February 28, 2025

Lucia Olivera
Division Administrator
Federal Highway Administration
585 Shepard Way
Helena, MT 59601-9785

Subject: 2024 KBP – Basecamp Dr to Airport Rd Re-evaluation of the Final and Re-evaluated Environmental Impact Statements
Project No. NH-MT-3(59)109
UPN 2038021

Dear Ms. Olivera,

The Montana Department of Transportation (MDT) Environmental Services Bureau has reviewed the subject project, the previously approved *US Highway 93 – Somers to Whitefish West Final Environmental Impact Statement (FEIS) and Final Section 4(f) Statement* (hereafter referred to as the 1994 FEIS), the previously approved *Re-evaluation (for the Kalispell Bypass [KBP] only) of the US Highway 93 – Somers to Whitefish West Final EIS and Final Section 4(f) Statement* (hereafter referred to as the 2006 REIS), current regulatory requirements, and current conditions at the project area. Based on this analysis, MDT concludes that the requirements of the National and Montana Environmental Policy Acts (NEPA and MEPA) can be met for the subject project through this 2024 Re-evaluation, as described at 23 Code of Federal Regulations (CFR) 771.129(b), rather than a Supplemental EIS, as described at 23 CFR 771.130. The 1994 FEIS was signed by your agency on September 12, 1994; the Record of Decision was signed on November 30, 1994; the REIS was signed on July 17, 2006.

The purpose of this letter is to request Federal Highway Administration (FHWA) concurrence that the following design elements proposed for the subject project would not result in significant changes that would require preparation of a Supplemental EIS. The following 2024 Re-evaluation focuses on changes to the design, the potential for new impacts, and new project-related issues that that have arisen since the approval of the 2006 REIS.

The subject project assessed in this 2024 Re-evaluation is located in the southern part of the City of Kalispell in Flathead County, Montana, in Sections 19, 20, 29, and 30, Township 28 North, Range 21 West. It begins at Reference Post (RP) 0.320 and proceeds north approximately 1.4 miles to RP 1.718. The project area for the subject project is shown on **Attachment 1**.

The project would be for the full-build design described in the REIS, which is a four-lane bypass with an intersection at Airport Road. An interim solution with a roundabout at Airport Road was implemented in 2010 when construction on the two-lane KBP began. The 2006 REIS identified KBP traveling under Airport Road; however this document did not indicate the type of intersection control at the ramp intersection.

The purpose of, and need for, the subject project has not changed since the approval of the 1994 FEIS. As stated on page 5 of the 2006 REIS, the 1994 FEIS indicated the primary transportation needs on US 93 were to reduce congestion on the existing facility, provide for planned growth and development, improve safety, provide for improved intermodal facility connections, and provide for enhanced scenic values.

Changes to the subject project that are the focus of this 2024 Re-evaluation are described in the following sections.

DESCRIPTION OF CHANGED CONDITIONS

Design elements and additional features that are the subject of this 2024 Re-evaluation and associated changes in the environmental considerations are described as follows; also refer to **Attachment 1**.

Design Element 1: Intersection Control at Airport Road

A preferred intersection alternative was never determined and outlined in either the 1994 FEIS or 2006 REIS. Four interchange options were developed for the KBP/Airport Road Interchange and associated secondary intersection at Airport Road/Cemetery Road in a 2020 Intersection Selection Study. A diamond interchange with roundabout-controlled termini has been selected as the preferred alternative. This interchange alternative was carried forward as it would minimize right-of-way (ROW) impacts, reduce conflict points, eliminate left turns across opposing traffic, improve traffic flow, and interchange capacity, and reduce long-term maintenance needs associated with traffic signals. Under the double roundabout (sometimes referred to as "dogbone" diamond interchange design), exit and entrance ramps would be added to provide all directional access to and from the KBP and Airport Road.

Subsequently, the roundabout located on Airport Road, north of the KBP, would also provide direct access with Cemetery Road.

The proposed double roundabout diamond interchange would require realigning Airport Road and Cemetery Road.

Design Element 2: Grade Separation with KBP Crossing Over Airport Road

The 1994 FEIS and 2006 REIS indicated that the KBP and Airport Road interchange would be grade separated, however; these documents indicated that Airport Road would travel over KBP. The proposed design includes KBP over Airport Road. The grade-separation change is proposed based on preliminary analysis of the roadway and site conditions. Restrictive right-of-way and topography created complex challenges related to geotechnical concerns, bridge issues, and roadway geometry. Proposing the KBP to travel over Airport Road mitigated these issues. The proposed grade separation also matches other interchange configurations along the corridor, including at the Foys Lake Road intersection located two-miles north of Airport Road.

Figure 1. KBP/ Airport Road Interchange Exhibit

Environmental Update 1: Wetland Delineation

Wetland resources for the proposed reconstruction have been fully delineated and preliminary impacts have been identified. Three wetland areas are documented in the project area. Please refer to the KBP US 93 to Airport Road Biological Resources Report (BRR)/ Preliminary Biological Assessment (PBA) dated January 2020 and the 2024 addendum to the BRR/PBA.

The 2006 REIS identified two wetlands within the project area. This fact is attributed to: 1) the project area has expanded since the 2006 REIS to accommodate interchange controls and 2) some of the wetlands have developed in roadside ditches along the existing roadway.

The preferred design alternative includes the following within the project area:

- 1.81 acres of wetland have been delineated;
- 1.11 acres of wetland were avoided;
- 0.05 acres of jurisdictional wetlands would be permanently impacted; and
- 0.65 acres of non-jurisdictional wetlands would be permanently impacted.

- All jurisdictional wetland impacts (0.05 acres) would be mitigated in accordance with Section 404 of the Clean Water Act (CWA), as needed. Generally, impacts less than 0.1 acres do not require compensatory mitigation. All wetland impacts (jurisdictional and non-jurisdictional) are subject to Executive Order (EO) 11990 and would be mitigated in accordance with EO 11990.

Environmental Update 2: Species of Concern and Special Status Species

Species listed as species of concern by the Montana Natural Heritage program were assessed in the 2020 BRR. Bald eagles were identified as a species of concern within the vicinity of the project area, however the closest nests were identified along the Flathead River and along the shore of Foys Lake.

Since the 2020 BRR, an additional bald eagle nest was identified near the project area. This nest is located along Ashley Creek and is approximately 450 feet away from the project area. Although the bald eagle is no longer listed under the ESA, it is still protected under the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, the Lacey Act, and the Montana Management Guidelines for Bald Eagles in Montana. Avoidance and minimization measures are discussed in the attached BRR addendum.

Environmental Update 3: Threatened and Endangered Species

Federally threatened, endangered, and candidate species with the potential to occur in the project area along with each species' respective federal status are listed in **Table 1.** There are four threatened species and one candidate species potentially occurring within the project area.

Table 1. Federally Listed Species Potentially Occurring within the Project Limits

Common Name	Scientific Name	Group	Status
Canada Lynx	*Lynx canadensis*	Mammal	Threatened
Grizzly Bear	*Ursus arctos horribilis*	Mammal	Threatened
North American Wolverine	*Gulo gulo luscus*	Mammal	Threatened
Monarch Butterfly	*Danaus plexippus*	Insect	Proposed Threatened
Suckley's Cuckoo Bumble Bee	*Bombus suckleyi*	Insect	Proposed Endangered
Spalding's Catchfly	*Silene spaldingii*	Flowering plant	Threatened

Effect determinations for the Canada lynx, grizzly bear, North American wolverine, and Spalding's Catchfly are discussed in the 2020 BRR. Effects to the Monarch Butterfly are discussed below.

The Monarch Butterfly is a large flying insect with bright orange wings surrounded by a black border and black veins. They are found in temperate regions and undergo long-distance

migrations, traveling more than 2,000 miles (in some cases) to overwintering sites. They prefer native prairies, foothills, open valley bottoms, roadsides, pastures, and marshes. Adults are sexually dimorphic and during the breeding season they lay their eggs on milkweed host plants. In December 2024, the USFWS proposed that the Monarch Butterfly warranted protection under the ESA as a threatened species.

No Monarch Butterflies or milkweed were identified within the project area limits. Due to the nature of the project and the lack of milkweed the project is not expected to jeopardize the continued existence of the Monarch butterfly, if the Monarch butterfly is listed the project would have no effect on the species.

The Suckley's cuckoo bumble bee is a medium sized, short-tongued and short haired bee. This species lacks pollen baskets, which separates them from most other bumble bees except for other cuckoo bees[1]. The Suckley's cuckoo bumble bee is a social parasite that takes control of host colonies of different bumble bees by infiltrating the hive and impersonating the original queen. The Suckley's cuckoo bumble bee then organizes the workers from the host colonies to gather pollen and rear the cuckoo bees larvae[2]. The preferred food plant genera for the Suckley's cuckoo bumble bee are *Aster, Centaurea, Cirsium, Trifolium, Chyrsothamnus, and Helichrysum* and can be found in a wide range of habitats that include montane meadows, prairies, farms, woodlands, boreal forests, agricultural land, and urban areas[3]. In December 2024, the USFWS proposed the Suckley's cuckoo bumble for listing as an endangered species under the ESA.

No Suckley's cuckoo bumble bees were observed within the project area, however suitable floral resources were observed. Additional floral resources were observed outside of the project area on sites that are less disturbed by traffic and other human disturbances. Due to the abundance of floral resources outside the project area and significant human disturbances within the project area, the project is not expected to jeopardize the continued existence of the Suckley's cuckoo bumble bee, and if the bee is listed the project would have no effect on the species.

Environmental Update 4: Historic and Cultural Resources

Historic and cultural resources for the project area were surveyed during three previous inventories (Ferguson and McKay 1999, Rossillon 2005, and McLeod 2009). However, the proposed interchange design has changed since these surveys necessitating additional surveys on the three additional parcels to assess the potential impacts to historic and cultural resources.

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[1] MTNHP. 2024. Montana Field Guide- Suckley Cuckoo Bumble Bee. Available online. https://fieldguide.mt.gov/speciesDetail.aspx?elcode=IIHYM24350. Accessed 03 February 2025.

[2] The Center for Biological Diversity. "Petition to List Suckely's Cuckoo Bumble Bee Under the Endangered Species Act and Concurrently Designate Critical Habitat". April 23, 2020. Accessed 03 February 2025.

[3] USFWS, 2024. "Suckley's Cuckoo Bumble Bee (Bombus suckleyi) Species Status Assessment, Version 1.0. Accessed 03 February 2025

The three additional parcels were surveyed for historic and cultural resources on July 12, 2024 in accordance with the Class III Inventory standards set forth by the Montana State Historical Preservation Office and the US Secretary of Interior. No new or previously recorded cultural resources were encountered during Class III Inventory for this project. SHPO concurrence with the no historic properties present finding was received on October 25, 2024.

Environmental Update 5: Traffic Noise Analysis

Traffic noise was estimated for the 2006 REIS using the Traffic Noise Model (TNM) 2.5 prescribed by FHWA for evaluating impacts from highway projects. A total of 29 impacted receptors were identified. Several noise mitigation measures were considered, including shifting the horizontal alignment, depressing the roadway, managing traffic, and constructing noise barriers. During construction of the interim configuration, an approximate 0.75-mile-long noise wall was constructed along the east side of the KBP, running from Bismarck Street to just south of Merganser Drive.

In September 2023, a new traffic noise analysis was conducted for the subject project to determine potential traffic noise impacts for the 20-year design year (i.e., 2044). Noise impacts were identified at two receptors located on the east and west side of KBP and south of the proposed Airport Road Interchange. Because traffic noise impacts were predicted, noise mitigation measures were evaluated; however, all measures were deemed infeasible or unreasonable per MDT's Noise Policy. Setbacks were also identified to mitigate traffic noise impacts to future developments.

PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

To evaluate potential cumulative effects, MDT conducted research to identify other known or programmed projects in the vicinity of the project area.

- KBP Basecamp Drive to US-93 includes roadway reconstruction and redesign of the US 93 and Basecamp Drive intersections. This project is scheduled for construction in 2028.
- The Parkland Meadows Development is currently being constructed in the northeast quadrant of Airport Road and Cemetery Road. This project involves the construction of multi-family development on 38 acres.

MDT coordinated with the City of Kalispell and Flathead County and determined that there are no significant transportation changes that have occurred or will occur in the near future that would significantly change conditions on the ground or already identified cumulative and indirect impacts. However, beneficial, cumulative impacts from the subject project and other Municipal Separate Storm Sewer System (MS4) improvement projects in the Kalispell area could be expected.

RE-EVALUATION

The following resource categories were previously examined in the 1994 FEIS and 2006 REIS and have been re-evaluated in the context of the subject project as currently proposed. Where applicable, new or updated information is provided. **Table 2** provides an overview of the resource categories and whether a change in impact or mitigation has occurred. Resource categories with changed conditions are described in greater detail as follows.

Table 2. 2024 Re-evaluation of Resource Categories

RESOURCE CATEGORY	CHANGE IN IMPACT? YES/NO	CHANGE IN MITIGATION? YES/NO	DISCUSSION
A. Transportation	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
B. Land Use	Yes	No	**2006 REIS:** Effects on future land use would be the same as those discussed in the 1994 FEIS. **2024 Re-evaluation:** Land use throughout the project area per the Flathead County's zoning map, is predominately zoned as SAG-10 suburban agricultural land. Additional zoning designations include R-1 suburban residential and R-4 two family residential at the northernmost portion, RA/1 PUD residential apartment planned unit development and B-2/PUD general business planned unit development at the southernmost portion, and I-1 light industrial near the northern portion of the project area. Permanent impacts from project related development are consistent with the 1994 FEIS and 2006 REIS. The project would not result in induced development between the interchanges; however, development could continue to be concentrated near interchanges. **Summary:** The changes in impact by incorporating these design elements would not be considered "significant" in terms of context and intensity.
C. Farmlands	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
D. Social	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
E. Economic Conditions	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
F. Pedestrian and Bicycle Facilities	No	No	**2006 REIS:** A bike path was planned to be constructed the entire length of the bypass, primarily on the east side of the bypass. **2024 Re-evaluation:** The project is anticipated to result in the approximate construction of 0.85 miles of paved shared-use pedestrian trails would connect current and future planned residential areas east of KBP, westward underneath the proposed KBP. **Summary:** The changes in impact by incorporating these design elements would not be considered "significant" in terms of context and intensity.
G. Air Quality	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
H. Noise	No	No	**2006 REIS:** 29 noise receptors were identified in the 2006 REIS. Several noise mitigation measures were considered, including shifting the horizontal alignment, depressing the roadway, managing traffic, and constructing noise barriers.

RESOURCE CATEGORY	CHANGE IN IMPACT? YES/NO	CHANGE IN MITIGATION? YES/NO	DISCUSSION
			2024 Re-evaluation: The project area was re-evaluated for noise impacts in 2023. Based on the 2023 noise analysis 27 noise receptors were identified with potential impacts at two noise receptors. Noise mitigation measures were evaluated; however they were determined to be infeasible or unreasonable per the MDT policy. Setback distances for future developments were determined to avoid impacts to future developments.
I. Water Resources	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
J. Wetlands	Yes	Yes	**2006 REIS:** Two wetlands were identified in the project area in the 2006 REIS. A total of 0.33 acres of permanently impacted wetland in the project area was identified in the 2006 REIS. **2024 Re-evaluation:** The project area was re-evaluated for wetlands in 2020 and 2023 due to changes in the construction area. Two additional wetlands were delineated within the project area since the 2006 REIS. Most of the wetlands within the current study area are developed within roadside ditches of the interim configuration. The project is anticipated to result in 0.70 acres of permanent wetlands impacts. All impacts will be mitigated in accordance with Section 404 of the CWA and EO 11990.
K. Fisheries & Wildlife	No	No	**2006 REIS:** No change in impact since the 1994 FEIS and 2006 REIS. **2024 Re-evaluation:** The bald eagle was delisted from the federal threatened and endangered species list since 2006. The project area was re-evaluated for bald eagle nests near the project area. One bald eagle nest is located along Ashley Creek approximately 450 feet from the project area, while the nearest nest previously identified was approximately 1.5 miles away along the Flathead River. Please see the attached BRR addendum for avoidance and minimization recommendations.
L. Threatened & Endangered Species	No	No	**2006 REIS:** No effect to threatened and endangered species. **2024 Re-evaluation:** Since the 2006 REIS several species have been removed from the threatened and endangered species list and others have been added. However, the project is still anticipated to have no effect to threatened and endangered species. Please refer to the 2020 BRR, BRR Addendum, and Environmental Update 3 for justification of the no effect determinations,
M. Floodplains	No	No	Potential impacts on floodplains from the Project would be consistent with those described in the 2006 reevaluation. Flooding risks as a result of the project are negligible since roadway elevations are set above the 100-year flood levels based on design requirements.
N. Historic and Cultural Resources	No	No	**2006 REIS:** Potential impacts to two cultural resources (McCormack Farm and Kalispell-Somers Railroad Spur Line) that identified in the 2006 REIS. Only the Kalispel-

RESOURCE CATEGORY	CHANGE IN IMPACT? YES/NO	CHANGE IN MITIGATION? YES/NO	DISCUSSION
			Somers Railroad Spur Line is within the current project area. Impacts to the railroad spur are to be mitigated with a historic marker describing the history and significance of the railroad spur. **2024 Re-evaluation:** A new cultural and historical resource Class III inventory was completed for the project area. No new cultural or historic resources were found. No new impacts are proposed.
O. Parks & Recreation	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
P. Hazardous Materials	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
Q. Visual Qualities	No	No	No change in impact since the 1994 FEIS and 2006 REIS.
R. Section 4(f)	No	No	No change in impact since the 1994 FEIS and 2006 REIS.

PERMITS

Environmental permitting is anticipated as a result of Environmental Update 1. Per Section 404 of the CWA a USACE NWP-14 is expected for 0.05 acres of jurisdictional wetland impacts from the subject project. All wetland impacts would be mitigated in compliance with the State's Wetland Mitigation Program regulations.

The project will require a floodplain development permit due to work within the floodway associated with Ashley Creek. SPA 124, 318 authorization, and floodplain permits would be sought for the subject project.

Based on the project's close proximity to the bald eagle nest along Ashley Creek, an Eagle Disturbance Take Permit from the USFWS is likely necessary.

PUBLIC AND AGENCY INVOLVEMENT

On September 10, 2020, MDT hosted two virtual public open houses for the subject project (12:00 PM and 5:30 PM MST). The open houses began with a presentation discussing the subject project, design elements, and additional features, followed by a question and answer session.

On October 8, 2020, MDT hosted a virtual Noise Analysis Neighborhood Meeting to discuss the noise analysis completed for the subject project. The meeting began with a presentation discussing results of the noise analysis, followed by a question and answer session.

Members of the public have also been encouraged to submit questions to the project team via email/telephone.

Both meetings were well attended by the public, and the project was generally favorably received. No substantive comments were received to lead MDT to believe that environmental issues exist that have not been considered. MDT believes that the subject project was accurately presented to the public.

CONCLUSION

Through this 2024 Re-evaluation, MDT has determined no substantive changes have occurred since the 1994 FEIS and REIS were signed. The environmental updates described in this 2024 Re-evaluation would not affect the ability of the Selected Alternative to meet the subject project's stated purpose and need, as described in the 1994 FEIS and 2006 REIS. Additionally, MDT has determined the impacts of the environmental updates are not individually or cumulatively significant or significantly different from those described in the 1994 FEIS or 2006 REIS. For these reasons, MDT has determined that the environmental updates would have no effect on the ultimate decision documented in the 1994 Record of Decision, and that approving this updated NEPA/MEPA evaluation would be consistent with 23 CFR 771.

REVIEWED/AUTHORIZED
By Tom Martin at 2:52 pm, Feb 28, 2025

Date _____

Tom Martin, P.E.
Environmental Services Bureau Chief

LUCIA HAYDEE OLIVERA
Digitally signed by LUCIA HAYDEE OLIVERA
Date: 2025.03.04 15:10:42 -07'00'

Date 3/4/2025

Federal Highway Administration

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Bob Vosen	Missoula District Administrator
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Tom Martin	Environmental Services Bureau Chief
Tom Gocksch	Environmental Services Bureau, Section Supervisor
Grant Rodway	Missoula District Project Development Engineer

Brian Hasselbach FHWA Deputy Division Administrator

John Heinley Project Development Engineer

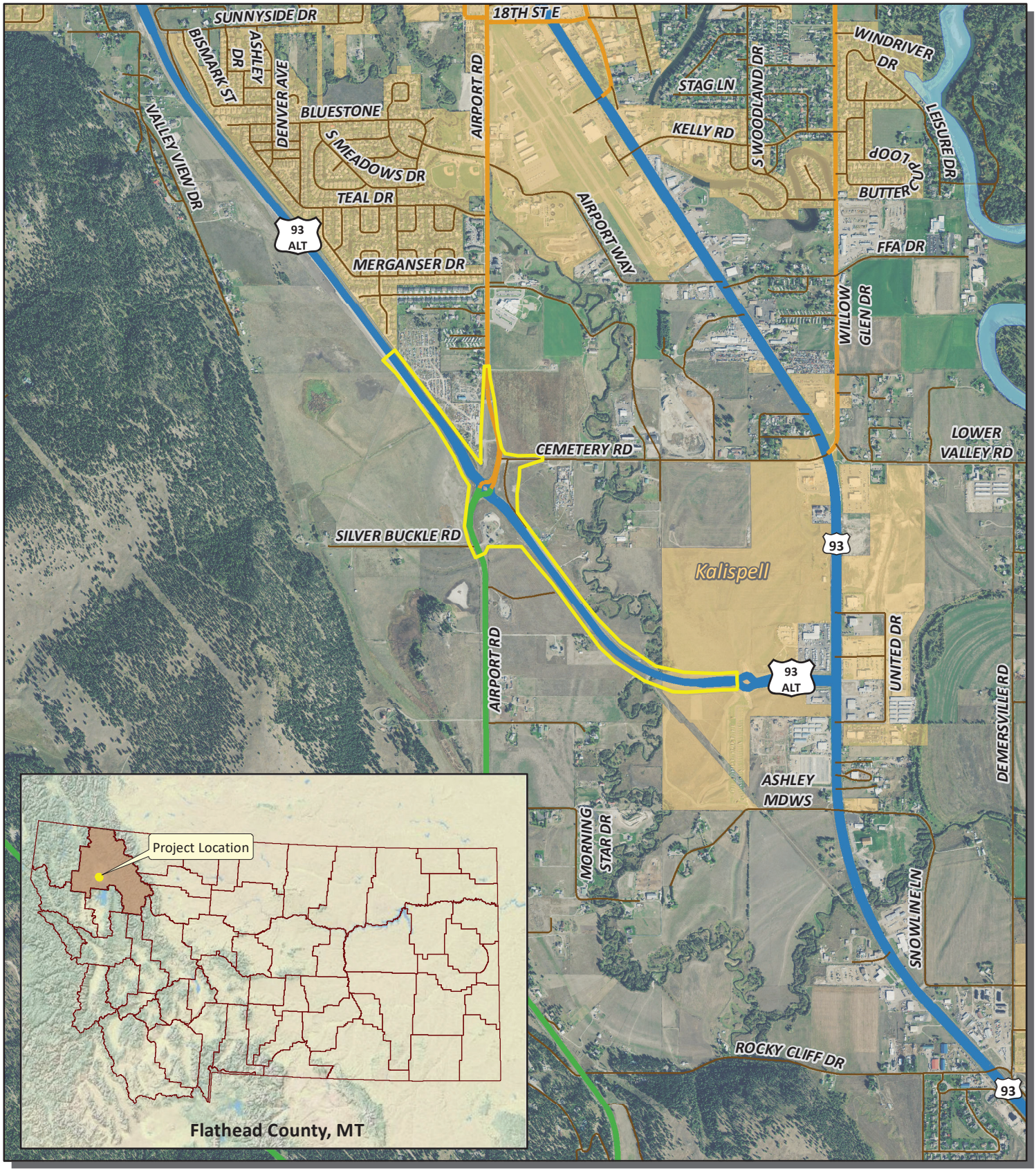
Montana Legislative Branch Environmental Quality Council

List of Attachments

1. Project Study Area Map
2. 2024 Biological Resource Report Addendum
3. Class III Cultural Resources Inventory
4. 2023 Detailed Noise Analysis
5. 2023 USFWS Threatened and Endangered Species List

Attachment 1

Project Study Area Map



- Project Area
- US Highway
- Secondary
- Urban
- Off System Route
- Incorporated City
- Rivers

SITE LOCATION MAP

KALISPELL BYPASS:

BASECAMP DRIVE TO AIRPORT ROAD
FLATHEAD COUNTY, MONTANA

Figure: 1

Notes:
Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, IGN, & the GIS User Community Copyright:©2013 National Geographic Society, i-cubed

KLJ

N W E S

Drawn By: jessicacallahan	NH-MT-3(59)109
Checked By: JC	UPN 2038021
	Date: 12/21/2023

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1 inch = 2,000 feet
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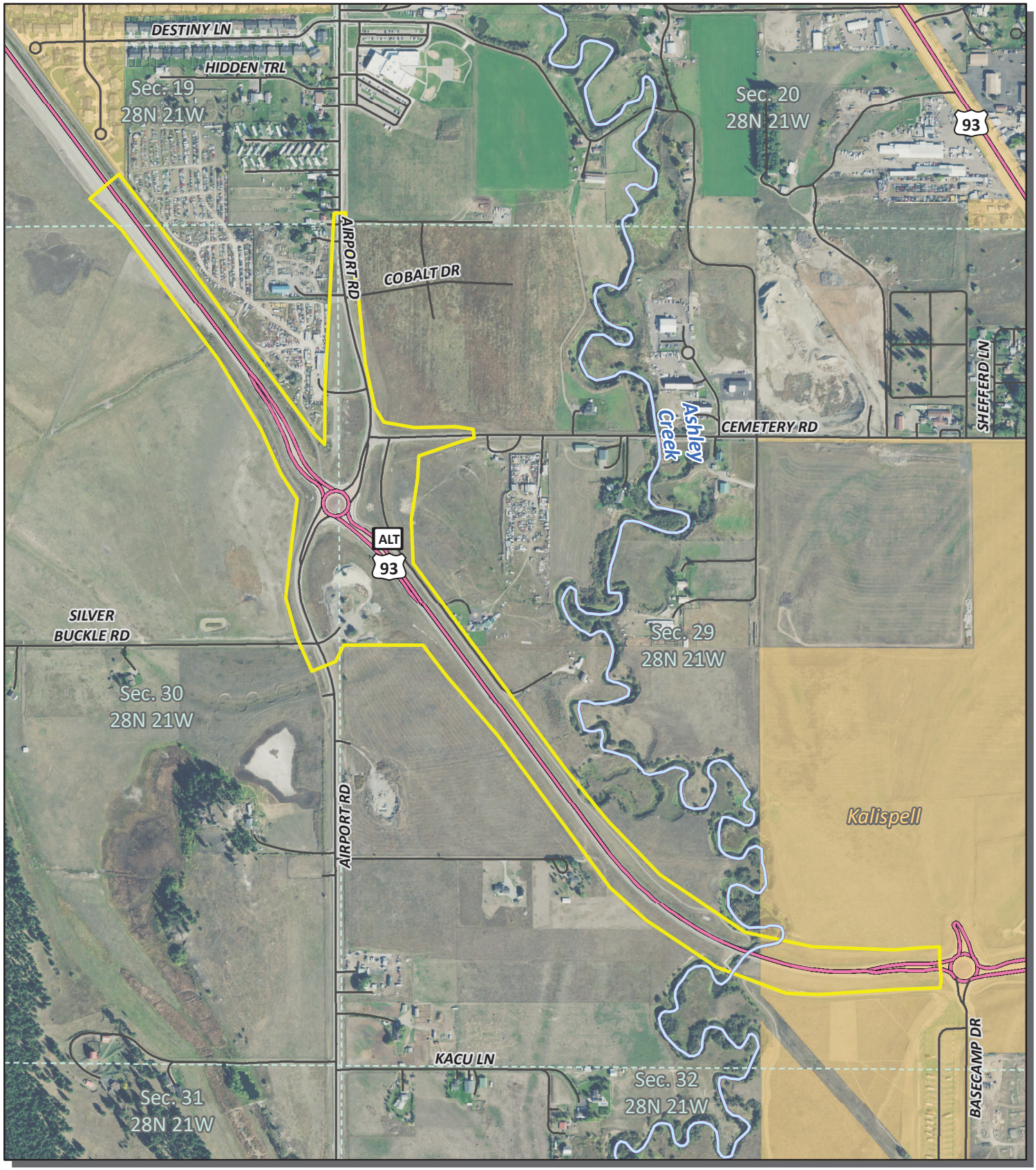

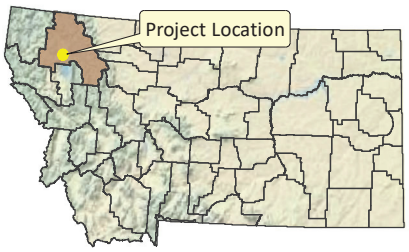

Flathead County, MT

PROJECT VICINITY

KALISPELL BYPASS:

BASECAMP DRIVE TO AIRPORT ROAD
FLATHEAD COUNTY, MONTANA

Figure: 2

Notes:
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N W E S

Drawn By: jessicacallahan	NH-MT-3(59)109
Checked By: JC	UPN 2038021
	Date: 12/21/2023

1:10,000
1 inch = 833 feet
0 400 800 1,600 Feet

Attachment 2

2024 Biological Resource Report
Addendum

BIOLOGICAL RESOURCE REPORT/ PRELIMINARY BIOLOGICAL ASSESSMENT

Kalispell Bypass: Basecamp Drive to Airport Road
Flathead County, Montana
NH-MT-3(59)109
UPN 2038021

January 2025

Prepared By:

Jessica Callahan
Environmental Specialist

Anna McCall
Environmental Specialist

Reviewed By:

Nicholas Sovner, CEP
Environmental Services Manager

Dillon McLain, PE
Project Engineer

Table of Contents

List of Figures and Tables

Appendices

1. INTRODUCTION

At the request of the Montana Department of Transportation (MDT), KLJ has prepared this Biological Resource Report Addendum to document changes from what was presented in the January 2020 Biological Resource Report (BRR). This addendum includes project design updates, wetlands update and U.S. Fish and Wildlife Service (USFWS) threatened and endangered species update.

1.1. BRR Addendum Summary

The following is discussed in this addendum.

- A preferred alternative has been identified for the project. The project design includes a diamond interchange with roundabout-controlled termini.
- An additional wetland was delineated within the project area since the 2020 BRR.
- The USFWS threatened and endangered species list has been updated to include the Monarch butterfly and remove the Yellow-billed Cuckoo.

Additional discussion in the sections below.

1.2. Project Updates

The Intersection Selection Study chose a preferred Airport Road interchange alternative in December 2021. KLJ completed the Alignment and Grade plans in December 2022. The chosen alternative moved into the design and included a grade separated interchange at the Airport Road intersection, where the Kalispell Bypass (KBP or US 93 Alt) travels over Airport Road via bridge with two roundabouts at the interchange ramp termini. The 2006 Re-evaluation of the 1994 US 93 – Somers to Whitefish West Final EIS and Final Section 4(f) Statement identified the KBP traveling under Airport Road and did not indicate the type of intersection control at the ramp intersections. In select locations, the proposed project design would extend beyond the study area assessed in the 2006 Re-evaluation. This addendum addresses the updates since the 2006 Re-evaluation and the 2020 BRR.

Table 1. Summary of 2020 BRR Resources

Resource	Change Since 2020 BRR	*Mitigation Measures*
Land Use and Land Ownership	No	None
Terrestrial Resources		
General Habitat/Vegetation Communities	No	» Restore areas disturbed construction with suitable species following construction.
Noxious Weeds/Regulated Plants	No	» Weed management during construction will be in accordance with MDT standard specifications and in accordance with Montana County Noxious Weed Management Act. » To reduce the spread and establishment of noxious weeds and to re-establish permanent wetland and upland vegetation, both wetland and upland seed mixes appropriate for the area and as determined by the MDT Reclamation Specialist should be utilized to reseed areas disturbed by construction activities. » All seed, mulch, or sod materials used for site revegetation should be free of noxious weeds and noxious weed seeds.

		» All construction equipment and vehicles should be cleaned prior to their transport to the Project Corridor.
General Wildlife	No	» Perform required clearing of trees and shrubs outside of the nesting season; between August 16th and April 15th. » Remove only those trees and shrubs in direct conflict with the permanent construction limits. » Do not remove, but trim trees and shrubs as necessary for equipment access and other temporary construction activities outside of the permanent construction limits. » A survey for nest sites should be conducted prior to construction through the general work area for presence of recent nesting activity. » Ground disturbances and equipment access outside the existing ROW should be limited to the smallest footprint possible and reclaimed immediately following construction. » Clean all construction equipment and vehicles prior to their transport to the project site. » Appropriate measures should be taken to prevent the introduction/spread of noxious weeds. » Implement approved BMP's and temporary erosion-control measures during all construction activities. » No construction equipment should be allowed to operate within the active channel of Ashley Creek or associated wetlands unless permitted to do so.
Wildlife Accommodation Needs and Opportunities	No	None
Aquatic Resources		
Waterways	No	» Prevent pollution and sedimentation of adjacent property, lakes, streams, rivers, ponds, wetlands, or other surface water according to the MDEQ authorization to discharge under the MPDES. » Clearing and grubbing should not be allowed beyond the construction limits or required clear zone in the vicinity of Ashley Creek or in wetland areas. Temporary clearing outside of construction limits, but within the ROW should be kept to the smallest area possible and reclaimed following construction. » All Clean Water Act (CWA) Section 404 permit conditions and state and federal water quality requirements/conditions must be compiled with, along applicable subsections of the MDT Standard Specifications for Road and Bridge Construction. Erosion control measures should be inspected regularly, especially during and following precipitation events. » Erosion/sediment-control devices should be installed at the edges of wetlands and other water before construction. All exposed soils should be permanently stabilized at the earliest practicable date. Best management practices (BMPs) should be included as required. » Perform instream work in the dry or low flow conditions to the maximum extent possible.

General Aquatic Species	No	» Instream work conducted with Ashley Creek shall be kept to the minimum amount necessary and completed in the shortest time possible, preferably during periods of low flow. » If possible, schedule instream construction activities during periods of low flow (summer/fall). » During all in-water or near-water work and equipment operations, work activities and staff would strictly adhere to typical State of Montana water quality BMPs. Silt fences, or other appropriate erosion-control measures, shall be used on adjacent ground to minimize silt run-offs during storm events. » No construction equipment should be allowed to operate within the active channel of Ashley Creek unless permitted to do so.
Wetlands	Yes	» See Section 4 below
Species of Concern and Special Status Species		
Plants	No	» None identified
Terrestrial Species	Yes	» See Section 5 below
Aquatic Species	No	» None identified
Threatened and Endangered Species Preliminary Biological Assessment	Yes	» See Section 6 below

The following sections are numbered to be consistent with the January 2020 BRR/PBA.

4. AQUATIC RESOURCES UPDATES

4.3. Wetlands

One waterway and two wetlands were identified in the January 2020 BRR/PBA as follows:

- Wetland1 a,b,c: This is a wetland complex located along the banks and in the floodplain of Ashley Creek.
- Wetland 2a & B: This is a wetland complex located north of Airport Road within the ROW
- Ashley Creek: A low gradient, low sinuosity stream that is classified as a Rosgen C-type stream

In 2023, the wetland boundaries of Wetlands 1a, b, c, and 2a,b were re-delineated along a similar boundary to the 2020 delineation. Ashley Creek was identified within the same channel as well. In addition to the wetlands mentioned above. Wetland 3 was delineated in the east quadrant of the Airport Road and KBP intersection. Please refer to the January 2020 BRR/PBA for a description of Wetlands 1a,b,c, 2a and b, and Ashley Creek. However, updated wetland determination forms for these resources are included in ***Appendix B.***

Wetland 3 is a linear ditch wetland that appears to capture water from the surrounding upland areas. Based on the linear nature of the ditch it appears that it may have been artificially straightened to convey water to Ashley Creek, however due to the low gradient along the ditch wetland conditions have established. Vegetation within the ditch consists of reed canary grass (FACW), Kentucky bluegrass (FAC), and slender plantain (FACW). Based on historical topography maps (Please refer to ***Appendix D***) Wetland 3 was historically connected to a channel on the west side of KBP. At the time of the 2023 field visit, it was unclear if Wetland 3 is still connected to the channel on the west side of KBP.

4.3.3. RECOMMENDED CONSERVATION MEASURES

- Permanent wetland impacts would be avoided and minimized to the extent practicable.
- Unavoidable impact to wetlands would be closely evaluated and compensatory mitigation would be developed as necessary.
- Implement approved BMPs and temporary erosion-control measures during all construction activities.
- Ensure all appropriate permits (e.g. CWA Section 404 and 401) are obtained prior to construction and comply with all permit conditions.
- Limit construction equipment operation in wetlands to perform necessary work and in accordance with the Temporary Facility Permitting Process.
- Disturbed wetlands should be revegetated with appropriate seed mix or plant material following construction completion.
- Appropriate measures should be taken to prevent the introduction/ spread of noxious weeds into wetland areas.

5. SPECIES OF CONCERN AND SPECIAL STATUS SPECIES UPDATES

5.2. Terrestrial Species

5.2.1. SPECIES OBSERVED/DOCUMENTED

In 2020, bald eagle nests were identified along the Flathead River and along the shore of Foys Lake. However, a bald eagle nest has been reported along the Ashley Creek nearer to the project area.

On Thursday, December 12th 2024, KLJ biologist, Leah Fischer, visited the project area to confirm the presence of a bald eagle nest along Ashely Creek. The project area and eagle nest were accessed by parking off the side of the KBP and walking over to Ashley Creek where the bald eagle nest was observed in a large ponderosa pine. The tree and nest are visible from the road and the walking trail. A bald eagle was observed flying around the nest and sitting in nearby trees during the site visit. The nest is intact and seems to be in use. Please see ***Appendix E*** for photos of the bald eagle nest.

The nest is located at 48,157897, -114.300014 and is approximately 450 feet from the project area. Please see ***Appendix A*** for a maps position in relation to the project area.

5.2.3. AVOIDANCE AND MINIMIZATION RECOMMENDATIONS

Based on the nest's close proximity to the project, coordination with the USFWS is likely necessary to determine if an Eagle Disturbance Take permit is needed. Generally, activities that are between 330 and 660 feet from a bald eagle nest require a take permit when work will occur during the breeding season. This requirement may not be recommended if the nest is located in an area with existing disturbances, however consultation with the USFWS is still required.

The National Bald Eagle Management Guidelines indicate that the approximate breeding season for bald eagles is between January 1st and August 15th, while Montana Bald Eagle Management Guidelines: An Addendum to Montana Bald Eagle Management Plan indicates that the breeding season is between February 1st and August 15th.

6. Threatened and Endangered Species Preliminary Biological Assessment Updates

Since the updated BRR/PBA was completed in 2020 the USFWS has updated species ranges for several species within the project area. Since the 2020 BRR, the Monarch butterfly has been added as a candidate species within the project area and the Yellow-billed Cuckoo has been removed. The updated species identified in the project area are listed in Table 2.

Table 2. Federally Listed Species Potentially Occurring in the Project Area

Scientific Name	Common Name	*Group*	Status	Habitat Present in the Project Area
Lynx canadensis	Canada lynx	Mammal	Threatened	No
Ursus arctos horribilis	Grizzly bear	Mammal	Threatened	No
Gulo gulo luscus	North American wolverine	Mammal	Threatened	No
Danaus plexippus	Monarch butterfly	Insect	Candidate	No
Silene spaldingii	Spalding's Catchfly	Plant	Threatened	No

6.5. Monarch Butterfly

The Monarch butterfly is a large, conspicuous orange and black butterfly. Adults lay their eggs on and larva exclusively feed on milkweed. Adults need a variety of flowering species to nectar on throughout their life. No Monarch butterflies or milkweed were identified within the project area during the June 2023 field visit.

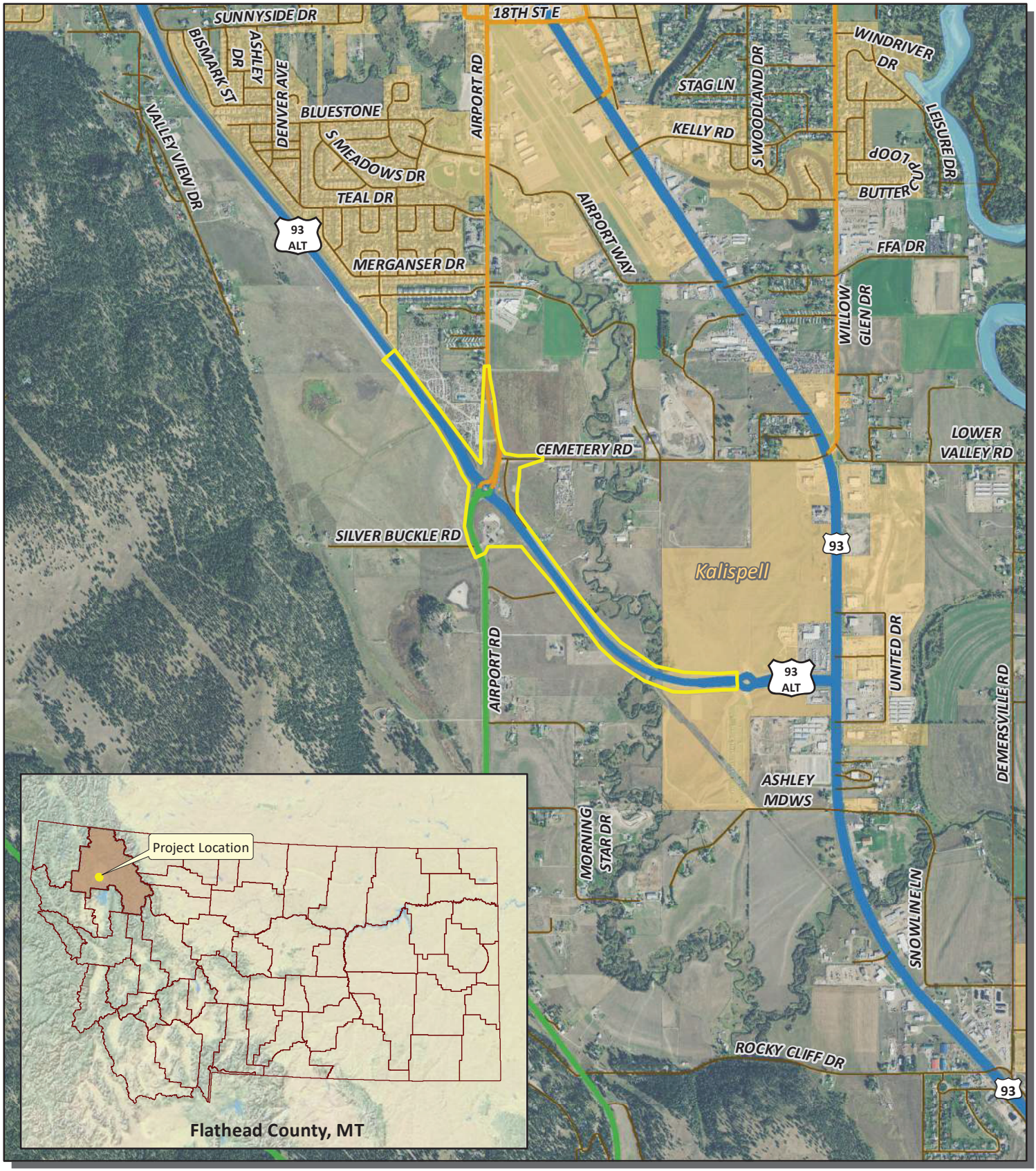
Please see the 2020 BRR/PBA for descriptions of the remaining species.

6.6. Recommended Conservation Measures

- Temporary clearing outside the construction limits but within the ROW should be kept to the smallest area possible and be reclaimed immediately following construction.
- Disturbed ground should be planted with native herbaceous, shrub, and tree species.
- Promptly clean up project related spills, litter, garbage, and debris.
- All food, food related items, petroleum products, antifreeze, garbage, and personal hygiene items should be stored inside a closed, hard-sided vehicle or commercially manufactured bear resistant container.

Appendix A

Figures



- Project Area
- US Highway
- Secondary
- Urban
- Off System Route
- Incorporated City
- Rivers

SITE LOCATION MAP

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Figure: 1

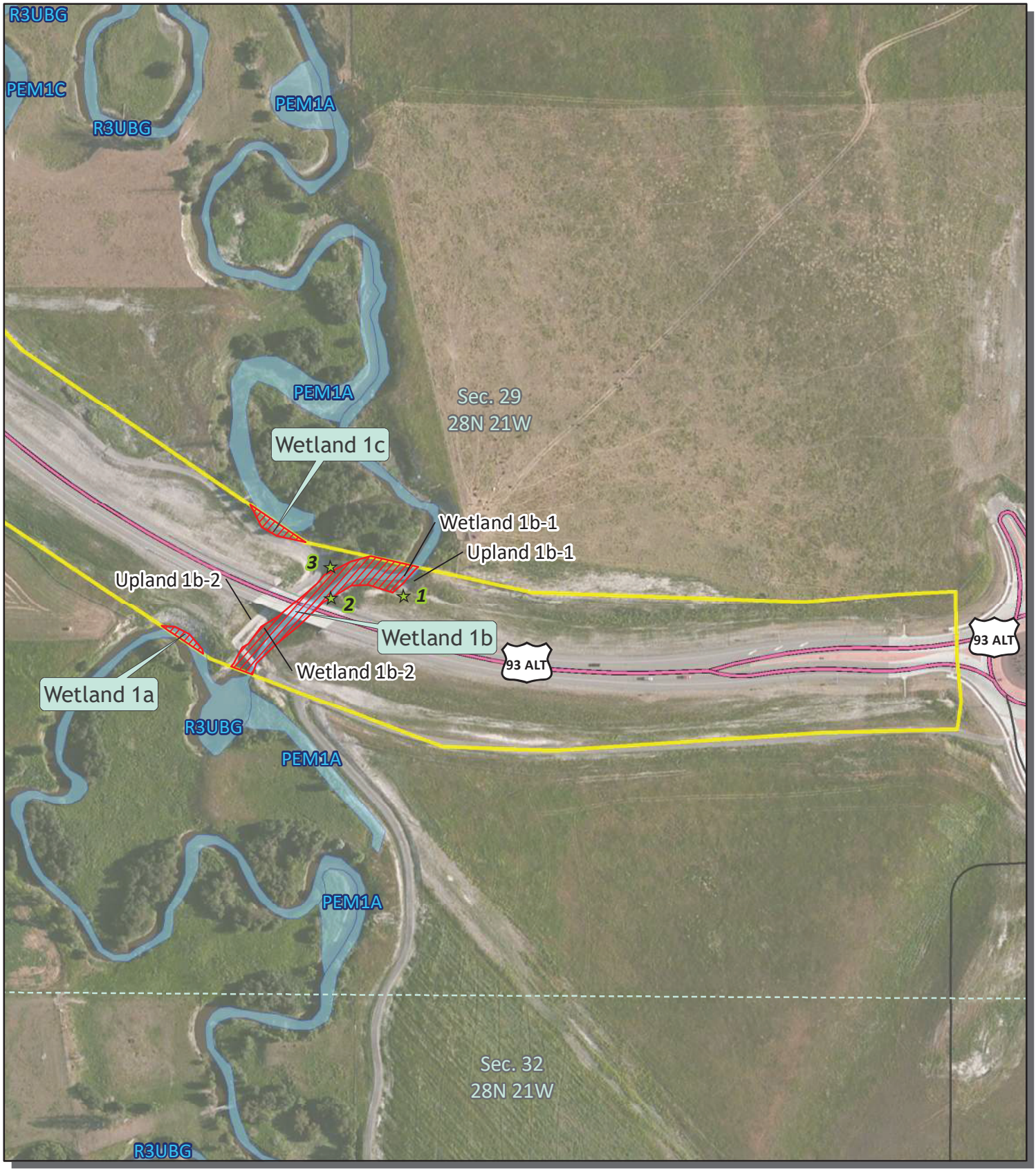
Notes:
Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, IGN, & the GIS User Community Copyright:©2013 National Geographic Society, i-cubed

KLJ

N W E S

Drawn By: jessicacallahan	NH-MT-3(59)109
Checked By: JC	UPN 2038021
	Date: 12/21/2023

1:24,000
1 inch = 2,000 feet
0 1,000 2,000 4,000 Feet



Project Area
Delineated Wetlands
Photo Point
Upland Test Hole
Wetland Test Hole
NWI Mapped Wetland

AQUATIC RESOURCES

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Page 1 of 4

Figure: 3

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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Drawn By: jessicacallahan

NH-MT-3(59)109
UPN 2038021

Checked By: JC

Date: 12/21/2023

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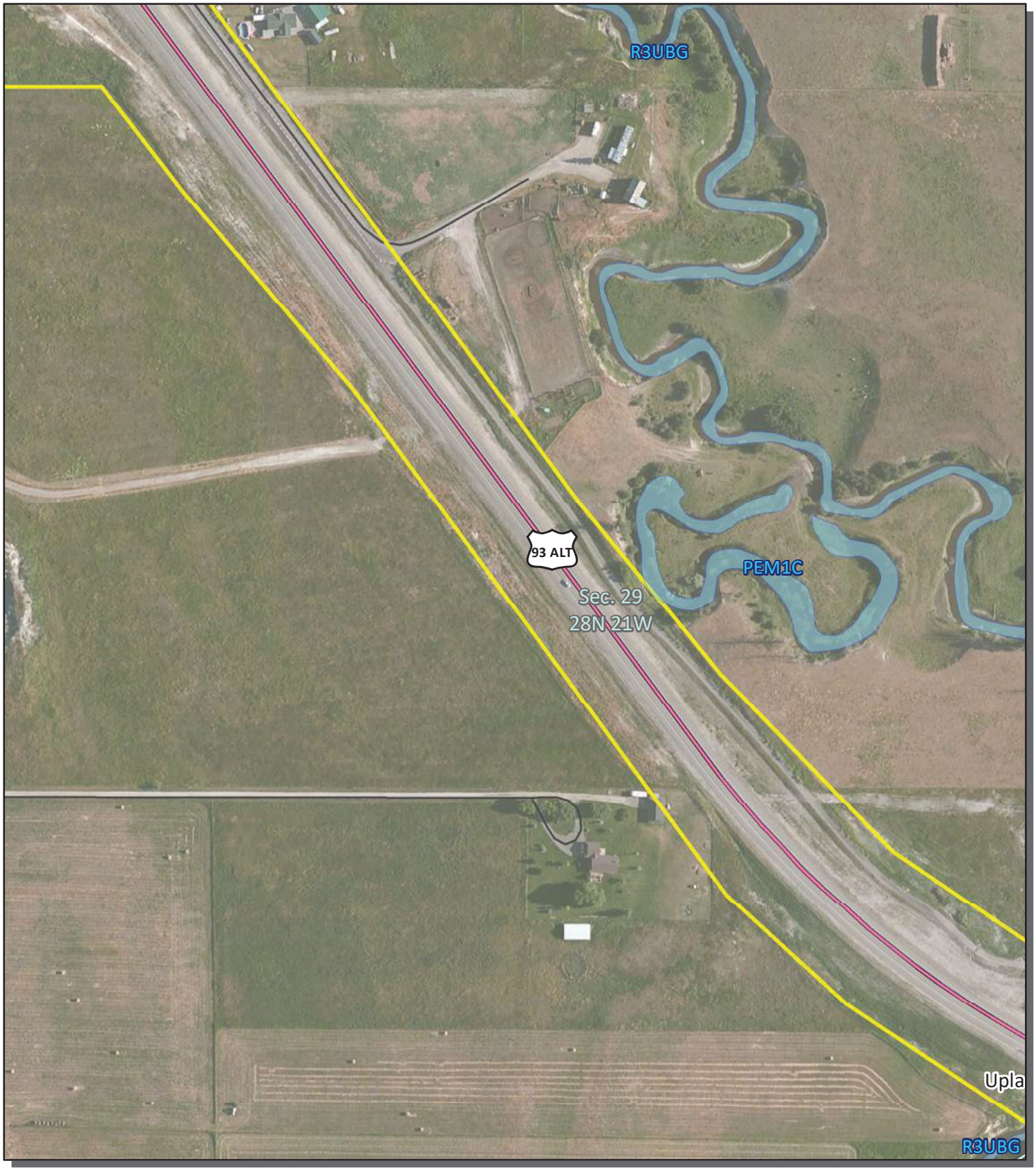
1 inch = 250 feet

0 100 200 400 Feet



- Project Area
- Delineated Wetlands
- Photo Point
- Upland Test Hole
- Wetland Test Hole
- NWI Mapped Wetland

AQUATIC RESOURCES

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Page 2 of 4

Figure: 3

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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Drawn By: jessicacallahan

NH-MT-3(59)109
UPN 2038021

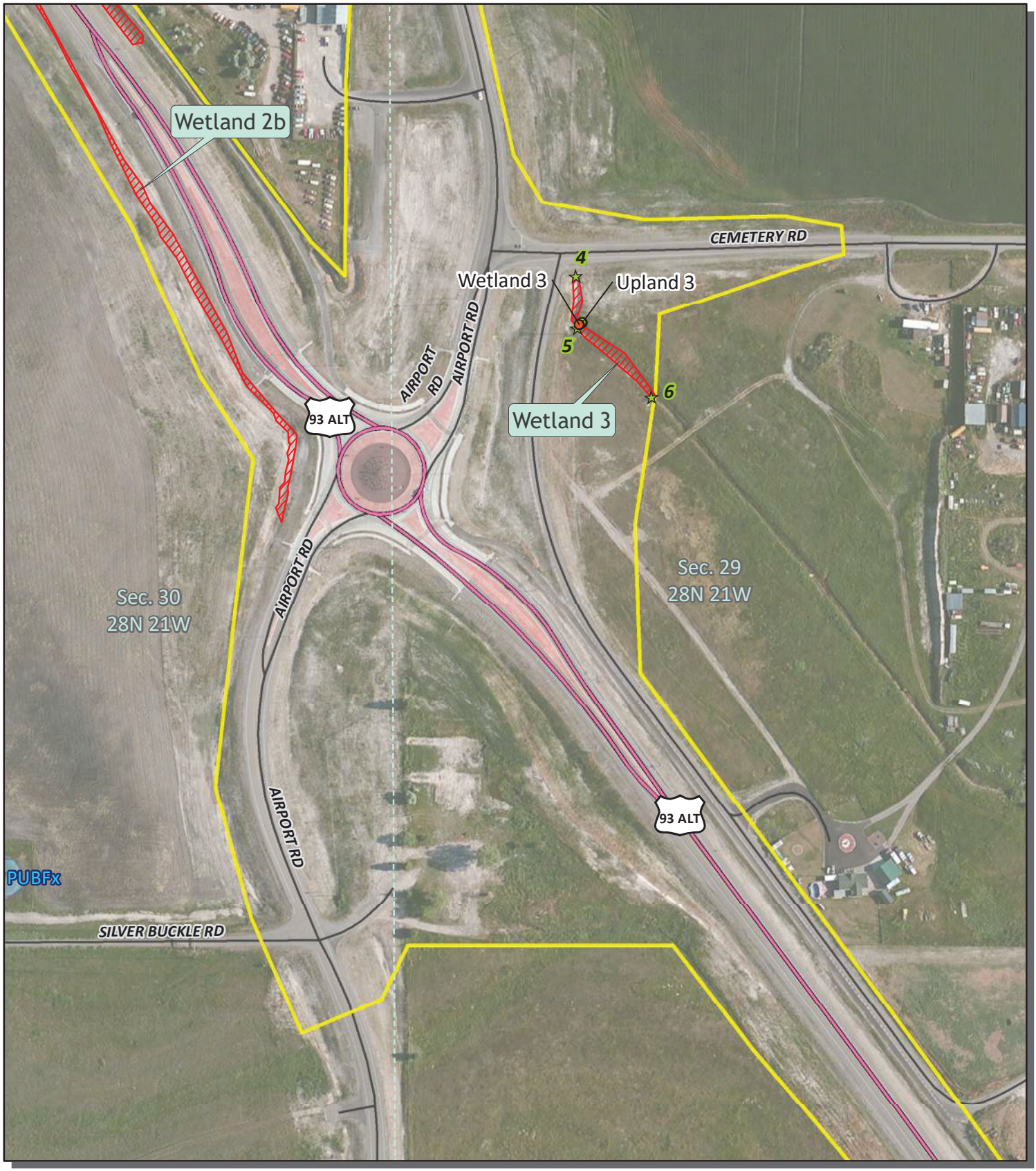
Checked By: JC

Date: 12/21/2023

1:3,000

1 inch = 250 feet

0 100 200 400 Feet



Project Area
Delineated Wetlands
Photo Point
Upland Test Hole
Wetland Test Hole
NWI Mapped Wetland

AQUATIC RESOURCES

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Page 3 of 4

Figure: 3

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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Drawn By: jessicacallahan

NH-MT-3(59)109
UPN 2038021

Checked By: JC

Date: 12/21/2023

1:3,000

1 inch = 250 feet

0 100 200 400 Feet

Project Area
Delineated Wetlands
Photo Point
Upland Test Hole
Wetland Test Hole
NWI Mapped Wetland

AQUATIC RESOURCES

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Page 4 of 4

Figure: 3

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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Drawn By: jessicacallahan

Checked By: JC

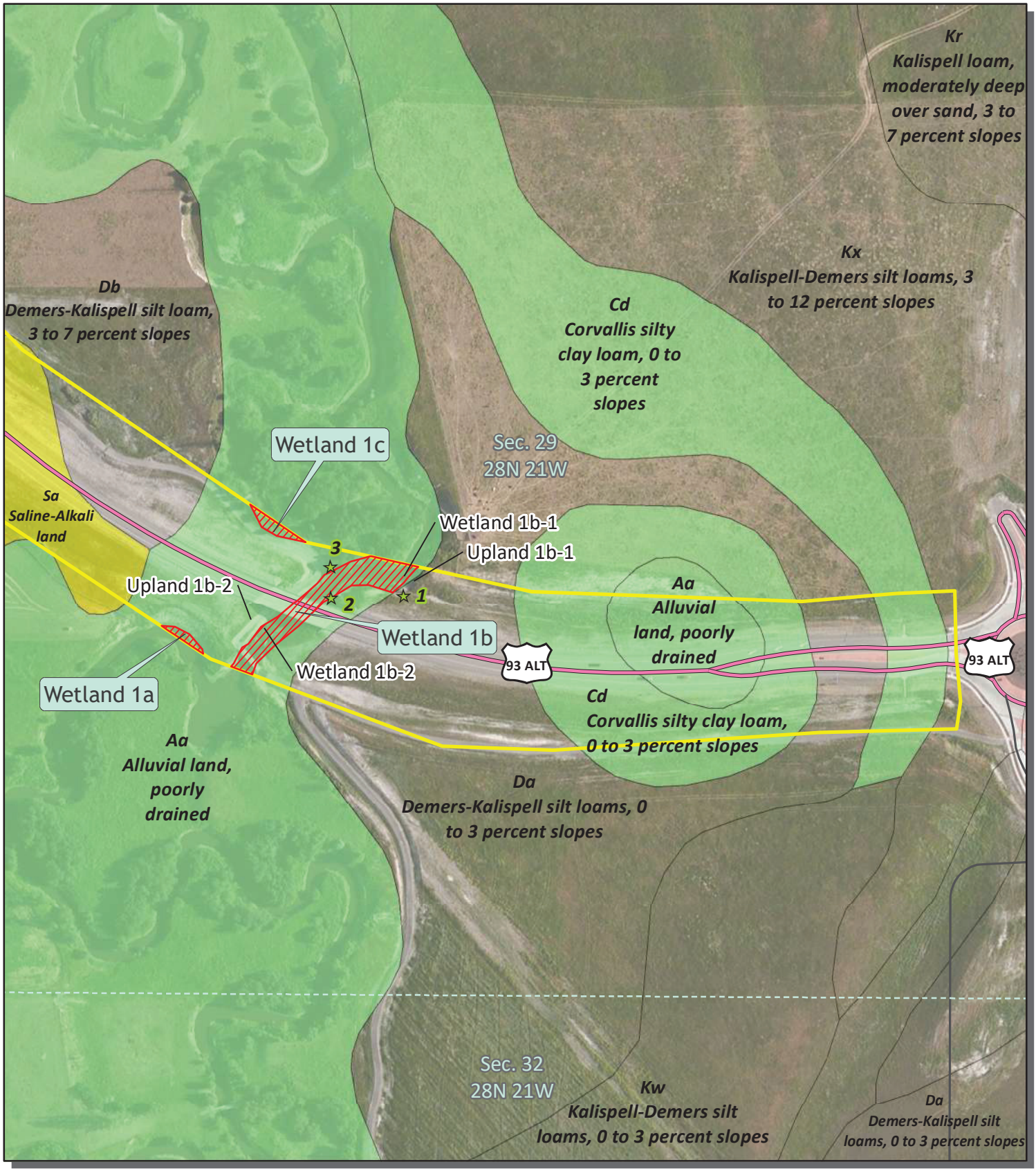
NH-MT-3(59)109
UPN 2038021

Date: 12/21/2023

1:3,000

1 inch = 250 feet

0 100 200 400 Feet



Project Area
Delineated Wetlands
Photo Point
Upland Test Hole
Wetland Test Hole

Soil Hydric Rating

Partially Hydric (33 to 65%)
Predominantly nonhydric (1 to 32%)
Nonhydric (0%)

HYDRIC SOIL RATING

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Page 1 of 4

Figure: 5

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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Drawn By: jessicacallahan

NH-MT-3(59)109
UPN 2038021

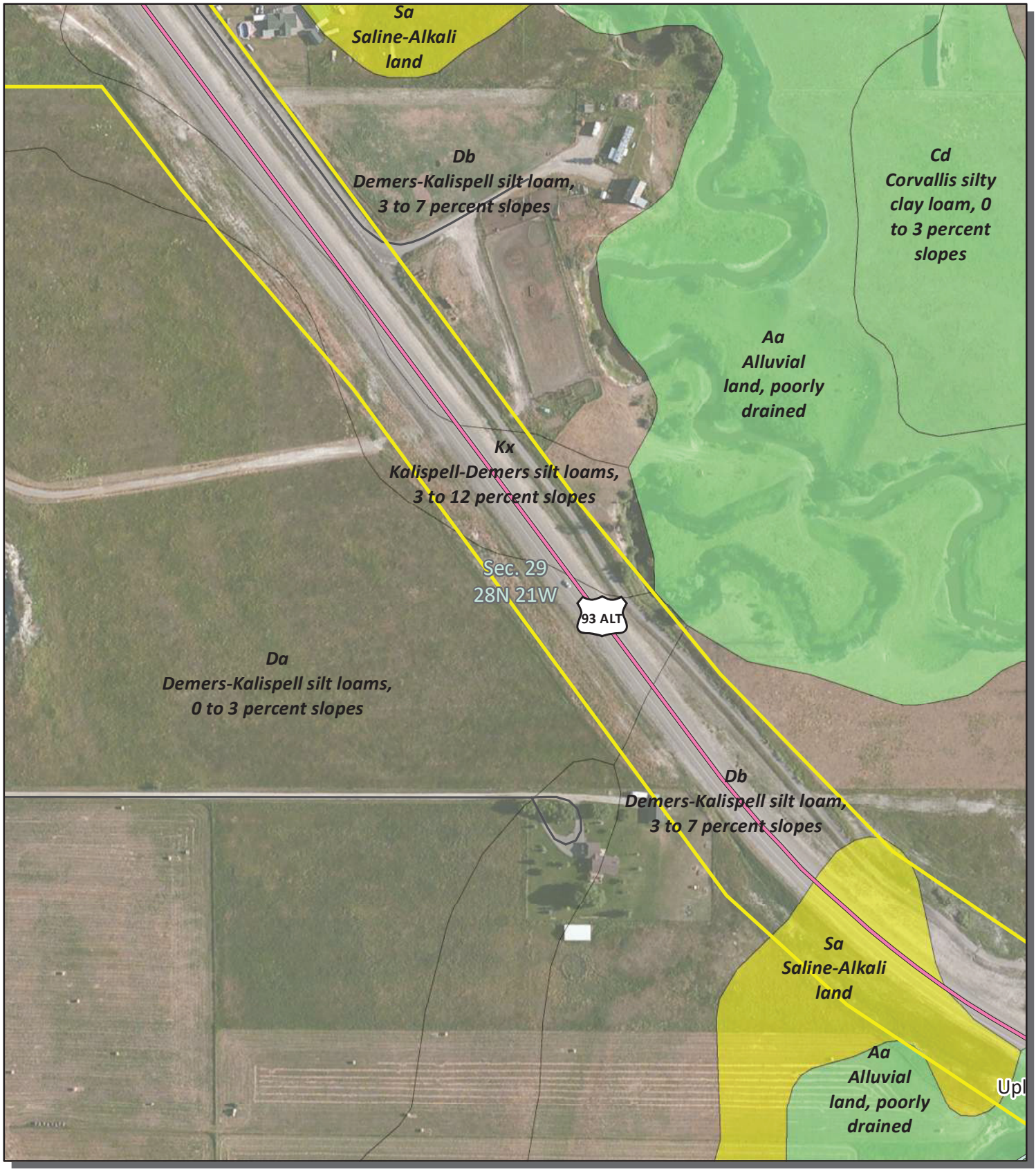
Checked By: JC

Date: 12/21/2023

1:3,000

1 inch = 250 feet

0 100 200 400 Feet



Project Area
Delineated Wetlands
Photo Point
Upland Test Hole
Wetland Test Hole

Soil Hydric Rating

Partially Hydric (33 to 65%)
Predominantly nonhydric (1 to 32%)
Nonhydric (0%)

HYDRIC SOIL RATING

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Page 2 of 4

Figure: 5

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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Drawn By: jessicacallahan

NH-MT-3(59)109
UPN 2038021

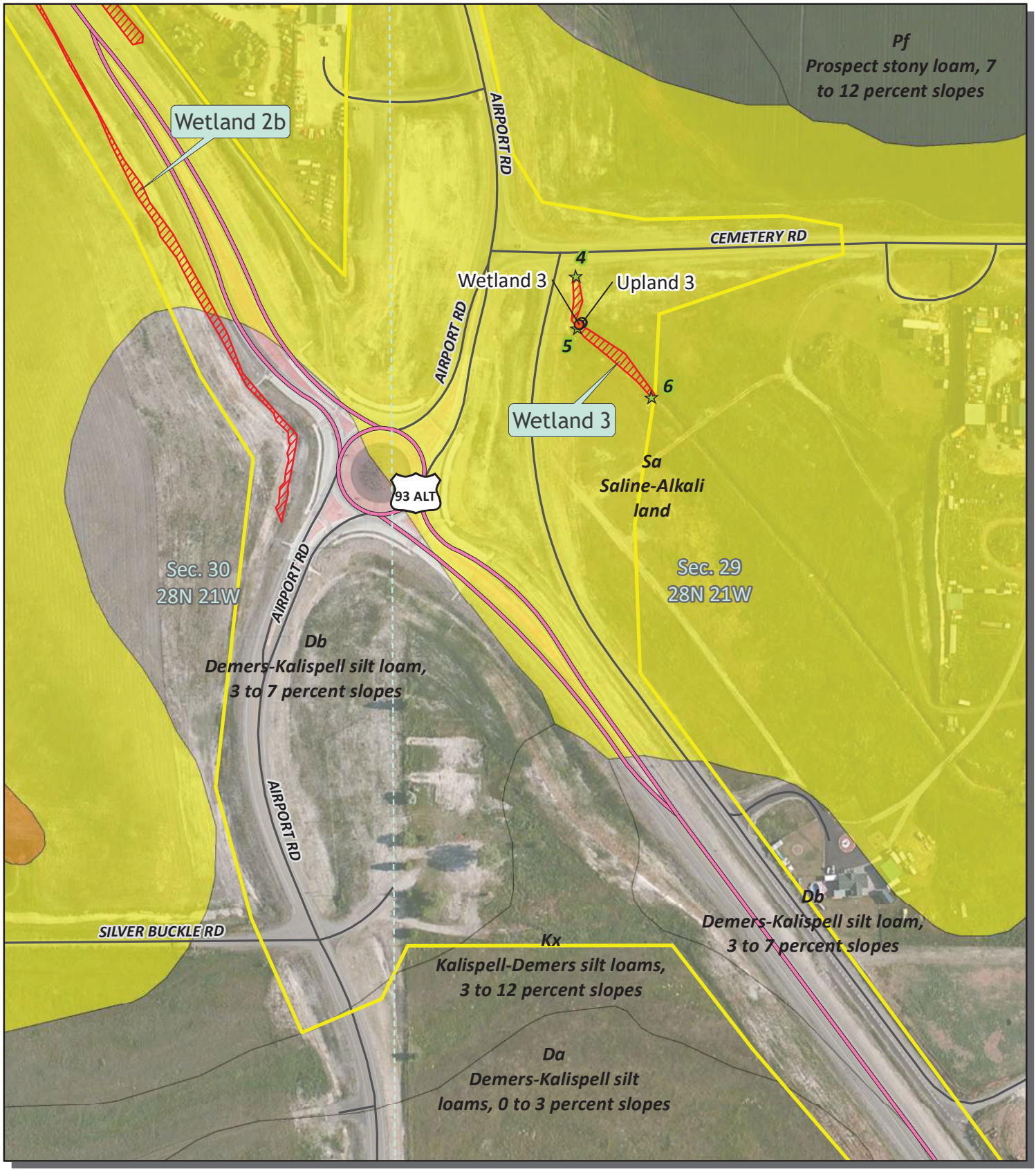
Checked By: JC

Date: 12/21/2023

1:3,000

1 inch = 250 feet

0 100 200 400 Feet



Project Area
Delineated Wetlands
Photo Point
Upland Test Hole
Wetland Test Hole

Soil Hydric Rating

Predominantly Hydric (66 to 99%)
Partially Hydric (33 to 65%)
Nonhydric (0%)

HYDRIC SOIL RATING

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Figure: 5

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

KLJ

N W E S

Drawn By: jessicacallahan

NH-MT-3(59)109
UPN 2038021

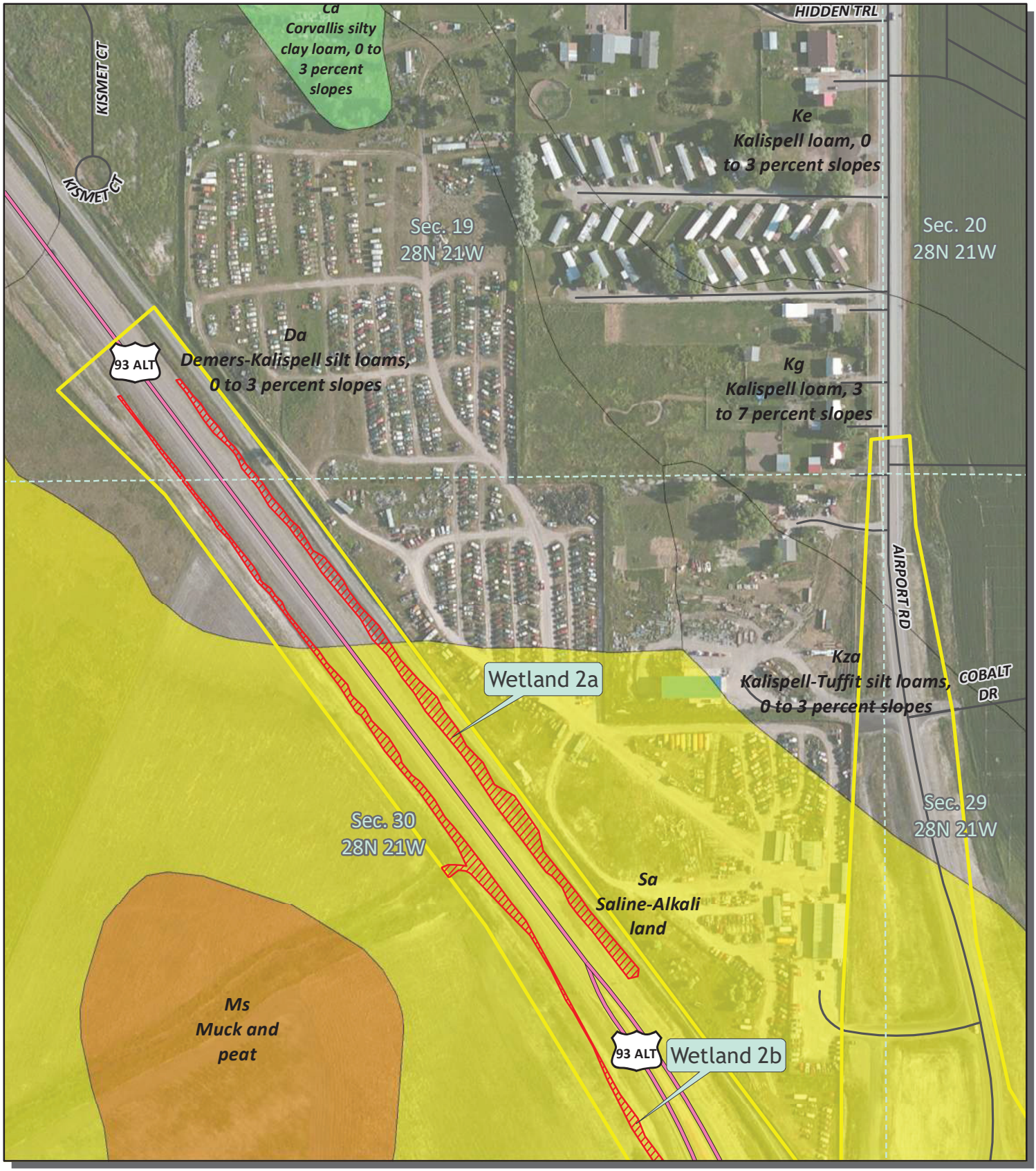
Checked By: JC

Date: 12/21/2023

1:3,000

1 inch = 250 feet

0 100 200 400 Feet



Project Area
Delineated Wetlands
Photo Point
Upland Test Hole
Wetland Test Hole

Soil Hydric Rating

Predominantly Hydric (66 to 99%)
Partially Hydric (33 to 65%)
Predominantly nonhydric (1 to 32%)
Nonhydric (0%)

HYDRIC SOIL RATING

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

Figure: 5

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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Drawn By: jessicacallahan

Checked By: JC

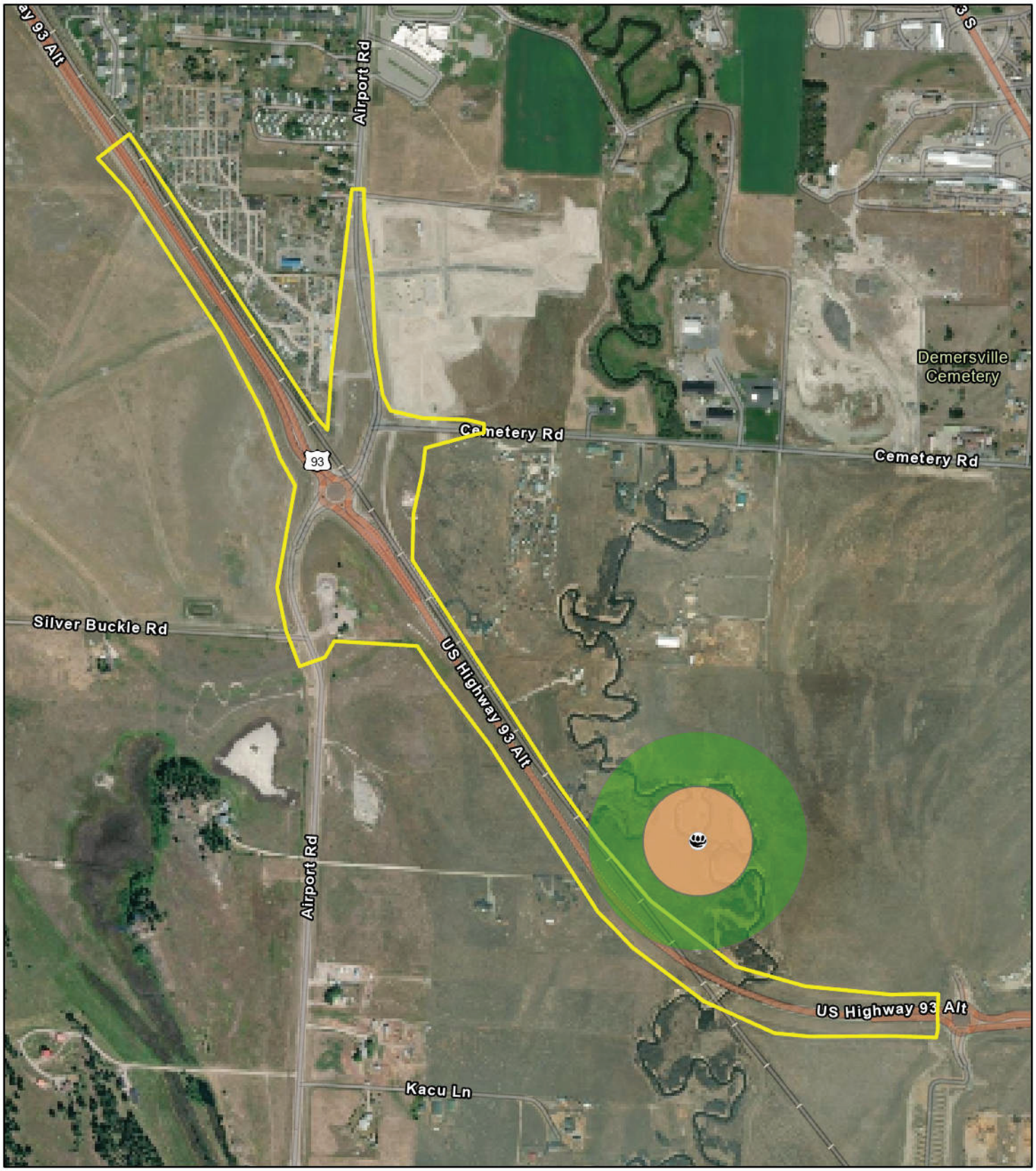
NH-MT-3(59)109
UPN 2038021

Date: 12/21/2023

1:3,000

1 inch = 250 feet

0 100 200 400 Feet



Bald Eagle Nest
Nest 660' Buffer
Nest 330' Buffer
Project Area

BALD EAGLE NEST MAP

KBP - BASECAMP DRIVE TO AIRPORT ROAD
KALISPELL, MONTANA

Figure: 1

Notes:
2016 Aerial Imagery courtesy of ESRI (Maxar)

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UPN 2038021

NH-MT-3(59)109

Date: 12/23/2024

1:9,600

0 200 400 800
Feet

Appendix B

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Kalispell Bypass City/County: Flathead County Sampling Date: 2023-06-22

Applicant/Owner: MDT State: Montana Sampling Point: Wetland 1a

Investigator(s): Anna Gamez, Jessica Callahan Section, Township, Range: sec 29 T028N R021W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): LRR E, MLRA 44 Lat: 48.155652 Long: -114.298079 Datum: WGS84

Soil Map Unit Name: Demers-Kalispell silt loams, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:
All three wetland criteria are met. Area is a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Elaeagnus angustifolia*	10	Y	FAC
2.			
3.			
4.			
	10.0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Salix bebbiana*	10	Y	FACW
2.			
3.			
4.			
5.			
	10.0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	90	Y	FACW
2. *Cirsium arvense*	5	N	FAC
3. *Sonchis arvensis*	5	N	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	100.00	x 2 =	200.00
FAC species	15.00	x 3 =	45.00
FACU species	0.00	x 4 =	0.00
UPL species	5.00	x 5 =	25.00
Column Totals:	120.00 (A)		270.00 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:
All stratums are dominated by FAC or wetter species. Hydrophytic vegetation present.

SOIL

Sampling Point: Wetland 1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	100					L	
6-24	10YR 6/2	90	7.5YR 5/8	10	C	M	CL	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Soils meet the F3 hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ✓ No ___ Depth (inches): 18

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 5

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation was observed 8 inches below the soil surface with a water table at 18 inches. Area along the bank of Ashley Creek.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Kalispell Bypass City/County: Flathead County Sampling Date: 2023-06-22

Applicant/Owner: MDT State: Montana Sampling Point: Upland 1a

Investigator(s): Anna Gamez, Jessica Callahan Section, Township, Range: sec 29 T028N R021W

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____

Subregion (LRR): LRR E, MLRA 44 Lat: 48.155673 Long: -114.298066 Datum: WGS84

Soil Map Unit Name: Demers-Kalispell silt loams, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil ✓, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
Soil seems to be mixed in this area due to construction and sedimentation and erosion from Ashley Creek. Not a wetland based on a lack of hydrophytic vegetation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Elaeagnus angustifolia*	2	N	FAC
2.			
3.			
4.			
	2.0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Salix bebbiana*	2	N	FACW
2.			
3.			
4.			
5.			
	2.0	= Total Cover	
Herb Stratum (Plot size: 5)			
1. *Artemisia annua*	20	Y	UPL
2. *Cirsium arvense*	20	Y	FAC
3. *Cirsium vulgare*	20	Y	FACU
4. *Poa pratensis*	20	Y	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	80.0	= Total Cover	
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	2.00	x 2 =	4.00
FAC species	42.00	x 3 =	126.00
FACU species	20.00	x 4 =	80.00
UPL species	20.00	x 5 =	100.00
Column Totals:	84.00 (A)		310.00 (B)

Prevalence Index = B/A = 3.69

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:
Shrub species are at the edge of the plot

SOIL

Sampling Point: Upland 1a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 6/2	70	7.5YR 5/8	30	C	M	L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ **No** _____

Remarks:

The soil appears to be mixed due to construction that has occurred in the area as well as erosion and sedimentation from Ashley Creek.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Kalispell Bypass City/County: Flathead County Sampling Date: 2023-06-22

Applicant/Owner: MDT State: Montana Sampling Point: Wetland 1b

Investigator(s): Anna Gamez, Jessica Callahan Section, Township, Range: sec 29 T028N R021W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): LRR E, MLRA 44 Lat: 48.155431 Long: -114.299221 Datum: WGS84

Soil Map Unit Name: Alluvial land, poorly drained NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Salix interior*	10	Y	FACW
2.			
3.			
4.			
5.			
	10.0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	60	Y	FACW
2. *Festuca rubra*	35	Y	FAC
3. *Sonchis arvensis*	5	N	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	70.00	x 2 =	140.00
FAC species	35.00	x 3 =	105.00
FACU species	0.00	x 4 =	0.00
UPL species	5.00	x 5 =	25.00
Column Totals:	110.00 (A)		270.00 (B)

Prevalence Index = B/A = 2.45

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: Wetland 1b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 4/2	98	7.5YR 5/8	2	C	PL	FSL	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Soils meet the F3 hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ✓ No ___ Depth (inches): 24

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 12

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Kalispell Bypass City/County: Flathead County Sampling Date: 2023-06-22

Applicant/Owner: MDT State: Montana Sampling Point: Upland 1b

Investigator(s): Anna Gamez, Jessica Callahan Section, Township, Range: sec 29 T028N R021W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 20-60

Subregion (LRR): LRR E, MLRA 44 Lat: 48.155474 Long: -114.299323 Datum: WGS84

Soil Map Unit Name: Alluvial land, poorly drained NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil ✓, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
The soils in this area appear to be mixed due to construction that has occurred as well as erosion and sedimentation caused by Ashley Creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Artemisia vulgaris*	50	Y	UPL
2. *Verbascum thapsus*	20	Y	FACU
3. *Oenothera biennis*	10	N	FACU
4. *Equisetum arvense*	10	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	90.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	0.00	x 2 =	0.00
FAC species	10.00	x 3 =	30.00
FACU species	30.00	x 4 =	120.00
UPL species	50.00	x 5 =	250.00
Column Totals:	90.00 (A)		400.00 (B)

Prevalence Index = B/A = 4.44

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: Upland 1b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 4/2	95	7.5YR 5/8	5	C	M	FSL	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ **No** _____

Remarks:

The soils in this area appear to be mixed due to construction that has occurred as well as erosion and sedimentation caused by Ashley Creek.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Kalispell Bypass City/County: Flathead County Sampling Date: 2023-06-22

Applicant/Owner: MDT State: Montana Sampling Point: Wetland 3

Investigator(s): Jessica Callahan , Anna Gamez Section, Township, Range: sec 29 T028N R021W

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): LRR E, MLRA 44 Lat: 48.164029 Long: -114.305328 Datum: WGS84

Soil Map Unit Name: Saline-Alkali land NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.	15	Y	
2.			
3.			
4.			
5.			
	15.0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	60	Y	FACW
2. *Poa pratensis*	15	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	75.0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 15

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	60.00	x 2 =	120.00
FAC species	15.00	x 3 =	45.00
FACU species	0.00	x 4 =	0.00
UPL species	0.00	x 5 =	0.00
Column Totals:	75.00 (A)		165.00 (B)

Prevalence Index = B/A = 2.2

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:
Ditch wetland

SOIL

Sampling Point: Wetland 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 6/2	98	5YR 4/2	2	C	M	CL	Prominent redox concentrations
6-12	10Y 3/1	100					CL	
12-24	10Y 5/1	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ✓ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Hydric soils are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): 8

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 6

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Ditch wetland

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Kalispell Bypass City/County: Flathead County Sampling Date: 2023-06-22

Applicant/Owner: MDT State: Montana Sampling Point: Upland 3

Investigator(s): Jessica Callahan , Anna Gamez Section, Township, Range: sec 29 T028N R021W

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): Convex Slope (%): 0-2

Subregion (LRR): LRR E, MLRA 44 Lat: 48.164027 Long: -114.307889 Datum: WGS84

Soil Map Unit Name: Saline-Alkali land NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Bromus inermis*	65	Y	UPL
2. *Festuca idahoensis*	15	N	FACU
3.			
4.			
5.			
	80.0 = Total Cover		
Herb Stratum (Plot size: 5)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1 =	0.00
FACW species	0.00	x 2 =	0.00
FAC species	0.00	x 3 =	0.00
FACU species	15.00	x 4 =	60.00
UPL species	65.00	x 5 =	325.00
Column Totals:	80.00 (A)		385.00 (B)

Prevalence Index = B/A = 4.81

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: Upland 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 6/1	100					LS	
12-24	7.5YR 6/1	100					LS	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Sandy and very dry

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (**LRR A**)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix C

MWAM Forms

MDT Montana Wetland Assessment Form (revised March 2008)

1. Project Name: Kalispell Bypass Airport Road to Basecamp Drive **2. MDT Project #:** NH-MT-3(59)109 **Control #:** UPN 2038021

3. Evaluation Date: 12/12/2023 **4. Evaluator(s):** Jessica Callahan **5. Wetlands/Site #(s):** Wetland 1a, b, c

6. Wetland Location(s): i. Legal: T28N,R21W,29

Latitude/Longitude: 48.161413, -114.305951 : Wetland 1a
48.161413, -114.305951 : Wetland 1b
48.156581, -114.298954 : Wetland 1c

ii. Approx. Stationing or Mileposts: 0.52

iii. Watershed: 4

Watershed Name, County: Flathead, Flathead

7. a. Evaluating Agency: KLJ

b. Purpose of Evaluation:

1. X Wetlands potentially affected by MDT project
2. ___ Mitigation wetlands; pre-construction
3. ___ Mitigation wetlands; post-construction
4. ___ Other:

8. Wetland size: 0.410 acres (estimated)

9. Assessment area (AA): 107.000 acres (estimated)

10. Classification of Wetland and Aquatic Habitats in AA

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% of AA
R	EM	NA	TE	10.00

Abbreviations: *(see manual for definitions)*

HGM Classes: Riverine (**R**), Depressional (**D**), Slope (**S**), Mineral Soil Flats (**MSF**), Organic Soil Flats (**OSF**), Lacustrine Fringe (**LF**);

Cowardin Classes: Rock Bottom (**RB**), Unconsolidated bottom (**UB**), Aquatic Bed (**AB**), Unconsolidated Shore (**US**), Moss-lichen Wetland (**ML**), Emergent Wetland (**EM**), Scrub-Shrub Wetland (**SS**), Forested Wetland (**FO**)

Modifiers: Excavated (**E**), Impounded (**I**), Diked (**D**), Partly Drained (**PD**), Farmed (**F**), Artificial (**A**)

Water Regimes: Permanent / Perennial (**PP**), Seasonal / Intermittent (**SI**), Temporary / Ephemeral (**TE**)

11. Estimated relative abundance: (of similarly classified sites within the same Major Montana Watershed Basin, see definitions)

COMMON

12. General condition of AA:

i. Disturbance: (use matrix below to determine [circle] appropriate response – see instructions for Montana-listed noxious weed and aquatic nuisance vegetation species (**ANVS**) list)

Conditions within AA	*Predominant conditions adjacent to (within 500 feet of) AA*		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is >=15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is <= 30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is > 30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is <= 15%.	low disturbance	low disturbance	moderate disturbance
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is <=	moderate disturbance	moderate disturbance	high disturbance
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is > 30%.	high disturbance	high disturbance	**high disturbance**

Comments: (types of disturbance, intensity, season, etc.): The action area is located in the southwest quadrant of the City of Kalispell, MT and is surrounded by industrial, residential and agricultural practices.

ii. Prominent noxious, aquatic nuisance, & other exotic vegetation species: Russian olive, knapweed, smooth brome. reed canary grass

iii. Provide brief descriptive summary of AA and surrounding land use/habitat: The action area is located in the southwest quadrant of the City of Kalispell, MT and is surrounded by industrial, residential and agricultural practices.

13. Structural Diversity: (based on number of "Cowardin" ***vegetated*** classes present [do not include unvegetated classes], see #10 above)

Existing # of "Cowardin" Vegetated Classes in AA	**Initial Rating**	**Is current management preventing (passive) existence of additional vegetated classes?**		**Modified Rating**
>= 3 (or 2 if 1 is forested) classes	H	NA	NA	NA
2 (or 1 if forested) classes	**M**	NA	NA	NA
1 class, but not a monoculture	M	<-- NO	YES -->	L
1 class, monoculture (1 species comprises >= 90% of total cover)	L	NA	NA	NA

Comments: Shrubs and grasses are present within the wetland boundary. However, the herbaceous of the wetlands are dominated by Reed Canary Grass.

SECTION PERTAINING to FUNCTIONS & VALUES ASSESSMENT

14A. Habitat for Federally Listed or Proposed Threatened or Endangered Plants or Animals:

i. AA is Documented (D) or Suspected (S) to contain (circle one based on definitions contained in instructions): No usable habitat

Primary or critical habitat (list species) **Secondary habitat (list species)** **Incidental habitat (list species)**

ii. Rating (use the conclusions from i above and the matrix below to arrive at [circle] the functional points and rating)

Highest Habitat Level	*doc/primary*	*sus/primary*	*doc/secondary*	*sus/secondary*	*doc/incidental*	*sus/incidental*	*None*
Functional Points and Rating	1H	.9H	.8M	.7M	.3L	.1L	**0L**

Sources for documented use (e.g. observations, records, etc): IPaC and MTNHP

14B. Habitat for plant or animals rated S1, S2, or S3 by the Montana Natural Heritage Program: (not including species listed in14A above)

i. AA is Documented (D) or Suspected (S) to contain (circle one based on definitions contained in instructions): No usable habitat

Primary or critical habitat (list species) **Secondary habitat (list species)** **Incidental habitat (list species)**

ii. Rating (use the conclusions from i above and the matrix below to arrive at [circle] the functional points and rating)

Highest Habitat Level	*doc/primary*	*sus/primary*	*doc/secondary*	*sus/secondary*	*doc/incidental*	*sus/incidental*	*None*
S1 Species: *Functional Points and Rating*	1H	.8H	.7M	.6M	.2L	.1L	0L
S2 and S3 Species: *Functional Points and Rating*	.9H	.7M	.6M	.5M	.2L	.1L	**0L**

Sources for documented use (e.g. observations, records, etc): MTNHP

14C. General Wildlife Habitat Rating:

i. Evidence of overall wildlife use in the AA (circle substantial, moderate, or low based on supporting evidence):

Substantial (based on any of the following [check]):

__ observations of abundant wildlife #s or high species diversity (during any period)
__ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
__ presence of extremely limiting habitat features not available in the surrounding area
__ interviews with local biologists with knowledge of the AA

Minimal (based on any of the following [check]):

__ few or no wildlife observations during peak use periods
X little to no wildlife sign
X sparse adjacent upland food sources
__ interviews with local biologists with knowledge of the AA

Moderate (based on any of the following [check]):

__ observations of scattered wildlife groups or individuals or relatively few species during peak periods
__ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
__ adequate adjacent upland food sources
__ interviews with local biologists with knowledge of the AA

ii. Wildlife habitat features (Working from top to bottom, circle appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent vegetated classes must be within 20% of each other interms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see instructions for further definitions of these terms])

Structural diversity (see #13)	High								Moderate								Low			
Class cover distribution (all vegetated classes)	Even				Uneven				Even				Uneven				Even			
Duration of surface water in >=10% of AA	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
Low disturbance at AA (see #12i)	E	E	E	H	E	E	H	H	E	H	H	M	E	H	M	M	E	H	M	M
Moderate disturbance at AA (see #12i)	H	H	H	H	H	H	H	M	H	H	M	M	H	M	M	L	H	M	L	L
High disturbance at AA (see #12i)	M	M	M	L	M	M	L	L	M	M	**L**	L	M	L	L	L	L	L	L	L

iii. Rating (use the conclusions from i and ii above and the matrix below to arrive at [circle] the functional points and rating)

Evidence of wildlife use (i)	*Wildlife habitat features rating (ii)*			
	Exceptional	High	Moderate	Moderate
Substantial	1E	.9H	.8H	.7M
Moderate	.9H	.7M	.5M	.3L
Minimal	.6M	.4M	.2L	**.1L**

Comments: .

14D. General Fish Habitat Rating: (Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier, etc.]. If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then mark ___ **NA** and proceed to 14E.)

Type of Fishery: Cold Water **(CW)** **X** Warm Water **(WW)** ___ **Use the CW or WW guidelines in the user manual to complete the matrix**

i. Habitat Quality and Known / Suspected Fish Species in AA (use matrix to arrive at [circle] the functional points and rating)

Duration of surface water in AA	Permanent / Perennial						Seasonal / Intermittent						Temporary / Ephemeral					
Aquatic hiding / resting / escape cover	Optimal		Adequate		Poor		Optimal		Adequate		Poor		Optimal		Adequate		Poor	
Thermal cover optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	1E	.9H	.8H	.7M	.6M	.5M	.9H	.8H	.7M	.6M	.5M	.4M	.7M	.6M	.5M	.4M	.3L	.2L
FWP Tier II or Native Game fish species	.9H	.8H	.7M	.6M	.5M	.5M	.8H	.7M	.6M	.5M	.4M	.4M	.6M	.5M	.4M	.3L	.2L	.2L
FWP Tier III or Introduced Game fish	.8H	.7M	**.6M**	.5M	.5M	.4M	.7M	.6M	.5M	.4M	.4M	.3L	.5M	.4M	.3L	.2L	.2L	.1L
FWP Non-Game Tier IV or No fish species	.5M	.5M	.5M	.4M	.4M	.3L	.4M	.4M	.4M	.3L	.3L	.2L	.2L	.2L	.2L	.1L	.1L	.1L

Sources used for identifying fish sp. potentially found in AA: Water is permanently in Ashley Creek

ii. Modified Rating (NOTE: Modified score cannot exceed 1 or be less than 0.1)

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see Appendix E) occur in fish habitat? **X** *If yes, reduce score in i above by 0.1.*

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area, etc.- specify in comments) for native fish or introduced game fish? ___ *If yes, add 0.1 to the adjusted score in* ***i*** *or* ***iia.***

iii. Final Score and Rating: 0.5M **Comments:** MTDEQ

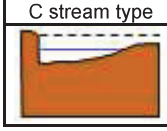
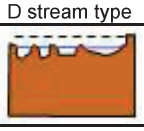
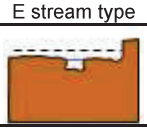
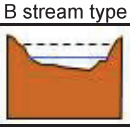
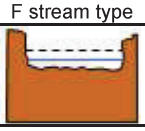
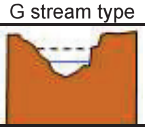
14E. Flood Attenuation: (Applies only to wetlands subject to flooding via in-channel or overbank flow. If wetlands in AA are not flooded from in-channel or overbank flow, mark ___ **NA** and proceed to 14F.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	Slightly entrenched - C, D, E stream types			Moderately entrenched – B stream type			Entrenched-A, F, G stream types		
% of flooded wetland classified as forested and/or scrub/shrub	75%	25-75%	<25%	75%	25-75%	<25%	75%	25-75%	<25%
AA contains **no outlet or restricted outlet**	1H	.9H	.6M	.8H	.7M	.5M	.4M	.3L	.2L
AA contains **unrestricted outlet**	**.9H**	.8H	.5M	.7M	.6M	.4M	.3L	.2L	.1L

Entrenchment ratio (ER) estimation – see User's Manual for additional guidance. Entrenchment ratio = (flood-prone width)/(bankfull width) Flood-prone width = estimated horizontal projection of where 2 x maximum bankfull depth elevation intersects the floodplain on each side of the stream.

150 /	50 =	**3.00**
Flood-prone width	*Bankfull width*	*Entrenchment ratio (ER)*

Slightly Entrenched ER = >2.2			**Moderately Entrenched ER = 1.41 – 2.2**	**Entrenched ER = 1.0 – 1.4**		
C stream type	D stream type	E stream type	B stream type	A stream type	F stream type	G stream type
						

ii. Are ≥10 acres of wetland in the AA subject to flooding **AND** are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA (circle)? ___ **Comments:** .

14F. Short and Long Term Surface Water Storage: (Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow. If no wetlands in the AA are subject to flooding or ponding, ___**NA** and proceed to 14G.)

i. Rating (Working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see instructions for further definitions of these terms].)

Estimated maximum acre feet of water contained in wetlands within the AA that are subject to periodic flooding or ponding	>5 acre feet			1.1 to 5 acre feet			<=1 acre foot		
Duration of surface water at wetlands within the AA	P/P	S/I	T/E	P/P	S/I	T/E	P/P	S/I	T/E
Wetlands in AA flood or pond **>= 5 out of 10 years**	1H	.9H	.8H	.8H	.6M	.5M	.4M	.3L	.2L
Wetlands in AA flood or pond **< 5 out of 10 years**	.9H	.8H	.7M	**.7M**	.5M	.4M	.3L	.2L	.1L

Comments: .

14G. Sediment/Nutrient/Toxicant Retention and Removal: (Applies to wetlands with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input. If no wetlands in the AA are subject to such input, ___**NA** and proceed to 14H.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [H=high, M=moderate, or L=low])

Sediment, nutrient, and toxicant input levels within AA	AA receives or surrounding land use with potential to deliver levels of sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use with potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% cover of wetland vegetation in AA	>= 70%		< 70%		>= 70%		< 70%	
Evidence of flooding / ponding in AA	Yes	No	Yes	No	Yes	No	Yes	No
AA contains **no or restricted outlet**	1H	.8H	.7M	.5M	.5M	.4M	.3L	.2L
AA contains **unrestricted outlet**	.9H	.7M	.6M	.4M	.4M	.3L	.2L	**.1L**

Comments: .

14H Sediment/Shoreline Stabilization: (Applies only if AA occurs on or within the banks or a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action. If 14H does not apply, ___**NA** and proceed to 14I.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

*% Cover of **wetland** streambank or shoreline by species with stability ratings of >=6 (see **Appendix F**).*	*Duration of surface water adjacent to rooted vegetation*		
	Permanent / Perennial	Seasonal / Intermittent	Temporary / Ephemeral
>= 65%	**1H**	.9H	.7M
35-64%	.7M	.6M	.5M
35%	.3L	.2L	.1L

Comments: .

14I. Production Export/Food Chain Support:

i. Level of Biological Activity (synthesis of wildlife and fish habitat ratings [circle])

General Fish Habitat Rating (14D.iii.)	**General Wildlife Habitat Rating (14C.iii.)**		
	E/H	M	L
E/H	H	H	M
M	H	M	**M**
L	M	M	L
N/A	H	M	L

ii. Rating (Working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14I.i.); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to duration of surface water in the AA, where P/P, S/I, and T/E are as previously defined, and A = "absent" [see instructions for further definitions of these terms].)

A	Vegetated component >5 acres						Vegetated component 1-5 acres						Vegetated component < 1 acre					
B	High		Moderate		Low		High		Moderate		Low		High		Moderate		Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	1H	.7M	.8H	.5M	.6M	.4M	.9H	.6M	**.7M**	.4M	.5M	.3L	.8H	.6M	.6M	.4M	.3L	.2L
S/I	.9H	.6M	.7M	.4M	.5M	.3L	.8H	.5M	.6M	.3L	.4M	.2L	.7M	.5M	.5M	.3L	.3L	.2L
T/E/A	.8H	.5M	.6M	.3L	.4M	.2L	.7M	.4M	.5M	.2L	.3L	.1L	.6M	.4M	.4M	.2L	.2L	.1L

iii. Modified Rating (NOTE: Modified score cannot exceed 1 or be less than 0.1.) **Vegetated Upland Buffer (VUB):** Area with >= 30% plant cover, = 15% noxious weed or ANVS cover, and that is not subjected to periodic mechanical mowing or clearing (unless for weed control).

a) Is there an average >= 50 foot-wide vegetated upland buffer around >= 75% of the AA circumference? ___*If yes, add 0.1 to the score in ii above.*

iv. Final Score and Rating: **0.70M** **Comments:** .

14J. Groundwater Discharge/Recharge: (check the appropriate indicators in i & ii below)

i. Discharge Indicators

_____ The AA is a slope wetland
_____ Springs or seeps are known or observed
_____ Vegetation growing during dormant season/drought
_____ Wetland occurs at the toe of a natural slope
_____ AA permanently flooded during drought periods
_____ Wetland contains an outlet, but no inlet
_____ Shallow water table and the site is saturated to the surface
_____ Other:

ii. Recharge Indicators

_____ Permeable substrate present without underlying impeding layer
_____ Wetland contains inlet but no outlet
_____ Stream is a known 'losing' stream; discharge volume decreases
_____ Other:

iii. Rating (use the information from i and ii above and the table below to arrive at [circle] the functional points and rating)

	Duration of saturation at AA Wetlands *FROM GROUNDWATER DISCHARGE OR WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM*			
Criteria	P/P	S/I	T	None
Groundwater Discharge or Recharge	1H	.7M	.4M	.1L
Insufficient Data/Information	**N/A**			

Comments: .

14K. Uniqueness:

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

Replacement potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland **or** plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types **and** structural diversity (#13) is high **or** contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types or associations **and** structural diversity (#13) is low-moderate		
Estimated relative abundance (#11)	rare	common	abundant	rare	common	abundant	rare	common	abundant
Low disturbance at AA (#12i)	1H	.9H	.8H	.8H	.6M	.5M	.5M	.4M	.3L
Moderate disturbance at AA (#12i)	.9H	.8H	.7M	.7M	.5M	.4M	.4M	.3L	.2L
High disturbance at AA (#12i)	.8H	.7M	.6M	.6M	.4M	.3L	.3L	**.2L**	.1L

Comments: .

14L. Recreation/Education Potential: (affords "bonus" points if AA provides recreation or education opportunity)

i. Is the AA a known or potential rec./ed. site: (circle) **X** (if 'Yes' continue with the evaluation; if 'No' then mark ___ **NA** and proceed to the overall summary and rating page)

ii. Check categories that apply to the AA: **X** Educational/scientific study; ___ Consumptive rec.; **X** Non-consumptive rec.; ___ Other :

iii. Rating:

Known or Potential Recreation or Education Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	.2H	.15H
Private ownership with general public access (no permission required)	.15H	.1M
Private or public ownership without general public access, or requiring permission for public access	.1M	**.05L**

Comments: .

General Site Notes
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FUNCTION & VALUE SUMMARY & OVERALL RATING FOR WETLAND/SITE #(S): Wetland 1a, b, c

Function & Value Variables	Rating	Actual Functional Points	Possible Functional Points	Functional Units: (Actual Points x Wetland Acreage)	Indicate the four most prominent functions with an asterisk (*)
A. Listed/Proposed T&E Species Habitat	L	0.00	1	0.00	
B. MT Natural Heritage Program Species Habitat	L	0.00	1	0.00	
C. General Wildlife Habitat	L	0.10	1	10.70	
D. General Fish Habitat	M	0.50	1	53.50	
E. Flood Attenuation	H	0.90	1	96.30	*
F. Short and Long Term Surface Water Storage	M	0.70	1	74.90	*
G. Sediment/Nutrient/Toxicant Removal	L	0.10	1	10.70	
H. Sediment/Shoreline Stabilization	H	1.00	1	107.00	*
I. Production Export/Food Chain Support	M	0.70	1	74.90	*
J. Groundwater Discharge/Recharge	NA				
K. Uniqueness	L	0.20	1	21.40	
L. Recreation/Education Potential (bonus points)	L	0.05	1	5.35	
Totals:		4.25	10.00	454.75	
Percent of Possible Score			43%		

Category I Wetland: (must satisfy one of the following criteria; otherwise go to Category II)
____ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
____ Score of 1 functional point for Uniqueness; **or**
____ Score of 1 functional point for Flood Attenuation and answer to Question 14E.ii is "yes"; **or**
____ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied and meets any one of the following criteria; otherwise go to Category IV)
____ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
____ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
____ Score of .9 or 1 functional point for General Fish Habitat; **or**
____ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
____ Score of .9 functional point for Uniqueness; **or**
____ Percent of possible score > 65% (round to nearest whole #).

Category III Wetland: (Criteria for Categories I, II, or IV not satisfied)

Category IV Wetland: (Criteria for Categories I or II are not satisfied and all of the following criteria are met; otherwise go to Category III)
X "Low" rating for Uniqueness; **and**
____ Vegetated wetland component 1 acre (do not include upland vegetated buffer); **and**
____ Percent of possible score 35% (round to nearest whole #).

OVERALL ANALYSIS AREA RATING: III

Summary Comments: .

MDT Montana Wetland Assessment Form (revised March 2008)

1. Project Name: Kalispell Bypass Airport Road to Basecamp Drive **2. MDT Project #:** NH-MT-3(59)109 **Control #:** UPN 2038021

3. Evaluation Date: 12/19/2023 **4. Evaluator(s):** Jessica Callahan **5. Wetlands/Site #(s):** Wetlands 2a,b

6. Wetland Location(s): i. Legal: T28N,R21W,30 ;T28N,R21E,19 **Latitude/Longitude:** 48.161413, -114.305951 : Wetland 2a
48.161413, -114.305951 : Wetland 2b

ii. Approx. Stationing or Mileposts: 1.45

iii. Watershed: 4

Watershed Name, County: Flathead, Flathead

7. a. Evaluating Agency: KLJ

b. Purpose of Evaluation:

1. X Wetlands potentially affected by MDT project
2. ___ Mitigation wetlands; pre-construction
3. ___ Mitigation wetlands; post-construction
4. ___ Other:

8. Wetland size: 1.250 acres (estimated)

9. Assessment area (AA): 107.000 acres (estimated)

10. Classification of Wetland and Aquatic Habitats in AA

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% of AA
D	EM	E	TE	5.00

Abbreviations: *(see manual for definitions)*

HGM Classes: Riverine (**R**), Depressional (**D**), Slope (**S**), Mineral Soil Flats (**MSF**), Organic Soil Flats (**OSF**), Lacustrine Fringe (**LF**);

Cowardin Classes: Rock Bottom (**RB**), Unconsolidated bottom (**UB**), Aquatic Bed (**AB**), Unconsolidated Shore (**US**), Moss-lichen Wetland (**ML**), Emergent Wetland (**EM**), Scrub-Shrub Wetland (**SS**), Forested Wetland (**FO**)

Modifiers: Excavated (**E**), Impounded (**I**), Diked (**D**), Partly Drained (**PD**), Farmed (**F**), Artificial (**A**)

Water Regimes: Permanent / Perennial (**PP**), Seasonal / Intermittent (**SI**), Temporary / Ephemeral (**TE**)

11. Estimated relative abundance: (of similarly classified sites within the same Major Montana Watershed Basin, see definitions)

ABUNDANT

12. General condition of AA:

i. Disturbance: (use matrix below to determine [circle] appropriate response – see instructions for Montana-listed noxious weed and aquatic nuisance vegetation species (**ANVS**) list)

Conditions within AA	*Predominant conditions adjacent to (within 500 feet of) AA*		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is >=15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is <= 30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is > 30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is <= 15%.	low disturbance	low disturbance	moderate disturbance
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is <=	moderate disturbance	moderate disturbance	high disturbance
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is > 30%.	high disturbance	high disturbance	**high disturbance**

Comments: (types of disturbance, intensity, season, etc.): The action area is located in the southwest portion of the City of Kalispell and is surrounded by industrial, agricultural, and residential uses.

ii. Prominent noxious, aquatic nuisance, & other exotic vegetation species: Reed Canary grass.

iii. Provide brief descriptive summary of AA and surrounding land use/habitat: The action area is located in the southwest portion of the City of Kalispell and is surrounded by industrial, agricultural, and residential uses.

13. Structural Diversity: (based on number of "Cowardin" ***vegetated*** classes present [do not include unvegetated classes], see #10 above)

Existing # of "Cowardin" Vegetated Classes in AA	**Initial Rating**	**Is current management preventing (passive) existence of additional vegetated classes?**		**Modified Rating**
>= 3 (or 2 if 1 is forested) classes	H	NA	NA	NA
2 (or 1 if forested) classes	M	NA	NA	NA
1 class, but not a monoculture	**M**	<-- NO	YES -->	L
1 class, monoculture (1 species comprises >= 90% of total cover)	L	NA	NA	NA

Comments: The wetland is dominated by a mixture of grass and rush species

SECTION PERTAINING to FUNCTIONS & VALUES ASSESSMENT

14A. Habitat for Federally Listed or Proposed Threatened or Endangered Plants or Animals:

i. AA is Documented (D) or Suspected (S) to contain (circle one based on definitions contained in instructions): No usable habitat

Primary or critical habitat (list species) **Secondary habitat (list species)** **Incidental habitat (list species)**

ii. Rating (use the conclusions from i above and the matrix below to arrive at [circle] the functional points and rating)

Highest Habitat Level	*doc/primary*	*sus/primary*	*doc/secondary*	*sus/secondary*	*doc/incidental*	*sus/incidental*	*None*
Functional Points and Rating	1H	.9H	.8M	.7M	.3L	.1L	**0L**

Sources for documented use (e.g. observations, records, etc): IPaC

14B. Habitat for plant or animals rated S1, S2, or S3 by the Montana Natural Heritage Program: (not including species listed in14A above)

i. AA is Documented (D) or Suspected (S) to contain (circle one based on definitions contained in instructions): No usable habitat

Primary or critical habitat (list species) **Secondary habitat (list species)** **Incidental habitat (list species)**

ii. Rating (use the conclusions from i above and the matrix below to arrive at [circle] the functional points and rating)

Highest Habitat Level	*doc/primary*	*sus/primary*	*doc/secondary*	*sus/secondary*	*doc/incidental*	*sus/incidental*	*None*
S1 Species: *Functional Points and Rating*	1H	.8H	.7M	.6M	.2L	.1L	0L
S2 and S3 Species: *Functional Points and Rating*	.9H	.7M	.6M	.5M	.2L	.1L	**0L**

Sources for documented use (e.g. observations, records, etc): MTNHP Species of concern are documented in the vicinity of the project however due to the heavy use associated with the project area there is not suitable habitat present.

14C. General Wildlife Habitat Rating:

i. Evidence of overall wildlife use in the AA (circle substantial, moderate, or low based on supporting evidence):

Substantial (based on any of the following [check]):

___ observations of abundant wildlife #s or high species diversity (during any period)
___ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
___ presence of extremely limiting habitat features not available in the surrounding area
___ interviews with local biologists with knowledge of the AA

Minimal (based on any of the following [check]):

___ few or no wildlife observations during peak use periods
_X_ little to no wildlife sign
_X_ sparse adjacent upland food sources
___ interviews with local biologists with knowledge of the AA

Moderate (based on any of the following [check]):

___ observations of scattered wildlife groups or individuals or relatively few species during peak periods
___ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
___ adequate adjacent upland food sources
___ interviews with local biologists with knowledge of the AA

ii. Wildlife habitat features (Working from top to bottom, circle appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent vegetated classes must be within 20% of each other interms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see instructions for further definitions of these terms])

Structural diversity (see #13)	High								Moderate								Low			
Class cover distribution (all vegetated classes)	Even				Uneven				Even				Uneven				Even			
Duration of surface water in >=10% of AA	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
Low disturbance at AA (see #12i)	E	E	E	H	E	E	H	H	E	H	H	M	E	H	M	M	E	H	M	M
Moderate disturbance at AA (see #12i)	H	H	H	H	H	H	H	M	H	H	M	M	H	M	M	L	H	M	L	L
High disturbance at AA (see #12i)	M	M	M	L	M	M	L	L	M	M	L	L	M	L	**L**	L	L	L	L	L

iii. Rating (use the conclusions from i and ii above and the matrix below to arrive at [circle] the functional points and rating)

Evidence of wildlife use (i)	*Wildlife habitat features rating (ii)*			
	Exceptional	High	Moderate	Moderate
Substantial	1E	.9H	.8H	.7M
Moderate	.9H	.7M	.5M	.3L
Minimal	.6M	.4M	.2L	**.1L**

Comments: .

14D. General Fish Habitat Rating: (Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier, etc.]. If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then mark **X NA** and proceed to 14E.)

Type of Fishery: Cold Water **(CW)** ___ Warm Water **(WW)** ___ **Use the CW or WW guidelines in the user manual to complete the matrix**

i. Habitat Quality and Known / Suspected Fish Species in AA (use matrix to arrive at [circle] the functional points and rating)

Duration of surface water in AA	Permanent / Perennial						Seasonal / Intermittent						Temporary / Ephemeral					
Aquatic hiding / resting / escape cover	Optimal		Adequate		Poor		Optimal		Adequate		Poor		Optimal		Adequate		Poor	
Thermal cover optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	1E	.9H	.8H	.7M	.6M	.5M	.9H	.8H	.7M	.6M	.5M	.4M	.7M	.6M	.5M	.4M	.3L	.2L
FWP Tier II or Native Game fish species	.9H	.8H	.7M	.6M	.5M	.5M	.8H	.7M	.6M	.5M	.4M	.4M	.6M	.5M	.4M	.3L	.2L	.2L
FWP Tier III or Introduced Game fish	.8H	.7M	.6M	.5M	.5M	.4M	.7M	.6M	.5M	.4M	.4M	.3L	.5M	.4M	.3L	.2L	.2L	.1L
FWP Non-Game Tier IV or No fish species	.5M	.5M	.5M	.4M	.4M	.3L	.4M	.4M	.4M	.3L	.3L	.2L	.2L	.2L	.2L	.1L	.1L	.1L

Sources used for identifying fish sp. potentially found in AA:

ii. Modified Rating (NOTE: Modified score cannot exceed 1 or be less than 0.1)

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see Appendix E) occur in fish habitat? ___ *If yes, reduce score in i above by 0.1.*

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area, etc.- specify in comments) for native fish or introduced game fish? ___ *If yes, add 0.1 to the adjusted score in **i** or **iia.***

iii. Final Score and Rating: NA **Comments:** .

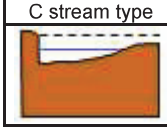
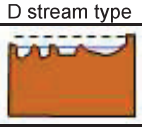
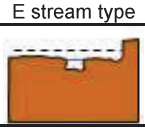
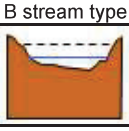
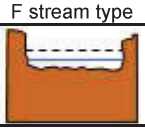
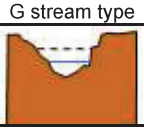
14E. Flood Attenuation: (Applies only to wetlands subject to flooding via in-channel or overbank flow. If wetlands in AA are not flooded from in-channel or overbank flow, mark **X NA** and proceed to 14F.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	Slightly entrenched - C, D, E stream types			Moderately entrenched – B stream type			Entrenched-A, F, G stream types		
% of flooded wetland classified as forested and/or scrub/shrub	75%	25-75%	<25%	75%	25-75%	<25%	75%	25-75%	<25%
AA contains **no outlet or restricted outlet**	1H	.9H	.8H	.8H	.7M	.5M	.4M	.3L	.2L
AA contains **unrestricted outlet**	.9H	.8H	.5M	.7M	.6M	.4M	.3L	.2L	.1L

Entrenchment ratio (ER) estimation – see User's Manual for additional guidance. Entrenchment ratio = (flood-prone width)/(bankfull width) Flood-prone width = estimated horizontal projection of where 2 x maximum bankfull depth elevation intersects the floodplain on each side of the stream.

/	=	
Flood-prone width	*Bankfull width*	*Entrenchment ratio (ER)*

Slightly Entrenched ER = >2.2			**Moderately Entrenched ER = 1.41 – 2.2**	**Entrenched ER = 1.0 – 1.4**		
C stream type	D stream type	E stream type	B stream type	A stream type	F stream type	G stream type
						

ii. Are ≥10 acres of wetland in the AA subject to flooding **AND** are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA (circle)? ___ **Comments:** .

14F. Short and Long Term Surface Water Storage: (Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow. If no wetlands in the AA are subject to flooding or ponding, **X NA** and proceed to 14G.)

i. Rating (Working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see instructions for further definitions of these terms].)

Estimated maximum acre feet of water contained in wetlands within the AA that are subject to periodic flooding or ponding	>5 acre feet			1.1 to 5 acre feet			<=1 acre foot		
Duration of surface water at wetlands within the AA	P/P	S/I	T/E	P/P	S/I	T/E	P/P	S/I	T/E
Wetlands in AA flood or pond **>= 5 out of 10 years**	1H	.9H	.8H	.8H	.6M	.5M	.4M	.3L	.2L
Wetlands in AA flood or pond **< 5 out of 10 years**	.9H	.8H	.7M	.7M	.5M	.4M	.3L	.2L	.1L

Comments: .

14G. Sediment/Nutrient/Toxicant Retention and Removal: (Applies to wetlands with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input. If no wetlands in the AA are subject to such input, **NA** and proceed to 14H.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [H=high, M=moderate, or L=low])

Sediment, nutrient, and toxicant input levels within AA	AA receives or surrounding land use with potential to deliver levels of sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use with potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% cover of wetland vegetation in AA	>= 70%		< 70%		>= 70%		< 70%	
Evidence of flooding / ponding in AA	Yes	No	Yes	No	Yes	No	Yes	No
AA contains **no or restricted outlet**	1H	.8H	.7M	.5M	.5M	**.4M**	.3L	.2L
AA contains **unrestricted outlet**	.9H	.7M	.6M	.4M	.4M	.3L	.2L	.1L

Comments: Wetland likely receives sediment and other pollutants from the roadway.

14H Sediment/Shoreline Stabilization: (Applies only if AA occurs on or within the banks or a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action. If 14H does not apply, **X NA** and proceed to 14I.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

*% Cover of **wetland** streambank or shoreline by species with stability ratings of >=6 (see **Appendix F**).*	*Duration of surface water adjacent to rooted vegetation*		
	Permanent / Perennial	Seasonal / Intermittent	Temporary / Ephemeral
>= 65%	1H	.9H	.7M
35-64%	.7M	.6M	.5M
35%	.3L	.2L	.1L

Comments: .

14I. Production Export/Food Chain Support:

i. Level of Biological Activity (synthesis of wildlife and fish habitat ratings [circle])

General Fish Habitat Rating (14D.iii.)	**General Wildlife Habitat Rating (14C.iii.)**		
	E/H	M	L
E/H	H	H	M
M	H	M	M
L	M	M	L
N/A	H	M	**L**

ii. Rating (Working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14I.i.); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to duration of surface water in the AA, where P/P, S/I, and T/E are as previously defined, and A = "absent" [see instructions for further definitions of these terms].)

A	Vegetated component >5 acres						Vegetated component 1-5 acres						Vegetated component < 1 acre					
B	High		Moderate		Low		High		Moderate		Low		High		Moderate		Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	1H	.7M	.8H	.5M	.6M	.4M	.9H	.6M	.7M	.4M	.5M	.3L	.8H	.6M	.6M	.4M	.3L	.2L
S/I	.9H	.6M	.7M	.4M	.5M	.3L	.8H	.5M	.6M	.3L	.4M	.2L	.7M	.5M	.5M	.3L	.3L	.2L
T/E/A	.8H	.5M	.6M	.3L	.4M	.2L	.7M	.4M	.5M	.2L	**.3L**	.1L	.6M	.4M	.4M	.2L	.2L	.1L

iii. Modified Rating (NOTE: Modified score cannot exceed 1 or be less than 0.1.) **Vegetated Upland Buffer (VUB):** Area with >= 30% plant cover, = 15% noxious weed or ANVS cover, and that is not subjected to periodic mechanical mowing or clearing (unless for weed control).

a) Is there an average >= 50 foot-wide vegetated upland buffer around >= 75% of the AA circumference? ___ *If yes, add 0.1 to the score in ii above.*

iv. Final Score and Rating: 0.30L **Comments:** The area surrounding the wetland is subject to mowing from the roadway.

14J. Groundwater Discharge/Recharge: (check the appropriate indicators in i & ii below)

i. Discharge Indicators

_____ The AA is a slope wetland
_____ Springs or seeps are known or observed
_____ Vegetation growing during dormant season/drought
__X__ Wetland occurs at the toe of a natural slope
_____ AA permanently flooded during drought periods
_____ Wetland contains an outlet, but no inlet
_____ Shallow water table and the site is saturated to the surface
_____ Other:

ii. Recharge Indicators

_____ Permeable substrate present without underlying impeding layer
_____ Wetland contains inlet but no outlet
_____ Stream is a known 'losing' stream; discharge volume decreases
_____ Other:

iii. Rating (use the information from i and ii above and the table below to arrive at [circle] the functional points and rating)

	Duration of saturation at AA Wetlands *FROM GROUNDWATER DISCHARGE OR WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM*			
Criteria	P/P	S/I	T	None
Groundwater Discharge or Recharge	1H	.7M	.4M	.1L
Insufficient Data/Information	**N/A**			

Comments: Based on the location wetland it appears that is likely fed from surface runoff from the roadway. Based on the fieldwork that was completed it is unknown if the wetland may also be supported by groundwater.

14K. Uniqueness:

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

Replacement potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland **or** plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types **and** structural diversity (#13) is high **or** contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types or associations **and** structural diversity (#13) is low-moderate		
Estimated relative abundance (#11)	rare	common	abundant	rare	common	abundant	rare	common	abundant
Low disturbance at AA (#12i)	1H	.9H	.8H	.8H	.6M	.5M	.5M	.4M	.3L
Moderate disturbance at AA (#12i)	.9H	.8H	.7M	.7M	.5M	.4M	.4M	.3L	.2L
High disturbance at AA (#12i)	.8H	.7M	.6M	.6M	.4M	.3L	.3L	.2L	**.1L**

Comments: .

14L. Recreation/Education Potential: (affords "bonus" points if AA provides recreation or education opportunity)

i. Is the AA a known or potential rec./ed. site: (circle) ___ (if 'Yes' continue with the evaluation; if 'No' then mark __X__ **NA** and proceed to the overall summary and rating page)

ii. Check categories that apply to the AA: ___Educational/scientific study; ___Consumptive rec.; ___Non-consumptive rec.; ___Other :

iii. Rating:

Known or Potential Recreation or Education Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	.2H	.15H
Private ownership with general public access (no permission required)	.15H	.1M
Private or public ownership without general public access, or requiring permission for public access	.1M	.05L

Comments: The wetland is located along a busy roadway.

General Site Notes
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FUNCTION & VALUE SUMMARY & OVERALL RATING FOR WETLAND/SITE #(S): Wetlands 2a,b

Function & Value Variables	Rating	Actual Functional Points	Possible Functional Points	Functional Units: (Actual Points x Wetland Acreage)	Indicate the four most prominent functions with an asterisk (*)
A. Listed/Proposed T&E Species Habitat	L	0.00	1	0.00	
B. MT Natural Heritage Program Species Habitat	L	0.00	1	0.00	
C. General Wildlife Habitat	L	0.10	1	10.70	*
D. General Fish Habitat	NA				
E. Flood Attenuation	NA				
F. Short and Long Term Surface Water Storage	NA				
G. Sediment/Nutrient/Toxicant Removal	M	0.40	1	42.80	*
H. Sediment/Shoreline Stabilization	NA				
I. Production Export/Food Chain Support	L	0.30	1	32.10	*
J. Groundwater Discharge/Recharge	NA				
K. Uniqueness	L	0.10	1	10.70	*
L. Recreation/Education Potential (bonus points)	NA				
Totals:		0.90	6.00	96.30	
Percent of Possible Score			15%		

Category I Wetland: (must satisfy one of the following criteria; otherwise go to Category II)
____ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
____ Score of 1 functional point for Uniqueness; **or**
____ Score of 1 functional point for Flood Attenuation and answer to Question 14E.ii is "yes"; **or**
____ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied and meets any one of the following criteria; otherwise go to Category IV)
____ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
____ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
____ Score of .9 or 1 functional point for General Fish Habitat; **or**
____ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
____ Score of .9 functional point for Uniqueness; **or**
____ Percent of possible score > 65% (round to nearest whole #).

Category III Wetland: (Criteria for Categories I, II, or IV not satisfied)

Category IV Wetland: (Criteria for Categories I or II are not satisfied and all of the following criteria are met; otherwise go to Category III)
__X__ "Low" rating for Uniqueness; **and**
____ Vegetated wetland component 1 acre (do not include upland vegetated buffer); **and**
__X__ Percent of possible score 35% (round to nearest whole #).

OVERALL ANALYSIS AREA RATING: III

Summary Comments: Wetland appears to have formed incidentally to the construction of the roadway.

MDT Montana Wetland Assessment Form (revised March 2008)

1. Project Name: Kalispell Bypass Airport Road to Basecamp Drive **2. MDT Project #:** NH-MT-3(59)109 **Control #:** UPN 2038021

3. Evaluation Date: 12/19/2023 **4. Evaluator(s):** Jessica Callahan **5. Wetlands/Site #(s):** Wetland 3

6. Wetland Location(s): i. Legal: T28N,R21W,29 **Latitude/Longitude:** 48.161413, -114.305951 : Wetland 3

ii. Approx. Stationing or Mileposts: 1.20

iii. Watershed: 4

Watershed Name, County: Flathead, Flathead

7. a. Evaluating Agency: KLJ

b. Purpose of Evaluation:

1. X Wetlands potentially affected by MDT project
2. ___ Mitigation wetlands; pre-construction
3. ___ Mitigation wetlands; post-construction
4. ___ Other:

8. Wetland size: 0.110 acres (estimated)

9. Assessment area (AA): 107.000 acres (estimated)

10. Classification of Wetland and Aquatic Habitats in AA

HGM Class (Brinson)	Class (Cowardin)	Modifier (Cowardin)	Water Regime	% of AA
D	EM	E	TE	5.00

Abbreviations: *(see manual for definitions)*

HGM Classes: Riverine (**R**), Depressional (**D**), Slope (**S**), Mineral Soil Flats (**MSF**), Organic Soil Flats (**OSF**), Lacustrine Fringe (**LF**);

Cowardin Classes: Rock Bottom (**RB**), Unconsolidated bottom (**UB**), Aquatic Bed (**AB**), Unconsolidated Shore (**US**), Moss-lichen Wetland (**ML**), Emergent Wetland (**EM**), Scrub-Shrub Wetland (**SS**), Forested Wetland (**FO**)

Modifiers: Excavated (**E**), Impounded (**I**), Diked (**D**), Partly Drained (**PD**), Farmed (**F**), Artificial (**A**)

Water Regimes: Permanent / Perennial (**PP**), Seasonal / Intermittent (**SI**), Temporary / Ephemeral (**TE**)

11. Estimated relative abundance: (of similarly classified sites within the same Major Montana Watershed Basin, see definitions)

ABUNDANT

12. General condition of AA:

i. Disturbance: (use matrix below to determine [circle] appropriate response – see instructions for Montana-listed noxious weed and aquatic nuisance vegetation species (**ANVS**) list)

Conditions within AA	*Predominant conditions adjacent to (within 500 feet of) AA*		
	Managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or buildings; and noxious weed or ANVS cover is >=15%.	Land not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to minor clearing; contains few roads or buildings; noxious weed or ANVS cover is <= 30%.	Land cultivated or heavily grazed or logged; subject to substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is > 30%.
AA occurs and is managed in predominantly natural state; is not grazed, hayed, logged, or otherwise converted; does not contain roads or occupied buildings; and noxious weed or ANVS cover is <= 15%.	low disturbance	low disturbance	moderate disturbance
AA not cultivated, but may be moderately grazed or hayed or selectively logged; or has been subject to relatively minor clearing, fill placement, or hydrological alteration; contains few roads or buildings; noxious weed or ANVS cover is <=	moderate disturbance	moderate disturbance	high disturbance
AA cultivated or heavily grazed or logged; subject to relatively substantial fill placement, grading, clearing, or hydrological alteration; high road or building density; or noxious weed or ANVS cover is > 30%.	high disturbance	high disturbance	**high disturbance**

Comments: (types of disturbance, intensity, season, etc.): The project area is located in the southwest portion of Kalispell and is surrounded by industrial, agricultural, and residential uses.

ii. Prominent noxious, aquatic nuisance, & other exotic vegetation species: .

iii. Provide brief descriptive summary of AA and surrounding land use/habitat: The project area is located in the southwest portion of Kalispell and is surrounded by industrial, agricultural, and residential uses.

13. Structural Diversity: (based on number of "Cowardin" ***vegetated*** classes present [do not include unvegetated classes], see #10 above)

Existing # of "Cowardin" Vegetated Classes in AA	**Initial Rating**	**Is current management preventing (passive) existence of additional vegetated classes?**		**Modified Rating**
>= 3 (or 2 if 1 is forested) classes	H	NA	NA	NA
2 (or 1 if forested) classes	M	NA	NA	NA
1 class, but not a monoculture	**M**	<-- NO	YES -->	L
1 class, monoculture (1 species comprises >= 90% of total cover)	L	NA	NA	NA

Comments: The wetland was dominated by a mixture of grass and forb species.

SECTION PERTAINING to FUNCTIONS & VALUES ASSESSMENT

14A. Habitat for Federally Listed or Proposed Threatened or Endangered Plants or Animals:

i. AA is Documented (D) or Suspected (S) to contain (circle one based on definitions contained in instructions): No usable habitat

Primary or critical habitat (list species) **Secondary habitat (list species)** **Incidental habitat (list species)**

ii. Rating (use the conclusions from i above and the matrix below to arrive at [circle] the functional points and rating)

Highest Habitat Level	*doc/primary*	*sus/primary*	*doc/secondary*	*sus/secondary*	*doc/incidental*	*sus/incidental*	*None*
Functional Points and Rating	1H	.9H	.8M	.7M	.3L	.1L	**0L**

Sources for documented use (e.g. observations, records, etc): IPaC. Threatened and Endangered species were identified on the IPaC however due to the heavy traffic use along the corridor no suitable habitat is present.

14B. Habitat for plant or animals rated S1, S2, or S3 by the Montana Natural Heritage Program: (not including species listed in14A above)

i. AA is Documented (D) or Suspected (S) to contain (circle one based on definitions contained in instructions): No usable habitat

Primary or critical habitat (list species) **Secondary habitat (list species)** **Incidental habitat (list species)**

ii. Rating (use the conclusions from i above and the matrix below to arrive at [circle] the functional points and rating)

Highest Habitat Level	*doc/primary*	*sus/primary*	*doc/secondary*	*sus/secondary*	*doc/incidental*	*sus/incidental*	*None*
***S1 Species:** Functional Points and Rating*	1H	.8H	.7M	.6M	.2L	.1L	0L
***S2 and S3 Species:** Functional Points and Rating*	.9H	.7M	.6M	.5M	.2L	.1L	**0L**

Sources for documented use (e.g. observations, records, etc): Species of concern were identified in the MTNHP report, however due to the heavy traffic use of the area no suitable habitat is present.

14C. General Wildlife Habitat Rating:

i. Evidence of overall wildlife use in the AA (circle substantial, moderate, or low based on supporting evidence):

Substantial (based on any of the following [check]):

__ observations of abundant wildlife #s or high species diversity (during any period)
__ abundant wildlife sign such as scat, tracks, nest structures, game trails, etc.
__ presence of extremely limiting habitat features not available in the surrounding area
__ interviews with local biologists with knowledge of the AA

Minimal (based on any of the following [check]):

__ few or no wildlife observations during peak use periods
X little to no wildlife sign
__ sparse adjacent upland food sources
__ interviews with local biologists with knowledge of the AA

Moderate (based on any of the following [check]):

__ observations of scattered wildlife groups or individuals or relatively few species during peak periods
__ common occurrence of wildlife sign such as scat, tracks, nest structures, game trails, etc.
__ adequate adjacent upland food sources
__ interviews with local biologists with knowledge of the AA

ii. Wildlife habitat features (Working from top to bottom, circle appropriate AA attributes in matrix to arrive at rating. Structural diversity is from #13. For class cover to be considered evenly distributed, the most and least prevalent vegetated classes must be within 20% of each other interms of their percent composition of the AA (see #10). Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; T/E = temporary/ephemeral; and A = absent [see instructions for further definitions of these terms])

Structural diversity (see #13)	High								Moderate								Low			
Class cover distribution (all vegetated classes)	Even				Uneven				Even				Uneven				Even			
Duration of surface water in >=10% of AA	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A	P/P	S/I	T/E	A
Low disturbance at AA (see #12i)	E	E	E	H	E	E	H	H	E	H	H	M	E	H	M	M	E	H	M	M
Moderate disturbance at AA (see #12i)	H	H	H	H	H	H	H	M	H	H	M	M	H	M	M	L	H	M	L	L
High disturbance at AA (see #12i)	M	M	M	L	M	M	L	L	M	M	L	L	M	L	**L**	L	L	L	L	L

iii. Rating (use the conclusions from i and ii above and the matrix below to arrive at [circle] the functional points and rating)

Evidence of wildlife use (i)	*Wildlife habitat features rating (ii)*			
	Exceptional	High	Moderate	Moderate
Substantial	1E	.9H	.8H	.7M
Moderate	.9H	.7M	.5M	.3L
Minimal	.6M	.4M	.2L	**.1L**

Comments: .

14D. General Fish Habitat Rating: (Assess this function if the AA is used by fish or the existing situation is "correctable" such that the AA could be used by fish [i.e., fish use is precluded by perched culvert or other barrier, etc.]. If the AA is not used by fish, fish use is not restorable due to habitat constraints, or is not desired from a management perspective [such as fish entrapped in a canal], then mark **X NA** and proceed to 14E.)

Type of Fishery: Cold Water **(CW)** ___ Warm Water **(WW)** ___ **Use the CW or WW guidelines in the user manual to complete the matrix**

i. Habitat Quality and Known / Suspected Fish Species in AA (use matrix to arrive at [circle] the functional points and rating)

Duration of surface water in AA	Permanent / Perennial						Seasonal / Intermittent						Temporary / Ephemeral					
Aquatic hiding / resting / escape cover	Optimal		Adequate		Poor		Optimal		Adequate		Poor		Optimal		Adequate		Poor	
Thermal cover optimal / suboptimal	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S	O	S
FWP Tier I fish species	1E	.9H	.8H	.7M	.6M	.5M	.9H	.8H	.7M	.6M	.5M	.4M	.7M	.6M	.5M	.4M	.3L	.2L
FWP Tier II or Native Game fish species	.9H	.8H	.7M	.6M	.5M	.5M	.8H	.7M	.6M	.5M	.4M	.4M	.6M	.5M	.4M	.3L	.2L	.2L
FWP Tier III or Introduced Game fish	.8H	.7M	.6M	.5M	.5M	.4M	.7M	.6M	.5M	.4M	.4M	.3L	.5M	.4M	.3L	.2L	.2L	.1L
FWP Non-Game Tier IV or No fish species	.5M	.5M	.5M	.4M	.4M	.3L	.4M	.4M	.4M	.3L	.3L	.2L	.2L	.2L	.2L	.1L	.1L	.1L

Sources used for identifying fish sp. potentially found in AA:

ii. Modified Rating (NOTE: Modified score cannot exceed 1 or be less than 0.1)

a) Is fish use of the AA significantly reduced by a culvert, dike, or other man-made structure or activity or is the waterbody included on the current final MDEQ list of waterbodies in need of TMDL development with listed "Probable Impaired Uses" including cold or warm water fishery or aquatic life support, or do aquatic nuisance plant or animal species (see Appendix E) occur in fish habitat? ___ *If yes, reduce score in i above by 0.1.*

b) Does the AA contain a documented spawning area or other critical habitat feature (i.e., sanctuary pool, upwelling area, etc.- specify in comments) for native fish or introduced game fish? ___ *If yes, add 0.1 to the adjusted score in **i** or **iia.***

iii. Final Score and Rating: NA **Comments:** .

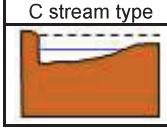
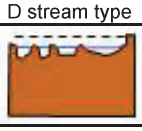
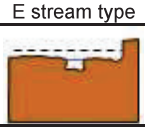
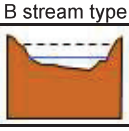
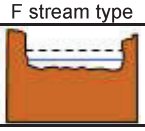
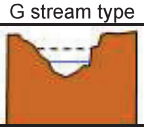
14E. Flood Attenuation: (Applies only to wetlands subject to flooding via in-channel or overbank flow. If wetlands in AA are not flooded from in-channel or overbank flow, mark **X NA** and proceed to 14F.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

Estimated or Calculated Entrenchment (Rosgen 1994, 1996)	Slightly entrenched - C, D, E stream types			Moderately entrenched – B stream type			Entrenched-A, F, G stream types		
% of flooded wetland classified as forested and/or scrub/shrub	75%	25-75%	<25%	75%	25-75%	<25%	75%	25-75%	<25%
AA contains **no outlet or restricted outlet**	1H	.9H	.8H	.8H	.7M	.5M	.4M	.3L	.2L
AA contains **unrestricted outlet**	.9H	.8H	.5M	.7M	.6M	.4M	.3L	.2L	.1L

Entrenchment ratio (ER) estimation – see User's Manual for additional guidance. Entrenchment ratio = (flood-prone width)/(bankfull width) Flood-prone width = estimated horizontal projection of where 2 x maximum bankfull depth elevation intersects the floodplain on each side of the stream.

/	=	
Flood-prone width	*Bankfull width*	*Entrenchment ratio (ER)*

Slightly Entrenched ER = >2.2			**Moderately Entrenched ER = 1.41 – 2.2**	**Entrenched ER = 1.0 – 1.4**		
C stream type	D stream type	E stream type	B stream type	A stream type	F stream type	G stream type
						

ii. Are ≥10 acres of wetland in the AA subject to flooding **AND** are man-made features which may be significantly damaged by floods located within 0.5 mile downstream of the AA (circle)? ___ **Comments:** .

14F. Short and Long Term Surface Water Storage: (Applies to wetlands that flood or pond from overbank or in-channel flow, precipitation, upland surface flow, or groundwater flow. If no wetlands in the AA are subject to flooding or ponding, **X NA** and proceed to 14G.)

i. Rating (Working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating. Abbreviations for surface water durations are as follows: P/P = permanent/perennial; S/I = seasonal/intermittent; and T/E = temporary/ephemeral [see instructions for further definitions of these terms].)

Estimated maximum acre feet of water contained in wetlands within the AA that are subject to periodic flooding or ponding	>5 acre feet			1.1 to 5 acre feet			<=1 acre foot		
Duration of surface water at wetlands within the AA	P/P	S/I	T/E	P/P	S/I	T/E	P/P	S/I	T/E
Wetlands in AA flood or pond **>= 5 out of 10 years**	1H	.9H	.8H	.8H	.6M	.5M	.4M	.3L	.2L
Wetlands in AA flood or pond **< 5 out of 10 years**	.9H	.8H	.7M	.7M	.5M	.4M	.3L	.2L	.1L

Comments:

14G. Sediment/Nutrient/Toxicant Retention and Removal: (Applies to wetlands with potential to receive sediments, nutrients, or toxicants through influx of surface or ground water or direct input. If no wetlands in the AA are subject to such input, **NA** and proceed to 14H.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating [H=high, M=moderate, or L=low])

Sediment, nutrient, and toxicant input levels within AA	AA receives or surrounding land use with potential to deliver levels of sediments, nutrients, or compounds at levels such that other functions are not substantially impaired. Minor sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.				Waterbody on MDEQ list of waterbodies in need of TMDL development for "probable causes" related to sediment, nutrients, or toxicants or AA receives or surrounding land use with potential to deliver high levels of sediments, nutrients, or compounds such that other functions are substantially impaired. Major sedimentation, sources of nutrients or toxicants, or signs of eutrophication present.			
% cover of wetland vegetation in AA	>= 70%		< 70%		>= 70%		< 70%	
Evidence of flooding / ponding in AA	Yes	No	Yes	No	Yes	No	Yes	No
AA contains **no or restricted outlet**	1H	.8H	.7M	.5M	.5M	**.4M**	.3L	.2L
AA contains **unrestricted outlet**	.9H	.7M	.6M	.4M	.4M	.3L	.2L	.1L

Comments: The wetland is located along Airport Drive and may receive sediment and other pollutants from the roadway.

14H Sediment/Shoreline Stabilization: (Applies only if AA occurs on or within the banks or a river, stream, or other natural or man-made drainage, or on the shoreline of a standing water body which is subject to wave action. If 14H does not apply, **X NA** and proceed to 14I.)

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

*% Cover of **wetland** streambank or shoreline by species with stability ratings of >=6 (see **Appendix F**).*	*Duration of surface water adjacent to rooted vegetation*		
	Permanent / Perennial	Seasonal / Intermittent	Temporary / Ephemeral
>= 65%	1H	.9H	.7M
35-64%	.7M	.6M	.5M
35%	.3L	.2L	.1L

Comments: .

14I. Production Export/Food Chain Support:

i. Level of Biological Activity (synthesis of wildlife and fish habitat ratings [circle])

General Fish Habitat Rating (14D.iii.)	**General Wildlife Habitat Rating (14C.iii.)**		
	E/H	M	L
E/H	H	H	M
M	H	M	M
L	M	M	L
N/A	H	M	**L**

ii. Rating (Working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating. Factor A = acreage of vegetated wetland component in the AA; Factor B = level of biological activity rating from above (14I.i.); Factor C = whether or not the AA contains a surface or subsurface outlet; the final three rows pertain to duration of surface water in the AA, where P/P, S/I, and T/E are as previously defined, and A = "absent" [see instructions for further definitions of these terms].)

A	Vegetated component >5 acres						Vegetated component 1-5 acres						Vegetated component < 1 acre					
B	High		Moderate		Low		High		Moderate		Low		High		Moderate		Low	
C	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P/P	1H	.7M	.8H	.5M	.6M	.4M	.9H	.6M	.7M	.4M	.5M	.3L	.8H	.6M	.6M	.4M	.3L	.2L
S/I	.9H	.6M	.7M	.4M	.5M	.3L	.8H	.5M	.6M	.3L	.4M	.2L	.7M	.5M	.5M	.3L	.3L	.2L
T/E/A	.8H	.5M	.6M	.3L	.4M	.2L	.7M	.4M	.5M	.2L	**.3L**	.1L	.6M	.4M	.4M	.2L	.2L	.1L

iii. Modified Rating (NOTE: Modified score cannot exceed 1 or be less than 0.1.) **Vegetated Upland Buffer (VUB):** Area with >= 30% plant cover, = 15% noxious weed or ANVS cover, and that is not subjected to periodic mechanical mowing or clearing (unless for weed control).

a) Is there an average >= 50 foot-wide vegetated upland buffer around >= 75% of the AA circumference? **X** *If yes, add 0.1 to the score in ii above.*

iv. Final Score and Rating: 0.40M **Comments:** .

14J. Groundwater Discharge/Recharge: (check the appropriate indicators in i & ii below)

i. Discharge Indicators

_____ The AA is a slope wetland
_____ Springs or seeps are known or observed
_____ Vegetation growing during dormant season/drought
_____ Wetland occurs at the toe of a natural slope
_____ AA permanently flooded during drought periods
_____ Wetland contains an outlet, but no inlet
_____ Shallow water table and the site is saturated to the surface
_____ Other:

ii. Recharge Indicators

__X__ Permeable substrate present without underlying impeding layer
_____ Wetland contains inlet but no outlet
_____ Stream is a known 'losing' stream; discharge volume decreases
_____ Other:

iii. Rating (use the information from i and ii above and the table below to arrive at [circle] the functional points and rating)

	Duration of saturation at AA Wetlands *FROM GROUNDWATER DISCHARGE OR WITH WATER THAT IS RECHARGING THE GROUNDWATER SYSTEM*			
Criteria	P/P	S/I	T	None
Groundwater Discharge or Recharge	1H	.7M	**.4M**	.1L
Insufficient Data/Information	N/A			

Comments: .

14K. Uniqueness:

i. Rating (working from top to bottom, use the matrix below to arrive at [circle] the functional points and rating)

Replacement potential	AA contains fen, bog, warm springs or mature (>80 yr-old) forested wetland **or** plant association listed as "S1" by the MTNHP			AA does not contain previously cited rare types **and** structural diversity (#13) is high **or** contains plant association listed as "S2" by the MTNHP			AA does not contain previously cited rare types or associations **and** structural diversity (#13) is low-moderate		
Estimated relative abundance (#11)	rare	common	abundant	rare	common	abundant	rare	common	abundant
Low disturbance at AA (#12i)	1H	.9H	.8H	.8H	.6M	.5M	.5M	.4M	.3L
Moderate disturbance at AA (#12i)	.9H	.8H	.7M	.7M	.5M	.4M	.4M	.3L	.2L
High disturbance at AA (#12i)	.8H	.7M	.6M	.6M	.4M	.3L	.3L	.2L	**.1L**

Comments: .

14L. Recreation/Education Potential: (affords "bonus" points if AA provides recreation or education opportunity)

i. Is the AA a known or potential rec./ed. site: (circle) __X__ (if 'Yes' continue with the evaluation; if 'No' then mark ___ **NA** and proceed to the overall summary and rating page)

ii. Check categories that apply to the AA: __X__ Educational/scientific study; ___ Consumptive rec.; __X__ Non-consumptive rec.; ___ Other :

iii. Rating:

Known or Potential Recreation or Education Area	Known	Potential
Public ownership or public easement with general public access (no permission required)	.2H	.15H
Private ownership with general public access (no permission required)	.15H	.1M
Private or public ownership without general public access, or requiring permission for public access	.1M	**.05L**

Comments: .

General Site Notes
.

FUNCTION & VALUE SUMMARY & OVERALL RATING FOR WETLAND/SITE #(S): Wetland 3

Function & Value Variables	Rating	Actual Functional Points	Possible Functional Points	Functional Units: (Actual Points x Wetland Acreage)	Indicate the four most prominent functions with an asterisk (*)
A. Listed/Proposed T&E Species Habitat	L	0.00	1	0.00	
B. MT Natural Heritage Program Species Habitat	L	0.00	1	0.00	
C. General Wildlife Habitat	L	0.10	1	10.70	*
D. General Fish Habitat	NA				
E. Flood Attenuation	NA				
F. Short and Long Term Surface Water Storage	NA				
G. Sediment/Nutrient/Toxicant Removal	M	0.40	1	42.80	*
H. Sediment/Shoreline Stabilization	NA				
I. Production Export/Food Chain Support	M	0.40	1	42.80	*
J. Groundwater Discharge/Recharge	M	0.40	1	42.80	*
K. Uniqueness	L	0.10	1	10.70	
L. Recreation/Education Potential (bonus points)	L	0.05	1	5.35	
Totals:		1.45	7.00	155.15	
Percent of Possible Score			21%		

Category I Wetland: (must satisfy one of the following criteria; otherwise go to Category II)
____ Score of 1 functional point for Listed/Proposed Threatened or Endangered Species; **or**
____ Score of 1 functional point for Uniqueness; **or**
____ Score of 1 functional point for Flood Attenuation and answer to Question 14E.ii is "yes"; **or**
____ Percent of possible score > 80% (round to nearest whole #).

Category II Wetland: (Criteria for Category I not satisfied and meets any one of the following criteria; otherwise go to Category IV)
____ Score of 1 functional point for MT Natural Heritage Program Species Habitat; **or**
____ Score of .9 or 1 functional point for General Wildlife Habitat; **or**
____ Score of .9 or 1 functional point for General Fish Habitat; **or**
____ "High" to "Exceptional" ratings for **both** General Wildlife Habitat **and** General Fish/Aquatic Habitat; **or**
____ Score of .9 functional point for Uniqueness; **or**
____ Percent of possible score > 65% (round to nearest whole #).

Category III Wetland: (Criteria for Categories I, II, or IV not satisfied)

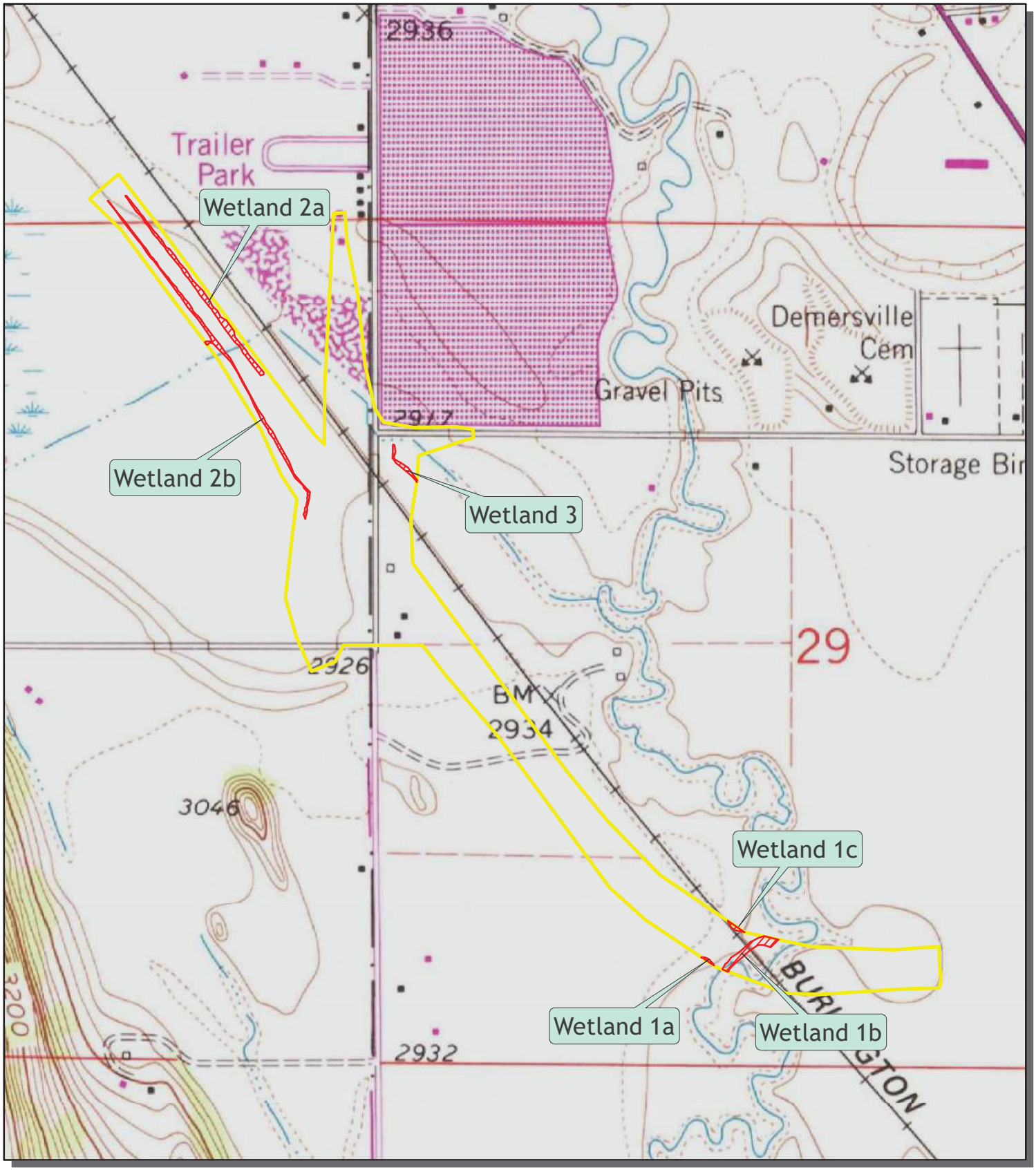
Category IV Wetland: (Criteria for Categories I or II are not satisfied and all of the following criteria are met; otherwise go to Category III)
__X__ "Low" rating for Uniqueness; **and**
____ Vegetated wetland component 1 acre (do not include upland vegetated buffer); **and**
__X__ Percent of possible score 35% (round to nearest whole #).

OVERALL ANALYSIS AREA RATING: III

Summary Comments: .

Appendix D

Historical Topographic Maps



Project Area

Delineated Wetlands

TOPOGRAPHIC MAP

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

1962 Topographic Map

Figure: 4

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

KLJ

N
W E
S

Drawn By: jessicacallahan

NH-MT-3(59)109

UPN 2038021

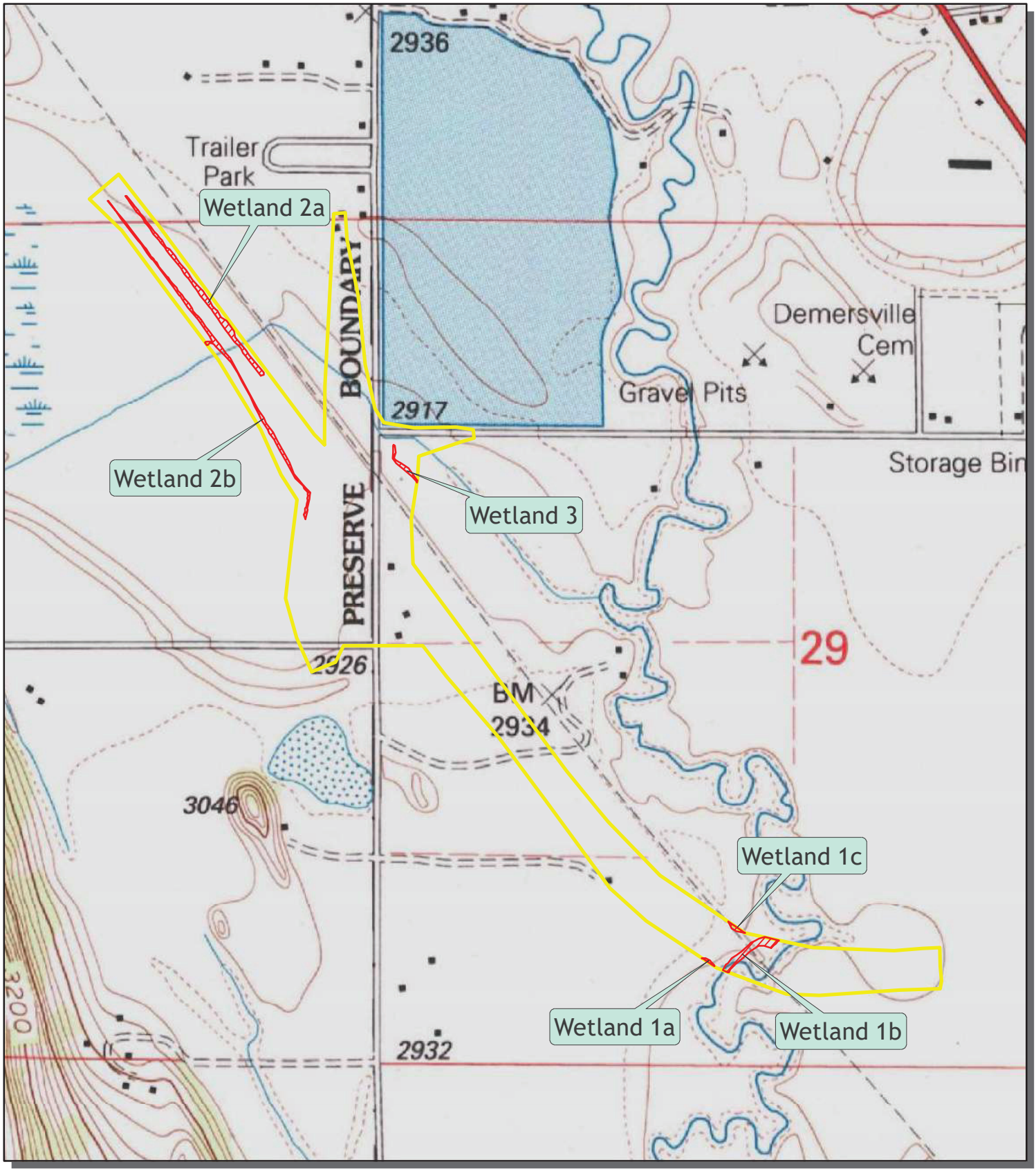
Checked By: JC

Date: 12/21/2023

1:10,000

1 inch = 833 feet

0 400 800 1,600 Feet



Project Area

Delineated Wetlands

TOPOGRAPHIC MAP

KALISPELL BYPASS:
AIRPORT ROAD TO BASECAMP DRIVE
FLATHEAD COUNTY, MONTANA

1994 Topographic Map

Figure: 4

Notes:
Orthophoto Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

KLJ

N
W E
S

Drawn By: jessicacallahan

NH-MT-3(59)109

UPN 2038021

Checked By: JC

Date: 12/21/2023

1:10,000

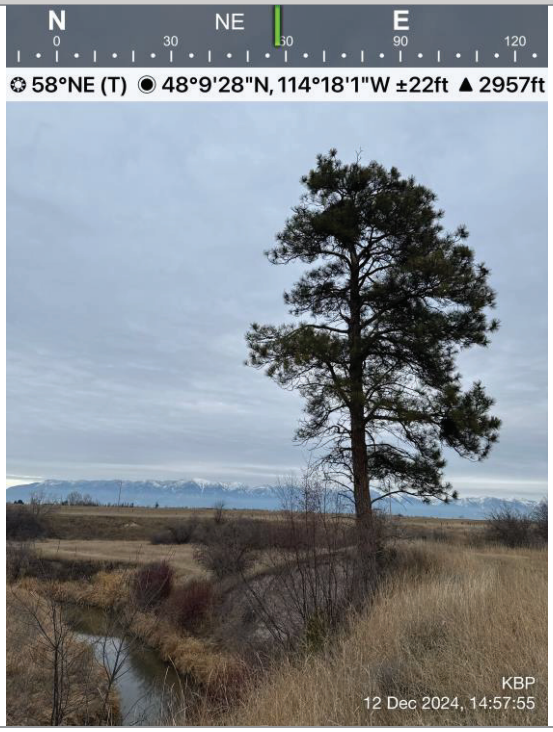
1 inch = 833 feet

0 400 800 1,600 Feet

Appendix E

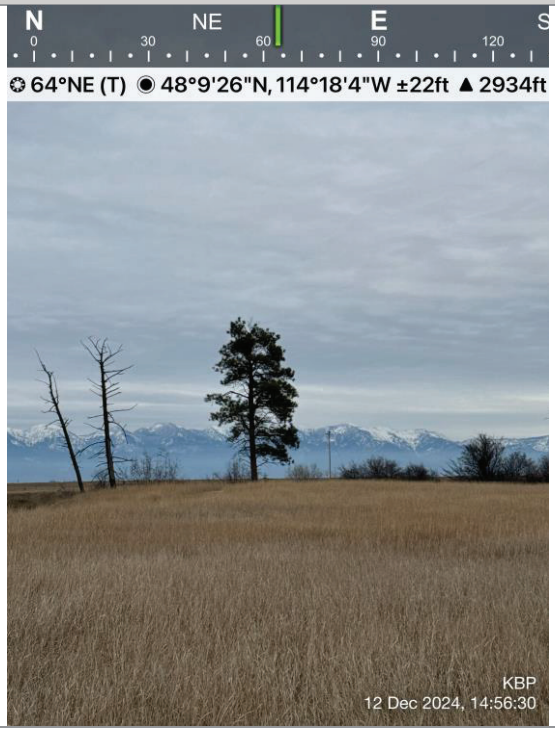
Site Photos

Site Photos



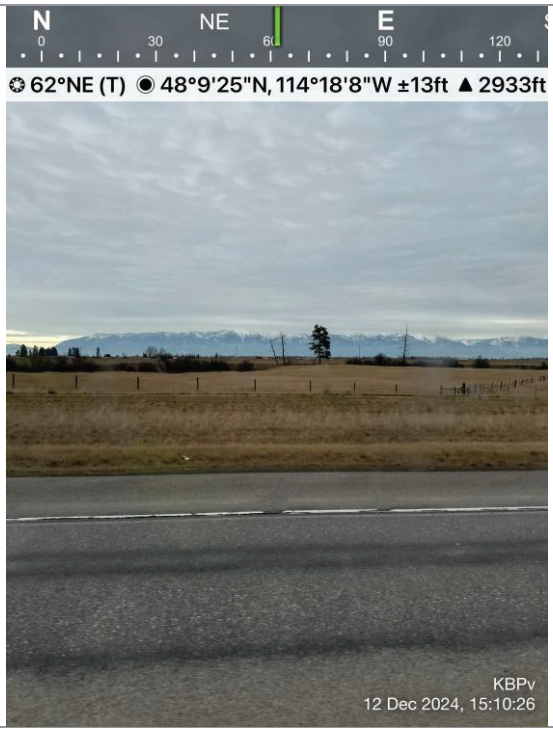
Date: 12/12/2024

Description: Ponderosa pine with eagle nest next to Ashley Creek



Date: 12/12/2024

Description: Ponderosa pine with eagle nest



Date: 12/12/2024

Description: Ponderosa pine visible from the bypass

Date: 12/12/2024

Description: Closeup of eagle sitting in nearby tree

Appendix F

USFWS IPaC

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Montana Ecological Services Field Office
585 Shephard Way, Suite 1
Helena, MT 59601-6287
Phone: (406) 449-5225 Fax: (406) 449-5339

In Reply Refer To:
Project Code: 2024-0016224
Project Name: Kalispell Bypass Airport Road to Basecamp Drive

November 14, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location 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 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 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:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- 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:

Montana Ecological Services Field Office
585 Shephard Way, Suite 1
Helena, MT 59601-6287
(406) 449-5225

PROJECT SUMMARY

Project Code: 2024-0016224
Project Name: Kalispell Bypass Airport Road to Basecamp Drive
Project Type: Road/Hwy - Maintenance/Modification
Project Description: The project involves roadway improvements to Kalispell Bypass.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@48.16186395,-114.30886313732798,14z

Counties: Flathead County, Montana

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 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 Fisheries[1], 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
Canada Lynx *Lynx canadensis* Population: Wherever Found in Contiguous U.S. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Grizzly Bear *Ursus arctos horribilis* Population: U.S.A., conterminous (lower 48) States, except where listed as an experimental population There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/7642	Threatened
North American Wolverine *Gulo gulo luscus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Spalding's Catchfly *Silene spaldingii*	Threatened

There is **proposed** critical habitat for this species.
Species profile: https://ecos.fws.gov/ecp/species/3681

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

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.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

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

There are bald and/or golden eagles in your project area.

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
Bald Eagle *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* 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. https://ecos.fws.gov/ecp/species/1680	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 the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

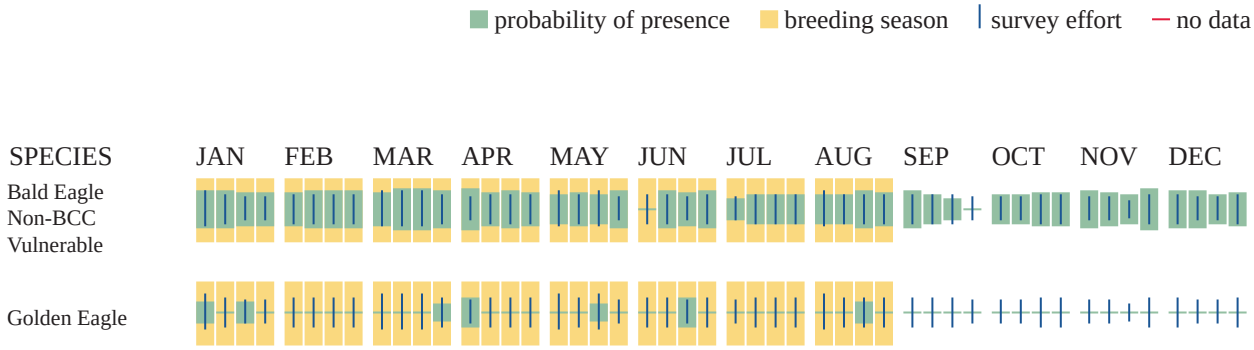
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Non-BCC
Vulnerable

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] 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)

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
Bald Eagle *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Black Swift *Cypseloides niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10

NAME	BREEDING SEASON
Black Tern *Chlidonias niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10955	Breeds Mar 1 to Jul 31
Cassin's Finch *Carpodacus cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9465	Breeds May 15 to Aug 10
Franklin's Gull *Leucophaeus pipixcan* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10567	Breeds May 1 to Jul 31
Golden Eagle *Aquila chrysaetos* 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. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird *selasphorus rufus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds Apr 15 to Jul 15

NAME	BREEDING SEASON
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet *Tringa semipalmata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10669	Breeds Apr 20 to Aug 5

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 the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

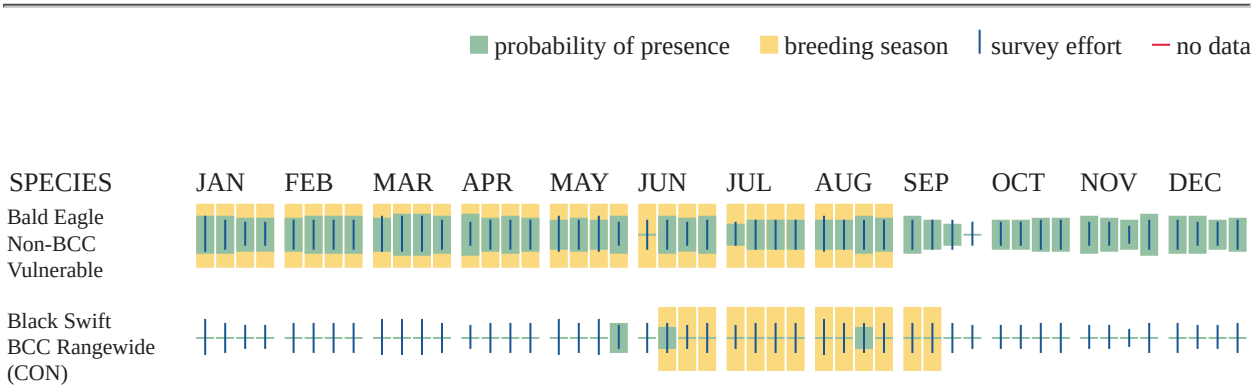
Probability of Presence (■)

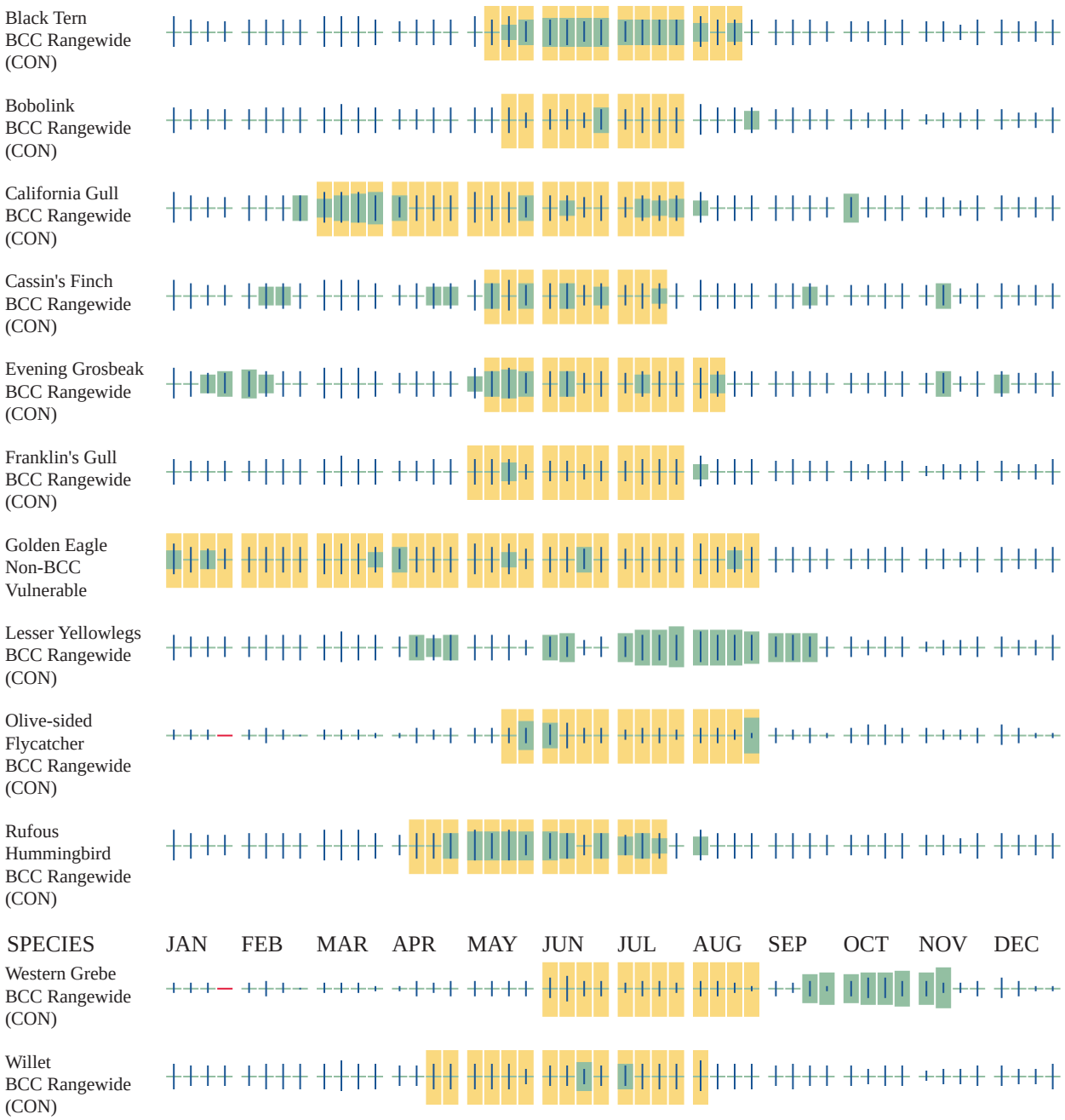
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

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.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

Agency: KLJ
Name: Jessica Callahan
Address: 2611 Gabel Road
City: Billings
State: MT
Zip: 59102
Email jessica.callahan@kljeng.com
Phone: 4062472904

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Montana Department of Transportation

Attachment 3

Class III Cultural Resources Inventory

CULTURAL RESOURCES

KALISPELL BYPASS (KBP)-BASECAMP DRIVE TO AIRPORT ROAD

NH 15(131), UPN 2038021:

A CLASS III CULTURAL RESOURCE INVENTORY IN FLATHEAD COUNTY, MT

Prepared For:
Montana Department of Transportation
Helena, Montana

Principal Investigator:
Bill Norman

Prepared By:
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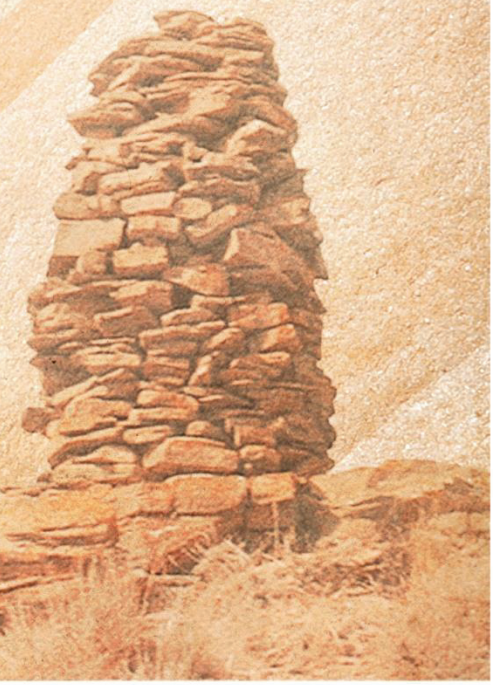
REPORT OF INVESTIGATION: 3377

SEPTEMBER 2024



KALISPELL BYPASS (KBP)-BASECAMP ROAD TO AIRPORT ROAD NH 15(131), UPN 2038021: A CLASS III CULTURAL RESOURCE INVENTORY IN FLATHEAD COUNTY, MT

Prepared For:
Montana Department of Transportation
Helena, Montana

Principal Investigator:
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Report of Investigation: 3377

September 2024

ABSTRACT

KLJ was contracted by the Montana Department of Transportation, to conduct Class III cultural resource inventory for the proposed Kalispell Bypass (KBP)-Basecamp Drive to Airport Road (NH 15(131), UPN 2038021) project. This report covers three small parcels of land that are additions to the longer, multi-year project. Previous inventories (Ferguson and McKay 1999, Rossillon 2005, and McLeod 2009) cover other sections of the over-all project. The proposed project is southwest of Kalispell in Flathead County, Montana, in Sections 29 and 30, Township 28 North, Range 21 West. The project is between Reference Post (RP) 0.4 and 1.7 on National Highway System (NH) Route N-109, also referred to as the US 93 Alternate or Kalispell Bypass.

The Class III inventory area for the project consists of three parcels totaling approximately seven acres. A Class I file search identified 30 historical era sites and two precontact lithic scatters within one mile of the Class III inventory area, none of which occur within or adjacent to its boundaries. The file search also revealed 29 manuscripts on file with the State Historic Preservation Office for the legal sections within one mile of the project area. Ten of these studies are for the Kalispell Bypass, while the remainder were conducted as part of various water and wetland, communications, and airport improvement projects. One of these studies (Rossillon 2005) overlaps a portion of the inventory area. All areas previously inventoried were resurveyed.

KLJ archaeologist Bill Norman conducted Class III inventory of the new project area parcels on July 12, 2024, and no new cultural resources were encountered. As no new or previously recorded resources were documented within the Class III inventory area, KLJ recommends a finding of No Historic Properties Affected for this project.

TABLE OF CONTENTS

TABLES

FIGURES

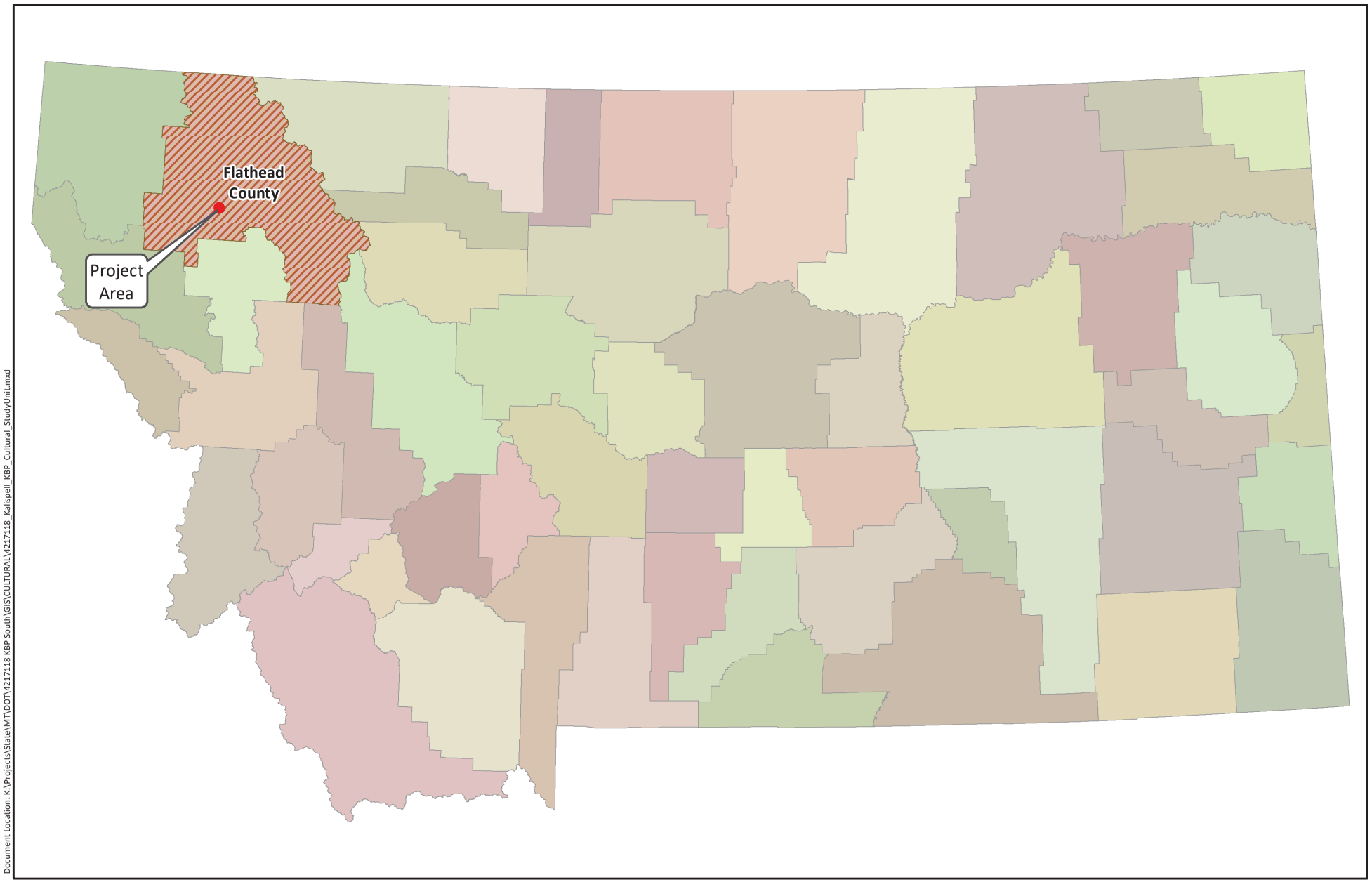
INTRODUCTION

KLJ was contracted by the Montana Department of Transportation (MDT), to conduct Class III cultural resource inventory for the proposed Kalispell Bypass (KBP) from Basecamp Drive to Airport Road (NH 15(131), UPN 2038021). This report covers three small parcels of land that are additions to the longer, multi-year project. Previous inventories (Ferguson and McKay 1999, Rossillon 2005, and McLeod 2009) cover other sections of the over-all project. This report serves as an addendum to the original work and covers Class III inventory of four additional parcels that were surveyed in July 2024. The proposed project is southwest of Kalispell in Flathead County, Montana, in Sections 29 and 30, Township 28 North, Range 21 West The project is between Reference Post (RP) 1.7 and 3.6 on National Highway System (NH) Route N-109, also referred to as the US 93 Alternate Bypass or KBP.

The Class III inventory area for the project are three small parcels of land near the intersection of the KBP and Airport Road, which encompasses a total of 7 acres. KLJ conducted a literature review for the project in April 2024 and fieldwork was undertaken by KLJ archaeologist Bill Norman in July 2024. The following sections of this report provide more information about the environmental and cultural background of the project, evaluation standards, field methods and conditions, and Class I and III inventory results. All field notes, forms, maps, and other records for the project are on file at the KLJ office in Billings, Montana.

Table 1: Legal Location of the Class III Inventory in Flathead County.

Township	Range	Section(s)
28 North	21 West	29, 30



KALISPELL BYPASS (KBP) - BASECAMP ROAD TO AIRPORT ROAD NH 15(131), UPN 2038021
Flathead County, Montana

KLJ

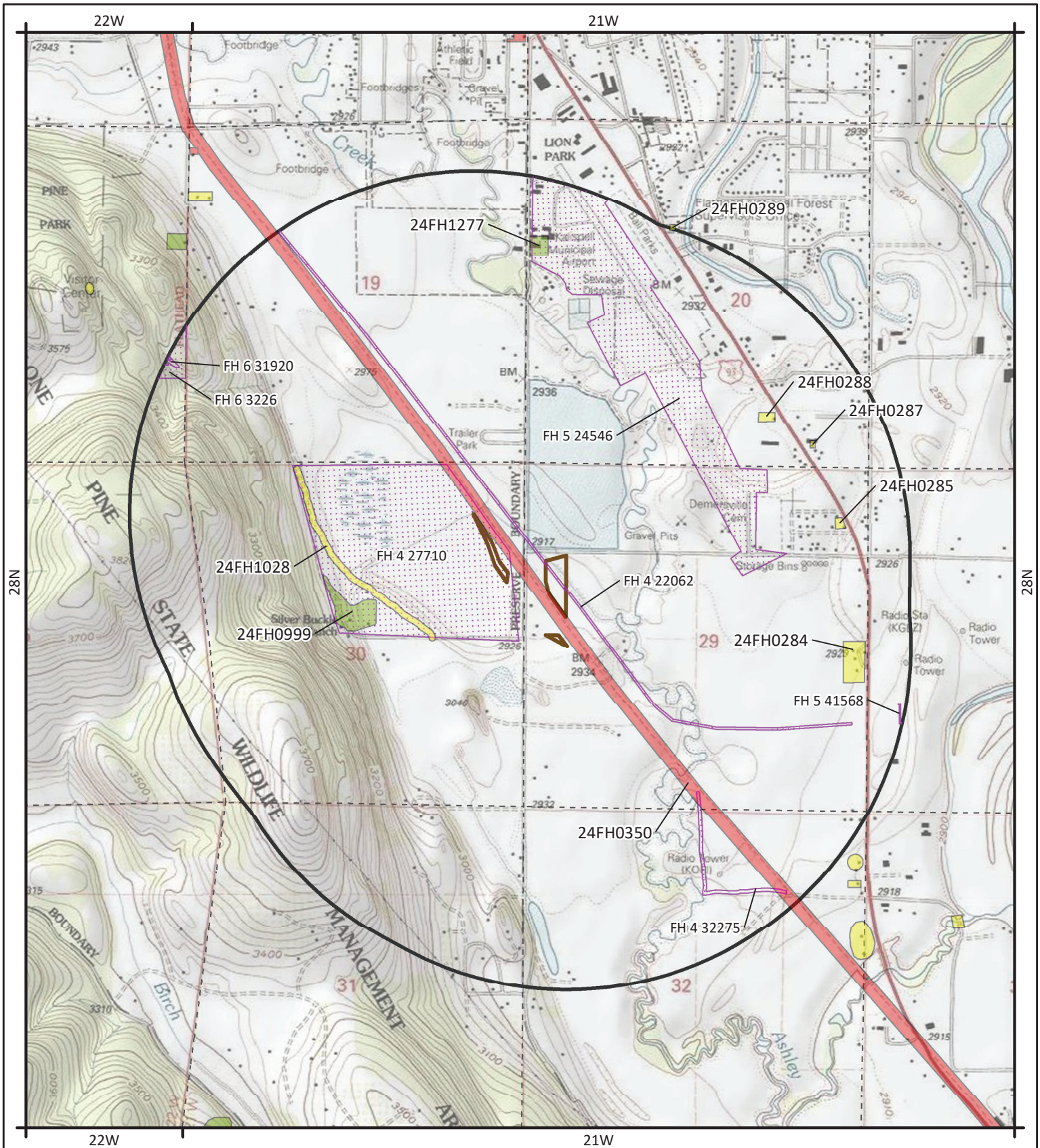
0 25 50 100 Miles

Project Area

N
W E
S

Map Scale: 1:3,700,000

Figure 1: Project Area Map in Flathead County, MT.



KLJ

Topo Source: ©2013, National Geographic Society, i-cubed

Restrictions:
For Official Use Only: Disclosure of Cultural Site Locations Prohibited

KLJ Project Number:	4217118
Date Created:	8/13/2024
Created By:	jeffprice

KALISPELL BYPASS (KBP) -BASECAMP ROAD TO AIRPORT ROAD NH 15(131), UPN 2038021 Flathead County, Montana
Topographic Map

Quadrangle: Kalispell

0 1,000 2,000 4,000 Feet

1:24,000

- Class III Inventory Area
- One Mile Buffer
- Previous Inventory
- Eligible Site
- Not Eligible Site
- Unevaluated Site

Figure 2: Topographic Map of the Class III Inventory Area.

Document Location: K:\Projects\State\MT\DOT\4217118 KBP South\GIS\CULTURAL\4217118_Kalispell_KBP_Cultural_Topo.mxd

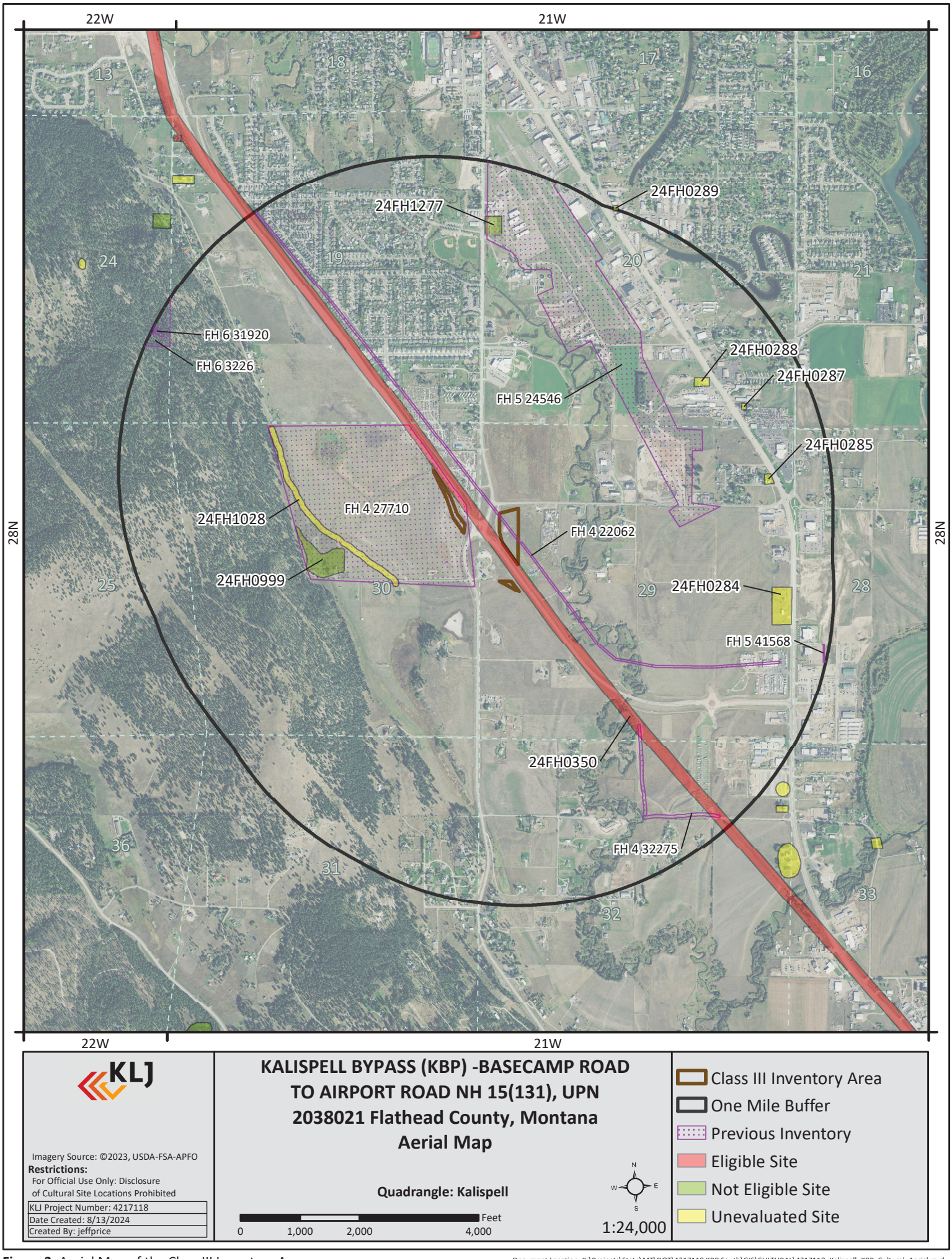


Figure 3: Aerial Map of the Class III Inventory Area.

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FIELD METHODS AND CONDITIONS

Fieldwork was undertaken by KLJ archaeologist Bill Norman on July 12, 2024. The inventory was conducted in accordance with standards set forth by the Montana SHPO (Montana Historical Society 2023) and the US Secretary of the Interior (Federal Register 1983). Per agency guidelines, the inventory area was surveyed using parallel pedestrian transects spaced no more than 25 meters apart. Location overview photos were taken from multiple viewpoints. During the inventory, particular attention was given to parts of the landscape with high probability for cultural material, including areas with gentle relief or soil deflation, adjacent to water resources, and/or where previous disturbance allowed for visual inspection of subsurface sediments (*e.g.,* road cuts, cattle paths).

The Class III inventory area is centered on the KBP at the southern edge of Kalispell, Montana. Typical vegetation in the area includes sparse prairie grasses, shrubs, with Ponderosa pine and Douglas fir trees along stony ridges and cultivated fields. Drainage bottoms have cottonwood stands. Ground surface visibility ranged from 60 to 100 percent and averaged 70 percent. The weather was sunny, calm, and seasonably warm and was not a limiting factor for completion of the Class III inventory.

CLASS I FILE SEARCH

KLJ archaeologist Jordan Phillips requested a file search from the Montana State Historic Preservation Office (SHPO) on May 21, 2024, for all cultural resources and prior surveys located within a one-mile buffer around the Class III inventory area (Figures 2 and 3; Appendix A). The search identified 30 historical era sites—including roads, railroads, homestead/farmsteads, bridges, outbuildings, and other architecture—and two precontact lithic scatters within one mile of the survey area. Three of the resources are recommended eligible for the National Register of Historic Places, while the remainder are unevaluated (n=21) or not eligible (n=8) for inclusion, and none of them are in or adjacent to the Class III inventory area for this project.

The file search also revealed 29 manuscripts on file with Montana SHPO that document previous surveys in the legal sections within one mile of the Class III inventory area (Figures 2 and 3; Appendix A). Ten of the previous studies are for work associated with the KBP, while the remaining reports are for various water and wetland, communications surveys, and airport improvement projects. This report covers three small parcels of land that are additions to the longer, multi-year project. Previous inventories (Ferguson and McKay 1999, Rossillon 2005, and McLeod 2009) cover other sections of the over-all project. One of these studies (Rossillon 2005) overlaps a portion of the inventory area. All areas previously inventoried were resurveyed.

CLASS III INVENTORY

No new or previously recorded cultural resources were encountered during Class III inventory for this project.

SUMMARY AND MANAGEMENT RECOMMENDATIONS

KLJ was contracted by the Montana Department of Transportation, to conduct Class III cultural resource inventory for the proposed Kalispell Bypass-Basecamp Drive to Airport Road project (NH 15(131), UPN 2038021). This report covers three small parcels of land that are additions to the longer, multi-year project. Previous inventories (Ferguson and McKay 1999, Rossillon 2005, and McLeod 2009) cover other sections of the over-all project. The proposed project is southwest of Kalispell in Flathead County, Montana, in Sections 29 and 30, Township 28 North, Range 21 West. The project is between Reference Post (RP) 0.4 and 1.7 on National Highway System (NH) Route N-109, also referred to as the US 93 Alternate or Kalispell Bypass. The Class III inventory area is approximately 7 acres.

A Class I file search identified 32 previously recorded resources and 29 prior surveys within one mile of the Class III inventory area. One of these studies (Rossillon 2005) overlaps a portion of the inventory area. All areas previously inventoried were resurveyed. Fieldwork for the project was undertaken by KLJ archaeologist Bill Norman in July 2024, and no new cultural resources were encountered during the inventory. As no new or previously recorded resources were documented in or adjacent to the Class III inventory area, KLJ recommends a finding of No Historic Properties Affected for this project.

REFERENCES CITED

Ferguson, David M. and Kathy McKay

1999 Cultural Resource Inventory and Assessment of The Kalispell Bypass Project. Manuscript on file with the Montana State Historic Preservation Office, Helena, MT.

McCloud, Charles M.

2009 Results of a Cultural Resources Inventory of the US 93 Alternate Bike Path Kalispell Bypass, Flathead County, Montana MDT Project # NH5-3(59)109 (Control # 2038). Manuscript on file with the Montana State Historic Preservation Office, Helena, MT.

Rossillion, Mitzi

2005 A Cultural Resource Inventory and Evaluation of Kalispell Bypass Wetland Mitigation Feasibility Study, Bibler Parcel in Flathead County, Montana. Manuscript on file with the Montana State Historic Preservation Office, Helena, MT.

APPENDIX A: PROJECT AREA PHOTOGRAPHS

Figure 4: Project overview, view to the northeast.

Figure 5: Project overview, view to the southeast.

Figure 6: Project overview, view to the northwest.

Figure 7: Project overview, view to the west.

APPENDIX B: CLASS I FILE SEARCH RESULTS

Table 2: Previously recorded resources within one mile of the Class III inventory area.

SITS	Site type	Description	Eligibility	TWN	RNG	SEC
24FH0104	Prehistoric	Lithic Material Concentration	Unevaluated	28N	22W	24
24FH0194	Historic	Site	Not Eligible	28N	21W	31
24FH0200	Historic	Building Foundation	Unevaluated	27N	21W	5
24FH0202	Historic	Site	Not Eligible	27N	21W	5
24FH0243	Historic	Vehicular/Foot Bridge	Unevaluated	28N	21W	33
24FH0244	Historic	Vehicular/Foot Bridge	Unevaluated	28N	21W	33
24FH0281	Historic	Homestead/Farmstead	Unevaluated	28N	21W	32
24FH0282	Historic	Homestead/Farmstead	Unevaluated	28N	21W	32
24FH0283	Historic	Homestead/Farmstead	Unevaluated	28N	21W	32
24FH0284	Historic	Homestead/Farmstead	Unevaluated	28N	21W	29
24FH0285	Historic	Architecture	Unevaluated	28N	21W	29
24FH0287	Historic	Architecture	Unevaluated	28N	21W	20
24FH0288	Historic	Architecture	Unevaluated	28N	21W	20
24FH0289	Historic	Architecture	Unevaluated	28N	21W	20
24FH0350	Historic	Railroad	Eligible	27N	21W	4
24FH0496	Historic	Homestead/Farmstead	Eligible	28N	21W	19
24FH0516	Historic	Vehicular/Foot Bridge	Unevaluated	28N	21W	33
24FH0664	Historic	Residence	Unevaluated	28N	21W	19
24FH0899	Historic	Outbuildings	Unevaluated	28N	21W	29
24FH0968	Historic	Residence	Not Eligible	28N	22W	24
24FH0999	Historic	Homestead/Farmstead	Not Eligible	28N	21W	30
24FH1244	Historic	Transmission Line	Eligible	28N	21W	34
24FH1028	Historic	Road	Unevaluated	28N	21W	30
24FH1277	Historic	Structure	Not Eligible	28N	21W	20
24FH1308	Historic	Trash Dump	Not Eligible	28N	21W	34
24FH1677	Historic	Commercial Development	Unevaluated	27N	21W	4
24FH0104	Prehistoric	Lithic Material Concentration	Unevaluated	28N	22W	24
24FH0194	Historic	Site	Not Eligible	28N	21W	31
24FH0200	Historic	Building Foundation	Unevaluated	27N	21W	5
24FH0202	Historic	Site	Not Eligible	27N	21W	5
24FH0243	Historic	Vehicular/Foot Bridge	Unevaluated	28N	21W	33
24FH0244	Historic	Vehicular/Foot Bridge	Unevaluated	28N	21W	33

Table 3: Manuscripts documenting previous surveys within one mile of the Class III inventory area.

MS #	Title	Primary Author	Year
DL 1 22029	Little Lost Creek Land Exchange	Morris	1998
FH 4 16230	Draft Eis & Site Forms - Us 93 Somers to Whitefish	Paulson	1993
FH 4 22062	Cultural Resource Inventory and Assessment of The Kalispell Bypass Project	Ferguson	1999
FH 4 23415	Cultural Resource Inventory and Evaluation of The Proposed Gravel Pit, Flathead County Montana (Foy's Canyon)	Hamilton	2001
FH 4 25057	Somers To Whitefish Cultural Resource Inventory Highway 93 And Its Alternates	Gray	1994
FH 4 27710	A Cultural Resource Inventory and Evaluation of Kalispell Bypass Wetland Mitigation Feasibility Study, Bibler Parcel In Flathead County, Montana	Rossillon	2005
FH 4 32275	Results of A Cultural Resources Inventory of The Us 93 Alternate Bike Path Kalispell Bypass, Flathead County, Montana MDT Project # Nh5-3(59)109 (Control # 2038)	Mcleod	2009
FH 4 32534	A Cultural Resource Inventory Report for The Foys Bend Riparian Project - Kalispell Bypass Nh5-3(59) 109 - Cn 2038	Platt	2010
FH 4 40678	Kalispell Bypass (KBP)-Foys Lake Road Interchange Select Portions Only Nh 15(132), UPN 2038022: A Class I Cultural Resource Inventory in Flathead County, Montana.	Moloney	2020
FH 4 40927	Kalispell Bypass (KBP)-Foys Lake Road Interchange Select Portions Only Nh 15(132), UPN 2038022: A Class I Cultural Resource Inventory in Flathead County, Montana.	Moloney	2020
FH 5 24546	A Cultural Resource Inventory of The Proposed Kalispell City Airport Project in Flathead County Montana	Brumley	2002
FH 6 14053	Greenacres West Unit #4	Taylor	1981
FH 6 24445	A Brief History and Evaluation Of 454 Valley View Drive, Kalispell Montana(Long Place)	Mckay	2002
FH 6 27675	Cultural Investigations and Visual Impact Assessment of Additions to A Cell Tower Located in Flathead County, Montana	Krigbaum	2005
FH 6 28193	A Cultural Resource Survey for the 2005 Flathead River Bank Stabilization Projects, Flathead County, Montana	Stutte	2005
FH 6 31920	Heritage Resource Inventory of a Proposal Helena Trail in Lone Pine State Park, FH Co. Mt	Scott	2010
FH 6 3226	Foy Lake Boating Access and Lone Pine State Park	Aaberg	1981
FH 6 3228	A Cultural Resources Reconnaissance of The Proposed City of Kalispell Sludge Management System	Choquette	1981

MS #	Title	Primary Author	Year
FH 6 3229	Cultural Resource Survey on For Construction of Facilities at Lone Pine State Park	Mclean	1982
FH 6 32846	A Cultural Resource Survey of The Mt1 Burbout Cellular Tower Facility Project in Flathead County, Montana	Stipe	2011
FH 6 37720	Heritage Resources Inventory for Proposed Improvements at Lone Pine State Park, Flathead County, Montana	Scott	2015
FH 6 38455	Kalispell-Kerr Transmission Line Rebuild Project- Segment 1 & 2	Aecom	2015
FH 6 39772	Summary Report Of 2017-2018 Cultural Resources Monitoring and Associated Protection Efforts for BPA's Kalispell-Kerr No. 1 115kv Transmission Line Rebuild Project, Miles 1 To 26, Flathead and Lake Counties, Montana	Jones	2019
FH 6 40860	Cultural Resource Compliance Report for Grassland Prescribed Fire, Lone Pine State Park, Flathead County, Montana.	Reckin	2021
FH 6 41017	Cultural Resource Inventory Report for Bridge Replacement and Archery Range Additions, Lone Pine State Park, Flathead County, Montana.	Reckin	2021
FH 6 41568	Cultural Resources Survey of The Proposed Dish Wireless Sebil00102a Monopole Installation, Kalispell, Flathead County, Montana.	Robinson	2022
FH 6 41573	Cultural Resource Inventory for Forest Health Project, Lone Pine State Park, Flathead County, Montana.	Reckin	2022
LN 1 23270	Archaeological Survey of Portions of The Proposed Montanore Project, Kootenai National Forest, Lincoln County	Ahlman	2006
ZZ 1 19861	Lost Creek Land Exchange	Caywood	1992

Attachment 4

2023 Detailed Noise Analysis

Big Sky Acoustics
PO Box 27 Helena, Montana 59624
406.457.0407 www.bigskyacoustics.com

December 8, 2023

Mr. Dillon McLain
KLJ Engineering
2969 Airport Rd, Ste. 1B
Helena, MT 59601

Re: KBP-Basecamp Dr to Airport Rd
Detailed Noise Analysis
NH 15(131), UPN 2038021
BSA Project #23134

Dear Dillon,

Big Sky Acoustics (BSA) has completed the Detailed Noise Analysis for the Kalispell Bypass (KBP)-Basecamp Drive to Airport Road project. The attached final report provides the details and results of the analysis.

Thank you for the opportunity to work with KLJ. If you have any questions concerning this report, please do not hesitate to call me at (406) 457-0407 or email me at sean@bigskyacoustics.com.

Sincerely,

Sean Connolly, INCE Bd. Cert.
BIG SKY ACOUSTICS

Kristin Connolly
BIG SKY ACOUSTICS

Attachment

KBP-BASECAMP DR TO AIRPORT RD
NH 15(131), UPN 2038021
DETAILED NOISE ANALYSIS

Prepared for:

KLJ

and

MONTANA
Department of Transportation

Completed by:

Big Sky Acoustics

December 8, 2023

TABLE OF CONTENTS

1.0 INTRODUCTION

The Montana Department of Transportation (MDT) is planning to reconstruct 1.4 miles of the Kalispell Bypass (KBP) (US 93 Alternate Route), from Reference Post (RP) 0.320 to RP 1.718, located approximately 2.5 miles south of Kalispell city center in Flathead County. Along KBP, the project begins west of Basecamp Drive approximately 0.2 miles prior to the Ashley Creek bridge, proceeding 0.9 miles northwest to a new grade-separated interchange and bridge over Airport Road, and terminating 0.5 miles beyond the Interchange (**Figures 1 – 3**, attached). Two new single-lane roundabouts will be constructed at the KBP on/off ramp termini on Airport Road, and portions of Airport Road and/or Cemetery Road, extending north, south and east, will also be modified (MDT 2022).

To improve safety and highway performance, the existing two-lane KBP highway and Ashley Creek bridge will be widened to typically include four 12-foot travel lanes, two 8- to 9-foot shoulders, and a paved 10-foot center median. The typical sections and roundabout approaches on Airport Road and Cemetery Road vary but include two 12- to 16-foot travel lanes and 2- to 4-foot shoulders. Both centerline and shoulder rumble strips are planned for the entire project, and 10- to 12-foot multi-use paths will be maintained on the east sides of KBP and Airport Road (MDT 2022).

This Detailed Noise Analysis for the KBP-Basecamp Dr to Airport Rd project was completed by Big Sky Acoustics (BSA) according to the U.S. Code of Federal Regulations Part 772 (23 CFR 772) *Procedures for Abatement of Street Traffic Noise and Construction Noise*, and MDT's *Traffic Noise Analysis and Abatement Policy* (MDT 2021). The project was evaluated as a Type 1 Project due to significant horizontal and vertical alignment shifts and construction of additional travel lanes. The intent of this traffic noise study was to evaluate existing traffic sound levels at noise-sensitive receptors and predict future traffic noise levels due to vehicles traveling on the improved roadways.

KBP is classified as a principal arterial, non-interstate highway in relatively flat terrain with a posted and planned speed limit of 60 mph. Airport Road is classified as a minor arterial and Cemetery Road is classified as a major collector, both with existing and planned speed limits of 35 mph. Surrounding land uses include single-family residences, mobile homes, apartments (under construction), salvage yards, an RV park, the KBP and Airport Road multi-use trails, and open grassland (**Figures 1 – 3**). The new Parkland Meadows Subdivision, including planned apartments and businesses, is currently under construction (infrastructure and Phase 2), and is located directly northeast of the Airport Road/Cemetery Road intersection (**Figure 1**) (City of Kalispell 2021a & 2023, Jackola 2021 & 2022, MDT 2022). BSA evaluated traffic noise level impacts for the No Build Alternative (i.e., the existing conditions) and for the proposed Build Alternative (KLJ 2022).

2.0 TERMINOLOGY

Sound levels are quantified using units of decibels (dB). Sound levels can also be expressed as A-weighted decibels (dBA). Humans typically have reduced hearing sensitivity at low frequencies compared with their response at high frequencies, and the A-weighting of sound levels closely correlates to the frequency response of normal human hearing. By utilizing A-weighted sound levels in a study, a person's response to noise can be assessed. Decibels are logarithmic values and cannot be combined using normal algebraic addition. For example, the combined sound level of two 50-dBA sound sources would be 53 dBA, not 100 dBA.

When traveling from a sound source to a receptor in an outdoor environment, sound levels decrease with increasing distance between the source and receptor. Traffic sound levels typically decrease between 3 and 4.5 dBA every time the distance between the road and receptor is doubled, depending on the characteristics of the source and the conditions over the path that the sound travels. The reduction in sound levels can be increased if a solid barrier, such as a man-made wall, or natural topography is located between the source and receptor.

The ambient sound at a receptor location in a given environment is the all-encompassing sound associated with that environment and is due to the combination of sound sources from many directions, near and far, including the sound source of interest. The background sound at a given location is due to any sources that are not associated with the sound source of interest.

For environmental noise studies, ambient sound levels and noise impact criteria are typically based on A-weighted equivalent sound levels, L_{eq}, during a certain time period. The equivalent sound level during a 1-hour period is represented as $L_{eq}(h)$ and is the metric used by the Federal Highway Administration (FHWA) and MDT for traffic noise studies. The equivalent sound level is defined as the steady state sound level that has the same acoustical energy as the actual, time-varying sound signal during the same time period. The $L_{eq}(h)$ metric is useful for traffic noise studies because it uses a single number to describe the constantly fluctuating ambient sound levels at a receptor location during one hour of time.

3.0 ACTIVITY CATEGORIES AND NOISE ABATEMENT CRITERIA

23 CFR 772 outlines the procedures to determine if traffic noise impacts will occur for a project and when traffic noise abatement measures will be considered. FHWA and MDT identify traffic noise impacts according to Noise Abatement Criteria (NAC) for various land uses and zoning. MDT's Noise Policy and 23 CFR 772 states that traffic noise impacts occur for roadway projects when the predicted $L_{eq}(h)$ sound level at a receptor location in a project's Design Year approaches or exceeds the NAC values listed in **Table 3-1** on the next page, or when the predicted traffic noise levels of the Build Alternative in the Design Year substantially exceed the existing ambient sound levels at a receptor. In determining and abating traffic noise impacts, 23 CFR 772, Section 772.11–*Noise Abatement*, gives primary consideration to receptor locations that represent exterior areas where frequent human use occurs, and a lowered sound level would be of benefit. MDT defines "approach" as 1 dBA below the NAC, and "substantially exceed" as 13 dBA above the existing traffic noise level (MDT 2021).

For example, Activity Category B and C land uses, such as residences, campgrounds and trails, the exterior NAC is 67 dBA, and Activity Category E land uses, such as offices and restaurants/bars, the exterior NAC is 72 dBA. Therefore, traffic noise impacts occur if the predicted traffic noise levels are 66 dBA or 71 dBA (or greater), respectively, in the Design Year of a project, or if the predicted traffic noise levels for the Build Alternative are 13 dBA higher than the Present Year sound levels. Activity Category F land uses, such as industrial, maintenance (e.g., auto salvage yards) and retail facilities, as well as undeveloped lands (Activity Category G), do not have a NAC (**Table 3-1**) and were not evaluated for this traffic noise analysis. When traffic noise impacts are identified at noise-sensitive receptor locations, MDT considers reasonable and feasible noise abatement measures to reduce the traffic noise levels at the receptor (MDT 2021).

Table 3-1: Noise Abatement Criteria (NAC)

Activity Category	Activity Criteria[1] $L_{eq}(h)$, dBA	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[2]	67	Exterior	Residential
C[2]	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E[2]	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities, (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

Source: MDT 2021

Notes:

1 The $L_{eq}(h)$ Activity Criteria values are for impact determination only and are not design standards for noise abatement measures.

2 Includes undeveloped lands permitted for this Activity Category.

Underlined denotes existing or possible uses within the project limits.

4.0 AFFECTED ENVIRONMENT

4.1 Ambient Sound Measurements

BSA completed three ambient sound level measurements for the project on September 25, 2023. The measurements determined the existing ambient sound levels at representative receptor locations and traffic was counted during the measurements (**Figures 1**).

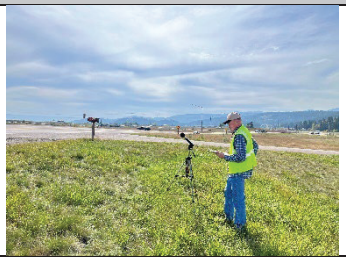
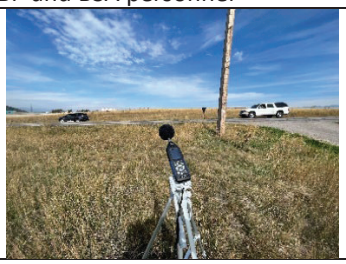
BSA conducted the measurements using Larson Davis Model 831 Type I Sound Level Meters, each with a preamplifier and 0.5-inch diameter microphone. The meters were calibrated using a Larson Davis Model CAL200 Acoustical Calibrator prior to and checked after the measurements. The sound level meters were set to "slow" response per FHWA requirements, mounted on a tripod so that the microphones were approximately 5 feet above the ground surface, and a 3-inch diameter windscreen was used over the microphones. Temperature, relative humidity, and wind speed were measured using a Kestrel 3000 meter.

The sound level measurements were 30-minutes in duration, and BSA calculated the 1-hour $L_{eq}(h)$ from the measurement data. **Table 4-1** summarizes the measured ambient $L_{eq}(h)$ sound levels, and **Table 4-2** includes the atmospheric conditions and measurement photos.

Table 4-1: Outdoor Ambient Sound Level Measurements

Meas. Location (Figures 1 & 2)	Date and Time (hours)	Description	Distance and Direction from Centerline	Measured $L_{eq}(h)$	Noise Sources during Measurement
1	09/25/23 1241 to 1311	West side of Airport Road and north of entrance to Wisher's Auto Recycling	42 feet west	60.6 dBA	Airport Road traffic was the dominant noise source. Other sources included KBP traffic, helicopters, and propeller planes to/from the Kalispell City Airport, and the Parkland Meadows Subdivision construction.
2	09/25/23 1244 to 1314	South side of Cemetery Road and southwest of residential driveway entrance	52 feet south	62.1 dBA	Cemetery Road traffic was the dominant noise source. Other sources included KBP traffic, helicopters, and propeller planes to/from the Kalispell City Airport.
3	09/25/23 1405 to 1435	East side of KBP, approx. 1,000 feet southeast of the KBP/Airport Road roundabout, and adjacent to multiuse path and R19 residence	57 feet east	70.1 dBA	KBP traffic was the dominant noise source.

Table 4-2: Atmospheric Conditions and Measurement Photos

Meas. Location (Figures 1 & 2)	Date and Time (hours)	Temp	Relative Humidity	Wind Speed and Direction	Measurement Photos – View of Closest Roadway and Receptor	
1	09/25/23 1241 to 1311	69 °F	42 %	Sunny and calm		
				Location 1:	Looking south at Airport Rd and KBP and BSA personnel	Looking east at Airport Rd and Parkland Meadows Subdivision
2	09/25/23 1244 to 1314	69 °F	42 %	Sunny and calm		
				Location 2:	Looking north at Cemetery Rd and Parkland Meadows Subdivision	Looking east at Cemetery Rd and closest residence
3	09/25/23 1405 to 1435	71 °F	41 %	Sunny, 3 to 6 mph from south		
				Location 3:	Looking northwest at KBP, roundabout at Airport Rd and path	Looking east at closest residence and BSA personnel

4.2 Creating and Verifying the Traffic Noise Model

BSA predicted traffic noise levels at the receptors for the No Build and Build Alternatives using the FHWA-approved Traffic Noise Model (TNM), Version 2.5 software. The ambient sound level measurements taken by BSA (**Table 4-1**) were used to verify that the TNM models were reasonably accurate.

TNM 2.5 uses a three-dimensional coordinate system (x, y, and z) to define the location of the highway, receptor locations and terrain elevations. The number and type of vehicles traveling on the highway that were tallied during the measurements, the approximate speed of the traffic, the location of the centerlines of the driving lanes, the approximate ground elevations between the measurement locations and the highway, and the measurement locations were entered into the model. Topographic elevations of the receptor locations, the highway conditions, and the location of the proposed Build Alternative were based on the Preliminary Alignment and Grade Road Plans and Typical Sections (KLJ 2022).

Table 4-3 lists the traffic data BSA counted during the field measurements and the predicted noise levels. The difference between each field measured $L_{eq}(h)$ level and the level predicted by the TNM model for the traffic conditions during each measurement period was -0.3 to +0.6 dBA. A difference of +/- 3 dBA between measured and predicted traffic noise levels indicates that a TNM model is reasonably accurate (MDT 2021). Therefore, the TNM models are reasonably accurate and acceptable for traffic noise level predictions at the receptor locations.

Table 4-3: Measured Ambient vs. Predicted Noise Levels

Meas. Location (Figures 1 & 2)	Date and Time (hours)	Distance and Direction from Centerline	Traffic Tallied during Measurement[1]		Measured $L_{eq}(h)$[2]	Predicted $L_{eq}(h)$ by TNM Model
1	09/25/23 1241 to 1311	42 feet west	Northbound Autos: 110 MT: 4 HT: 0	Southbound Autos: 98 MT: 4 HT: 4	60.6 dBA	60.0 dBA
2	09/25/23 1244 to 1314	52 feet south	Eastbound Autos: 164 MT: 16 HT: 4	Westbound Autos: 174 MT: 18 HT: 8	62.1 dBA	61.8 dBA
3	09/25/23 1405 to 1435	57 feet east	Northbound Autos: 286 MT: 22 HT: 18	Southbound Autos: 336 MT: 40 HT: 24	70.1 dBA	70.4 dBA

Notes:

[1] The 30-minute traffic counts were doubled to determine the $L_{eq}(h)$ data (MDT 2021)

[2] The $L_{eq}(h)$ was calculated from the 30-minute measurement data (MDT 2021)

Autos Automobiles – 2-axle, 4-wheel vehicles including pickup trucks (FHWA Vehicle Classes 1 – 3)

MT Medium trucks – 2-axle, 6-wheel vehicles, plus automobiles pulling trailers (FHWA Vehicle Classes 4 – 5)

HT Heavy trucks – 3 or more axles (FHWA Vehicle Classes 6 – 16)

4.3 Traffic Data Used for the Traffic Noise Predictions

BSA calculated the traffic noise levels for the No Build and Build Alternatives for the project (**Section 5.0**) using MDT's traffic data for KBP and Airport Road for Present Year 2023 and Design Year 2044 (MDT 2023), and KLJ's traffic data for Cemetery Road for Present Year 2022 and Design Year 2045 (KLJ 2023). Note that MDT's data for KBP is unfactored (i.e., not seasonally or axle adjusted), and therefore, is a conservative analysis for the KBP traffic noise.

The traffic data in **Table 4-4** used for the noise level predictions includes the average annual daily traffic (AADT), the Design Hourly Volume (DHV), and the vehicle classification data. For the TNM modeling, BSA assumed that the traffic would be evenly divided between the travel lanes for each roadway in each direction.

Table 4-4: Traffic Data Used for the Noise Level Predictions

Roadway	Design Condition	Year	AADT	DHV	Autos	MT	HT
KBP	No Build	2023	18,600	1,913	95.8%	2.2%	2.0%
		2044	28,190	2,900			
	Build Alternative	2044					
Airport Rd	No Build	2023	4,850	552	97.9%	1.5%	0.6%
		2044	5,980	680			
	Build Alternative	2044					
Cemetery Rd	No Build	2022	4,284	389	97.0%	0.9%	2.1%
		2045	6,755	614			
	Build Alternative	2045					

Notes:
AADT Average Annual Daily Traffic
DHV Design Hourly Volume
Autos Automobiles – 2-axle, 4-wheel vehicles including pickup trucks (FHWA Vehicle Classes 1 – 3)
MT Medium trucks – 2-axle, 6-wheel vehicles, plus automobiles pulling trailers (FHWA Vehicle Classes 4 – 5)
HT Heavy trucks – 3 or more axles (FHWA Vehicle Classes 6 – 16)

5.0 ENVIRONMENTAL CONSEQUENCES

To determine the existing conditions, BSA completed the sound level measurements and drove the project limits to field-verify the receptor locations. BSA also reviewed aerial photography, the Preliminary Alignment and Grade Road Plans and Typical Sections (KLJ 2022), the Alignment and Grade Review report (MDT 2022), and the engineering, traffic impact and City reports for the Parkland Meadows Subdivision (Abelin 2021, City of Kalispell 2021a & 2021b, Jackola 2022), discussed the project and traffic data with KLJ and MDT, and discussed existing and planned/proposed subdivisions with the City of Kalispell and Flathead County (City of Kalispell 2023, Flathead County 2023).

The approximate 38-acre Parkland Meadows Subdivision is a 4-phase Planned Unit Development (PUD), zoned RA-1 (Residential Apartment – 31 acres) and B-1 (Neighborhood Business – 7 acres). As shown on **Figure 1** and in **Table 4-2**, the infrastructure and Phase 2 of the Subdivision are currently under construction and located northeast of the intersection of Airport and Cemetery

roads, where a 5-leg roundabout is planned for the Build Alternative (KLJ 2022). The Subdivision has been annexed into the City of Kalispell and the complete build-out (Phases 1 – 4) may include four 18-unit 3-story apartment buildings (72 units), sixteen 24-unit 3-story apartment buildings (384 units), and seven business lots for boutique commercial/retail, office, and/or restaurant uses as shown in the sketch below (City of Kalispell 2021a & 2023).

Because of the flexibility allowed by the PUD, the final Subdivision plat could include a total of 480 to 600 apartment units if additional apartment buildings are built on the B-1 lots rather than businesses. However, the Developer is currently planning for some business uses within the Subdivision. No additional City or County planned or proposed subdivisions were identified within the project limits (City of Kalispell 2023, Flathead County 2023).

As shown on **Figures 1 – 3**, BSA identified 27 noise-sensitive receptors (or groups of receptors) located adjacent to KBP, Airport Road, and/or Cemetery Road and within approximately 500 feet of the edge of the nearest roadway travel lane or project roadway termini (MDT 2021). The identified noise-sensitive receptors include 11 single-family residences, three mobile homes, nine first-row apartment buildings (192 units) (Activity Category B), the Montana Basecamp RV Park (campground) and the KBP and Airport Road multiuse trails located on the east side of the roadways (Activity Category C), and the potential first-row businesses in the Parkland Meadows Subdivision (Activity Category E) (**Table 3-1**). There are also two single-family residences within 500 feet of the north project terminus on east side of KBP, but these homes were not evaluated as receptors due to the existing traffic noise barrier wall that was constructed for the Southside Estates Subdivision.

5.1 Results – No Build vs. Build Alternatives

The predicted traffic noise levels for both the No Build and Build Alternatives are summarized in **Table 5-1**. For the noise-sensitive receptors located adjacent to KBP, Airport Road or Cemetery

Road, no traffic noise impacts are predicted due to the No Build Alternative in the Present Year. One impact is predicted for the No Build Alternative in the Design Year at single-family residential Receptor R19, located on the east side of KBP adjacent to Measurement Location 3 (**Figure 2**). For the Build Alternative, traffic noise impacts are predicted for single-family residential Receptors R19 and R21 in the Design Year, located on the east and west sides of KBP, respectively, and south of the proposed Airport Road Interchange (**Figure 2**). No traffic noise impacts are predicted for the Build Alternative at receptors located adjacent to Airport or Cemetery roads (**Figure 1**).

Table 5-1: Predicted Traffic Noise Levels

Receptor Number (Figures 1 – 3)	Description	Adjacent Roadway	NAC Activity Category (Table 3-1)	NAC Impact Criteria[1] (Table 3-1)	No Build Alt $L_{eq}(h)$, Present Year (dBA)	No Build Alt $L_{eq}(h)$, Design Year (dBA)	Build Alt $L_{eq}(h)$, Design Year (dBA)	Build Alt Design Year Minus No Build Alt Present Year
R1	Mobile home	Airport Rd	B	66	53	54	54	1
R2	Mobile home	Airport Rd	B	66	57	58	58	1
R3	Mobile home	Airport Rd	B	66	58	59	59	1
R4	Single-family residence	Airport Rd	B	66	57	58	58	1
R5	Single-family residence	Airport Rd	B	66	56	57	58	2
R6	Single-family residence	Airport Rd	B	66	56	57	58	2
R7	Single-family residence	Airport Rd	B	66	57	57	59	2
R8	Apartment Bldg - 24 units[2]	Airport Rd	B	66	44	46	50	6
R9	Apartment Bldg - 24 units[2]	Airport Rd	B	66	53	54	58	5
R10	Apartment Bldg - 24 units[2]	Airport Rd	B	66	47	48	54	7
R11	Apartment Bldg - 18 units[2]	Airport Rd	B	66	51	52	57	6
R12	Apartment Bldg - 18 units[2]	Airport Rd	B	66	49	50	55	6
R13	Apartment Bldg - 18 units[2]	Cemetery Rd	B	66	50	52	56	6
R14	Apartment Bldg - 18 units[2]	Cemetery Rd	B	66	55	57	59	4
R15	Apartment Bldg - 24 units[2]	Cemetery Rd	B	66	49	50	55	6
R16	Apartment Bldg - 24 units[2]	Cemetery Rd	B	66	48	49	52	4
R17	Single-family residence	Cemetery Rd	B	66	52	54	53	1
R18	Single-family residence	Cemetery Rd	B	66	52	54	56	4
R19	Single-family residence	KBP	B	66	65	66	68	3
R20	Single-family residence	KBP	B	66	52	54	56	4
R21	Single-family residence	KBP	B	66	61	63	66	5
R22	Single-family residence	KBP	B	66	51	53	55	4
R23	MT Basecamp RV Park	KBP	C	66	53	55	55	2
R24	Single-family residence	Cemetery Rd	B	66	50	52	53	3
R25	Business lots (2) - Airport Rd[2]	Airport Rd	E	71	54	55	59	5
R26	Business lots (3) - Cemetery Rd[2]	Cemetery Rd	E	71	58	60	60	2
R27	Multiuse Paths (2)	KBP & Airport Rd	C	66	61	63	63	2

Notes:

[1] MDT defines "approach" as 1 dBA less than NAC value (**Table 3-1**) and "substantially exceed" as at least 13 dBA greater than Present Year sound level.

[2] First-row apartment building or business lot in the Parkland Meadows Subdivision, representing a group of receptors (i.e., units per building/lot).

Shading Indicates that the predicted traffic noise level meets or exceeds the traffic noise impact criteria (**Section 3.0**).

As shown in **Table 5-1**, the predicted Build Alternative Design Year noise levels for the project are 1 to 7 dBA greater than the existing No Build Alternative noise levels in the Present Year (**Table 5-1**). Because traffic noise impacts were predicted along KBP, BSA evaluated noise mitigation measures (**Section 6.0**).

5.2 Construction Noise

Road construction may cause localized, intermittent, short-duration noise impacts, which may cause annoyance to people living in the area. Construction noise will vary by construction phase, type of equipment used, and distance between activities and a listener location. During construction of the project, the contractor should comply with all applicable state, City, and County noise, construction, and equipment ordinances. The contractor should also use the following techniques to reduce construction noise impacts at the identified receptors:

1. Place stationary noise sources away from receptors.
2. Use portable noise barriers or natural terrain to provide shielding between equipment and receptors.
3. Turn idling equipment off. Drive equipment forward instead of backward, lift instead of dragging materials, and avoid scraping or banging activities.
4. Confine work to between the hours of 7:00 a.m. to 7:00 p.m.
5. Use quieter equipment with properly sized and maintained mufflers, engine intake silencers, less obtrusive backup alarms (such as manually adjustable, self-adjusting, or broadband sound alarms instead of traditional "beep-beep-beep" alarms), engine enclosures, noise blankets or rubber truck bed linings.

6.0 MITIGATION CONSIDERATIONS

When traffic noise impacts are predicted, possible abatement measures for the mitigation of traffic noise need to be considered, and the measures are assessed to determine if they are feasible and reasonable per the MDT Noise Policy (MDT 2021). Possible abatement measures include construction of noise barriers, modifying the proposed build alternatives, acquisition of real property, traffic management measures, or building modifications for Activity Category D public use or institutional structures (**Table 3-1**). Barriers typically provide the highest level of traffic noise reduction.

According to MDT's Noise Policy, to determine if a mitigation measure is feasible, the measure must provide a minimum 5-dBA reduction in traffic noise levels for at least three first-row impacted receptors, and must not cause safety hazards or maintenance, utility or access limitations. To determine if a mitigation measure is reasonable involves an examination of costs, public support, and whether a noise reduction design goal of 7 dBA can be achieved for 60% of the first-row benefited receptors (MDT 2021).

6.1 Noise Barriers

A barrier is most effective when it is continuous and solid, and it blocks the direct line-of-sight between the road and a receptor. Barriers can be constructed using built up dirt to create a berm, using concrete, concrete block, other similar masonry materials, metal panels, or thick wood to

create a wall, or a combination of a berm or Jersey barrier with a shorter wall on top (MDT 2021). Numerous traffic noise barrier walls were built adjacent to KBP north of this project as part of the original highway construction or have subsequently been built by Subdivision developers as required by the City of Kalispell (2011).

As shown on **Figure 2** and in **Table 5-1**, for the Build Alternative, traffic noise impacts are predicted for single-family residential receptors R19 and R21 in the Design Year, located on the east and west sides of KBP, respectively, and south of the proposed Airport Road Interchange. However, for each barrier to be considered feasible per MDT's Noise Policy (MDT 2021), it must benefit at least three receptors (**Section 6.0**). Therefore, construction of two barriers to benefit these two receptors are not feasible or reasonable mitigation measures for this project.

6.2 Design Modifications

Shifting the horizontal and/or vertical alignments of the Build Alternative, or acquisition of real property, to reduce traffic noise impacts can provide more distance between a road and receptors resulting in lower noise levels. This project will add two southbound travel lanes on KBP, and the reconstructed highway will generally follow the existing alignment within MDT's right of way (ROW). Impacted Receptors R19 and R21 are located on opposite sides of KBP (**Figure 2**) and based on discussions with KLJ shifting the horizontal or vertical alignments or acquisition of real property are not a feasible and/or reasonable mitigation measures per the MDT Noise Policy (2021) as shown in **Table 6-1** (KLJ 2023).

Table 6-1: KBP Design Modification Options

Build Alternative KBP Noise-Impact Receptor (Table 5-1 & Figure 2)	KBP Alignment Shift	Design Modification Option	Feasible and/or Reasonable Discussion
R19 Single-family residence	Horizontal	Shift KBP alignment 120 feet west of R19 to eliminate impact	Property to the northwest quadrant is held in a conservation easement. **Not feasible or reasonable.**
	Vertical	Build Airport Road over KBP with KBP at grade	Noise impact will not be eliminated due to overall roadway modifications that will double pavement width causing more noise reflection. **Not feasible or reasonable.**
		Construct KBP under Airport Road with Airport Road at grade	KBP would have to be below ground level prior to R19 to eliminate the impact. Soil conditions and drainage perpetuation would not allow for a significant cut below existing grade in the area. **Not feasible.**
R21 Single-family residence	Horizontal	Shift KBP alignment 80 feet east of R21 to eliminate impact	Shifting the KBP alignment east will impact Ashley Creek. **Not reasonable.**
	Vertical	Build Airport Road over KBP with KBP at grade	Receptor R21 is too far south of the Interchange to eliminate the Design Year impact. **Not reasonable.**

6.3 Traffic Management Measures

Traffic management measures include traffic control devices, signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modifying speed limits, and exclusive lane designations (MDT 2021). Traffic control devices are already included in the project design,

as two single-lane roundabouts will be constructed at the proposed KBP on/off ramp interchange termini on Airport Road.

KBP is a principal arterial, non-interstate highway (60 mph speed limit), Airport Road is a minor arterial (35 mph speed limit transitioning to 25 mph/school zone north of the project), and Cemetery Road is a major collector (35 mph speed limit). Restricting certain vehicle types, limiting the time of day that certain vehicles may use the roads, or exclusive lane designations are not reasonable mitigation measures for the connectivity of KBP, the new Interchange, or Airport and Cemetery roads.

Modifying speed limits is a potential noise mitigation measure if it does not hinder the function of the roadways, but the existing and proposed project speed limits are generally low (as listed above) for the functionality of the roadways. Additionally, speed limits are generally set by the Transportation Commission, and are usually reduced for safety concerns rather than noise impacts (MDT 2021), and therefore, were not evaluated by BSA.

7.0 COORDINATION WITH LOCAL OFFICIALS

Traffic noise can significantly affect the value and usefulness of property near roadways. Traffic noise in future areas of frequent residential outdoor use can be annoying, distracting, and hinder communication. In March 2008, MDT published *Growing Neighborhoods in Growing Corridors: Land Use Planning for Traffic Noise* and recommended that traffic noise levels of $L_{eq}(h)$ 60 dBA be used to determine the location of outdoor use areas and the location of residential building façades closest to a roadway, and to avoid traffic noise problems in the future (MDT 2008). For comparison, 60 dBA represents the typical exterior background sound levels of a large urban area, and the background sound levels inside large busy offices. If the 60 dBA criteria can be met by planning a site accordingly, then the need for traffic noise control measures, such as barrier walls, earthen berms, improved window configurations, etc., can be avoided.

To avoid future traffic noise impacts in future development, BSA determined the minimum setback distances from the Build Alternative centerlines associated with the Design Year $L_{eq}(h)$ 60 and 64 dBA traffic noise levels (MDT 2008). **Table 7-1** lists the setback distances for the modeled 60 and 64 dBA contour lines, for KBP, Airport Road and Cemetery Road within the project limits, and MDT should advise the City of Kalispell and Flathead County (**Section 9.0**) of the results of this analysis for discussions with the Parkland Meadows Subdivision developer and for future proposed developments.

Table 7-1: Traffic Noise Levels vs. Minimum Setback Distances from the Build Alternative Centerlines

Roadway	60 dBA Contour Line	64 dBA Contour Line
KBP	430 feet	340 feet
Airport Road	80 feet	40 feet
Cemetery Road	80 feet	40 feet

Local officials should strongly encourage developers to incorporate noise-compatible development on their planned/proposed properties. Examples of noise-compatible development include providing greenbelts, open space, or parkland between the residents and the roadway. Garages, carports, or storage sheds should front the roadway rather than residences. If residential buildings must be located along the roadway, the homes should be designed so that less-sensitive rooms, such as kitchens, laundry rooms, utility rooms, and storage spaces, face the roadway rather than bedrooms and living rooms. Windows in the highway-side of the building should be avoided. Strategies that incorporate noise-compatible development concepts are proactive and preventative in nature and can avoid traffic noise impact problems in the future.

8.0 CONCLUSION

The predicted traffic noise levels for both the No Build and Build Alternatives are summarized in **Table 5-1**. For the noise-sensitive receptors located adjacent to KBP, Airport Road or Cemetery Road, no traffic noise impacts are predicted due to the No Build Alternative in the Present Year. One impact is predicted for the No Build Alternative in the Design Year at single-family residential Receptor R19, located on the east side of KBP adjacent to Measurement Location 3 (**Figure 2**). For the Build Alternative, traffic noise impacts are predicted for single-family residential Receptors R19 and R21 in the Design Year, located on the east and west sides of KBP, respectively, and south of the proposed Airport Road Interchange (**Figure 2**). No traffic noise impacts are predicted for the Build Alternative at receptors located adjacent to Airport or Cemetery roads (**Figure 1**).

As shown in **Table 5-1**, the predicted Build Alternative Design Year noise levels for the project are 1 to 7 dBA greater than the existing No Build Alternative noise levels in the Present Year (**Table 5-1**). Because traffic noise impacts were predicted along KBP, BSA evaluated noise mitigation measures (**Section 6.0**).

Road construction may cause localized, intermittent, short-duration noise impacts, which may cause annoyance to people living in the area. During construction of the KBP-Basecamp Dr to Airport Rd project, the contractor should comply with all applicable state, City, and County noise, construction, and equipment requirements. The contractor should also use the techniques listed in **Section 5.2** to reduce construction noise impacts.

Because traffic noise impacts were predicted along KBP, BSA evaluated noise mitigation measures (**Section 6.0**), including barriers, design modifications, and traffic management modifications. However, BSA and KLJ determined that the mitigation measures were not feasible and/or reasonable per MDT's Noise Policy (MDT 2021).

To avoid future traffic noise impacts in future development, BSA determined the minimum setback distances from the Build Alternative centerlines associated with the Design Year $L_{eq}(h)$ 60 and 64 dBA traffic noise levels (MDT 2008). **Table 7-1** lists the setback distances for the modeled 60 and 64 dBA contour lines for KBP, Airport Road and Cemetery Road within the project limits, and MDT should advise the City of Kalispell and Flathead County (**Section 9.0**) of the results of this analysis for discussions with the Parkland Meadows Subdivision developer and for future proposed developments.

9.0 REFERENCES

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10.0 STANDARD OF CARE

To complete this report, BSA has endeavored to perform its services consistent with the professional skill and care ordinarily provided by acoustical consultants practicing in similar markets and under similar project conditions. BSA is fully experienced and properly qualified to perform acoustical consulting services. However, BSA makes no warranty, either expressed or implied, as to the professional services it has rendered to complete this report. For the completion of this report, BSA has used data provided by KLJ and MDT in performing its services and is entitled to rely upon the accuracy and completeness thereof. Therefore, if the information and assumptions used to create this report change (i.e., traffic data, location of the travel lanes, modification of the Build Alternative, etc.) then the noise analysis may need to be reevaluated.

FIGURE 1

Big Sky Acoustics

Receptor & Noise Measurement Locations: North of Interchange
KBP-Basecamp Dr to Airport Rd
NH 15(131), UPN 2038021
Scale: 1 inch = 300 ft (8.5 x 11")

FIGURE 2

Big Sky Acoustics

Receptor & Noise Measurement Locations: South of Interchange
KBP-Basecamp Dr to Airport Rd
NH 15(131), UPN 2038021
Scale: 1 inch = 300 ft (8.5 x 11")

FIGURE 3

Big Sky Acoustics

Receptor Location: West of Basecamp Dr
KBP-Basecamp Dr to Airport Rd
NH 15(131), UPN 2038021
Scale: 1 inch = 300 ft (8.5 x 11")

Attachment 5

2024 USFWS Threatened and Endangered Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Montana Ecological Services Field Office
585 Shephard Way, Suite 1
Helena, MT 59601-6287
Phone: (406) 449-5225 Fax: (406) 449-5339

In Reply Refer To: 11/07/2024 15:22:56 UTC
Project Code: 2024-0016224
Project Name: Kalispell Bypass Airport Road to Basecamp Drive

Subject: List of threatened and endangered species that may occur in your proposed project location 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 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 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:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- 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:

Montana Ecological Services Field Office
585 Shephard Way, Suite 1
Helena, MT 59601-6287
(406) 449-5225

PROJECT SUMMARY

Project Code: 2024-0016224
Project Name: Kalispell Bypass Airport Road to Basecamp Drive
Project Type: Road/Hwy - Maintenance/Modification
Project Description: The project involves roadway improvements to Kalispell Bypass.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@48.16186395,-114.30886313732798,14z

Counties: Flathead County, Montana

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 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 Fisheries[1], 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.

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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
Canada Lynx *Lynx canadensis* Population: Wherever Found in Contiguous U.S. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Grizzly Bear *Ursus arctos horribilis* Population: U.S.A., conterminous (lower 48) States, except where listed as an experimental population There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/7642	Threatened
North American Wolverine *Gulo gulo luscus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Spalding's Catchfly *Silene spaldingii* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/3681	Threatened

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

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.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

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

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

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

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* 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. https://ecos.fws.gov/ecp/species/1680	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 "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

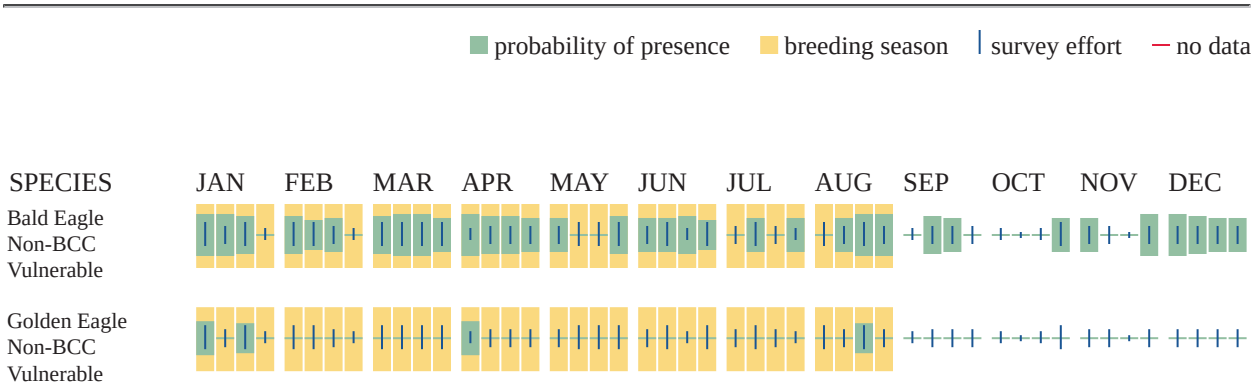
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider

implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

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)

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

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Black Swift *Cypseloides niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black Tern *Chlidonias niger surinamenisis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10955	Breeds Mar 1 to Jul 31
Calliope Hummingbird *Selasphorus calliope* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9526	Breeds May 1 to Aug 15
Cassin's Finch *Haemorhous cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15

NAME	BREEDING SEASON
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9465	Breeds May 15 to Aug 10
Franklin's Gull *Leucophaeus pipixcan* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10567	Breeds May 1 to Jul 31
Golden Eagle *Aquila chrysaetos* 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. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird *Selasphorus rufus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds Apr 15 to Jul 15
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet *Tringa semipalmata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10669	Breeds Apr 20 to Aug 5
Williamson's Sapsucker *Sphyrapicus thyroideus nataliae* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11995	Breeds May 1 to Jul 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 "Supplemental

Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

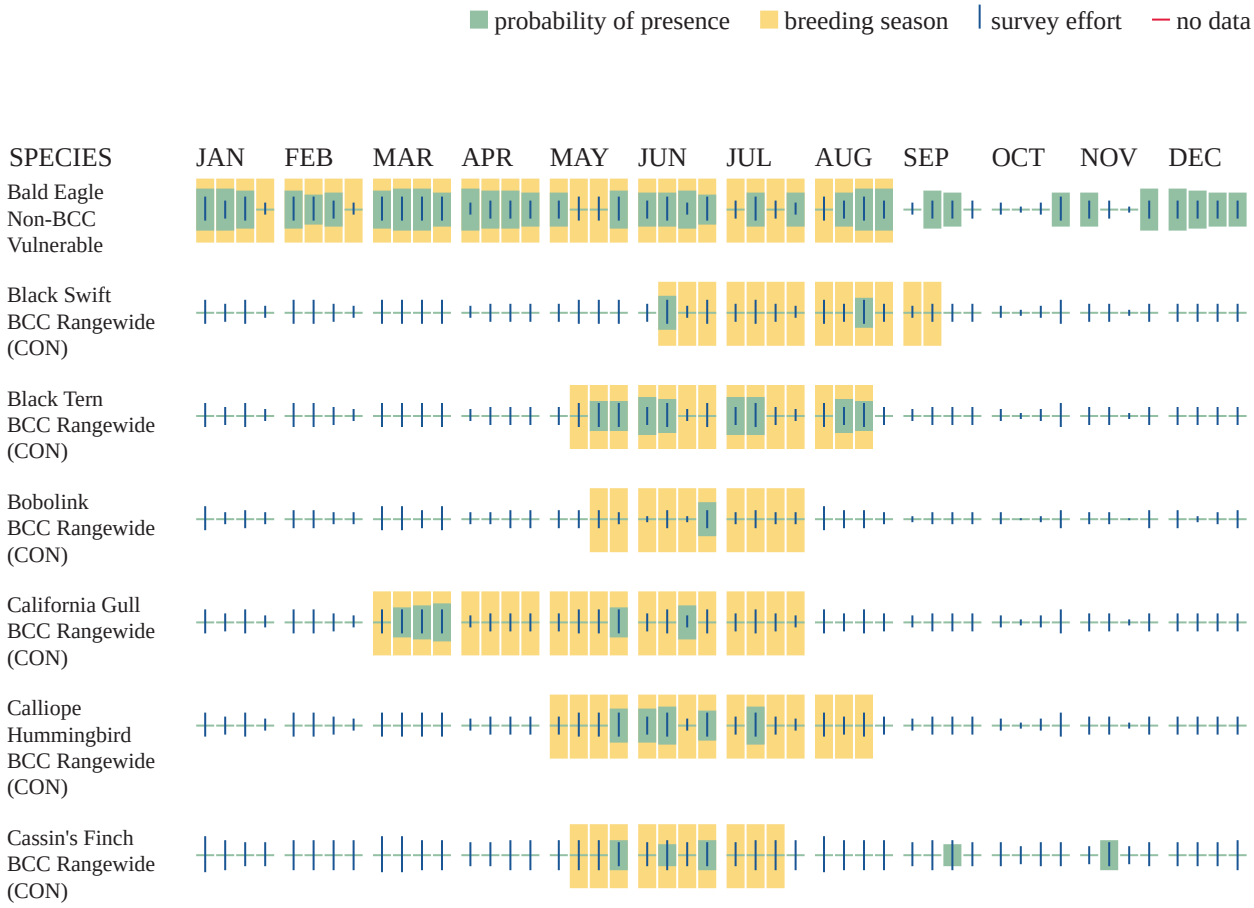
Probability of Presence (■)

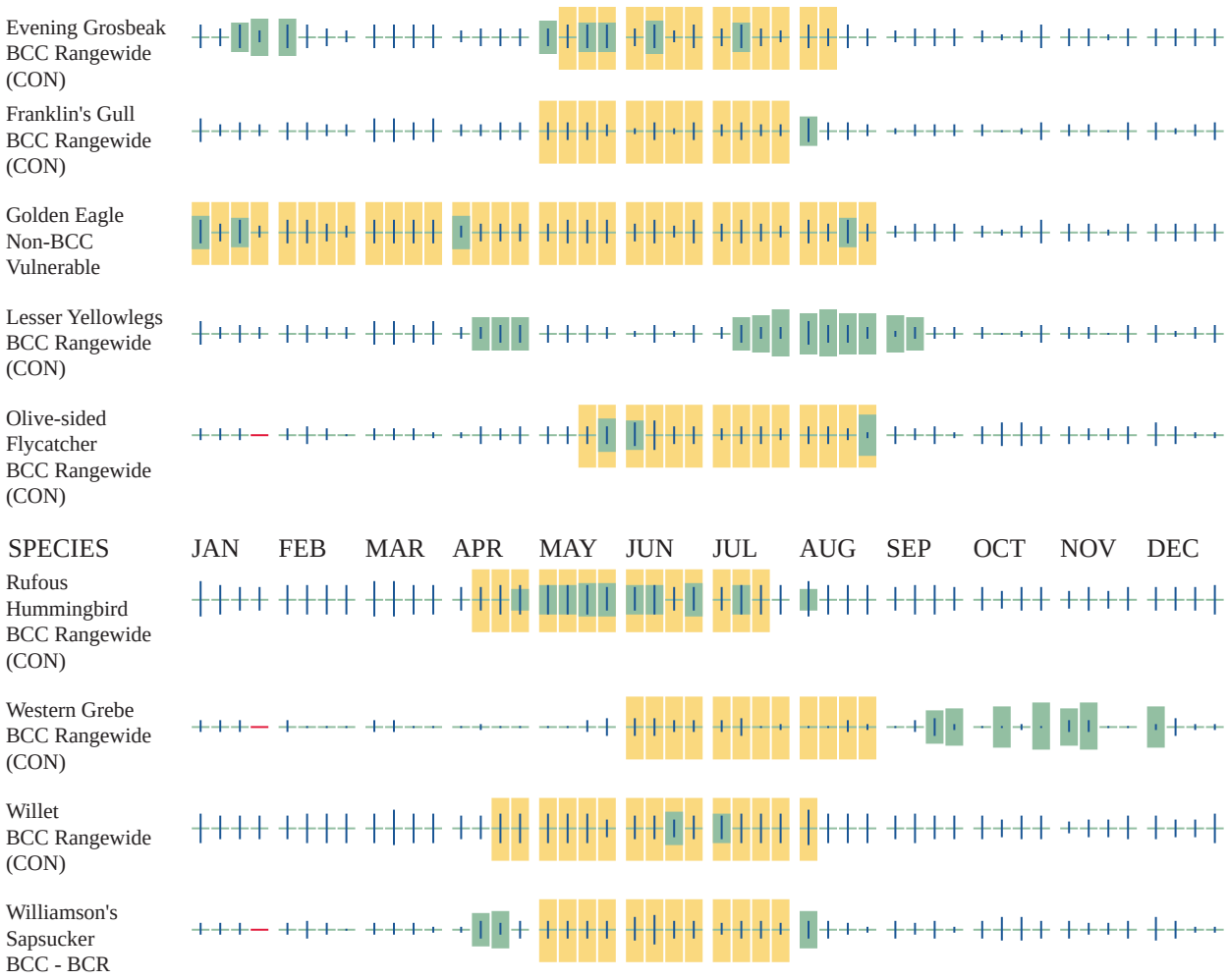
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

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

RIVERINE

- R3UBG
- R4SBA

IPAC USER CONTACT INFORMATION

Agency: KLJ
Name: Jessica Callahan
Address: 2611 Gabel Road
City: Billings
State: MT
Zip: 59102
Email jessica.callahan@kljeng.com
Phone: 4062472904

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Montana Department of Transportation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Montana Ecological Services Field Office
585 Shephard Way, Suite 1
Helena, MT 59601-6287
Phone: (406) 449-5225 Fax: (406) 449-5339

In Reply Refer To: 02/03/2025 18:00:24 UTC
Project Code: 2024-0016224
Project Name: Kalispell Bypass Airport Road to Basecamp Drive

Subject: List of threatened and endangered species that may occur in your proposed project location 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 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 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:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- 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:

Montana Ecological Services Field Office
585 Shephard Way, Suite 1
Helena, MT 59601-6287
(406) 449-5225

PROJECT SUMMARY

Project Code: 2024-0016224
Project Name: Kalispell Bypass Airport Road to Basecamp Drive
Project Type: Road/Hwy - Maintenance/Modification
Project Description: The project involves roadway improvements to Kalispell Bypass.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@48.16186395,-114.30886313732798,14z

Counties: Flathead County, Montana

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 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 Fisheries[1], 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.

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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
Canada Lynx *Lynx canadensis* Population: Wherever Found in Contiguous U.S. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Grizzly Bear *Ursus arctos horribilis* Population: U.S.A., conterminous (lower 48) States, except where listed as an experimental population There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/7642	Threatened
North American Wolverine *Gulo gulo luscus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885	Proposed Endangered

FLOWERING PLANTS

NAME	STATUS
Spalding's Catchfly *Silene spaldingii* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/3681	Threatened

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

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.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information

on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* 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. https://ecos.fws.gov/ecp/species/1680	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 "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

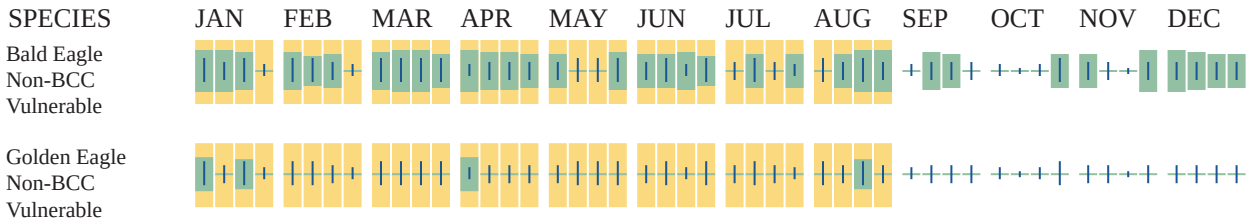
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort – no data



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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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)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

NAME	BREEDING SEASON
Black Swift *Cypseloides niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black Tern *Chlidonias niger surinamenisis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10955	Breeds Mar 1 to Jul 31
Calliope Hummingbird *Selasphorus calliope* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9526	Breeds May 1 to Aug 15
Cassin's Finch *Haemorhous cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9465	Breeds May 15 to Aug 10
Franklin's Gull *Leucophaeus pipixcan* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10567	Breeds May 1 to Jul 31
Golden Eagle *Aquila chrysaetos* 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. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere

NAME	BREEDING SEASON
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird *Selasphorus rufus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds Apr 15 to Jul 15
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet *Tringa semipalmata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10669	Breeds Apr 20 to Aug 5
Williamson's Sapsucker *Sphyrapicus thyroideus nataliae* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11995	Breeds May 1 to Jul 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 "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

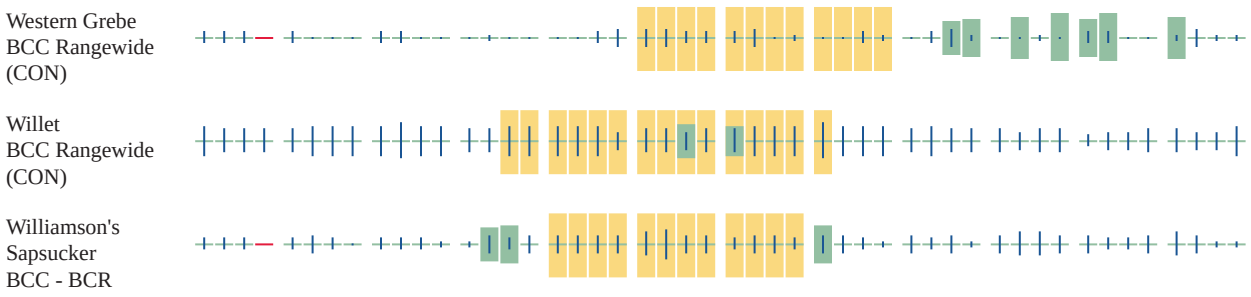
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

probability of presence | breeding season | survey effort | no data



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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

RIVERINE

- R3UBG
- R4SBA

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LEAD AGENCY CONTACT INFORMATION

Lead Agency: Montana Department of Transportation