halff

October 11, 2024

Mr. Steve E. Landin
Assistant City Manager
City of Laredo
City Manager's Office
1111 Houston St.
Laredo, TX 78040

Re: Proposed Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

Dear Mr. Landin:

AEP Texas Inc. (AEP Texas) will be filing an application with the Public Utility Commission of Texas (PUC) to amend its Certificate of Convenience and Necessity (CCN) to construct a new 138-kilovolt (kV) double-circuit transmission line from the future Mangana Hein 138-kV Substation, located approximately 0.5 mile west of the intersection of State Highway Loop 20 and Mangana Hein Road south of the City of Laredo in Webb County, to one of multiple potential endpoints located along the existing Rio Bravo to Wormser Road 138-kV transmission line segment located approximately 2.5 miles to the east of the future Mangana Hein 138-kV Substation. Please refer to the attached map depicting the study area.

Halff Associates, Inc. (Halff) is preparing an Environmental Assessment (EA) and Alternative Route Analysis to support AEP Texas' CCN application. Halff is currently in the process of gathering data on the existing environment and identifying environmental and land use constraints within the project study area that will be used in the creation of an environmental, cultural, and land use constraints map. Halff will identify potential alternative routes between the described endpoints that consider environmental and land use constraints.

Halff is requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your comments will be an important consideration in the assessment of impacts. Upon certification for the proposed project, AEP Texas will determine the need for other approvals and/or permits. If your jurisdiction has approvals and/or permits that would apply to this project, please identify them in response to this inquiry. If permits are required from your office, AEP Texas will contact your office following PUC route approval.

Thank you for your assistance with this transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data may also be shared at jurbanovsky@halff.com.

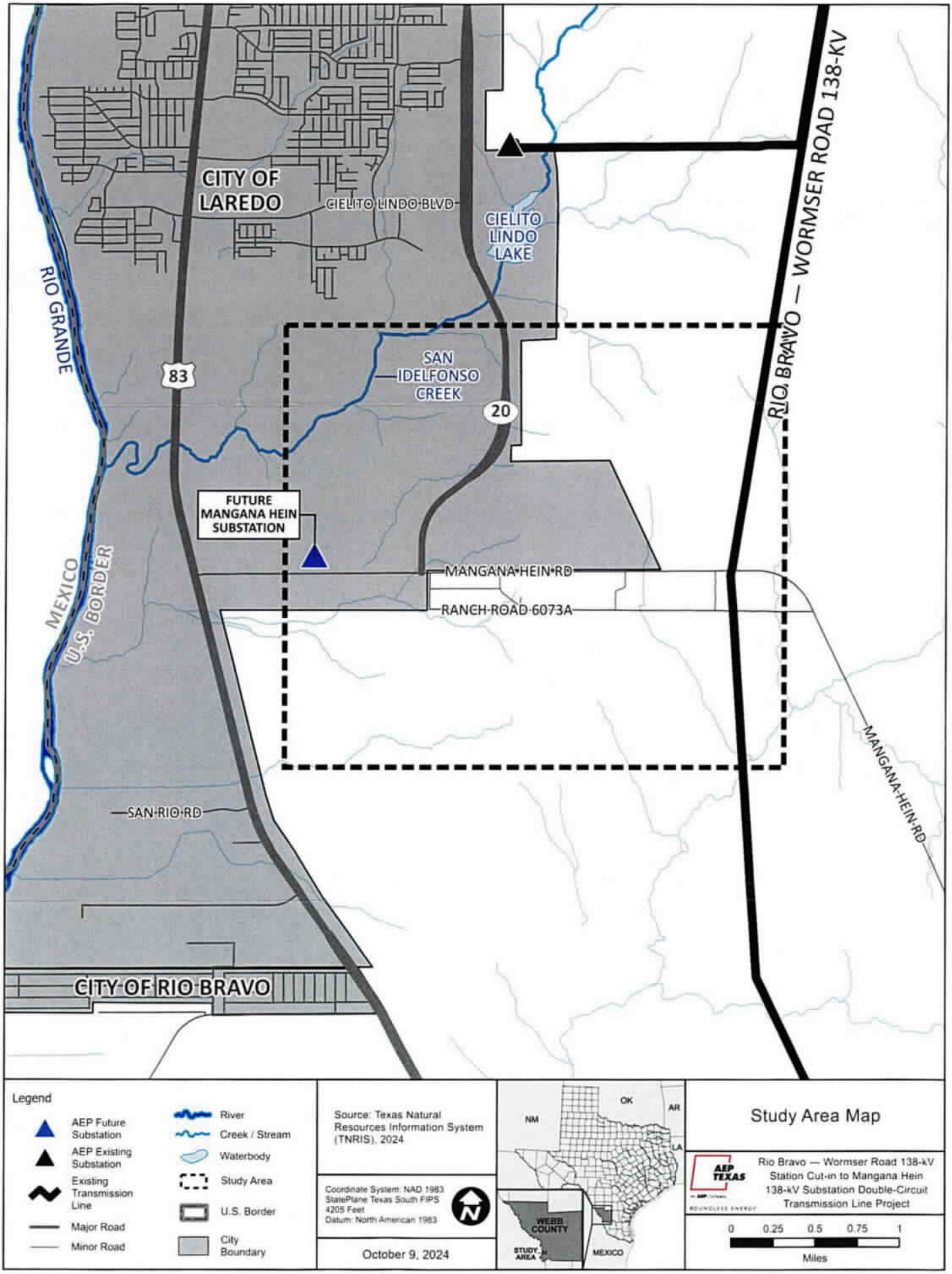
Your earliest reply will be appreciated.

Sincerely,
HALFF ASSOCIATES, INC.

Jody Urbanovsky

Mr. Jody Urbanovsky
Project Manager

Attachment – Study Area Map


CITY OF LAREDO
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Major Road
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Study Area
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City Boundary
Source: Texas Natural Resources Information System (TNRIS), 2024
Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet
Datum: North American 1983
October 9, 2024
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OK
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WEBB COUNTY
STUDY AREA
MEXICO
Study Area Map
AEP TEXAS
Rio Bravo — Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project
0 0.25 0.5 0.75 1
Miles

From: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC <osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil>
Sent: Friday, October 11, 2024 1:51 PM
To: Jody Urbanovsky
Cc: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC
Subject: RE: Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

Good afternoon Mr. Urbanovsky,

Your Informal Review request for the Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation project has been received. We will begin processing the request shortly.

Thank you for the opportunity to review the project.

Very Respectfully,

The Clearinghouse
Military Aviation and Installation Assurance Siting Clearinghouse
Office of the Assistant Secretary of Defense (Energy Resilience and Optimization)
Email: osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil

From: Jody Urbanovsky <jurbanovsky@halff.com>
Sent: Friday, October 11, 2024 11:07 AM
To: OSD Pentagon OUSD A-S Mailbox ASD EIE-RP-SC <osd.pentagon.ousd-a-s.mbx.asd-eie-rp-sc@mail.mil>
Subject: Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

To whom it may concern,
Please see the attached formal letter and study area map for the referenced transmission line project in Webb County, Texas. Please also see the attached KMZ for the project study area and the completed Informal Review Request Form. A hard copy of the attached letter with the study area map has been sent by certified mail consistent to AEP Texas company protocols. If you have any questions, please don't hesitate to let me know. Thanks, and have a great day.
-Jody

Jody Urbanovsky
Project Manager

Halff
O: 214.346.6357
E: jurbanovsky@halff.com

We improve lives and communities
by turning ideas into reality.

From:	Townes, Daniel W CTR OSD OUSD A-S (USA) <daniel.w.townes.ctr@mail.mil>
Sent:	Friday, November 8, 2024 9:34 AM
To:	Jody Urbanovsky
Cc:	Beard, Robbin E CIV OSD OUSD A-S (USA)
Subject:	Response Letter for the Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Project
Attachments:	IR - Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Project.pdf

Good morning Mr. Urbanovsky,

Attached is the Informal Review Response Letter for the Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Project.

Thank you for the opportunity to review your project.

Respectfully,

Dan Townes
Military Aviation and Installation Assurance Siting Clearinghouse
Office of the Assistant Secretary of Defense (Energy Resilience and Optimization)
Desk: 571-372-8414 (*temporarily unavailable*)
NIPR: daniel.w.townes.ctr@mail.mil

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
3400 DEFENSE PENTAGON
WASHINGTON, DC 20301-3400

ENERGY, INSTALLATIONS
AND ENVIRONMENT

November 7, 2024

Jody Urbanovsky
Halff
1201 N. Bowser Road
Richardson, TX 75081

Dear Mr. Urbanovsky,

As requested, the Military Aviation and Installation Assurance Siting Clearinghouse coordinated within the Department of Defense (DoD) an informal review of the Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Project. The results of our review indicated that the transmission line project, located in Webb County, Texas, as proposed, will have minimal impact on military operations conducted in the area.

Please note that this informal review by the DoD Military Aviation and Installation Assurance Siting Clearinghouse does not constitute an action under 49 United States Code Section 44718 and that the DoD is not bound by the conclusion arrived at under this informal review. To expedite our review in the Obstruction Evaluation Airport Airspace Analysis (OE/AAA) process, please add the project number 2024-10-T-DEV-15 in the comments section of the filing. If you have any questions, please contact me at robbin.e.beard.civ@mail.mil.

Sincerely,

Robbin Beard
Deputy Director
Military Aviation and Installation
Assurance Siting Clearinghouse

From:	Dracoulis, Danielle <danielle.dracoulis@fema.dhs.gov>
Sent:	Wednesday, October 16, 2024 9:54 AM
To:	Jody Urbanovsky
Cc:	jorgecalderon@webbcountytx.gov
Subject:	FW: RA # 24-10-124921 IMS Item logged for action to Mitigation
Attachments:	24-10-124921_Proposed Rio Bravo to Wormser Road 138-kV Station Cut-in.pdf; IMS# 124921 Halff Environmental Assessment.pdf

Attached please find formal response from FEMA Region 6, Denton, Texas.

Thank you!

Danielle Dracoulis
Program Support Assistant
| Mitigation Division | Region 6
Federal Emergency Management Agency (FEMA)
800 North Loop 288 | Denton, TX 76209-3698
Phone: (940) 231-6845 | Email: Danielle.dracoulis@fema.dhs.gov

FEMA

The best teams are made up of nobodies, who love everybody, and serve anybody and don't care about becoming somebody.

halff

October 11, 2024

Mr. Tony Robinson
Regional Administrator
Federal Emergency Management Agency - Region VI
FRC 800 North Loop 288
Denton, TX 76209

Re: Proposed Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

Dear Mr. Robinson:

AEP Texas Inc. (AEP Texas) will be filing an application with the Public Utility Commission of Texas (PUC) to amend its Certificate of Convenience and Necessity (CCN) to construct a new 138-kilovolt (kV) double-circuit transmission line from the future Mangana Hein 138-kV Substation, located approximately 0.5 mile west of the intersection of State Highway Loop 20 and Mangana Hein Road south of the City of Laredo in Webb County, to one of multiple potential endpoints located along the existing Rio Bravo to Wormser Road 138-kV transmission line segment located approximately 2.5 miles to the east of the future Mangana Hein 138-kV Substation. Please refer to the attached map depicting the study area.

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Thank you for your assistance with this transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data may also be shared at jurbanovsky@halff.com.

RA# 24-10-124921

Your earliest reply will be appreciated.

Date Rec'd: 10/10/24		
Rec'd by: Maria		
	Action	Info
RA		
Deputy RA		
XA		
Analyst		
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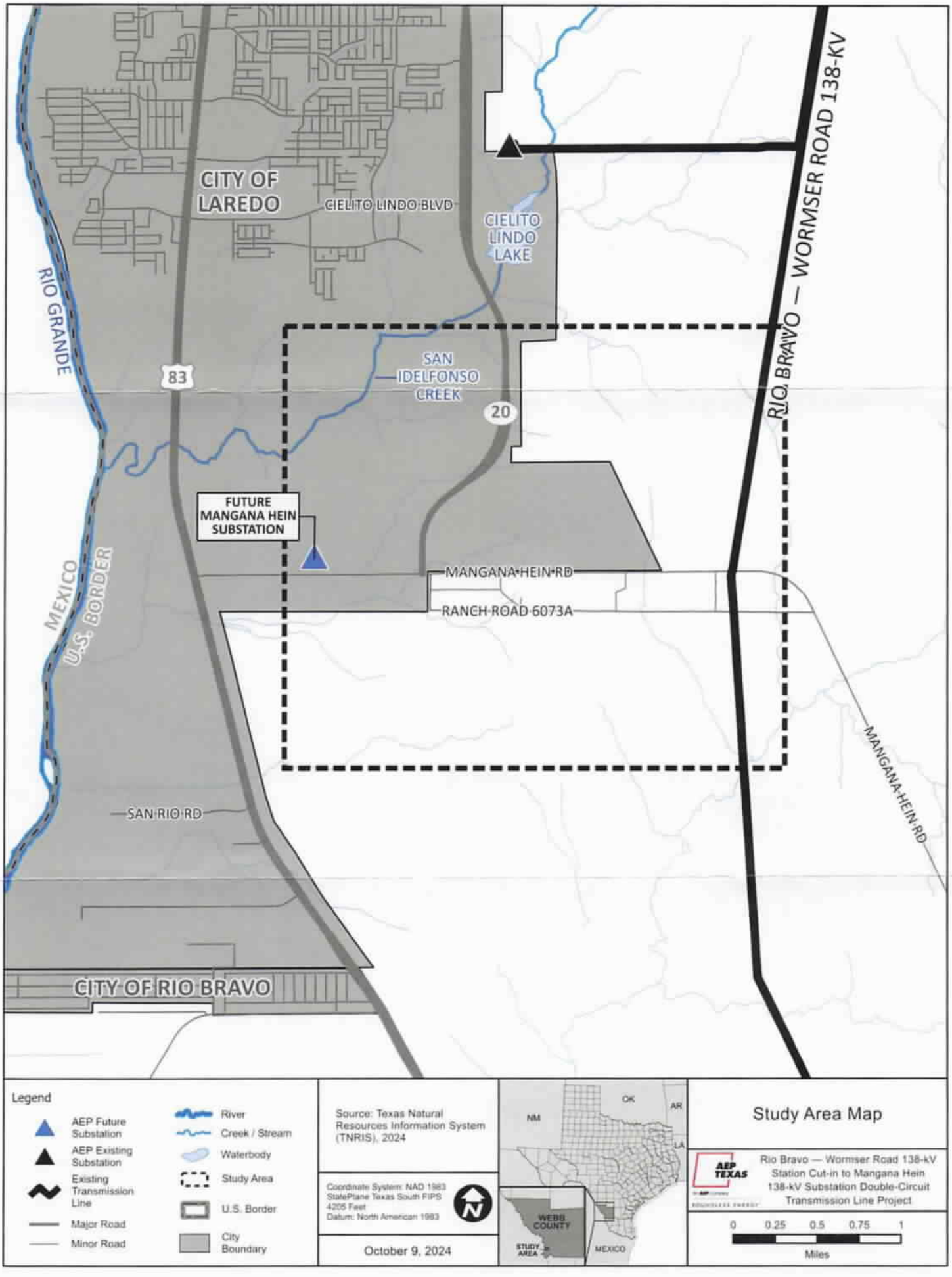
MSD		
NP		
Grants		
File		
Suspense Date: 10/30/24		

Sincerely,
HALFF ASSOCIATES, INC.

Jody Urbanovsky

Mr. Jody Urbanovsky
Project Manager

Attachment – Study Area Map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U. S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, TX 76209-3698

FEMA

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI
MITIGATION DIVISION

RE: Proposed Rio Bravo to Wormser Road 138kV Station Cut-in to Mangana Hein 138kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

NOTICE REVIEW/ENVIRONMENTAL CONSULTATION

☐ We have no comments to offer. ☒ We offer the following comments:

WE WOULD REQUEST THAT THE COMMUNITY FLOODPLAIN ADMINISTRATOR BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT. IF FEDERALLY FUNDED, WE WOULD REQUEST PROJECT TO BE IN COMPLIANCE WITH EO11988 & EO 11990.

County Contact:
Jorge Calderon, Floodplain Administrator
(956) 523-4100
jcalderon@webbcountytx.gov
Webb County, Texas

REVIEWER:

Charles Cook
Floodplain Management and Insurance Branch
Mitigation Division
Charles.Cook4@fema.dhs.gov
(940) 898-5400

DATE: October 16, 2024

From: Karen Sanchez <Karen.Sanchez@rrc.texas.gov>
Sent: Monday, October 21, 2024 8:43 AM
To: Jody Urbanovsky
Cc: Sarah Halterman
Subject: ORR with Railroad Commission of Texas
Attachments: 0328_001.pdf

Ms. Urbanovsky,

All of our information is filed by lease number, API number, T-4 pipeline permit number or other RRC identifying numbers. We do not file our information by property or mapping area.

You can use our online GIS mapping system at the following link to determine if there are any RRC regulated facilities that you would like information about. Public GIS Viewer (Map) Once you have any RRC identifying numbers, we will be happy to search for any responsive information.

Sincerely,

Karen Sanchez
Legal Assistant
Office of General Law
Railroad Commission of Texas

halff

October 11, 2024

Ms. Karen Sanchez
Program Specialist
Railroad Commission of Texas
P.O. Box 12967
Austin, TX 78711

Re: Proposed Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

Dear Ms. Sanchez:

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Thank you for your assistance with this transmission line project. If you have any questions or require additional information, please contact me at (214) 346-6357. Electronic data may also be shared at jurbanovsky@halff.com.

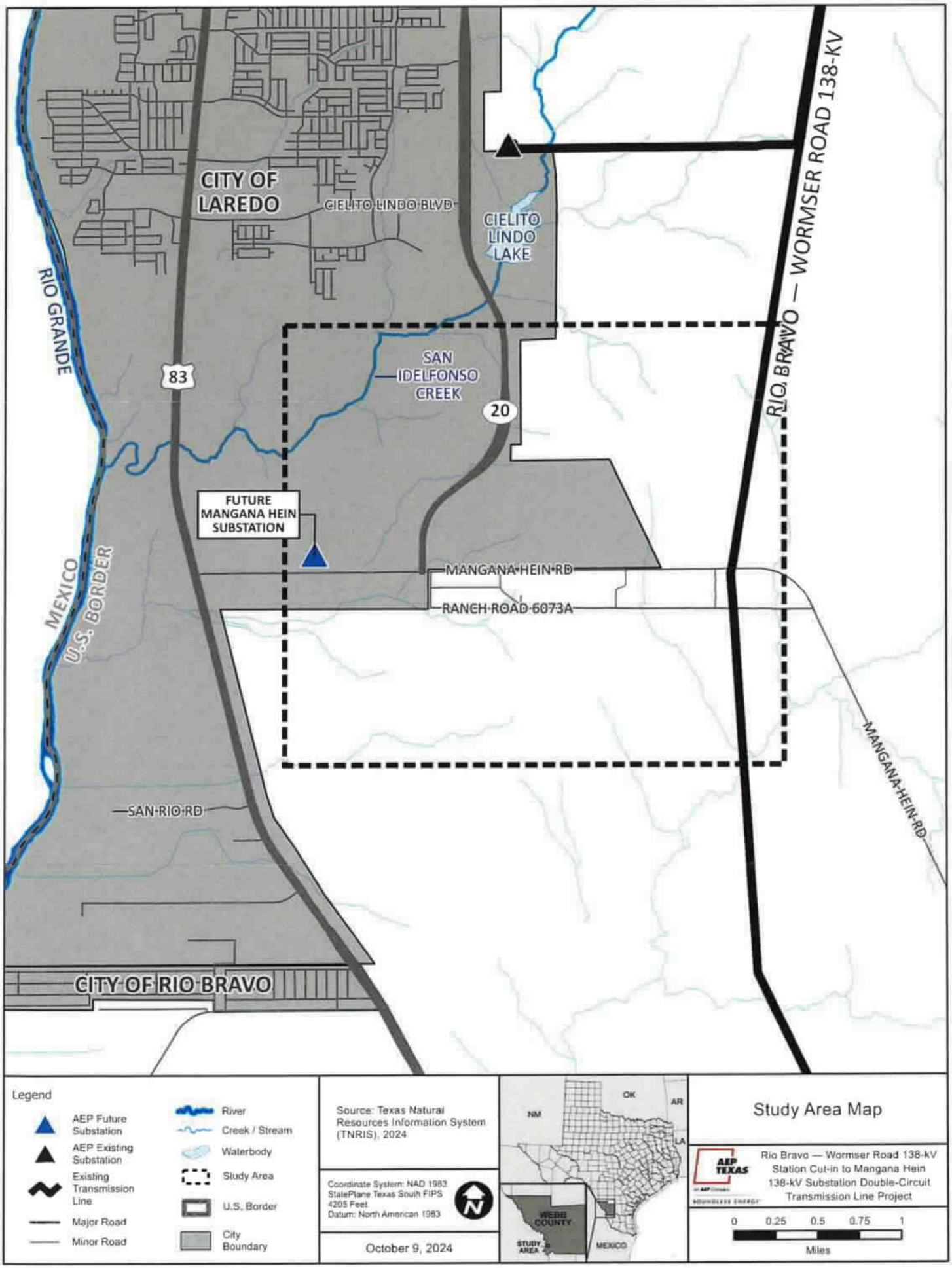
Your earliest reply will be appreciated.

Sincerely,
HALFF ASSOCIATES, INC.

Jody Urbanovsky

Mr. Jody Urbanovsky
Project Manager

Attachment – Study Area Map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Study Area Map
AEP TEXAS
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0 0.25 0.5 0.75 1
Miles

From: Baer, Arabela <arabela.baer@austin.utexas.edu>
Sent: Friday, October 18, 2024 3:46 PM
To: Jody Urbanovsky
Subject: RE: Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

---

Hi Jody,

My apologies for the delay, we are swamped with requests, meetings, and various projects so I'm a bit behind on this, but I've got you in the queue. Thank you for your patience.

Sincerely,
Arabela
Arabela Baer, MA, RPA (she/her)
Head of Records
Texas Archeological Research Laboratory
University of Texas at Austin
1 University Station R7500
Austin, Texas 78712
arabela.baer@austin.utexas.edu

I live and work in Austin, Texas and would like to acknowledge the Alabama-Coushatta, Caddo, Carrizo/Comecrudo, Coahuiltecan, Comanche, Kickapoo, Lipan Apache, Tonkawa and Ysleta Del Sur Pueblo, and all the American Indian and Indigenous Peoples and communities who have been or have become a part of these lands and territories in Texas.

From: Jody Urbanovsky <jurbanovsky@halff.com>
Sent: Friday, October 11, 2024 10:07 AM
To: Baer, Arabela <arabela.baer@austin.utexas.edu>
Subject: Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

Greetings,
Please see the attached formal letter and study area map for the referenced transmission line project in Webb County, Texas. Consistent with past notifications to TARL please also see the attached GIS shapefile for the project study area. If you have any questions, please don't hesitate to let me know. Thanks, and have a great day.
-Jody

Jody Urbanovsky
Project Manager

Halff
O: 214.346.6357
E: jurbanovsky@halff.com

From:	Baer, Arabela <arabela.baer@austin.utexas.edu>
Sent:	Wednesday, October 23, 2024 4:06 PM
To:	Jody Urbanovsky
Subject:	RE: Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas
Attachments:	Halff_ManganaHein_23OCT2024.pdf

Please see the document attached for the results of your request regarding the project area located in Webb County, Texas. Please let me know if you have any questions.

Thank you,
Arabela

Arabela Baer, MA, RPA (she/her)
Head of Records
Texas Archeological Research Laboratory
University of Texas at Austin
1 University Station R7500
Austin, Texas 78712
arabela.baer@austin.utexas.edu

I live and work in Austin, Texas and would like to acknowledge the Alabama-Coushatta, Caddo, Carrizo/Comecrudo, Coahuiltecan, Comanche, Kickapoo, Lipan Apache, Tonkawa and Ysleta Del Sur Pueblo, and all the American Indian and Indigenous Peoples and communities who have been or have become a part of these lands and territories in Texas.

From: Jody Urbanovsky <jurbanovsky@halff.com>
Sent: Friday, October 11, 2024 10:07 AM
To: Baer, Arabela <arabela.baer@austin.utexas.edu>
Subject: Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

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-Jody

Jody Urbanovsky
Project Manager

Halff
O: 214.346.6357
E: jurbanovsky@halff.com

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TEXAS ARCHEOLOGICAL RESEARCH LABORATORY
COLLEGE OF LIBERAL ARTS

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www.liberalarts.utexas.edu/tarl/

October 23, 2024

Jody Urbanovsky
Halff Associates, Inc.
1201 North Bowser Rd.
Richardson, TX 75081-2274

Re: Proposed Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

Dear Jody,

This letter is provided in response to a request for information received by the Texas Archeological Research Laboratory (TARL) on October 11, 2024, concerning the above referenced project study area located on the 7.5' USGS Laredo South quadrangle and the possible location of archeological sites within its boundaries. Please note that information regarding archeological site locations is not intended for public disclosure; site location information is protected by the National Historic Preservation Act of 1966, Title III, §304, and by §191.004 of the Texas Antiquities Code. If you have any questions regarding this policy, please feel free to contact me at the phone number or email address below.

A search of the records on file at TARL indicates that 13 previously recorded archeological sites are present in the study area. There is a concentration of several sites along Cuatro Vientos Blvd and continuing south through the study area. Site **41WB578** is described as a prehistoric campsite and lithic procurement area of unknown age. Stone tools, burned rock, and charcoal were identified at the site. The site is located in the central northernmost portion of the study area near San Idelfonso Creek. Site **41WB624** is a prehistoric campsite and lithic reduction area first excavated in 2004 by Blanton & Associates. It is located immediately south of 41WB578 on top and east of Cuatro Vientos Rd. Gulf South Research Corporation revisited the site in 2021 and observed a burned rock midden and additional stone tools. Site **41WB621** and **41WB622** are located immediately south of 41WB624 along Cuatro Vientos Blvd and are described as prehistoric campsites and lithic reduction areas. Stone tools and the byproducts of their production were observed. Site **41WB623** is immediately south of 41WB622 following along the southernmost portion of Cuatro Vientos Blvd and is described as a large prehistoric lithic reduction and production site. Site **41WB662** is described as a Middle Archaic campsite and stone tools were identified at the site. It is located approximately 300 meters south of 41WB623, south of Mangana Hein Rd. Sites **41WB661** and **41WB660** are described as possible Middle Archaic open campsites. Site 41WB661 is located approximately 100 meters south of 41WB662. Site 41WB660 is located approximately 300 meters south of 41WB661. A small scatter of lithic debris and stone tools

were observed on the surface at both sites. The northern site boundary of site **41WB659** barely overlaps with the southern edge of the study area and is located approximately 200 meters south of 41WB660.

Site **41WB1023** is described as a Middle Archaic lithic scatter. Stone tools were observed. The site is located on the south side of Mangana Hein Rd approximately 400 meters west of the intersection of Cuatro Vientos Rd.

Site **41WB613** is described as a small prehistoric lithic scatter on eroded sandstone slopes, at which a small number of stone tools were identified, some of which may date to the Late Archaic period. The site is located on the central western edge of the study area with only partial overlap. The site is described as a prehistoric open campsite of unknown date, and a small scatter of lithics were observed.

Sites **41WB948** and **41WB950** are located at the northwestern corner of the study area. Site 41WB948 is described as a prehistoric campsite with some late 20th century commercial historic scatter. Stone tools and concrete foundations were observed. Site 41WB950 is located 150 meters east of 41WB948 and is described as a prehistoric campsite. A moderate number of stone tools were identified.

The eligibility of site 41WB624 is undetermined. Site 41WB578 was determined eligible in 2005, and then changed to ineligible in 2007. Sites 41WB613, 41WB621-623, and 41WB948 have all been determined NRHP ineligible. Sites 41WB659-662, 41WB950, and 41WB1023 have been determined ineligible in the ROW.

TARL does not maintain cultural resource information other than the archeological site files and spatial data. As a courtesy, however, the current constraints analysis included a search of the Texas Historical Commission's (THC) restricted online Texas Archeological Sites Atlas and the publicly accessible Texas Historic Sites Atlas. Based on the results of that search, no additional State Antiquities Landmarks or properties listed on the National Register of Historic Places are present within the study area. Likewise, no Texas Historical Markers are present within the study area.

For regulatory matters pertaining to your project, contact the Archeology Division of the Texas Historical Commission at 512-463-6096. For any other questions, please contact me at arabela.baer@austin.utexas.edu.

Sincerely,

Arabela Baer, MA, RPA
Head of Records
Texas Archeological Research Laboratory
The University of Texas at Austin

Brown, David O., James T. Jones, and Dana Anthony
2003 *Cultural Resources Survey of the Proposed Cuatro Vientos Roadway, Webb County, Texas.* Blanton & Associates, Austin, Texas.

Campbell, John, Rachel Feit, Matthew C. Stotts, and Bradford Jones
2007 *Archeological Survey of the Proposed Cuatro Vientos Roadway from Mangana-Hein Road to US 83/Espejo-Molina Road, Webb County, Texas.* Hicks & Company Archeology Series #187, Austin, Texas.

Carpenter, Steve, Michael Chavez, Kevin Miller, & S. Christopher Caran
2010 *Cuatro Vientos – A Reconsideration of Seven Prehistoric Sites in the Lower Rio Grande Plains of South Texas, Webb County, Texas*. SWCA Environmental Consultants, Austin, Texas.

Trahan, Travis, and Robert Lassen
2024 *Archeological Survey for the Proposed Webb County Waterline Extension Project.* AmaTerra, Austin, Texas.

From:	Kenneth Duncan <Kenneth.Duncan@txdot.gov>
Sent:	Wednesday, October 30, 2024 10:12 AM
To:	Jody Urbanovsky
Cc:	Adriana Munoz; Luis Villarreal; Roberto Rodriguez III
Subject:	AEP Substation

Good Morning Jody,

Thank you for taking some time this morning to talk to me. As I stated we are getting information and trying to finalize are alignments in that area. Once we have this information we will make sure that we share with you. I do know that we have a couple of projects in this area, and we want to make sure that your location will not be in conflict. If you have any questions, please feel free to reach out to me.

Thank you,

KENNETH DUNCAN
Utility Coordinator II

TEXAS DEPARTMENT OF TRANSPORTATION
TP&D Laredo District

Office: 956-712-7406
Direct: 956-712-7463
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Office Hours: 8:00 am – 12:00 pm/ 12:30 pm – 4:30 pm

Subject:	FW: Proposed Transmission Line Project, Webb County, TX
Location:	Microsoft Teams Meeting
Start:	Tue 11/5/2024 4:15 PM
End:	Tue 11/5/2024 5:00 PM
Show Time As:	Tentative
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer:	Lena Camarillo

Kenneth,
Just letting you know that I received your email and appreciate your help gathering any TxDOT project information within the study area. Below is the Teams meeting set up by PCI for 11/5 at 4:15 PM to discuss their work for TxDOT in the study area. If there is anything you need from me, please let me know.
Thanks again,
Jody

-----Original Appointment-----
From: Lena Camarillo <lcamarillo@pozcam.com>
Sent: Tuesday, October 29, 2024 3:38 PM
To: Lena Camarillo; Jody Urbanovsky; Fernando Camarillo; Robert Maxwell; Ignacio Izaguirre
Subject: Proposed Transmission Line Project, Webb County, TX
When: Tuesday, November 5, 2024 4:15 PM-5:00 PM (UTC-06:00) Central Time (US & Canada).
Where: Microsoft Teams Meeting

From:	Fernando Camarillo <fcamarillo@pozcam.com>
Sent:	Tuesday, November 5, 2024 5:11 PM
To:	Lena Camarillo; Jackie Lopez; Jody Urbanovsky; Robert Maxwell; Ignacio Izaguirre
Cc:	Jared M Jarrell; Adriana Munoz; Kenneth Duncan; Travis Sterne
Subject:	RE: Proposed Transmission Line Project, Webb County, TX
Attachments:	SL_20_I2-83.kmz; SL_20_BASE_HALN.kmz

The attached KMZ Base is from the feasibility study that was developed for the Laredo Outer Loop competed by TxDOT in 2020.

The SL 20 I2-83 is the latest footprint conceptual alignment we are using to survey the corridor and refine the alignment as we develop the schematic design.

I will send you a link for the utility permit that was submitted by Webb County on the proposed waterline. I suggest you reach out to the County to get their latest plans.

Fernando Camarillo, PE
Chief Executive Officer
210.349.3273 x-118 (office)
210.287.2519 (mobile)
fcamarillo@pozcam.com

POZNECKI-CAMARILLO, LLC
4801 Northwest Loop 410, Ste. 108
San Antonio, TX 78229

pozcam.com /// LinkedIn /// TBPE No. F-483 /// TBPLS No. 10042300

From:	Fernando Camarillo <fcamarillo@pozcam.com>
Sent:	Tuesday, November 5, 2024 5:12 PM
To:	Lena Camarillo; Jackie Lopez; Jody Urbanovsky; Robert Maxwell; Ignacio Izaguirre
Cc:	Jared M Jarrell; Adriana Munoz; Kenneth Duncan; Travis Sterne
Subject:	RE: Proposed Transmission Line Project, Webb County, TX
Attachments:	Attachments.txt

As mentioned below is a link for the utility permit that was submitted by Webb County on the proposed waterline. I suggest you reach out to the County to get their latest plans.

ShareFile Attachments Expires December 5, 2024

20240924103227_ARPA_Waterline_Projec...246.pdf 27.8 MB

Download Attachments

Fernando Camarillo uses ShareFile to share documents securely.

Fernando Camarillo, PE
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From:	Fernando Camarillo <fcamarillo@pozcam.com>
Sent:	Thursday, November 21, 2024 4:52 PM
To:	Jody Urbanovsky
Cc:	Lena Camarillo; Robert Maxwell; Adriana Munoz; Luis Villarreal; Kenneth Duncan; Ignacio Izaguirre; Travis Sterne
Subject:	RE: Proposed Transmission Line Project, Webb County, TX
Attachments:	Mtg Summary AEP 11052024.pdf

Jody,

Please see attached notes from our meeting on Nov 5th. Please let me know if anyone has any comments or revisions to the minutes.

Thanks

Fernando Camarillo, PE
Chief Executive Officer
210.349.3273 x-118 (office)
210.287.2519 (mobile)
fcamarillo@pozcam.com

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From: Lena Camarillo <lcamarillo@pozcam.com>
Sent: Thursday, November 21, 2024 1:23 PM
To: Jody Urbanovsky <jurbanovsky@halff.com>
Cc: Fernando Camarillo <fcamarillo@pozcam.com>
Subject: RE: Proposed Transmission Line Project, Webb County, TX
Importance: High

Hi Jody – we sent draft notes to TxDOT – I'll follow up with them to get permission to send out to attendees – Thanks!

Maria Elena "Lena" Camarillo
Executive VP, Environmental/Public Involvement
210.349.3273 x-117 (office)
210.240.5389 (mobile)
lcamarillo@pozcam.com

POZNECKI-CAMARILLO, LLC
4801 Northwest Loop 410, Ste. 108
San Antonio, TX 78229

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From: Jody Urbanovsky <jurbanovsky@halff.com>
Sent: Thursday, November 21, 2024 12:46 PM
To: Lena Camarillo <lcamarillo@pozcam.com>
Subject: RE: Proposed Transmission Line Project, Webb County, TX

Lena,
Good afternoon. We had meeting on Nov.5 to discuss a proposed transmission line project occurring near the Loop 20 extension project your firm is working on. I believe during that meeting you were taking meeting notes/minutes. If possible, can I please have a copy of those minutes for our records. Thank you,
Jody

Jody Urbanovsky
Project Manager

Halff
O: 214.346.6357
E: jurbanovsky@halff.com

We improve lives and communities
by turning ideas into reality.

From: Fernando Camarillo <fcamarillo@pozcam.com>
Sent: Tuesday, November 5, 2024 5:11 PM
To: Lena Camarillo <lcamarillo@pozcam.com>; Jackie Lopez <jlopez@pozcam.com>; Jody Urbanovsky <jurbanovsky@halff.com>; Robert Maxwell <rmaxwell@pozcam.com>; Ignacio Izaguirre <iizaguirre@pozcam.com
Cc: Jared M Jarrell <jmjarrell@aep.com>; Adriana Munoz <adriana.munoz@txdot.gov>; Kenneth Duncan <Kenneth.Duncan@txdot.gov>; Travis Sterne <tsterne@pozcam.com>
Subject: RE: Proposed Transmission Line Project, Webb County, TX

The attached KMZ Base is from the feasibility study that was developed for the Laredo Outer Loop competed by TxDOT in 2020.

The SL 20 I2-83 is the latest footprint conceptual alignment we are using to survey the corridor and refine the alignment as we develop the schematic design.

I will send you a link for the utility permit that was submitted by Webb County on the proposed > waterline. I suggest you reach out to the County to get their latest plans.

Fernando Camarillo, PE
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210.287.2519 (mobile)
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Cuatro Vientos (SL 20) Extension
Meeting with AEP

MEETING NOTES

Date: **Nov. 5, 2024**
Time: **4:15-5 p.m.**
Location: **Microsoft Teams**

Attendees:

AEP
- Travis Coody
- Jared Jarrell

Halff Associates (AEP Consultant)
- Jody Urbanovsky, Consultant (Halff)

TxDOT
- Kenneth Duncan
- Adriana Munoz
- Roberto Rodriguez III
- Luis Villarreal

PCI
- Fernando Camarillo
- Lena Camarillo
- Ignacio (Nacho) Izaguirre
- Robert Maxwell
- Travis Sterne

Overview

Fernando Camarillo, Poznecki-Camarillo, began with introductions and provided an overview of the meeting's purpose, along with an introduction to TxDOT's proposed Cuatro Vientos (SL 20) Extension project.

Mr. Camarillo requested an overview of the AEP transmission line project. Jody Urbanovsky, Halff Associates, discussed:
- Project limits
- Location of the utility substation on Mangana Hein Road.
- Location of existing transmission lines.
- General overview of their process for proposing routes to tie into the existing transmission line corridor.

Mr. Camarillo emphasized the need for coordination between PCI and AEP, given the proposed expansion of Loop 20. He presented a visual of the proposed Loop 20 project. Mr. Urbanovsky requested that alignment files be shared with AEP for planning purposes. Mr. Camarillo agreed to share the files pending TxDOT's permission, noting that PCI is still in the preliminary route planning stage.

AEP inquired about the intersection at Mangana Hein Road and Loop 20/US 83, asking if it would be at-grade or an overpass. Mr. Camarillo confirmed it would be an overpass. AEP discussed their need to cross Loop 20/US 83 from east to west on both the south and north side of Mangana Hein Road at a 90-degree angle. AEP confirmed 600-ft spans are planned between transmission poles.

AEP plans to hold a public open house in January 2025 to discuss route options with landowners, with more details solidifying by that time. They expect to bring the project before the Public Utility Commission (PUC) in 2025. AEP is currently in the scoping phase, with potential construction targeted for 2027.

The route for a water line along Mangana Hein Road was discussed, and PCI will provide PDF schematics to AEP. Mr. Camarillo mentioned the possibility of a roadway shift east or west at the Mangana Hein Road intersection with Loop 20/US 83. Grade separations were noted as a priority due to the planned new bridge.

Travis Coody, AEP, inquired about the timeline for the Mangana Hein Road widening project. Mr. Camarillo noted there is currently no funding, though this may change with the approval of the presidential permit. Roberto Rodriguez, TxDOT, provided an update, stating that construction is currently scheduled for 2026.

Mr. Camarillo inquired about the timing for international bridge construction. Mr. Rodriguez shared that NEPA clearance is anticipated within the next 24 months. The Presidential Permit has a five-year window to begin construction.

Action Items

- Any data or information discussed during this meeting may be shared between PCI and AEP.
    - PCI sent the Loop 20 KMZ alignment and waterline project PDF to AEP on 11/05.
- Any follow-up requests for information must be submitted via Open Records request.
- AEP will refine the alignment of transmission line routes based on PCI's Loop 20 alignment.
- AEP will share any further updates on route changes as available, especially closer to the open house meeting date which is anticipated on January 9, 2025.
- A follow-up meeting may be scheduled closer to the open house date.
- PCI and AEP will extend an invitation to the open house public meeting to relevant stakeholders.

TEXAS GENERAL LAND OFFICE
COMMISSIONER DAWN BUCKINGHAM, M.D.

October 31, 2024

Jody Urbanovsky
Halff Associate, Inc.
1201 North Bowser Road
Richardson, TX 75081-2275

Re: Proposed Rio Bravo to Wormser Road 138 kV Station Cut-in to Mangana Hein 138 kV Substation Double-Circuit Transmission Line Project in Webb County, Texas

Dear Mr. Urbanovsky:

On behalf of Commissioner Buckingham, I would like to thank you for your letter concerning the above- referenced project.

Using your map depicting the project's study area, it does not appear that the General Land Office will have any environmental issues or land use constraints at this time.

When a final route for this proposed project has been determined, please contact me and we can assess the route to determine if the project will cross any streambeds or Permanent School Fund (PSF) land that would require an easement from our agency.

In the interim, if you would like to speak to me further about this project, I can be reached by email at jeff.burroughs@glo.texas.gov or by phone at (512) 463-7845.

Again, thank you for your inquiry.

Sincerely,

Jeff Burroughs
Manager, Right-of-Way Department
Leasing Operations

From: noreply@thc.state.tx.us
Sent: Friday, November 22, 2024 2:34 PM
To: Jody Urbanovsky; reviews@thc.state.tx.us
Subject: Rio Bravo to Wormser Rd 138 kV Station Cut-in

TEXAS HISTORICAL COMMISSION
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Re: Project Review under the Antiquities Code of Texas
THC Tracking #202502765
Date: 11/22/2024
Rio Bravo to Wormser Rd 138 kV Station Cut-in
wof SW Loop 20 and Mangana Hein Rd S.

Description: Construct a new 138 kV double circuit transmission line from future Mangana Hein substation to endpoint located along existing Rio Bravo to Wormser Rd.

Dear Jody Urbanovsky:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the Executive Director of the Texas Historical Commission (THC), pursuant to review under the Antiquities Code of Texas.

The review staff, led by Caitlin Brashear and Mary Galindo, has completed its review and has made the following determinations based on the information submitted for review:

Archeology Comments

- An archeological survey is required. You may obtain lists of archeologists in Texas through the Council of Texas Archeologists and the Register of Professional Archaeologists. Please note that other qualified archeologists not included on these lists may be used. If this work will occur on land owned or controlled by a state agency or political subdivision of the state, a Texas Antiquities Permit must be obtained from

this office prior to initiation of fieldwork. All fieldwork should meet the Archeological Survey Standards for Texas. A report of investigations is required and should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation and submitted to this office for review. Reports for a Texas Antiquities Permit should also meet the Council of Texas Archeologists Guidelines for Cultural Resources Management Reports and the Texas Administrative Code. In addition, any buildings 45 years old or older that are located on or adjacent to the tract should be documented with photographs and included in the report. To facilitate review and make project information available through the Texas Archeological Sites Atlas, we appreciate the submittal of survey area shapefiles via the Shapefile tab on eTRAC concurrently with submission of the draft report. Please note that while appreciated for Federal projects this is required for projects conducted under a Texas Antiquities Permit. For questions on how to submit these, please visit our video training series at: https://www.youtube.com/playlist?list=PLONbbv2pt4cog5t6mCqZVaEAx3d0MkgQC

We have the following comments: According to our records the proposed Project Area has not been previously subject to an archeological investigation, and the mapped geological and soil units indicate there is an elevated probability for buried archeological sites in this area. As such, an archeological survey is required.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: caitlin.brashear@thc.texas.gov, Mary.Galindo@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

for Joseph Bell, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

From: WHAB <WHAB@tpwd.texas.gov>
Sent: Friday, October 11, 2024 10:07 AM
To: Jody Urbanovsky
Cc: WHAB
Subject: TPWD has received your project review request

This is an automated message to inform you that the Wildlife Habitat Assessment (WHAB) program has received your email. Please note that responses to requests for project review generally take **approximately 45 days** to complete, and project schedules should accommodate the review timeline. Responses may be delayed due to workload and lack of staff. If you wish to speak to the biologist who will review your project, please visit https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/habitat_assessment/media/whab-map-2020.jpg for a staff directory by area of responsibility. Thank you.

From:	Russell Hooten <Russell.Hooten@tpwd.texas.gov>
Sent:	Monday, November 25, 2024 3:42 PM
To:	Jody Urbanovsky
Cc:	Russell Hooten
Subject:	TPWD Review (#52965) Rio Bravo to Wormser Rd 138-kV station cut-in Webb Co
Attachments:	WL52965 ManganaHein_WormserRd 138-kV Tline Webb C 11-25-2024.pdf

Good afternoon Jody,

TPWD's scoping comments regarding the proposed project referenced in the Subject line above are attached. Please contact me with any questions.

Sincerely,
Russell

Russell Hooten
Environmental Review Biologist
Ecological and Environmental Planning Program
TPWD-Wildlife Division
1409 Waldron Road
Corpus Christi, TX 78418
russell.hooten@tpwd.texas.gov
361-431-6003 Office
361-414-3643 Cell

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Chairman-Emeritus
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David Yoskowitz, Ph.D.
Executive Director

November 25, 2024

Jody Urbanovsky
Halff Associates, Incorporated
1201 N. Bowser Road
Richardson, TX 75081

RE: Proposed Rio Bravo to Wormser Rod 138-kV Station to Mangana Hein 138-kV Substation Double-Circuit Transmission Line Project, Webb County, Texas

Dear Mr. Urbanovsky:

Texas Parks and Wildlife Department (TPWD) received the preliminary request regarding the project referenced above. On behalf of AEP Texas, Incorporated (AEP Texas) Halff Associates, Incorporated (Halff) is preparing an Environmental Assessment (EA) to support AEP Texas' application to amend its Certificate of Convenience and Necessity (CCN) from the Public Utility Commission of Texas (PUCT).

Under Texas Parks and Wildlife Code (PWC) section 12.001 l(b)(2) and (b)(3), TPWD has authority to provide recommendations and informational comments that will protect fish and wildlife resources to local, state, and federal agencies that approve, license, or construct developmental projects or make decisions affecting those resources. TPWD is providing input on this proposed project to facilitate the incorporation of beneficial management practices (BMP) during construction, operation, and maintenance that may assist the project proponent in minimizing impacts to the state's natural resources. Pursuant to PWC section 12.0011(b)(2) and (b)(3), TPWD offers the following comments and recommendations concerning this project.

Project Description

AEP Texas is proposing to construct a new 138-kilovolt (kV) double-circuit transmission line from the proposed Mangana Hein 138-kV Substation, located approximately 0.5 miles west of the State Highway (SH) Loop 20 and Mangana Road intersection south of Laredo, to one of multiple potential endpoints located along the existing Rio Bravo to Wormser Road 138-kV transmission line segment located approximately 2.5 miles to the east of the future Mangana Hein 138-kV Substation.

Comment: When new construction is the only feasible option, TPWD typically recommends routing new transmission lines along existing road, pipeline, transmission line, or other utility right-of-way (ROW) or easements to reduce

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AUSTIN, TEXAS 78744-3291
512.389.4800
www.tpwd.texas.gov

habitat fragmentation. By utilizing previously disturbed areas, existing utility corridors, county roads, railroads, and highway ROW, adverse impacts to fish and wildlife resources would be mitigated by avoiding and/or minimizing impacts to undisturbed habitats.

Federal Regulations

Clean Water Act

Section 404 of the Clean Water Act (CWA) establishes a federal program to regulate the discharge of dredged and fill material into waters of the U.S., including wetlands. The U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA) are responsible for making jurisdictional determinations and regulating wetlands and other waters under Section 404 of the CWA.

TPWD identified several aquatic resources in the project study area. These include:

- San Idelfonso Creek
- Unnamed tributaries

as well as named and unnamed springs and ponds, potential wetlands and other features, which may be natural or manmade.

Recommendation: Waterways in the study area, including those that have been manipulated or are completely manmade, provide habitat for wildlife. Natural buffers contiguous to any wetland or aquatic system should remain undisturbed to preserve wildlife cover, food sources, and travel corridors.

BMP for erosion control and sediment runoff should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site-specific native vegetation. BMP should be properly installed in order to effectively minimize the amount of sediment and other debris entering the waterways. During construction, trucks and equipment should use existing bridge or culvert structures to cross waterways, ponds or depressional wetlands, and equipment staging areas should be located in previously disturbed areas away from aquatic areas and outside of riparian corridors.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits taking, attempting to take, capturing, killing, selling, purchasing, possessing, transporting, and importing of migratory birds, their eggs, parts, or nests, except when specifically authorized by the Department of the Interior. This protection applies to most native bird species,

including ground nesting species. The United States Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for more information on potential impacts to migratory birds.

Recommendation: If vegetation clearing is necessary to construct the switching station, establish access roads to the existing ROW, widen the ROW, or complete construction, TPWD recommends scheduling vegetation clearing or trampling to occur outside of the March 15 - September 15 migratory bird nesting season in order to comply with the MBTA.

If vegetation clearing must be scheduled to occur during the nesting season, TPWD recommends the vegetation to be impacted should be surveyed for active nests by a qualified biologist. Nest surveys should be conducted no more than five days prior to the scheduled clearing to ensure recently constructed nests are identified. If active nests are observed during surveys, TPWD recommends a 100-foot radius buffer of vegetation remain around nests until eggs have hatched and the young have fledged; however, the size of the buffer zone is dependent on various factors and can be coordinated with the local or regional USFWS office.

The potential exists for birds to collide with transmission lines and associated guy wires and static lines. Bird fatalities can also occur due to electrocution if perching birds simultaneously make contact with energized and grounded structures. Birds most susceptible of colliding with electrical transmission lines (e.g. egrets, waterfowl, shorebirds, and doves) occur on the Laredo-Santa Rita Park eBird hotspot species lists near the project's study area.

Recommendation: TPWD strongly recommends that transmission lines should be marked with line markers or bird flight diverters to reduce the potential of birds flying into the lines. Line alterations to prevent bird electrocutions should not necessarily be implemented after such events occur as all electrocutions may not be known or documented. Incorporation of preventative measures along portions of the routes that are most attractive to birds (as indicated by frequent sightings) prior to any electrocutions is a preferred alternative.

TPWD recommends the transmission line design should utilize avian safety features described in the publication:

Avian Power Line Interaction Committee (APLIC). 2012. *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*. Edison Electric Institute and APLIC. Washington, D.C.

In particular, the overhead ground wire should be marked with line markers to increase its visibility. Additional recommendations are available in the document entitled, "*TPWD Recommendations for Electrical Transmission/Distribution Line Design and Construction*" available on TPWD's website.

Endangered Species Act

Federally listed animal species and their habitat are protected from "take" on any property by the Endangered Species Act (ESA). Take of a federally listed species can be allowed if it is "incidental" to an otherwise lawful activity and must be permitted in accordance with Section 7 or 10 of the ESA. Federally listed plants are not protected from take except on lands under federal jurisdiction or for which a federal nexus (i.e., permits or funding) exists. Take of a federally listed species or its habitat without allowance from the USFWS is a violation of the ESA.

According to Texas Natural Diversity Database (TXNDD) data, the prostrate milkweed (*Asclepias prostrata*) has been documented as occurring in the project area. This plant occurs in primarily in grasslands or openings in shrublands on loamy fine sands and fine sandy loams. They typically flower between April and October, but flowering can be rainfall dependent.

Recommendation: TPWD recommends that the areas proposed for disturbance be surveyed for the above-listed federal endangered plant where suitable habitat is present. Field surveys should be performed by a qualified biologist familiar with the identification of these species. Surveys should be conducted when these species are most detectable and identifiable (usually during their respective flowering periods), and disturbance should be avoided during construction to the extent feasible. If these species are found in the path of construction, this office should be contacted for further coordination and possible salvage of plants and/or seeds for seed banking. Plants not in the direct path of construction should be protected by markers or fencing and by instructing construction crews to avoid any harm.

State Regulations

Parks and Wildlife Code, Chapter 64-Birds

State law prohibits any take or possession of nongame birds, including their eggs and nests. Laws and regulations pertaining to state-protection of nongame birds are contained in chapter 64 of the PWC; specifically, section 64.002 provides that no person may catch, kill, injure, pursue, or possess a bird that is not a game bird. PWC

section 64.003, regarding destroying nests or eggs, provides that, no person may destroy or take the nests, eggs, or young and any wild game bird, wild bird, or wild fowl. PWC chapter 64 does not allow for incidental take.

Although not documented in the TXNDD, many bird species which are not listed as threatened or endangered are protected by chapter 64 of the PWC and are known to be year-round or seasonal residents or seasonal migrants through the proposed project area.

> **Recommendation:** Please review the *Federal Regulations: Migratory Bird Treaty Act* section above for recommendations as they are applicable for chapter 64 of the PWC compliance.

Parks and Wildlife Code, Section 68.015

PWC regulates state listed threatened and endangered animal species. The capture, trap, take, or killing of state listed threatened and endangered animal species is unlawful unless expressly authorized under a permit issued by the USFWS or TPWD. A copy of *TPWD Guidelines for Protection of State-Listed Species*, which includes a list of penalties for take of species, can be found on the TPWD Wildlife Habitat Assessment Program website. State listed species may only be handled by persons with appropriate authorization from the TPWD Wildlife Permits Office. For more information regarding Wildlife Permits, please contact the Wildlife Permits Office at (512) 389-4647.

The potential occurrence of state listed species in the project area is primarily dependent upon the availability of suitable habitat. Direct impacts to high quality or suitable habitat therefore are directly proportional to the magnitude and potential to directly impact state-listed species. State listed reptiles that are typically slow moving or unable to move due to cool temperatures are especially susceptible to being directly impacted during ROW clearing and construction of the transmission line.

> **Recommendation:** TPWD recommends reviewing the most current TPWD annotated county lists of rare species for Webb County, as state listed species could be present depending upon habitat availability. These lists are available online at the TPWD Wildlife Diversity website. Environmental documents prepared for the project should include an inventory of existing natural resources within the proposed project ROW. Specific evaluations should be designed to predict project impacts upon these natural resources including potential impacts to state listed species.

The following state listed species have the potential to occur within the study area if suitable habitat is available:

Texas horned lizard (*Phrynosoma cornutum*)
Texas tortoise (*Gopherus berlandieri*)

Texas horned lizard

The Texas horned lizard can be found in open, arid, and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees. If present in the general project area, the Texas horned lizard could be impacted by ground disturbing activities. Texas horned lizards may hibernate on-site in loose soils a few inches below ground during the cooler months from September/October to March/April. Construction in these areas could harm hibernating lizards. Horned lizards are active above ground when temperatures exceed 75 degrees Fahrenheit. If horned lizards (nesting, gravid females, newborn young, lethargic from cool temperatures or hibernation) cannot move away from noise and approaching construction equipment, they could be negatively affected by construction activities.

Recommendation: TPWD recommends avoiding disturbance of the Texas horned lizard, its burrows, and colonies of its primary food source, the harvester ant (*Pogonomyrmex* sp.), during clearing and construction. TPWD recommends a permitted biological monitor be present during construction to attempt to capture and relocate Texas horned lizards, if found. If the presence of a biological monitor is not feasible, Texas horned lizards observed during construction should be allowed to safely leave the site on their own.

Texas tortoise

The Texas tortoise occurs primarily in thornscrub, open woodlands, and brush. It feeds primarily on fruits of prickly pear and succulent plants. Texas tortoises have low fecundity; individuals take over 10 years to reach maturity and females do not reproduce every year. Nesting occurs in spring and summer. The Texas tortoise has a home range of approximately five to ten acres. Suitable habitat for the Texas tortoise appears to occur within the project study area. Tortoises are often found near or at the base of prickly pear cactus and may seek shade by crawling under parked vehicles.

Recommendation: TPWD recommends reviewing the Texas tortoise BMP document available online at TPWD's Wildlife Habitat Assessment Program homepage. Contractors and other staff should be made aware that in south

Texas, the Texas tortoise is generally inactive from December through January and is therefore likely to be undetectable in a project area during this time. TPWD recommends a biological monitor be on site during any vegetation clearing to inspect sites subject to disturbance that may provide cover for tortoises (e.g., bases of prickly pear cactus) or provide sites for tortoise pallets (shallow excavations typically at the base of vegetation that are opportunistically occupied by tortoises). As indicated above, tortoises may seek cover (shade) underneath parked vehicles; therefore, TPWD recommends that before driving vehicles that have been parked within the project area, contractors should check underneath the vehicles to ensure no tortoises are present.

If a tortoise is located at the project site, it should be relocated only if it is found in an area in which imminent danger is present. Individuals that must be relocated should be transported to the closest suitable habitat outside of the proposed disturbance area but preferably within its five to ten acre range. After tortoises are removed from the immediate project area, TPWD recommends constructing an exclusion fence as described above under *General Construction Recommendations*.

Reduced speed limits should also be established and enforced in areas in which state listed reptiles could occur.

When inactive, tortoises may occupy the shallow depressions or pallets that are scratched out at the base of vegetative cover; tortoises may also be found sheltering in burrows.

Recommendation: If possible, TPWD recommends completing major ground disturbing activities before late fall or winter when reptiles become inactive and could be utilizing burrows in areas subject to disturbance. If ground disturbing construction activities must occur after October (e.g., to avoid migratory bird nesting season) in areas of suitable tortoise habitat, TPWD recommends surveying those areas for tortoises or indications of tortoise presence, e.g., the presence of burrows or pallets under prickly pear. If tortoises or indications of tortoise presence is observed, TPWD-Ecological and Environmental Planning Program staff should be contacted.

Species of Greatest Conservation Need

In addition to state and federally protected species, TPWD tracks species considered to be Species of Greatest Conservation need (SGCN) that, due to limited distributions and/or declining populations, face threat of extirpation or extinction

but currently lack the legal protection given to threatened or endangered species. Special landscape features, natural communities, and SGCN are rare resources for which TPWD actively promotes conservation, and TPWD considers it important to evaluate and, if necessary, minimize impacts to such resources to reduce the likelihood of endangerment and preclude the need to list SGCN as threatened or endangered in the future. These species and communities are tracked in the TXNDD. The most current and accurate TXNDD data can be requested from the TXNDD website.

Please note that the absence of TXNDD information in an area does not imply that a species is absent from that area. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Although it is based on the best data available to TPWD regarding rare species, the data from the TXNDD do not provide a definitive statement as to the presence, absence, or condition of special species, natural communities, or other significant features within your project area. These data are not inclusive and **cannot be used as presence/absence data**. This information cannot be substituted for on-the-ground surveys.

> **Recommendation:** Please review the current TPWD county list for Webb County as rare and protected species could be present, depending on habitat availability. If during construction, the project area is found to contain SGCN or protected species, natural plant communities, or special features, TPWD recommends that precautions be taken to avoid impacts to them.

Suitable habitat for the following SGCN species may occur in the project area. The following BMP are provided to assist in project planning to avoid/minimize potential impacts.

Reticulate collared lizard (*Crotaphytus reticulatus*)

Occurrences of the reticulate collared lizard have been documented in the TXNDD within the general project area. Reticulate collared lizards are large lizards known to bask on elevated dirt mounds such as those along the edges of unimproved roads throughout south Texas. They generally occur in areas void of vegetation (i.e., bare rock, gravel) and in typical shrubland/chaparral habitat. Also, both reticulate collard lizards and Texas horned lizards are especially active during the spring (April-May) mating season and are more likely to be negatively impacted by construction activities during this period.

> **Recommendation:** When approached, reticulate collared lizards will typically flee to the base of a shrub and remain motionless. Contractors should be made

aware of the potential to encounter reticulate collared lizards in the project area. If encountered, contractors should allow the lizards to escape; contractors should also be instructed to avoid negatively impacting any lizards encountered.

Beneficial Management Practices

TPWD recommends implementing the following BMP to avoid or minimize impacts to wildlife and Species of Greatest Conservation Need (SGCN), including state listed SGCN, potentially occurring at the construction site for this project:

1. In general, TPWD recommends the judicious use and placement of sediment control fence to exclude wildlife from discrete areas to be disturbed. In many cases, sediment control fence placement for the purposes of controlling erosion and protecting water quality can be modified minimally to also provide the benefit of excluding wildlife access to construction areas. The exclusion fence should be buried at least six inches and be at least 24 inches high. The exclusion fence should be maintained for the life of the project and only be removed after the project activities are completed and the disturbed sites have been revegetated or otherwise stabilized. Construction personnel should be encouraged to examine the inside of the exclusion area daily to determine if any wildlife species have been trapped inside the area of impact and provide safe egress opportunities prior to initiation of construction activities.

2. For soil stabilization and/or revegetation of disturbed areas within the proposed project area, TPWD recommends erosion and seed/mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, TPWD recommends the use of no-till drilling, hydromulching and/or hydroseeding due to a reduced risk to wildlife. If erosion control blankets or mats would be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting and hydromulch containing microplastics should be avoided.

3. TPWD recommends designing the project to minimize removal of vegetation and retain native habitats. TPWD recommends that precautions be taken to avoid impact to SGCN flora and fauna, natural plant communities, and priority habitat types of the ecoregion while working in Webb County, or if encountered during project construction, operation, and maintenance activities. Areas exhibiting a native grass and forbs component should be protected from disturbance and from introduction of non-native vegetation. TPWD encourages

clearly marking areas found to contain rare plants as work zone avoidance areas prior to construction, maintenance, and operation activities.

4. TPWD recommends informing employees and contractors of the potential for state listed species and other SGCN to occur in the project area and to avoid impacts to all wildlife that are encountered. Wildlife observed during construction should be allowed to safely leave the site or be translocated to a nearby area with similar habitat that would not be disturbed during construction. TPWD recommends that any translocations of reptiles be the minimum distance possible, no greater than one mile, and preferably with 100-200 yards from the initial encounter location. For purposes of relocation, surveys, monitoring, and research, state listed species may only be handled by persons with the appropriate authorization obtained through the TPWD Wildlife Permits Program. For more information on this authorization, please contact the Wildlife Permits Office at (512) 389-4647.

5. Waterways, floodplains, riparian corridors, lakes, and wetlands provide valuable wildlife habitat, and TPWD recommends protecting them to the maximum extent possible. TPWD recommends establishing disturbance-free buffers contiguous to wetlands or aquatic systems to preserve wildlife cover, food sources, and travel corridors and constructing the transmission line to span all creeks. During construction, trucks and equipment should use existing bridges to cross creeks. Erosion control measures should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site-specific native vegetation.

6. Significant declines in the population of migrating monarch butterflies (*Danaus plexippus*), a federal candidate species, have led to widespread concern about this species and other native insect pollinator species due to reduction in native floral resources. To support pollinators and migrating monarchs, TPWD encourages the establishment of native wildflower habitats on private and public lands. Infrastructure ROW can provide habit for a diverse community of pollinators, providing food, breeding, or nesting opportunities. Infrastructure ROW extend across a variety of landscapes and can aid dispersal of pollinators by linking fragmented habitats. By acting as refugia for pollinators in otherwise inhospitable landscapes, this habitat can contribute to the maintenance of healthy ecosystems and provide ecological services such as crop pollination. The publication, Monarch Habitat Development on Utility Rights of Way, can be found at the TPWD Wildlife Habitat Assessment Program webpage. TPWD encourages the project proponent to restore or revegetate impacted areas with vegetation that provides habitat for monarch butterflies and other pollinator species. Species appropriate for establishment within the project area can be

found by accessing the Lady Bird Johnson Wildflower Center, working with TPWD biologist to develop an appropriate list of species, or utilizing resources found at the Monarch Watch website or the Xerces Society's Guidelines webpage. For areas of the site that already exhibit floral resources and for areas that are planted with floral resources, TPWD recommends incorporating pollinator conservation into maintenance plans for the site to promote and sustain the availability of flowering species throughout the growing season. TPWD recommends scheduling vegetation maintenance to occur after seeds from pollinator plants have been released and avoiding herbicide that affect floral resources.

7. To aid in the scientific knowledge of a species' status and current range, TPWD encourages reporting encounters of SGCN to the TXNDD following the data submittal instructions found at the *TPWD Texas Natural Diversity Database: Submit Data* webpage. An additional method for reporting observations of species is through the iNaturalist community app where plant and animal observations are uploaded from a smartphone. The observer then selects to add the observation to specific TPWD Texas Nature Tracker Projects appropriate for the taxa observed, including Herps of Texas, Birds of Texas, Texas Eagle Nests, Texas Whooper Watch, Mammals of Texas, Rare Plants of Texas, Bees & Wasps of Texas, Terrestrial Mollusks of Texas, Texas Freshwater Mussels, Fishes of Texas, and All Texas Nature.

TPWD advises review and implementation of these recommendations in the preparation of the environmental document for the project. Please contact me at (361) 431-6003 or **russell.hooten@tpwd.texas.gov** if you have any questions or we may be of further assistance.

Sincerely,

Russell Hooten
Ecological and Environmental Planning Program
Wildlife Division

/rh 52965

From: Gray, Natasha A CIV USARMY CESWF (USA) <Natasha.A.Gray@usace.army.mil>
Sent: Saturday, October 19, 2024 4:26 PM
To: Jody Urbanovsky
Cc: Kurpis, Julianna K CIV USARMY CESWF (USA)
Subject: SWF-2024-00508 (Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line)

Dear Mr. Urbanovsky:

Thank you for your letter received October 11, 2024, concerning a proposal for the construction of a 138kV double circuit transmission line located in Webb County, Texas. The project has been assigned Project Number SWF-2024-00508, please include this number in all future correspondence concerning this project.

Mrs. Julianna Kurpis has been assigned as the regulatory project manager for your request and will be evaluating it as expeditiously as possible.

You may be contacted for additional information about your request. For your information, please refer to the Fort Worth District Regulatory Division homepage at http://www.swf.usace.army.mil/Missions/regulatory and particularly guidance on submittals at https://swf-apps.usace.army.mil/pubdata/environ/regulatory/introduction/submital.pdf and mitigation at https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Mitigation that may help you supplement your current request or prepare future requests.

If you have any questions about the evaluation of your submittal or would like to request a copy of one of the documents referenced above, please refer to our website at http://www.swf.usace.army.mil/Missions/Regulatory or contact Mrs. Julianna Kurpis by telephone (817) 692-6139, or by email julianna.k.kurpis@usace.army.mil, and refer to your assigned project number. Please note that it is unlawful to start work without a Department of the Army permit if one is required.

Please help the regulatory program improve its service by completing the survey on the following website: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Brandon W. Mobley
Chief, Regulatory Division

Please assist us in better serving you by completing the survey at the following website:
https://regulatory.ops.usace.army.mil/customer-service-survey/

From: Kurpis, Julianna K CIV USARMY CESWF (USA) <Julianna.K.Kurpis@usace.army.mil>
Sent: Tuesday, November 19, 2024 4:03 PM
To: Jody Urbanovsky
Subject: SWF-2024-00508 Request for Additional Information
Attachments: NWP57TX.pdf

Good afternoon,

I've been assigned USACE Project Number SWF-2024-00508, Rio Bravo to Wormser Road 138-kV Station Cut-in to Mangana Hein 138-kV Substation Double-Circuit Transmission Line, which appears incomplete. In order for us to continue our review of this project, please address the following:

1. Please submit a professional delineation of wetlands, other special aquatic sites and other waters. A qualified specialist (biologist, ecologist or other specialist qualified in delineations) who is familiar with the Great Plains Region Regional Supplement to the 1987 Corps of Engineers Wetlands Delineation Manual and the USACE Regulatory Program (33 CFR Parts 320-331) should complete the delineation. Please include new site assessment photos and a key showing the direction in which the photo was taken. The delineation should be performed by a professional with experience performing delineations in the Fort Worth District.

2. Please provide impact exhibits for wetlands and other waters, based on the delineation, showing permanent and/or temporary impacts (in acres for wetlands/other open waters, and acres and LF for streams). The impact exhibit should show the impact details overlaid on the most recent aerial imagery possible.

- Impacts to waters may require NWP 57 authorization. A copy of this permit is attached.

3. Please perform a new threatened & endangered species assessment consisting of 1) running a USFWS IPAC report for the project site (please ensure date report is generated is on the report) and 2) discussion documenting whether any species listed as endangered or threatened under the Endangered Species Act, or candidate species, as listed on the IPAC report, might be affected by, or found in the vicinity of, the USACE permit area for the proposed project.

4. Please contact the Fort Worth District's Regulatory Archeology Section (Arlo Mckee at Arlo.M.Mckee@usace.army.mil or 817-886-1838) to determine what, if any, additional Section 106 (National Historic Preservation Act) requirements apply to this project. Please have your archeology principal investigator coordinate directly with Arlo in order to assist him in completing his review and copy me on all communication.

5. Please provide the contact information for the applicant, including a name, mailing address, and email

5. No PRM sites are located within or adjaent to the study area. Therefore, coordination for impacts to a PRM site would not be required.

Based on the responses to the items above, additional completeness items may be required to continue our review of the submittal. If we do not receive sufficient requested information within 30 days of the date of this communication, we will consider your application administratively withdrawn. If withdrawn, you may re-open your application at a later date by submitting the requested information. Please email me responses that are small (30 MB or less) with attachments in pdf format. Large responses (greater than 30 MB) can be with multiple emails & the attachments split up, or if necessary, I can provide a link to the Department of Defense FTP site we use (no physical hardcopy is needed). If you have any further questions or concerns, please feel free to contact me at (817) 692-6139 or julianna.k.kurpis@usace.army.mil

Respectfully,

Julianna Kurpis
Project Manager
USACE Ft. Worth District, Regulatory Division
819 Taylor Street
Fort Worth, Texas 76102

Office: 817-692-6139

NATIONWIDE PERMIT 57
Electric Utility Line and
Telecommunications Activities
Effective Date: March 15, 2021
(NWP Final Notice, 86 FR 8)

57. Electric Utility Line and Telecommunications Activities. Activities required for the construction, maintenance, repair, and removal of electric utility lines, telecommunication lines, and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Electric utility lines and telecommunication lines: This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of electric utility lines and telecommunication lines. There must be no change in pre-construction contours of waters of the United States. An "electric utility line and telecommunication line" is defined as any cable, line, fiber optic line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and internet, radio, and television communication.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the electric utility line or telecommunication line crossing of each waterbody.

Electric utility line and telecommunications substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with an electric utility line or telecommunication line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead electric utility line or telecommunication line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead electric utility line or telecommunication line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of electric utility lines or telecommunication lines,

including overhead lines and substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize electric utility lines or telecommunication lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (see 33 CFR part 322). Electric utility lines or telecommunication lines constructed over section 10 waters and electric utility lines or telecommunication lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP authorizes, to the extent that Department of the Army authorization is required, temporary structures, fills, and work necessary for the remediation of inadvertent returns of drilling fluids to waters of the United States through sub-soil fissures or fractures that might occur during horizontal directional drilling activities conducted for the purpose of installing or replacing electric utility lines or telecommunication lines. These remediation activities must be done as soon as practicable, to restore the affected waterbody. District engineers may add special conditions to this NWP to require a remediation plan for addressing inadvertent returns of drilling fluids to waters of the United States during horizontal directional drilling activities conducted for the purpose of installing or replacing electric utility lines or telecommunication lines.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the electric utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) a section 10 permit is required; or (2) the discharge will result in the loss of greater than 1/10-acre of waters of the United States. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: Where the electric utility line is constructed, installed, or maintained in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, a copy of the NWP

verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the electric utility line to protect navigation.

Note 2: For electric utility line or telecommunications activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Electric utility line and telecommunications activities must comply with 33 CFR 330.6(d).

Note 3: Electric utility lines or telecommunication lines consisting of aerial electric power transmission lines crossing navigable waters of the United States (which are defined at 33 CFR part 329) must comply with the applicable minimum clearances specified in 33 CFR 322.5(i).

Note 4: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the electric utility line or telecommunication line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 5: This NWP authorizes electric utility line and telecommunication line maintenance and repair activities that do not qualify for the Clean Water Act section 404(f) exemption for maintenance of currently serviceable fills or fill structures.

Note 6: For overhead electric utility lines and telecommunication lines authorized by this NWP, a copy of the PCN and NWP verification will be provided by the Corps to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

Note 7: For activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

2021 Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently

relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water,

adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for

that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-

construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available

under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a

complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate

form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and

should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously

received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

_____

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not

begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete

crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any

Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

2021 District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district

engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

2021 Further Information

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

2021 Nationwide Permit Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high

tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent

that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a

rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water

marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

The following regional conditions apply within the Fort Worth District

1. Notification to the appropriate District Engineer in accordance with Nationwide Permit General Condition 32 - Pre-Construction Notification (PCN) is required for all activities proposed for authorization by any NWP into the below listed ecologically unique and sensitive areas located within waters of the United States. The Corps will coordinate with the resource agencies as specified in NWP General Condition 32(d)(3).
    a. Pitcher plant bogs ((*Sarracenia* spp.) and/or sundews (*Drosera* spp.) and/or Bald Cypress/Tupelo swamps ((*Taxodium distichum*) and/or water tupelo (*Nyssa aquatica*)).
    b. Karst Zones 1 and 2 located in Bexar, Travis and Williamson Counties (see https://www.fws.gov/southwest/es/AustinTexas/Maps_Data.html).
    c. Caddo Lake and associated areas that are designated as "Wetland of International Importance" under the Ramsar Convention (see

http://caddolakedata.us/media/145/1996caddolakeramsar.pdf or http://caddolakedata.us/media/144/1996caddolakeramsar.jpg).

d. Reaches of rivers (and their adjacent wetlands) that are included in the Nationwide Rivers Inventory (see https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm).

2. For all activities proposed for authorization under any NWP at sites approved as compensatory mitigation sites (either permittee-responsible, mitigation bank and/or in-lieu fee) under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899, the applicant shall notify the appropriate District Engineer in accordance with the Nationwide Permit General Condition 32 - PCN prior to commencing the activity.

ADDITIONAL INFORMATION

This nationwide permit is effective March 15, 2021, and expires on March 14, 2026.

Information about the U.S. Army Corps of Engineers regulatory program, including nationwide permits, may also be found at http://www.swf.usace.army.mil/Missions/Regulatory.aspx and http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 18, 2020

Colonel Timothy R. Vail
Galveston District
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229

Re: 2020 USACE Nationwide Permits Reissuance

Dear Colonel Vail:

This letter is in response to your October 19, 2020, letter requesting Clean Water Act Section 401 certification of the United States Army Corps of Engineers (Corps) Nationwide Permits (NWPs). The Proposal to Reissue and Modify Nationwide Permits was published in the Federal Register (Vol. 85, No. 179, pages 57298-57395) on September 15, 2020. Regional conditions for NWPs in Texas were proposed in public notices on September 30, 2020 (Corps Galveston District) and October 1, 2020 (Corps Fort Worth District).

The Texas Commission on Environmental Quality (TCEQ) has reviewed the Proposal to Reissue and Modify Nationwide Permits and the proposed regional conditions. On behalf of the Executive Director and based on our evaluation of the information contained in these documents, the TCEQ certifies that any discharge associated with the activities authorized by NWPs 1, 2, 4, 5, 8, 9, 10, 11, 20, 23, 24, 28, 34, 35, 48, A, and B will comply with water quality requirements as required by Section 401 of the Federal Clean Water Act and pursuant to Title 30, Texas Administrative Code (TAC), Chapter 279.

The TCEQ conditionally certifies that any discharge associated with the activities authorized by NWPs 3, 6, 7, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 25, 27, 29, 30, 31, 32, 33, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 49, 50, 51, 52, 53, 54, C, D, and E will comply with water quality requirements as required by Section 401 of the Federal Clean Water Act and pursuant to Title 30, Texas Administrative Code, Chapter 279. Conditions for each NWP are defined in Attachment 1 and more detail on specific conditions is given below, including information explaining why the condition is necessary for compliance with water quality requirements as well as the supporting regulatory authorizations.

The TCEQ understands that a prohibition against the use of NWPs (except for NWP 3) in coastal dune swales, mangrove marshes, and Columbia Bottomlands in the Galveston District is included in the Draft 2020 Nationwide Permit (NWP) Regional Conditions for the State of Texas (Regional Conditions). A prohibition of using NWPs (except for NWP 3) in coastal dune swales, mangrove marshes, and Columbia bottomlands in the Galveston District is a condition of this TCEQ 401 certification. This condition is necessary to ensure compliance with water quality requirements because impacts to rare and ecologically significant aquatic resources such as coastal dune swales, mangrove marshes, and Columbia bottomlands would not be considered minimal but significant, and therefore would not meet the purpose of a nationwide permit to authorize activities that will result in no more than minimal adverse environmental effects. Furthermore, activities that would result in impacts to these unique resources are more appropriately authorized under an individual permit to ensure that unavoidable impacts are adequately minimized (30 TAC §279.11(c)(2)) and mitigated (30 TAC §279.11(c)(3) and 30 TAC §307.4(i)).

The TCEQ wants to clarify the application of NWP 16 in Texas. NWP 16 should be limited to the return water from upland contained dredged material disposal areas. It is important to emphasize the intent for dredged material disposal. The TCEQ understands dredged material to be associated with navigational dredging activities, not commercial mining activities. To avoid confusion, the TCEQ requests that a regional condition be added or that the Corps commits to prohibiting the use of NWP 16 for activities that would be regulated under Standard Industrial Classification (SIC) codes 1442 and 1446 (industrial and construction sand and gravel mining).

Consistent with previous NWPs certification decisions, the TCEQ is conditionally certifying NWP 16 for the return water from confined upland disposal not to exceed a 300 mg/L total suspended solids (TSS) concentration. This condition is necessary to ensure that return water discharges will comply with water quality requirements in accordance with Texas Water Code §26.003 and antidegradation policy in 30 TAC §307.5, and not result in violations of general water quality criteria in 30 TAC 307.4(b)(2)-(5). The TCEQ encourages the Corps to consider that TSS limits are promulgated as effluent limits under Title 40 of the Code of Federal Regulations, and that the TCEQ effectively imposes TSS effluent limits in thousands of wastewater discharge permits issued in Texas under Section 402 of the federal Clean Water Act.

The TCEQ recognizes the usefulness of having an instantaneous method to determine compliance with the 300 mg/L TSS limit. However, existing literature and analysis of paired samples of turbidity and TSS from the Texas Surface Water Quality Information System indicate this relationship must be a site-specific characterization of the actual sediments to be dredged. To address this approach, we have continued language in the NWP 16 conditional certification that allows flexibility to use an instantaneous method in implementing the TSS limit when a site-specific correlation curve for turbidity (nephelometric turbidity units (NTU)) versus TSS has been approved by TCEQ. The TCEQ remains interested in working with the Corps in the development of these curves and in working together to find the best methods to implement this limit.

Regional Condition 17 applies to NWP authorizations in the Area of Concern (AOC) of the San Jacinto River Waste Pits Superfund Site. The TCEQ conditionally certifies Regional Condition 17 provided that the Permit Evaluation Requirement Process (Process), effective November 1, 2009, is adhered to for all proposed and existing permits within the AOC. The Process requires that all permit applicants and existing permittees within the AOC perform sampling to ensure that any activities conducted, especially activities involving dredging or disposal of dredged materials, do not impact site investigation and remediation and that existing water quality is maintained and protected in accordance with the Texas Water Code §26.003 and TCEQ antidegradation policy in 30 TAC §307.5.

The TCEQ is conditionally certifying NWP General Condition 12 *Soil Erosion and Sediment Controls*, and General Condition 25 *Water Quality*. The conditions address three broad categories of water quality management with specific recommendations for Best Management Practices (BMPs) for each category. These BMP conditions are necessary to enhance the water quality protection of these General Conditions by requiring the use of specific BMPs to control erosion, sedimentation, and/or post-construction TSS in permitted activities and therefore prevent violation of state general water quality criteria (30 TAC §307.4) and antidegradation policy (30 TAC §307.5). Runoff from bridge decks has been exempted from the requirement for post-construction TSS controls under General Condition 25. A list of TCEQ-recommended BMPs is included as Attachment 2. Attachment 3 is provided as a quick reference table identifying the BMP categories that are required for each NWP. A detailed description of the BMPs is provided in Attachment 4.

The Corps is proposing to remove the 300 linear foot (LF) limit for NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52, in part, to simplify the quantification of aquatic resource types (i.e., streams, wetlands, etc.) by using acreage as the preferred unit of measure. Removing the stream bed loss limit would mean that stream losses associated with activities covered by these 10 NWPs would only be limited by the existing ½-acre limit on overall impacts to waters of the U.S. This could significantly affect state stream resources by allowing upwards of several thousand linear feet of stream impacts under these permits, depending on the dimensions of the streams being impacted. The TCEQ has traditionally relied on and used linear feet as the preferred unit of measure of stream impacts and stream mitigation in our Section 401 water quality certification program. Therefore, the TCEQ does not support the proposed removal of the 300 LF stream bed loss limit in these NWPs and conditionally certifies NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 with a limit of 1,500 linear feet of stream bed loss. The condition is based on the amount of stream impacts considered minimal by the TCEQ, where certification is waived for projects impacting 1,500 LF of streams or less in accordance with the Memorandum of Agreement (August 2000) between the Corps and TCEQ. Any proposed impacts greater than 1,500 linear feet of impacts in stream length will need to undergo an individual TCEQ 401 certification review, preferably in the context of a Section 404 individual permit. This condition is necessary to ensure that the discharge associated with projects permitted using these 10 NWPs will comply with water quality requirements for aquatic life uses and habitat (30 TAC 307.4(i)), antidegradation implementation procedures (30 TAC

307.5(c)(1)(B), and minimization and mitigation requirements in 30 TAC 279.11(c)(2) and (3), as well as be consistent with the NWP goal of authorizing only minimal adverse environmental impacts.

This certification decision is limited to those activities under the jurisdiction of the TCEQ. For activities related to the production and exploration of oil and gas, a Railroad Commission of Texas certification is required as provided in the Texas Water Code §26.131.

The TCEQ has reviewed the Notice of Reissuance of Nationwide Permits for consistency with the Texas Coastal Management Program (CMP) goals and policies in accordance with the CMP regulations {Title 31, Texas Administrative Code (TAC), Chapter (§)505.30} and has determined that the action is consistent with the applicable CMP goals and policies.

This certification was reviewed for consistency with the CMP's development in critical areas policy {31 TAC §501.23} and dredging and dredged material disposal and placement policy {31 TAC §501.25}. This certification complies with the CMP goals {31 TAC §501.12(1, 2, 3, 5)} applicable to these policies.

The TCEQ reserves the right to modify this certification if additional information identifies specific areas where significant impacts, including cumulative or secondary impacts, are occurring, and the use of these NWPs would be inappropriate.

No review of property rights, location of property lines, nor the distinction between public and private ownership has been made, and this certification may not be used in any way with regard to questions of ownership.

If you require further assistance, please contact Ms. Lili Murphy, Water Quality Assessment Section, Water Quality Division (MC-150), at (512) 239-4595 or by email at lili.murphy@tceq.texas.gov.

Sincerely,

David W Galindo

David W. Galindo, Deputy Director
Water Quality Division
Texas Commission on Environmental Quality

DWG/LM/

Attachments

ccs: Mr. Joseph McMahan, U.S. Army Corps of Engineers Galveston District via e-mail at joseph.a.mcmahan@usace.army.mil
Ms. Kristi McMillan U.S. Army Corps of Engineers Galveston District via e-mail at Kristi.N.McMillan@usace.army.mil
Mr. Stephen Brooks, Branch Chief, U.S. Army Corp of Engineers Fort Worth District via e-mail at Stephen.Brooks@usace.army.mil
Ms. Allison Buchtien,and Mr. Jesse Solis, Texas General Land Office via e-mail at Federal.Consistency@glo.texas.gov
Ms. Leslie Savage, Texas Railroad Commission via e-mail at Leslie.Savage@RRC.texas.gov
Branch Chief, U.S. Army Corps of Engineers, Albuquerque District, 4101 Jefferson Plaza NE, Room 313, Albuquerque, New Mexico 87109-3435
Regulatory Branch Chief, U.S. Army Corps of Engineers, Regulatory Branch CESWT-PE-R, 1645 South 101st East Avenue, Tulsa, Oklahoma, 74128
Regulatory Branch Chief, U.S. Army Corps of Engineers, El Paso Regulatory Office, CESPA-OD-R-EP, P.O. Box 6096, Fort Bliss, Texas 79906-6096

Attachment 1
Conditions of Section 401 Certification for Nationwide Permits, Regional Conditions, and General Conditions

General Condition 12 (Soil Erosion and Sediment Controls)
Erosion control and sediment control best management practices (BMPs) are required with the use of this general condition. Attachment 2 describes the BMPs and the Nationwide Permits (NWPs) to which they apply. If the applicant does not choose one of the BMPs listed in Attachment 2, an individual 401 certification is required.

General Condition 25 (Water Quality)
Post-construction total suspended solids (TSS) BMPs are required with the use of this general condition. Attachment 2 describes the BMPs and the NWPs to which they apply. If the applicant does not choose one of the BMP's listed in Attachment 2, an individual 401 certification is required. Bridge deck runoff is exempt from this requirement.

Regional Condition 17 condition
The Permit Evaluation Requirement Process, effective November 1, 2009, is required for all proposed and existing permits within San Jacinto River Waste Pits Superfund Site Area of Concern.

All NWPs except for NWP 3
These NWPs are not authorized for use in coastal dune swales, mangrove marshes, and Columbia bottomlands in the Galveston District, Texas.

NWP 3 (Maintenance)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 6 (Survey Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 7 (Outfall Structures and Associated Intake Structures)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 12 (Oil or Natural Gas Pipeline Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP 13 (Bank Stabilization)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 14 (Linear Transportation Projects)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP 15 (U.S. Coast Guard Approved Bridges)
Soil Erosion and Sediment Controls under General Condition 12 are required.

Attachment 1
Conditions of Section 401 Certification for Nationwide Permits, Regional Conditions, and General Conditions

NWP 16 (Return Water From Upland Contained Disposal Areas)
Activities that would be regulated under Standard Industrial Classification (SIC) codes 1442 and 1446 (industrial and construction sand and gravel mining) are not eligible for this NWP. Effluent from an upland contained disposal area shall not exceed a TSS concentration of 300 mg/L unless a site-specific TSS limit, or a site-specific correlation curve for turbidity (nephelometric turbidity units (NTU)) versus TSS has been approved by TCEQ.

NWP 17 (Hydropower Projects)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP 18 (Minor Discharges)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP 19 (Minor Dredging)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 21 (Surface Coal Mining Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 22 (Removal of Vessels)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 25 (Structural Discharges)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 27 (Aquatic Habitat Restoration, Establishment, and Enhancement Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 29 (Residential Developments)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 30 (Moist Soil Management for Wildlife)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 31 (Maintenance of Existing Flood Control Facilities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

Attachment 1
Conditions of Section 401 Certification for Nationwide Permits, Regional Conditions, and General Conditions

NWP 32 (Completed Enforcement Actions)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 33 (Temporary Construction, Access and Dewatering)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 36 (Boat Ramps)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP 37 (Emergency Watershed Protection and Rehabilitation)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 38 (Cleanup of Hazardous and Toxic Waste)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 39 (Commercial and Institutional Developments)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 40 (Agricultural Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 41 (Reshaping Existing Drainage Ditches and Irrigation Ditches)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP 42 (Recreational Facilities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 43 (Stormwater Management Facilities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 44 (Mining Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

Attachment 1
Conditions of Section 401 Certification for Nationwide Permits, Regional Conditions, and General Conditions

NWP 45 (Repair of Uplands Damaged by Discrete Events)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP 46 (Discharges in Ditches)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 49 (Coal Remining Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP 50 (Underground Coal Mining Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 51 (Land-Based Renewal Energy Generation Facilities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 52 (Water-Based Renewal Energy Generation Pilot Projects)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required. Stream bed losses are limited to 1,500 linear feet.

NWP 53 (Removal of Low-Head Dams)
Soil Erosion and Sediment Controls under General Condition 12 are required.

NWP 54 (Living Shorelines)
Sediment Controls under General Condition 12 are required.

NWP C (Electric Utility Line and Telecommunications Activities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP D (Utility Line Activities for Water and Other Substances)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

NWP E (Water Reclamation and Reuse Facilities)
Soil Erosion and Sediment Controls under General Condition 12 are required. Post-construction TSS controls under General Condition 25 are required.

Attachment 2
401 Water Quality Certification Best Management Practices (BMPs) for Nationwide Permits

I. Erosion Control

Disturbed areas must be stabilized to prevent the introduction of sediment to adjacent wetlands or water bodies during wet weather conditions (erosion). *At least one* of the following best management practices (BMPs) must be maintained and remain in place until the area has been stabilized for NWPs 3, 6, 7, 12, 13, 14, 15, 17, 18, 19, 21, 22, 25, 27, 29, 30, 31, 32, 33, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 49, 50, 51, 52, 53, C, D, and E. If the applicant does not choose one of the BMPs listed, an individual 401 certification is required. BMPs for NWP 52 apply only to land-based impacts from attendant features.

- ◇ Temporary Vegetation
- ◇ Mulch
- ◇ Interceptor Swale
- ◇ Erosion Control Compost
- ◇ Compost Filter Socks
- ◇ Blankets/Matting
- ◇ Sod
- ◇ Diversion Dike
- ◇ Mulch Filter Socks

II. Sedimentation Control

Prior to project initiation, the project area must be isolated from adjacent wetlands and water bodies by the use of BMPs to confine sediment. Dredged material shall be placed in such a manner that prevents sediment runoff into water in the state, including wetlands. Water bodies can be isolated by the use of one or more of the required BMPs identified for sedimentation control. These BMP's must be maintained and remain in place until the dredged material is stabilized. *At least one* of the following BMPs must be maintained and remain in place until the area has been stabilized for NWPs 3, 6, 7, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 25, 27, 29, 30, 31, 32, 33, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 49, 50, 51, 52, 53, 54, C, D, and E. If the applicant does not choose one of the BMPs listed, an individual 401 certification is required. BMPs for NWP 52 apply only to land-based impacts from attendant features.

- ◇ Sand Bag Berm
- ◇ Silt Fence
- ◇ Triangular Filter Dike
- ◇ Stone Outlet Sediment Traps
- ◇ Erosion Control Compost
- ◇ Compost Filter Socks
- ◇ Rock Berm
- ◇ Hay Bale Dike
- ◇ Brush Berms
- ◇ Sediment Basins
- ◇ Mulch Filter Socks

Attachment 2
401 Water Quality Certification Best Management Practices (BMPs) for Nationwide Permits

III. Post-Construction TSS Control

After construction has been completed and the site is stabilized, total suspended solids (TSS) loadings shall be controlled by *at least one* of the following BMPs for NWPs 12, 14, 17, 18, 21, 29, 31, 36, 39, 40, 41, 42, 44, 45, 49, 50, 51, 52, C, D, and E. If the applicant does not choose one of the BMPs listed, an individual 401 certification is required. BMPs for NWP 52 apply only to land-based impacts from attendant features. Runoff from bridge decks has been exempted from the requirement for post construction TSS controls.

- ◇ Retention/Irrigation Systems
- ◇ Extended Detention Basin
- ◇ Vegetative Filter Strips
- ◇ Grassy Swales
- ◇ Erosion Control Compost
- ◇ Compost Filter Socks
- ◇ Constructed Wetlands
- ◇ Wet Basins
- ◇ Vegetation lined drainage ditches
- ◇ Sand Filter Systems
- ◇ Mulch Filter Socks
- ◇ Sedimentation Chambers*

* Only to be used when there is no space available for other approved BMPs.

Attachment 3
Reference to Nationwide Permits Best Management Practices Requirements

NWP	Permit Description	Erosion Control	Sediment Control	Post-Construction TSS
1	Aid to Navigation			
2	Structures in Artificial Canals			
3	Maintenance	X	X	
4	Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities			
5	Scientific Measurement Devices			
6	Survey Activities *Trenching	X	X	
7	Outfall Structures and Associated Intake Structures	X	X	
8	Oil and Gas Structures on the Outer Continental Shelf			
9	Structures in Fleeting and Anchorage Areas			
10	Mooring Buoys			
11	Temporary Recreational Structures			
12	Oil or Natural Gas Pipeline Activities	X	X	X
13	Bank Stabilization	X	X	
14	Linear Transportation Projects	X	X	X
15	U.S. Coast Guard Approved Bridges	X	X	
16	Return Water From Upland Contained Disposal Areas			
17	Hydropower Projects	X	X	X
18	Minor Discharges	X	X	X
19	Minor Dredging	X	X	
20	Response Operations for Oil or Hazardous Substances			
21	Surface Coal Mining Activities	X	X	X
22	Removal of Vessels	X	X	

Attachment 3
Reference to Nationwide Permits Best Management Practices Requirements

NWP	Permit Description	Erosion Control	Sediment Control	Post-Construction TSS
23	Approved Categorical Exclusions			
24	Indian Tribe or State Administered Section 404 Programs			
25	Structural Discharges	X	X	
26	[Reserved]			
27	Aquatic Habitat Restoration, Establishment, and Enhancement Activities	X	X	
28	Modifications of Existing Marinas			
29	Residential Developments	X	X	X
30	Moist Soil Management for Wildlife	X	X	
31	Maintenance of Existing Flood Control Facilities	X	X	X
32	Completed Enforcement Actions	X	X	
33	Temporary Construction, Access and Dewatering	X	X	
34	Cranberry Production Activities			
35	Maintenance Dredging of Existing Basins			
36	Boat Ramps	X	X	X
37	Emergency Watershed Protection and Rehabilitation	X	X	
38	Cleanup of Hazardous and Toxic Waste	X	X	
39	Commercial and Institutional Developments	X	X	X
40	Agricultural Activities	X	X	X
41	Reshaping Existing Drainage Ditches and Irrigation Ditches	X	X	X
42	Recreational Facilities	X	X	X
43	Stormwater Management Facilities	X	X	

Attachment 3
Reference to Nationwide Permits Best Management Practices Requirements

NWP	Permit Description	Erosion Control	Sediment Control	Post-Construction TSS
44	Mining Activities	X	X	X
45	Repair of Uplands Damaged by Discrete Events	X	X	X
46	Discharges in Ditches	X	X	
47	[Reserved]			
48	Existing Commercial Shellfish Aquaculture Activities			
49	Coal Remining Activities	X	X	X
50	Underground Coal Mining Activities	X	X	X
51	Land-Based Renewable Energy Generation Facilities	X	X	X
52	Water-Based Renewable Energy Generation Pilot Projects	X	X	X
53	Removal of Low-Head Dams	X	X	
54	Living Shorelines		X	
C	Electric Utility Line and Telecommunications Activities	X	X	X
D	Utility Line Activities for Water and Other Substances	X	X	X
E	Water Reclamation and Reuse Facilities	X	X	X

Attachment 4
Description of Best Management Practices (BMPs)

EROSION CONTROL BMPs

Temporary Vegetation

Description: Vegetation can be used as a temporary or permanent stabilization technique for areas disturbed by construction. Vegetation effectively reduces erosion in swales, stockpiles, berms, mild to medium slopes, and along roadways. Other techniques such as matting, mulches, and grading may be required to assist in the establishment of vegetation.

Materials:

- The type of temporary vegetation used on a site is a function of the season and the availability of water for irrigation.
- Temporary vegetation should be selected appropriately for the area.
- County agricultural extension agents are a good source for suggestions for temporary vegetation.
- All seed should be high quality, U.S. Dept. of Agriculture certified seed.

Installation:

- Grading must be completed prior to seeding.
- Slopes should be minimized.
- Erosion control structures should be installed.
- Seedbeds should be well pulverized, loose, and uniform.
- Fertilizers should be applied at appropriate rates.
- Seeding rates should be applied as recommended by the county agricultural extension agent.
- The seed should be applied uniformly.
- Steep slopes should be covered with appropriate soil stabilization matting.

Blankets and Matting

Description: Blankets and matting material can be used as an aid to control erosion

on critical sites during the establishment period of protective vegetation. The most common uses are in channels, interceptor swales, diversion dikes, short, steep slopes, and on tidal or stream banks.

Materials:

New types of blankets and matting materials are continuously being developed. The Texas Department of Transportation (TxDOT) has defined the critical performance factors for these types of products and has established minimum performance standards which must be met for any product seeking to be approved for use within any of TxDOT's construction or maintenance activities. The products that have been approved by TxDOT are also appropriate for general construction site stabilization. TxDOT maintains a web site at https://www.txdot.gov/inside-txdot/division/maintenance/erosion-control.html which is updated as new products are evaluated.

Installation:

- Install in accordance with the manufacturer's recommendations.
- Proper anchoring of the material.
- Prepare a friable seed bed relatively free from clods and rocks and any foreign material.
- Fertilize and seed in accordance with seeding or other type of planting plan.
- Erosion stops should extend beyond the channel liner to full design cross-section of the channel.
- A uniform trench perpendicular to line of flow may be dug with a spade or a mechanical trencher.
- Erosion stops should be deep enough to penetrate solid material or below level of ruling in sandy soils.
- Erosion stop mats should be wide enough to allow turnover at bottom of trench for stapling, while maintaining the top edge flush with channel surface.

Mulch

Description: Mulching is the process of applying a material to the exposed soil surface to protect it from erosive forces and to conserve soil moisture until plants can become

established. When seeding critical sites, sites with adverse soil conditions or seeding on other than optimum seeding dates, mulch material should be applied immediately after seeding. Seeding during optimum seeding dates and with favorable soils and site conditions will not need to be mulched.

Materials:

- Mulch may be small grain straw which should be applied uniformly.
- On slopes 15 percent or greater, a binding chemical must be applied to the surface.
- Wood-fiber or paper-fiber mulch may be applied by hydroseeding.
- Mulch nettings may be used.
- Wood chips may be used where appropriate.

Installation:

Mulch anchoring should be accomplished immediately after mulch placement. This may be done by one of the following methods: peg and twine, mulch netting, mulch anchoring tool, or liquid mulch binders.

Sod

Description: Sod is appropriate for disturbed areas which require immediate vegetative covers, or where sodding is preferred to other means of grass establishment. Locations particularly suited to stabilization with sod are waterways carrying intermittent flow, areas around drop inlets or in grassed swales, and residential or commercial lawns where quick use or aesthetics are factors. Sod is composed of living plants and those plants must receive adequate care in order to provide vegetative stabilization on a disturbed area.

Materials:

- Sod should be machine cut at a uniform soil thickness.
- Pieces of sod should be cut to the supplier's standard width and length.
- Torn or uneven pads are not acceptable.
- Sections of sod should be strong enough to support their own weight and retain their size and shape when suspended from a firm grasp.

- Sod should be harvested, delivered, and installed within a period of 36 hours.

Installation:

- Areas to be sodded should be brought to final grade.
- The surface should be cleared of all trash and debris.
- Fertilize according to soil tests.
- Fertilizer should be worked into the soil.
- Sod should not be cut or laid in excessively wet or dry weather.
- Sod should not be laid on soil surfaces that are frozen.
- During periods of high temperature, the soil should be lightly irrigated.
- The first row of sod should be laid in a straight line with subsequent rows placed parallel to and butting tightly against each other.
- Lateral joints should be staggered to promote more uniform growth and strength.
- Wherever erosion may be a problem, sod should be laid with staggered joints and secured.
- Sod should be installed with the length perpendicular to the slope (on the contour).
- Sod should be rolled or tamped.
- Sod should be irrigated to a sufficient depth.
- Watering should be performed as often as necessary to maintain soil moisture.
- The first mowing should not be attempted until the sod is firmly rooted.
- Not more than one third of the grass leaf should be removed at any one cutting.

Attachment 4
Description of Best Management Practices (BMPs)

Interceptor Swale

Interceptor swales are used to shorten the length of exposed slope by intercepting runoff, prevent off-site runoff from entering the disturbed area, and prevent sediment-laden runoff from leaving a disturbed site. They may have a v-shape or be trapezoidal with a flat bottom and side slopes of 3:1 or flatter. The outflow from a swale should be directed to a stabilized outlet or sediment trapping device. The swales should remain in place until the disturbed area is permanently stabilized.

Materials:

- Stabilization should consist of a layer of crushed stone three inches thick, riprap or high velocity erosion control mats.
- Stone stabilization should be used when grades exceed 2% or velocities exceed 6 feet per second.
- Stabilization should extend across the bottom of the swale and up both sides of the channel to a minimum height of three inches above the design water surface elevation based on a 2-year, 24-hour storm.

Installation:

- An interceptor swale should be installed across exposed slopes during construction and should intercept no more than 5 acres of runoff.
- All earth removed and not needed in construction should be disposed of in an approved spoils site so that it will not interfere with the functioning of the swale or contribute to siltation in other areas of the site.
- All trees, brush, stumps, obstructions and other material should be removed and disposed of so as not to interfere with the proper functioning of the swale.
- Swales should have a maximum depth of 1.5 feet with side slopes of 3:1 or flatter.
- Swales should have positive drainage for the entire length to an outlet.
- When the slope exceeds 2 percent, or velocities exceed 6 feet per second (regardless of slope), stabilization is required. Stabilization should be crushed stone placed in a layer of at least 3 inches thick or may be high velocity erosion control matting. Check dams are also recommended to reduce velocities in the swales possibly reducing the amount of stabilization necessary.

- Minimum compaction for the swale should be 90% standard proctor density.

Diversion Dikes

A temporary diversion dike is a barrier created by the placement of an earthen embankment to reroute the flow of runoff to an erosion control device or away from an open, easily erodible area. A diversion dike intercepts runoff from small upland areas and diverts it away from exposed slopes to a stabilized outlet, such as a rock berm, sandbag berm, or stone outlet structure. These controls can be used on the perimeter of the site to prevent runoff from entering the construction area. Dikes are generally used for the duration of construction to intercept and reroute runoff from disturbed areas to prevent excessive erosion until permanent drainage features are installed and/or slopes are stabilized.

Materials:

- Stone stabilization (required for velocities in excess of 6 fps) should consist of riprap placed in a layer at least 3 inches thick and should extend a minimum height of 3 inches above the design water surface up the existing slope and the upstream face of the dike.

- Geotextile fabric should be a non-woven polypropylene fabric designed specifically for use as a soil filtration media with an approximate weight of 6 oz./yd^2, a Mullen burst rating of 140 psi, and having an equivalent opening size (EOS) greater than a #50 sieve.

Installation:

- Diversion dikes should be installed prior to and maintained for the duration of construction and should intercept no more than 10 acres of runoff.

- Dikes should have a minimum top width of 2 feet and a minimum height of compacted fill of 18 inches measured form the top of the existing ground at the upslope toe to top of the dike and have side slopes of 3:1 or flatter.

- The soil for the dike should be placed in lifts of 8 inches or less and be compacted to 95 % standard proctor density.

- The channel, which is formed by the dike, must have positive drainage for its entire l length to an outlet.

- When the slope exceeds 2 percent, or velocities exceed 6 feet per second (regardless of slope), stabilization is required. In situations where velocities do not exceed 6 feet per second, vegetation may be used to control erosion.

Attachment 4
Description of Best Management Practices (BMPs)

Erosion Control Compost

Description: Erosion control compost (ECC) can be used as an aid to control erosion on critical sites during the establishment period of protective vegetation. The most common uses are on steep slopes, swales, diversion dikes, and on tidal or stream banks.

Materials:

New types of erosion control compost are continuously being developed. The Texas Department of Transportation (TxDOT) has established minimum performance standards which must be met for any products seeking to be approved for use within any of TxDOT's construction or maintenance activities. Material used within any TxDOT construction or maintenance activities must meet material specifications in accordance with current TxDOT specifications. TxDOT maintains a website at https://www.txdot.gov/inside-txdot/division/support/recycling/speclist.html that provides information on compost specification data.

ECC used for projects not related to TxDOT should also be of quality materials by meeting performance standards and compost specification data. To ensure the quality of compost used as an ECC, products should meet all applicable state and federal regulations, including but not limited to the United States Environmental Protection Agency (USEPA) Code of Federal Regulations (CFR), Title 40, Part 503 Standards for Class A biosolids and Texas Natural Resource Conservation Commission (now named TCEQ) Health and Safety Regulations as defined in the Texas Administration Code (TAC), Chapter 332, and all other relevant requirements for compost products outlined in TAC, Chapter 332.

Testing requirements required by the TCEQ are defined in TAC Chapter 332, including Sections §332.71 Sampling and Analysis Requirements for Final Products and §332.72 Final Product Grades. Compost specification data approved by TxDOT are appropriate to use for ensuring the use of quality compost materials or for guidance.

Testing standards are dependent upon the intended use for the compost and ensures product safety, and product performance regarding the product's specific use. The appropriate compost sampling and testing protocols included in the United States Composting Council (USCC) Test Methods for the Examination of Composting and Compost (TMECC) should be conducted on compost products used for ECC to ensure that the products used will not impact public health, safety, and the environment and to promote production and marketing of quality composts that meet analytical standards. TMECC is a laboratory manual that provides protocols for the composting industry and test methods for compost analysis. TMECC provides protocols to sample, monitor, and analyze materials during all stages of the composting process. Numerous parameters that might be of concern in compost can be tested by following protocols

or test methods listed in TMECC. TMECC information can be found at https://www.compostingcouncil.org/page/tmecc.
The USCC Seal of Testing Assurance (STA) program contains information regarding compost STA certification. STA program information can be found at https://www.compostingcouncil.org/page/SealofTestingAssuranceSTA.

Installation:

- Install in accordance with current TxDOT specification.
- Use on slopes 3:1 or flatter.
- Apply a 2-inch uniform layer unless otherwise shown on the plans or as directed.
- When rolling is specified, use a light corrugated drum roller.

Mulch and Compost Filter Socks

Description: Mulch and compost filter socks (erosion control logs) are used to intercept and detain sediment laden run-off from unprotected areas. When properly used, mulch and compost filter socks can be highly effective at controlling sediment from disturbed areas. They cause runoff to pond which allows heavier solids to settle. Mulch and compost filter socks are used during the period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. The sock should remain in place until the area is permanently stabilized. Mulch and compost filter socks may be installed in construction areas and temporarily moved during the day to allow construction activity provided it is replaced and properly anchored at the end of the day. Mulch and compost filter socks may be seeded to allow for quick vegetative growth and reduction in run-off velocity.

Materials:

New types of mulch and compost filter socks are continuously being developed. The Texas Department of Transportation (TxDOT) has established minimum performance standards which must be met for any products seeking to be approved for use within any of TxDOT's construction or maintenance activities. Mulch and compost filter socks used within any TxDOT construction or maintenance activities must meet material specifications in accordance with TxDOT specification 5049. TxDOT maintains a website at https://www.txdot.gov/inside-txdot/division/support/recycling/speclist.html that provides information on compost specification data.

Mulch and compost filter socks used for projects not related to TxDOT should also be of quality materials by meeting performance standards and compost specification

data. To ensure the quality of compost used for mulch and compost filter socks, products should meet all applicable state and federal regulations, including but not limited to the United States Environmental Protection Agency (USEPA) Code of Federal Regulations (CFR), Title 40, Part 503 Standards for Class A biosolids and Texas Natural Resource Conservation Commission Health and Safety Regulations as defined in the Texas Administration Code (TAC), Chapter 332, and all other relevant requirements for compost products outlined in TAC, Chapter 332. Testing requirements required by the TCEQ are defined in TAC Chapter 332, including Sections §332.71 Sampling and Analysis Requirements for Final Products and §332.72 Final Product Grades. Compost specification data approved by TxDOT are appropriate to use for ensuring the use of quality compost materials or for guidance.

Testing standards are dependent upon the intended use for the compost and ensures product safety, and product performance regarding the product's specific use. The appropriate compost sampling and testing protocols included in the United States Composting Council (USCC) Test Methods for the Examination of Composting and Compost (TMECC) should be conducted on compost products used for mulch and compost filter socks to ensure that the products used will not impact public health, safety, and the environment and to promote production and marketing of quality composts that meet analytical standards. TMECC is a laboratory manual that provides protocols for the composting industry and test methods for compost analysis. TMECC provides protocols to sample, monitor, and analyze materials during all stages of the composting process. Numerous parameters that might be of concern in compost can be tested by following protocols or test methods listed in TMECC. TMECC information can be found at https://www.compostingcouncil.org/page/tmecc. The USCC Seal of Testing Assurance (STA) program contains information regarding compost STA certification. STA program information can be found at https://www.compostingcouncil.org/page/SealofTestingAssuranceSTA.

Installation:

- Install in accordance with TxDOT Special Specification 5049.
- Install socks (erosion control logs) near the downstream perimeter of a disturbed area to intercept sediment from sheet flow.
- Secure socks in a method adequate to prevent displacement as a result of normal rain events such that flow is not allowed under the socks.
- Inspect and maintain the socks in good condition (including staking, anchoring, etc.). Maintain the integrity of the control, including keeping the socks free of accumulated silt, debris, etc., until the disturbed area has been adequately stabilized.

Attachment 4
Description of Best Management Practices (BMPs)

SEDIMENT CONTROL BMPS

Sandbag Berm

Description: The purpose of a sandbag berm is to detain sediment carried in runoff from disturbed areas. This objective is accomplished by intercepting runoff and causing it to pool behind the sandbag berm. Sediment carried in the runoff is deposited on the upstream side of the sandbag berm due to the reduced flow velocity. Excess runoff volumes are allowed to flow over the top of the sandbag berm. Sandbag berms are used only during construction activities in streambeds when the contributing drainage area is between 5 and 10 acres and the slope is less than 15%, i.e., utility construction in channels, temporary channel crossing for construction equipment, etc. Plastic facing should be installed on the upstream side and the berm should be anchored to the streambed by drilling into the rock and driving in T-posts or rebar (#5 or #6) spaced appropriately.

Materials:

- The sandbag material should be polypropylene, polyethylene, polyamide or cotton burlap woven fabric, minimum unit weight 4 oz/yd 2, mullen burst strength exceeding 300 psi and ultraviolet stability exceeding 70 percent.
- The bag length should be 24 to 30 inches, width should be 16 to 18 inches and thickness should be 6 to 8 inches.
- Sandbags should be filled with coarse grade sand and free from deleterious material. All sand should pass through a No. 10 sieve. The filled bag should have an approximate weight of 40 pounds.
- Outlet pipe should be schedule 40 or stronger polyvinyl chloride (PVC) having a nominal internal diameter of 4 inches.

Installation:

- The berm should be a minimum height of 18 inches, measured from the top of the existing ground at the upslope toe to the top of the berm.
- The berm should be sized as shown in the plans but should have a minimum width of 48 inches measured at the bottom of the berm and 16 inches measured at the top of the berm.
- Runoff water should flow over the tops of the sandbags or through 4-inch diameter PVC pipes embedded below the top layer of bags.

- When a sandbag is filled with material, the open end of the sandbag should be stapled or tied with nylon or poly cord.
- Sandbags should be stacked in at least three rows abutting each other, and in staggered arrangement.
- The base of the berm should have at least 3 sandbags. These can be reduced to 2 and 1 bag in the second and third rows respectively.
- For each additional 6 inches of height, an additional sandbag must be added to each row width.
- A bypass pump-around system, or similar alternative, should be used on conjunction with the berm for effective dewatering of the work area.

Silt Fence

Description: A silt fence is a barrier consisting of geotextile fabric supported by metal posts to prevent soil and sediment loss from a site. When properly used, silt fences can be highly effective at controlling sediment from disturbed areas. They cause runoff to pond which allows heavier solids to settle. If not properly installed, silt fences are not likely to be effective. The purpose of a silt fence is to intercept and detain water-borne sediment from unprotected areas of a limited extent. Silt fence is used during the period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. This fence should remain in place until the disturbed area is permanently stabilized. Silt fence should not be used where there is a concentration of water in a channel or drainage way. If concentrated flow occurs after installation, corrective action must be taken such as placing a rock berm in the areas of concentrated flow. Silt fencing within the site may be temporarily moved during the day to allow construction activity provided it is replaced and properly anchored to the ground at the end of the day. Silt fences on the perimeter of the site or around drainage ways should not be moved at any time.

Materials:

- Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in 2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
- Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Y-bar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft 2, and Brindell hardness exceeding 140.

- Woven wire backing to support the fabric should be galvanized 2-inch x 4-inch welded wire, 12 gauge minimum.

Installation:

- Steel posts, which support the silt fence, should be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of 1 foot deep and spaced not more than 8 feet on center. Where water concentrates, the maximum spacing should be 6 feet.

- Lay out fencing down-slope of disturbed area, following the contour as closely as possible. The fence should be sited so that the maximum drainage area is 3 acre/100 feet of fence.

- The toe of the silt fence should be trenched in with a spade or mechanical trencher, so that the down-slope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3 inches of pea gravel on uphill side to prevent flow from seeping under fence.

- The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.

- Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post. There should be a 3-foot overlap, securely fastened where ends of fabric meet.

Triangular Filter Dike

Description: The purpose of a triangular sediment filter dike is to intercept and detain water-borne sediment from unprotected areas of limited extent. The triangular sediment filter dike is used where there is no concentration of water in a channel or other drainage way above the barrier and the contributing drainage area is less than one acre. If the uphill slope above the dike exceeds 10%, the length of the slope above the dike should be less than 50 feet. If concentrated flow occurs after installation, corrective action should be taken such as placing rock berm in the areas of concentrated flow. This measure is effective on paved areas where installation of silt fence is not possible or where vehicle access must be maintained. The advantage of these controls is the ease with which they can be moved to allow vehicle traffic and then reinstalled to maintain sediment.

Materials:

- Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in 2 , ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.

- The dike structure should be 6 gauge 6-ing x 6-inch wire mesh folded into triangular form being eighteen (18) inches on each side.

Installation:

- The frame of the triangular sediment filter dike should be constructed of 6-inch x 6-inch, 6-gauge welded wire mesh, 18 inches per side, and wrapped with geotextile fabric the same composition as that used for silt fences.

- Filter material should lap over ends six (6) inches to cover dike to dike junction; each junction should be secured by shoat rings.

- Position dike parallel to the contours, with the end of each section closely abutting the adjacent sections.

- There are several options for fastening the filter dike to the ground. The fabric skirt may be toed-in with 6 inches of compacted material, or 12 inches of the fabric skirt should extend uphill and be secured with a minimum of 3 inches of open graded rock, or with staples or nails. If these two options are not feasible the dike structure may be trenched in 4 inches.

- Triangular sediment filter dikes should be installed across exposed slopes during construction with ends of the dike tied into existing grades to prevent failure and should intercept no more than one acre of runoff.

- When moved to allow vehicular access, the dikes should be reinstalled as soon as possible, but always at the end of the workday.

Rock Berm

Description: The purpose of a rock berm is to serve as a check dam in areas of concentrated flow, to intercept sediment-laden runoff, detain the sediment and release the water in sheet flow. The rock berm should be used when the contributing drainage area is less than 5 acres. Rock berms are used in areas where the volume of runoff is too great for a silt fence to contain. They are less effective for sediment removal than silt fences, particularly for fine particles, but are able to withstand higher flows than a

silt fence. As such, rock berms are often used in areas of channel flows (ditches, gullies, etc.). Rock berms are most effective at reducing bed load in channels and should not be substituted for other erosion and sediment control measures further up the watershed.

Materials:

- The berm structure should be secured with a woven wire sheathing having opening of one inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.

- Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

Installation:

- Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20-gauge woven wire mesh with 1 inch openings.

- Berm should have a top width of 2 feet minimum with side slopes being 2:1 (H:V) or flatter.

- Place the rock along the sheathing to a height not less than 18 inches.

- Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon.

- Berm should be built along the contour at zero percent grade or as near as possible.

- The ends of the berm should be tied into existing upslope grade and the berm should be buried in a trench approximately 3 to 4 inches deep to prevent failure of the control.

Hay Bale Dike

Description: The purpose of a hay or straw bale dike is to intercept and detain small amounts of sediment-laden runoff from relatively small unprotected areas. Straw bales are to be used when it is not feasible to install other, more effective measures or when the construction phase is expected to last less than 3 months. Straw bales should not be used on areas where rock or other hard surfaces prevent the full and uniform anchoring of the barrier.

Attachment 4
Description of Best Management Practices (BMPs)

Materials:

Straw: The best quality straw mulch comes from wheat, oats or barley and should be free of weed and grass seed which may not be desired vegetation for the area to be protected. Straw mulch is light and therefore must be properly anchored to the ground.

Hay: This is very similar to straw with the exception that it is made of grasses and weeds and not grain stems. This form of mulch is very inexpensive and is widely available but does introduce weed and grass seed to the area. Like straw, hay is light and must be anchored.

- Straw bales should weigh a minimum of 50 pounds and should be at least 30 inches long.
- Bales should be composed entirely of vegetable matter and be free of seeds.
- Binding should be either wire or nylon string, jute or cotton binding is unacceptable. Bales should be used for not more than two months before being replaced.

Installation:

- Bales should be embedded a minimum of 4 inches and securely anchored using 2-inch x 2-inch wood stakes or 3/8-inch diameter rebar driven through the bales into the ground a minimum of 6 inches.
- Bales are to be placed directly adjacent to one another leaving no gap between them.
- All bales should be placed on the contour.
- The first stake in each bale should be angled toward the previously laid bale to force the bales together.

Brush Berms

Organic litter and spoil material from site clearing operations is usually burned or hauled away to be dumped elsewhere. Much of this material can be used effectively on the construction site itself. The key to constructing an efficient brush berm is in the method used to obtain and place the brush. It will not be acceptable to simply take a bulldozer and push whole trees into a pile. This method does not assure continuous ground contact with the berm and will allow uncontrolled flows under the berm.

Brush berms may be used where there is little or no concentration of water in a channel or other drainage way above the berm. The size of the drainage area should be no greater than one-fourth of an acre per 100 feet of barrier length; the maximum slope length behind the barrier should not exceed 100 feet; and the maximum slope gradient behind the barrier should be less than 50 percent (2:1).

Materials:

- The brush should consist of woody brush and branches, preferably less than 2 inches in diameter.
- The filter fabric should conform to the specifications for filter fence fabric.
- The rope should be 1/4-inch polypropylene or nylon rope.
- The anchors should be 3/8-inch diameter rebar stakes that are 18-inches long.

Installation:

- Lay out the brush berm following the contour as closely as possible.
- The juniper limbs should be cut and hand placed with the vegetated part of the limb in close contact with the ground. Each subsequent branch should overlap the previous branch providing a shingle effect.
- The brush berm should be constructed in lifts with each layer extending the entire length of the berm before the next layer is started.
- A trench should be excavated 6-inches wide and 4-inches deep along the length of the barrier and immediately uphill from the barrier.
- The filter fabric should be cut into lengths sufficient to lay across the barrier from its up-slope base to just beyond its peak. The lengths of filter fabric should be draped across the width of the barrier with the uphill edge placed in the trench and the edges of adjacent pieces overlapping each other. Where joints are necessary, the fabric should be spliced together with a minimum 6-inch overlap and securely sealed.
- The trench should be backfilled, and the soil compacted over the filter fabric.
- Set stakes into the ground along the downhill edge of the brush barrier and anchor the fabric by tying rope from the fabric to the stakes. Drive the rope anchors into the ground at approximately a 45-degree angle to the ground on 6-

foot centers.

- Fasten the rope to the anchors and tighten berm securely to the ground with a minimum tension of 50 pounds.

- The height of the brush berm should be a minimum of 24 inches after the securing ropes have been tightened.

Stone Outlet Sediment Traps

A stone outlet sediment trap is an impoundment created by the placement of an earthen and stone embankment to prevent soil and sediment loss from a site. The purpose of a sediment trap is to intercept sediment-laden runoff and trap the sediment in order to protect drainage ways, properties and rights of way below the sediment trap from sedimentation. A sediment trap is usually installed at points of discharge from disturbed areas. The drainage area for a sediment trap is recommended to be less than 5 acres.

Larger areas should be treated using a sediment basin. A sediment trap differs from a sediment basin mainly in the type of discharge structure. The trap should be located to obtain the maximum storage benefit from the terrain, for ease of clean out and disposal of the trapped sediment and to minimize interference with construction activities. The volume of the trap should be at least 3600 cubic feet per acre of drainage area.

Materials:

- All aggregate should be at least 3 inches in diameter and should not exceed a volume of 0.5 cubic foot.

- The geotextile fabric specification should be woven polypropylene, polyethylene or polyamide geotextile, minimum unit weight of 4.5 oz/yd 2, mullen burst strength at least 250 lb/in 2, ultraviolet stability exceeding 70%, and equivalent opening size exceeding 40.

Installation:

- Earth Embankment: Place fill material in layers not more than 8 inches in loose depth. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content of the material. Compact each layer to 95 percent standard proctor density. Do not place material on surfaces that are muddy or frozen. Side slopes for the embankment are to be 3:1. The minimum width of the embankment should be 3 feet.