

**HETTINGER COUNTY, NORTH DAKOTA
FLOODPLAIN DEVELOPMENT PERMIT APPLICATION
NON-BUILDING SITUATION**

(Attach additional information as necessary)

1. GENERAL INFORMATION:

Community: Rural Hettinger County, North Dakota

PERMIT # _____ DATE: August 18, 2016

Applicant: John DiDonato, NextEra Energy
Address: 700 Universe Boulevard, Juno Beach, Florida 33408
Telephone # 561-304-5244

Contractor: Steve Yarbrough
Address: 350 Indiana Street, Suite 500, Golden, CO, 80401
Telephone # 303-980-3544

Estimated Cost of project: \$ 250,000,000

Description and location of proposed development:

Brady Wind II, LLC (Brady Wind II), is a wholly-owned, indirect subsidiary of NextEra Energy Resources, LLC (NEER). NEER is proposing to construct the Brady II Wind Energy Center (the Project). The proposed Project will have a nameplate capacity of approximately 150 megawatts (MW), consisting of up to 72 wind turbines using both General Electric (GE) 2.1 MW and GE 1.79 MW Xle wind turbine generators. Additional facilities proposed as part of the Project include service roads, electrical collection systems and cabling, and meteorological towers (four temporary and one permanent) (**Attachment 2**). All wind turbines are proposed to be located in Hettinger County. Facilities proposed to be located in Stark County are limited to underground electrical collection systems and cabling.

The proposed Project will be located adjacent to the southern boundary of the proposed Brady Wind Energy Center (a.k.a., Brady Wind I). The proposed Project will utilize the temporary laydown and turbine storage areas identified for the Brady Wind I during construction, and the Operations & Maintenance (O&M) building proposed for the Brady Wind I will be shared with the proposed Project. Substation equipment to support the proposed Project will be located within the same 8-acre parcel where the Brady Wind I substation is proposed to be located. The overhead transmission line proposed to serve the Brady Wind Energy Center will also serve the proposed Project. Impacts to floodplains associated with the laydown area, O&M facility, overhead transmission line and the substation are described in separate floodplain applications made to Stark County in May 2016. ND. The proposed Project would not cause additional impacts associated with the laydown area, substation facilities, O&M building, and transmission line other than those already described in those applications. Impacts associated with these facilities are therefore not discussed in this Application.

This permit application is for additional temporary impacts to floodplains that were identified after the original permit for Brady Wind II was approved on June 15, 2016. These additional temporary impacts are the result of an additional crane path needed to transport the erection cranes from one turbine site to another in order to support turbine erection. Table 1 below lists the additional infrastructure type, temporary impact acreage estimate, and the location on the included Map Sheet (**Attachment 2**).

Table 1: Temporary Floodplain Impacts, Brady Wind II, Hettinger County, ND

Infrastructure Type	Temporary Impact Acreage	Latitude	Longitude	Map Sheet #	FIRM Map Panel #
Crane path	1.59	46.607567	-102.689962	1	275

2. FLOODPLAIN DETERMINATION: (fill-in the appropriate information)

Map information:

FIRM Date: Attachment 3 FIRM Map

FIRM Zone: All floodplains in Project are Zone A

Project is located in:

100-year floodplain (Flood Fringe): Yes

*Regulatory Floodway: Not applicable

(*a hydraulic analysis is needed by a registered professional engineer unless determined otherwise by the community, please explain.)

BFE at Development Site: _____ (MSL)

Development will be elevated to: _____ (MSL)

3. DEVELOPMENT ACTIVITIES: (check all that apply)

- Fill placement (fill brought in from outside the floodplain)
- Excavation (where subgrade fill is removed from the floodplain)
- Landscaping (cut and fill, fill borrow and placement)
- Construction or maintenance of a dike/levee/floodwall
- Removal of fill, embankment, or dikes
- Watercourse alterations (river, stream, lake - channel modifications, rip-rap)
- Road, street or bridge construction (new, repair or replacement, realignment)
- Drainage improvements (including culvert work)
- Mining (removal of gravel, rock, fill or other natural materials)
- Installation of utilities (water sewer, pipeline, gas, electric, communications)
- Tower construction (communications tower, antennae etc.)
- Pipeline construction (temporary construction activity)
- Well drilling (water, oil, natural gas etc.)
- Subdivision (new or expansion of existing subdivision)
- Other (please specify) _____

4. ADDITIONAL INFORMATION, PERMITS OR NOTIFICATION:
(attach additional information)

- Comments or further explanation of work:
- Copies of project description, plans, blueprints, etc.
- Wetlands - will the activity impact identified wetlands? Notify U.S. Army Corps of Engineers?
- Will the development aggravate flooding elsewhere? Notify Water Resource District and/or Neighboring political entity?

5. ELEVATION INFORMATION:

Attach information about the completed project elevations(s) with registered professional engineer or registered land surveyor certifications if part of the project.

The project is anticipated to have minimal impacts to the associated floodplains.

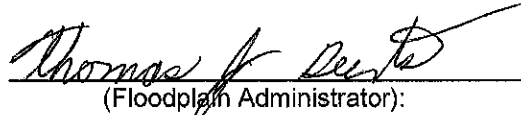
6. ACTION / APPROVAL:

The proposed development is in conformance with applicable community floodplain standards.

Comments or Conditions of the permit: _____

PERMIT IS APPROVED (Conditioned on receiving as-built information/certification)

Signature



(Floodplain Administrator):

Date:

8-22-16

PLEASE SUBMIT COMPLETED APPLICATION TO:
HETTINGER COUNTY DEPARTMENT OF EMERGENCY SERVICES
JERI SCHIMDT
336 PACIFIC AVENUE
MOTT, ND 58646
ierschmidt@nd.gov

**Attachment 1:
Supplement for Section 4. Additional
Information, Permits, or Notification**

4. Additional Information for the Floodplain Permit

- a. Comments or further explanation of work:

Crane Path

A crane path between Turbine 56 and Turbine 59 (Sheet map in Attachment 2) will generally be built at grade, but may require minor grading or placement of temporary fill within the floodplain. Once construction of the crane path is completed, the area will be returned to the original contour and grade. No change in base elevation is anticipated from the installation of the crane path.

- b. Copies of project description, plans, blueprints, etc.

The project description is provided in Section 1 of the permit application. Attached are figures and a FIRM map of the Project area that has the temporary floodplain impacts that were not submitted with the original temporary floodplain impact application.

- c. Wetlands – Will the activity impact identified wetlands? Notify the U.S. Army Corps of Engineers?

The Project is anticipated to have very minor acreages of temporary impacts to floodplains from the crane path mentioned above. The Project will not exceed the threshold of 0.10 acre of permanent loss of wetlands or other waters of the U.S. that would require the completion of a preconstruction notification (PCN) to the USACE. There have been several informal discussions with the USACE/Bismarck Regulatory Office regarding permitting requirements for the Project. No Clean Water Act Section 404 permitting is anticipated for the Project at this time.

- d. Will the development aggravate flooding elsewhere? Notify Water Resource District and/or Neighboring political entity?










The Project is anticipated to have relatively minor impacts on flooding. Cumulatively, the project will have 7.17 acres of temporary impacts to floodplains, which includes 5.58 acres of temporary impacts that were previously permitted and an additional 1.59 acres of temporary impacts for the use of the crane path. All of these temporary impacts will be returned to the original contour and grade following installation. Notification of neighboring water resource districts or political entities has not been requested.

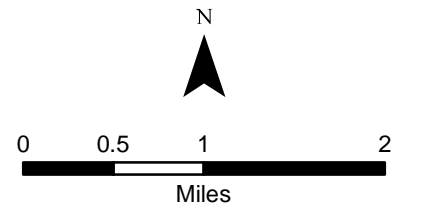
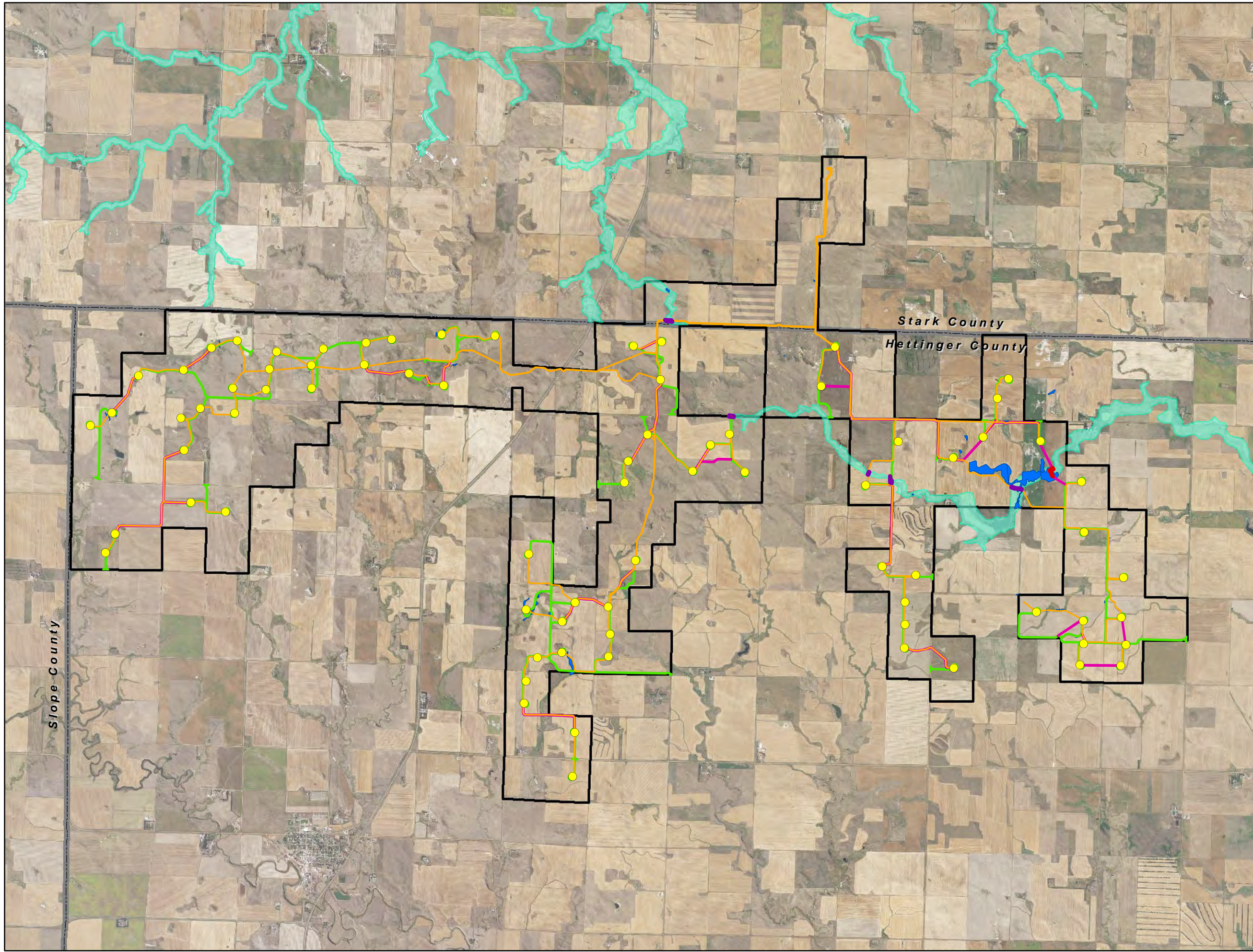
Attachment 2: Map Sheets

Temporary Project Impacts in 100-year Floodplain

Brady II Wind Energy Center
Stark and Hettinger Counties, North Dakota

Legend

-  Project Area
-  Proposed Turbine
-  Proposed Service Road
-  Proposed Collection Lines
-  Proposed Crane Path
-  100-year Floodplain (Zone A)
-  Delineated Wetland
-  Temporary Floodplain Impacts, Permit Requested
-  Floodplain Impacts Previously Permitted

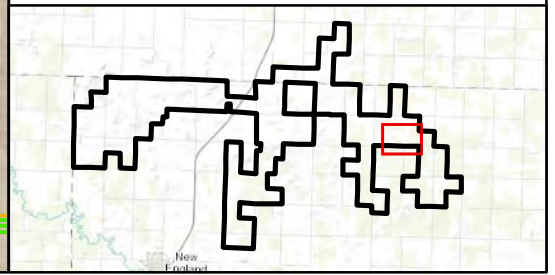
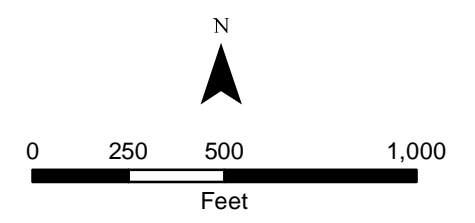
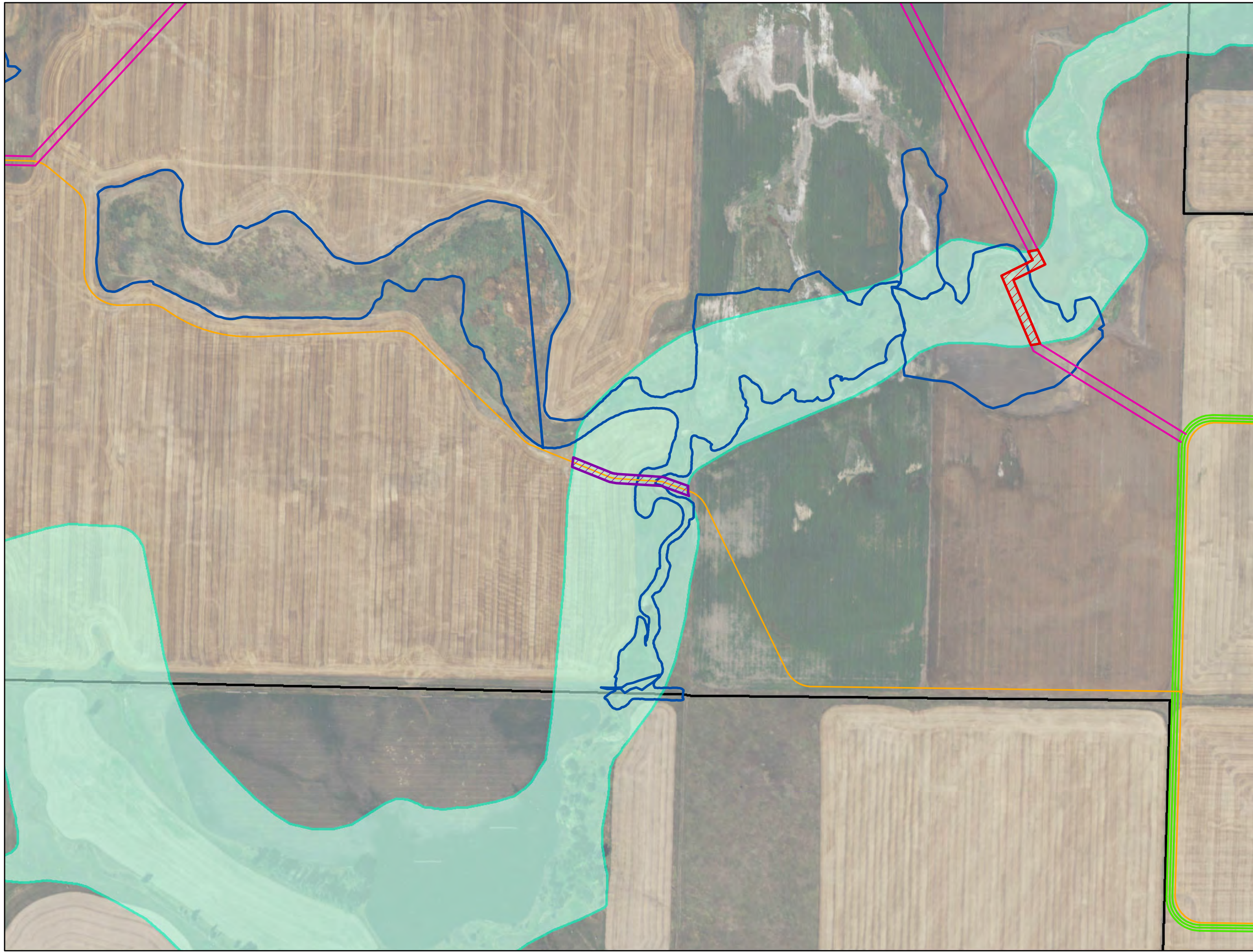


Temporary Project Impacts in 100-year Floodplain Sheet 1 of 1

Brady II Wind Energy Center
Stark and Hettinger Counties, North Dakota

Legend

-  Project Area
-  Proposed Turbine
-  Proposed Service Road
-  Collection Line
-  Proposed Crane Path
-  100-year Floodplain (Zone A)
-  Delineated Wetland
-  Temporary Floodplain Impacts, Permit Requested
-  Floodplain Impacts Previously Permitted



Attachment 3: FIRM Maps

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **flowways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **flowways** were computed at cross sections and interpolated between cross sections. The flowways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The horizontal datum was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NINGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from NAIP Orthophotography produced with a one meter ground resolution from photography dated 2009.

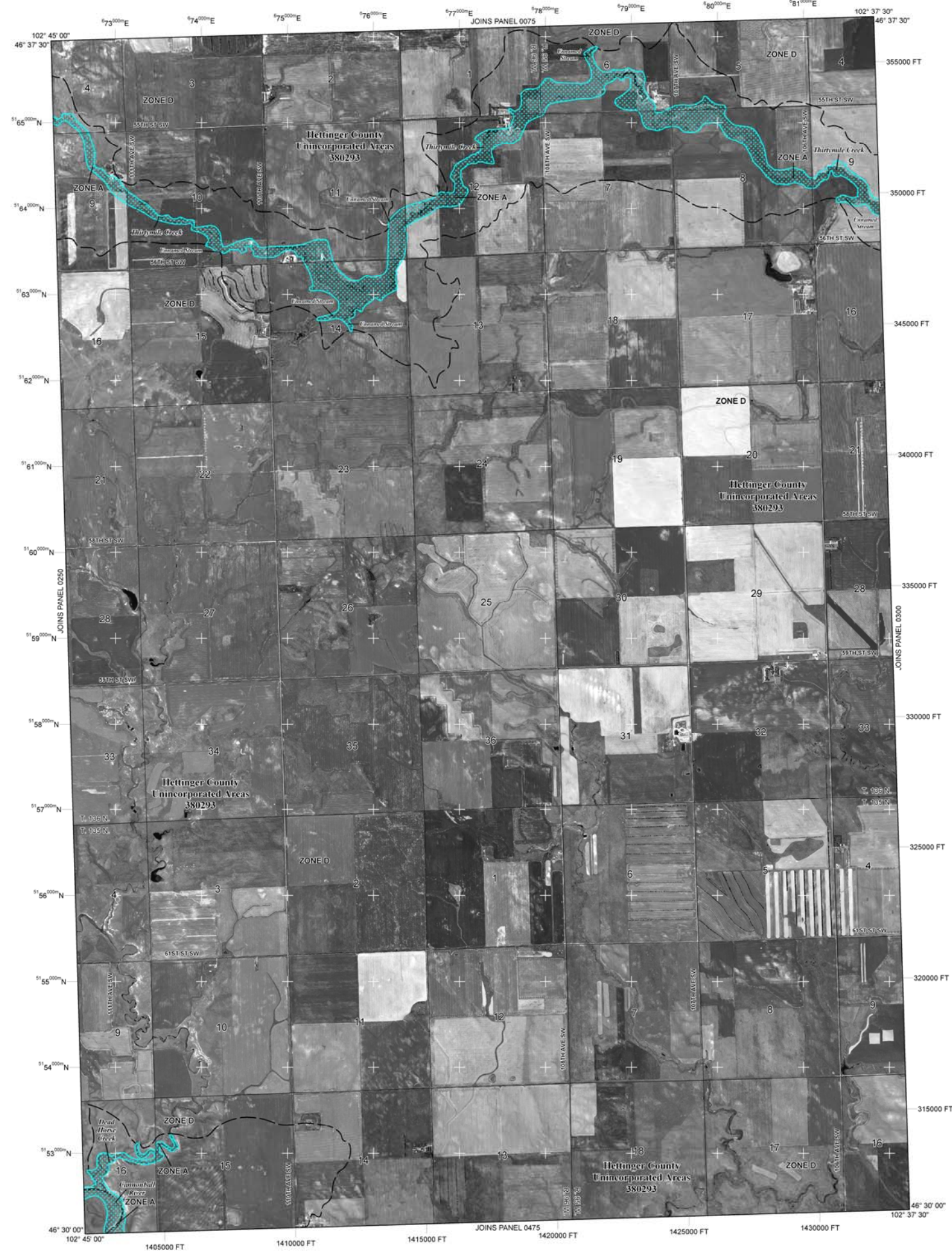
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and flowways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/fmix>.



LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently identified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS
ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS
ZONE X Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
- OTHERWISE PROTECTED AREAS (OPAs)
CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
1% Annual Chance Floodplain Boundary
0.2% Annual Chance Floodplain Boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
Base Flood Elevation line and value; elevation in feet*
Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

Cross section line
 Transect line

45° 02' 06", 93° 02' 12"
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

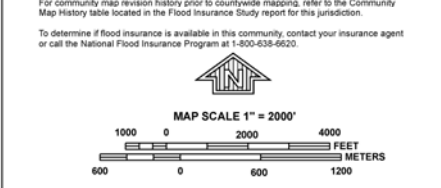
3100000 FT
5000-foot ticks: North Dakota State Plane South Zone (FIPS Zone 3302), Lambert Conformal Conic projection

Bench mark (see explanation in Notes to Users section of this FIRM panel)

Map 1:5
River Mile
MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
March 2, 2012

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL



NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0275D

FIRM
FLOOD INSURANCE RATE MAP
HETTINGER COUNTY,
NORTH DAKOTA
AND INCORPORATED AREAS

PANEL 275 OF 950
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HETTINGER COUNTY, Unincorporated Areas	380293	0275	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
38041C0275D
EFFECTIVE DATE
MARCH 2, 2012
Federal Emergency Management Agency