Appendix A

Agency Coordination



Department of Transportation Environmental Office

700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Hilary Meyer SD Dept. of Game, Fish & Parks 523 E. Capitol Ave Pierre, SD 57501

RE: Project EM 0295(45) 130, PCN 020V, Brookings County

I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Ms. Meyer:

The City of Brookings (the City), in conjunction with South Dakota Department of Transportation (SDDOT) and Federal Highway Administration (FHWA) are initiating a study to evaluate alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). See attached for a figure of the project location. Please comment on any of the following topics that pertain to your agency:

1. Wetland Locations	6. Parks
2. Threatened or Endangered Species	7. Land & Water Conservation Funds
3. Refuges	8. Aquatic Invasive Species
4. SDGF&P Game Production Areas	
5. SDGF&P Recreation Areas	

Please submit your comments as soon as possible, so that the project's environmental documentation can be completed, and the project can be let and constructed in a timely manner.

Sincerely,

Joanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721

Attachment

Cc: Randy Kittle





Department of Transportation Environmental Office

700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Patrick Snyder SD Dept. of Environment & Natural Resources Joe Foss Building Pierre, SD 57501-3181

RE: Project EM 0295(45) 130, PCN 020V, Brookings County

I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Snyder:

The City of Brookings (the City), in conjunction with South Dakota Department of Transportation (SDDOT) and Federal Highway Administration (FHWA) are initiating a study to evaluate alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). See attached for a figure of the project location. Please comment on any of the following topics that pertain to your agency:

1. Water Quality Standards
2. Air Quality
3. Hazardous Waste
4. Underground Storage Tanks
5. Contaminated Soils

Please submit your comments as soon as possible, so that the project's environmental documentation can be completed, and the project can be let and constructed in a timely manner.

Sincerely,

oanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721

Attachment

Cc: Shannon Minerich, DENR Nicole Stasch, DENR Terry Florentz, DENR





Department of Transportation Environmental Office

700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

August 24, 2020

Scott Larson, Field Supervisor U.S. Fish & Wildlife Service 420 Garfield - Suite 400 Pierre, SD 57501-5408

RE: Project EM 0295(45)130, PCN 020V, Brookings County

I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way, and Design

Dear Mr. Larson:

Attached is information on the above project for your review and comment. The City of Brookings, in conjunction with the South Dakota Department of Transportation and the Federal Highway Administration, are initiating a study to evaluate alternatives for a new interchange on Interstate 29 at 20th Street South. The project location figure, a figure showing probable impacted tree removal areas in the project area, and the Northern Long-eared Bat Habitat Assessment Data Sheet are attached for your review.

According to the U.S. Fish & Wildlife Service Information for Planning and Consultation (IPAC) database (Consultation code: 06E14000-2020-SLI-0642), the following species are known to occur in the Project Area in Brookings County:

Species	Status	SDDOT Determination	Comments
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened	May Affect, Not Likely to Adversely Affect	Suitable habitat is present; tree removal will occur outside the active season
Red Knot (<i>Calidris canutus rufa</i>)	Threatened	No Effect	No suitable habitat present
Dakota Skipper (<i>Hesperia dacotae</i>)	Threatened	No Effect	No suitable habitat present
Poweshiek Skipperling (<i>Oarisma poweshiek</i>)	Endangered	No Effect	No suitable habitat present
Western Prairie Fringed Orchid (Platanthera praeclara)	Threatened	No Effect	No suitable habitat present

A consistency letter through IPAC was not able to be generated due to project activities occurring greater than 300 feet from existing road surfaces. Currently, 20th Street South ends approximately 0.25-mile west of Interstate 29 (I-29) and resumes immediately east of I-29. An improved roadway from I-29 to 0.25-mile west of I-29, south of the Edgebrook Golf Course, does not exist. The project would extend 20th Street South across I-29 and create a new interchange at Exit 130, providing a much-needed point of access for the City of Brookings.

Tree removal will be required for the anticipated construction of the project and will occur in a timeframe from November 1st to April 14th, outside the active maternity and pup-rearing season of the NLEB. Suitable NLEB habitat areas where removal will likely be required for project

construction are identified on the attached figure. Trees required to be removed will be clearly marked in the field. Due to tree removal activities occurring outside the active season of the NLEB, the SDDOT has made the preliminary effect determination of *may affect, not likely to adversely affect* for the NLEB.

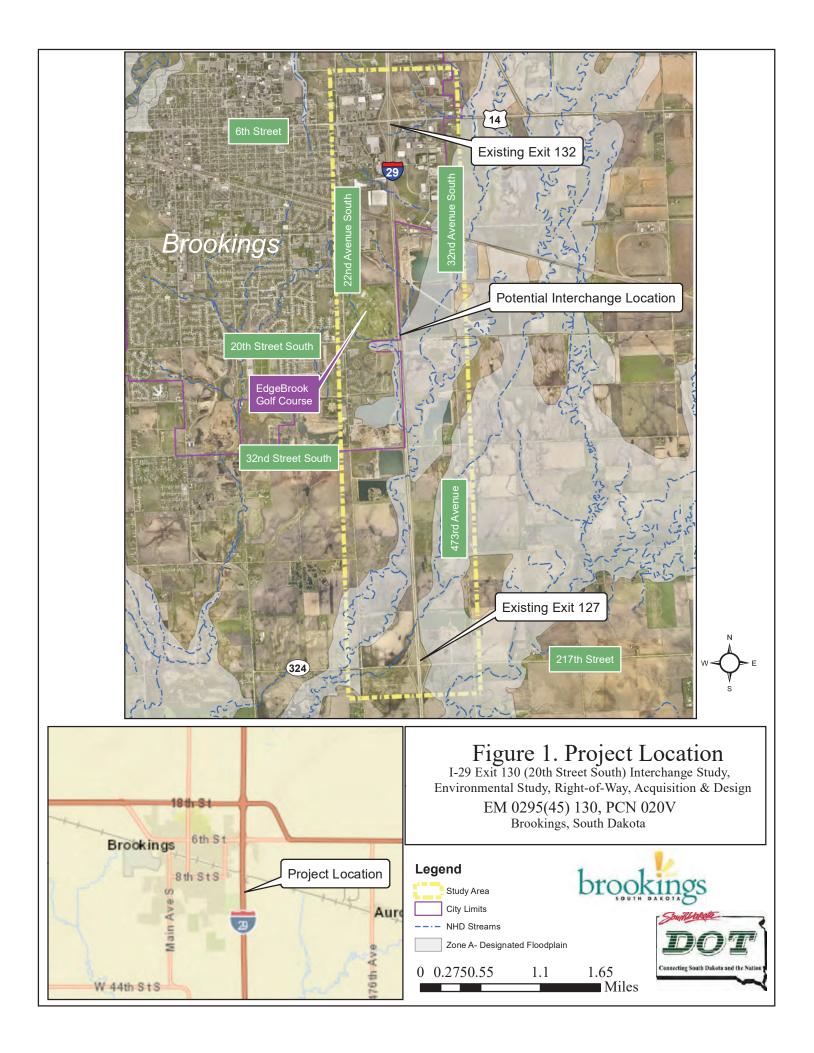
The project may impact aquatic resources and will be reviewed for wetland impacts. The project will comply with all federal and state environmental regulations.

Please submit your comments as soon as possible, so that the project's environmental documentation can be completed.

Sincerely,

Joanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721 Attachments





Project EM 0295(45)130 PCN020V Brookings County – I-29 Exit 130 (20th Street South) Interchange Tree Removal Locations



Phase I Summer Habitat Assessments Northern Long-Eared Bat Habitat Assessment Data Sheet

Date: 5 / 12 / 20 South Dakota Department of Transportation Office of Project Development-Environmental Surveyor: Kendall Vande Kamp & Caiti Murphy Becker-Hansen Building 700 E. Broadway Ave. Phone (605) 773-3721 Pierre, SD 57501-2586 http://www.sddot.com/business/environmental/Default.aspx **General Project Information** Project/PCN 020V County Brookings Station # Multiple Sample Sites? Yes, See Comments MRM # No No Structure # Habitat (trees) within 1000' of bridge? Yes

Brief Project Description

The project would consist of constructing a new I29 interchange at 20th Street South in Brookings South Dakota. Approach grading to the interchange from 22nd Avenue South and 34th Avenue South would also be needed.

Project Area							
		Total acres		Forest acres		Open acres	
Project (Acres of site being surveyed)	200		50		150		
		Completely Cleared		Partially Cleared (Leave Some trees)		Preserve acres (no clearing)	
Proposed tree rem (acres) No Remo	oval _{3.13} oval						
Vegetation cover t	ypes						
Pre-project Other C	oniferous	Other Deciduous	-	-		-	
-		-	-	-		-	
Post-project							
Overall, the vegetation	on structur	e throughout the major	ity of th	e project area would re	main the s	same. Portions of the project a	rea +
Landscape within	5-Mile Ra	<u>dius</u>					
-		ested areas? (If yes, De - forested river bottom		g. shelterbelt, forested, forest erbelts	ed creek bott No	com, forested river bottom)	
Describe adjacent	propertie	S (e.g., forested, grassl	and, cor	nmercial or residential c	levelopmei	nt, water sources).	
Shelterbelt		Resident	tial		Comm	ercial	
Proximity to public	: land (<u>15</u>	Mile Radius)					
				forested public land management areas		national or state forests,	
"forested". Oak Lak	e Field Sta		nately 1			land might be classified as n the Mountain County Park is	

Although it might not meet the definition of "forested". The nearest public land that contains trees is the Dakota Nature Park just under a mile to the southwest.

Survey Complete

Northern Long-Eared Bat Habitat Assessment Data Sheet (continued)

Additional information about discreet habitat types at multiple sites Use additional sheets to assess discrete habitat types at multiple sites in a project area. Include a map depicting sample sites in project area. A single sheet can be used for multiple sample sites if the habitat is the same.

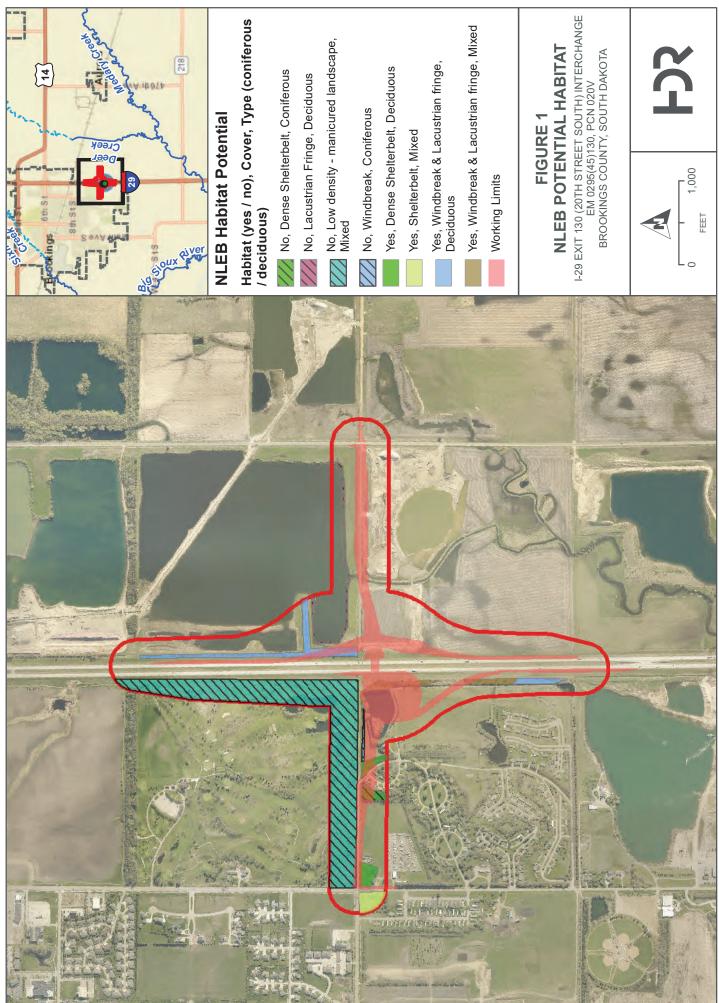
Sample Site Description (Station # / MRM#) Sample site no. 20th Street Interchange Project Area. Sample site no. Water Resources at Sample Site Intermittent Perennial Describe existing condition of water sources Ephemeral Stream type (# and length in FT) 340 Excavated borrow pits and associated drains Pools/ponds Open and accessible to bats? (\bullet) (# and size in acres) 140 Yes provides potential summer water source. Wetlands Permanent Seasonal (Approx. acres) 8.0 10.0 No Water Source Forest Resources at Sample Site Midstory (20-50') Canopy (>50') Understory (<20') Closure/density 1=1-10%, 2=11-20%, (Use 1-6 from far right table) 1 1 3=21-40%, 4=41-60%, 5=61-80%, 6=81-100% Dominant species Other Deciduous Other Deciduous Other Deciduous of mature trees % of trees with 5 1 2 exfoliating bark Size composition of live Large (>15 in.) Small (3-8 in.) Med. (9-15 in.) trees (%) 40 50 10 Total # of suitable snags 10 No Forest Resources (Suitable snags are standing dead trees with exfoliating bark, cracks, crevices or hollows.) Conclusion IS THE HABITAT SUITABLE FOR NORTHERN LONG-EARED BATS? Yes

Additional comments:

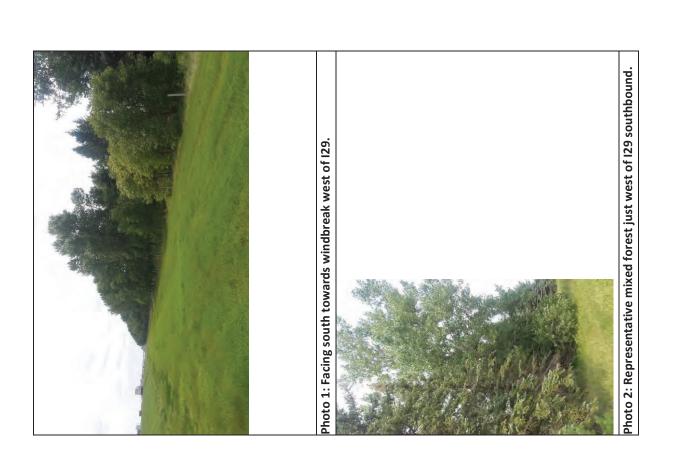
This data form characterizes the forest resources throughout the project area as a whole. Attached is a map that maps dichotomous "forested" areas at a smaller spatial scale with regards to whether they provide suitable NLEB habitat, cover description, and type (coniferous, deciduous, or mixed). Also attached are representative photos of forested areas within the project area.

Attach aerial map of project site with all forested areas labeled and a general description of the habitat.

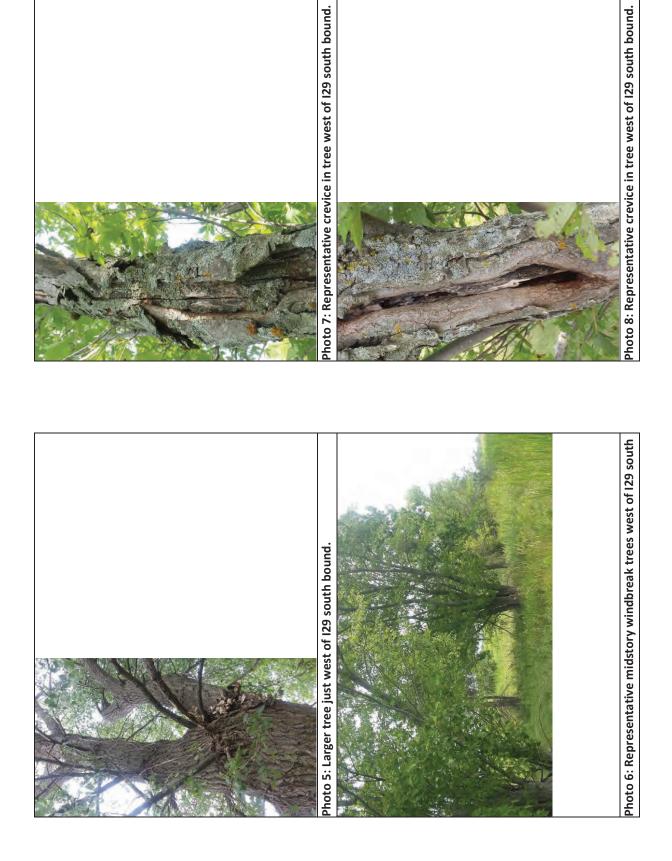
Photographic documentation should include: habitat shots at edge and interior from multiple locations; canopy, midstory, understory; examples of potential suitable snags and live trees; and water resources.



H: (GISIPROJECTSICITY_OF_BROOKINGS)[22_EXIST130_20THST_INTERCHANGE_10220242MAP_DOCSINLEB/HEBINLEB_HABITAT_FORM_ATTACHMENT_V2.MXD - USER: KVANDEKA - DATE: 8/20/2020



















United States Department of the Interior

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



April 17, 2020

In Reply Refer To: Consultation Code: 06E14000-2020-SLI-0642 Event Code: 06E14000-2020-E-01681 Project Name: I29 Exit 130 (20th Street South) Interchange

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Thank you.

Attachment(s):

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

Official Species List

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

This species list is provided by:

South Dakota Ecological Services Field Office

420 South Garfield Avenue, Suite 400 Pierre, SD 57501-5408 (605) 224-8693

Project Summary

Consultation Code:	06E14000-2020-SLI-0642
Event Code:	06E14000-2020-E-01681
Project Name:	I29 Exit 130 (20th Street South) Interchange
Project Type:	TRANSPORTATION
Project Description:	The project would construct an interchange on Interstate 29 (I-29) at 20th Street South in the City of Brookings, South Dakota.

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/44.2824778479752N96.75829216485886W</u>



Counties: Brookings, SD

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 Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/9045</u>	Threatened
Birds	
NAME	STATUS
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1864</u> Insects	Threatened
NAME	STATUS
Dakota Skipper <i>Hesperia dacotae</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/1028</u>	Threatened
Poweshiek Skipperling Oarisma poweshiek There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/9161</u>	Endangered

Flowering Plants

NAME	STATUS
Western Prairie Fringed Orchid Platanthera praeclara	Threatened
No critical habitat has been designated for this species.	
Species profile: <u>https://ecos.fws.gov/ecp/species/1669</u>	

Critical habitats

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

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

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

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty 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 should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

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

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

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
American Bittern Botaurus lentiginosus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <u>https://ecos.fws.gov/ecp/species/6582</u>	Breeds Apr 1 to Aug 31
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. <u>https://ecos.fws.gov/ecp/species/1626</u>	Breeds Dec 1 to Aug 31

NAME	BREEDING SEASON
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Dunlin <i>Calidris alpina arcticola</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Franklin's Gull <i>Leucophaeus pipixcan</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	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. <u>https://ecos.fws.gov/ecp/species/1680</u>	Breeds Jan 1 to Aug 31
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9679</u>	Breeds elsewhere
Long-eared Owl <i>asio otus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/3631</u>	Breeds Mar 1 to Jul 15
Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9481</u>	Breeds May 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the

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

Probability of Presence (

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

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

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

Breeding Season (=)

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

Survey Effort ()

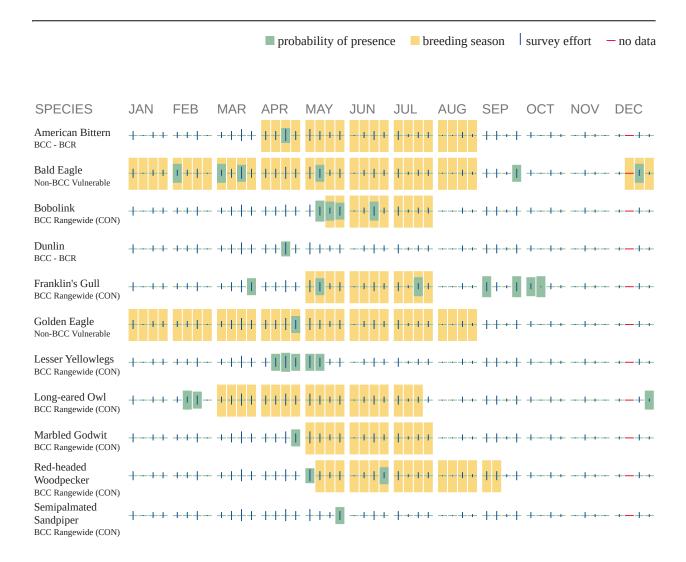
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

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

Survey Timeframe

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



Additional information can be found using the following links:

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

Migratory Birds FAQ

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

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

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

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern</u> (<u>BCC</u>) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>AKN Phenology Tool</u>.

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

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

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

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

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: <u>The Cornell Lab</u> of <u>Ornithology All About Birds Bird Guide</u>, or (if you are unsuccessful in locating the bird of interest there), the <u>Cornell Lab of Ornithology Neotropical Birds guide</u>. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your

project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that

overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of Engineers District</u>.

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 POND

• <u>Palustrine</u>

RIVERINE

• <u>Riverine</u>



Banner Associates, Inc. 2307 W 57th St, Ste 102 Sioux Falls, SD 57108 Tel 605.692.6342 Toll Free 855.323.6342 www.bannerassociates.com

April 23, 2020

Staci Bungard, Floodplain Administrator City of Brookings Planning & Zoning 520 3rd Street, Suite 230 Brookings, SD 57006

RE: Project EM 0295(45) 130, PCN 020V, Brookings County

I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Ms. Bungard:

This letter is to introduce the above-mentioned project and to initiate coordination with your office. The City of Brookings, South Dakota Department of Transportation (SDDOT), and Federal Highway Administration (FHWA) have initiated this project to study alternatives and identify the preferred alternative for a new interchange on Interstate 29 (I-29) at 20th Street South within Brookings, SD. Attached is a map showing the location of the above project. The project will comply with all federal and state regulations.

The project is located within City of Brookings and Brookings County limits. We are also sending a coordination letter to the floodplain administrator for Brookings County. Preliminary alternatives were identified during the previously completed studies. Currently these alternatives are being refined and the resources within the study area are being identified. We have also identified the presence of designated floodplain, Zone A, in the study area. After the alternatives are refined, potential impacts to the resources, including floodplain, will be determined. We will continue to coordinate with your office after the potential impacts are identified for the alternatives.

As the project proceeds, we will continue to coordinate with your department as information becomes available on any effects to any recreational resources. If you have any comments or questions, please feel free to contact me or provide comments to <u>beckyb@bannerassociates.com</u>.

Sincerely,

Becky Baker Environmental Department Head 605.690.2190

Attachments





Banner Associates, Inc. 2307 W 57th St, Ste 102 Sioux Falls, SD 57108 Tel 605.692.6342 Toll Free 855.323.6342 www.bannerassociates.com

April 23, 2020

Robert Hill Brookings County, Floodplain Administrator 520 3rd Street, Suite 200 Brookings, SD 57006

RE: Project EM 0295(45) 130, PCN 020V, Brookings County

I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Hill:

This letter is to introduce the above-mentioned project and to initiate coordination with your office. The City of Brookings, South Dakota Department of Transportation (SDDOT), and Federal Highway Administration (FHWA) have initiated this project to study alternatives and identify the preferred alternative for a new interchange on Interstate 29 (I-29) at 20th Street South within Brookings, SD. Attached is a map showing the location of the above project. The project will comply with all federal and state regulations.

The project is located within City of Brookings and Brookings County limits. We are also sending a coordination letter to the floodplain administrator for the City of Brookings. Preliminary alternatives were identified during the previously completed studies. Currently the alternatives are being refined and the resources within the study area are being identified. We have also identified the presence of designated floodplain, Zone A, in the study area. After the alternatives are refined, potential impacts to the resources, including floodplain, will be determined. We will continue to coordinate with your office after the potential impacts are identified for the alternatives.

As the project proceeds, we will continue to coordinate with your department as information becomes available on any effects to any recreational resources. If you have any comments or questions, please feel free to contact me or provide comments to <u>beckyb@bannerassociates.com</u>.

Sincerely,

Becky Baker Environmental Department Head 605.690.2190

Attachments





Banner Associates, Inc. 2307 W 57th St, Ste 102 Sioux Falls, SD 57108 Tel 605.692.6342 Toll Free 855.323.6342 www.bannerassociates.com

April 23, 2020

Dusty Rodiek, Director City of Brookings Parks, Recreation & Forestry 520 3rd Street, Suite 130 Brookings, SD 57006

RE: Project EM 0295(45) 130, PCN 020V, Brookings County

I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Rodiek:

This letter is to introduce the above-mentioned project and to initiate coordination with your office. The City of Brookings, South Dakota Department of Transportation (SDDOT), and Federal Highway Administration (FHWA) have initiated this project to study alternatives and identify the preferred alternative for a new interchange on Interstate 29 (I-29) at 20th Street South within Brookings, SD. Attached is a map showing the location of the above project. The project will comply with all federal and state regulations.

Preliminary alternatives were identified during the previously completed studies. Currently, these alternatives are being refined and the resources within the study area are being identified. Initially, the recreational resources identified include the Edgebrook Golf Course and a recreational multi-use trail. We would appreciate your department's confirmation that these are the only recreational resources present under your jurisdiction. In addition, we request any documentation available regarding the grant funds received through the Land and Water Conservation Fund program for either resource.

As the project proceeds, we will continue to coordinate with your department as information becomes available on any effects to any recreational resources. If you have any comments or questions, please feel free to contact me or provide comments to <u>beckyb@bannerassociates.com</u>.

Sincerely,

Becky Baker Environmental Department Head 605.690.2190





Banner Associates, Inc. 2307 W 57th St, Ste 102 Sioux Falls, SD 57108 Tel 605.692.6342 Toll Free 855.323.6342 www.bannerassociates.com

April 27, 2020

Steve Naylor, US Army Corp of Engineers- SD Regulatory Office 28563 Powerhouse Road Pierre, SD 57501-5408

RE: Project EM 0295(45) 130, PCN 020V, Brookings County

I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Naylor:

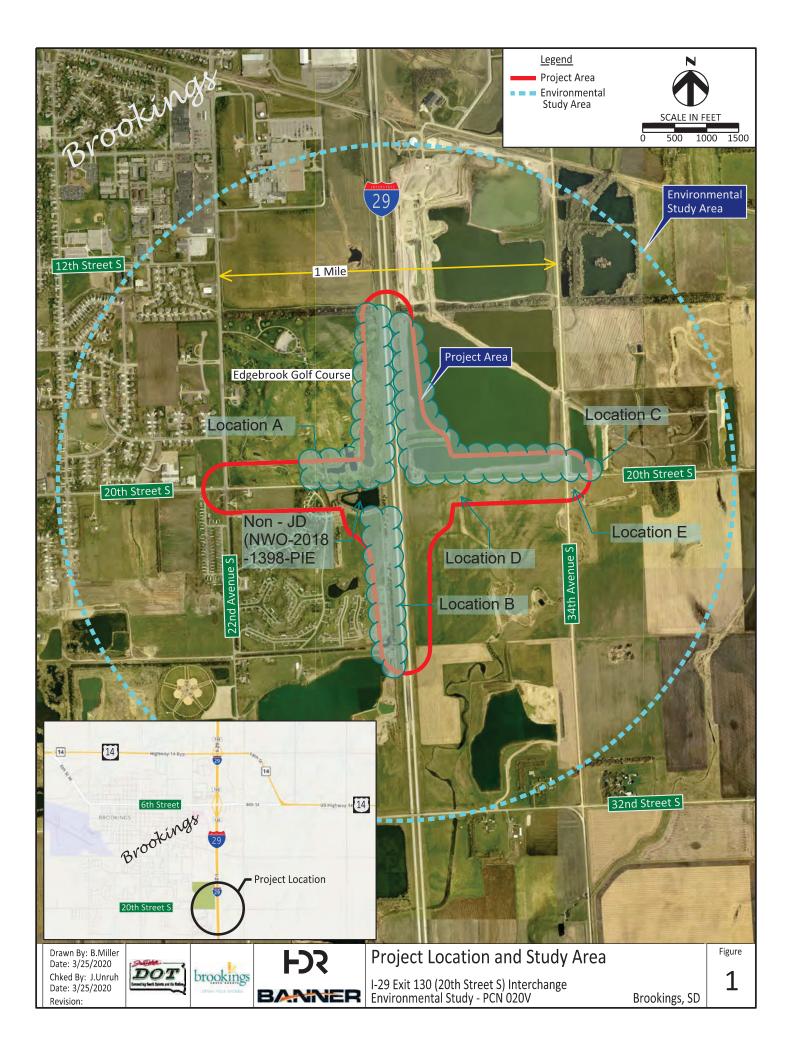
This letter is to introduce the above-mentioned project and to initiate coordination with your office. The City of Brookings, South Dakota Department of Transportation (SDDOT), and Federal Highway Administration (FHWA) have initiated this project to study alternatives and identify the preferred alternative for a new interchange on Interstate 29 (I-29) at 20th Street South within Brookings, SD. Attached is a map showing the location of the above project. The project will comply with all federal and state regulations.

Preliminary alternatives were identified during the previously completed studies. Currently the alternatives are being refined and the resources within the study area are being identified. A wetland delineation will be completed for the project area noted in the attached figure. We were provided a jurisdictional determination from the landowner that USACE assigned the file number: NWO-2018-1398-PIE. We would like to request a jurisdictional determination for other areas noted in the attached figure (Locations A - E) that are assumed to contain wetland. As the project progresses, we will delineate the regulated wetland boundaries and complete an alternative analysis in compliance with the Clean Water Act.

To ensure continuous coordination, we would like to request a pre-consultation meeting to discuss the project. Due to the recent COVID outbreak, this meeting would be held as a video conference call with the project consultants, HDR and Banner Associates. Please provide dates and times that would be the preference of your office. If you have any comments or questions, please feel free to contact me or provide comments to <u>beckyb@bannerassociates.com</u>.

Sincerely,

Becky Baker Environmental Department Head 605.690.2190



REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD) U.S. ARMY CORPS OF ENGINEERS, OMAHA DISTRICT		
The information that you provide will be used in evaluating your request to determi any aquatic resources within the project area subject to federal jurisdiction under the authorities referenced below. Note : Submission of requested information is volunt information is not provided, the request for an AJD cannot be evaluated nor can are	he regulatory DATE RECEIVED:	
1. PROPERTY LOCATION:	2. REQUESTOR CONTACT INFORMATION:	
Street Address:	Typed or printed name: Joanne Hight	
City/Township/Parish:	Company name: SDDOT	
County: Brookings State: SD	Street Address: 700 E Broadway Ave	
Acreage of Parcel/Review Area for JD:	City: Pierre State: SD Zip: 57501	
Section: 6/31 Township: 109/110N Range: 49W	Daytime phone no.: (605) 773-3721	
Latitude: 44.282305° Longitude: -96.758393° (For linear projects, please include the center point of the proposed alignment.)	Email address: Joanne.Hight@state.sd.us	
3. MAP: Please attach a survey/plat map and vicinity map identifying location and review area for the JD. see Project Area attached and @ https://www.20thstinterchange.com/documents/ProjectLocation_Apr2020.pdf		
4. REASON FOR REQUEST (check as many as applicable):		
 I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process. I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process. 		
I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.		
A Corps JD is required in order to obtain my local/state au	ithorization.	
I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.		
I believe that the site may be comprised entirely of dry lan	d/upland.	
Other:		
5. TYPE OF DETERMINATION BEING REQUESTED:	6. OWNERSHIP DETAILS:	
I am requesting an approved JD	I currently own this property.	
I am requesting a preliminary JD	I plan to purchase this property.	
I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.	I am an agent/consultant acting on behalf of the requestor.	
I am unclear as to which JD I would like to request and require additional information.	Other (please explain):	
*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332. Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.		
By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.		
Signature: Joanne Hight Digitally signed by Joanne Hight Date: 2020.04.24 08:36:03 -05'00'	Date:	



700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Jonathan Windy Boy, THPO Chippewa Cree Tribe PO Box 230 Box Elder, MT 59521

RE: Project EM 0295(45) 130, PCN 020V, Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Windy Boy:

Attached is a map showing the location of the above project. This project will study alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). The project will comply with all federal and state environmental regulations.

Pursuant to Section 106 of the National Historic Preservation Act (36 CFR Part 800), the South Dakota Department of Transportation, on behalf of the Federal Highway Administration – SD Division, is soliciting comments on this project from tribes that have expressed an interest in highway projects in Brookings County. Please provide your comments by May 25, 2020 so the project can move toward a timely letting and construction (scheduled to begin in late 2021 or early 2022).

If you have any questions, please feel free to contact me at the phone number or email address below, or you may contact Tom Lehmkuhl, FHWA Environmental Engineer, at (605) 224-8033.

Sincerely,

oanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721 joanne.hight@state.sd.us





700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Garrie Killsahundred, THPO Flandreau Santee Sioux Tribe PO Box 283 Flandreau, SD 57028-0283

RE: Project EM 0295(45) 130, PCN 020V, Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Killshundred:

Attached is a map showing the location of the above project. This project will study alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). The project will comply with all federal and state environmental regulations.

Pursuant to Section 106 of the National Historic Preservation Act (36 CFR Part 800), the South Dakota Department of Transportation, on behalf of the Federal Highway Administration – SD Division, is soliciting comments on this project from tribes that have expressed an interest in highway projects in Brookings County. Please provide your comments by May 25, 2020 so the project can move toward a timely letting and construction (scheduled to begin in late 2021 or early 2022).

If you have any questions, please feel free to contact me at the phone number or email address below, or you may contact Tom Lehmkuhl, FHWA Environmental Engineer, at (605) 224-8033.

Sincerely,

oanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721 joanne.hight@state.sd.us





700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Clair Green, Section 106 Coordinator Lower Brule Sioux Tribe PO Box 187 Lower Brule, SD 57548-0187

RE: Project EM 0295(45) 130, PCN 020V, Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Ms. Green:

Attached is a map showing the location of the above project. This project will study alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). The project will comply with all federal and state environmental regulations.

Pursuant to Section 106 of the National Historic Preservation Act (36 CFR Part 800), the South Dakota Department of Transportation, on behalf of the Federal Highway Administration – SD Division, is soliciting comments on this project from tribes that have expressed an interest in highway projects in Brookings County. Please provide your comments by May 25, 2020 so the project can move toward a timely letting and construction (scheduled to begin in late 2021 or early 2022).

If you have any questions, please feel free to contact me at the phone number or email address below, or you may contact Tom Lehmkuhl, FHWA Environmental Engineer, at (605) 224-8033.

Sincerely,

oanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721 joanne.hight@state.sd.us





700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Dianne Desrosiers, THPO Sisseton-Wahpeton Oyate PO Box 907 Agency Village, SD 57262-0907

RE: Project EM 0295(45) 130, PCN 020V, Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Ms. Desrosiers:

Attached is a map showing the location of the above project. This project will study alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). The project will comply with all federal and state environmental regulations.

Pursuant to Section 106 of the National Historic Preservation Act (36 CFR Part 800), the South Dakota Department of Transportation, on behalf of the Federal Highway Administration – SD Division, is soliciting comments on this project from tribes that have expressed an interest in highway projects in Brookings County. Please provide your comments by May 25, 2020 so the project can move toward a timely letting and construction (scheduled to begin in late 2021 or early 2022).

If you have any questions, please feel free to contact me at the phone number or email address below, or you may contact Tom Lehmkuhl, FHWA Environmental Engineer, at (605) 224-8033.

Sincerely,

Joanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721 joanne.hight@state.sd.us





700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Jon Eagle, THPO Standing Rock Sioux Tribe PO Box D Ft Yates, ND 58538-0522

RE: Project EM 0295(45) 130, PCN 020V, Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Eagle:

Attached is a map showing the location of the above project. This project will study alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). The project will comply with all federal and state environmental regulations.

Pursuant to Section 106 of the National Historic Preservation Act (36 CFR Part 800), the South Dakota Department of Transportation, on behalf of the Federal Highway Administration – SD Division, is soliciting comments on this project from tribes that have expressed an interest in highway projects in Brookings County. Please provide your comments by May 25, 2020 so the project can move toward a timely letting and construction (scheduled to begin in late 2021 or early 2022).

If you have any questions, please feel free to contact me at the phone number or email address below, or you may contact Tom Lehmkuhl, FHWA Environmental Engineer, at (605) 224-8033.

Sincerely,

oanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721 joanne.hight@state.sd.us





700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Pete Coffey Tribal Historic Preservation Office Three Affiliated Tribes 404 Frontage Rd. New Town, ND 58763-9404

RE: Project EM 0295(45) 130, PCN 020V, Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Coffey:

Attached is a map showing the location of the above project. This project will study alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). The project will comply with all federal and state environmental regulations.

Pursuant to Section 106 of the National Historic Preservation Act (36 CFR Part 800), the South Dakota Department of Transportation, on behalf of the Federal Highway Administration – SD Division, is soliciting comments on this project from tribes that have expressed an interest in highway projects in Brookings County. Please provide your comments by May 25, 2020 so the project can move toward a timely letting and construction (scheduled to begin in late 2021 or early 2022).

If you have any questions, please feel free to contact me at the phone number or email address below, or you may contact Tom Lehmkuhl, FHWA Environmental Engineer, at (605) 224-8033.

Sincerely,

Joanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721 joanne.hight@state.sd.us





700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

March 25, 2020

Kip Spotted Eagle, THPO Yankton Sioux Tribe PO Box 1153 Wagner, SD 57380-1153

RE: Project EM 0295(45) 130, PCN 020V, Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Spotted Eagle:

Attached is a map showing the location of the above project. This project will study alternatives for a new interchange on Interstate 29 (I-29) at 20th Street South (20th St S). The project will comply with all federal and state environmental regulations.

Pursuant to Section 106 of the National Historic Preservation Act (36 CFR Part 800), the South Dakota Department of Transportation, on behalf of the Federal Highway Administration – SD Division, is soliciting comments on this project from tribes that have expressed an interest in highway projects in Brookings County. Please provide your comments by May 25, 2020 so the project can move toward a timely letting and construction (scheduled to begin in late 2021 or early 2022).

If you have any questions, please feel free to contact me at the phone number or email address below, or you may contact Tom Lehmkuhl, FHWA Environmental Engineer, at (605) 224-8033.

Sincerely,

oanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721 joanne.hight@state.sd.us





DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES

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

denr.sd.gov

April 7, 2020

Joanne Hight Department of Transportation 700 East Broadway Avenue Pierre, South Dakota 57501

RE: SD DOT Project EM 0295(45)130 PCN 020V Brookings County

Dear Ms. Hight:

The South Dakota Department of Environment and Natural Resources (DENR), Division of Environmental Regulation, has reviewed the above referenced project.

This office has no objections to this project, which should not result in any violations of applicable statutes or regulations provided the Department of Transportation and/or its contractor(s) comply with the following requirements.

SURFACE WATER QUALITY

- 1. All fill material shall be free of substances in quantities, concentrations, or combinations which are toxic to aquatic life.
- 2. Removal of vegetation shall be confined to those areas absolutely necessary to construction.
- 3. At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site. Any construction activity that disturbs an area of one or more acres of land must have authorization under the General Permit for Storm Water Discharges Associated with Construction Activities. Contact the Department of Environment and Natural Resources for additional information or guidance at 1-800-SDSTORM (800-737-8676) or http://denr.sd.gov/des/sw/stormwater.aspx.
- 4. All material identified in the application as removed waste material, material stockpiles, dredged or excavated material shall be placed for either temporary or permanent disposal in an upland site that is not a wetland, and measures taken to ensure that the material cannot enter the watercourse through erosion or any other means.
- 5. Methods shall be implemented to minimize the spillage of petroleum, oils and lubricants used in vehicles during construction activities. If a discharge does occur, suitable containment procedures such as banking or diking shall be used to prevent entry of these materials into a waterway.

- 6. All newly created and disturbed area above the ordinary high-water mark which are not riprapped shall be seeded or otherwise revegetated to protect against erosion.
- 7. This project may be in the vicinity of multiple streams and wetlands. These waters are considered waters of the state and are protected under Administrative Rules of South Dakota Chapter 74:51. Special construction measures may have to be taken to ensure that water quality standards are not violated.

HAZARDOUS and SOLID WASTES

- 1. Should any hazardous waste be generated during the implementation of this project, the generator must abide by all applicable hazardous waste regulations found in ARSD 74:28 and 40 CFR Part 262.
- 2. If any contamination is encountered during construction activities, the contractor, owner, or party responsible for the release must report the contamination to the department at 605-773-3296. Any contaminated soil encountered must be temporarily stockpiled and sampled to determine disposal requirements.
- 3. It is not expected that any hazardous wastes sites will be encountered during road construction in any rural area. However, if road construction is planned for areas within a city or town, the DOT or contractor should contact this Department prior to construction.
- 4. Some solid waste may be generated during this project. Any solid waste generated that will not be reused in some beneficial manner must be disposed or managed at a permitted solid waste facility.
- 5. Regional landfills able to accept all solid waste generated are listed on our website available here: https://apps.sd.gov/NR60SolidWaste/main.html#. Only Regional landfills are permitted to accept all wastes generated. If you have any questions please contact Waste Management at 605-773-3153.
- 6. Demolition or renovation of a building structure may be subject to asbestos abatement requirements. If demolition is part of the construction projects please contact our Asbestos Coordinator at 605-773-3153.

AIR QUALITY

- 1. It appears that Department of Transportation projects may have only a minor impact on the air quality in South Dakota. This impact would be through point source and fugitive emissions.
- 2. Equipment with point source emissions in many cases are required to have an air quality permit to operate. Permit applications can be obtained from the Air Quality or Minerals and Mining Programs.
- 3. Fugitive emissions, although not covered under State air quality regulations, are a common source of public concern and may be subject to local or county ordinances. Fugitive emissions add to the deterioration of the ambient air quality and should be controlled to protect the health of communities within the construction areas.
- 4. For further air quality information, please contact Anthony Lueck, Air Quality Program, telephone number 605-773-3151.

This office requests the opportunity to review and comment on any significant changes that may be proposed before the project is completed. Thank you for the opportunity to comment on the proposed project. If you have any questions, please contact me at <u>Shannon.Minerich@state.sd.us</u>.

Sincerely,

Channon Minerick

Shannon Minerich Environmental Scientist Surface Water Quality Program

Cc: Becky Baker, Banner & Associates



DEPARTMENT OF ENVIRONMENT and NATURAL RESOURCES

JOE FOSS BUILDING 523 EAST CAPITOL PIERRE, SOUTH DAKOTA 57501-3182 denr.sd.gov

April 02, 2020

Joanne Hight South Dakota Department of Transportation 700 E Broadway Pierre, SD 57501

Re: Environmental Review – Project EM 0295(45) 130, PCN 020V, I-29 Exit 130, Brookings County, SD, I-29 Exit 130 (20th Street South) Interchange. Interchange Justification Study, Environmental Study, Right of Way & Design.

Dear Ms. Hight:

The South Dakota Department of Environment and Natural Resources' (DENR) Ground Water Quality Program has reviewed the above-referenced project for potential impacts to ground water quality. Based on the information submitted in your letter, dated March 25, 2020, DENR does not anticipate adverse impacts to ground water quality by this project.

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

Additionally, if construction for this project disturbs a major stream or surface water body please make sure you contacted the DENR's Surface Water Quality Program and the United States Army Corps of Engineers. DENR's Surface Water Quality Program can be reached at (605) 773-3351.

There have been numerous petroleum and other chemical releases throughout the state. Of the releases reported to DENR, we have not identified any release cases in the vicinity of your project. However, the locational information provided to us regarding releases is sometimes inaccurate or incomplete. If you would like to do more research, additional information on reported releases in South Dakota may be obtained at the following website: <u>https://apps.sd.gov/denr/spillsviewer/</u>

In the event that contamination is encountered during construction activities or is caused by the construction activity, South Dakota Department of Transportation, or its designated representative,

must report the contamination to DENR at 605-773-3296. Any contaminated soil encountered or caused by the construction must be temporarily stockpiled and sampled to determine disposal requirements.

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

Sincerely,

Aletto

Andrew Fox Environmental Scientist I Ground Water Quality Program

Enclosure

c: Robert Hill, Brookings County Emergency Manager, Brookings, SD

Becky Baker

From:	Clair Green <clairgreenoffice@gmail.com></clairgreenoffice@gmail.com>
Sent:	Thursday, March 26, 2020 8:43 AM
То:	Becky Baker
Subject:	Re: PCN 020V- I-29 Exit 130 (20th Street South) Interchange

the Lower Brule Tribe has no comment

On Thu, Mar 26, 2020 at 7:27 AM Becky Baker <<u>beckyb@bannerassociates.com</u>> wrote:

Ms. Green,

Please see the attached letter. Pursuant to Section 106 of the National Historic Preservation Act (36 CFR Part 800), the South Dakota Department of Transportation, on behalf of the Federal Highway Administration – SD Division, is soliciting comments on this project from tribes that have expressed an interest in highway projects in Brookings County. Please provide your comments by May 25, 2020 so the project can move toward a timely letting and construction (scheduled to begin in late 2021 or early 2022).

Thanks!

Becky Baker | Environmental Department Head



Banner Associates, Inc.

2307 West 57th Street, Suite 102

Sioux Falls, South Dakota 57108

Toll Free | 1.855.323.6342

www.bannerassociates.com

Becky Baker

From:	Kittle, Randy <randy.kittle@state.sd.us></randy.kittle@state.sd.us>
Sent:	Thursday, March 26, 2020 8:31 AM
То:	Becky Baker; Morey, Hilary
Cc:	Hight, Joanne
Subject:	RE: PCN 020V- I-29 Exit 130 (20th Street South) Interchange

Becky,

Thank you for the opportunity to comment on project PCN 020V – I-29 Exit 130 (20^{th} Street South) Interchange with regard to Land & Water Conservation Fund (LWCF) Section 6(F)(3) encumbrances. The City of Brookings has been the recipient of multiple LWCF grants throughout the life of the program, some of which have been used at Edgebrook Golf Course. The Edgebrook Golf Course is encumbered under LWCF Section 6(F)(3) for public outdoor recreation.

If a portion of the golf course property needs to be converted from public outdoor recreation use, a Conversion of Use will need to be processed for that property.

Feel free to contact me if you have additional questions regarding this site. We are currently working remotely so I do not have easy access to all of the old project files.

Randy Kittle | Grants Coordinator South Dakota Game, Fish and Parks 523 East Capitol Avenue | Pierre, SD 57501 605.773.5490 | randy.kittle@state.sd.us



From: Becky Baker <beckyb@bannerassociates.com>
Sent: Thursday, March 26, 2020 8:23 AM
To: Morey, Hilary <Hilary.Morey@state.sd.us>; Kittle, Randy <Randy.Kittle@state.sd.us>
Cc: Hight, Joanne <Joanne.Hight@state.sd.us>
Subject: [EXT] PCN 020V- I-29 Exit 130 (20th Street South) Interchange

Good morning,

Please see the attached agency coordination letter requesting your input for the I-29 Exit 130 (20th Street South) Interchange.

Thanks! Becky Baker | Environmental Department Head



Banner Associates, Inc. 2307 West 57th Street, Suite 102 Sioux Falls, South Dakota 57108



SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS

523 EAST CAPITOL AVENUE | PIERRE, SD 57501

April 24, 2020

Joanne Hight SD Department of Transportation 700 E. Broadway Avenue Pierre, SD 57501

RE: Project EM 0295(45) 130 PCN 020V Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange justification study, environmental study, right-of-way and design

Dear Joanne,

The Department of Game, Fish and Parks has reviewed the above project involving the study of a new interchange in Brookings, South Dakota.

We have conducted a search of the SD Natural Heritage Database for the above referenced project. This database monitors species at risk, specifically those species that are legally designated as threatened, endangered or rare. We did not find any occurrences of endangered, rare or threatened species in the immediate project area. Please note that many places in South Dakota have not been surveyed for rare and endangered species. Based on the information provided, there is no anticipated significant impact to fish and wildlife resources and would anticipate that to remain if the following suggestions are considered during the planning and construction of the project:

- 1. Disturbance to riparian and wetland areas should be kept to an absolute minimum.
- 2. If riparian vegetation is lost it should be quantified and replaced on site. Seeding of indigenous species should be accomplished immediately after construction to reduce sediment and erosion.
- 3. A site specific sediment and erosion control plan should be part of the project.
- 4. A post construction erosion control plan should be implemented in order to provide interim control prior to re-establishing permanent vegetative cover on the disturbed site.

If you have any questions, please feel free to contact me at 605-773-6208.

Sincerely,

Hilary Morey Environmental Review Senior Biologist 523 East Capitol Avenue Pierre, SD 57501 <u>hilary.morey@state.sd.us</u>



Becky Baker

From:	Dusty Rodiek < DRodiek@cityofbrookings.org>
Sent:	Monday, April 27, 2020 10:07 AM
То:	Becky Baker
Subject:	RE: I-29 (20th Street South) Interchange

Becky,

I received your letter and wanted to confirm that the trail and golf course are the only recreational amenities within the project area.

Attached are the Land and Water Conservation funded projects related to the golf course. (As far as I can tell) I have not been able to locate the original project files for these. SDGFP Grants Division should have additional information based on the project numbers if you need it.

It appears that the original land purchase and initial course development was funded by LWCF. Thank you and let me know if you need additional information.

Dusty Rodiek

Director of Parks, Rec. and Forestry Office: 605.697.8332 Cell: 605.691.3313 <u>drodiek@cityofbrookings.org</u>



www.cityofbrookings.org

Project Title and Number:	BROOKINGS ACQU	
Project Contact:	CITY OF BROOKIN	
Address:	221 Main Avenue, Br	
Project Location:	SE corner of city.	
Project Fund Amount: \$25,750.00		
Project Scope: Acquire 150 acres for future development.		

Project Title and Number:	BROOKINGS GOLF CC 4600166
Project Contact:	CITY OF BROOKINGS
Address:	221 Main Avenue, Brool
Project Location:	City golf course - SE of c
Project Fund Amount:	\$100,613.22 Pro

Project Scope:

9-hole golf course including grass greens, irrigation sy storage spaces, parking lot & tree planting.

From: Becky Baker <beckyb@bannerassociates.com>
Sent: Thursday, April 23, 2020 10:20 PM
To: Dusty Rodiek <DRodiek@cityofbrookings.org>
Cc: Jacqueline Lanning <JLanning@cityofbrookings.org>; Rust, Jill <jill.rust@hdrinc.com>
Subject: I-29 (20th Street South) Interchange

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dusty,

Please see the attached letter. HDR Engineering and Banner Associates have been hired to complete the environmental assessment for this project. Please feel free to let us know if you have any questions.

Thanks! Becky Baker | Environmental Department Head



Banner Associates, Inc. 2307 West 57th Street, Suite 102 Sioux Falls, South Dakota 57108 Toll Free | 1.855.323.6342 www.bannerassociates.com



700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

September 10, 2020

Randy Kittle South Dakota Game, Fish, and Parks Joe Foss Building, 523 East Capitol Avenue Pierre, SD 57501

RE: Section 6(f) Impact Considerations Project EM 0295(45) 130, PCN 020V, Brookings County I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Mr. Kittle:

The City of Brookings, South Dakota Department of Transportation (SDDOT), and Federal Highway Administration (FHWA) have continued development of this project and identified the preferred alternative for a new interchange on Interstate 29 (I-29) at 20th Street South within Brookings, SD. Attached is a map showing the location of the above project (Figure 1).

Edgebrook Golf Course is a regulation public 18-hole facility with a nine-hole junior/short course located at 1415 22nd Avenue South. It is owned and operated by the City of Brookings. Fees are reviewed and set annually by Brookings Parks & Recreation Advisory Board and include single rounds of golf and seasonal passes. The clubhouse offers golf carts and equipment for rent as well as pro shop. Edgebrook also provides professional golf lessons by appointment. Three Land and Water Conservation Fund (LWCF) grants (46-00166, 46-00304, and 46-01035) were obtained to develop the Edgebrook golf course. Therefore, the entire golf course is protected under Section 6(f) for public outdoor recreation.

No permanent right-of-way is needed for the 20th Street construction and no operations of the golf course would be impacted. A temporary easement would be needed to complete the work along the south edge of the golf course near 20th Street. A total of 0.12 acres within the golf course property will be temporarily impacted and 0.28 acres of temporary easement would be required for construction (See Figure 2). The area will be re-graded and reseeded to a similar or better condition once construction of the area is complete.

Minimal grading would be needed along the south edge of the golf course for 20th Street construction as shown in attached Figure 1. The alignment of proposed 20th Street has been shifted to the south specifically to avoid impacts to the golf course. Near 22nd Avenue, the 20th Street fill slope would extend onto the City-owned golf course property as shown in the Section A-A view of Figure 1. This allows 20th Street to line up across 22nd Avenue. Construction within this area will take less than 6 months and no operations of the golf course will be impacted.

Mr. Randy Kittle September 10, 2020 Page 2

I am requesting your concurrence that the work being conducted will be considered a temporary non-conforming use 6(f) impact. If you concur, please indicate as such by providing your signature in the space provided below at your earliest convenience so the project's environmental documentation can be completed. Thank you for your time and cooperation on this matter. If you have questions and/or concerns, please feel free to contact me.

Sincerely,

Joanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721

Attachment

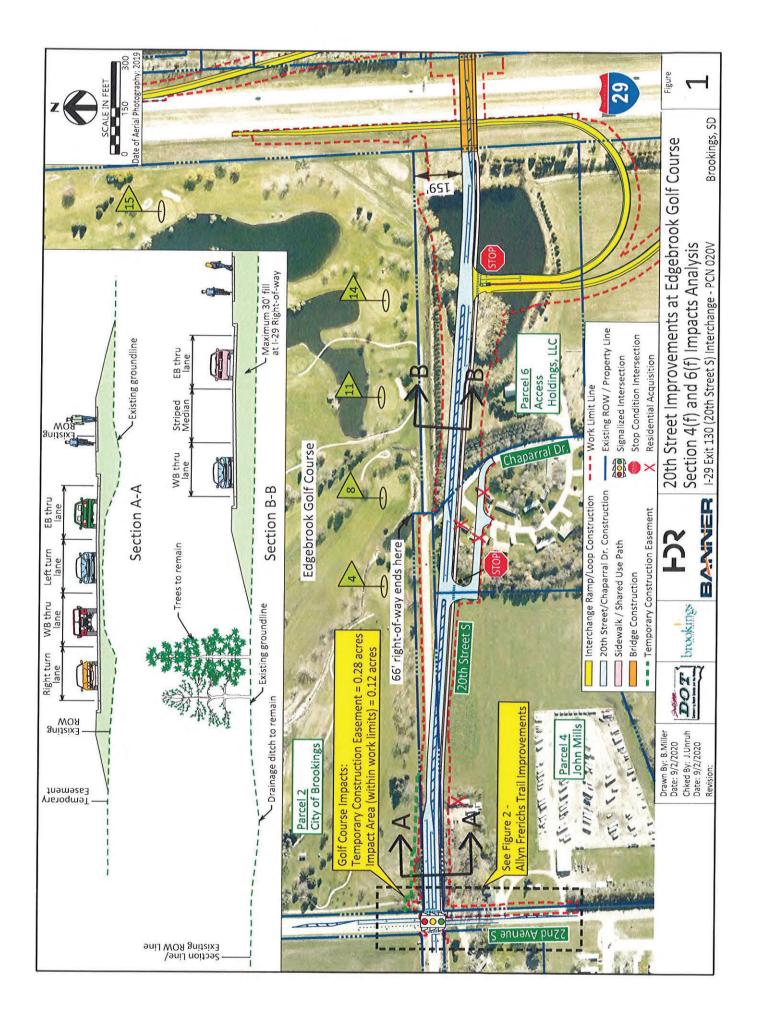
Concurrence: As the designated alternate State Liason Officer who administers LWCF Program funds, I hereby concur that the use and impacts of the I-29 Exit 130 (20th Street South) Interchange project combined with identified avoidance, minimization, and mitigation measures, will not adversely affect the activities, features, and attributes that qualify Edgebrook Golf Course for protection under Section 6(f) and that the activities fall under a temporary, non-conforming use...

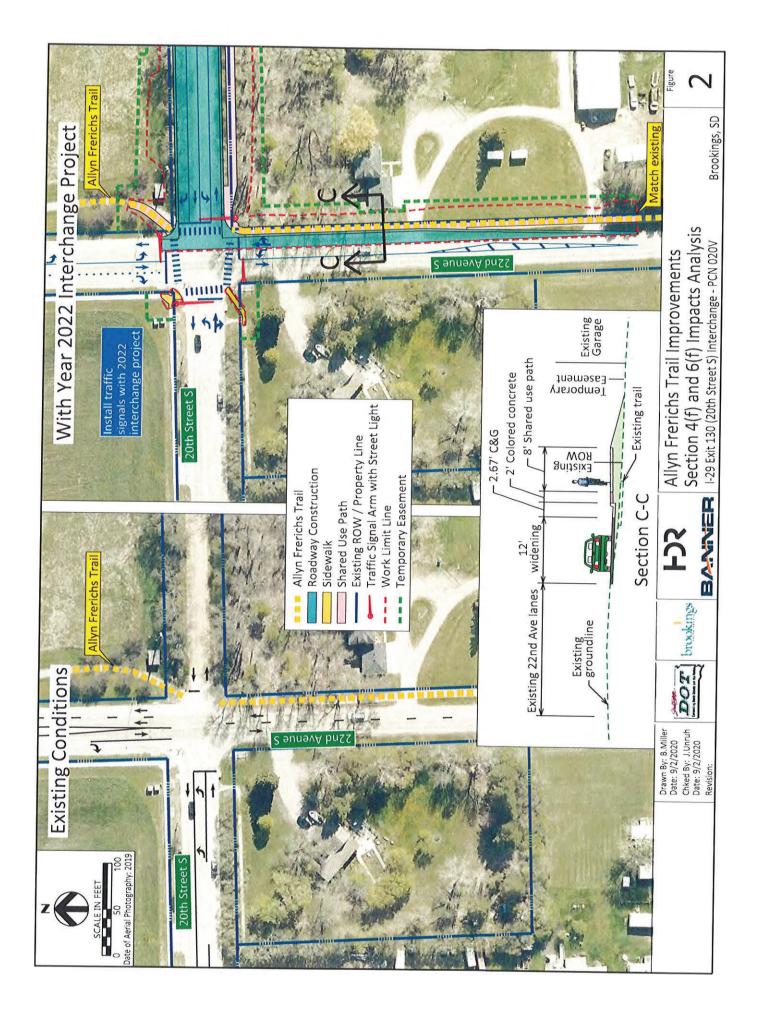
0 201

Randy Kittle

Date:

South Dakota Game, Fish, and Parks







Banner Associates, Inc. 2307 W 57th St, Ste 102 Sioux Falls, SD 57108 Tel 605.692.6342 Toll Free 855.323.6342 www.bannerassociates.com

MEETING MINUTES

DATE	June 10, 2020	
PROJECT	I-29 Exit 130 (Brookings) Interchange	BAI No.23192.00
SUBJECT	Floodplain Analysis	
LOCATION	Zoom Meeting	
	Jackie Lanning, Brookings City Engineer	
	Robert Hill, Brookings County Floodplain Administrator	
	Richard Haugen, Brookings County	
	Staci Bungard, City of Brookings Floodplain Administrator	
ATTENDEES	Tom Birney, Federal Emergency Management Agency (FEMA)	
	Tracie Harrison, FEMA	
	Kent Johnson, Banner Associates	
	Rich Uckert, Banner Associates	
	Becky Baker, Banner Associates	

- 1. INTRODUCTION OF THE PROJECT
 - A. BRIEF DISCUSSION OF PURPOSE AND NEED
 - B. OVERVIEW OF ALTERNATIVES
 - C. OVERVIEW OF PROJECT SCHEDULE
- 2. FLOODPLAIN ANALYSIS
 - A. DESIGNATED FLOODPLAIN
 - I. CURRENT
 - II. PROPOSED
 - B. DECISION TO BE MADE:
 - I. REGULATE TO EFFECTIVE FIRM USING 1D HEC-RAS MODEL IMPACT
 - II. REGULATE TO EFFECTIVE FIRM USING PROPOSED FEMA BLE (2D HEC-RAS MODEL)
 - III. REGULATE TO PROPOSED FEMA BLE
 - IV. FLOOPLAIN DEVELOPMENT PERMIT



DISCUSSION:

- A portion of the proposed interchange site is located within a FEMA "Zone A" Special Flood Hazard Area (SPFA) as identified on FEMA's *effective* Flood Insurance Rate Map (FIRM). The local communities (City and County) regulate using the effective map; however, CFR and local ordinances allow use of "best available information" which includes BLE data. Since the effective FEMA map is more restrictive than the BLE map, we are required to regulate to the effective map. If the BLE map was more restrictive (more inundation area than the effective map), we could use it and the elevations from the BLE information. The effective Zone A areas were not created through detailed engineering methods and do not have Base Flood Elevations (BFEs) tied to it.
- The future BLE mapping show the interchange site is not located within it's inundation area.
- The BLE information will be updated and eventually become the effective map in the future, unknown timeline due to COVID and funding. Best guess is two to four years when it will become effective.
- Current effective floodplain is Zone A, which allows up to 1 foot of rise. Zone A encroachment does not require modeling of impacts in the Floodplain Development Permit. Initial conservative 1D HEC-RAS modeling shows the alternatives for the project having a rise of 0.65 feet. To mitigate, the incorporation of a 50-foot-wide culvert would cause a rise of 0.50 feet.
- A Floodplain Development Permit is required because the project area is within a Zone A SFHA. A LOMR may or may not be required, coordination would occur with Floodplain Administrators to determine if required after completion of project. Definition of completion is not clear, likely during completion of construction. Timing of approval of new floodplain map may avoid the LOMR, the elevations could be provided to FEMA for incorporation in the new designated floodplain.
- A CLOMR is not required by FEMA for rise in a Zone A designated floodplain. A CLOMR could be requested by the community, but it is not likely for this area for a number of factors: it is in a Zone A SFHA, the impacted area is currently not developed, FEMA will be updating the map, and the conservative increase due to the project is less than 1-foot.
- A 50-foot-wide culvert is not required for mitigation and would cause concerns for drainage downstream. A culvert sized by drainage design standards should be incorporated at the drainage on the east side of the interstate. Brookings County would like their highway superintendent to review.

PREPARED BY Becky Baker and Kent Johnson

JUNE 11, 2020 - FURTHER CLARIFICATION FOLLOWING MEETING BETWEEN KENT JOHNSON AND TOM BIRNEY, FEMA REGION 8.

Following was noted by Kent Johnson. After yesterdays discussion with Tom Birney, he said that within a Zone A area, there is no defined allowable increase in floodwater. I think we generally "think" it is a 1-foot allowable because that is what is stated in the Zone AE and more restrictive regulations/ordinances and is stardard floodplain managment practice. The 1-foot increase is used in SDDOT design guidelines for sizing structures (culverts/bridges) as the max allowable.

The allowable increase is not defined within a Zone A because the boudary was determined from an approximate study without any BFEs being established.

Here's my drainage law comment and Tom B also mentioned this - A landowner impacted by increased flood heights due to the project could potentially file a complaint.



Banner Associates, Inc. 409 22nd Avenue South Brookings, SD 57006 Tel 605.692.6342 Toll Free 855.323.6342 www.bannerassociates.com

MEETING MINUTES

DATE	06-23-2020	
PROJECT	I-29 EXIT 130 BROOKINGS INTERCHANGE- FLOODPLAIN	BAI No. 23192.00
SUBJECT	ROAD DESIGN / DRAINAGE MANUAL DESIGN HEADWATER	
LOCATION	Remote Teams Meeting	
	Bob Hill, Richard Haugen – Brookings County Planning and Zoning	
ATTENDEES	Jackie Lanning, Staci Bungard, Thad Drietz – City of Brookings	
	Kent Johnson – Banner Associates, Inc.	

- 1. Discuss floodplain administrator duties for interchange project.
 - a. Ordinances were reviewed very briefly which identify administrator duties for floodplain areas in the community. Need to determine impact of project within floodplain.
 - b. Project is within a Zone A (approximate floodplain study without BFEs).
 - i. A preliminary 1D HEC-RAS model was constructed; it showed a 0.7' rise due to the project.
 - c. To further analyze impact, ordinances and Federal Regulations allow the use of best available information.
 - i. Use FEMA 2D BLE model as recommended by Tom Birney from FEMA Region 8.
 - ii. Preliminary FEMA maps developed by FEMA do not show the project within the future refined floodplain.
- 2. FEMA 2D model adjustments and results/impact of interchange project
 - a. FEMA BLE HEC-RAS 2D model was used as best available information to show impact due to the project.
 - i. FEMA has started a map update process for Brookings county using the BLE 2D model, but it is in the beginning stages and will not become effective until 2-4 years depending on many factors such as funding and covid19.
 - ii. **Existing Conditions Model:** The BLE model was updated with culvert information surveyed with this project. ground survey of the project area also replaced lidar terrain in the existing model.
 - iii. Proposed Conditions Model: A future preliminary roadway embankment was added to the east side of the interstate to 34th Avenue. The existing culverts sizes were not changed in the proposed model.
 - b. There is no impact due to the project using the BLE 2D model. Water surface elevations do not change between the existing and proposed conditions model.
- 3. Floodplain Development Permit
 - a. A floodplain development permit will be submitted to the City and County which will document the impact of the project.



- b. A follow-up LOMR may be necessary. FEMA will be consulted with to determine course of action since project was shown not to have an impact.
- 4. Downstream drainage concerns
 - a. Downstream of the project area are sensitive properties of which there is an active drainage lawsuit.
 - b. Goal should be to maintain existing drainage patterns, so we do not cause another drainage issue and potentially another drainage lawsuit.
 - c. Golf Course area has some local drainage which does not seem correct in the BLE 2D Model. Additional breaklines were not included which may make the model perform closer to what the City has known to experience in past flooding events. The FEMA BLE 2D HEC-RAS model will be updated and rerun to more closely model the flow through the future loops and existing drainage channels.
 - After leaving the golf course, drainage pattern is east in a ditch along the north side of 20th Street South and then into a pond owned by Mills. Then it is within a drainage channel (not the Interstate 29 road side ditch) until it gets to the Bowes area and eventually through a box culvert under I-29.
 - e. It is not favorable to drain golf course area drainage to the east side of the interstate. It is preferable to maintain drainage patterns through the loops.
- 5. Setting the road gradeline of 20th Street South interchange.
 - a. We reviewed the City of Brookings Design Guidelines which use the 5-year and 100-year as the minor and major storm events.
 - b. Thad Drietz said 20th Street South will be a Minor Arterial street classification.
 - c. See Attachment 1 for Table 14 Allowable Maximum Culvert Overtopping requirements from the City of Brookings Drainage Design and Technical Criteria Manual.
 - d. A previous conversation between Kent Johnson and Kevin Marton, SDDOT, confirmed design guidelines followed by SDDOT. See Attachment 2.
 - i. These requirements differ from City of Brookings requirements.
 - ii. The allowable design headwater elevation (25-year water surface elevation) should not exceed 1-ft below the low subgrade shoulder at the lowest point of the roadway within the drainage basin.
 - e. After discussion, Jackie Lanning said they want to follow the SDDOT design guidance for a local collector even though the City's street classification is a Minor Arterial.

PREPARED BY Kent R. Johnson, PE



700 E Broadway Avenue Pierre, South Dakota 57501-2586 605/773-4336

SEP 0 9 2020 South Dakota SHPO

September 8, 2020

Jenna Dietmeier, Review & Compliance Archaeologist State Historic Preservation Office Cultural Heritage Center 900 Governors Drive Pierre, SD 57501-2217 Fursuant to CC OCC per CCC.1C, I Photorio properties are discovered or unanticipated effects on historic properties found after the agency official has completed the Section 106 process, the agency official shall avoid, minimize or mitigate the adverse effects to such properties and notify the SHPO/THPO, and Indian tribes that might attach religious and cultural significance to the affected property within 48 hours of the discovery.

RE: Project EM 0295(45) 130, PCN 020V, Brookings County⁸ hours of the discovery I-29 Exit 130 (20th Street South) Interchange Interchange Justification Study, Environmental Study, Right-of-Way & Design

Dear Ms. Dietmeier:

Attached for your review are two cultural resources survey reports, entitled, *A Level I Literature Review of the Proposed Interstate Exchange Project Area in Brookings, Brookings County, South Dakota*, by Troy Kogel and *A Level III Cultural Resources Survey of the Proposed Interstate 29 Interchange at 20th Street South, Brookings, Brookings County, South Dakota*, by Troy Kogel. Structure BK00000575 and two other structures within SW ¼ of the SD ¼ of Section 31, Township 110N, and Range 49W were not relocated; they were likely torn down when the property became an aggregate quarry. Structures BK 00002371, BK00002372, and BK 00002373 were identified and were recommended not eligible for inclusion on the National Register of Historic Places (NRHP). Seven mobile homes were also identified. The mobile homes were not eligible for inclusion on the NRHP.

The report recommends that a Section 106 finding of *No Historic Properties Affected* be granted for this project. The SDDOT concurs and requests SHPO concurrence in a Section 106 determination of *No Historic Properties Affected* for this project.

Should any evidence of buried cultural resources be encountered during the project construction activities, such activities will cease and the SHPO in Pierre or the ARC in Rapid City will be notified immediately in order to determine an appropriate course of action.

Sincerely,

Joanne M. Hight

Joanne Hight Environmental Engineer Manager 605.773.3721

Attachment

SECTION 106 CONSULTATION Concurrence of the State Historical Preservation Office does not relieve the federal agency official from consulting with other appropriate parties, as described in 36 CFR Part 800.2(c).

SECTION 100 D Based upon the Information	ETERMINATION
Stelle Historic Preservation Off	lice on 9/9/2+26
We concur with your adency's	Getermination of the miscang
Properties Affected" for this u	ndertaking.
Group D. Voitz	1011001
State Historic Projer	vation Officer (SHPO)
By: Areather !	Rula_
9/11/2020	2.00909 10 (F 9HPO Project #
Date (OTTO Project



In Reply Refer to:

EM 0295(45)130, PCN 020V

United States Department of the Interior

FISH AND WILDLIFE SERVICE Ecological Services South Dakota Field Office 420 South Garfield Avenue, Suite 400 Pierre, South Dakota 57501-5408



September 17, 2020

Ms. Joanne Hight Environmental Engineer Manager South Dakota Department of Transportation 700 East Broadway Avenue Pierre, South Dakota. 57501

Dear Ms. Hight

This letter is in response to your request received August 25, 2020, for environmental comments regarding the above referenced project involving the interchange justification study, environmental study, right-of-way, and design for the I-29 exit 130 interchange. This project is located in Brookings County, South Dakota.

According to the National Wetlands Inventory, (available online at www.fws.gov/wetlands/) wetlands exist within the project boundary. If a project may impact wetlands or other important fish and wildlife habitats, the U.S. Fish and Wildlife Service (Service), in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347) and other environmental laws and rules, recommends complete avoidance of these areas, if possible, then minimization of any adverse impacts, and finally replacement of any lost acres, in that order. Alternatives should be examined and the least damaging practical alternative selected. If wetland impacts are unavoidable, a mitigation plan addressing the number and types of wetland acres to be impacted, and the methods of replacement should be prepared and submitted to the resource agencies for review.

The U.S. Fish and Wildlife Service concurs with your conclusions that the described project will not adversely affect listed species. Contact this office if changes are made or new information becomes available.

INTERIOR REGION 5 MISSOURI BASIN KANSAS, MONTANA*, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA "PAR TIAI

COLORADO, NEW MEXICO, UTAH, WYOMING

Ms. Joanne Hight

The Service appreciates the opportunity to provide comments. If you have any questions on these comments, please contact Dylan Turner of this office at (605) 224-8693, Extension 233.

Sincerely,

Scott Larson Field Supervisor South Dakota Field Office