and temporary increases in the need for local construction contractors to complete Alternatives B or C and other projects/activities at or near the Airport. This would result in a temporary, cumulative increase in construction employment opportunities. Construction activities associated with Alternatives B or C and other projects/activities at or near the Airport would provide a small and temporary net economic benefit to the region due to increases in payroll taxes, sales receipts, and the indirect purchase of goods and services.

3.8.3.5 Visual Effects

Modifications associated with Alternatives B and C and other projects/activities at or near the Airport would be compatible with the existing visual character of the area. Minor, cumulative impacts would be expected on the overall viewshed within the Airport and overall viewshed of the Airport from surrounding areas.

Alternatives B or C and other projects/activities at or near the Airport would slightly modify the nature of light emanating from these areas. Minor, cumulative impacts would be expected on surrounding properties and the traveling public. The three nearest residences are approximately 1,000 feet of the southern end of Airport Road. The increase in visual annoyance at this distance is anticipated to be minor.

3.8.3.6 Water Resources - Wetlands, Surface Water, and Groundwater

Alternatives B, C-1 and C-2 would result in temporary impacts on approximately 0.065 acres, 0.259 acres, or 0.828 acres of natural and artificial wetlands, respectively. The impacted wetlands, when combined with the number of impacted wetlands from other projects/activities at or near the Airport would not result in an overall net reduction in wetland area near the Airport.

Upon completion of Alternatives B or C, there would not be an increase in the rate of stormwater runoff at the Airport. However, when added to potential increases in stormwater runoff from other project/activities in or near the Airport, an overall increase in runoff and potential for erosion and siltation results. Stormwater drainage at the Airport would be managed according to FAA AC 150/5320-5D, Airport Drainage Design. A NPDES permit would be obtained, and BMPs would be used at the Airport for prevention of spills, erosion, and siltation. Therefore, any cumulative impacts are anticipated to be minor.

Temporary, impacts on water quality would be expected from construction of Alternatives B or C. These temporary impacts, when added to the temporary construction impacts from other projects/activities in the Rapid City area are not anticipated to result in cumulative effects, as BMPs would be implemented as part of Alternatives B or C to control erosion and sedimentation.

3.9 Environmental Consequences Not Relevant to the Proposed Action

3.9.1 Air Quality

South Dakota is one of thirteen states that are in attainment for all criteria pollutants and the Airport's operations are lower than FAA guidelines requiring air quality analysis; therefore, a detailed air quality analysis is not required under the FAA's NEPA requirements (DENR, 2019).

3.9.2 Climate

The CEQ has indicated that climate should be considered in NEPA analyses. As noted by CEQ, however, "it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions; as such direct linkage is difficult to isolate and to understand."

3.9.3 Coastal Resources

The project alternatives are not located within a coastal barrier or coastal zone; therefore, coastal resources are not relevant to the Proposed Action.

3.9.4 Farmland

No land would be acquired and converted to Airport property for this project. Therefore, no further analysis is required.

3.9.5 Natural Resources and Energy Supply

Temporary, direct impacts on fuel needs are expected during construction as additional fuels would be required for construction equipment; however, this increase in demand is not anticipated to exceed existing capacity. Therefore, no further analysis is required.

3.9.6 Noise and Compatible Land Use

The project would not increase flights, number of aircraft, or the types of aircraft using the Airport; therefore, no further analysis is required.

3.9.7 Department of Transportation Section 4(f) and Section 6(f) Properties

As discussed in **Section 3.3, Historical, Architectural, Archaeological, and Cultural Resources**, there were two sites identified within the Project Area that are eligible for listing on the NRHP, however these sites would be avoided by construction and would not be indirectly impacted. There are no public recreation facilities within the Project Area. There are 58 Section 6(f) properties in Pennington County (The Wilderness Society, 2019). However, there are no Section 6(f) properties within the Project Area. None of the identified properties are located within the Project Area; therefore, impacts to Section 4(f) and/or 6(f) properties are not anticipated.

3.9.8 Environmental Justice

There are no environmental justice populations present within the Project Area (US Census Bureau, 2019); therefore, environmental justice is not relevant to the Proposed Action.

3.9.9 Children's Environmental Health and Safety Risks

The replacement of the Airport sewage lagoon would not create or exacerbate existing adverse impacts to children in any of the impact areas (i.e. air quality, noise, water quality, etc.). Therefore, children's environmental health and safety risks are not relevant to the Proposed Action.

3.9.10 Water Resources -Wild and Scenic River

There are no wild and scenic rivers in or near the Project Area; therefore, wild and scenic rivers are not relevant to the Proposed Action.

3.10 Commitments and Compliance

This section summarizes the environmental consequences and mitigation associated with Alternatives B and C. Please refer to **Table 12, Summary of Environmental Impacts, Commitments, and Compliance**.

The Airport's Contractor would comply with all federal, state, and local laws and regulations controlling pollution of the environment. Necessary precautions would be taken to prevent pollution of aquatic resources with fuels, oils, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

During construction, it may be necessary to designate certain areas on Airport property as borrow pits. Spoil pits may be required on Airport property for purposes of disposing unsuitable material from construction. Spoil would not be placed in wetlands not designated for removal as part of this project or any other natural watercourses. Prior to the removal of soil or waste from borrow or spoil pits, topsoil would be removed from these areas. Upon completion of their use, the borrow or spoil pits would again be landscaped, top-soiled, and seeded to blend with the surrounding terrain, while minimizing wildlife attractants. The Airport's Contractor would be required to obtain material source (e.g., borrow, aggregate, riprap, staging areas) clearance for material quality, cultural resources, and threatened or endangered species before taking materials from offsite.

The use of haul roads is expected. The Airport's Contractor would properly maintain public roads and streets and any portion of the Airport property that is used for haul roads for the duration of the

project. The Contractor is responsible for the written approval from the local officials for all routes and any new access. Haul roads would be left in original or better condition than prior to hauling operations.

Plans and specifications for the Wastewater Treatment Improvement must be submitted to Albert Spangler with SD DENR.

Table 12, Summary of Environmental Impacts, Commitments, and Compliance

IMPACT CATEGORY	ALT A (NO ACTION)	ALT B (BUILD ALT)	ALT C-1 (BUILD ALT)	ALT C-2 (BUILD ALT)	COMMITMENTS AND COMPLIANCE
Biological Resources	No impact.	<p>No lakes, rivers, streams, or creeks would be impounded, diverted, deepened, controlled, or modified.</p> <p>Temporary impacts on habitat and wildlife would be expected during construction activities.</p> <p>No direct or indirect impacts on bald and golden eagles would be expected.</p> <p>Determination of <i>No effect</i> on whooping crane, least tern, rufa red knot, and northern long-eared bat.</p>			<p>Tree removal, if required, would be conducted outside of the summer maternity season for the northern long-eared bat (April 1 to September 30).</p> <p>BMPs (e.g., berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains) would be implemented to prevent erosion and siltation.</p>
Hazardous Materials, Pollution Prevention, and Solid Waste	No impact.	<p>Not expected to involve hazardous materials or generate hazardous waste other than those generally associated with construction.</p>			<p>If previously unknown contaminants are discovered during construction, or a spill occurs during construction, work would cease until the Contractor notifies the National Response Center (800 424 8802). If contamination is encountered, the Contractor must also notify the DENR. Any contaminated soil encountered would be temporarily stockpiled and sampled to determine disposal requirements.</p>

IMPACT CATEGORY	ALT A (NO ACTION)	ALT B (BUILD ALT)	ALT C-1 (BUILD ALT)	ALT C-2 (BUILD ALT)	COMMITMENTS AND COMPLIANCE
Historical, Architectural, Archaeological, and Cultural Resources	No Impact.	SHPO concurred with a <i>No Historic Properties Affected</i> determination.			<p>Protective measures would be required to ensure that no unintentional disturbances of avoidance areas occur during construction. Due to the potential for additional discoveries during construction, the Airport would be required to provide TCS(s) appointed by their Tribe an opportunity to observe ground disturbing activities that remove the top 12 inches of topsoil and Holocene deposits in accordance with guidelines to be provided by the FAA. Work shall cease if cultural resources are discovered. Discoveries must be reported to the ND SHPO and the Bismarck FAA-ADO</p> <p>Material source clearance for borrow, aggregate, riprap, and for stage areas would be required before materials could be brought onsite. If any construction activity results in discovery of cultural resources, work would cease until the FAA Airports District Office (ADO) in Bismarck is notified per the Discovery Plan for General Aviation (GA) Projects in the Dakotas.</p>
Land Use	No changes. The uncovered sewage lagoon would remain within the AOA.	The existing uncovered lagoon would be replaced with a covered lagoon.	The existing uncovered lagoon would be replaced with underground sewer lines connecting to City of Rapid City's WRF.		Any utilities running along or crossing SDDOT right of way would require a permit from the SDDOT Area Engineer in order to use SDDOT right of way.
Socioeconomics	No direct impacts would be expected. No temporary net economic benefit.	<p>There would be no relocation of housing or businesses.</p> <p>Construction would provide a small and temporary net economic benefit to the area.</p> <p>Operation of construction equipment and transport of workers and materials to and from the project site would result in a minimal temporary increase in vehicle traffic volume.</p>			No mitigation is required.

IMPACT CATEGORY	ALT A (NO ACTION)	ALT B (BUILD ALT)	ALT C-1 (BUILD ALT)	ALT C-2 (BUILD ALT)	COMMITMENTS AND COMPLIANCE
Visual Effects	No impact.	Visual changes include the elimination of the existing sewage lagoon and the surrounding fence. A new covered lagoon would be constructed with a fence around it.	Visual changes include the elimination of the existing sewage lagoon and construction of a lift station to the west of Airport Road. A security fence would be constructed around the lift station, a turnout and parking area would also be constructed off Airport Road to provide access.	No mitigation is required.	
		Minor impacts are anticipated on the overall viewshed within the Airport and viewshed of the Airport from surrounding areas, any increase in visual annoyance from the proposed improvements is anticipated to be minor.			
Water Resources - Wetlands	No Impact.	Temporary impacts to 0.065 acres. The discharge outfall would be located outside of the wetland 12 boundary and would flow into wetland 12 at a discharge rate of 10 to 17 gallons per minute. Wetland 12 is anticipated to remain a PEMC wetland.	Temporary impacts to 0.259 acres.	Temporary impacts to 0.828 acres.	No compensatory mitigation is required provided any disturbed wetland areas are restored to their original grade and contours prior to the end of construction. Final plans must include all practicable measures to minimize harm to adjacent wetlands, including the implementation of BMPs. Permits required: USACE Section 404
Water Resources - Floodplains	No Impact.	No Impact.	Underground pipes would be constructed in the FEMA DFIRM Zone A.		No mitigation is required. Permits required: A non-building floodplain permit would be required from the City of Rapid City. No mitigation would be required.

IMPACT CATEGORY	ALT A (NO ACTION)	ALT B (BUILD ALT)	ALT C-1 (BUILD ALT)	ALT C-2 (BUILD ALT)	COMMITMENTS AND COMPLIANCE
Water Resources - Surface and Groundwater	Effluent from the existing lagoon is expected to seep through the lining of the lagoon and may cause contamination to surface and ground water.	Not anticipated to cause substantial increase in rate of stormwater runoff. No permanent changes are anticipated in drainage patterns and stormwater flow. Temporary, minimal impacts on water quality during construction.			Stormwater drainage would be managed according to FAA AC 150/5320-5D, Airport Drainage Design. Impacts on water quality during Airport operations minimized through the use of BMPs. The 30-day average total suspended solids criterion of 90 mg/L must not be violated. Permits required: NPDES Permit (Construction General Permit)

3.11 Selection of the Preferred Alternative

The alternatives that were evaluated in this EA include Alternative A (No-Action) and two build alternatives; Alternative B (Aerated Lagoon) and Alternative C (Connect to Rapid City WRF) with two alignment options. Based on the analysis in this EA Alternatives B, C-1, and C-2 all meet the project purpose and need outlined in Chapter 1 of this document. Impacts to the environment were considered in the selection of the preferred alternative. Please refer to **Table 12, Summary of Environmental Impacts, Commitments, and Compliance**. The follow describes both the advantages and disadvantages associated with the each of the alternatives:

- ◆ Alternative A does not meet the projects purpose and need.
- ◆ Alternative B and Alternative C (Options 1 and 2) all meet the project purpose and need.
- ◆ Alternative B has the lowest amount of temporary wetland impacts (approximately 0.065 acres) compared to the Alternative C (approximately 0.259 acres for Alternative C-1 and approximately 0.828 acres for Alternative C-2).
- ◆ Alternatives C-1 and C-2 would cross floodplains and would require a floodplain permit during construction.
- ◆ Alternative B would require the Airport to have a licensed operator and to have its own Industrial Discharge Permit from the DENR.
- ◆ Alternatives C-1 and C-2 would allow the Airport wastewater to be treated under the Rapid City WRF’s permit and would not require the Airport to hire a licensed operator.
- ◆ Alternative B would have the lowest upfront cost estimated at \$1.0 million and highest annual operation and maintenance cost (\$42,000 per year).
- ◆ Alternative C-1 would cost an estimated \$1.6 million to construct but would only cost \$8,500 per year to operate and maintain.
- ◆ Alternative C-2 would cost an estimated \$1.8 million to construct but would cost \$9,500 per year to operate and maintain.

The Airport has selected Alternative C-2 as their preferred alternative for this project.

CHAPTER 4 PREPARERS AND COORDINATING PARTIES

4.1 Introduction

As required by FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and 40 CFR 1502.17 of the CEQ regulations for implementing NEPA, the names and qualifications of the principal persons contributing information to this EA are identified in this chapter. It should be noted that, in accordance with 40 CFR 1502.6 of the CEQ regulations, the efforts of an interdisciplinary team, consisting of technicians and experts in various fields, were required to accomplish this study.

4.2 Preparers and Qualifications

KLJ prepared this EA under a contractual agreement with the city of Rapid City. Please refer to **Table 13, Preparers**, for a list of individuals with primary responsibility for preparing this EA.

Table 13, Preparers

NAME	TITLE	RESPONSIBILITY
Rod Senn	Senior Engineer	Project oversight; project management
Curt Cady	Environmental Planner	NEPA process coordination; Document preparation
Kory Rude	Environmental Scientist	Wetland Delineation
Ashley Ross	Environmental Planner	QAQC
Matt Hall	Archaeologist	Class III Cultural Resource Survey and Report
Andrew Robinson	Archaeologist	Class III Cultural Resource Survey and Report
Corey Yates	Archaeologist	Class III Cultural Resource Survey and Report

4.3 Coordination with Agencies, Organizations, and Parties to Whom SOVs were Sent

4.3.1 Scoping

Scoping is a formal information exchange to determine the scope of issues to be addressed and to identify the significant issues related to a Proposed Action. The scoping process is described in 40 CFR 1501, *NEPA and Agency Planning*, in the CEQ regulations for implementing NEPA as a process used to identify the range of alternatives and the issues to be addressed in the environmental document. Scoping is to begin early and continue throughout the project development process. Scoping is usually limited to affected governmental agencies and interested groups or organizations with specific knowledge about a project Study Area.

4.3.2 Advance Notification

To initiate early communication and coordination, an early notification package was sent to 66 federal, state, and local agencies, and other interested parties on January 19, 2018. Pursuant to Section 102(2) (D) (IV) of NEPA, a solicitation of views was requested to ensure social, economic, and environmental effects were considered in the development of this EA. Comments were to be submitted by October 28, 2019. Please refer to **Appendix A** which contains the notification package and a list of agencies and interested parties that received the package.

Comments were received from three parties, yielding a response rate of 6 percent. The comments were referenced and incorporated, where appropriate, within the applicable resource category in **Chapter 3**. These comments provided valuable insight into the evaluation of potential environmental impacts. Copies of each letter received in response to the advance notification package are included in **Appendix B**. Additional agency coordination was conducted throughout the process, when necessary.

4.4 Environmental Assessment Coordination

Copies of the EA document were sent to the following agencies:

- ◆ Rosebud Sioux Tribe THPO – Rosebud, SD
- ◆ Cheyenne River Sioux Tribe THPO – Eagle Butte, SD
- ◆ SD Department of Natural Resources – Pierre, SD
- ◆ US Army Corps of Engineers – Pierre, SD

The EA was made available to the following public viewing locations:

- ◆ SDDOT Office of Aeronautics – Pierre, SD
- ◆ Airport Director’s Office – Rapid City, SD
- ◆ Rapid City Public Library – Rapid City, SD

CHAPTER 5 REFERENCES

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www.census.gov/quickfacts/fact/table/penningtoncountysouthdakota,rapidcitycitysouthdakota/PST045218
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- The Wilderness Society. 2019. Mapping the Land and Water Conservation Fund (LWCF)
<https://www.wilderness.org/articles/article/mapping-land-and-water-conservation-fund-lwcf>



Appendix A

Advance Notification

- ◆ Agency Notification Package
- ◆ Mailing List
- ◆ Study Area Map



4585 Coleman Street
Bismarck, ND 58503-0431
701 355 8400
KLJENG.COM

September 27, 2019

Recipient Name
Recipient Title
Recipient Company
Recipient Address
Recipient City, State, Zip

Re: Rapid City Regional Airport
Pennington County, South Dakota

Dear Recipient Name:

KLJ is assisting the City of Rapid City in the development of improvements to the Rapid City Regional Airport. The Federal Aviation Administration (FAA) is the lead agency for review and approval, in coordination with the South Dakota Department of Transportation. The funding of improvements associated with this project involves a federal action, which requires environmental documentation in accordance with the National Environmental Policy Act (NEPA).

Improvements being planned for may include but are not limited to: construction of a replacement wastewater system for the Rapid City Regional Airport. The existing wastewater lagoon would be abandoned and replaced with either an onsite aerated lagoon with a cover system and ammonia treatment or by connecting the Airport's wastewater collection system into the Rapid City wastewater collection system. Construction involves excavation of a high density polyethylene (HDPE) lined cell surrounded by earth dikes and a security fence and installation of a blower, diffusers, HDPE cover and polishing reactor; or installation of a gravity main, construction of lift station surrounded by security fence and installation of force main across City owned property or along Highway 44 right of way than along Dunn Road right of way. **Please refer to the Project Area Sketch.** The project is expected to be constructed during the 2021 construction season.

To ensure that social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed development of this project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any property that your department may own, or have an interest in, and which would be adjacent to the proposed improvements. We would also appreciate being made aware of any environmental concerns your department may have regarding the project. Any information that might help us in our evaluation would be appreciated.

It is requested that any comments or information be forwarded to our office on or before October 28, 2019.



If further information is desired regarding the proposed improvements, you may contact me at 701-355-8719. Thank you in advance for your cooperation.

Sincerely,

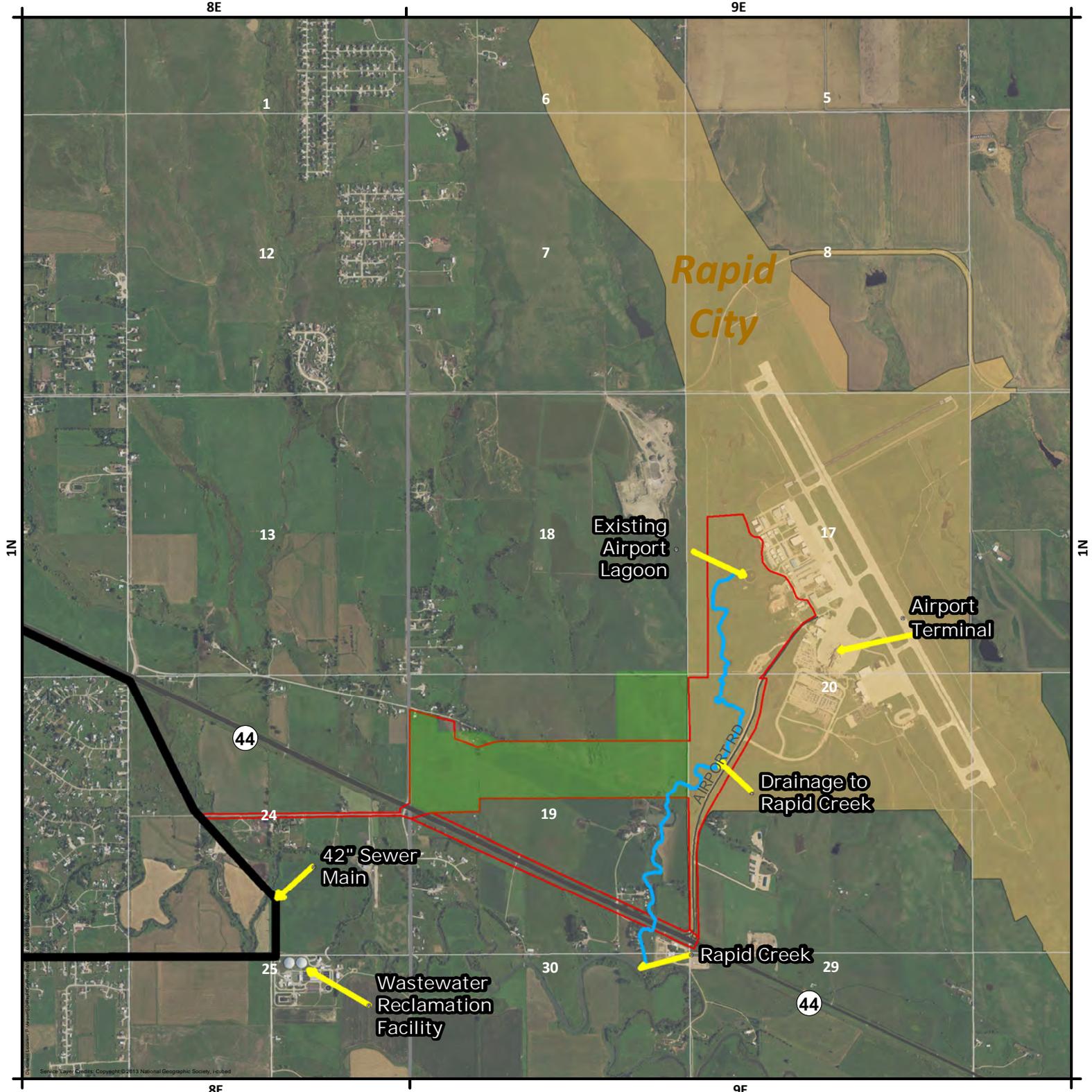
KLJ

A handwritten signature in blue ink that reads 'Curt Cady'.

Curt Cady
Environmental Planner

Project #: 1805-01949

cc: Jon Becker, SDDOT
Sheri Lares, FAA
Patrick Dame, Airport Director

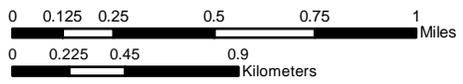


Source: Google Earth, Copyright © 2019 National Geographic Society, Imagery



Project Area Sketch
Rapid City Regional Airport
Rapid City, Pennington County, South Dakota

- Construction Limits
- Sections
- Townships
- Rapid City Incorporated City Boundary
- City Owned Parcels



KLJ Project Number: 1805-01949
 Date Created: 9/27/2019 | Created By: ASP

Rapid City Regional Airport SOV LIST

	Type	Special Letter	Pre	First	Last	Title	Department	Agency	Address	City	State	Zip
1	FEDERAL		Mr.	Timothy	LaPointe	Regional Director	Great Plains Regional Office	Bureau of Indian Affairs	115 4th Ave. SE, Suite 400	Aberdeen	SD	57401
2	FEDERAL		Mr.	Kirk	Fredrichs	Division Administrator		Federal Highway Administration	116 East Dakota Avenue, Suite A	Pierre	SD	57501
3	FEDERAL		Mr.	Lee	Depalo	Regional Administrator, Federal Insurance & Hazard Mitigation Division	Region 8	Federal Emergency Mngmt. Agency	Bldg 710, Box 25267	Denver	CO	80225
4			Mr.	Kirk	Keysor		Economic Development Administration	US Department of Commerce	1244 Speer Blvd., Suite 431	Denver	CO	80204
5	FEDERAL		Ms.	Suzanne	Bohan	NEPA Transportation Coordinator	Region 8, EPR-N	US Environmental Protection Agency	1595 Wynkoop Street	Denver	CO	80202-1129
6	FEDERAL		Senator	Mike	Rounds				1313 W. Main St.	Rapid City	SD	57701
7	FEDERAL		Senator	John	Thune				246 Founders Park Drive, Suite 102	Rapid City	SD	57701
8	FEDERAL		Congressman	Dusty	Johnson				2525 W Main Street	Rapid City	SD	57702
9	STATE		Mr.	Dave	Flute	Secretary		Department of Tribal Relations	302 E. Dakota	Pierre	SD	57501
10	STATE		Mr.	Jim	Hagen	Secretary		SD Department of Tourism	711 E Wells Ave.	Pierre	SD	57501
11	STATE		Mr.	Gary	Hanson	Chairman		SD Public Utilities Commission	500 E Capitol Ave.	Pierre	SD	57501-5070
12	STATE		Mr.	Chris	Petersen	Division Director	Administration	SD Department of Game, Fish, and Parks	523 E Capitol Ave.	Pierre	SD	57501
13	STATE		Mr.	Darin	Bergquist	Secretary of Transportation		SD Department of Transportation	700 E Broadway Ave	Pierre	SD	57501
14	STATE		Mr.	Mike	Carlson	Rapid City Area Engineer		SD Department of Transportation	PO Box 1970	Rapid City	SD	57709
15	STATE		Mr.	Craig	Price	Secretary of Public Safety		SD Department of Public Safety	118 West Captol Ave.	Pierre	SD	57501
16	STATE		Ms.	Kim	Malsam-Rysdon	Secretary of Health		SD Department of Health	600 E Capitol Ave.	Pierre	SD	57501
17	CITY		Mr.	Steve	Allender	Mayor	Mayor's Office	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
18	CITY		Ms.	Laura	Armstrong	President	City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
19	CITY		Ms.	Darla	Drew		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
20	CITY		Ms.	Becky	Drury		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
21	CITY		Ms.	Lisa	Modrick		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
22	CITY		Mr.	Ritchie	Nordstrom		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
23	CITY		Mr.	Bill	Evans		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
24	CITY		Mr.	Chad	Lewis		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
25	CITY		Mr.	Greg	Strommen		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
26	CITY		Mr.	John B.	Roberts		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
27	CITY		Mr.	Lance	Lehmann		City Counsel	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
28	CITY		Mr.	Dale	Tech	Director	Public Works	City of Rapid City	300 Sixth Street	Rapid City	SD	57700
29	CITY		Mr.	Ted	Johnson	Manager	Engineering Services	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
30	CITY		Mr.	Dave	Van Cleave	Manager	Water Reclamation Division	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
31	CITY		Mr.	Jeff	Biegler	Director	Parks & Recreation	City of Rapid City	515 West Boulevard	Rapid City	SD	57701
32	CITY		Mr.	Ken	Young	Director	Community Development	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
33	CITY		Ms.	Pauline	Sumption	Director	Finance Department	City of Rapid City	300 Sixth Street	Rapid City	SD	57701
34	CITY		Mr.	Rod	Seals	Fire Chief	Fire Department	City of Rapid City	10 Main Street	Rapid City	SD	57701
35	CITY		Mr.	Karl	Jegeris	Police Chief	Police Department	City of Rapid City	300 Kansas City Street	Rapid City	SD	57701
36	CITY		Dr.	Lori J.	Simon	Superintendent		Rapid City Area Schools	625 9th Street	Rapid City	SD	57701
37	COUNTY		Ms.	Linda	Rabe	President/CEO		Rapid City Area Chamber of Commerce	444 Mount Rushmore Road, North	Rapid City	SD	57701
38	COUNTY		Mr.	Ron	Rosknecht	Commissioner	Board of Commissioners	Pennington County Commission	130 Kansas City Str. Suite 100	Rapid City	SD	57701
39	COUNTY		Mr.	Lloyd	LaCroix	Commissioner	Board of Commissioners	Pennington County Commission	130 Kansas City Str. Suite 100	Rapid City	SD	57701
40	COUNTY		Mr.	Mark	DiSanto	Commissioner	Board of Commissioners	Pennington County Commission	130 Kansas City Str. Suite 100	Rapid City	SD	57701
41	COUNTY		Ms.	Deb	Hadcock	Commissioner, Chair	Board of Commissioners	Pennington County Commission	130 Kansas City Str. Suite 100	Rapid City	SD	57701
42	COUNTY		Mr.	Gary	Drewes	Commissioner	Board of Commissioners	Pennington County Commission	130 Kansas City Str. Suite 100	Rapid City	SD	57701
43	COUNTY		Mr.	PJ	Conover	Director	Planning	Pennington County	130 Kansas City Str. Suite 200	Rapid City	SD	57701
44	COUNTY		Mr.	Dustin	Willet	Director	Emergency Management	Pennington County	130 Kansas City Str. Suite 130A	Rapid City	SD	57701
45	COUNTY		Mr.	Jerome	Harvey	Fire Administrator	Fire Service	Pennington County	130 Kansas City Str. Suite 130B	Rapid City	SD	57701
46	COUNTY		Mr.	Joseph	Miller	Superintendent	Highway Department	Pennington County	3601 Cambell Str	Rapid City	SD	57701
47	COUNTY		Mr.	Kevin	Thom	Sheriff	Sheriff Office	Pennington County	300 Kansas City Str.	Rapid City	SD	57701
48	COUNTY		Ms.	Donna	Mayer	Register of Deeds	Register of Deeds	Pennington County	130 Kansas City Str Suite 210	Rapid City	SD	57701
49	COUNTY		Ms.	Cindy	Mohler	Auditor		Pennington County	130 Kansas City Str. Suite 230	Rapid City	SD	57701
50	FEDERAL	x	Mr.	Steve	Naylor	State Program Manager	South Dakota Regulatory Office	US Army Corps of Engineers	28563 Powerhouse Rd	Pierre	SD	57501
51	FEDERAL	x	Mr.	Jeffery	Zimprich	State Conservationist		US Department of Agriculture - NRCS	200 Fourth Str. W	Huron	SN	57350
52	FEDERAL	x				Refuge Manager	Lacreek National Wildlife Refuge	US Fish and Wildlife Service	29746 Bird Road	Martin	SD	57551
53	STATE	x	Mr.	Steve	Pirner	Secretary		SD Department of Environment and Natural Resources	523 E Capitol Ave.	Pierre	SD	57501



U.S. Department
of Transportation
**Federal Aviation
Administration**

Federal Aviation Administration
Dakota-Minnesota Airports District Office
Bismarck Office
2301 University Drive, Building 23B
Bismarck, ND 58504

Federal Aviation Administration
Dakota-Minnesota Airports District Office
Minneapolis Office
6020 28th Avenue South, Suite 102
Minneapolis, MN 55450

September 25, 2019

«Name», «Title»
«Tribe»
«Address_1»
«Address_2»
«City», «State» «Zip»

Dear «Name»:

Rapid City Regional Airport
Replacement Wastewater System
Pennington County, South Dakota

The Federal Aviation Administration (FAA), in cooperation with the owner and operator of Rapid City Regional Airport (Airport), and in coordination with the South Dakota Department of Transportation, is funding improvements at the Airport.

Improvements being planned for may include but are not limited to: construction of a replacement wastewater system for the Rapid City Regional Airport. The existing wastewater lagoon would be abandoned and replaced with either an onsite aerated lagoon with a cover system and ammonia treatment or by connecting the Airport's wastewater collection system into the Rapid City wastewater collection system. Construction involves excavation of a high density polyethylene (HDPE) lined cell surrounded by earth dikes and a security fence and installation of a blower, diffusers, HDPE cover and polishing reactor; or installation of a gravity main, construction of lift station surrounded by security fence and installation of force main across City owned property and along Dunn Road right of way. **Please refer to the enclosed Project Area Sketch.** The project is expected to be constructed during the 2021 construction season.

Purpose of Government-to-Government Consultation

The primary purpose of government-to-government consultation as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments" and FAA's Order 1210.20 "American Indian and Alaska Native Tribal Consultation Policy and Procedures" is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes. *This initial solicitation of views is being provided to both the Tribal Historic Preservation Office and Tribal Chair.*

Consultation

During the early stages of the project, information related to the project was presented at the Fall 2019 Tribal Consultation Committee Meeting, as well as coordination meetings at THPO offices in Standing Rock, Cheyenne River, Rosebud, Ft. Peck, and Ft. Belknap in August of 2019. Also, representatives from Cheyenne River Sioux Tribe and Rosebud Sioux Tribe

participated in the Class III Archaeological and Tribal Resources Survey. Approximately 310 acres were surveyed, as shown in the enclosed sketch. The results of the survey included the identification of 14 traditional cultural properties (TCPs).

Request for Comments

The FAA is seeking comments on the proposed project and concerns that uniquely or significantly affect your Tribe related to proposed airport improvements. Early identification of Tribal concerns allows the FAA and the airport owner and operator to consider ways to avoid and minimize potential impacts to Tribal resources and practices as project planning and alternatives are developed and refined. We would be pleased to discuss details of the proposed project with you.

Confidentiality

We understand that you may have concerns regarding the confidentiality of information on areas or resources of religious, traditional and cultural importance to the Tribe. In accordance with Section 9 of the Archaeological Resources Protection Act of 1979, 16 USC 470hh(a), *Confidentiality of Information Concerning the Nature and Location of Archaeological Resources and Traditional Cultural Properties*, and its implementing regulations at 43 CFR 7.18, detailed information regarding the specific locations of archaeological and cultural resources will not be included in any public documents. However, if we identify an area of avoidance, the project exhibits will illustrate the avoidance area only. This would be a result from our discussions during consultation meetings. The avoidance areas will also be made part of the construction plans to ensure protection of the sites.

FAA Contact Information

If you wish to provide comments related to this proposed project, please contact me at (701) 323-7384, or by e-mail at sheri.lares@faa.gov.

Airport Owner and Operator Contact Information

In addition, you may wish to include the Airport in your response so that they may be aware of your comments. The Airport owner and operator's point of contact for this project is:

Mr. Patrick Dame, Airport Director
Rapid City Regional Airport
4550 Terminal Road, Suite 102
Rapid City, SD 57703-8706
Phone: (605) 393-9924

Sincerely,

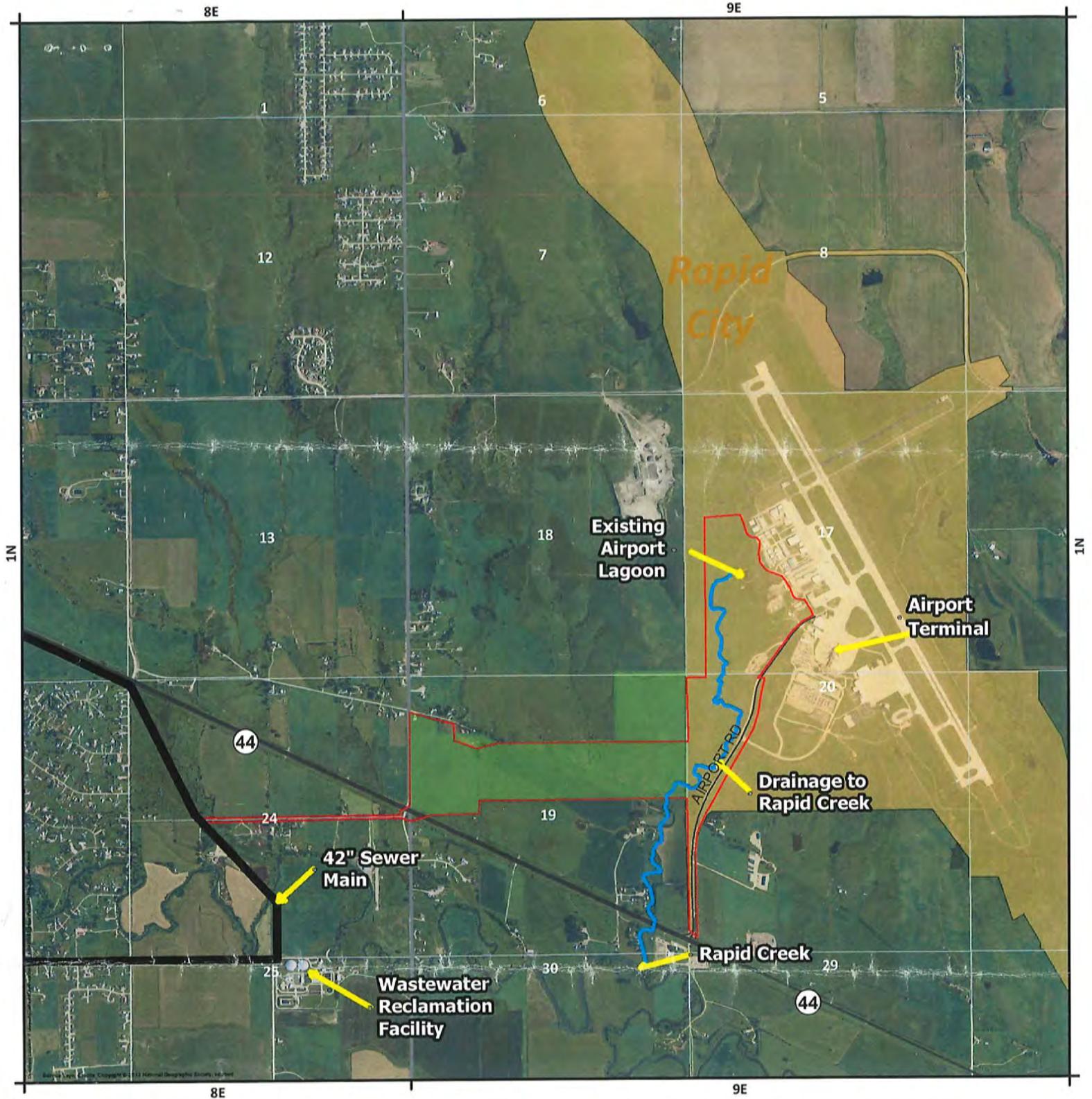


Sheri G. Lares
Environmental Protection Specialist/Tribal Liaison

Enclosure

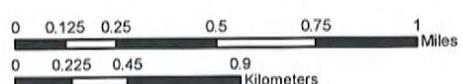
cc: Mr. Patrick Dame, Airport Director (with enclosure)
Mr. Curt Cady, KLJ (with enclosure) ✓

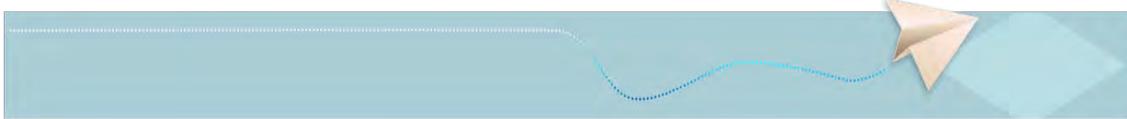
Name	Title	Tribes	Address 1	Address 2	City	State	Zip
Ms. Cheyenne St. John	THPO	Lower Sioux Indian Community		32469 Cty Hwy	Morton	MN	56270
Mr. Robert Larson	President	Lower Sioux Indian Community		PO Box 308	Morton	MN	56270-0308
Mr. William Big Day	THPO	Crow Nation		PO Box 159	Crow Agency	MT	59002
Mr. Darrin Old Coyote	Chairman	Crow Nation		PO Box 159	Crow Agency	MT	59002
Ms. Dyan Youppee	THPO	Fort Peck Assiniboine and Sioux Tribes	501 Medicine Bear Rd	PO Box 1027	Poplar	MT	59255
Mr. Floyd Azure	Chairman	Fort Peck Assiniboine and Sioux Tribes	501 Medicine Bear Rd	PO Box 1027	Poplar	MT	59255
Ms. Teanna Limpy	THPO	Northern Cheyenne Tribe		PO Box 128	Lame Deer	MT	59043
Ms. Rynalea Whiteman Pena	Tribal President	Northern Cheyenne Tribe		PO Box 128	Lame Deer	MT	59043
Mr. Michael J. Black Wolf	THPO	Ft. Belknap		656 Agency Main S	Harlem	MT	59526
Mr. Andrew Werk, Jr.	President	Ft. Belknap		656 Agency Main S	Harlem	MT	59526
Mr. Jon Eagle	THPO	Standing Rock Sioux Tribe		PO Box D	Fort Yates	ND	58538
Mr. Mike Faith	Chairman	Standing Rock Sioux Tribe		PO Box D	Fort Yates	ND	58538
Dr. Erich Longie	THPO	Spirit Lake Tribe		PO Box 76	Fort Totten	ND	58335
Ms. Myra Pearson	Chairperson	Spirit Lake Tribe		PO Box 76	Fort Totten	ND	58335
Mr. Mark Fox	THPO	Mandan, Hidatsa & Arikara Nation		404 Frontage Road	New Town	ND	58763
Mr. Jeff Desjarlais, Jr.	Chairman	Mandan, Hidatsa & Arikara Nation		404 Frontage Road	New Town	ND	58763
Mr. Richard McCloud	THPO	Turtle Mountain Band of Chippewa		PO Box 900	Belcourt	ND	58316-0900
Mr. Richard Thomas	Chairman	Turtle Mountain Band of Chippewa		PO Box 900	Belcourt	ND	58316-0900
Mr. Roger Trudell	THPO	Santee Sioux Tribe of Nebraska		108 Spirit Lake Ave	Niobrara	NE	68760-7207
Mr. Steve Vance	Chairman	Santee Sioux Tribe of Nebraska		108 Spirit Lake Ave	Niobrara	NE	68760-7207
Mr. Harold Frazier	THPO	Cheyenne River Sioux Tribe	CRST Preservation Office	PO Box 590	Eagle Butte	SD	57625
Mr. Brandon Sazue	Chairman	Cheyenne River Sioux Tribe		PO Box 590	Eagle Butte	SD	57625
Mr. Garnie Killshundred	THPO	Crow Creek Sioux Tribe		PO Box 50	Fort Thompson	SD	57339-0050
Mr. Anthony Reider	President	Crow Creek Sioux Tribe		PO Box 50	Fort Thompson	SD	57339-0050
Mr. Thomas Brings	THPO	Flandreau-Santee Sioux Tribe		PO Box 50	Fort Thompson	SD	57339-0050
Mr. Scott Weston	President	Flandreau-Santee Sioux Tribe		PO Box 283	Flandreau	SD	57028
Mr. Ben Rhodd	THPO	Flandreau-Santee Sioux Tribe		PO Box 283	Flandreau	SD	57028
Mr. William Kindle	President	Oglala Sioux Tribe	OST Cultural Affairs & Historic Preservation Office	PO Box 320	Porcupine	SD	57772
Ms. Dianne Desrosiers	THPO	Oglala Sioux Tribe		PO Box 320	Pine Ridge	SD	57770
Mr. Dave Flute	Chairman	Rosebud Sioux Tribe		PO Box 809	Rosebud	SD	57570
Mr. Kip Spotted Eagle	THPO	Rosebud Sioux Tribe		PO Box 430	Rosebud	SD	57570
Mr. Robert Flying Hawk	Chairman	Sisseton-Wahpeton Oyate		PO Box 907	Sisseton	SD	57262
Ms. Clair Green	THPO	Sisseton-Wahpeton Oyate		Sisseton-Wahpeton Agency Village		SD	57262-0509
Mr. Boyd I. Gourneau	Chairman	Yankton Sioux Tribe	800 Main Ave SW	Box 1153	Wagner	SD	57380
		Lower Brule Sioux Tribe	800 Main Ave SW	Box 1153	Wagner	SD	57380
		Lower Brule Sioux Tribe	Cultural Resources Office	PO Box 187	Lower Brule	SD	57548-0187
		Lower Brule Sioux Tribe		PO Box 187	Lower Brule	SD	57548-0187



Project Area Sketch
Rapid City Regional Airport
Rapid City, Pennington County, South Dakota

- Construction Limits
- Townships
- Rapid City Incorporated City Boundary
- City Owned Parcels
- Sections





Appendix B

Letters and Responses

- ◆ US Department of Agriculture, Natural Resources Conservation Service
11/08/2019
- ◆ US Department of Army Corps of Engineers (USACE), Omaha District
12/18/2019
- ◆ USACE, Omaha District
12/18/2019
- ◆ US Department of the Interior, Bureau of Indian Affairs
10/22/2019
- ◆ FAA letter to State Historical Society
07/13/2018
- ◆ Northern Cheyenne Tribal Historic Preservation
9/25/2019
- ◆ South Dakota Department Environment and Natural Resources (DENR)
10/10/2019
- ◆ SD DENR
10/21/2019
- ◆ SD DENR
10/23/2019
- ◆ SD DENR
10/24/2019
- ◆ SD DENR
10/31/2019
- ◆ South Dakota State Historical Society
07/14/2020



November 8, 2019

Mr. Curt Cady, Environmental Planner
KLJ
4585 Coleman Street
Bismarck, North Dakota 58503-0431

RE: Environmental Review for:
Rapid City Regional Airport, Project # 1805-01949

Dear Mr. Cady:

Thank you for the opportunity to provide Farmland Protection Policy Act (FPPA) review of this project.

The project **does** impact prime farmland and land of statewide importance. Enclosed is a Web Soil Survey map delineating the FPPA farmland classifications of the proposed site. Also enclosed is a Farmland Conversion Impact Rating Form (AD-1006) for this project. We have completed Parts II, IV, and V. Please complete parts I, III, VI, and VII as per instructions on the back of the form and the attached document titled **Site Assessment Scoring for the Twelve Factors Used in FPPA**. If the TOTAL POINTS in Part VII is less than 160 points, the proposed activity will have no significant impact on the prime farmland or farmland of statewide importance in Pennington County, and no further alternatives need be considered.

The Natural Resources Conservation Service (NRCS) would advise the applicant to consult with the local NRCS and Farm Service Agency offices regarding any United States Department of Agriculture easements or contracts in the project areas that may be affected. For any other easements outside of the NRCS, you should check with the local courthouse.

If you have any questions, please contact me at (605) 858-6670.

Sincerely,

TIMOTHY NORDQUIST
Conservation Agronomist

Attachments

cc:

Nathan Jones, State Soil Scientist, NRCS, Huron SO
Lance Smith, Acting State Resource Conservationist, NRCS, Huron SO

FARMLAND CONVERSION IMPACT RATING

PART I <i>(To be completed by Federal Agency)</i>	Date Of Land Evaluation Request
Name Of Project	Federal Agency Involved
Proposed Land Use	County And State

PART II <i>(To be completed by NRCS)</i>		Date Request Received By NRCS	
Does the site contain prime, unique, statewide or local important farmland? <i>(If no, the FPPA does not apply -- do not complete additional parts of this form).</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount Of Farmland As Defined in FPPA Acres: %	
Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By NRCS	

PART III <i>(To be completed by Federal Agency)</i>	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				

PART IV <i>(To be completed by NRCS)</i> Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				

PART V <i>(To be completed by NRCS)</i> Land Evaluation Criterion Relative Value Of Farmland To Be Converted <i>(Scale of 0 to 100 Points)</i>				
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PART VI <i>(To be completed by Federal Agency)</i> Site Assessment Criteria <i>(These criteria are explained in 7 CFR 658.5(b))</i>	Maximum Points				
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS	160				

PART VII <i>(To be completed by Federal Agency)</i>				
Relative Value Of Farmland <i>(From Part V)</i>	100			
Total Site Assessment <i>(From Part VI above or a local site assessment)</i>	160			
TOTAL POINTS <i>(Total of above 2 lines)</i>	260			

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>
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Reason For Selection:

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 – Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 – Originator will send copies A, B and C together with maps indicating locations of site(s), to the Natural Resources Conservation Service (NRCS) local field office and retain copy D for their files. (Note: NRCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the NRCS State Conservationist in each state).

Step 3 – NRCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 – In cases where farmland covered by the FPPA will be converted by the proposed project, NRCS field offices will complete Parts II, IV and V of the form.

Step 5 – NRCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for NRCS records).

Step 6 – The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 – The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in § 658.5 (b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will, be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned relative adjustments must be made to maintain the maximum total weight points at 160.

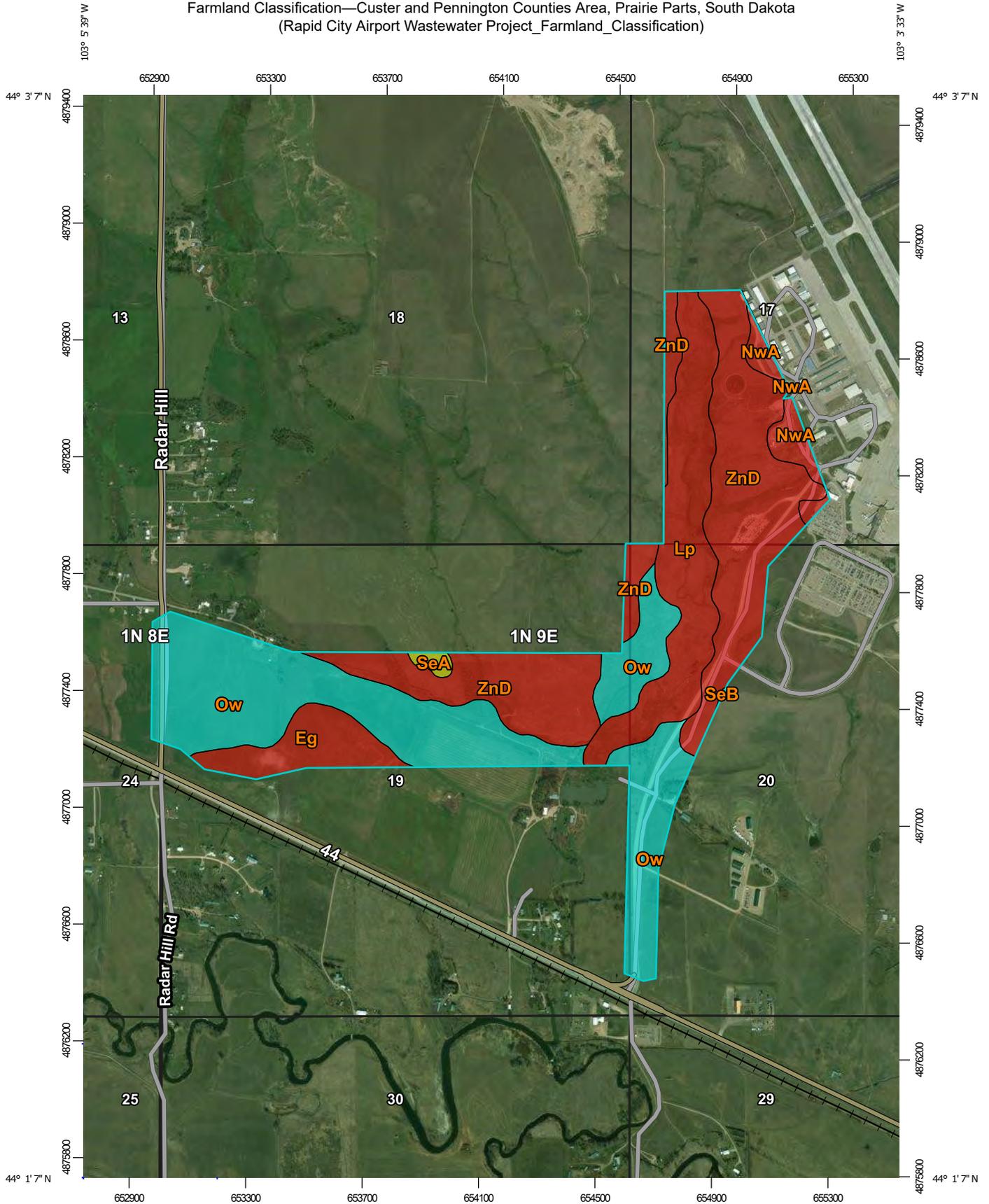
In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and alternative Site "A" is rated 180 points:

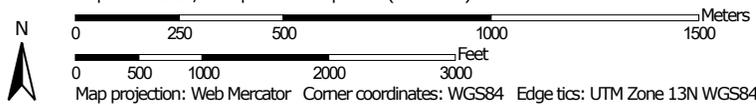
Total points assigned Site A = $\frac{180}{200} \times 160 = 144$ points for Site "A."

Maximum points possible 200

Farmland Classification—Custer and Pennington Counties Area, Prairie Parts, South Dakota
(Rapid City Airport Wastewater Project_Farmland_Classification)



Map Scale: 1:18,100 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

Farmland Classification—Custer and Pennington Counties Area, Prairie Parts, South Dakota
(Rapid City Airport Wastewater Project_Farmland_Classification)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Farmland Classification—Custer and Pennington Counties Area, Prairie Parts, South Dakota
(Rapid City Airport Wastewater Project_Farmland_Classification)

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer	
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	Soil Rating Points		Not prime farmland		Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Prime farmland if drained		Prime farmland if irrigated and reclaimed of excess salts and sodium	
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if warm enough		Prime farmland if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance	
	Farmland of statewide importance, if drained		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if thawed		Prime farmland if irrigated		Farmland of statewide importance, if drained	
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season				Farmland of local importance		Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season	
	Farmland of statewide importance, if irrigated				Farmland of local importance, if irrigated		Prime farmland if irrigated and drained		Farmland of statewide importance, if irrigated	
							Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season			

Farmland Classification—Custer and Pennington Counties Area, Prairie Parts, South Dakota
(Rapid City Airport Wastewater Project_Farmland_Classification)

<p> Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if irrigated and drained</p> <p> Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer</p> <p> Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60</p>	<p> Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium</p> <p> Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if warm enough</p> <p> Farmland of statewide importance, if thawed</p> <p> Farmland of local importance</p> <p> Farmland of local importance, if irrigated</p>	<p> Farmland of unique importance</p> <p> Not rated or not available</p> <p>Political Features</p> <p> PLSS Township and Range</p> <p> PLSS Section</p> <p>Transportation</p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p> <p>Background</p> <p> Aerial Photography</p>	<p>The soil surveys that comprise your AOI were mapped at 1:24,000.</p> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Custer and Pennington Counties Area, Prairie Parts, South Dakota Survey Area Data: Version 11, Sep 17, 2019</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Sep 23, 2015—Mar 4, 2017</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>
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Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Eg	Egas silty clay loam	Not prime farmland	22.9	6.4%
Lp	Lohmiller silty clay, channeled, 0 to 3 percent slopes, occasionally flooded	Not prime farmland	62.0	17.2%
NwA	Nunn-Urban land complex, 0 to 3 percent slopes	Not prime farmland	11.1	3.1%
Ow	Owanka clay loam	Farmland of statewide importance	136.6	37.9%
SeA	Satanta loam, 0 to 2 percent slopes	Prime farmland if irrigated	2.2	0.6%
SeB	Satanta loam, 2 to 6 percent slopes	Prime farmland if irrigated	0.1	0.0%
ZnD	Zigweid-Nihill complex, 6 to 15 percent slopes	Not prime farmland	125.5	34.8%
Totals for Area of Interest			360.5	100.0%

Description

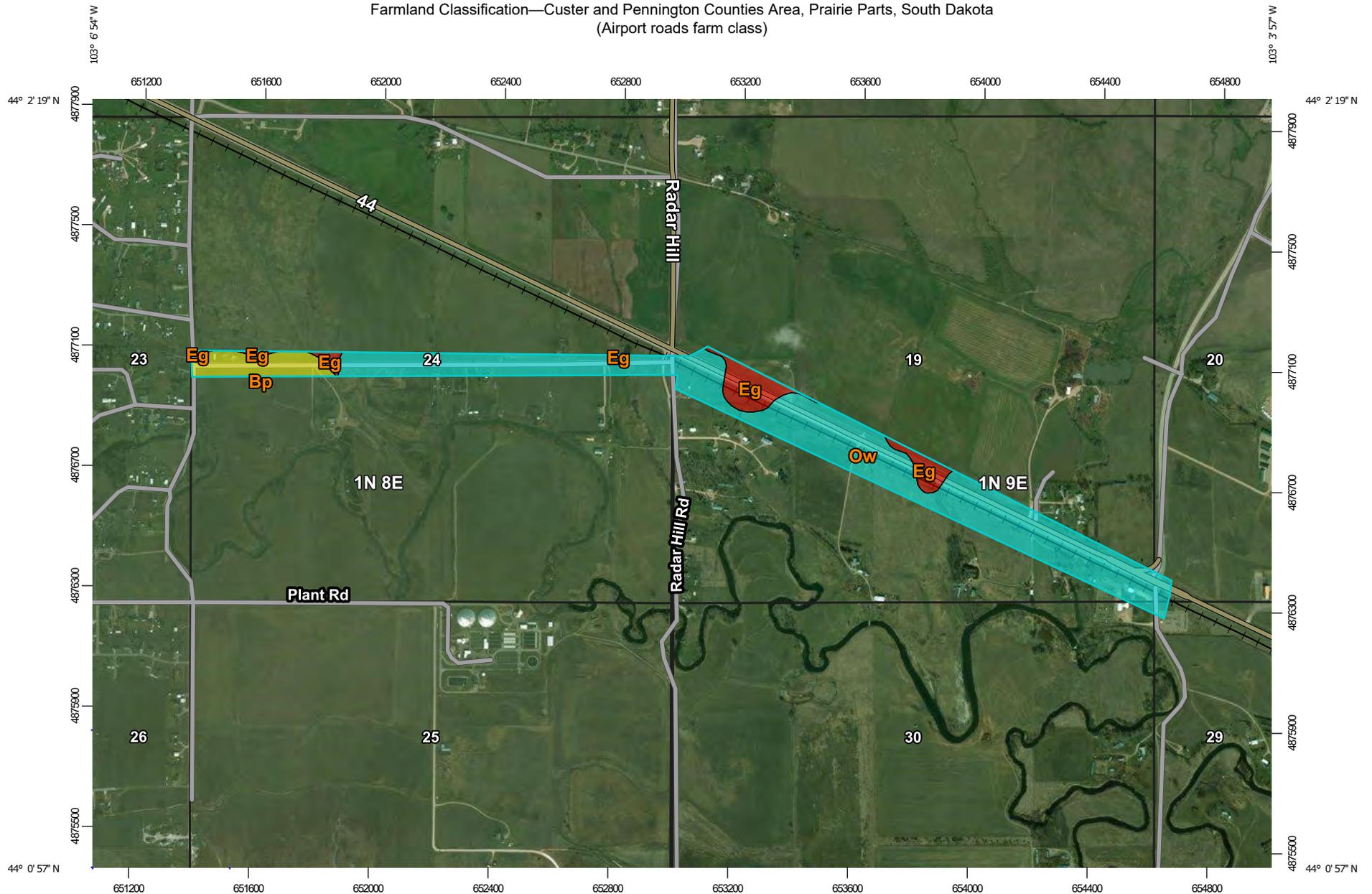
Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Farmland Classification—Custer and Pennington Counties Area, Prairie Parts, South Dakota
(Airport roads farm class)



Map Scale: 1:18,000 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

Farmland Classification—Custer and Pennington Counties Area, Prairie Parts, South Dakota
(Airport roads farm class)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
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-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
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-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Farmland Classification—Custer and Pennington Counties Area, Prairie Parts, South Dakota
(Airport roads farm class)

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season		Not rated or not available		Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Soil Rating Points		Prime farmland if irrigated and reclaimed of excess salts and sodium
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if warm enough		Prime farmland if drained		Farmland of statewide importance
	Farmland of statewide importance, if drained		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if thawed		Prime farmland if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if drained
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season				Farmland of local importance		Prime farmland if irrigated		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
	Farmland of statewide importance, if irrigated				Farmland of local importance, if irrigated		Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
							Prime farmland if irrigated and drained		Farmland of statewide importance, if irrigated
							Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season		

Farmland Classification—Custer and Pennington Counties Area, Prairie Parts, South Dakota
(Airport roads farm class)

<ul style="list-style-type: none">  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if irrigated and drained  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 	<ul style="list-style-type: none">  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if warm enough  Farmland of statewide importance, if thawed  Farmland of local importance  Farmland of local importance, if irrigated 	<ul style="list-style-type: none">  Farmland of unique importance  Not rated or not available <p>Political Features</p> <ul style="list-style-type: none">  PLSS Township and Range  PLSS Section <p>Transportation</p> <ul style="list-style-type: none">  Rails  Interstate Highways  US Routes  Major Roads  Local Roads <p>Background</p> <ul style="list-style-type: none">  Aerial Photography 	<p>The soil surveys that comprise your AOI were mapped at 1:24,000.</p> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Custer and Pennington Counties Area, Prairie Parts, South Dakota Survey Area Data: Version 11, Sep 17, 2019</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Sep 23, 2015—Mar 4, 2017</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>
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Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Bp	Bridgeport silt loam	Prime farmland if irrigated	8.8	9.1%
Eg	Egas silty clay loam	Not prime farmland	11.2	11.5%
Ow	Owanka clay loam	Farmland of statewide importance	76.9	79.4%
Totals for Area of Interest			96.8	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue SE, Suite 400
Aberdeen, South Dakota 57401

IN REPLY REFER TO:
DECRM
MC-208

OCT 22 2019

Curt Cady, Environmental Planner
KLJ
4585 Colman Street
Bismarck, North Dakota 58503-0431

Dear Mr. Cady:

We received your letter regarding the proposed projects listed below. We have considered the potential for both environmental damage and impacts to archaeological and Native American religious sites on lands held in trust by the Bureau of Indian Affairs, Great Plains Region. We have no environmental objections to the actions as long as the projects comply with all pertinent laws and regulations. You should be aware; however, that Tribes or Tribal members may have lands in fee status near the sites of interest. These lands would not necessarily be in our databases, and the Tribes should be contacted directly to ensure all concerns are recognized. The actions considered have the following project names:

September 25, 2019

Project Name: 1805-01949 Replacement Wastewater
System – Rapid City Regional Airport

Questions regarding environmental opinions and conditions can be addressed to Christie Avery, Environmental Protection Specialist, at (605) 226-7656.

We also find that the listed action will not affect cultural resources on Tribal or individual landholdings for which we are responsible. Methodologies for the treatment of cultural resources now known or yet to be discovered – particularly human remains – must nevertheless utilize the best available science in accordance with provisions of the Native American Graves Protection and Repatriation Act, the Archaeological Resources Protection Act of 1979 (as amended), and all other pertinent legislation and implementing regulations. Archaeological concerns can be addressed to Dr. Sebastian C. LeBeau II, Acting Regional Archaeologist, at (605) 226-7656.

Sincerely,

Deputy Regional Director – Trust Services



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
SOUTH DAKOTA REGULATORY OFFICE
28563 POWERHOUSE ROAD, ROOM 118
PIERRE, SOUTH DAKOTA 57501-6174

December 18, 2019

South Dakota Regulatory Office
28563 Powerhouse Road, Room 118
Pierre, South Dakota 57501

Federal Aviation Administration
Dakota-Minnesota Airports District Office, Attn: Sheri Lares
2301 University Drive, Building 23B
Bismark, North Dakota 58504

Dear Ms. Lares:

Reference is made to the information received October 30, 2019, concerning Section 404 of the Clean Water Act permit requirements for Rapid City Regional Airport Improvement Planning in aquatic resources identified your request for a jurisdictional determination. The review area is located in Sections 17, 19 and 20, Township 1 North, Range 9 East, and Section 24, Township 1 North, Range 8 East, Pennington County, South Dakota.

A preliminary jurisdictional determination (PJD) has been completed for the aquatic resources identified within the review area. A PJD is a written indication that wetlands and waterways within your project area are Waters of United States. If you do not concur with the findings, you may request an AJD for these sites from this office. See attached PJD.

You can obtain additional information about the Regulatory Program from our website:
<http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/SouthDakota.aspx>

If you have any questions, please feel free to contact this office at the above Regulatory Office address, or telephone Jeff Breckenridge at (605) 341-3169, ext. 3621 and reference action ID NWO-2019-1865-PIE.

Sincerely,

A handwritten signature in black ink that reads "Steven E. Naylor".

Steven E. Naylor
Regulatory Program Manager,
South Dakota

Enclosures

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: December 17, 2019

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Federal Aviation Administration
 Dakota-Minnesota Airports District Office, Attn: Sheri Lares
 2301 University Drive, Building 23B
 Bismark, North Dakota 58504

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENWO-ODR-SD, JD Request from FAA for Rapid City Regional Airport Improvement Planning, Pennington County, NWO-2019-1865-PIE.

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
 (USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR
 AQUATIC RESOURCES AT DIFFERENT SITES)**

State: South Dakota County/parish/borough: Pennington County City: Rapid City

Center coordinates of site (lat/long in degree decimal format):

Lat.: 44.03804 Long.: -103.06835

Universal Transverse Mercator: 13

Name of nearest waterbody: Rapid Creek

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: December 17, 2019

Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
1	44.031061	-103.10500700	0.13 acre	Riverine	404
2	44.031065	-103.10097300	0.01 acre	Riverine	404
3	44.030971	-103.09318600	0.29 acre	Riverine	404
5	44.034183	-103.07766700	2.74 acre	Riverine	404
6	44.032946	-103.07057700	1.32 acre	Riverine	404
7	44.033803	-103.06850000	0.56 acre	Slope	404
8	44.038039	-103.06835400	0.69 acre	Slope	404
9	44.037832	-103.06707700	0.63 acre	Slope	404

10	44.039257	-103.06917900	0.12 acre	Slope	404
11	44.038097	-103.06435100	0.42 acre	Riverine	404
12	44.045518	-103.06855300	2.39 acre	Slope	404
13	44.038885	-103.06764500	0.85 acre	Depress	404
14	44.040318	-103.06779200	0.01 acre	Riverine	404
15	44.039967	-103.06506900	0.75 acre	Riverine	404
16	44.042063	-103.06762000	0.66 acre	Slope	404
17	44.042634	-103.06686000	0.06 acre	Riverine	404
18	44.044746	-103.06609300	0.19 acre	Riverine	404
19	44.045309	-103.06642900	0.24 acre	Slope	404
21	44.024893	-103.07332300	0.05 acre	Riverine	404
22	44.027334	-103.07997200	0.86 acre	Slope	404

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: See file for Aquatic Resource Delineation completed by KLJ, October 2019.
- Data sheets prepared/submitted by or on behalf of the PJD requestor.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report. Rationale: _____.
- Data sheets prepared by the Corps: _____.
- Corps navigable waters' study: _____.
- U.S. Geological Survey Hydrologic Atlas: _____.
- USGS NHD data.
- USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Box Elder 24K.
- Natural Resources Conservation Service Soil Survey. Citation: _____.
- National wetlands inventory map(s). Cite name: _____.
- State/local wetland inventory map(s): _____.
- FEMA/FIRM maps: _____.
- 100-year Floodplain Elevation is: _____. (National Geodetic Vertical Datum of 1929)
- Photographs:
 - Aerial (Name & Date): Google Earth, Various years.
 - Other (Name & Date): _____.
- Previous determination(s). File no. and date of response letter: _____.
- Other information (please specify): All Aquatic Resources identified have a continuous surface water connection to Rapid Creek which flows directly to the Cheyenne River (TNW).

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

BRECKENRIDGE.JEF Digitally signed by
BRECKENRIDGE.JEFFREY.L.1231340897
Date: 2019.12.18 09:57:39 -07'00'
FREY.L.1231340897

Signature and date of
Regulatory staff member
completing PJD

Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)¹

¹ Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
SOUTH DAKOTA REGULATORY OFFICE
28563 POWERHOUSE ROAD, ROOM 118
PIERRE, SOUTH DAKOTA 57501-6174

December 18, 2019

South Dakota Regulatory Office
28563 Powerhouse Road, Room 118
Pierre, South Dakota 57501

Federal Aviation Administration
Dakota-Minnesota Airports District Office, Attn: Sheri Lares
2301 University Drive, Building 23B
Bismark, North Dakota 58504

Dear Ms. Lares:

Reference is made to the information received October 30, 2019, concerning Section 404 of the Clean Water Act permit requirements for Rapid City Regional Airport Improvement Planning in aquatic resources identified as NWO-2019-1865-PIE-4, 20, and 23. The review area is located in Sections 19, 20, and 24, Township 1 North, Range 9 East, Pennington County, South Dakota.

Based on the information provided, we have determined that there are no waters of the United States (i.e. jurisdictional waters) located within the review area. Therefore, activities within the review area are not subject to Department of the Army regulatory authorities and no permit pursuant to Section 404 of the Clean Water Act is required from the Corps of Engineers.

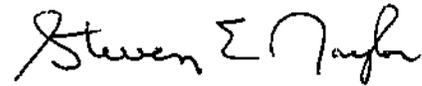
An approved jurisdictional determination (JD) has been completed for your project. This JD is valid for 5 years from the date of this letter. The JD is enclosed and also may be viewed at our website. The link to the website is shown below. The JD will be available on the website within 30 days. If you are not in agreement with the JD, you may request an administrative appeal under Corps of Engineers regulations found at 33 C.F.R. 331. Enclosed you will find a Notification of Administrative Appeal Options and Process and Request for Appeal form (RFA). Should you decide to submit an RFA form, it must be received by the Corps of Engineers Northwestern Division Office within 60 days from the date of this correspondence (by November 29, 2019). It is not necessary to submit a RFA if you do not object to the JD.

You can obtain additional information about the Regulatory Program from our website:

<http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/SouthDakota.aspx>

If you have any questions, please feel free to contact this office at the above Regulatory Office address, or telephone Jeff Breckenridge at (605) 341-3169, ext. 3621 and reference action ID NWO-2019-1865-PIE.

Sincerely,

A handwritten signature in black ink that reads "Steven E. Naylor". The signature is written in a cursive style with a large, stylized initial 'S'.

Steven E. Naylor
Regulatory Program Manager,
South Dakota

Enclosures



APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 17, 2019

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENWO-ODR-SD, JD Request from FAA for Rapid City Regional Airport Improvement Planning, Pennington County, NWO-2019-1865-PIE. Potential Waters of US evaluated in this Approved Jurisdictional Determination: NWO-2019-1865-PIE-4, 20, and 23.

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Dakota County/parish/borough: Pennington County City: Rapid City
 Center coordinates of site (lat/long in degree decimal format): Lat. **44.02865° N**, Long. **-103.08373° W**
 Universal Transverse Mercator: 13

Name of nearest waterbody: Rapid Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Cheyenne River

Name of watershed or Hydrologic Unit Code (HUC): 10120110 - Rapid

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
- Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: December 17, 2019
- Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are **no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
- Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
 Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There Are **no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
 Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
 Explain: **All waters identified as NOW-2019-1865-PIE-4, 20 and 23 were constructed in uplands as part of the**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

construction of SD Hwy 44 and collect and/or drain surface water from surrounding upland areas. These waters were not constructed within the natural drainage features in the area. Therefore that are considered "Preamble Waters" and not Waters of the U.S. as described in the preamble to the 1986 Regulations 33 CFR Section 328.3.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW:

Summarize rationale supporting determination:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

- (i) General Area Conditions:
Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW⁵:
Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: feet
Average depth: feet
Average side slopes: **Pick List**

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Pick List**. Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
------------------------------	------------------------	------------------------------	------------------------

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.

2. RPWs that flow directly or indirectly into TNWs.

Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial;
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters:

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters:

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.⁹**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. **ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:
- Other factors. Explain:

Identify water body and summarize rationale supporting determination:

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters:
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See file for Aquatic Resource Delineation completed by KLJ, October 2019.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Box Elder 24K.
- USDA Natural Resources Conservation Service Soil Survey. Citation:
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (Datum :)
- Photographs: Aerial (Name & Date): Google Earth, Various years.
or Other (Name & Date):
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Federal Aviation Administration		File Number: NWO-2019-1865-PIE	Date: Dec. 18, 2019
Attached is:		See Section below	
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
X	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found in Corps regulations at 33 CFR Part 331, or at <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/FederalRegulation.aspx>

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

If you only have questions regarding the appeal process you may also contact:

US Army Corps of Engineers, Northwestern Division
Attn: Melinda Larsen, Regulatory Appeals Review Officer
Portland, OR 97232
Telephone (503) 808-3888
Melinda.M.Larsen@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date: _____

Telephone number: _____



Northern Cheyenne Tribal Historic Preservation

14 E. Medicine Lodge Drive | P.O. Box 128 | Lamé Deer, MT. 59043

Ph: (406) 477- 4838/ 4839/ 8113/ 8114

CONSULTATION REQUEST

CONSULTING AGENCY

Federal Aviation
Administration
Bismarck Office

ADDRESS

2301 University
Drive, Building 23B

CITY/STATE/ZIP

Bismarck, ND. 58504

PHONE

(701) 323-7384

FAX

E-MAIL

sheri.lares@faa.gov

AGENCY CONTACT

Sheri Lares

PROJECT CONTACT

PREPARED BY:

Gary LaFranier

PROJECT TYPE	Rapid City Regional Airport Replacement Wastewater System
FEDERAL AGENCY STATE / COUNTY	United States Department of Transportation South Dakota/ Pennington

CORRESPONDENCE	
DATE RECEIVED	9/25/2019
REVIEW PERIOD	30-DAY
DEADLINE	10/25/2019

DOCUMENTATION RECEIVED	
MAPS	YES
SURVEY	CLASS III
TRIBAL SURVEY	YES

DETERMINATION	
FINDING	NO EFFECT
COMMENT	Your undertaking may proceed as planned

ADDITIONAL COMMENTS

	<i>Teanna Limby</i>
Tribal Historic Preservation Officer	
10/21/2019	
DATE	

LITTLEWOLF AND MORNING STAR- Out of Defeat and exile they led us back to Montana and won our Cheyenne Homeland that we will keep forever



CONSULTING AGENCY

Federal Aviation
Administration
Bismarck Office

ADDRESS

2301 University
Drive, Building 23B

CITY/STATE/ZIP

Bismarck, ND. 58504

PHONE

(701) 323-7384

FAX

E-MAIL

sheri.lares@faa.gov

AGENCY CONTACT

Sheri Lares

PROJECT CONTACT

PREPARED BY:

Gary LaFranier

**LITTLEW
our Cheye**

RECEIVED

OCT 7 - 2019

Dept. of Environment and
Natural Resources
Secretary's Office



4585 Coleman Street
Bismarck, ND 58503-0431
701 355 8400
KLJENG.COM

**Waste Management Determination
Hazardous Waste/Solid Waste/Asbestos**

It appears, based on the information provided, that this project will have little or no impact on the waste management in this area.

Approved By: James L. Wink
Date: Oct. 10, 2019

**South Dakota Department of
Environment & Natural Resources**
Phone: (605) 773-3153 Fax: (605) 773-6035

October 2, 2019

Mr. Steve Pirner
Department Secretary
SD Department of Environment and Natural Resources
523 E. Capitol Ave.
Pierre, SD 57501

Re: Rapid City Regional Airport
Pennington County, South Dakota

Dear Mr. Pirner:

KLJ is assisting the City of Rapid City in the development of improvements to the Rapid City Regional Airport. The Federal Aviation Administration (FAA) is the lead agency for review and approval, in coordination with the South Dakota Department of Transportation. The funding of improvements associated with this project involves a federal action, which requires environmental documentation in accordance with the National Environmental Policy Act (NEPA).

Improvements being planned for may include but are not limited to: construction of a replacement wastewater system for the Rapid City Regional Airport. The existing wastewater lagoon would be abandoned and replaced with either an onsite aerated lagoon with a cover system and ammonia treatment or by connecting the Airport's wastewater collection system into the Rapid City wastewater collection system. Construction involves excavation of a high density polyethylene (HDPE) lined cell surrounded by earth dikes and a security fence and installation of a blower, diffusers, HDPE cover and polishing reactor; or installation of a gravity main, construction of lift station surrounded by security fence and installation of force main across City owned property or along Highway 44 right of way than along Dunn Road right of way. **Please refer to the Project Area Sketch.** The project is expected to be constructed during the 2021 construction season.

According to the FAA Terminal Area Forecast (TAF), annual operations at Rapid City Regional Airport are 46,297 and are not anticipated to increase during the planning period. We believe these volumes are not of the magnitude that would result in a violation of any Air Quality Standards and the project is consistent with the State Implementation Plan for air quality. Your concurrence with this determination is requested.

To ensure that social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed development of this project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any property that your department may own, or have an interest in, and which would be adjacent to the proposed improvements. We would also appreciate being made aware



of any environmental concerns your department may have regarding the project. Any information that might help us in our evaluation would be appreciated.

It is requested that any comments or information be forwarded to our office on or before November 1, 2019.

If further information is desired regarding the proposed improvements, you may contact me at 701-355-8719. Thank you in advance for your cooperation.

Sincerely,


Curt Cady
Environmental Planner

Curt Cady
Environmental Planner

Project #: 1805-01949

cc: Jon Becker, SDDOT
Sheri Lares, FAA
Patrick Dame, Airport Director

RECEIVED

OCT 7 - 2019

Dept. of Environment and
Natural Resources
Secretary's Office



4585 Coleman Street
Bismarck, ND 58503-0431
701 355 8400
KLJENG.COM

AIR QUALITY DETERMINATION

It appears, based on the information, that the project will have little or no impact on the air quality in this area. This project is approved.

Approved By: *[Signature]*

Date: 10/21/2019

(605) 773-3151
South Dakota Department of Environment
And Natural Resources

October 2, 2019

~~Mr. Steve Pirner~~ *Sec. Hunter Roberts*
Department Secretary
SD Department of Environment and Natural Resources
523 E. Capitol Ave.
Pierre, SD 57501

Re: Rapid City Regional Airport
Pennington County, South Dakota

Dear Mr. Pirner:

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It is requested that any comments or information be forwarded to our office on or before November 1, 2019.

If further information is desired regarding the proposed improvements, you may contact me at 701-355-8719. Thank you in advance for your cooperation.

Sincerely,

KLJ

A handwritten signature in blue ink that reads "Curt Cady".

Curt Cady
Environmental Planner

Project #: 1805-01949

cc: Jon Becker, SDDOT
Sheri Lares, FAA
Patrick Dame, Airport Director



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

October 23, 2019

Curt Cady
KLJ Engineers
4585 Coleman Street
Bismarck, ND 58503-0431

RE: Environmental Assessment – Request for Comments
Rapid City Regional Airport, Pennington County, South Dakota

Dear Mr. Cady:

The South Dakota Department of Environment and Natural Resources (DENR) Surface Water Quality Program has reviewed the information provided for the above referenced project. Based on the information provided, DENR has the following comments:

1. At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site. Any construction activity that disturbs an area of one or more acres of land must have authorization under the General Permit for Storm Water Discharges Associated with Construction Activities. Contact the Department of Environment and Natural Resources for additional information or guidance at 1-800-SDSTORM (1-800-737-8676) or <http://denr.sd.gov/des/sw/stormwater.aspx>.
2. A Surface Water Discharge permit may be required if any construction dewatering should occur as a result of this project. Please contact this office for more information.
3. Impacts to tributaries, creeks, wetlands, and lakes should be avoided by this project. These waterbodies are considered waters of the state and are protected under Administrative Rules of South Dakota (ARSD) Chapter 74:51. Special construction measures may have to be taken to ensure that water quality standards are not violated.

This project will be in close vicinity to Rapid Creek. This waterbody is classified by the South Dakota Surface Water Quality Standards and Uses Assigned to Streams for the following beneficial uses:

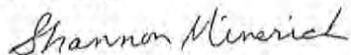
- (4) Warmwater permanent fish life propagation waters;
- (7) Immersion contact recreation waters;
- (8) Limited contact recreation waters;
- (9) Fish and wildlife propagation, recreation, and stock watering waters; and
- (10) Irrigation waters.

Because of these beneficial uses, special construction measures may have to be taken to ensure that the 30-day average total suspended solids criterion of 90 mg/L is not violated.

4. The discharge of pollutants from any source, including indiscriminate use of fill material, may not cause destruction or impairment except where authorized under Section 404 of the Federal Water Pollution Control Act. Please contact the United States Army Corps of Engineers for more information 605-224-8531.
5. Plans and specifications for the Wastewater Treatment Improvements must be submitted to Albert Spangler with the South Dakota Department of Environment and Natural Resources.

If you have any questions concerning these comments, please contact me by email at Shannon.Minerich@state.sd.us. Thank you.

Sincerely,



Shannon Minerich
Environmental Scientist
Surface Water Quality Program

4585 Coleman Street
Bismarck, ND 58503-0431
701 355 8400
KLJENG.COM

RECEIVED

OCT 7 - 2019

Dept. of Environment and
Natural Resources
Secretary's Office



October 2, 2019

Mr. Steve Pirner
Department Secretary
SD Department of Environment and Natural Resources
523 E. Capitol Ave.
Pierre, SD 57501

Re: Rapid City Regional Airport
Pennington County, South Dakota

Dear Mr. Pirner:

KLJ is assisting the City of Rapid City in the development of improvements to the Rapid City Regional Airport. The Federal Aviation Administration (FAA) is the lead agency for review and approval, in coordination with the South Dakota Department of Transportation. The funding of improvements associated with this project involves a federal action, which requires environmental documentation in accordance with the National Environmental Policy Act (NEPA).

Improvements being planned for may include but are not limited to: construction of a replacement wastewater system for the Rapid City Regional Airport. The existing wastewater lagoon would be abandoned and replaced with either an onsite aerated lagoon with a cover system and ammonia treatment or by connecting the Airport's wastewater collection system into the Rapid City wastewater collection system. Construction involves excavation of a high density polyethylene (HDPE) lined cell surrounded by earth dikes and a security fence and installation of a blower, diffusers, HDPE cover and polishing reactor; or installation of a gravity main, construction of lift station surrounded by security fence and installation of force main across City owned property or along Highway 44 right of way than along Dunn Road right of way. **Please refer to the Project Area Sketch.** The project is expected to be constructed during the 2021 construction season.

According to the FAA Terminal Area Forecast (TAF), annual operations at Rapid City Regional Airport are 46,297 and are not anticipated to increase during the planning period. We believe these volumes are not of the magnitude that would result in a violation of any Air Quality Standards and the project is consistent with the State Implementation Plan for air quality. Your concurrence with this determination is requested.

To ensure that social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed development of this project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any property that your department may own, or have an interest in, and which would be adjacent to the proposed improvements. We would also appreciate being made aware

DRINKING WATER QUALITY DETERMINATION
It appears, based on the information provided,
that this project will not have adverse
environmental effects to drinking water in
this area. This project is approved.
Approved by: *[Signature]*
Date: *10/2/19* ID No.: *20190664*
605-773-3754 Fax: 605-773-5286
SOUTH DAKOTA DEPARTMENT OF
ENVIRONMENT & NATURAL RESOURCES



of any environmental concerns your department may have regarding the project. Any information that might help us in our evaluation would be appreciated.

It is requested that any comments or information be forwarded to our office on or before November 1, 2019.

If further information is desired regarding the proposed improvements, you may contact me at 701-355-8719. Thank you in advance for your cooperation.

Sincerely,

KLJ

A handwritten signature in cursive script that reads "Curt Cady".

Curt Cady
Environmental Planner

Project #: 1805-01949

cc: Jon Becker, SDDOT
Sheri Lares, FAA
Patrick Dame, Airport Director



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

October 31, 2019

Curt Cady
KLJ
4585 Coleman Street
Bismarck, ND 58503-0431

Re: Environmental Review – Rapid City Regional Airport, Pennington County, South Dakota S

Dear Ms. Brooks:

The South Dakota Department of Environment and Natural Resources' (DENR) Ground Water Quality Program has reviewed the above-referenced project for potential impacts to ground water quality. Based on the information submitted in your letter, dated October 2, 2019, DENR does not anticipate adverse impacts to ground water quality by this project. However, plans and specifications for the wastewater system improvements must be submitted to the DENR for approval prior to construction. This is to ensure that any improvements and/or expansion plans meet DENR's recommended design criteria for wastewater systems.

If construction for this project disturbs one or more acre(s) of soil, a storm water permit may be required. For more information or to obtain a storm water permit, please contact the Department at 1-800-SD-Storm or visit: <http://denr.sd.gov/des/sw/StormWaterandConstruction.aspx>.

There have been numerous petroleum and other chemical releases throughout the state. Of the releases reported to DENR, we have identified several release cases in the vicinity of your project areas. A list of these releases is enclosed in Table 1. However, the locational information provided to us regarding releases is sometimes inaccurate or incomplete. If you would like to do more research, additional information on reported releases in South Dakota may be obtained at the following website: <http://aregis.sd.gov/server/denr/spillsviewer/>.

In the event that contamination is encountered during construction activities or is caused by the construction activity, City of Rapid City, or its designated representative, must report the contamination to DENR at 605-773-3296. Any contaminated soil encountered or caused by the construction activities must be temporarily stockpiled and sampled to determine disposal requirements and the construction material used in the contamination area should be evaluated for chemical compatibility and adjusted accordingly.

Thank you for providing DENR the opportunity to comment on this project. If you have any questions regarding the information provided, please contact me at 605-773-3296.

Sincerely,



Georgina Smith
Environmental Scientist II
Ground Water Quality Program

Enclosure

c: Dustin Willett, Pennington County Emergency Manager, Rapid City, SD

Table 1 - Known releases that may impact the City of Rapid City Regional Airport Wastewater Systems Improvement project, as of October 30, 2019.

DENR ID	Site Name	City	County	Street	Material	Status	R1	Latitude	Longitude
2011.103	ATP - Rapid City Regional Airport Airport Ground	Rapid City	Pennington	Flight Service Station	Fuel Oil	C	TF	44.040251	-103.062306
2007.07	@4550 Terminal Road	Rapid City	Pennington	Airport Grounds @ 4550 Terminal Road	Crude Distillate	C	RL	44.040881	-103.063367
86.053	Rapid City Airport Tank	Rapid City	Pennington	Airport Road	Fuel Oil	C	KM	44.041793	-103.064135
2012.011	Overfill - RC Airport Fuel Farm	Rapid City	Pennington	Airport Road, Airport Fuel Farm	Jet Fuel	NFA	MT	44.041664	-103.064097
99.136	Rapid City Airport - Oil Spill	Rapid City	Pennington	4550 Terminal Rd. Suite 102	Transformer Oil	C	BM	44.043339	-103.063314
93.218	Westjet - Airport	Rapid City	Pennington	4160 Fire Station Road	Petroleum	M	ZM	44.041648	-103.064492
98.084	Rapid City Regional Airport - Tank System Removed Impacted	Rapid City	Pennington	Vehicle Storage/Maintenance Site	Petroleum	C	JN	44.043306	-103.063414
2016.0187	Soils - Fuel Storage Facility	Rapid City	Pennington	Fuel Farm Road	Petroleum/ Metals	NFA	KM	44.041554	-103.06519
93.119	Delta Airlines Withdrawn	Rapid City	Pennington	Tank Farm	Jet Fuel	C	TK	44.041769	-103.064285
9999.239	ATP - Rapid City Regional Airport Rank	Rapid City	Pennington	4251 Airport Road		W		44.042046	-103.062936
2015.057	Removal at Hertz Car Rental Withdrawn	Rapid City	Pennington	Rapid City Regional Airport	Gasoline	NFA	ZB	44.042095	-103.063069
9999.191	ATP - Rapid City Flight Service	Rapid City	Pennington	4200 Airport Road				44.042501	-103.062903

2015.047	Harms Oil Spill at Rapid City Airport	Rapid City	Pennington	Rapid City Airport, Terminal Road	Diesel Fuel	C	TK	44.042893	-103.063185
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Status: C = Closed, NFA = No Further Action, O/M = Open/Monitoring, I=Inactive, T=Tracking, W = Withdrawn

R1 = DENR reviewer's initials



July 14, 2020

Ms. Sheri G. Lares
Federal Aviation Administration
Bismarck Office
2301 University Dr., Bldg. 23B
Bismarck, ND 58504

SECTION 106 PROJECT CONSULTATION

Project: 200629004F – Rapid City Regional Airport, Eligibly Determination and Determination of Effect, Sanitary Sewer System Project

Location: Pennington County
(FAA)

Dear Ms. Lares:

Thank you for the opportunity to comment on the above referenced project pursuant to 54 U.S.C. 306108 (Section 106) of the National Historic Preservation Act of 1966 (as amended). The South Dakota Office of the State Historic Preservation Officer (SHPO) concurs with your determination regarding the effect of the proposed undertaking on the non-renewable cultural resources of South Dakota.

On June 26, 2020, we received your letter, the form entitled “Section 106 Project Review Form,” and the report titled “Rapid City Regional Airport – Sanitary Sewer System Project: A Level III Cultural Resource Inventory in Pennington County, South Dakota,” by Andrew J. Robinson and Matthew Hull. According to the report, sixteen properties were identified and recorded during the survey of the project area.

Based on the information provided, we agree with the following recommendations. Updated site forms were completed for eligible properties 39PN2007, including two newly recorded bridges KLJ-RCA-SMH2 and KLJ-RCA-SMH3, and 39PN2169 (Murphy Ditch). These properties remain eligible for listing in the National Register of Historic Places. Newly recorded site 39PN3775 and eleven newly recorded traditional cultural properties, TCP-PN-0001, TCP-PN-0002, TCP-PN-0003, TCP-PN-0004, TCP-PN-0005, TCP-PN-0006, TCP-PN-0007, TCP-PN-0008, TCP-PN-0009, TCP-PN-0010 and TCP-PN-0011, are all considered eligible for listing in the National Register.

Therefore, provided that all the sites listed above are avoided by construction activities, we concur with your determination of “No Historic Properties Affected”. Any activities occurring in areas not

identified in your request will require the submission of additional documentation pertaining to the identification of historic properties, as described in 36 C.F.R. § 800.4.

If historic properties are discovered or unanticipated effects on historic properties are found after the agency official has completed the process outlined by 54 U.S.C. 306108 (Section 106) of the National Historic Preservation Act, the agency official shall avoid, minimize, or mitigate the adverse effects to such properties and notify the SHPO and Indian tribes that might attach religious and cultural significance to the affected property within 48 hours of the discovery, pursuant to 36 C.F.R. § 800.13.

Concurrence of the SHPO does not relieve the federal agency official from consulting with other appropriate parties, as described in 36 C.F.R. § 800.2(c).

Should you require additional information, please contact Paige Olson at Paige.Olson@state.sd.us or (605) 773-6004. Your concern for the non-renewable cultural heritage of our state is appreciated.

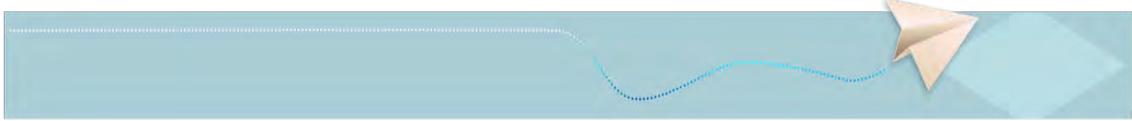
Sincerely,

Jay D. Vogt
State Historic Preservation Officer



Paige Olson
Review & Compliance Coordinator

cc: Jane Watts and Renee Boen, Archaeological Research Center



Appendix C

Background Information

- ◆ Threatened, Endangered, Proposed, Candidate Species and Critical Habitat Affect Determination Table
- ◆ Information for Planning and Consultation Species List
- ◆ Rapid City - Pennington County Land Use
- ◆ Terminal Area Forecast

Threatened, Endangered, Proposed, Candidate Species and Critical Habitat Affect Determination Table

Airport: Rapid City Regional Airport		Grant: 3-46-0048-051-2018	Description: Sewer Lagoon Replacement Project	County: Pennington		State: SD	
Species	Listing	Guidance	FAA Review Required?		Determination		Additional Documentation Included
			Yes	No	Not Present	No Effect	
Eskimo Curlew (Bird)	E	The likelihood that the Eskimo curlew remains extant is extremely low, therefore the USFWS do not recommend further conservation or management actions at this time; no further review required. ¹			X		
Interior Least Tern (Bird)	E	FAA Review required for construction activities within ½ mile of the shoreline of the Missouri River System including reservoirs from April 15 through August 31.		X		X	
Whooping Crane (Bird)	E	FAA Review required for the adjustment (raising, relocating) of existing above-ground utility lines; or for newly placed poles/towers (including beacons) and those that require overhead lines/guy wires; unless the adjustments or new installations are located in a highly developed or urban area. Review also required for projects requiring major earthwork (.e. runway extension, RSA grading) in rural areas within ½ mile of suitable stopover habitat that are located within the whooping crane migration corridor.		X		X	
Pallid Sturgeon (Fish)	E	FAA Review required for work in or along the shoreline of the Missouri River (including reservoirs) and Yellowstone River Systems. Review also required for in-water work for any direct tributary (within ½ mile) to the Missouri River (including reservoirs) and Yellowstone River systems.			X		
Topeka Shiner (Fish)	E	FAA review required for work in or along the shoreline of prairie (or former prairie) streams with pools containing clear, clean water (non-turbid), and have clean gravel, rock or sand bottoms, specifically in one or more of the three known inhabited watersheds (the James, Vermillion, and Big Sioux).			X		
American Burying Beetle (Insect)	E	FAA review required for work in undisturbed grassland prairie, forest edge, and scrubland areas where significant humus or topsoil, suitable for burying carrion, occurs.			X		
Poweshiek Skipperling (Insect)	E	FAA Review required for work occurring in undisturbed native tall grass prairie and wet swales.			X		
Rusty Patched Bumblebee	E	Species is not known to exist in the Dakotas at this time. Until more information becomes available for this species, no review is required.			X		

¹ Eskimo Curlew 5-Year Review: Summary and Evaluation. USFWS Fairbanks Fish and Wildlife Office, December 14, 2016.

Species	Listing	Guidance	FAA Review Required?		Determination		Additional Documentation Included
			Yes	No	Not Present	No Effect	
Black-footed Ferret (Mammal)	E	FAA Review required for ground disturbing activities within 100 feet of prairie dog towns of at least 80 acres in size. Projects within the existing airport property will not require FAA review.			X		
Gray Wolf (Mammal)	E	FAA Review required for projects on a new location (i.e. construction of a new airport).			X		
Higgin's Eye Mussel (Mollusc)	E	FAA review required for work in deep water with moderate currents in large rivers with sand/gravel bottoms.			X		
Scaleshell Mussel (Mollusc)	E	FAA review required for work in or along the shoreline of river habitat with stable channels and good water quality.			X		
Piping Plover (Bird)	T	FAA Review required for ground disturbing activities within ½ mile of designated piping plover critical habitat or known nesting sites from April 15 through August 31. See link for piping plover designated critical habitat maps: http://www.fws.gov/mountain-prairie/species/birds/pipingplover/			X		
Rufa Red Knot (Bird)	T	FAA Review required for work activities within ½ mile of designated Piping Plover Critical Habitat or known nesting sites. See link for piping plover designated critical habitat maps: http://www.fws.gov/mountain-prairie/species/birds/pipingplover/		X		X	
Dakota Skipper (Insect)	T	FAA Review required for work occurring in high quality native prairie containing a high diversity of wildflowers and grasses.			X		
Northern Long-Eared Bat (Mammal)	T	FAA Review required for work involving the removal of trees or buildings, ground disturbance in areas with caves, mines, and rock crevices, or work on structures. A final 4(d) rule with programmatic biological opinion (PBO) has been released by the USFWS. Further guidance: https://www.fws.gov/Midwest/endangered/mammals/nleb/s7.html https://www.fws.gov/Midwest/endangered/mammals/nleb/pdf/S7FrameworkNLEB17Feb2016.pdf		X		X	
Leedy's Roseroot (Plant)	T	FAA Review required for work along cool wet groundwater-fed limestone cliffs, as well as cliffs characterized by the presence of cracks in the rocks.			X		
Western Prairie Fringed Orchid (Plant)	T	FAA Review required for all ground disturbing activities on non-flooded, undisturbed ground, known habitat, and native prairie. High probability of species in or near the Sheyenne National Grassland or the Big Sioux River Valley.			X		

Piping Plover Critical Habitat	D	FAA Review required for ground disturbing activities within ½ mile of designated piping plover critical habitat or known nesting sites. See link for piping plover designated critical habitat maps: http://www.fws.gov/mountain-prairie/species/birds/pipingplover/ https://www.fws.gov/mountain-prairie/es/species/birds/pipingplover/sdunit1.pdf			X		
Dakota Skipper Critical Habitat	D	FAA Review required for ground disturbing activities within 0.6 mile of proposed Dakota Skipper critical habitat. See link for Dakota Skipper proposed critical habitat maps: https://www.fws.gov/midwest/endangered/insects/dask/fCHmaps/daskchND.pdf https://www.fws.gov/midwest/endangered/insects/dask/fCHmaps/daskchSD.pdf			X		
Poweshiek Skipperling Critical Habitat	D	FAA Review required for ground disturbing activities within 0.6 mile of proposed Poweshiek Skipperling critical habitat. See link for Poweshiek Skipperling proposed critical habitat maps: https://www.fws.gov/midwest/endangered/insects/posk/fCHmaps/PS_ND_1_2.pdf https://www.fws.gov/midwest/endangered/insects/posk/fCHmaps/poskchSD.pdf			X		



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Dakota Ecological Services Field Office
420 South Garfield Avenue, Suite 400
Pierre, SD 57501-5408
Phone: (605) 224-8693 Fax: (605) 224-1416
<http://www.fws.gov/southdakotafieldoffice/>

In Reply Refer To:

July 15, 2020

Consultation Code: 06E14000-2020-SLI-0970

Event Code: 06E14000-2020-E-02526

Project Name: Rapid City Sanitary Sewer Replacement

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Migratory Bird Treaty Act (16 U.S.C. 703-712, as amended), as well as the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). Projects affecting these species may benefit from the development of an Eagle Conservation Plan (ECP), see guidance at this website (http://www.fws.gov/windenergy/eagle_guidance.html). An ECP can assist developers in achieving compliance with regulatory requirements, help avoid "take" of eagles at project sites, and provide biological support for eagle permit applications. Additionally, we recommend wind energy developments adhere to our Land-based Wind Energy Guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

We have recently updated our guidelines for minimizing impacts to migratory birds at projects that have communication towers (including meteorological, cellular, digital television, radio, and emergency broadcast towers). These guidelines can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>
<http://www.towerkill.com>

According to National Wetlands Inventory maps, (available online at <http://wetlands.fws.gov/>) wetlands exist adjacent to the proposed construction corridor. If a project may impact wetlands or other important fish and wildlife habitats, the U.S. Fish and Wildlife Service (Service), in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347) and other environmental laws and rules, recommends complete avoidance of these areas, if possible. If this is not possible, attempts should be made to minimize adverse impacts. Finally if adverse impacts are unavoidable, measures should be undertaken to replace the impacted areas. Alternatives should be examined and the least damaging practical alternative selected. If wetland impacts are unavoidable, a mitigation plan addressing the number and types of wetland acres to be impacted, and the methods of replacement should be prepared and submitted to the resource agencies for review.

Please check with your local wetland management district to determine whether Service interest lands exist at the proposed project site, the exact locations of these properties, and any additional restrictions that may apply regarding these sites. The Offices are listed below. If you are not sure which office to contact, we can help you make that decision.

U.S. Fish and Wildlife Service, Huron Wetland Management District, Federal Building, Room 309, 200 4th Street SW, Huron, SD 57350; telephone (605) 352-5894. Counties in the Huron WMD: Beadle, Buffalo, Hand, Hughes, Hyde, Jerauld, Sanborn, Sully.

U.S. Fish and Wildlife Service, Lake Andes Wetland Management District, 38672 291st Street, Lake Andes, South Dakota; telephone (605) 487-7603. Counties in the Lake Andes WMD: Aurora, Bon Homme, Brule, Charles Mix, Clay, Davison, Douglas, Hanson, Hutchinson, Lincoln, Turner, Union, Yankton.

U.S. Fish and Wildlife Service, Madison Wetland Management District, P.O. Box 48, Madison, South Dakota, 57042, telephone (605) 256-2974. Counties in the Madison WMD: Brookings, Deuel, Hamlin, Kingsbury, Lake, McCook, Miner, Minnehaha, Moody.

U.S. Fish and Wildlife Service, Sand Lake Wetland Management District, 39650 Sand Lake Drive, Columbia, South Dakota, 57433; telephone (605) 885-6320. Counties in the Sand Lake WMD: Brown, Campbell, Edmunds, Faulk, McPherson, Potter, Spink, Walworth.

U.S. Fish and Wildlife Service, Waubay Wetland Management District, 44401 134A Street, Waubay, South Dakota, 57273; telephone (605) 947-4521. Counties in the Waubay WMD: Clark, Codington, Day, Grant, Marshall, Roberts.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

You are welcome to contact our office at the address or phone number above for more information.

Thank you.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Dakota Ecological Services Field Office

420 South Garfield Avenue, Suite 400

Pierre, SD 57501-5408

(605) 224-8693

Project Summary

Consultation Code: 06E14000-2020-SLI-0970

Event Code: 06E14000-2020-E-02526

Project Name: Rapid City Sanitary Sewer Replacement

Project Type: WASTEWATER FACILITY

Project Description: The Rapid City Regional Airport proposed to remove the existing wastewater lagoon and connect to the Rapid City Water Reclamation Facility located approximately 2 miles southwest of the existing lagoon. The connection will through a series of underground pipe and a lift station located adjacent to Airport Road.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/44.035209531684984N103.06844405550343W>



Counties: Pennington, SD

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Least Tern <i>Sterna antillarum</i> Population: interior pop. No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8505	Endangered
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane <i>Grus americana</i> Population: Wherever found, except where listed as an experimental population There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p> <p>https://ecos.fws.gov/ecp/species/1626</p>	Breeds Dec 1 to Aug 31
<p>Golden Eagle <i>Aquila chrysaetos</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p>https://ecos.fws.gov/ecp/species/1680</p>	Breeds Jan 1 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

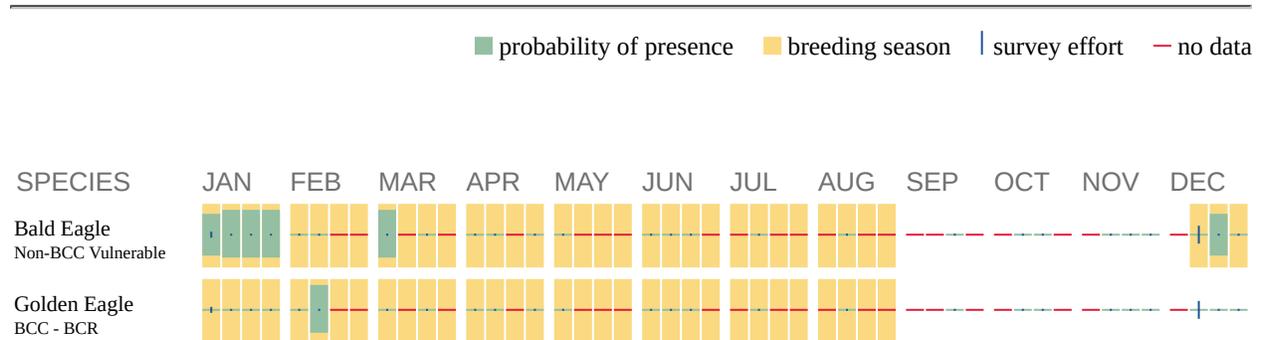
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
 2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
 3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).
-

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

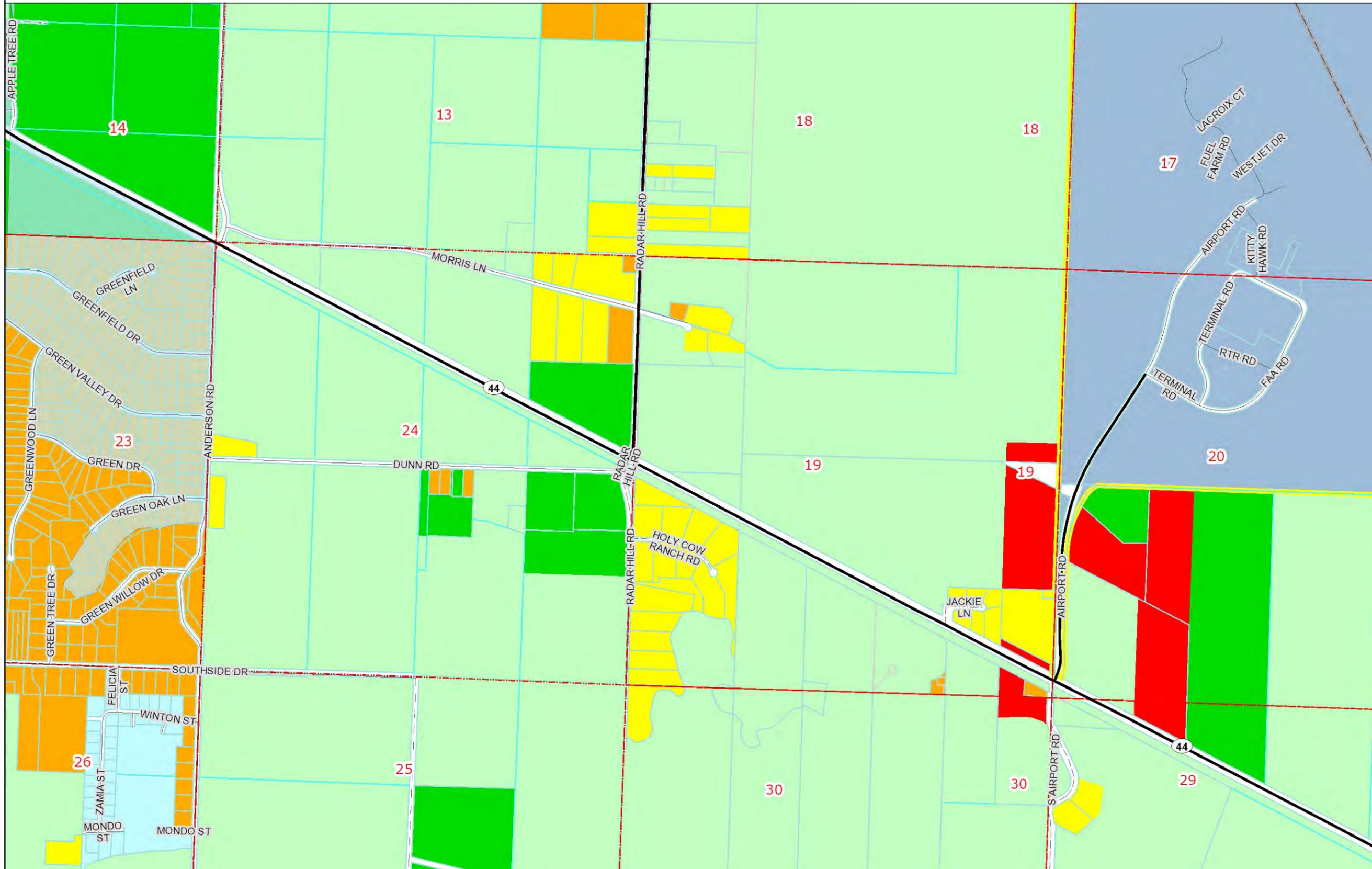
- [PEM1A](#)
- [PEM1C](#)
- [PEM1Ch](#)
- [PEM1Cx](#)

FRESHWATER POND

- [PABFh](#)

RIVERINE

- [R4SBC](#)
 - [R5UBFx](#)
-



Legend

Roads

- Interstate
- US highway
- SD highway
- County highway
- Main road
- Minor arterial
- Collector
- Ramp
- Paved road
- Unpaved road
- Unimproved road
- Trail
- Airport Runway
- Not yet coded

Section Lines 0-25k

- Tax Parcels

Lot Lines

- <Null>
- Lot Line
- Parcel Line

Urban MS4 Boundary

- Box Elder, SD Urban Cluster
- Rapid City, SD Urbanized Area

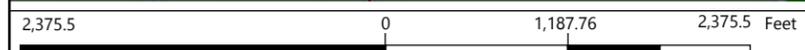
Rapid City Planned Development

- Rapid City Planned Development
- Rapid City Overlay Districts

Rapid City Zoning Districts

- Airport Zoning District
- Business Park District
- Central Business District
- Civic Center District
- Cement Plant
- Flood Hazard District
- General Agricultural District
- General Commercial District
- High Density Residential District
- Heavy Industrial District
- Hotel-Motel District
- Low Density Residential District 1
- Low Density Residential District 2
- Light Industrial District
- Medium Density Residential District
- Mining and Earth Resources Extrac

1: 14,253



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Map Notes:

APO TERMINAL AREA FORECAST DETAIL REPORT
Forecast Issued February 2019

RAP

Fiscal Year	Enplanements			AIRCRAFT OPERATIONS									Total Ops	Total Tracon Ops	Based Aircraft
	Air Carrier	Commuter	Total	Itinerant Operations				Local Operations							
				Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total				
REGION:AGL STATE:SD LOCID:RAP															
CITY:RAPID CITY AIRPORT:RAPID CITY RGNL															
1990	104,547	56,220	160,767	3,935	8,664	16,915	2,548	32,062	15,052	4,307	19,359	51,421	0	92	
1991	100,836	67,730	168,566	5,129	12,928	20,895	2,764	41,716	19,128	6,250	25,378	67,094	0	92	
1992	113,501	74,663	188,164	5,211	12,007	21,601	2,931	41,750	22,311	6,204	28,515	70,265	0	92	
1993	111,702	77,648	189,350	5,275	12,328	20,712	2,407	40,722	20,016	4,737	24,753	65,475	0	92	
1994	86,442	99,388	185,830	3,355	14,773	22,389	2,453	42,970	18,299	3,762	22,061	65,031	0	72	
1995	77,081	103,376	180,457	2,218	13,275	21,993	2,404	39,890	16,801	3,216	20,017	59,907	0	72	
1996	80,655	104,144	184,799	2,073	11,361	20,595	2,680	36,709	16,610	2,047	18,657	55,366	0	77	
1997	74,239	96,260	170,499	2,312	12,110	21,739	1,973	38,134	15,359	1,416	16,775	54,909	0	117	
1998	100,088	68,983	169,071	2,767	11,410	23,274	1,869	39,320	16,663	2,163	18,826	58,146	0	117	
1999	152,781	42,108	194,889	3,583	12,251	21,656	2,177	39,667	17,660	1,996	19,656	59,323	0	113	
2000	162,544	33,787	196,331	3,781	12,362	23,238	2,295	41,676	15,617	1,823	17,440	59,116	0	113	
2001	87,844	105,067	192,911	3,666	11,512	22,481	2,869	40,528	14,037	2,230	16,267	56,795	0	112	
2002	85,640	110,507	196,147	3,442	12,179	26,121	3,051	44,793	18,375	2,292	20,667	65,460	0	112	
2003	81,733	132,011	213,744	3,382	11,626	22,986	3,523	41,517	11,690	2,610	14,300	55,817	0	113	
2004	85,415	152,601	238,016	2,986	14,199	24,090	2,553	43,828	12,839	1,581	14,420	58,248	0	116	
2005	84,869	158,617	243,486	3,144	12,336	21,985	2,885	40,350	11,129	1,748	12,877	53,227	0	122	
2006	82,030	145,339	227,369	2,665	12,612	19,872	2,839	37,988	8,981	1,504	10,485	48,473	0	124	
2007	88,233	137,871	226,104	2,085	12,752	20,136	2,965	37,938	9,037	1,264	10,301	48,239	0	124	
2008	95,764	181,004	276,768	4,589	10,981	16,684	1,897	34,151	8,329	572	8,901	43,052	0	125	
2009	51,594	212,302	263,896	4,631	10,666	14,530	2,223	32,050	6,344	692	7,036	39,086	0	125	
2010	65,455	219,502	284,957	3,245	13,077	14,402	2,730	33,454	7,758	1,036	8,794	42,248	0	115	
2011	55,534	202,138	257,672	1,338	14,823	14,630	2,378	33,169	6,148	949	7,097	40,266	0	115	
2012	58,625	193,983	252,608	1,157	14,671	16,251	2,457	34,536	7,571	1,331	8,902	43,438	0	92	
2013	60,725	192,621	253,346	2,878	11,808	14,997	2,978	32,661	7,593	1,654	9,247	41,908	0	111	
2014	57,104	206,189	263,293	3,129	11,909	14,680	2,866	32,584	7,953	1,659	9,612	42,196	0	111	
2015	57,146	206,515	263,661	3,358	11,408	15,891	2,823	33,480	7,504	1,296	8,800	42,280	0	110	
2016	55,580	211,970	267,550	3,115	11,706	16,303	2,643	33,767	8,194	1,332	9,526	43,293	0	118	
2017	57,582	226,915	284,497	4,457	10,969	16,048	3,169	34,643	8,450	1,084	9,534	44,177	0	117	
2018*	58,976	238,157	297,133	3,944	11,811	16,853	1,736	34,344	11,533	599	12,132	46,476	0	119	
2019*	65,557	228,038	293,595	3,516	12,645	16,150	1,736	34,047	11,651	599	12,250	46,297	0	121	

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	Air Carrier	Commuter	Total	Itinerant Operations				Local Operations							
				Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total				
2020*	67,235	233,640	300,875	4,070	10,853	16,163	1,736	32,822	11,722	599	12,321	45,143	0	122	
2021*	68,476	237,641	306,117	4,331	10,179	16,176	1,736	32,422	11,793	599	12,392	44,814	0	124	
2022*	69,580	241,192	310,772	4,734	8,845	16,189	1,736	31,504	11,865	599	12,464	43,968	0	126	
2023*	70,688	244,888	315,576	5,232	7,113	16,202	1,736	30,283	11,937	599	12,536	42,819	0	127	
2024*	71,713	248,330	320,043	5,405	6,768	16,215	1,736	30,124	12,010	599	12,609	42,733	0	129	
2025*	72,672	251,562	324,234	5,475	6,844	16,228	1,736	30,283	12,083	599	12,682	42,965	0	131	
2026*	73,662	254,868	328,530	5,547	6,921	16,241	1,736	30,445	12,157	599	12,756	43,201	0	133	

2027*	74,730	258,404	333,134	5,624	6,999	16,254	1,736	30,613	12,231	599	12,830	43,443	0	135
2028*	75,895	262,264	338,159	5,708	7,078	16,267	1,736	30,789	12,306	599	12,905	43,694	0	137
2029*	77,097	266,244	343,341	5,795	7,158	16,280	1,736	30,969	12,381	599	12,980	43,949	0	139
2030*	78,330	270,340	348,670	5,884	7,238	16,293	1,736	31,151	12,457	599	13,056	44,207	0	141
2031*	79,591	274,506	354,097	5,975	7,319	16,306	1,736	31,336	12,533	599	13,132	44,468	0	143
2032*	80,878	278,692	359,570	6,066	7,401	16,319	1,736	31,522	12,610	599	13,209	44,731	0	145
2033*	82,163	282,870	365,033	6,157	7,484	16,332	1,736	31,709	12,687	599	13,286	44,995	0	147
2034*	83,472	287,120	370,592	6,250	7,568	16,345	1,736	31,899	12,765	599	13,364	45,263	0	149
2035*	84,810	291,455	376,265	6,345	7,653	16,358	1,736	32,092	12,843	599	13,442	45,534	0	151
2036*	86,167	295,822	381,989	6,441	7,739	16,371	1,736	32,287	12,922	599	13,521	45,808	0	153
2037*	87,525	300,200	387,725	6,537	7,826	16,384	1,736	32,483	13,001	599	13,600	46,083	0	155
2038*	88,904	304,637	393,541	6,634	7,914	16,397	1,736	32,681	13,081	599	13,680	46,361	0	157
2039*	90,317	309,205	399,522	6,734	8,003	16,410	1,736	32,883	13,161	599	13,760	46,643	0	159
2040*	91,758	313,867	405,625	6,836	8,093	16,423	1,736	33,088	13,242	599	13,841	46,929	0	161
2041*	93,133	318,292	411,425	6,933	8,184	16,436	1,736	33,289	13,323	599	13,922	47,211	0	163
2042*	94,503	322,733	417,236	7,030	8,277	16,449	1,736	33,492	13,405	599	14,004	47,496	0	165
2043*	95,890	327,183	423,073	7,127	8,371	16,462	1,736	33,696	13,487	599	14,086	47,782	0	167
2044*	97,329	331,750	429,079	7,227	8,466	16,475	1,736	33,904	13,570	599	14,169	48,073	0	169
2045*	98,786	336,383	435,169	7,328	8,562	16,488	1,736	34,114	13,654	599	14,253	48,367	0	171