# APPENDIX G

# EROSION CONTROL PLAN MAPS

**Laydown Area SWPPP Notes:**

1. Install silt fence along the perimeter of the laydown yard, except for those locations where VTCs are present.
2. VTCs must be provided at access points and may consist of rock pads, mud mats, rumble strips, manual vehicle cleaning and road sweeping, or equivalent to prevent sediment tracking off site.
3. The location of soil stockpiles must be marked on this plan sheet, when determined. Perimeter control (e.g., bioroll) must be installed downslope of soil stockpiles.
4. Soil stockpiles must be stabilized when the stockpile is inactive for a period of at least 21 days. Stabilization must be completed as soon as practicable, but no later than 14 days after stockpile use is inactive. Stabilization may consist of providing plastic sheeting or effective equivalent over the stockpile, or stabilizing with temporary seed and mulch. Stockpile covers must be staked, stapled, or weighted down at the base to ensure effectiveness. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) are exempt from this requirement.
5. Inspect each laydown area at least once every 7 calendar days and within 24 hours of a 0.5-inch or more rain event, or a snowmelt event that causes surface erosion. Once the site has been temporarily stabilized and construction has ceased for the winter, inspections must be conducted at least once per month.
6. Silt fence and other perimeter controls must be repaired, replaced or supplemented with effective controls when they become nonfunctional, flattened, or the sediment reaches 1/2 the height of the device. These repairs must be made within 24 hours of discovery or as soon as field conditions allow access.
7. For areas of 10 or more disturbed acres at one time, with a common drainage location, a temporary sediment basin is required. The basin must be designed and constructed to provide storage for runoff from the disturbed drainage area based on a 2-inch precipitation event in a 24-hour period. Temporary sediment basins are not required if less than 10 acres are disturbed at one time with a common drainage location. If a temporary sediment basin is required but not possible to construct, the SWPPP must be updated with the rationale for using alternative controls.

Date: 10/23/2015

# Laydown Yard #3 - Webster, SD
## Erosion Control Plan
Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 20, 2015*

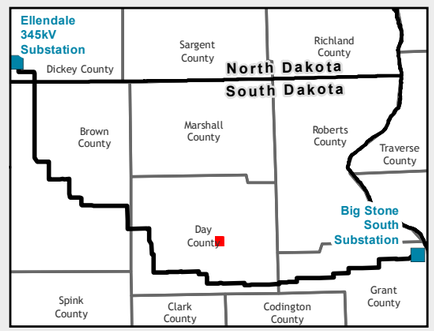
- Laydown Area
- Vehicle Tracking Control*
- Perimeter Control BMP **
- Perimeter Control for Impaired Waters
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Provide VTCs at vehicle entrances and exits. VTCs may consist of rock pads, mud mats, rumble strips, manual vehicle cleaning and road sweeping, or equivalent to prevent sediment tracking off site.
** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information on perimeter control.

Refer to Laydown Area SWPPP Notes for further instruction.

**Laydown Yard #3**
**Webster, SD**

1:4,000
0 250 500 Feet




BSSE Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\Laydown_Yard_Erosion_Control_Plan.mxd

Date: 10/23/2015

# Laydown Yard #4 - Milbank, SD
## Erosion Control Plan
Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 20, 2015*

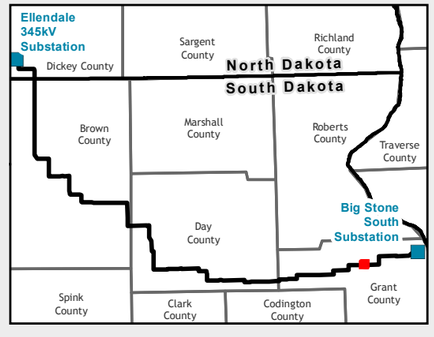
- Laydown Area
- Vehicle Tracking Control*
- Perimeter Control BMP **
- Perimeter Control for Impaired Waters
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Provide VTCs at vehicle entrances and exits. VTCs may consist of rock pads, mud mats, rumble strips, manual vehicle cleaning and road sweeping, or equivalent to prevent sediment tracking off site.
** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information on perimeter control.

Refer to Laydown Area SWPPP Notes for further instruction.

**Laydown Yard #4**
**Milbank, SD**

1:4,000
0 250 500 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\Laydown_Yard_Erosion_Control_Plan.mxd

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

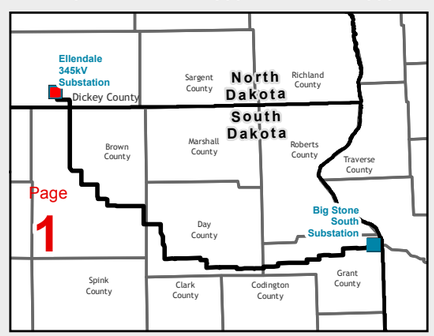
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 1

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015

Page to Left:

T129N R 63W

Ellendale Twp.

004-P

005-P

006-P

008-P

Sec. 9

Sec. 10

Sec. 16

Sec. 15

87TH AVE SE

98TH ST SE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

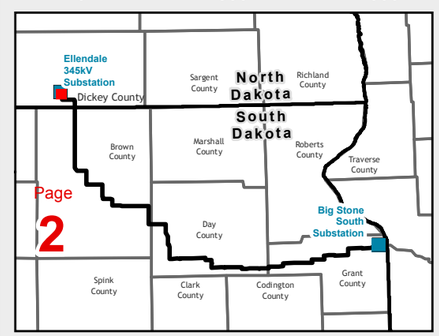
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 2

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 2

Ellendale Twp. T129N R 63W

009-P

010-P

011-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

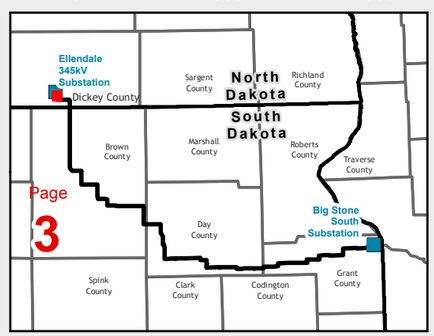
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 3

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Page to Right: 4

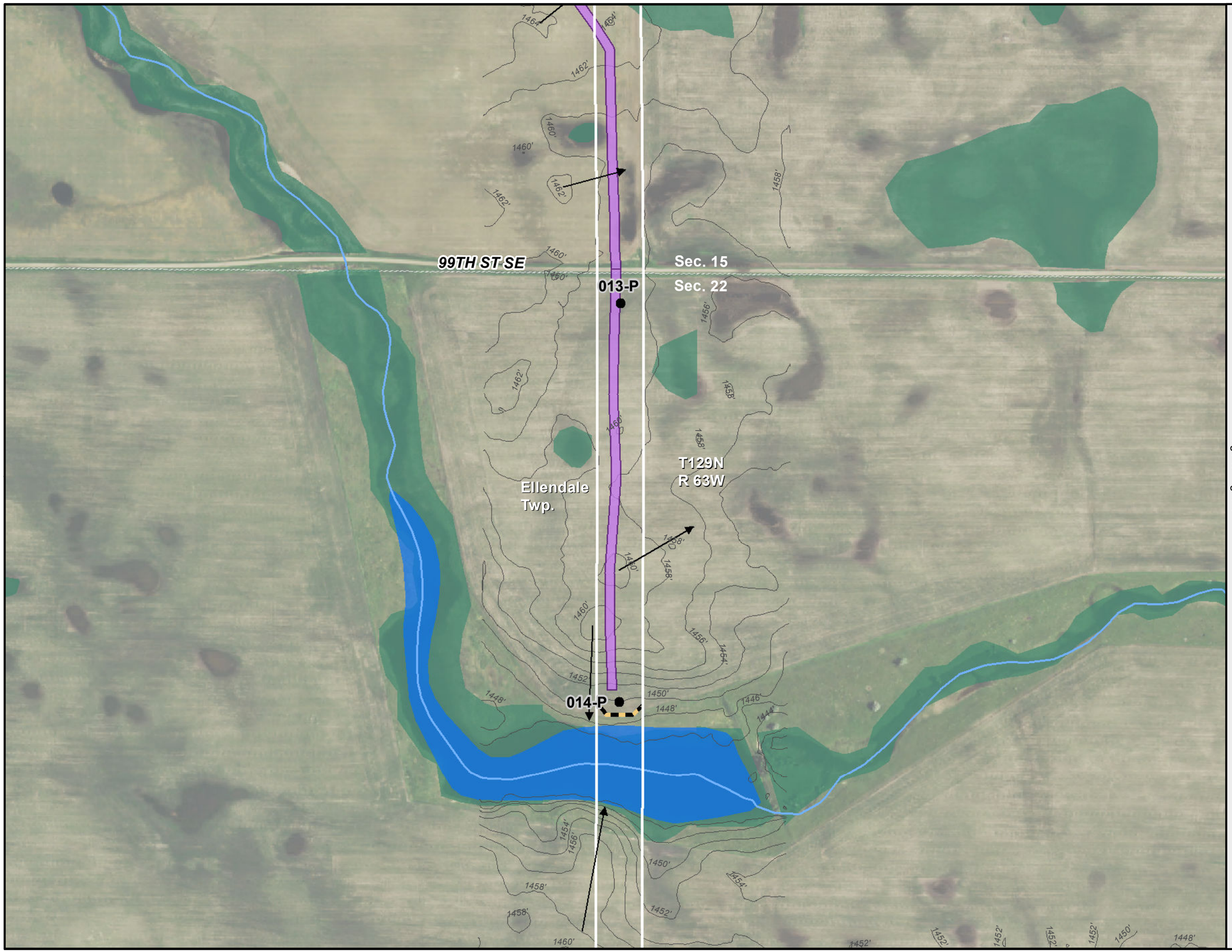
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 3




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

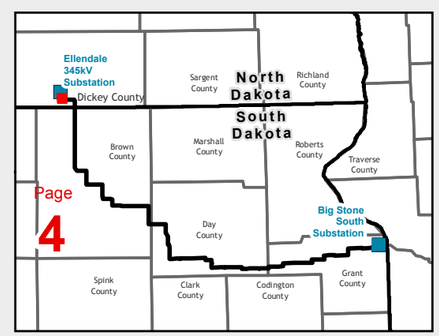
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 4

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 5

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

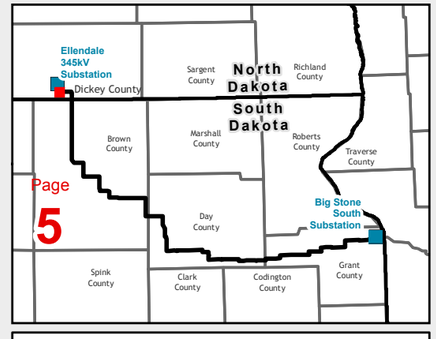
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 5

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Right: 6

016-P
015-P
017-P
Ellendale Twp.
T129N
R 63W
Sewer Branch
88TH AVE SE
Sec. 22
Sec. 23
Sec. 22
Sec. 27
100TH ST SE
100TH ST SE

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

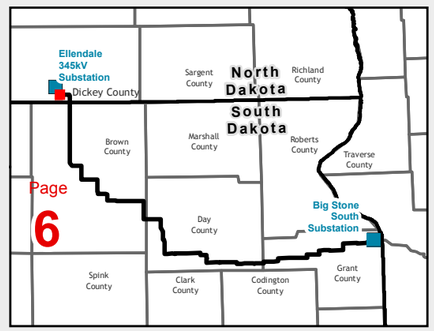
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 6

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015



T129N
R 63W

021-P

022-P

023-P

Ellendale
Twp.

Sec. 23

Sec. 24

281

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

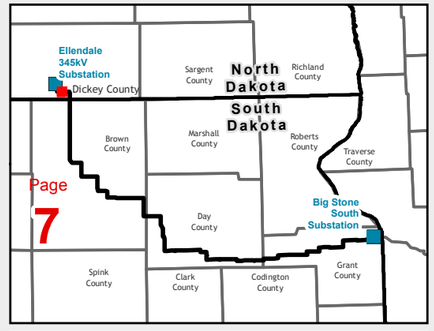
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 7

1:3,600

0 300 600 Feet



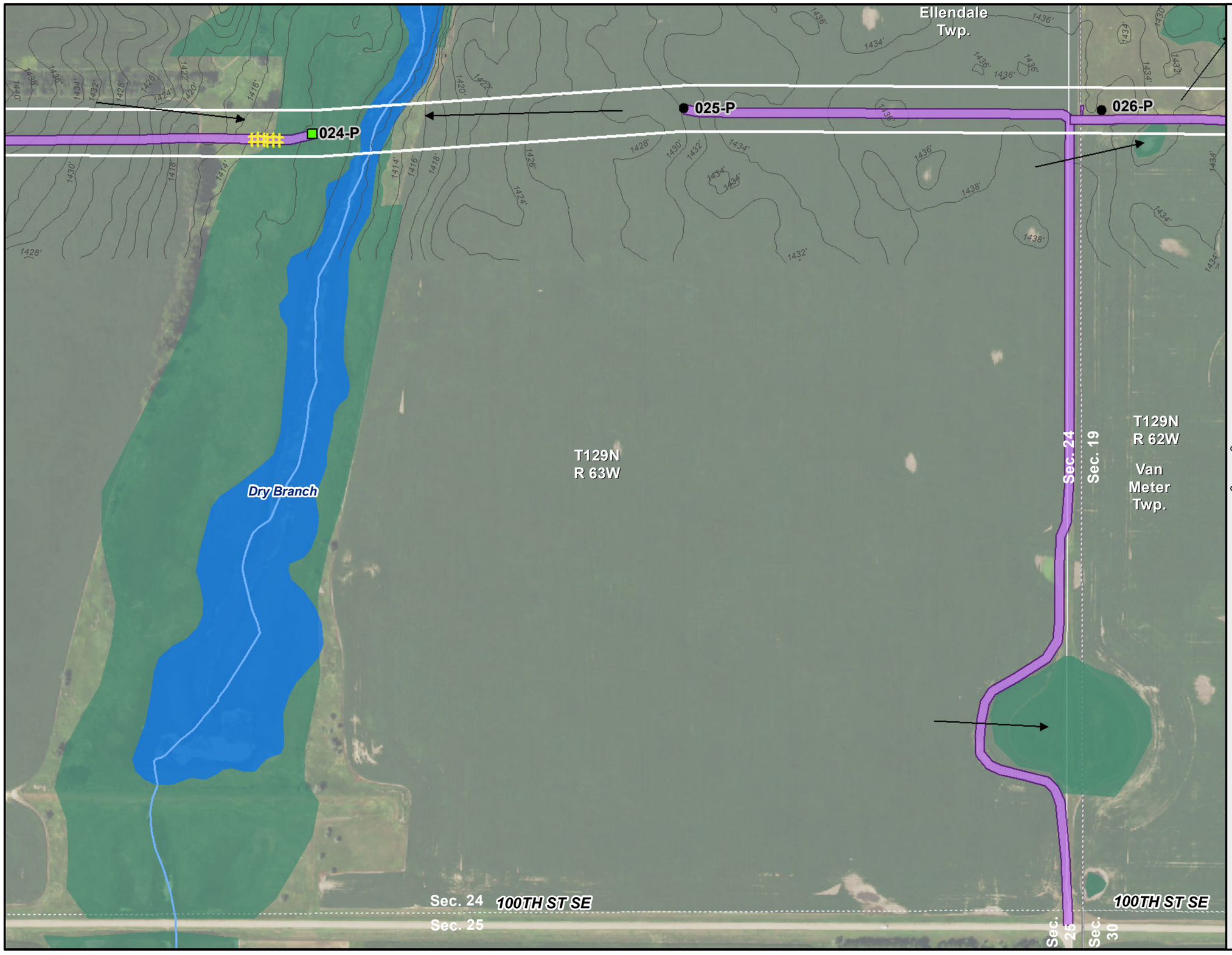

BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

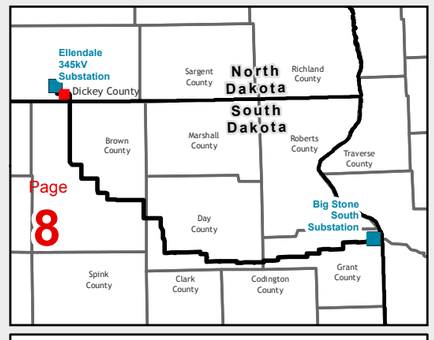
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 8

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

026-P

027-P

028-P

T129N
R 63W

Ellendale
Twp.

Sec. 24

Sec. 19

Van Meter
Twp.

T129N
R 62W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

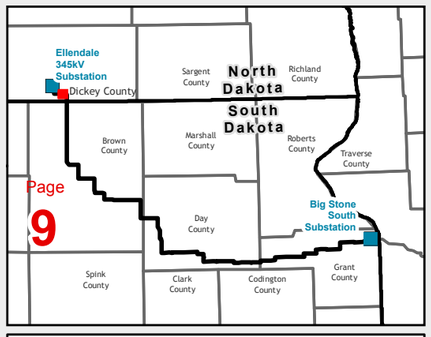
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 9

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

91ST AVE SE

Sec. 19

Sec. 20

029-P

030-P

031-P

T129N
R 62W

Van
Meter
Twp.

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale
## 345 kV Transmission Line Project
## North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

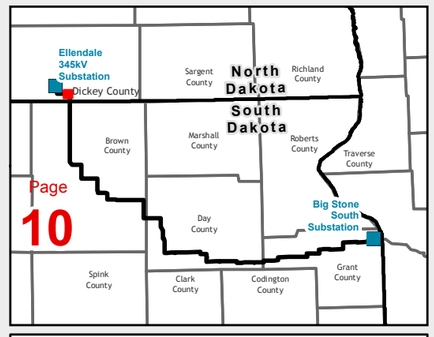
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 10

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

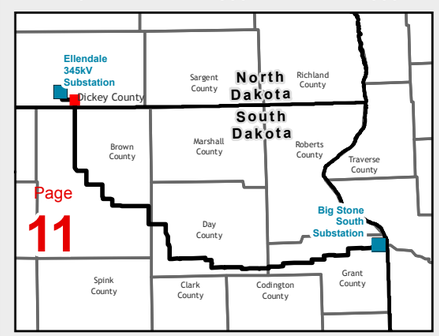
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 11

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



T129N
R 62W
Van Meter Twp.

032-P
033-P
034-P

Van Meter Twp. T129N R 62W

100TH ST SE

Sec. 20

Sec. 29

035-P

036-P

037-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

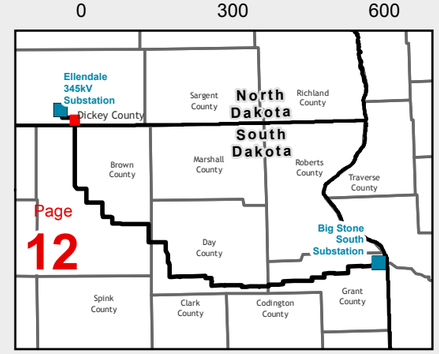
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 12

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Van Meter Twp.

101ST ST SE

Sec. 29

Sec. 32

038-P

039-P

040-P

T129N
R 62W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

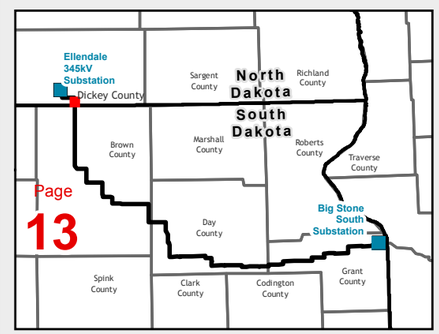
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 13

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

T129N
R 62W

T128N
R63W

102ND ST SE

Savo
Twp.

041-P

042-P

043-P

Van
Meter
Twp.

Sec.
6

Sec.
1

Osceola
Twp.

100 ST

T128N
R64W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

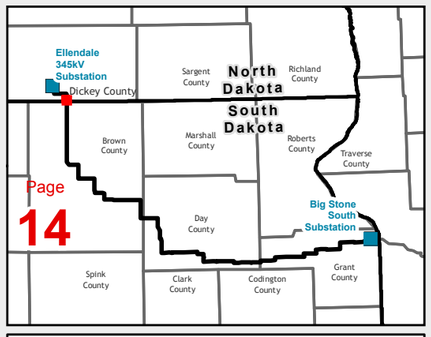
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Dickey County
## Page 14

1:3,600

0 300 600 Feet

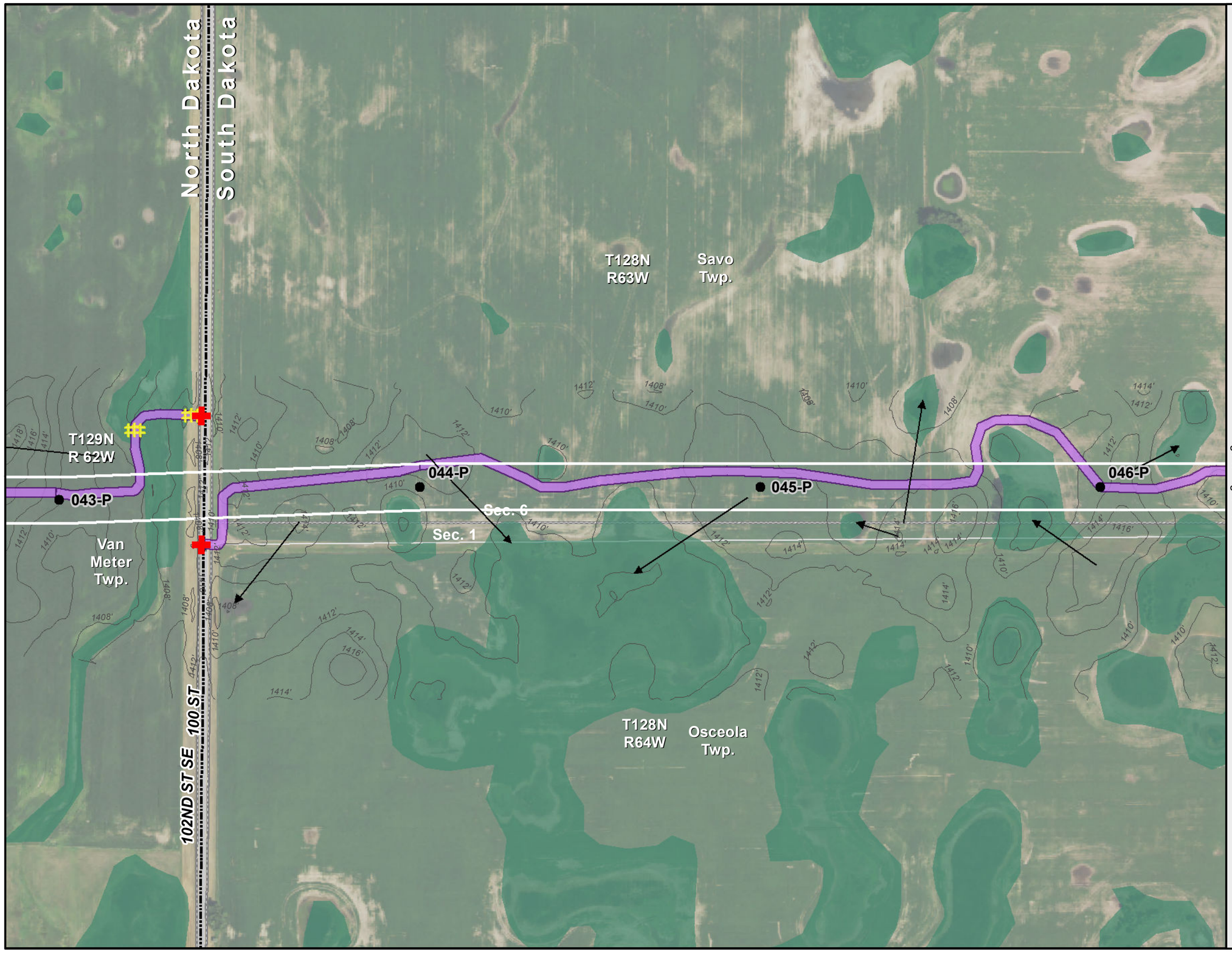



BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left:




**SWPPP - Erosion Control Plan**
Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

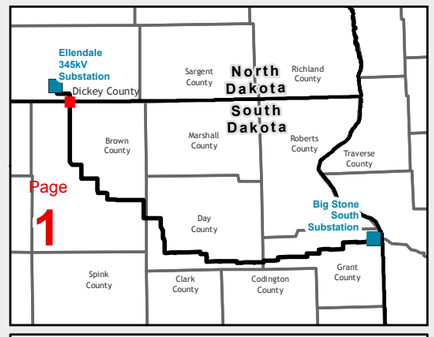
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

**Brown County**
**Page 1**

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 16

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Savo Twp.

T128N R63W

Sec. 6 Sec. 7

047-P

048-P

049-P

Sec. 6 Sec. 1

Sec. 7 Sec. 12

Osceola Twp.

T128N R64W

Sec. 1 Sec. 12

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

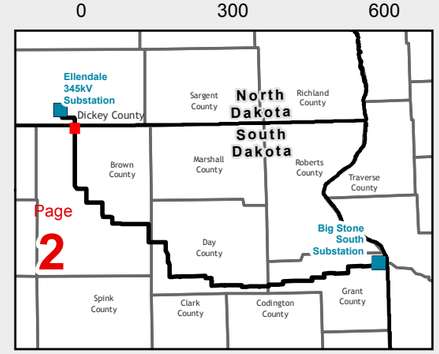
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County Page 2

1:3,600

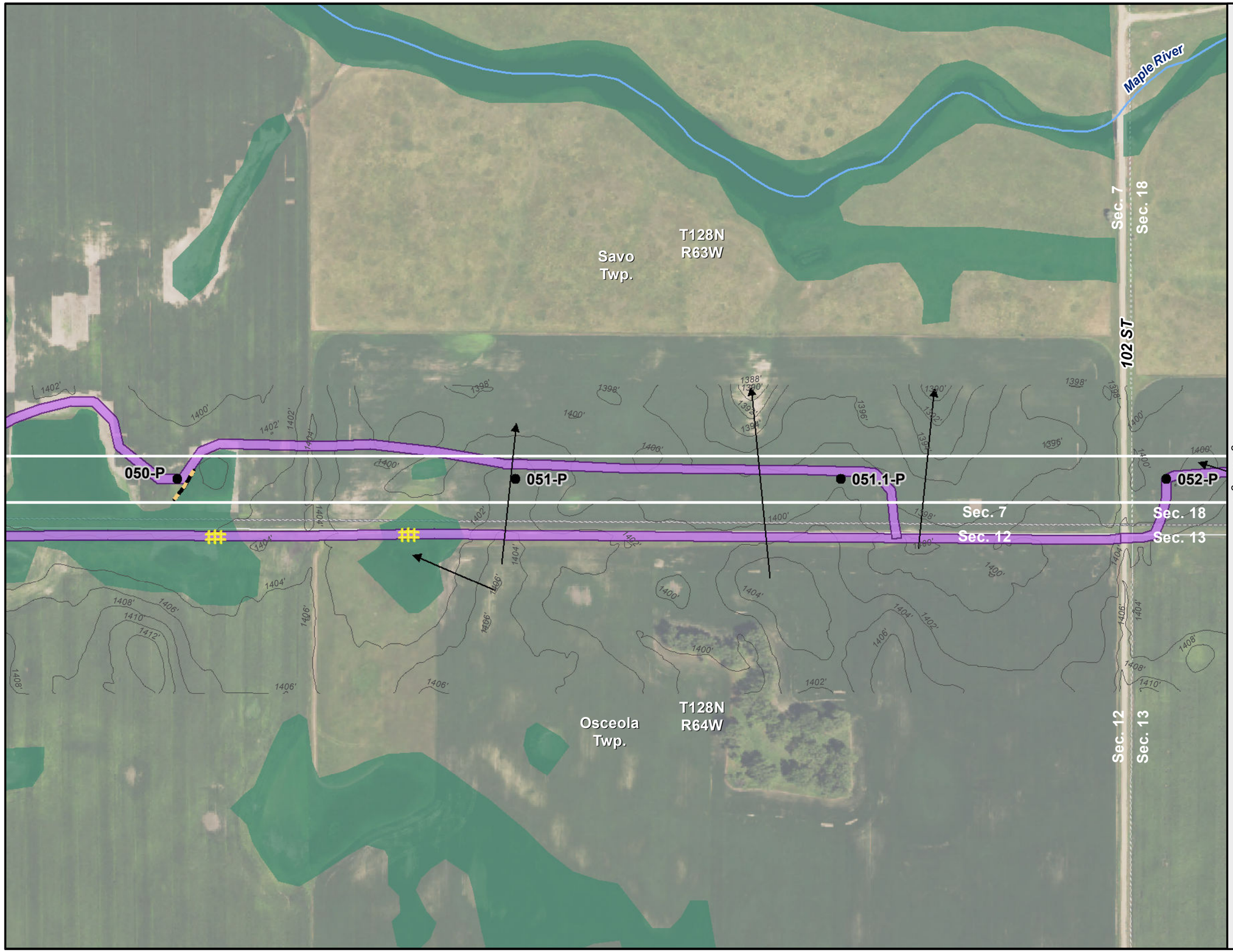
0 300 600 Feet




BSSE Big Stone South to Ellendale

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

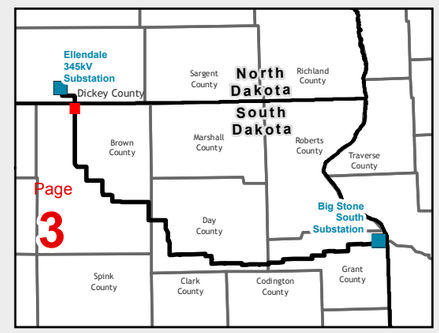
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 3

1:3,600

0 300 600 Feet

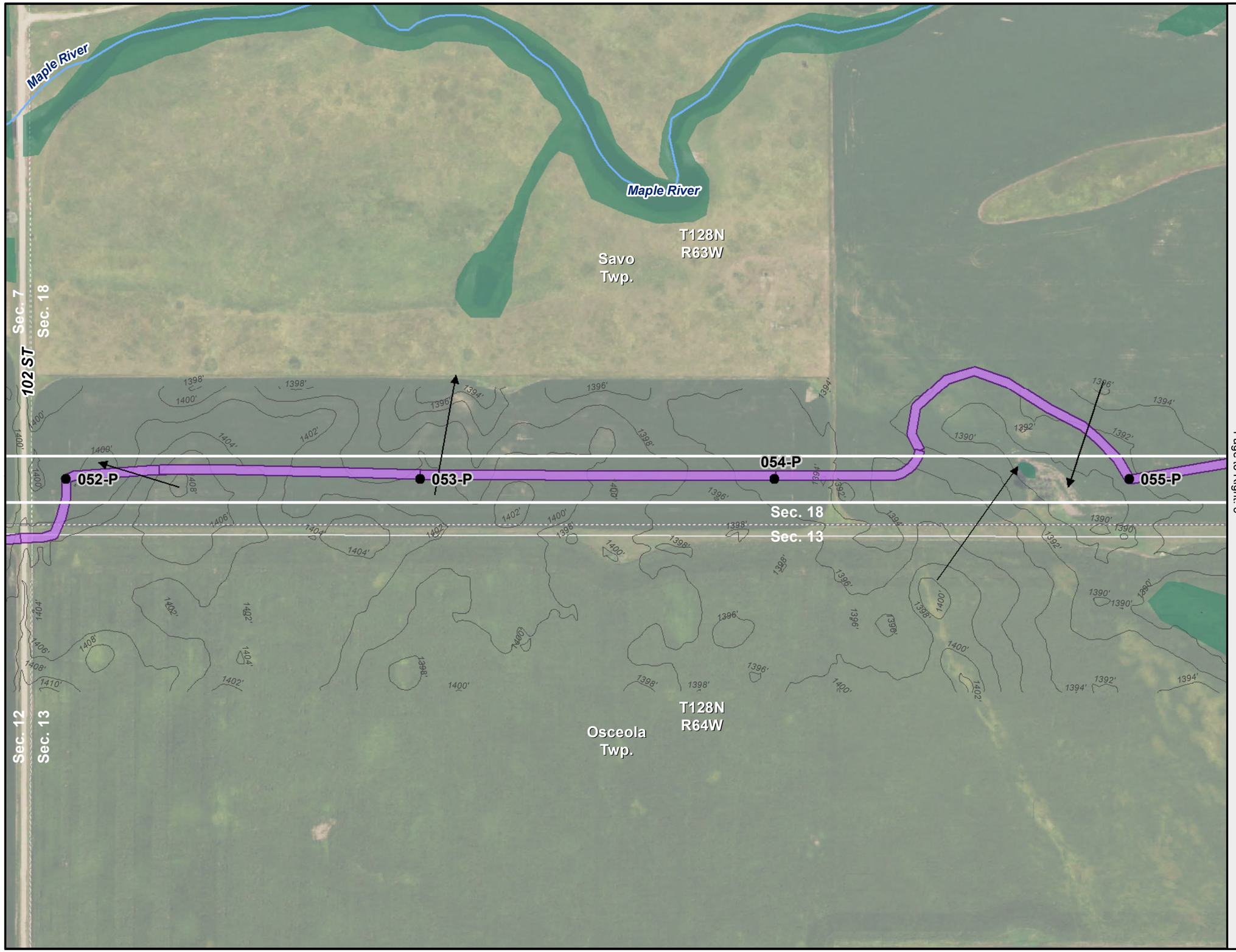



BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015




## SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

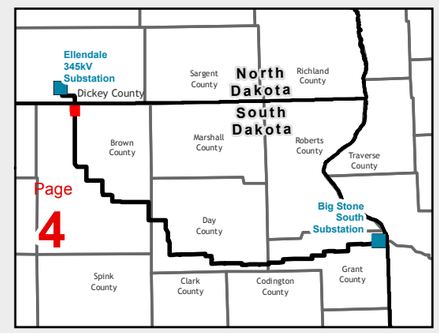
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 4

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left: 3

Page to Right: 5

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Osceola Twp.

T128N R64W

Sec. 24

Sec. 13

103 ST

057-P

056-P

055-P

055.1-P

Sec. 24

Sec. 19

Sec. 13

Sec. 18

Savo Twp.

Sec. 19

Sec. 18

T128N R63W

ple River

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

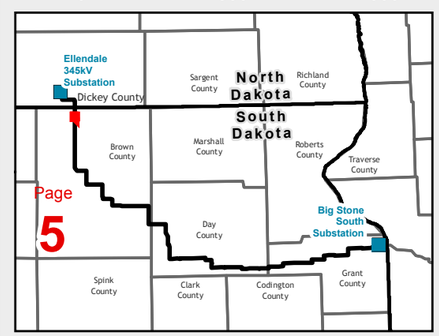
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 5

1:3,600

0 300 600 Feet




BIG STONE SOUTH TO ELLENDALE

T128N
R63W

Savo
Twp.

Sec. 19
Sec. 30

388 AVE

Sec. 19
Sec. 24

058-P

059-P

060-P

Maple River

104 ST

Osceola
Twp.

T128N
R64W

Sec. 24
Sec. 25

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

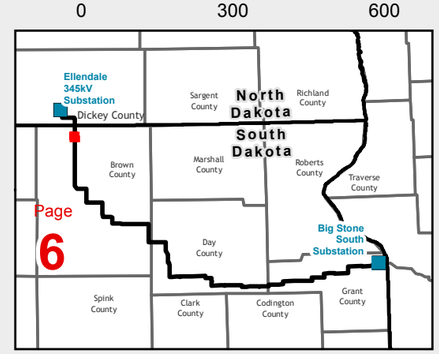
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 6

1:3,600

0 300 600 Feet




Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

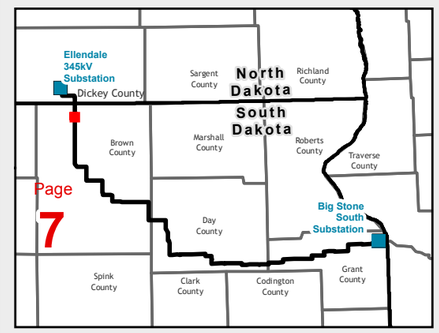
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 7

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

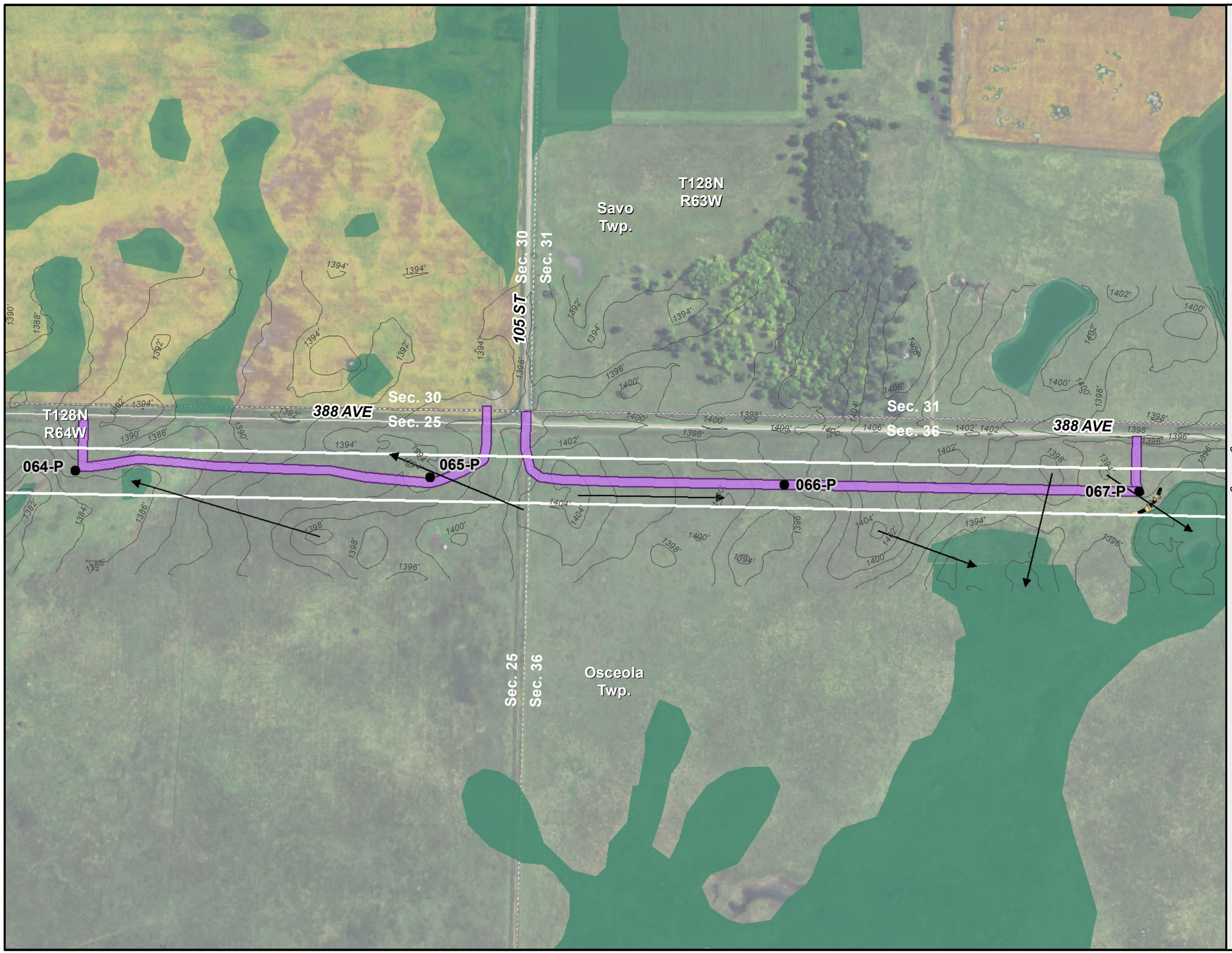


Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 7




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

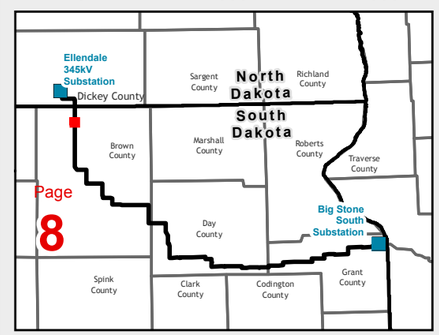
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 8

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 9

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015





# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

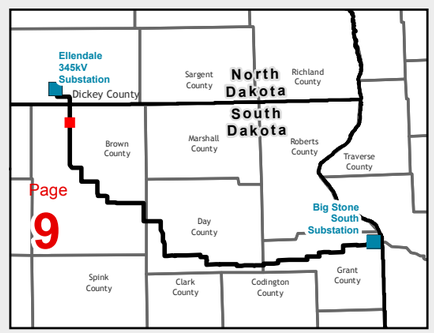
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 9

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Savo Twp.
T128N R63W
Richland Twp.
T127N R63W
Osceola Twp.
T128N R64W
Frederick Twp.
T127N R64W
Sec. 31
Sec. 6
Sec. 36
Sec. 1
106 ST
388 AVE
067-P
068-P
069-P
070-P

Date: 10/24/2015



T127N
R63W

Richland
Twp.

070-P

071-P

072-P

073-P

Sec. 6

Sec. 1

388 AVE

Frederick
Twp.

T127N
R64W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

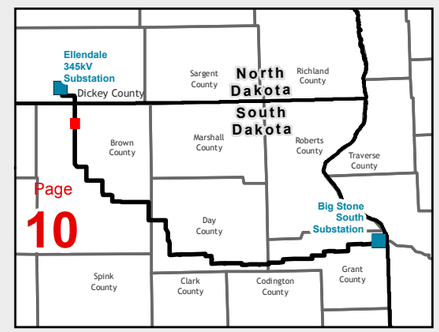
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 10

1:3,600

0 300 600 Feet



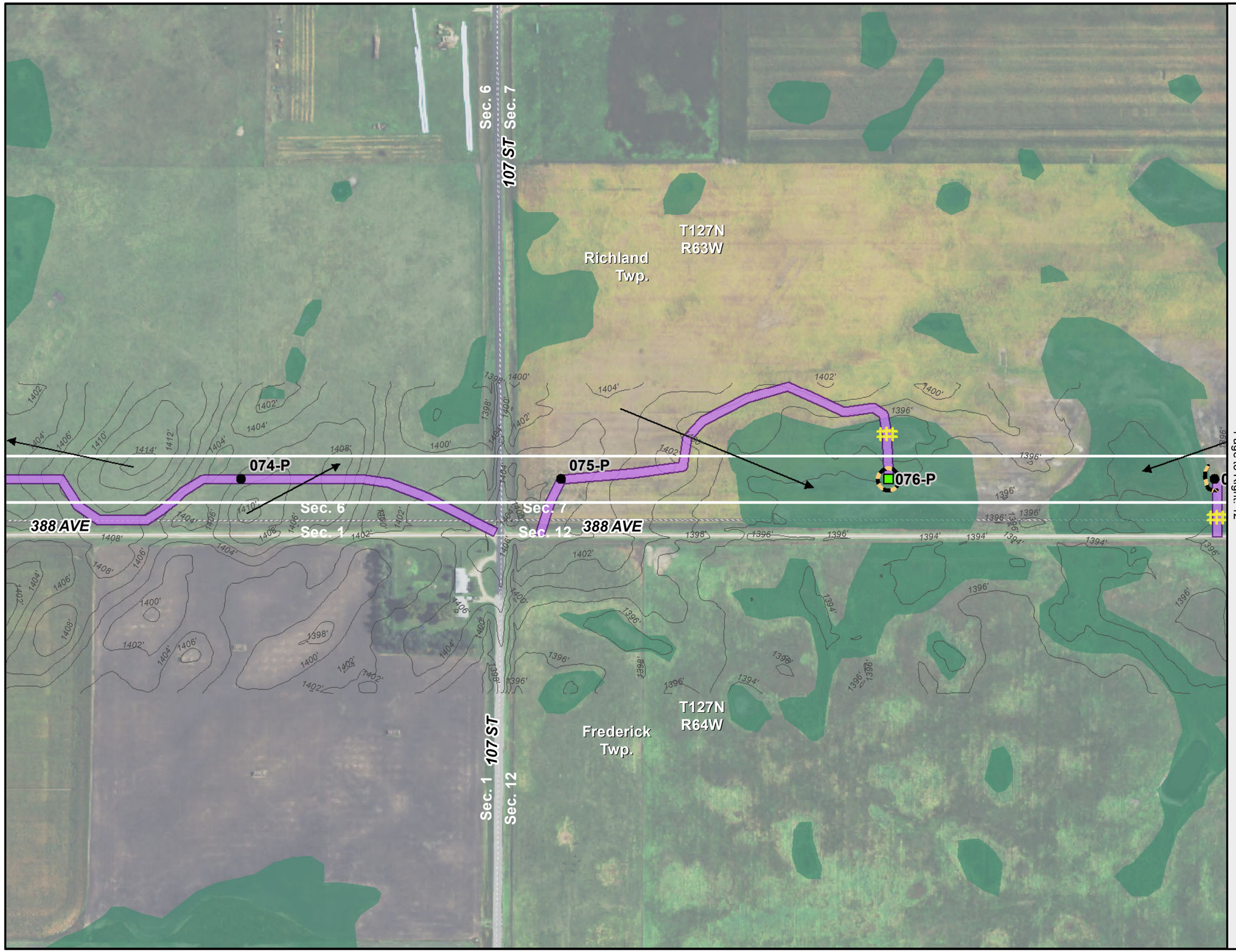

BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

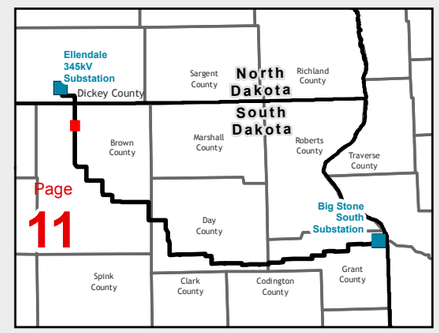
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 11

1:3,600

0 300 600 Feet



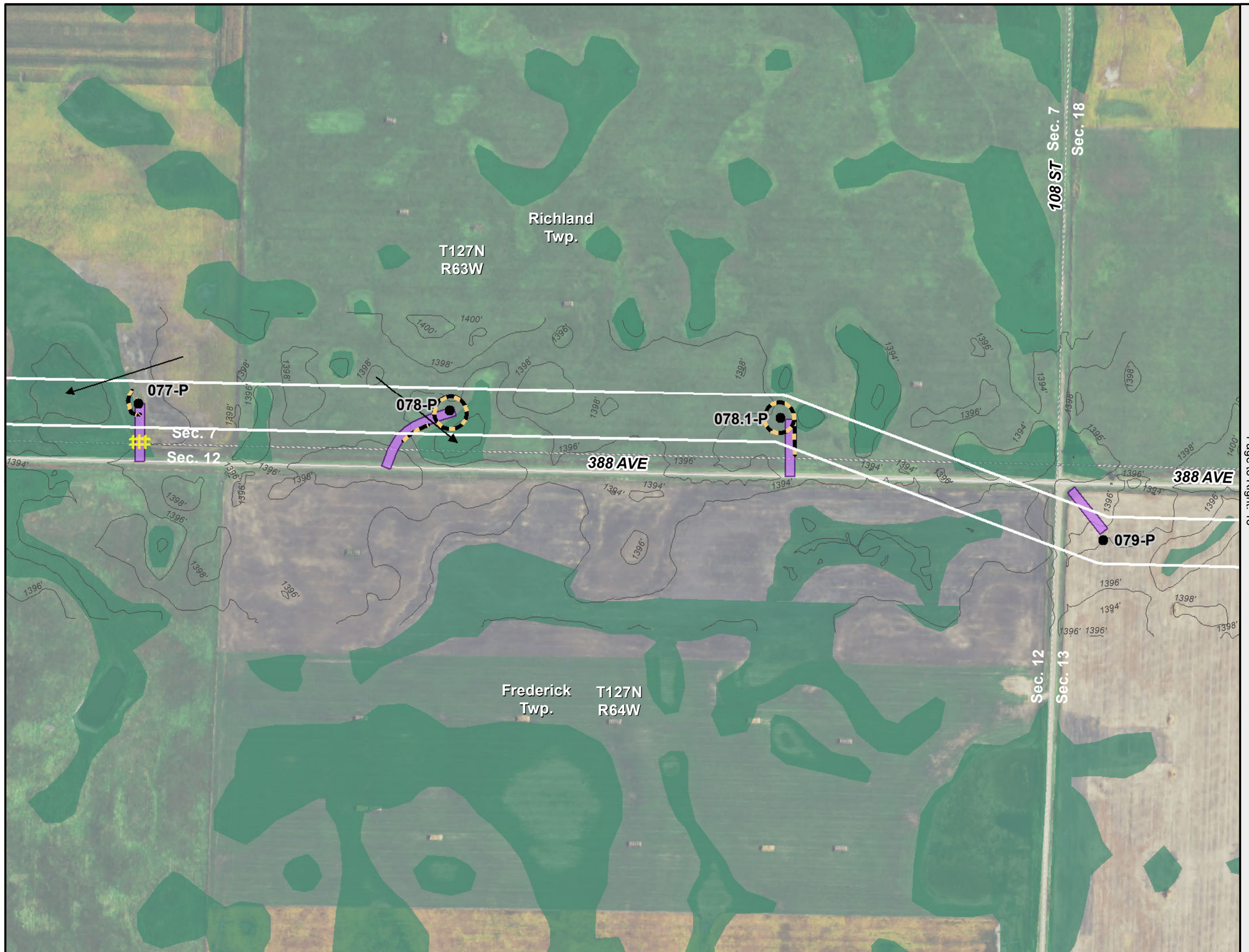

BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015

Page to Left: 11




Page to Right: 13

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

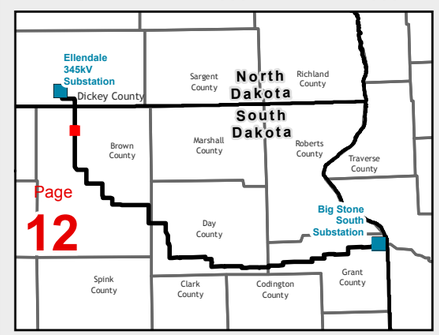
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 12

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

T127N
R63W

Richland
Twp.

Sec. 18
Sec. 13

388 AVE

080-P
081-P
082-P

T127N
R64W

Frederick
Twp.

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

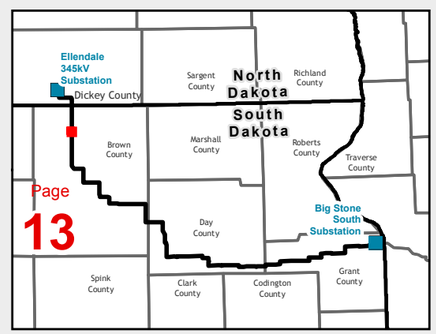
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 13

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Date: 10/24/2015



Sec. 18
Sec. 19
T127N
R63W
Richland
Twp.
Sec. 18
Sec. 19
Sec. 13
Sec. 24
388 AVE
083-P
084-P
085-P
T127N
R64W
Frederick
Twp.
109 ST
Sec. 13
Sec. 24

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

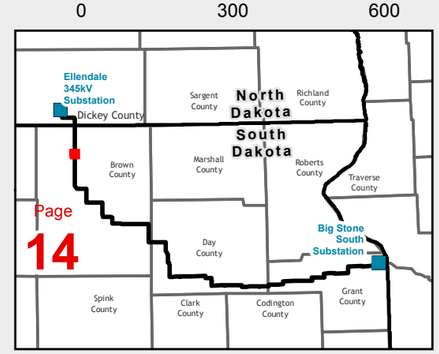
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 14

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

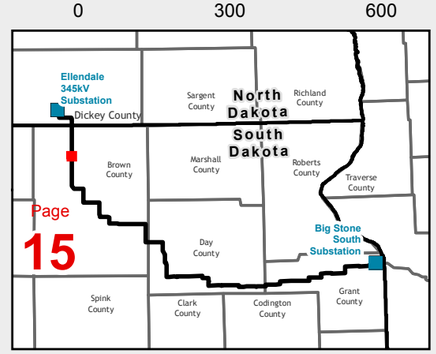
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 15

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 15

Richland Twp.

T127N R63W

Sec. 30

Sec. 25

088-P

089-P

090-P

110 ST

Sec. 24

Sec. 25

Frederick Twp.

T127N R64W

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

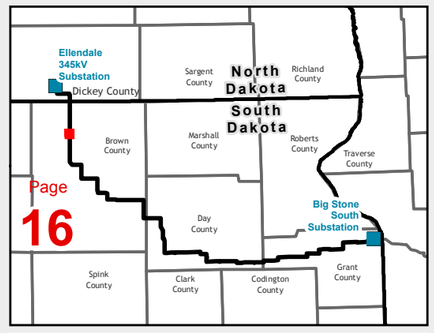
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County Page 16

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Page to Right: 17

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015



Richland Twp.
T127N R63W
Sec. 30
Sec. 31
Sec. 30
Sec. 25
Sec. 31
Sec. 36
091-P
092-P
093-P
T127N R64W
Frederick Twp.
Sec. 25
Sec. 36

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

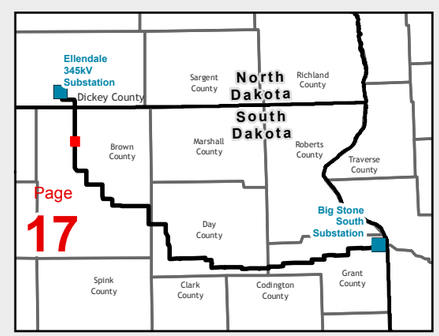
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 17

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 18

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

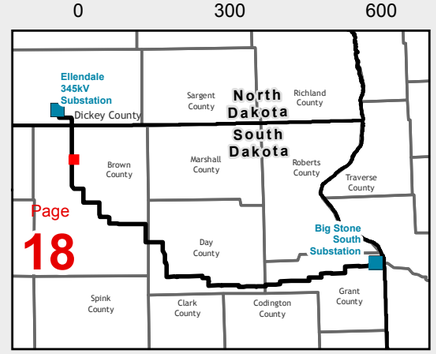
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 18

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

T127N
R63W

Richland
Twp.

Sec. 31

Sec. 36

093-P

094-P

095-P

096-P

Frederick
Twp.

T127N
R64W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

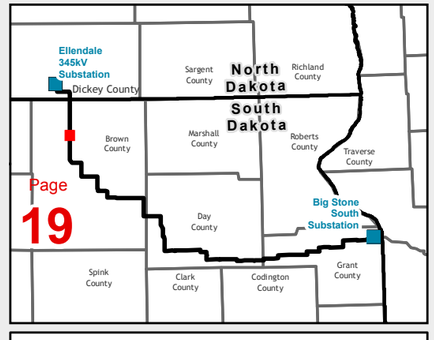
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 19

1:3,600

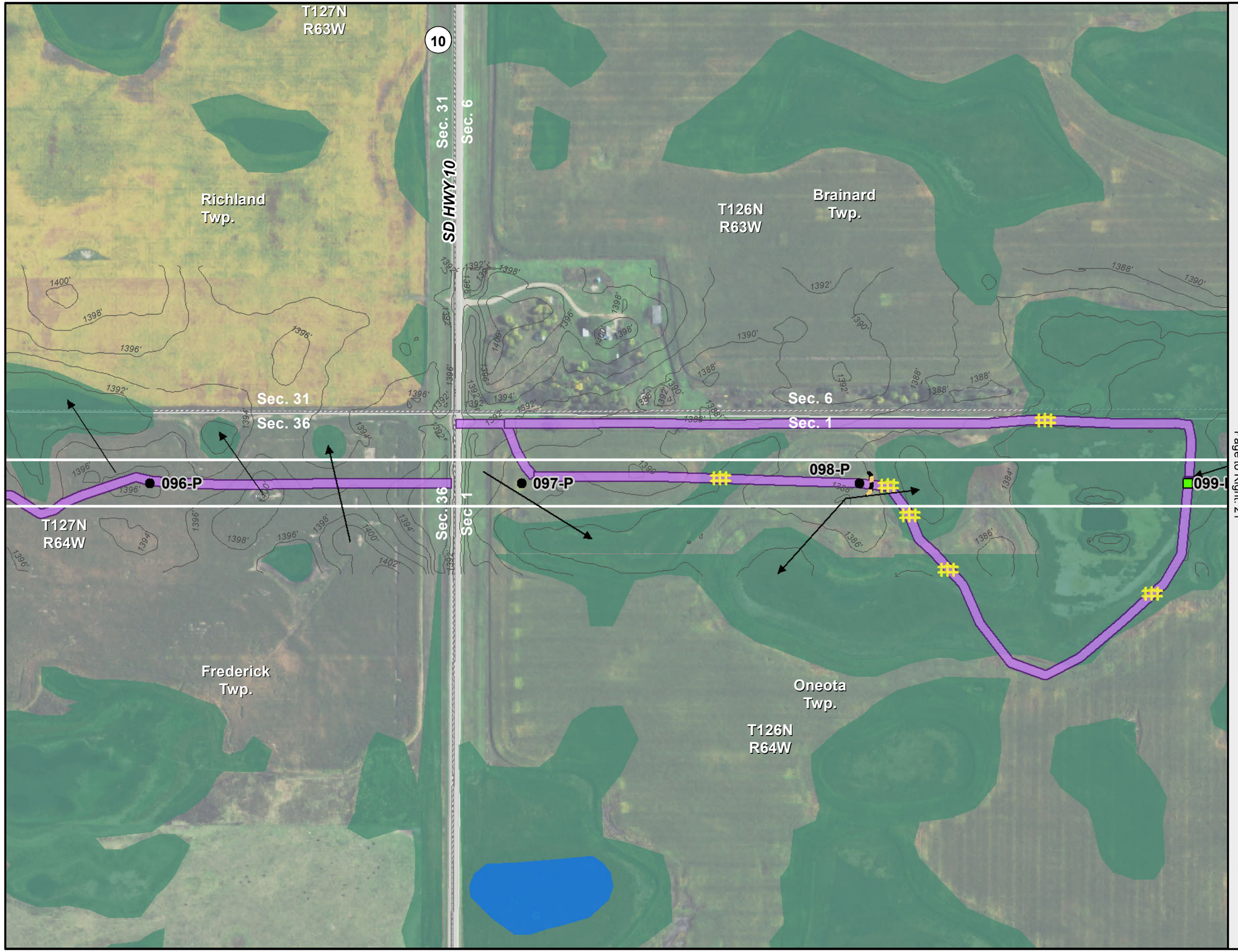
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

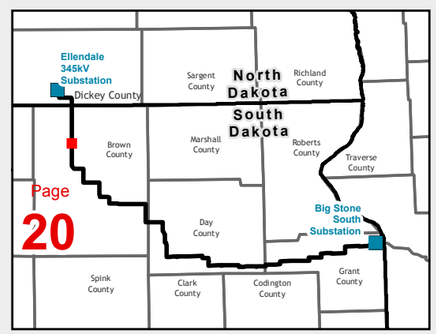
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 20

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

T126N
R63W

Brainard
Twp.

Sec. 6

Sec. 1

099-P

100-P

101-P

102-P

Oneota
Twp.

T126N
R64W

Sec. 1

Sec. 12

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

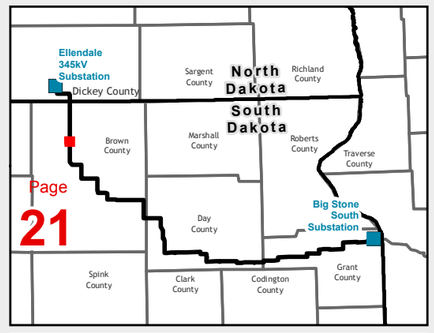
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 21

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Sec. 2
Sec. 1
Sec. 11
Sec. 12
387 AVE
T126N
R64W
Oneota
Twp.

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

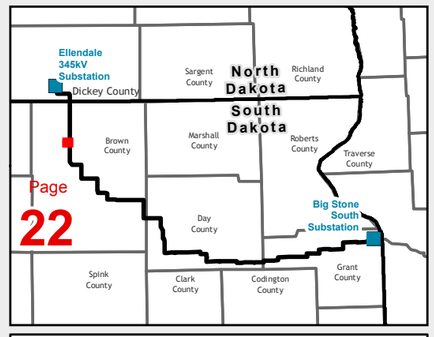
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 22

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

T126N
R63W

Brainard
Twp.

388 AVE

Sec. 7

Sec. 12

102-P

103-P

104-P

T126N
R64W

Oneota
Twp.

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale
## 345 kV Transmission Line Project
## North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

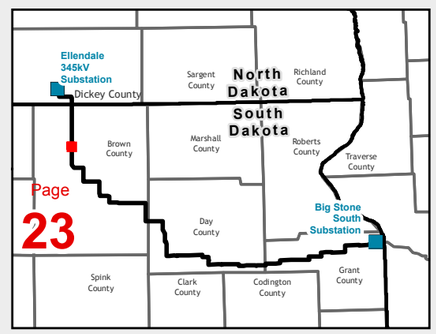
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 23

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 23

Brainard Twp.

T126N R63W

114 ST

Sec. 7

Sec. 18

388 AVE

Sec. 12

Sec. 13

105-P

106-P

107-P

108-P

T126N R64W

Oneota Twp.

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

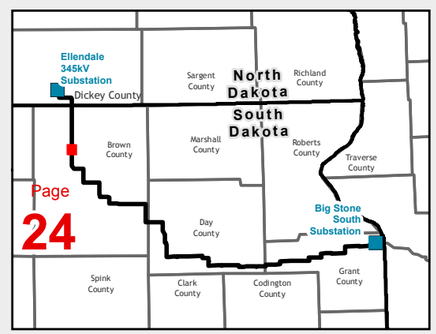
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 24

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 25

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

T126N
R63W

Brainard
Twp.

115 ST

Sec. 18

Sec. 19

Sec. 13

Sec. 24

388 AVE

108-P

109-P

110-P

111-P

T126N
R64W

Oneota
Twp.

115 ST



# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

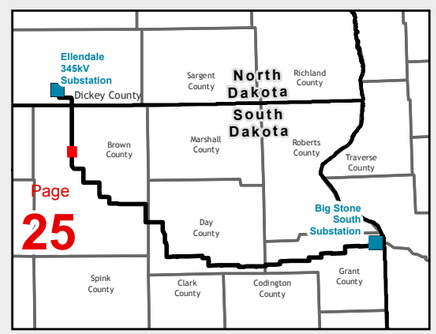
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 25

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Brainard Twp.

T126N R63W

Sec. 19

Sec. 24

388 AVE

111-P

112-P

113-P

114-P

T126N R64W

Oneota Twp.

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

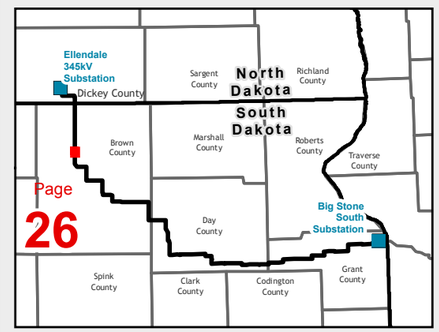
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 26

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Sec. 19
Sec. 30
T126N
R63W
Brainard
Twp.
Sec. 19
Sec. 24
388 AVE
Sec. 30
Sec. 25
115-P
116-P
117-P
Sec. 24
Sec. 25
Oneota
Twp.
T126N
R64W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

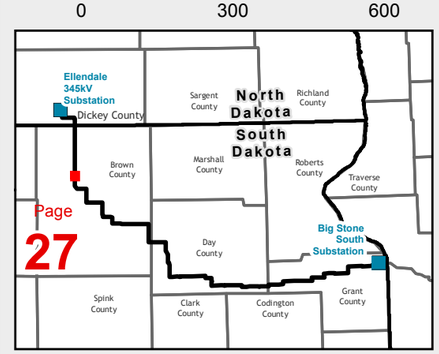
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 27

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 27

T126N
R63W

Brainard
Twp.

Sec. 30
Sec. 31

388 AVE

Sec. 30
Sec. 25

388 AVE

118-P

119-P

120-P

Oneota
Twp.

117 ST

T126N
R64W

Sec. 25
Sec. 36

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

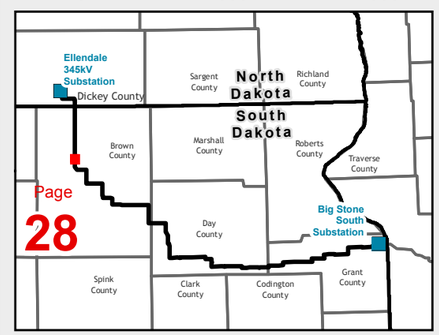
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 28

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Right: 29

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

T126N
R63W

Brainard
Twp.

388 AVE

Sec. 31

Sec. 36

121-P

122-P

123-P

Oneota
Twp.

T126N
R64W

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale
## 345 kV Transmission Line Project
## North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

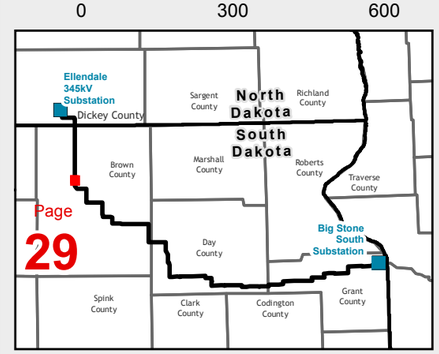
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 29

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Brainard Twp.

T126N R63W

T125N R63W

118 ST

Sec. 31

Sec. 6

388 AVE

Sec. 31

Sec. 36

Sec. 6

Sec. 1

Westport Twp.

124-P

125-P

126-P

126.1-P

Oneota Twp.

T126N R64W

T125N R64W

118 ST

Sec. 36

Sec. 1

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

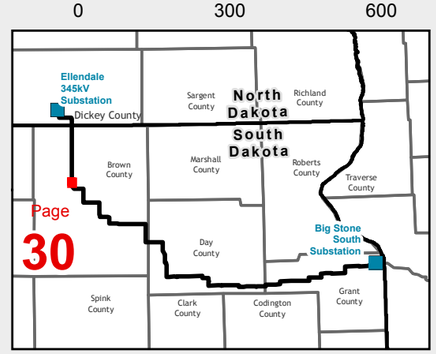
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 30

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015

Westport Twp.

T125N R63W

T125N R64W

127-P

127.1-P

128-P

119 ST

Sec. 1

Sec. 12

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

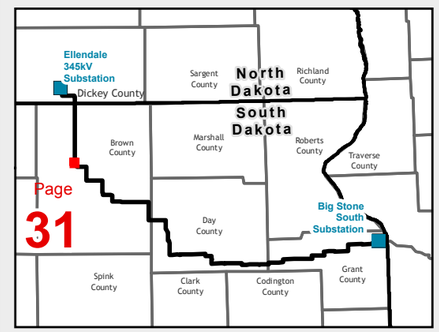
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 31

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left: 30

Page to Right: 32

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 31

T125N
R63W

T125N
R64W

Westport
Twp.

Sec. 7
Sec. 12

128-P
129-P
130-P
131-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

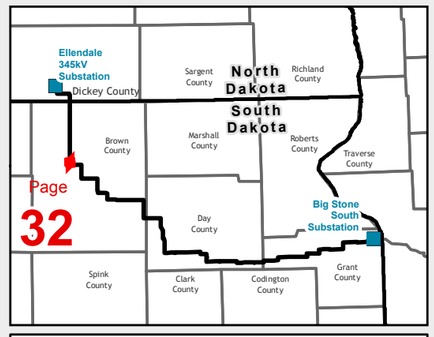
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 32

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 33

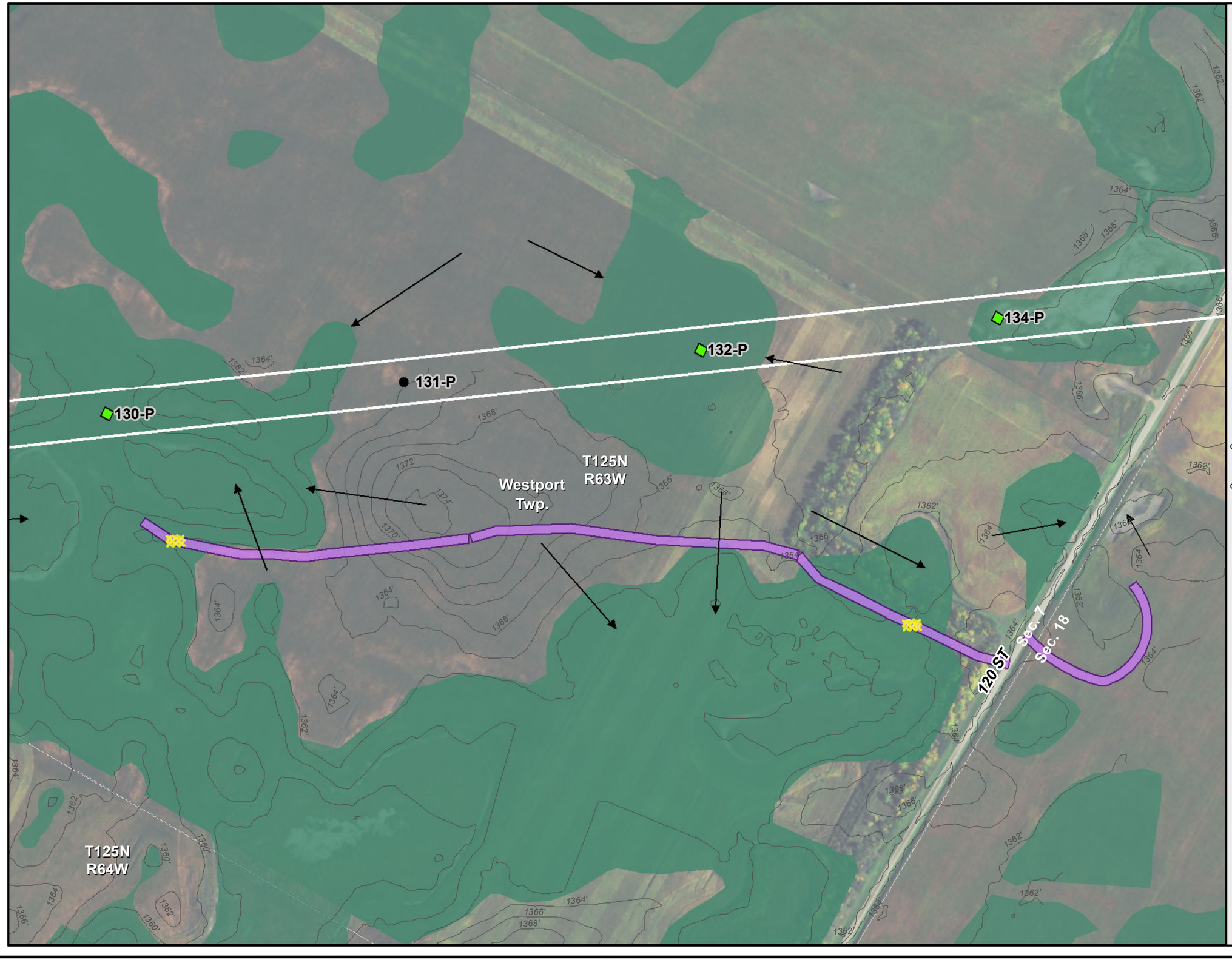


Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 32




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

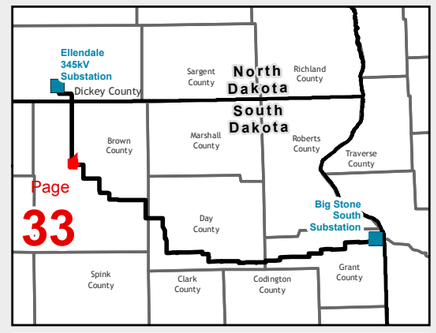
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 33

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 34

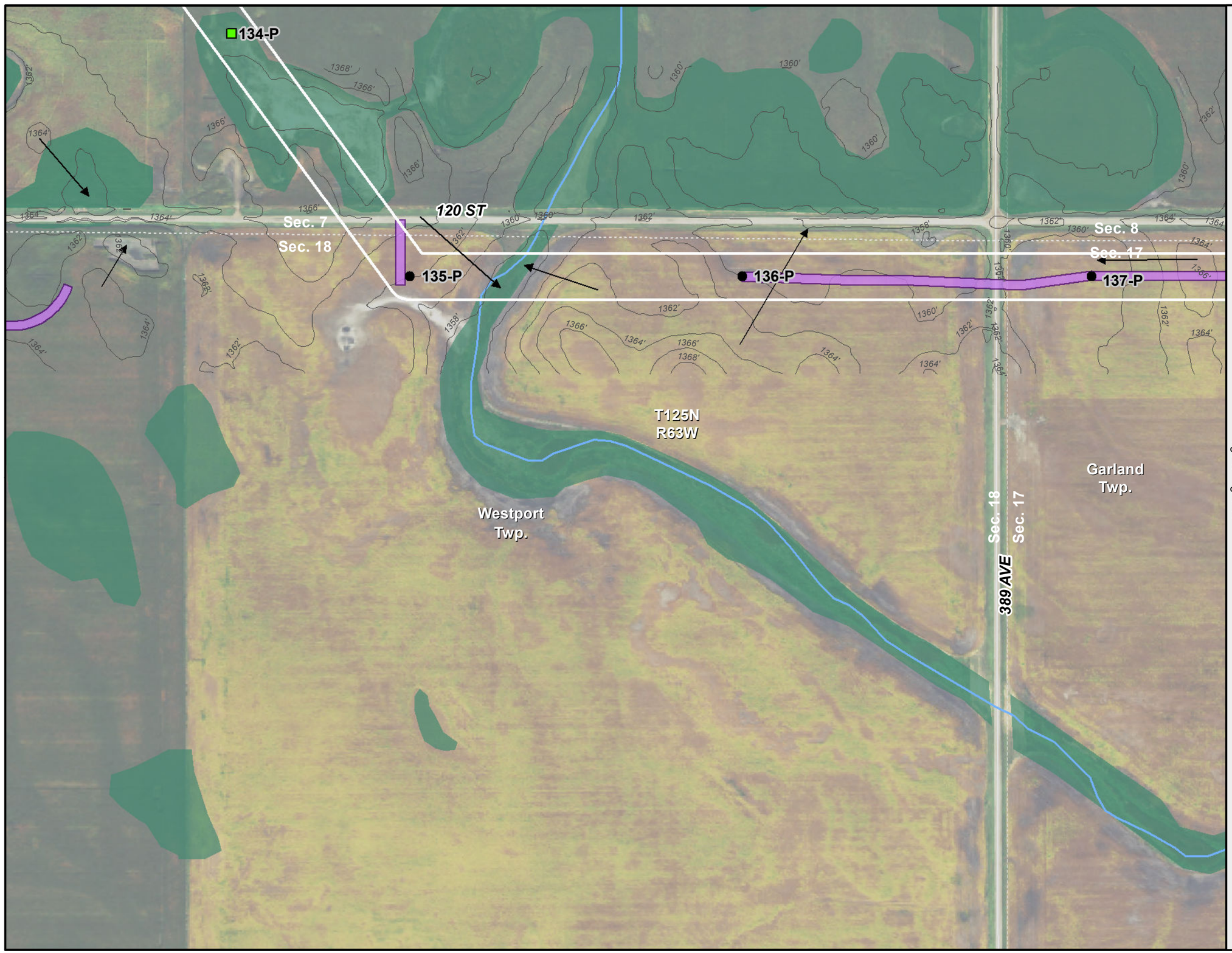
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 33




Page to Right: 35

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

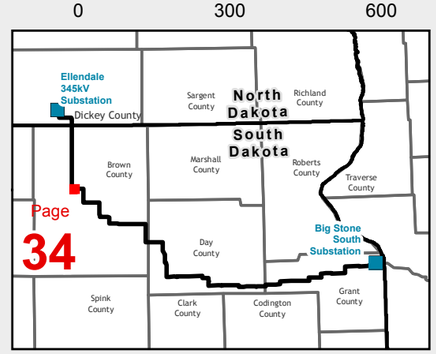
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 34

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

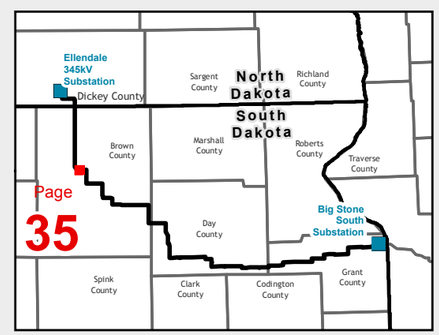
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 35

1:3,600

0 300 600 Feet

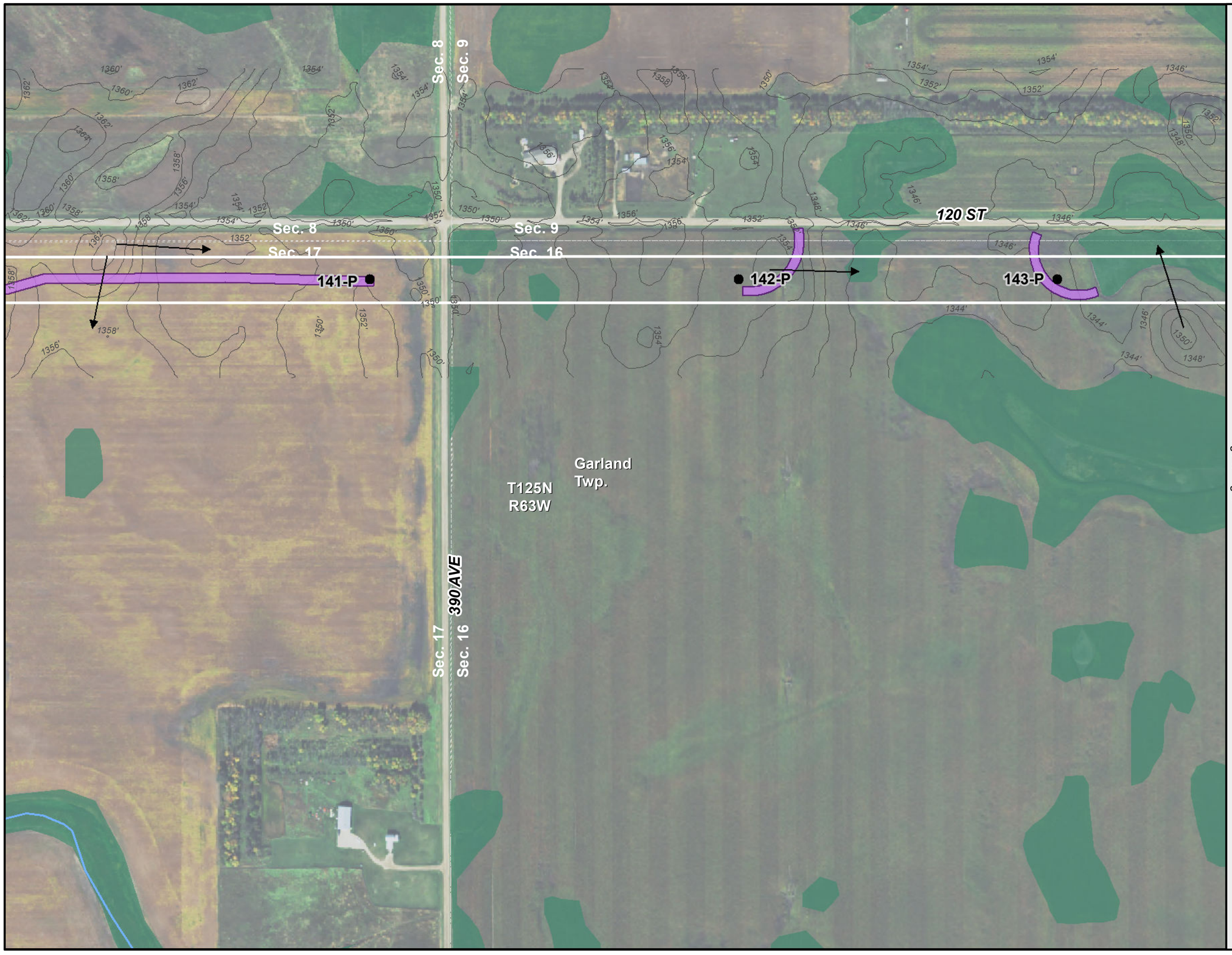



Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 35




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

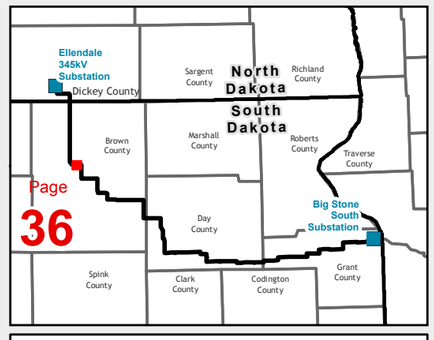
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 36

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 37

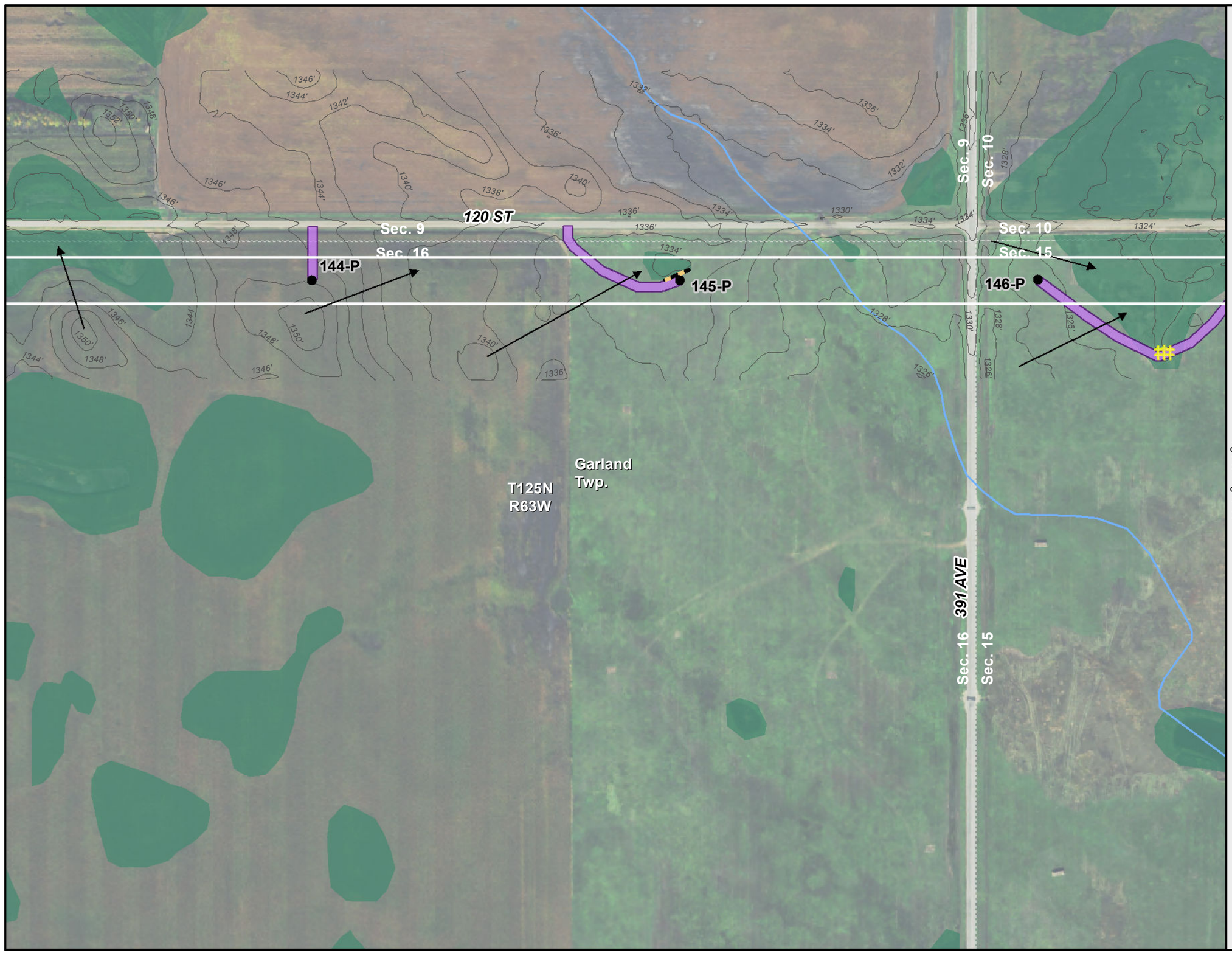
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 36




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

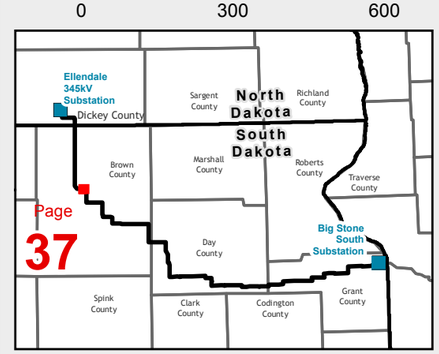
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 37

1:3,600

0 300 600 Feet



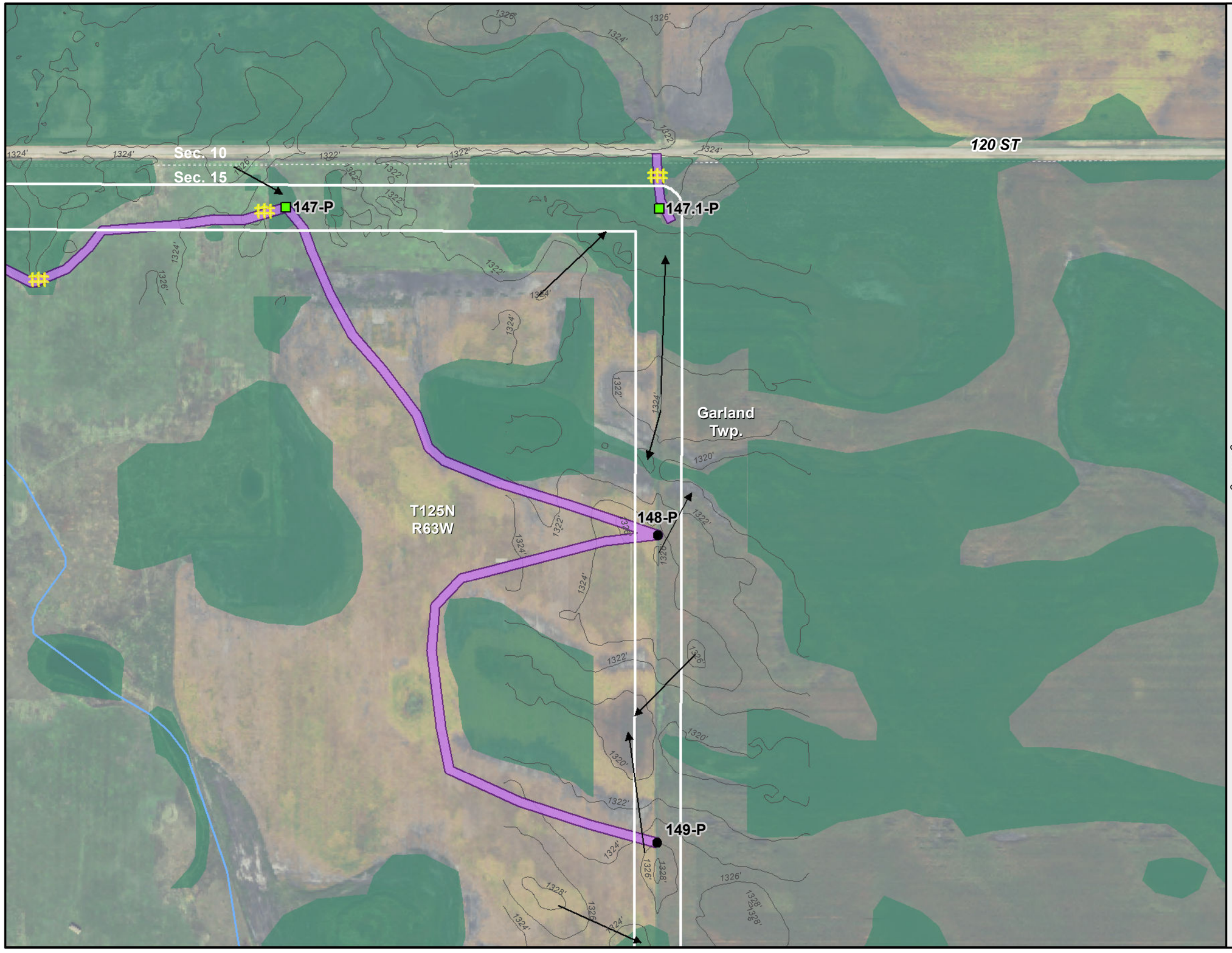

Big Stone South to Ellendale

Page to Right: 38

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

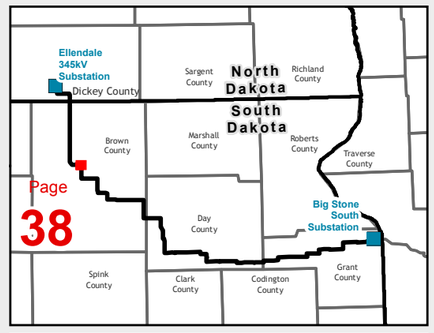
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 38

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left: 37

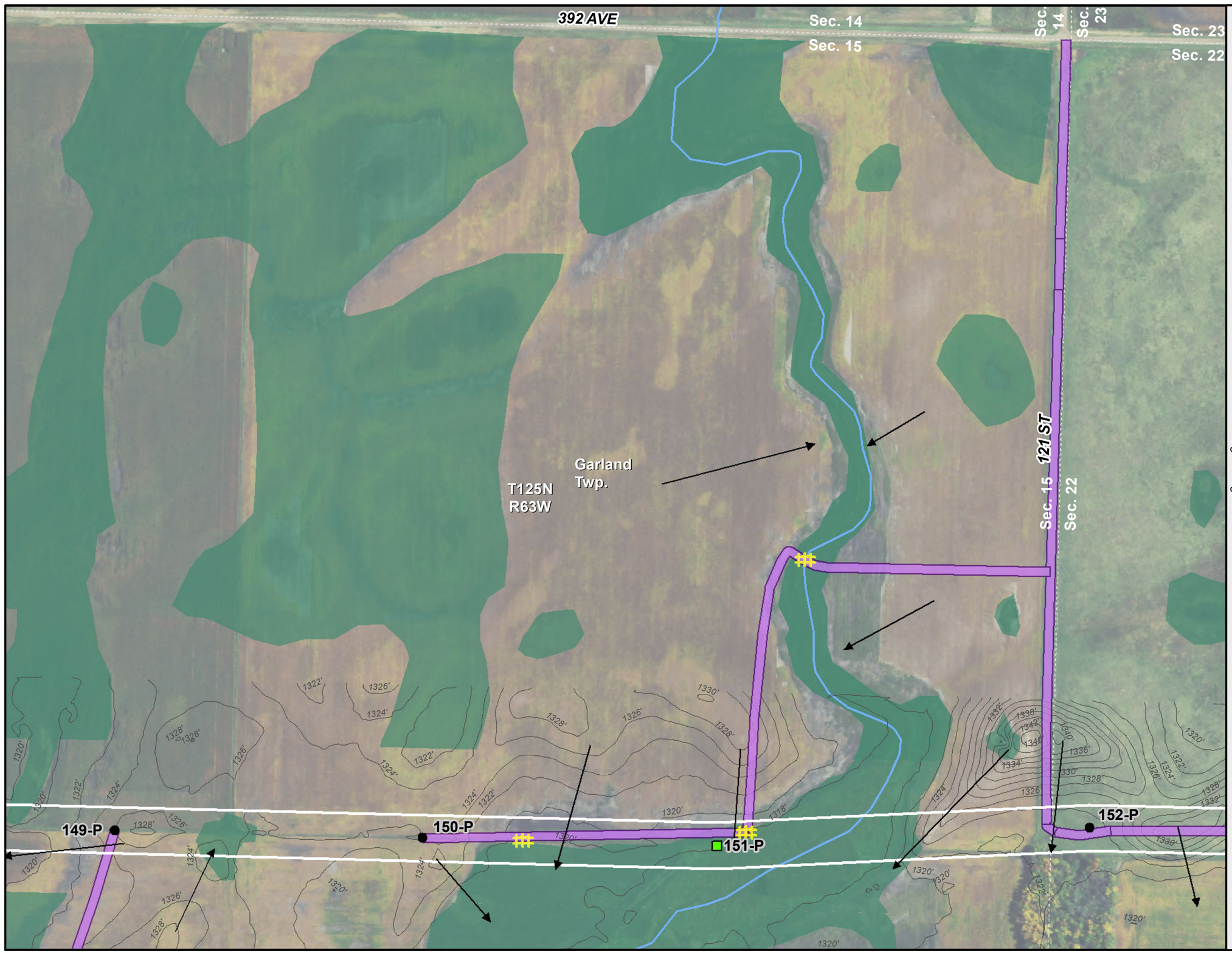
Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 38




**SWPPP - Erosion Control Plan**
Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

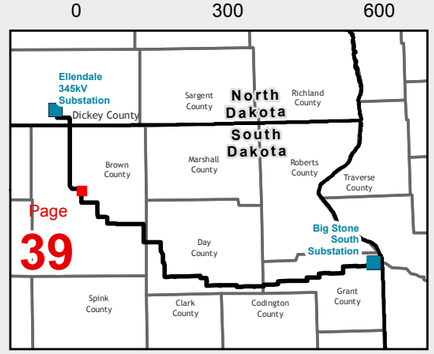
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

**Brown County**
**Page 39**

1:3,600
Feet
0 300 600




BSSE
Big Stone South to Ellendale

Page to Right: 40

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

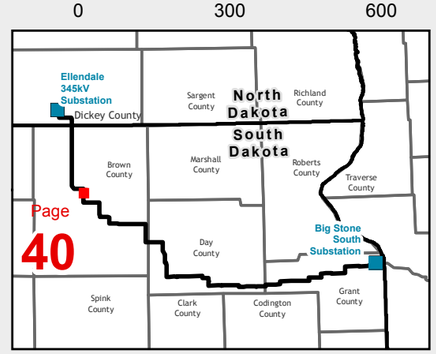
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 40

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

T125N
R63W

122 ST

Garland
Twp.

Sec. 22

Sec. 27

155-P

156-P

157-P

158-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

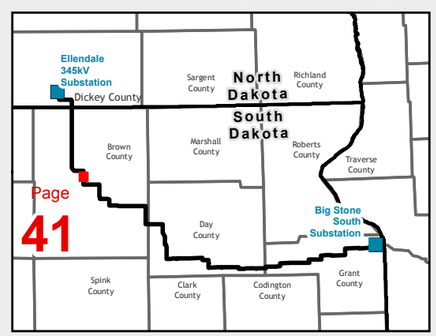
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 41

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Garland Twp.

Sec. 27

Sec. 34

158-P

159-P

160-P

161-P

T125N
R63W

Ordway Twp.

123 ST

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

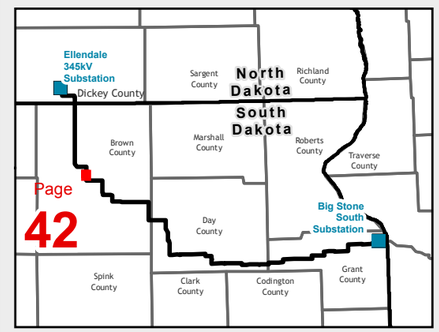
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 42

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 42

Ordway Twp. T125N R63W

162-P

163-P

164-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

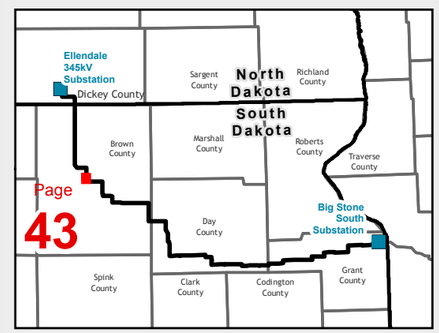
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 43

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Page to Right: 44

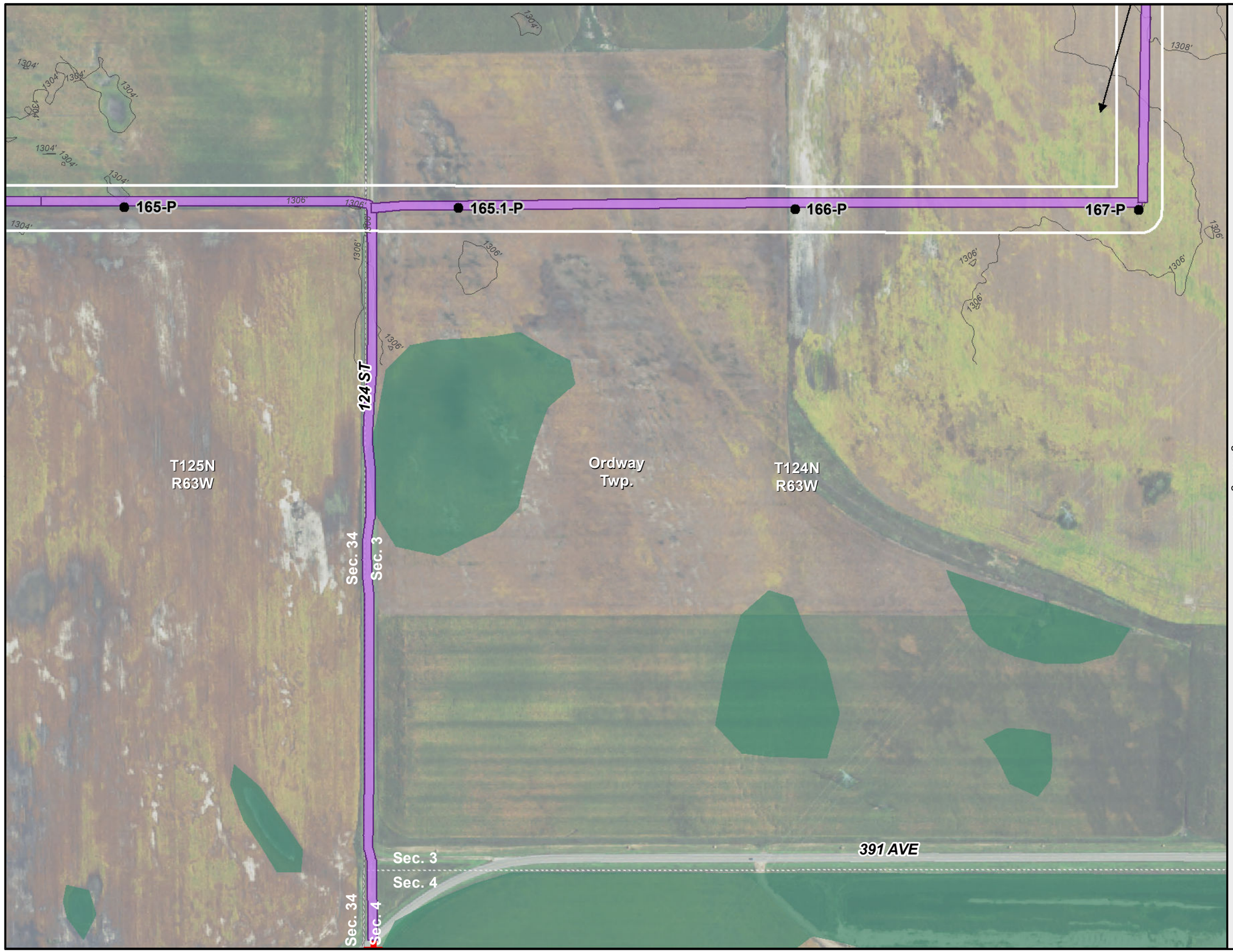
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 43




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

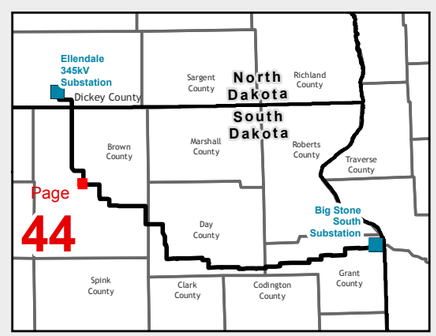
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 44

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 45

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

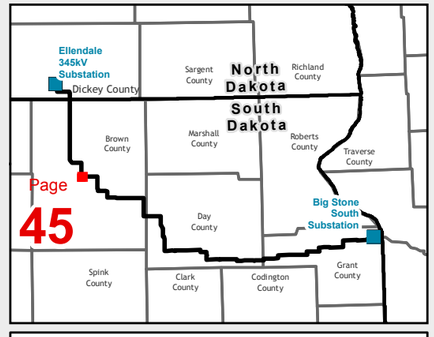
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 45

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

168-P
169-P
170-P
Sec. 3
Sec. 2
392 AVE
Ordway Twp.
T124N R63W
1308'
1306'
1304'
1302'
1300'

Date: 10/24/2015



170-P

169-P

392 AVE

Sec. 2

Sec. 3

Sec. 11

Sec. 10

T124N
R63W

Ordway
Twp.

125 ST

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

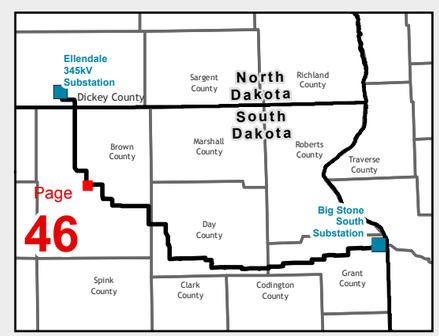
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 46

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Ordway Twp.

171-P

172-P

173-P

124 ST

T124N
R63W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

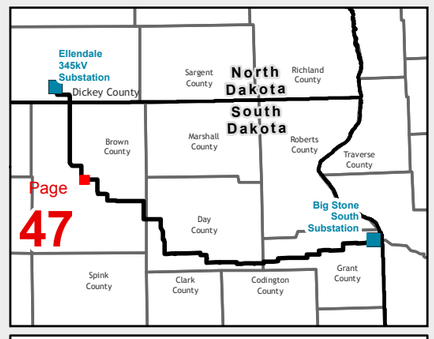
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 47

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

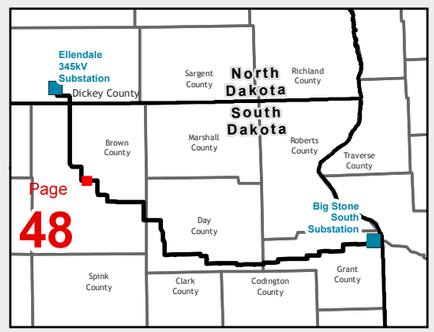
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 48

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 48

Ordway Twp.

177-P

178-P

178.1-P

179-P

124 ST

T124N R63W

T124N R62W

Cambria Twp.

Sec. 1

Sec. 6

Elm Riv

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

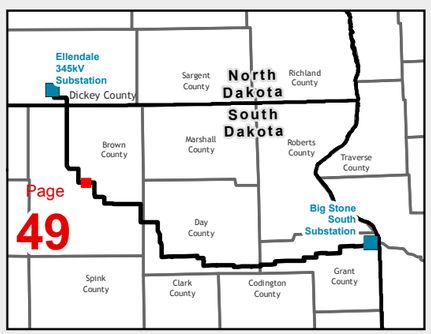
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 49

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 50

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Cambria Twp.

182-P

Elm River

181-P

180-P

124 ST

T124N
R62W

Elm River

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

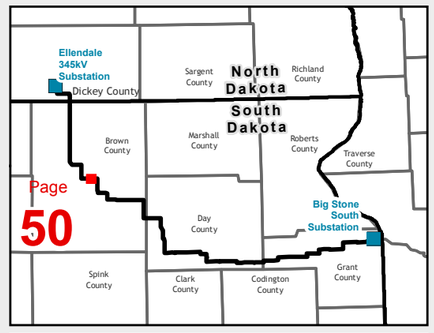
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

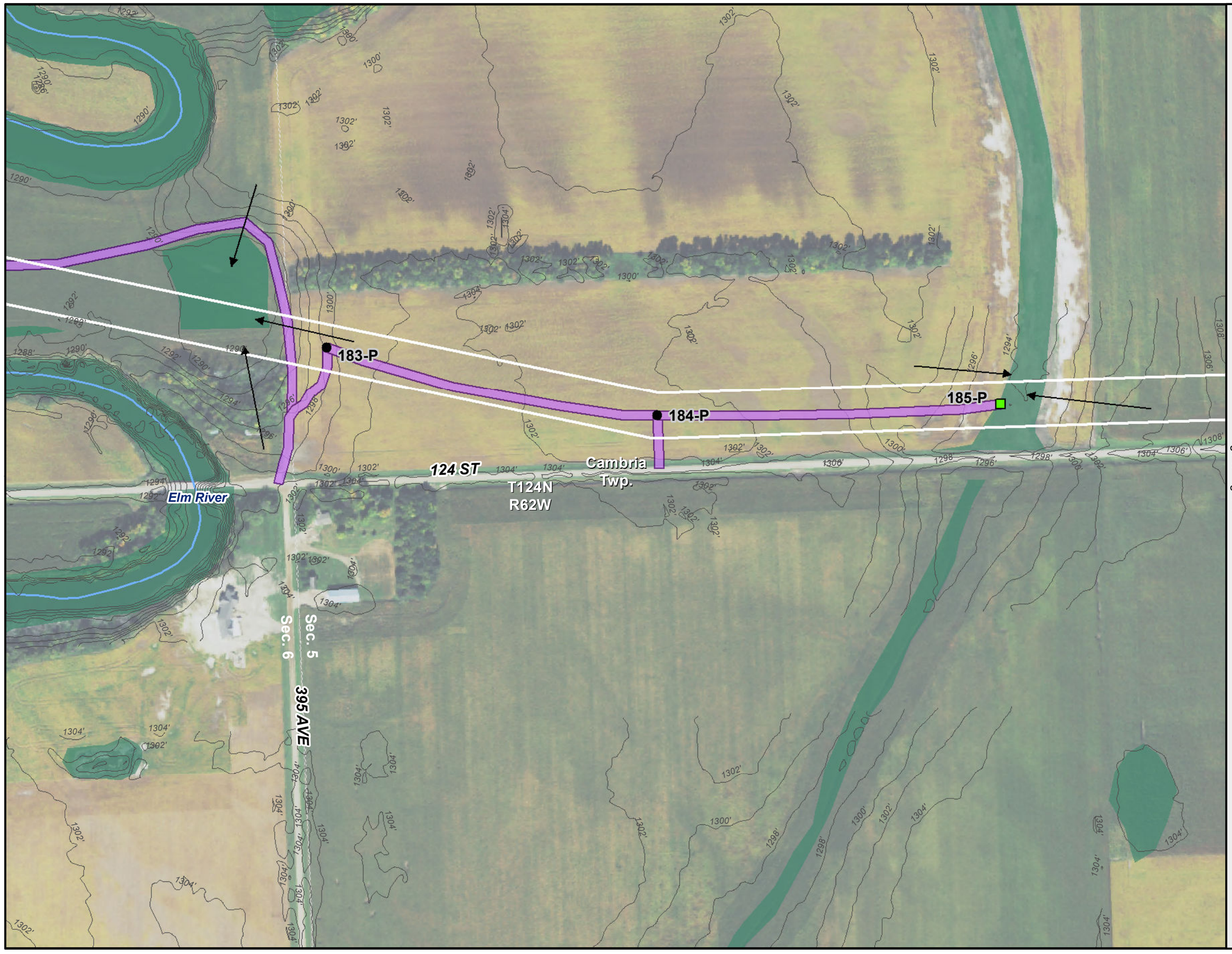
## Brown County
## Page 50

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

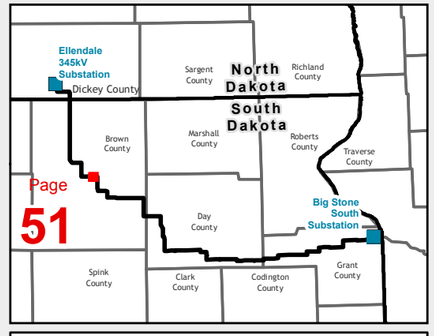
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 51

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

T124N
R62W

185.1-P

186-P

187-P

188-P

124 ST

Cambria
Twp.

Sec. 5

Sec. 4

396 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

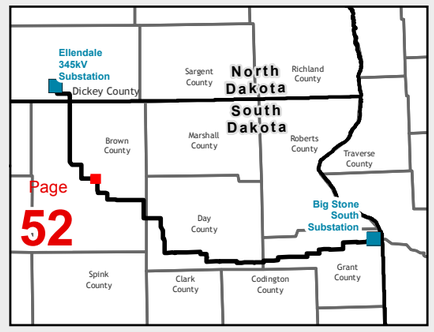
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 52

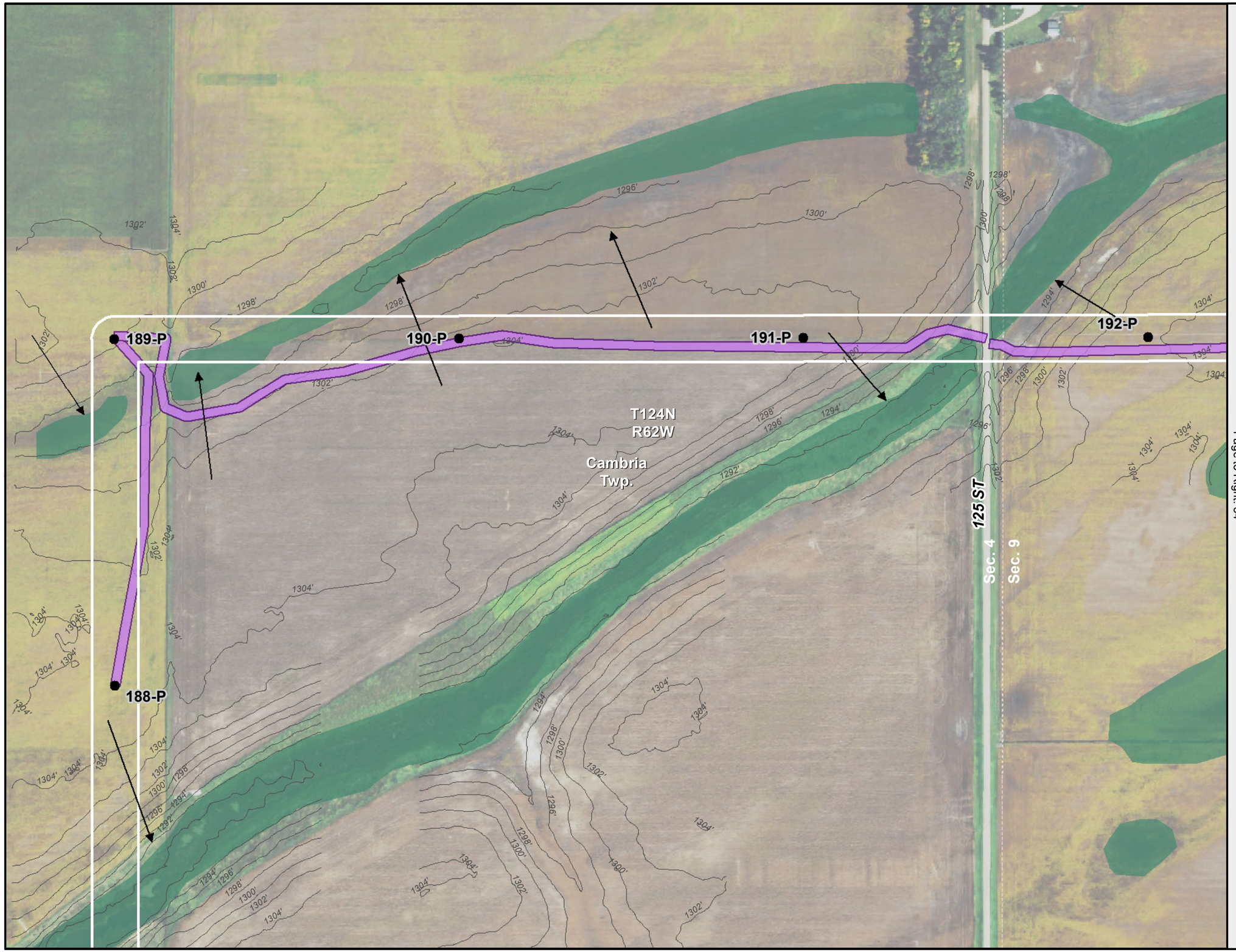
1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

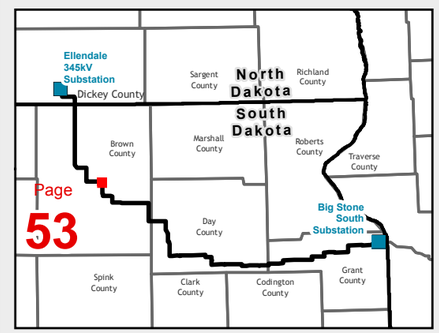
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 53

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left:
Page to Right: 54

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

T124N
R62W

Cambria
Twp.

193-P

194-P

194.1-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

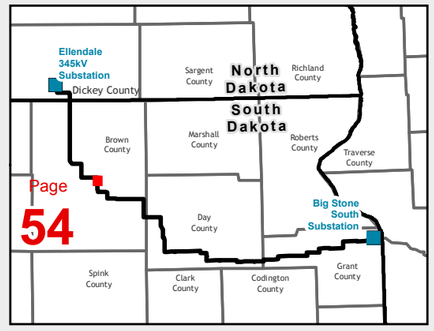
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 54

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

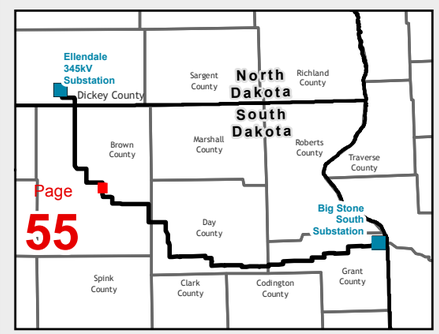
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 55

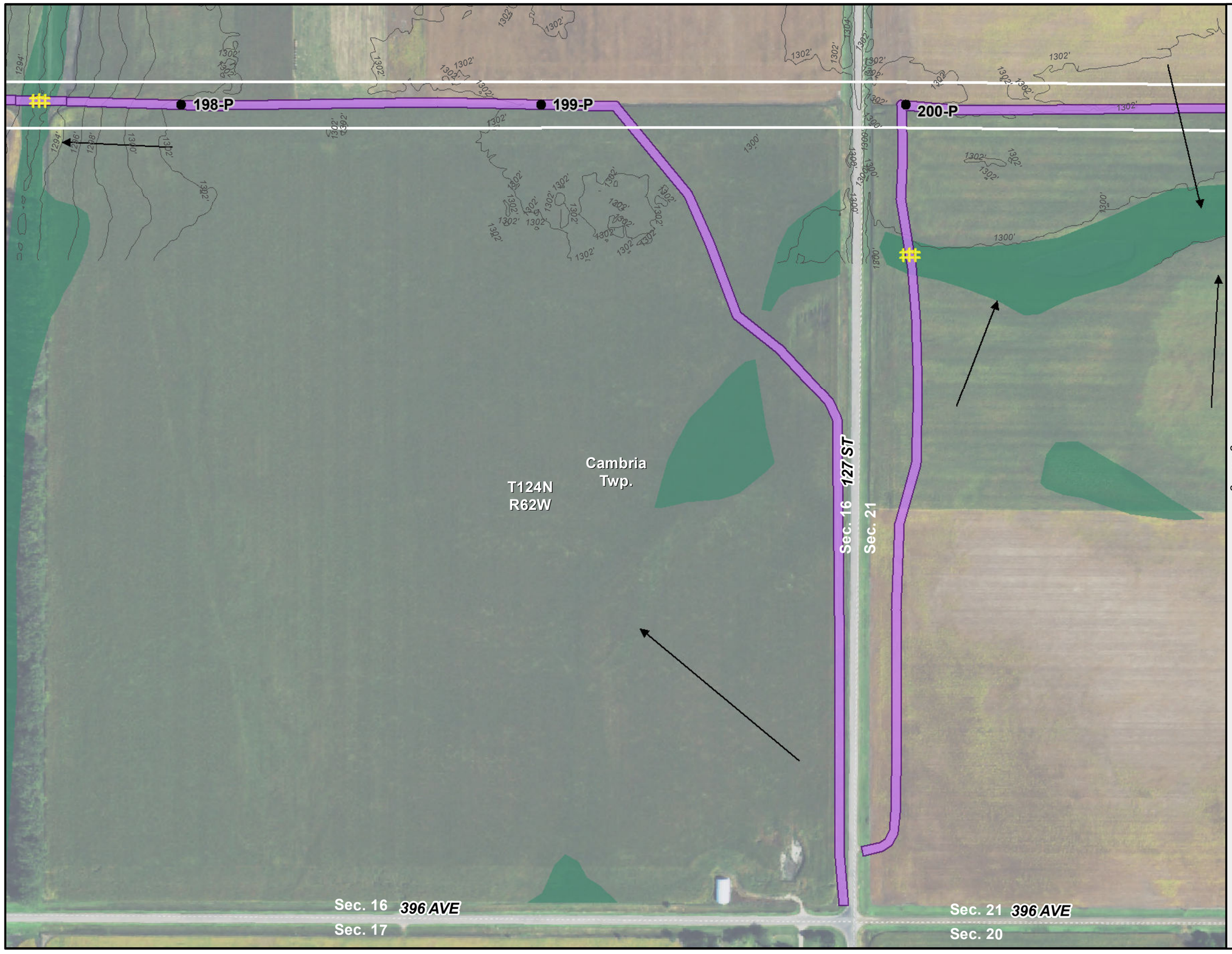
1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

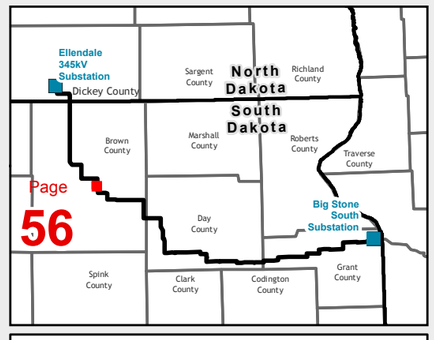
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 56

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left:

Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Cambria Twp.

200-P

201-P

202-P

202.1-P

T124N
R62W

127 ST

Sec. 16

Sec. 21

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

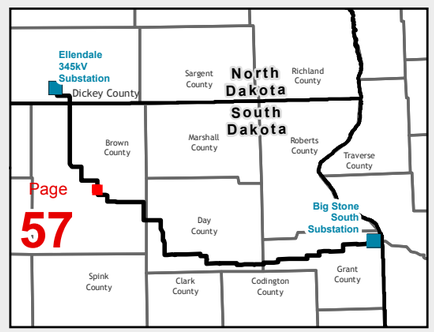
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 57

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 57

T124N
R62W

203-P

204-P

205-P

128 ST

Sec. 21

Sec. 28

Cambria
Twp.

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

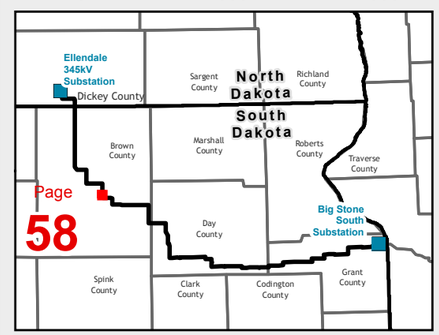
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 58

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 59

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

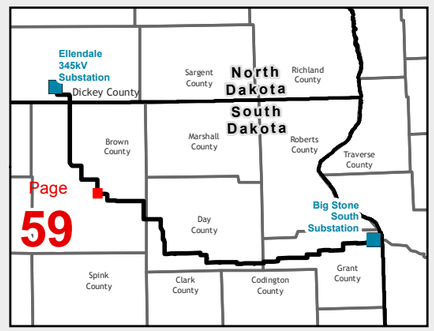
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

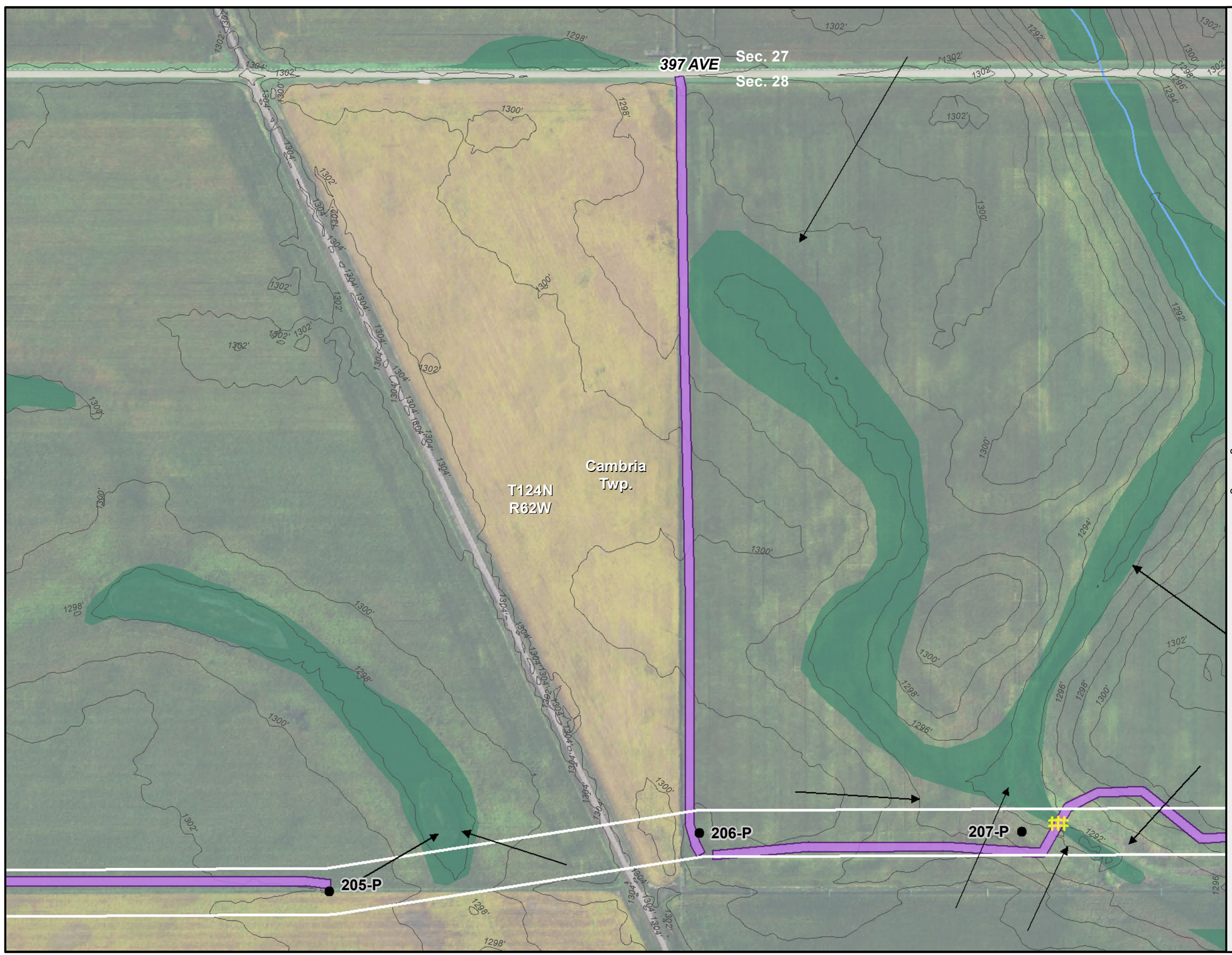
## Brown County
## Page 59

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

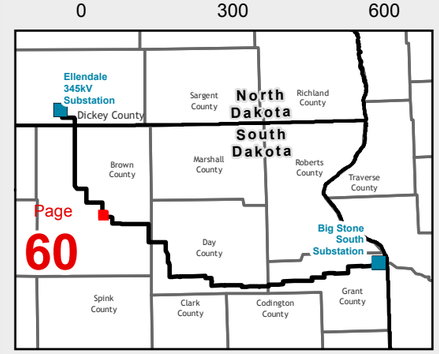
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 60

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Cambria Twp.

Sec. 28

Sec. 27

129 ST

Sec. 28
Sec. 33

Sec. 27
Sec. 34

129 ST

209-P

210-P

211-P

T124N
R62W

397 AVE

Sec. 33

Sec. 34

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

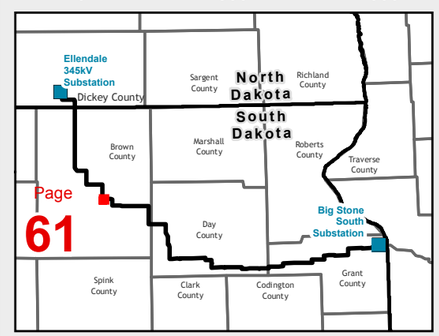
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 61

1:3,600

0 300 600 Feet

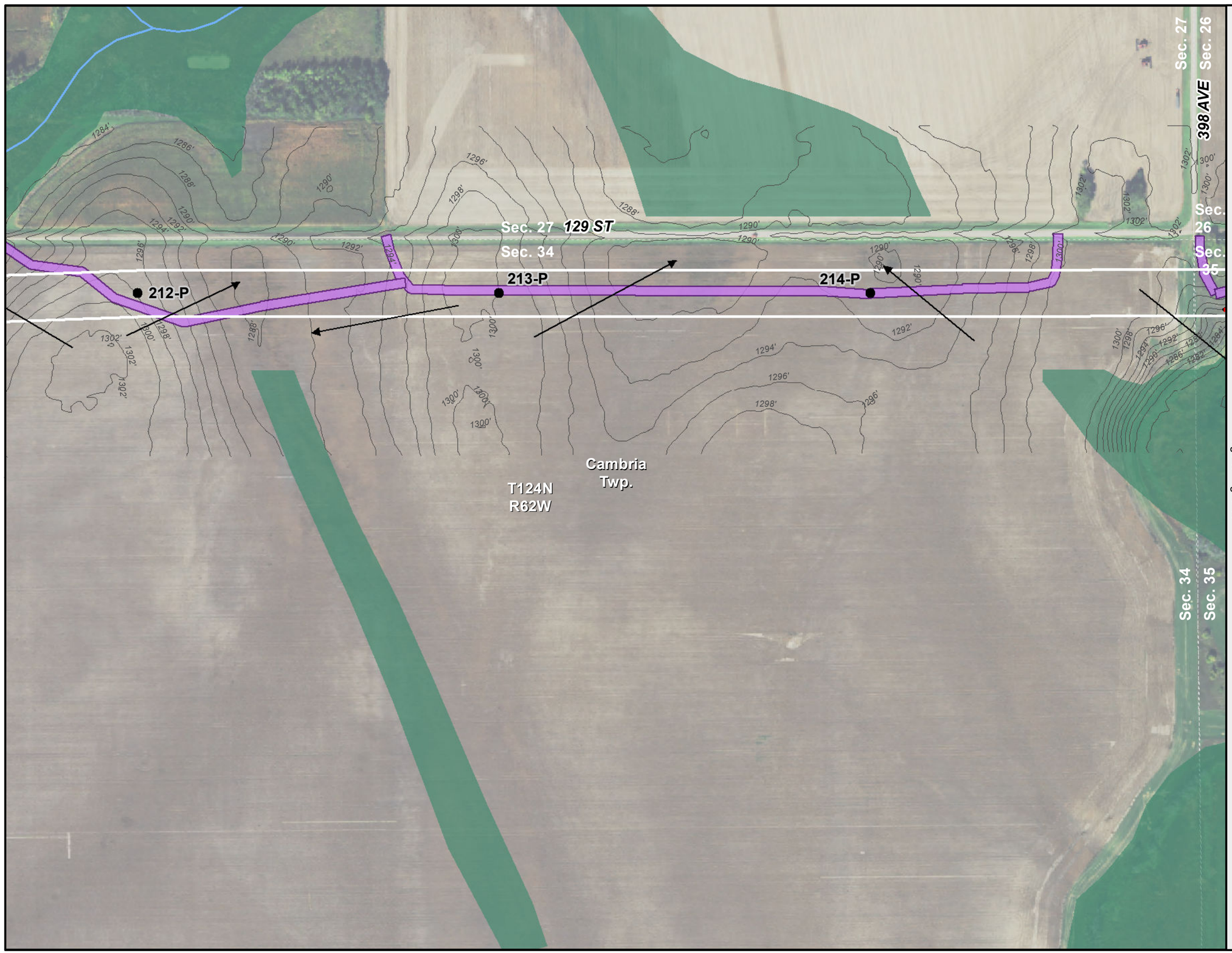



BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 61




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

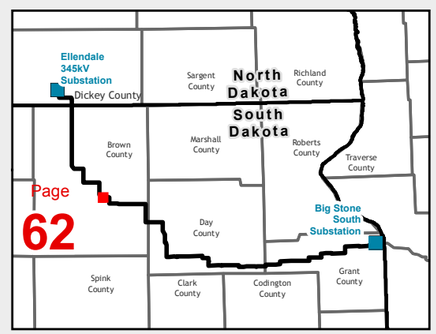
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 62

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 63

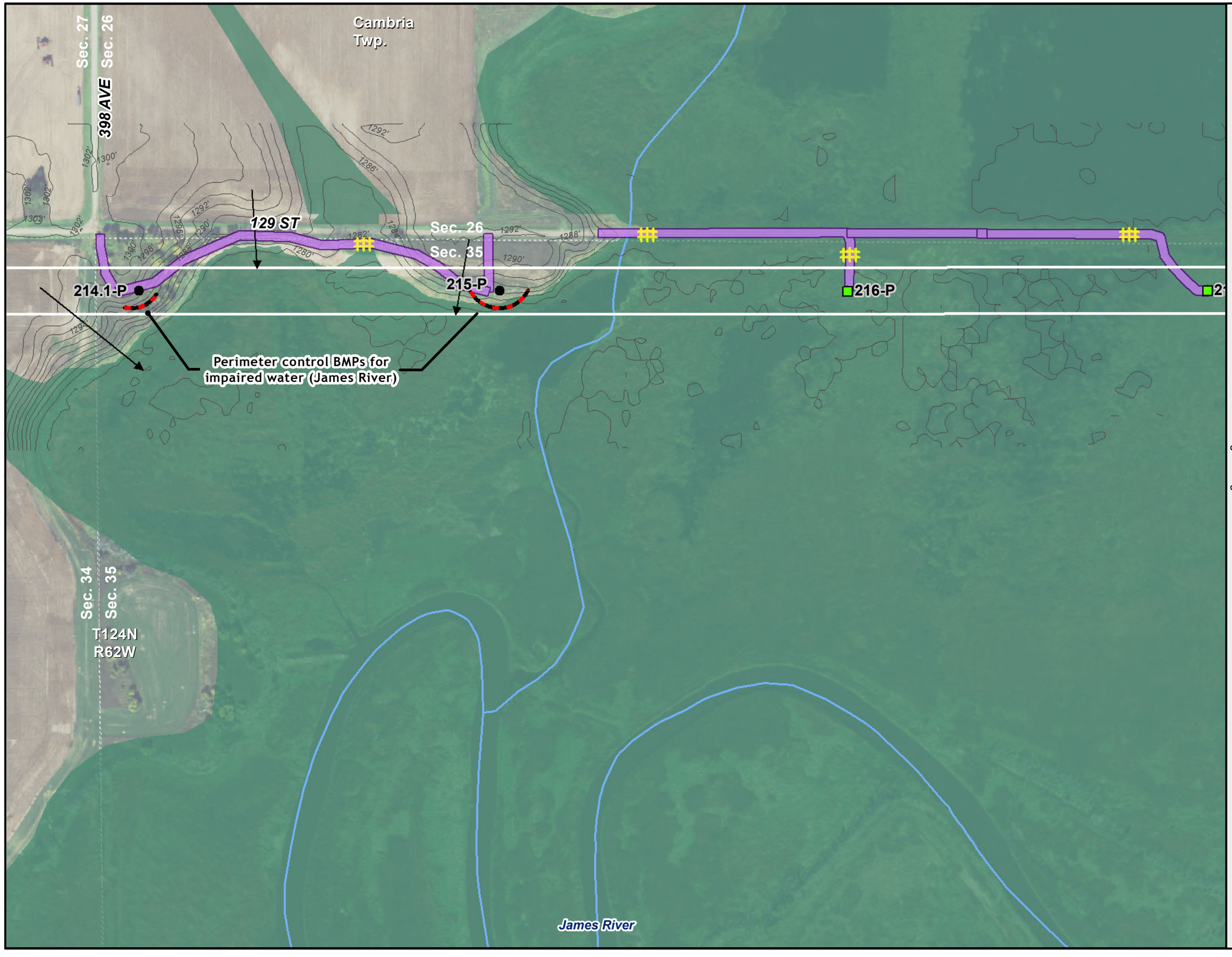
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 62




## SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

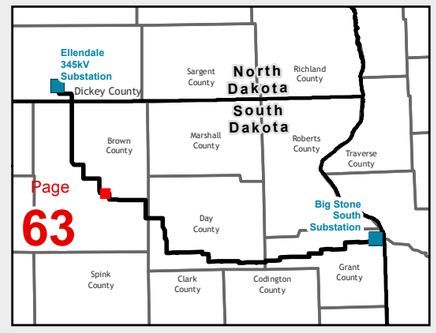
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 63

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

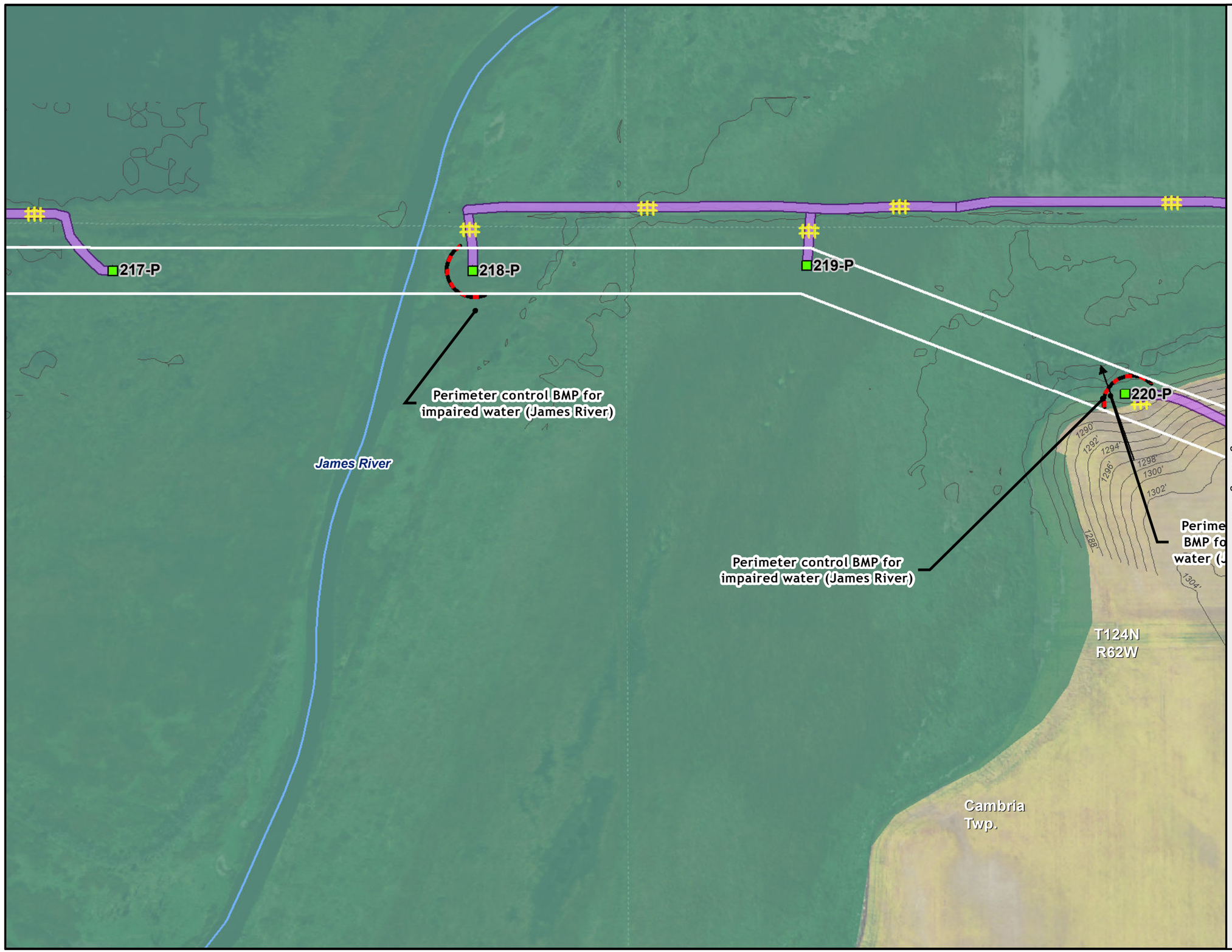
Page to Right: 64

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

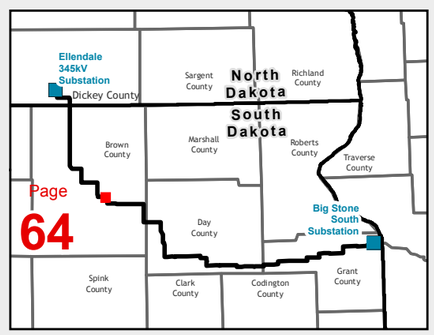
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 64

1:3,600

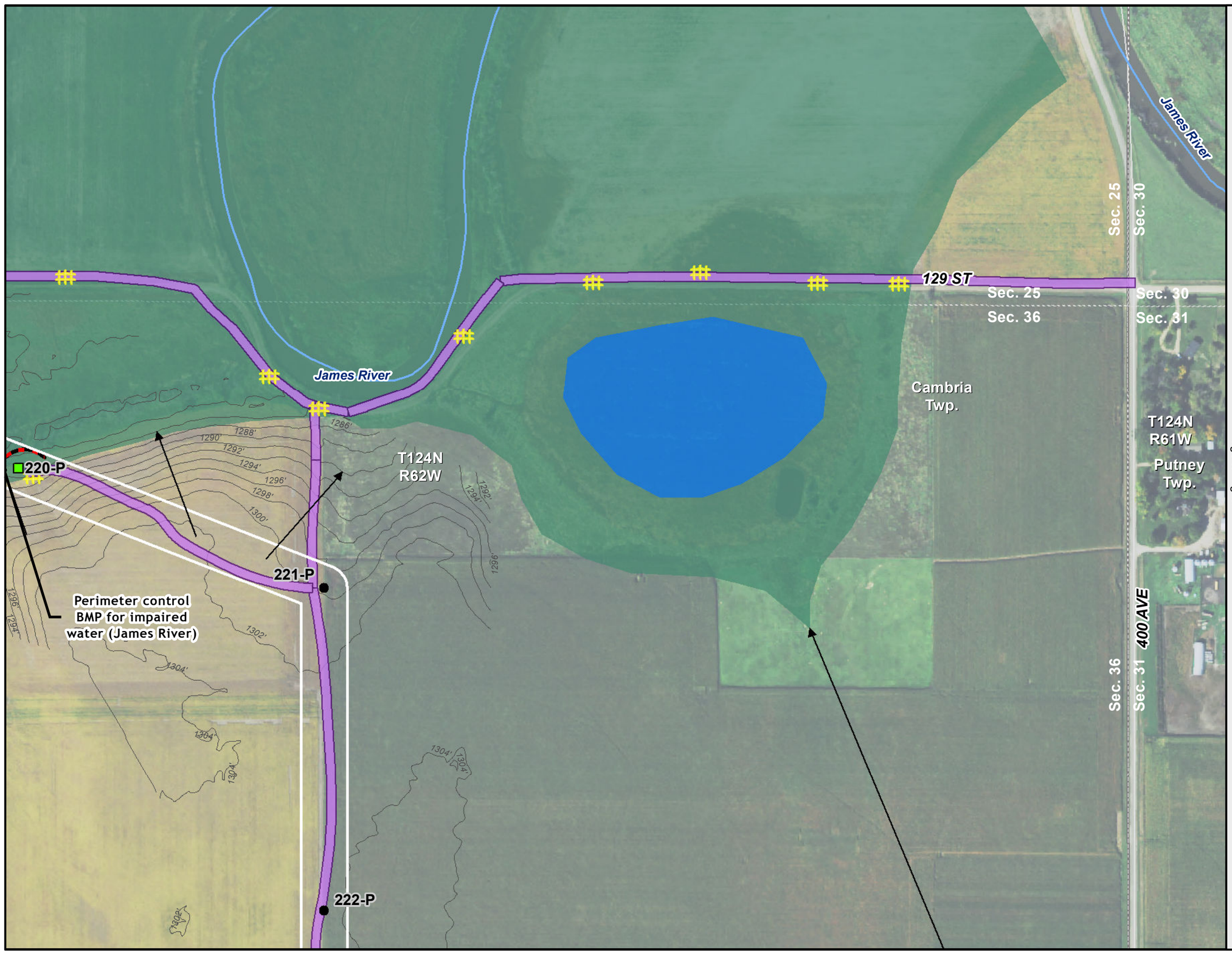
0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

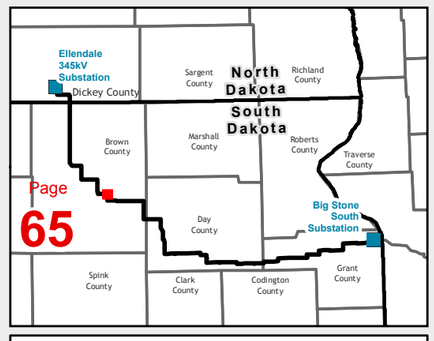
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 65

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

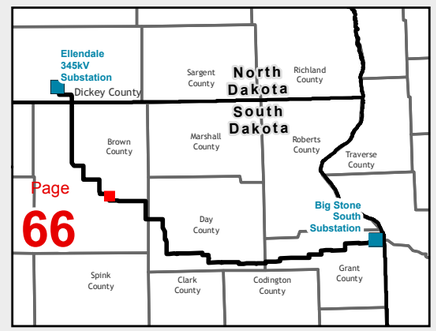
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 66

1:3,600

0 300 600 Feet

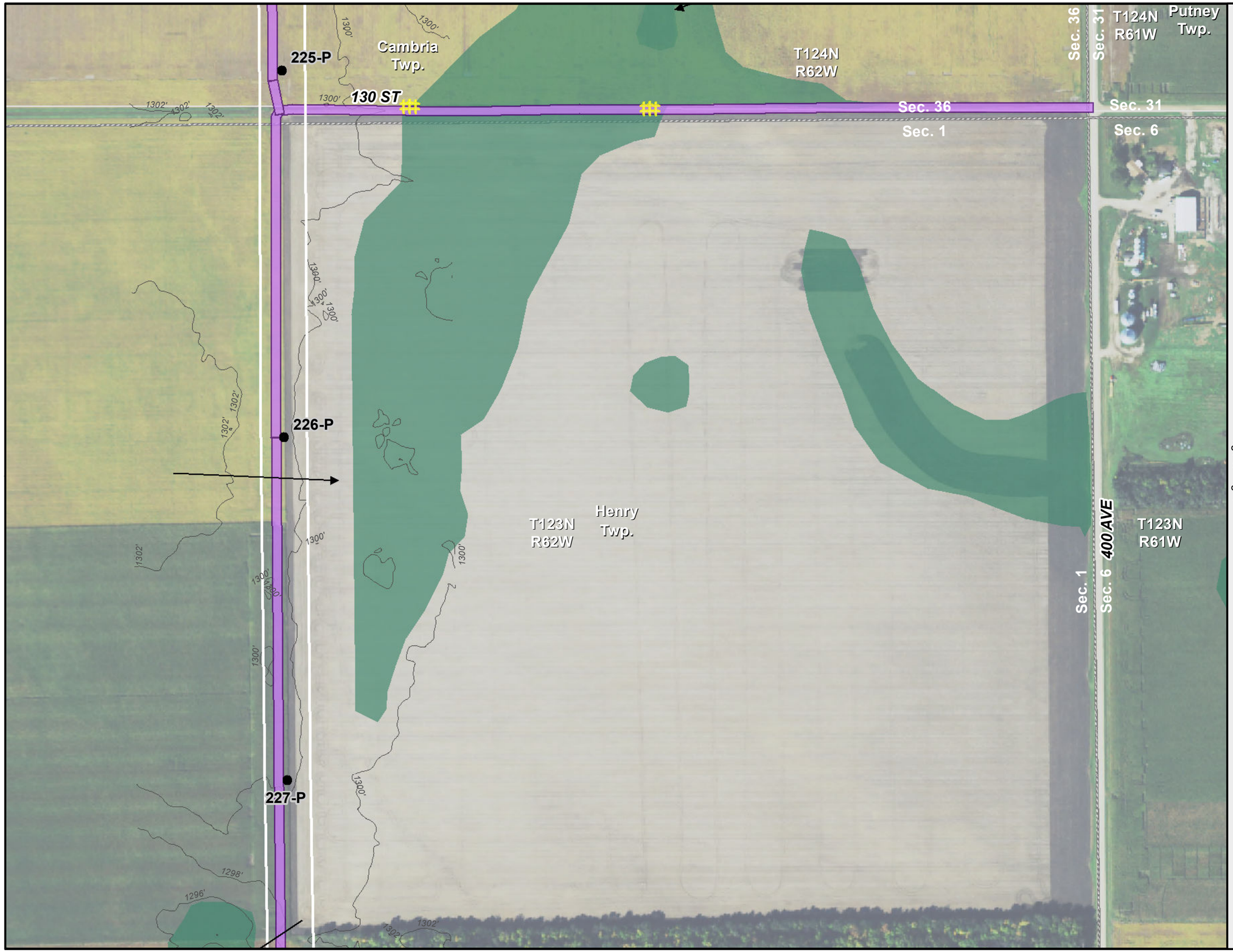



BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

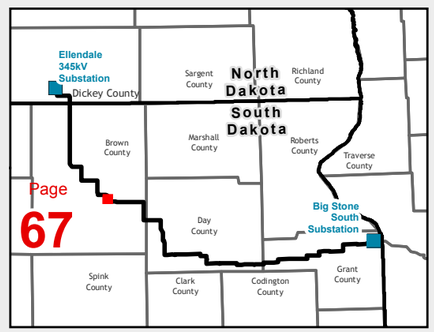
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 67

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

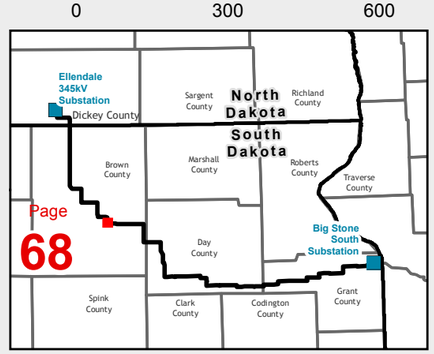
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 68

1:3,600

0 300 600 Feet



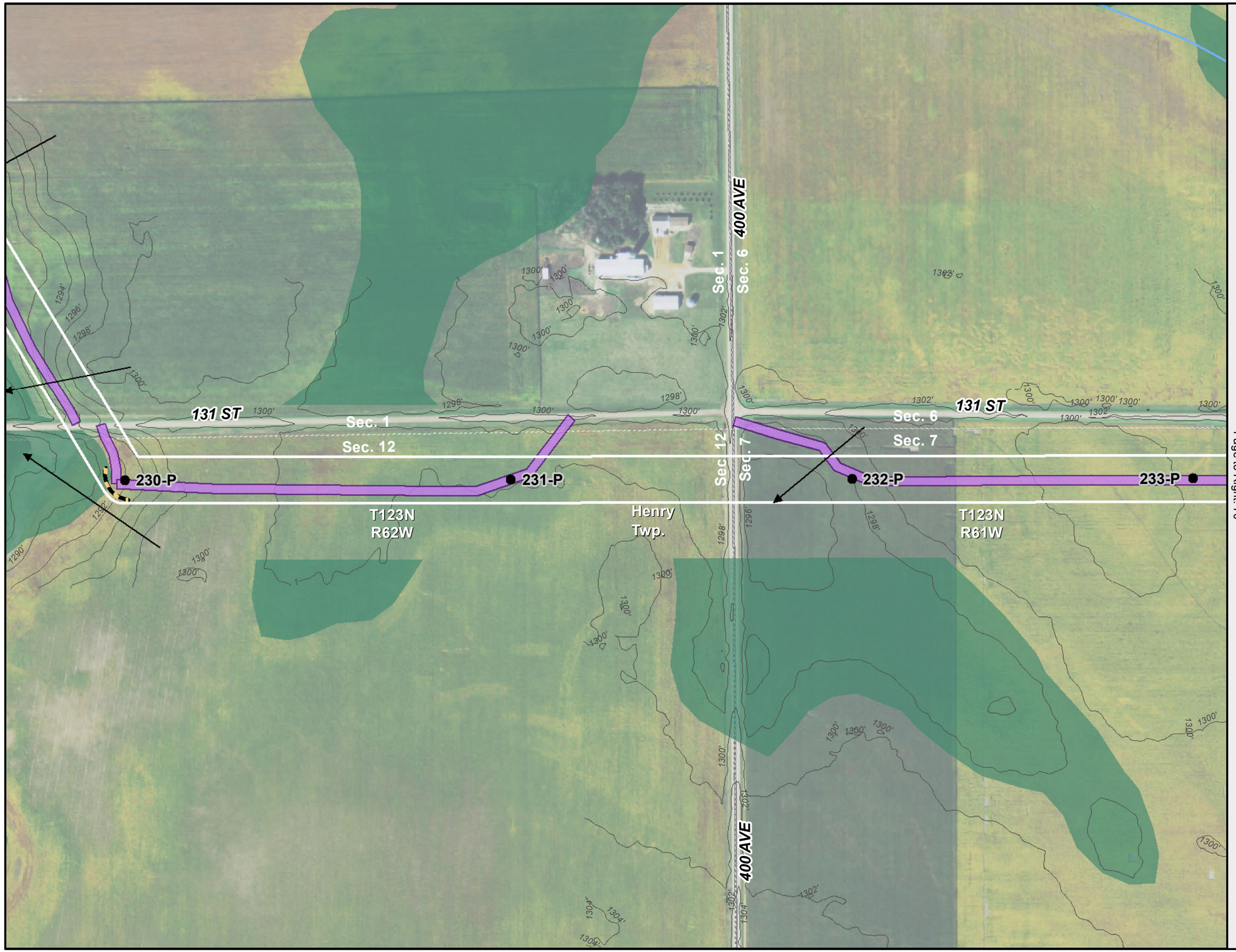

Big Stone South to Ellendale

228-P
229-P
230-P
231-P
232-P
131 ST
400 AVE
T123N R62W Henry Twp.
T123N R61W
Sec. 1
Sec. 12
Sec. 6
Sec. 7

Page to Top:

Date: 10/24/2015

Page to Left: 68




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

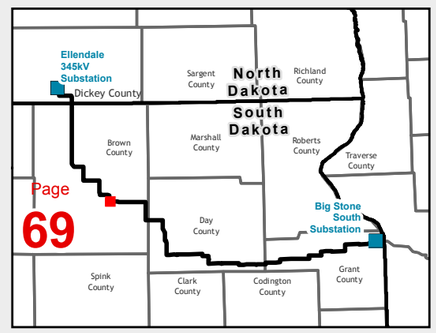
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 69

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 70

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015



Henry Twp.

Sec. 6 | Sec. 5

131 ST

Sec. 6

Sec. 7

233-P | 234-P | 235-P | 236-P

T123N
R61W

Sec. 7 | Sec. 8

401 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

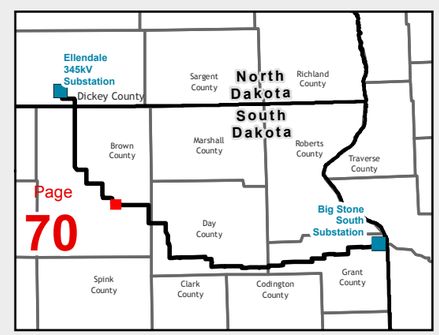
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 70

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 70

T123N
R61W

Henry
Twp.

131 ST

Sec. 5

Sec. 8

237-P

238-P

239-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

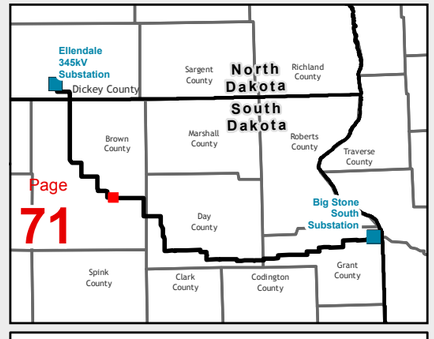
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 71

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 72

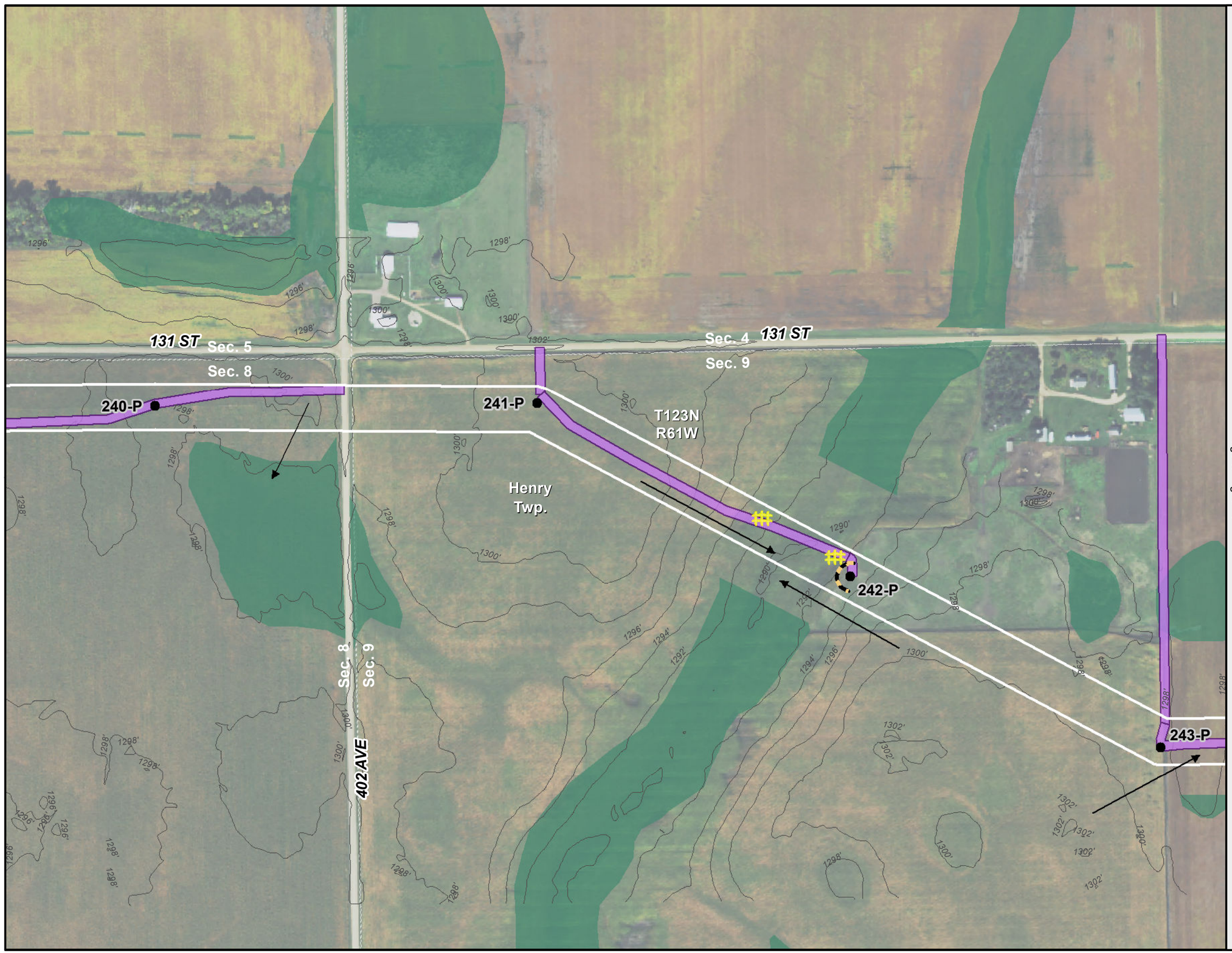
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 71




**SWPPP - Erosion Control Plan**
Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

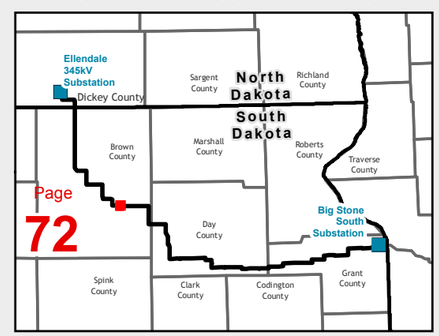
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

**Brown County**
**Page 72**

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 73

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

131 ST Sec. 4
Sec. 9
Sec. 4
Sec. 3
131 ST Sec. 3
Sec. 10
Sec. 9
Sec. 10
403 AVE
Henry Twp.
T123N R61W
243-P
244-P
245-P
246-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

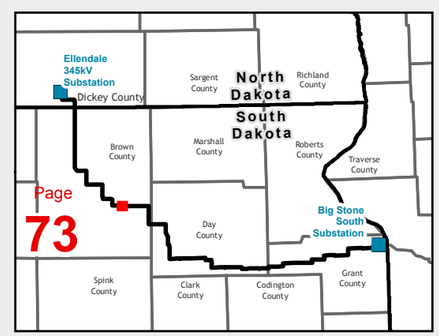
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 73

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Henry Twp.

Sec. 3

131 ST

Sec. 10

246-P

247-P

248-P

249-P

T123N
R61W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

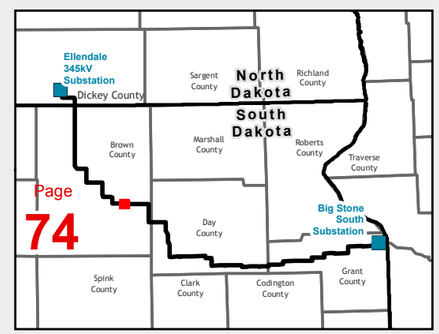
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 74

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

T123N
R61W

404 AVE

131 ST

Sec. 3

Sec. 10

Sec. 2

Sec. 11

Sec. 10

Sec. 11

Henry
Twp.

Groton
Twp.

249-P

250-P

251-P

252-P

1304'

1302'

1306'

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

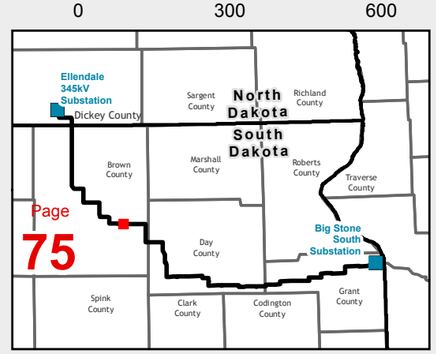
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 75

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 75

131 ST Sec. 2
Sec. 11
405 AVE
Sec. 1
131 ST
Sec. 12
Groton
Twp.
253-P
254-P
255-P
T123N
R61W
Sec. 11
405 AVE
Sec. 12

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

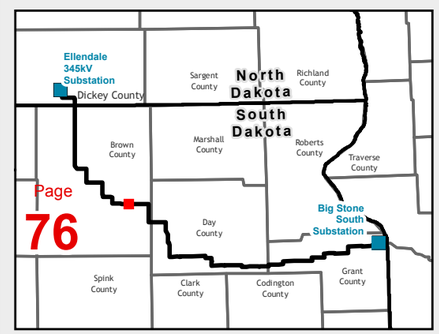
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 76

1:3,600
Feet
0 300 600




BSSE
Big Stone South to Ellendale

Page to Right: 77

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Groton Twp.

Sec. 1

Sec. 12

131 ST

257-P

256-P

258-P

T123N
R61W

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

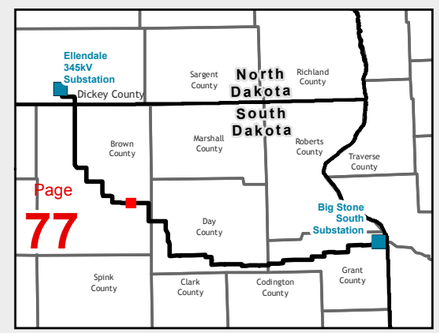
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 77

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Sec. 1
Sec. 12
Sec. 1
Sec. 6
131 ST
Sec. 6
Sec. 7
T123N
R61W
SD HWY 37
37
Groton
Twp.
T123N
R60W
259-P
260-P
261-P
Sec. 12
Sec. 7

## SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

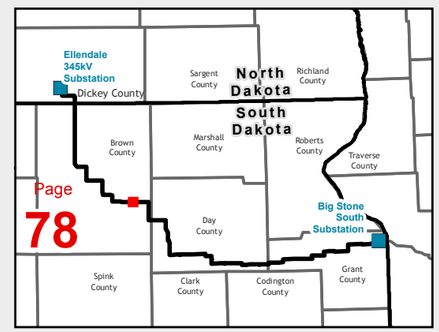
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

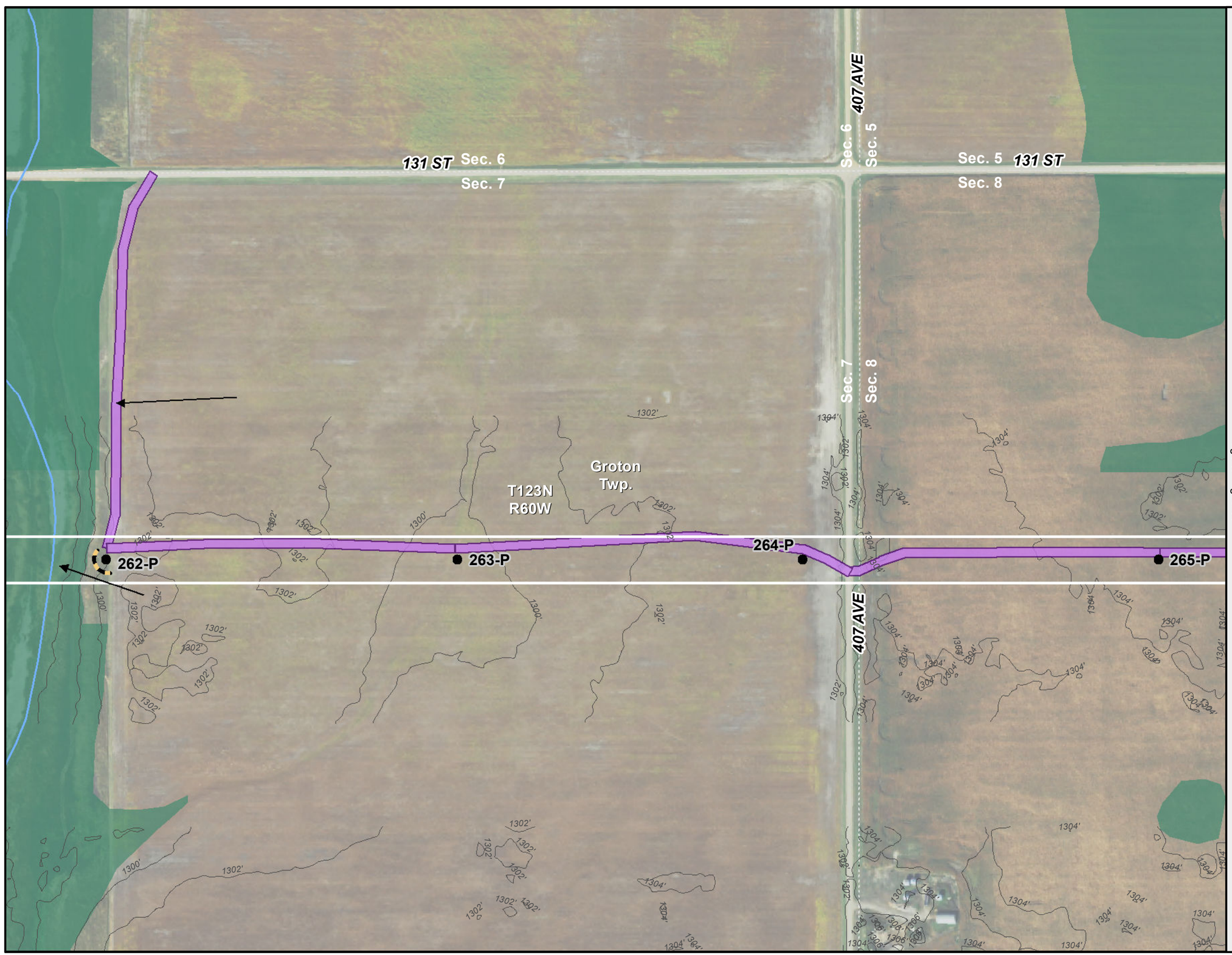
## Brown County
## Page 78

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




**SWPPP - Erosion Control Plan**
Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

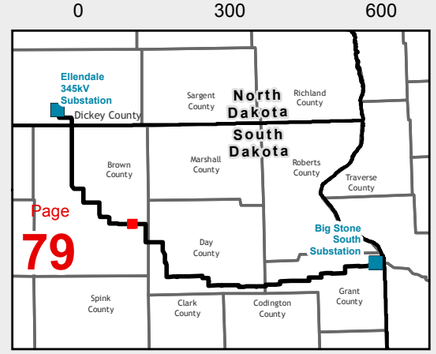
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

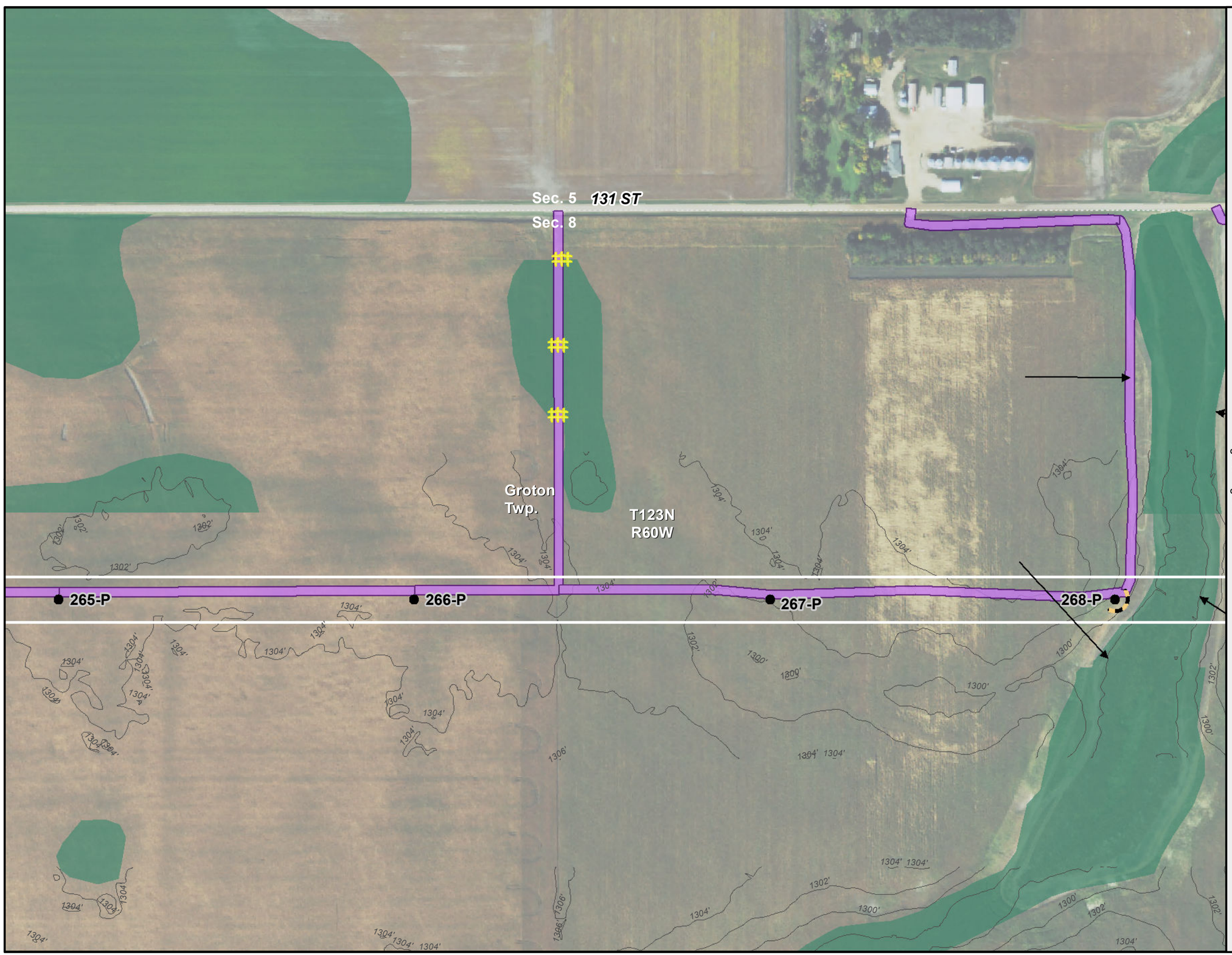
**Brown County**
**Page 79**

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

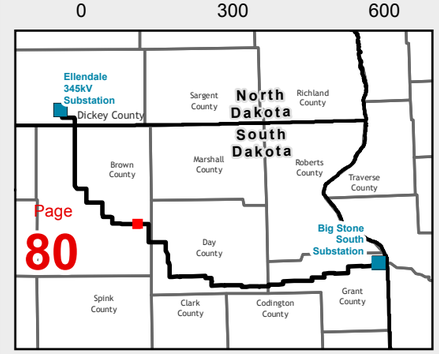
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 80

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 80

T123N
R60W

Sec. 5
Sec. 4
Sec. 8
Sec. 9
131 ST
Groton
Twp.

268-P
269-P
270-P
271-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

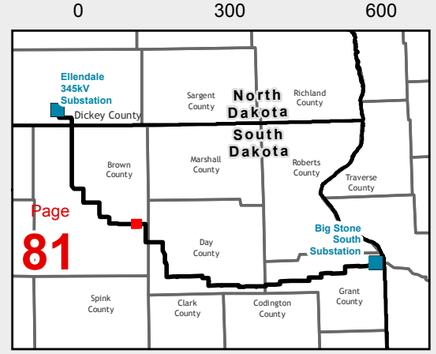
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 81

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 82

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Groton Twp.

Sec. 4

Sec. 3

131 ST Sec. 4

Sec. 9

Sec. 3 131 ST

Sec. 10

Sec. 9

Sec. 10

409 AVE

T123N R60W

272-P

273-P

274-P

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

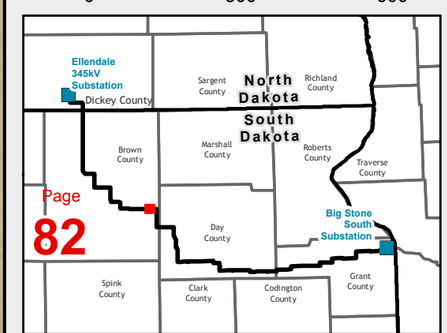
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

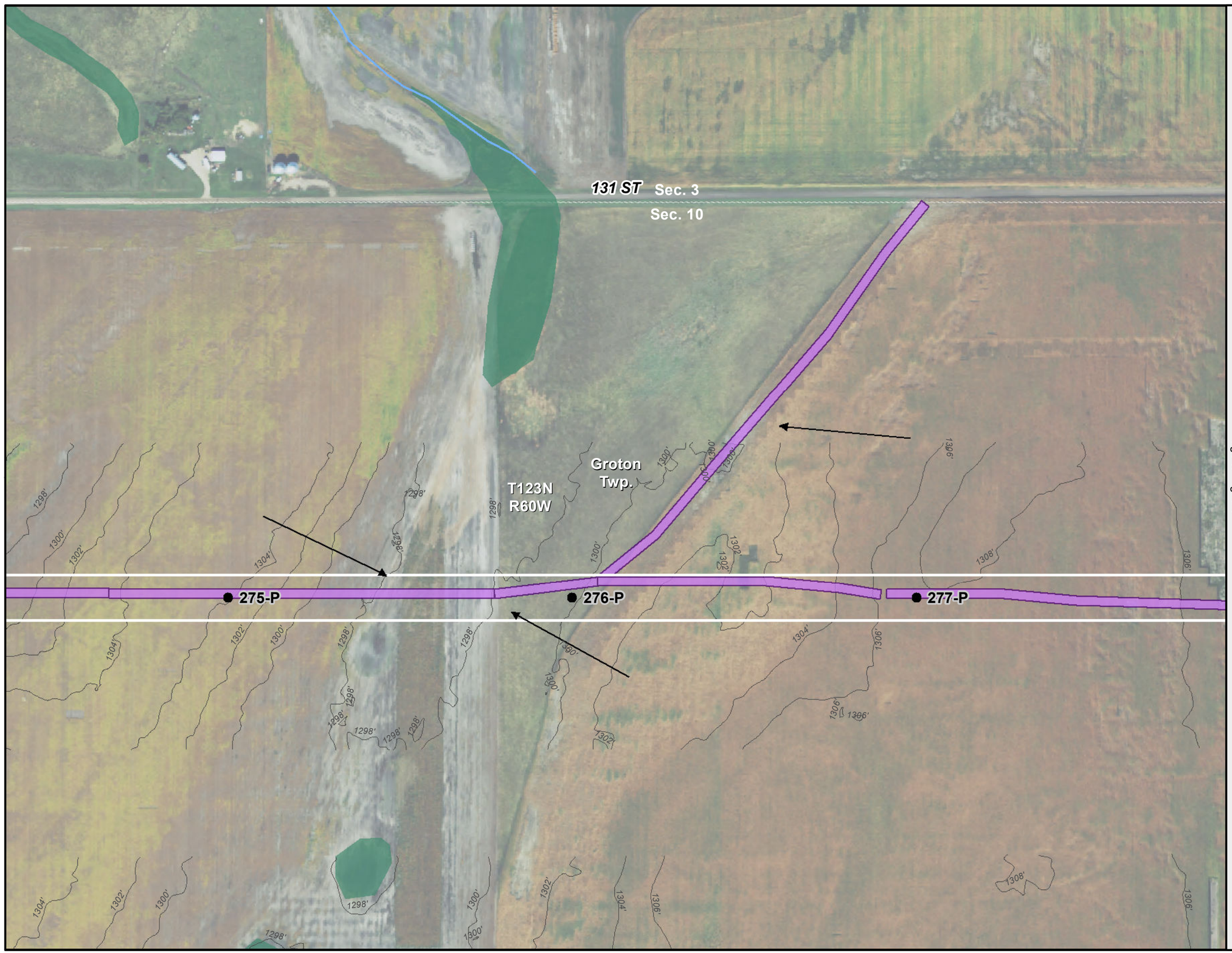
## Brown County Page 82

1:3,600

0 300 600 Feet




Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

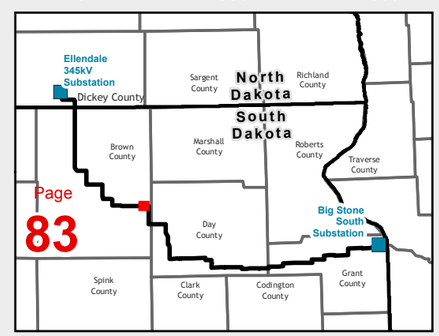
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 83

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015

Sec. 3 | Sec. 2

131 ST Sec. 3 / Sec. 10

131 ST Sec. 2 / Sec. 11

Road may no longer exist. If road is used matting may be needed to cross this section.

Groton Twp.

T123N R60W

410 AVE

277.1-P | 278-P | 279-P | 280-P

Sec. 10 | Sec. 11

1306' 1304' 1308'

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

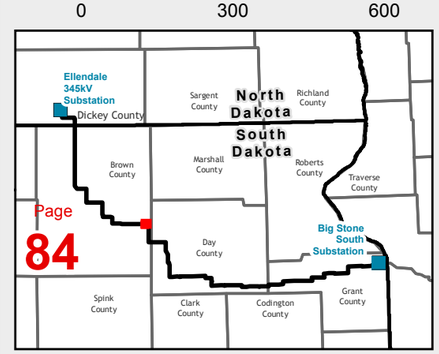
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 84

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Left: 83

Page to Right: 85

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Sec. 2
131 ST
Sec. 11
Sec. 2
Sec. 1
Sec. 1
131 ST
Sec. 12
T123N
R60W
Groton
Twp.
411 AVE
280-P
281-P
282-P
Sec. 11
Sec. 12
1310'
1308'
1312'

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

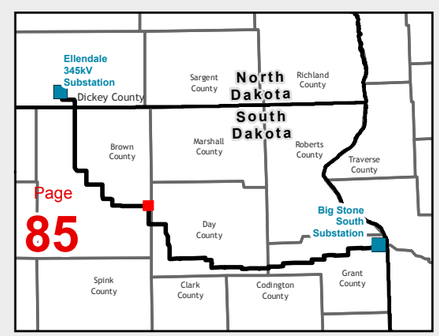
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 85

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 85

Page to Right: 87

283-P

284-P

285-P

411 AVE

T123N
R60W

Groton
Twp.

Sec. 12

Sec. 11

Sec. 13

Sec. 14

132 ST

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

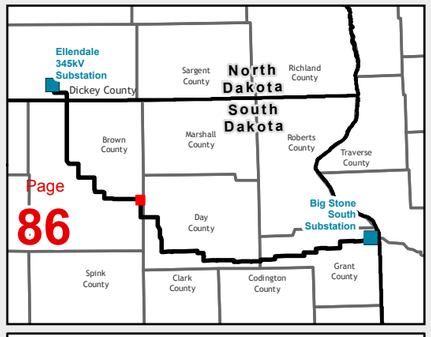
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 86

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Sec. 12
Sec. 13
Sec. 11
Sec. 14
132 ST
411 AVE
T123N
R60W
Groton
Twp.
286-P
287-P
288-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

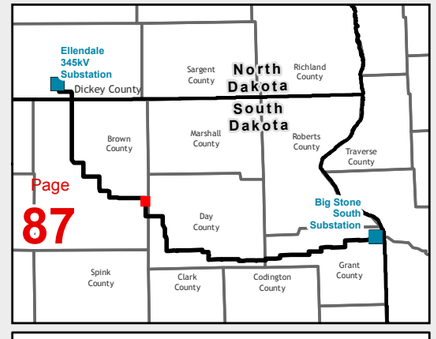
*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.
**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 87

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 87

Groton Twp. T123N R60W

Sec. 13
Sec. 24
Sec. 14
Sec. 23

289-P
290-P
291-P

411 AVE
411 AVE

133 ST

1328'
1324'
1322'
1326'
1318'
1320'
1314'
1316'

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

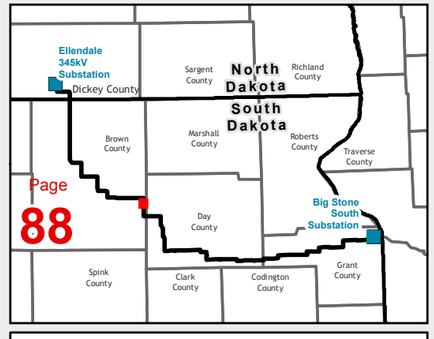
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 88

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 89

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 88

Groton Twp.

292-P

293-P

294-P

411 AVE

T123N R60W

Sec. 24

Sec. 23

Sec. 25

Sec. 26

134 ST

1324'

1326'

1328'

1330'

1332'

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

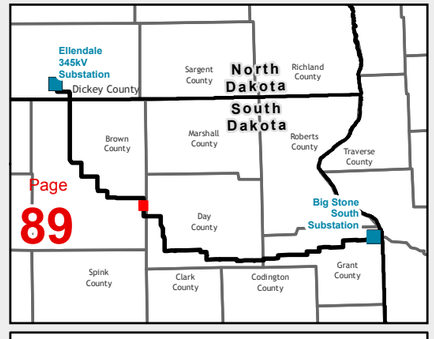
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 89

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 90



Page to Bottom:

Date: 10/24/2015

Page to Left: 89

Groton Twp. T123N R60W

294.1-P
295-P
296-P
297-P
411 AVE
Sec. 25
Sec. 26

1330'
1336'
1338'
1334'
1332'
1328'
1326'

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

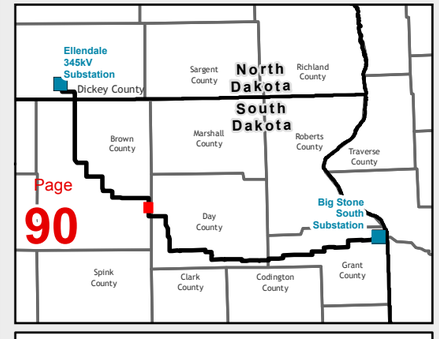
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 90

1:3,600

0 300 600 Feet

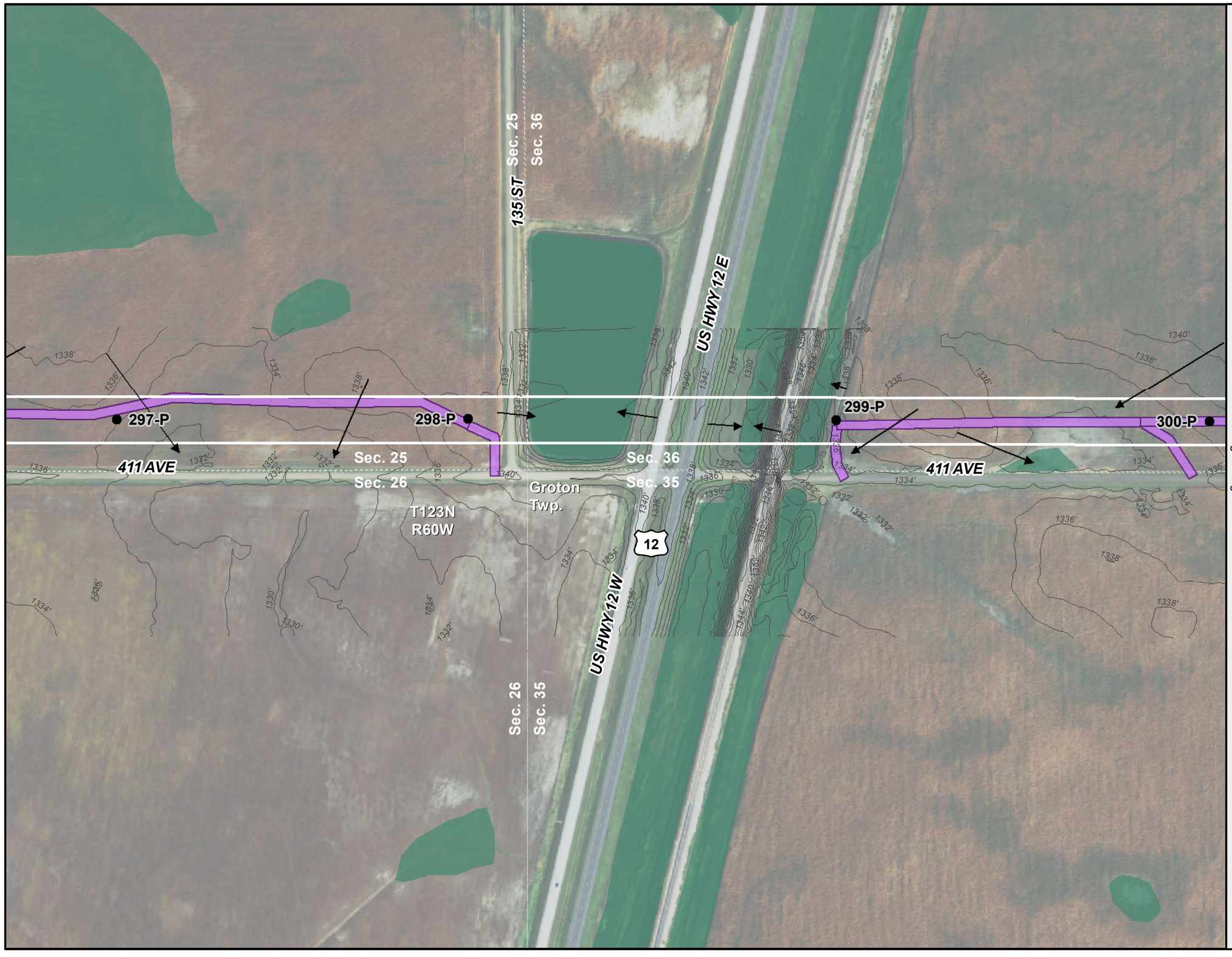



BSSE
Big Stone South to Ellendale

Page to Right: 91

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Left: 90




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

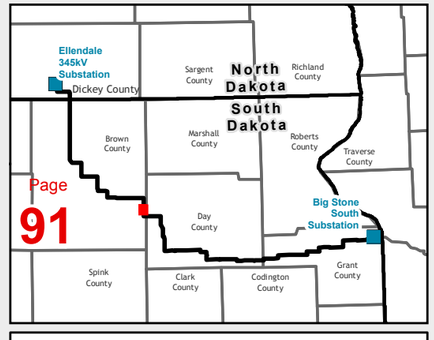
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 91

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 92

Groton Twp.

Sec. 36

136 ST

Sec. 1

T122N R60W

300-P

301-P

302-P

Sec. 36

Sec. 35

411 AVE

T123N R60W

East Hanson Twp.

Sec. 35

Sec. 2

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

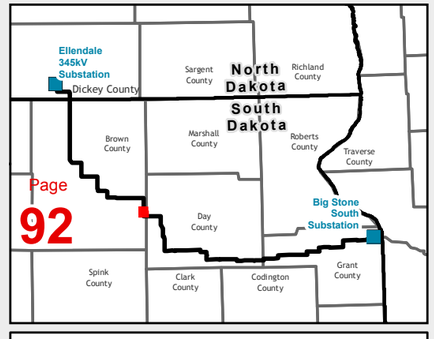
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 92

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 92

East Hanson Twp.

303-P

304-P

305-P

411 AVE

Sec. 1

Sec. 2

T122N
R60W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

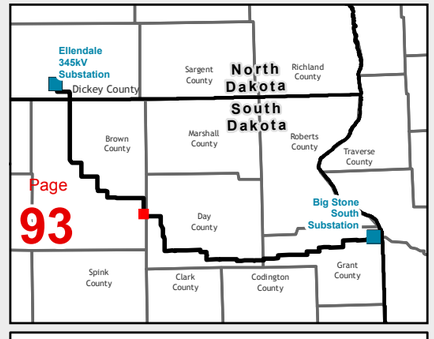
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 93

1:3,600

0 300 600 Feet



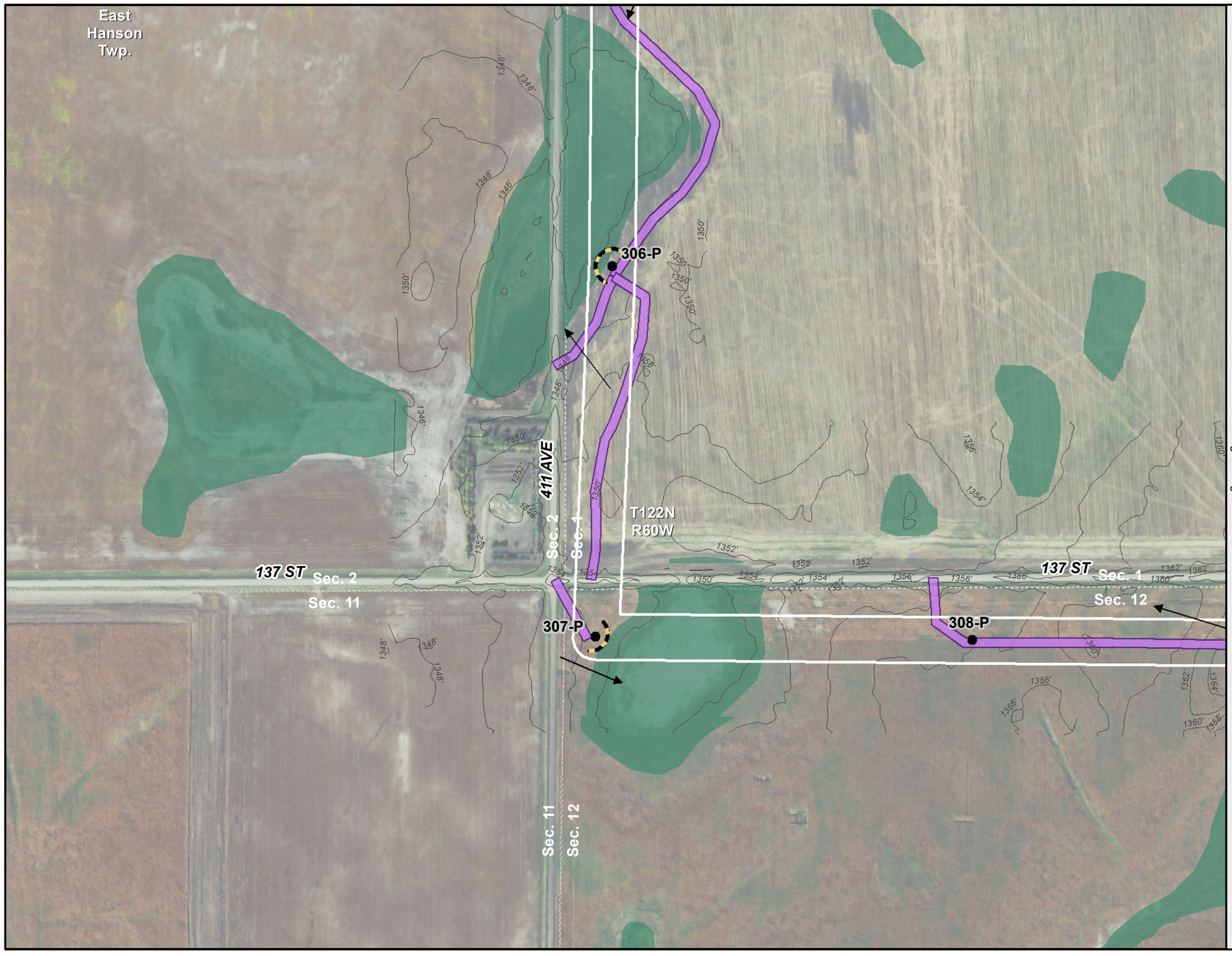

BSSE
Big Stone South to Ellendale

Page to Right: 94

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

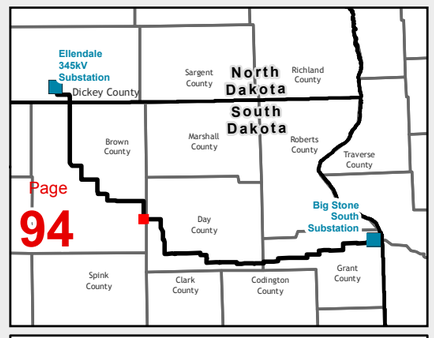
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 94

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left:

Page to Right: 95

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

East Hanson Twp.

Andover Twp.

137 ST

Sec. 1

Sec. 12

Sec. 6

309-P

310-P

311-P

T122N R60W

T122N R59W

Brown County 412 AVE

Sec. 12

Sec. 7

Day County

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

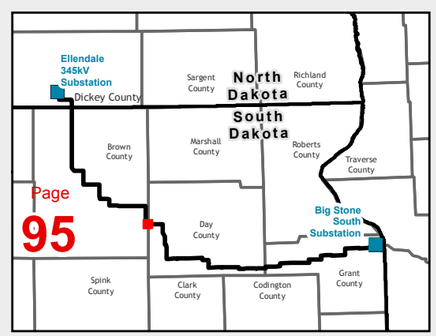
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Brown County
## Page 95

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Andover Twp.

T122N R59W

Sec. 1

Sec. 6

T122N R60W

East Hanson Twp.

Sec. 6

Sec. 7

137 ST

312-P

313-P

314-P

Brown County

412 AVE

Sec. 12

Day County

Sec. 7

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

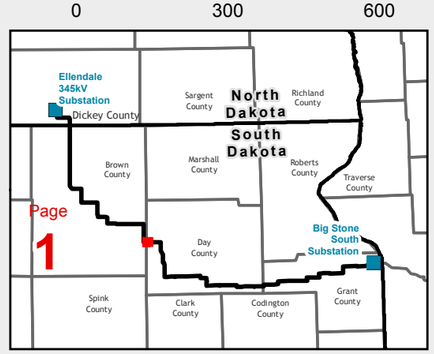
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 1

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 1

Andover Twp. T122N R59W

Sec. 6 | Sec. 5

137 ST

Sec. 6 | Sec. 5

Sec. 7 | Sec. 8

137 ST

315-P | 316-P | 317-P

Sec. 7 | Sec. 8

413 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

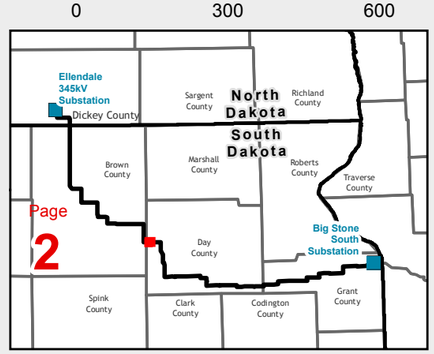
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 2

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 3

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 2

Page to Right: 4

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

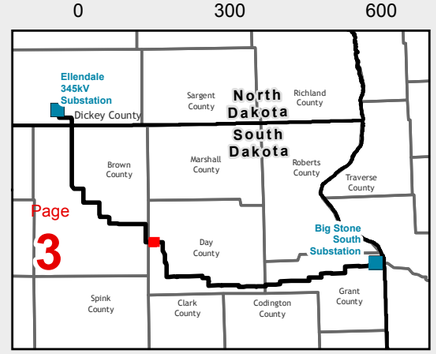
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 3

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Sec. 5
Sec. 8
Andover Twp.
137 ST
Sec. 4
Sec. 9
318-P
319-P
320-P
T122N
R59W
Sec. 8
Sec. 9
414 AVE

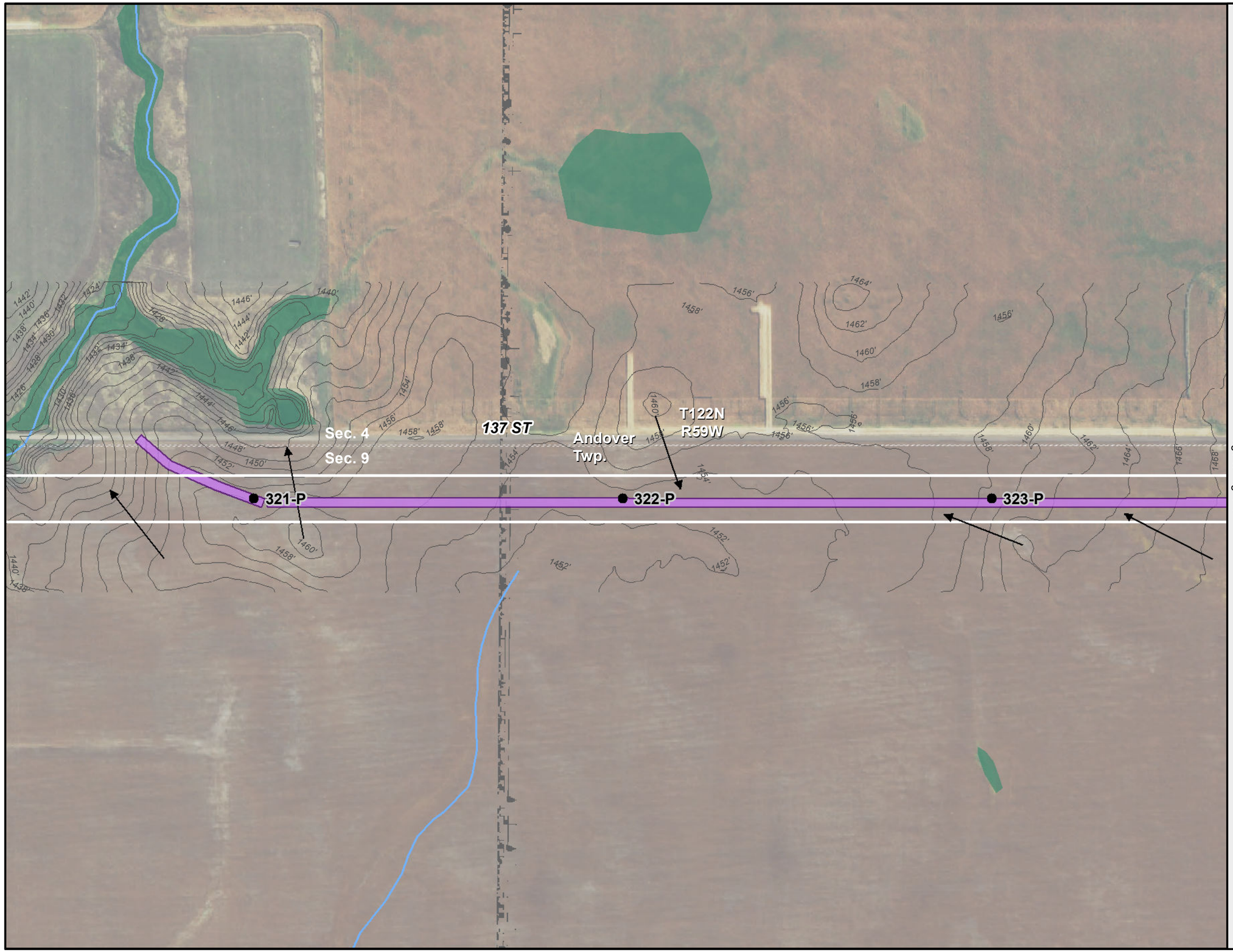
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 3




Page to Right: 5

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

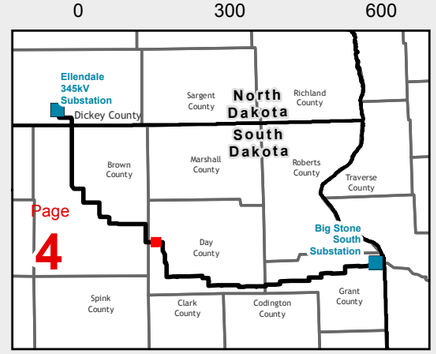
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 4

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 4

Andover Twp.

Sec. 4 | Sec. 3

137 ST

Sec. 4 | Sec. 3

Sec. 9 | Sec. 10

137 ST

324-P | 325-P | 326-P

T122N
R59W

Sec. 9 | Sec. 10

415 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

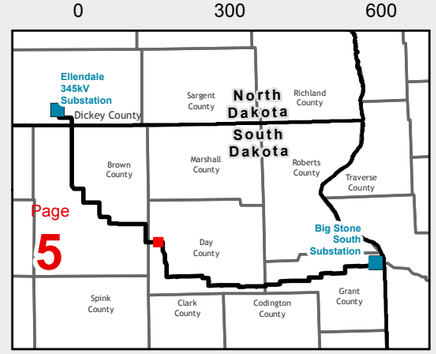
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 5

1:3,600

0 300 600 Feet

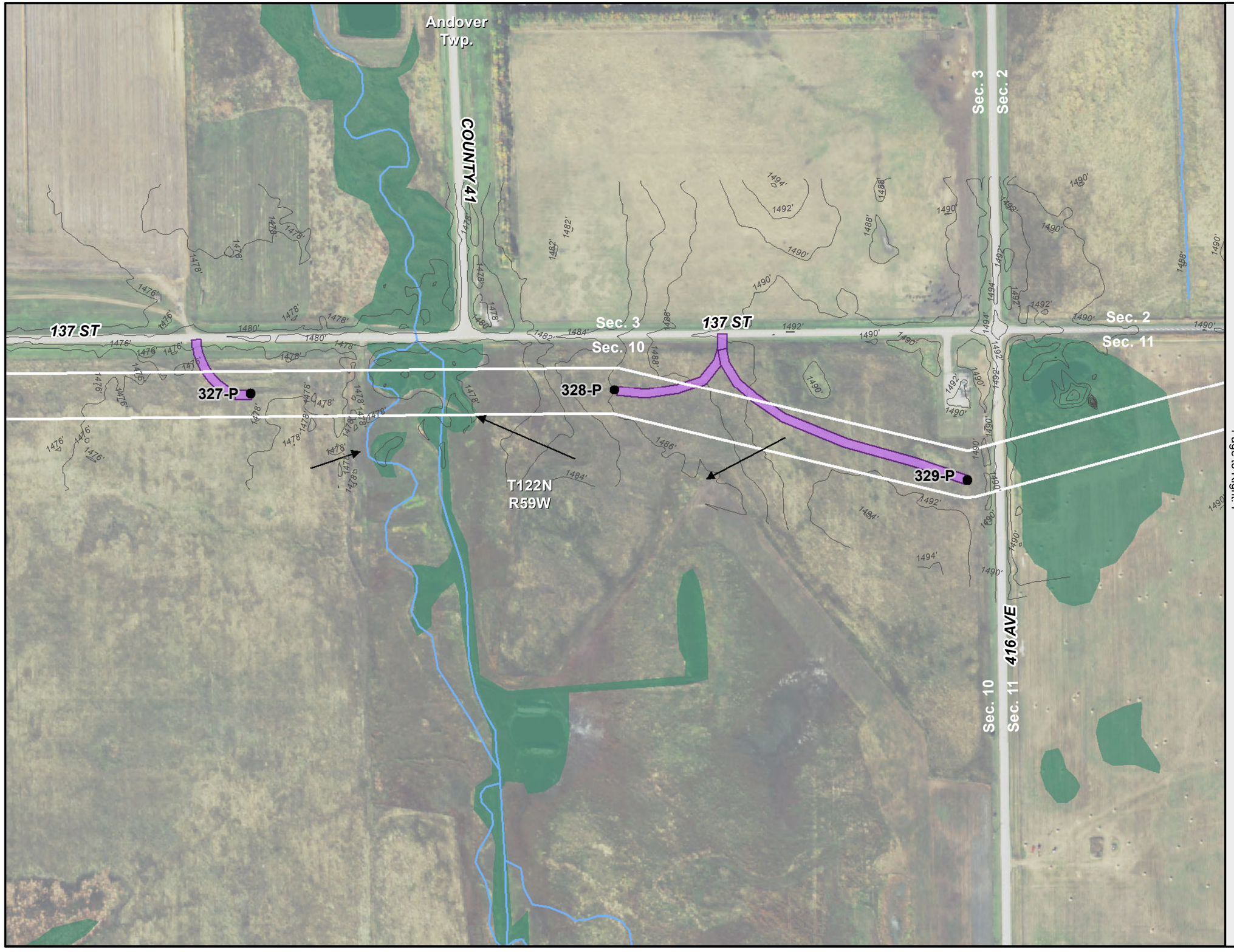



BSSE
Big Stone South to Ellendale

Page to Right: 6

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

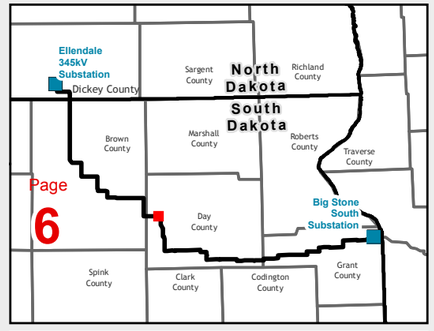
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 6

1:3,600

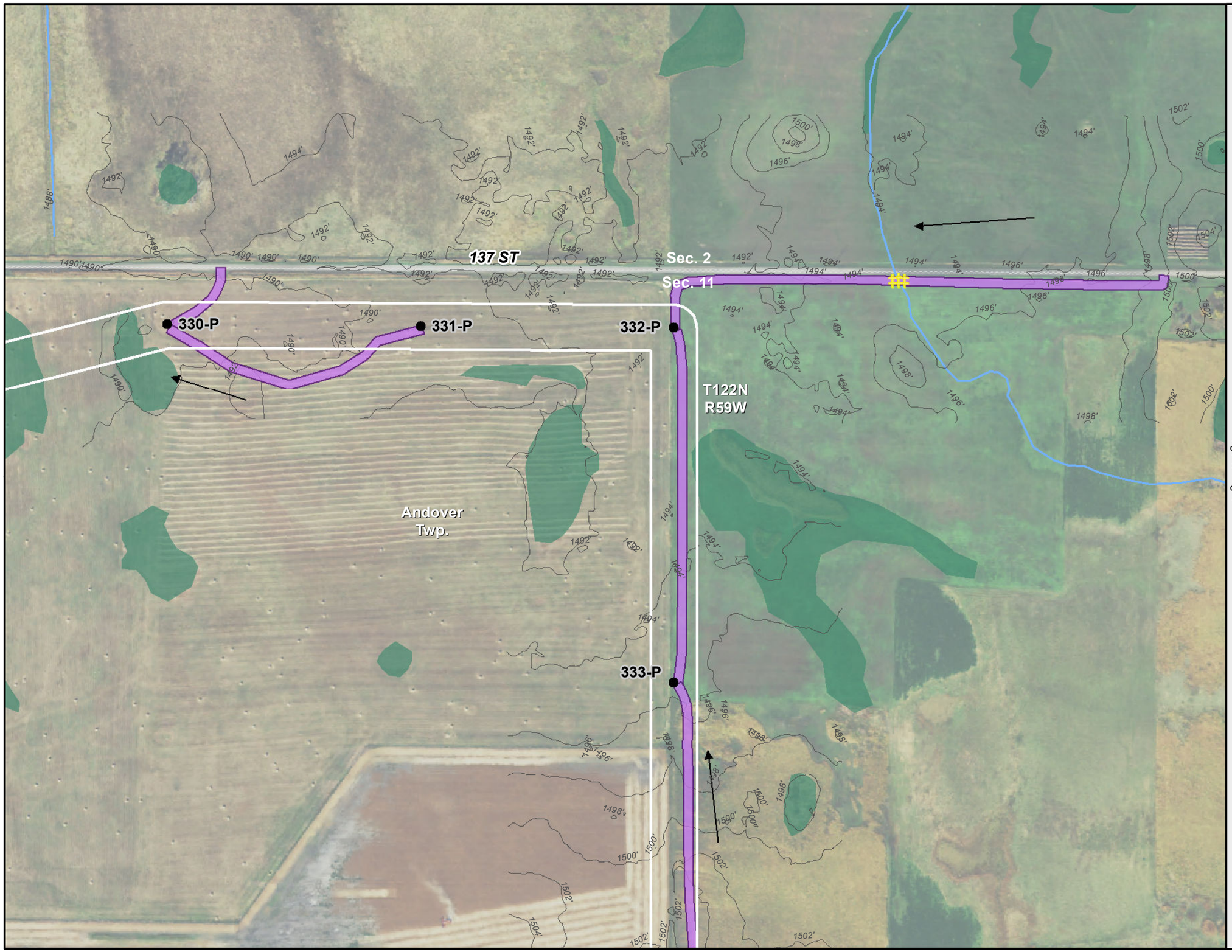
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

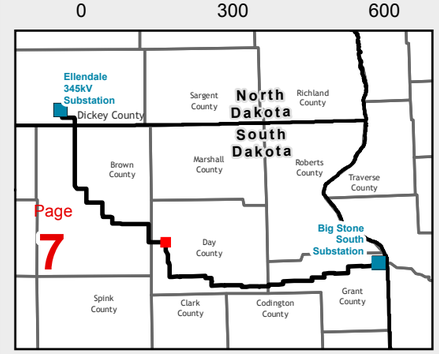
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 7

1:3,600

0 300 600 Feet



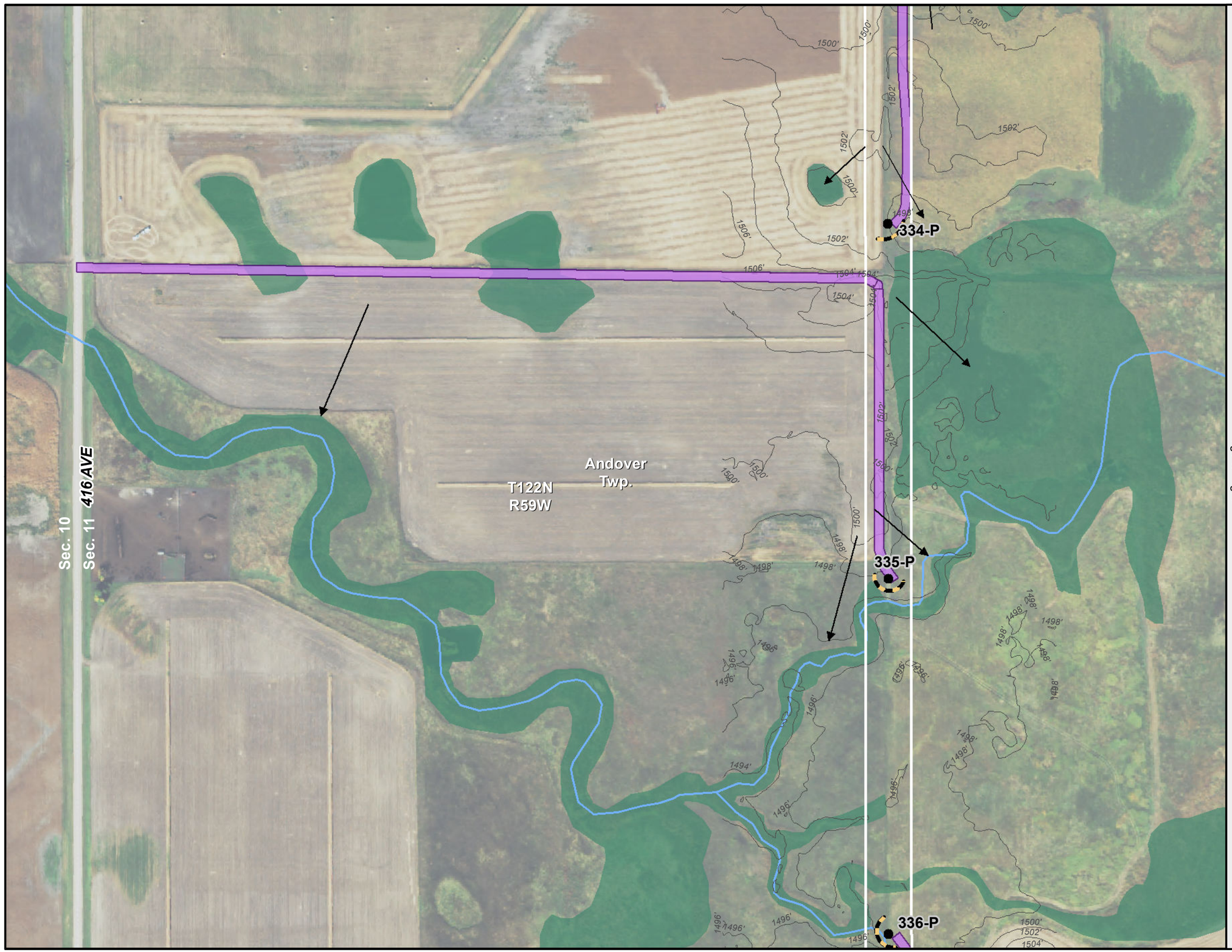

BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015

Page to Left:




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

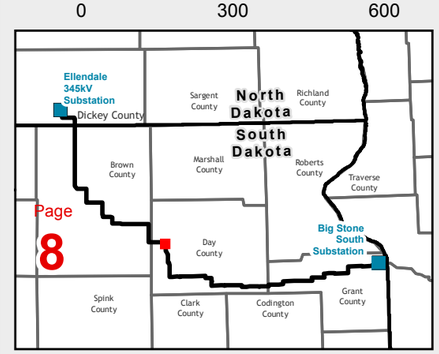
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 8

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015



336-P

337-P

338-P

Sec. 11

Sec. 14

Sec. 12

Sec. 13

Sec. 11

Sec. 12

Sec. 14

Sec. 13

138 ST

417 AVE

Andover Twp.

T122N R59W

1496'
1498'
1500'
1502'
1504'
1506'
1508'

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

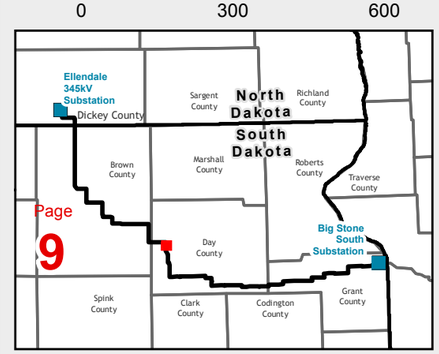
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 9

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

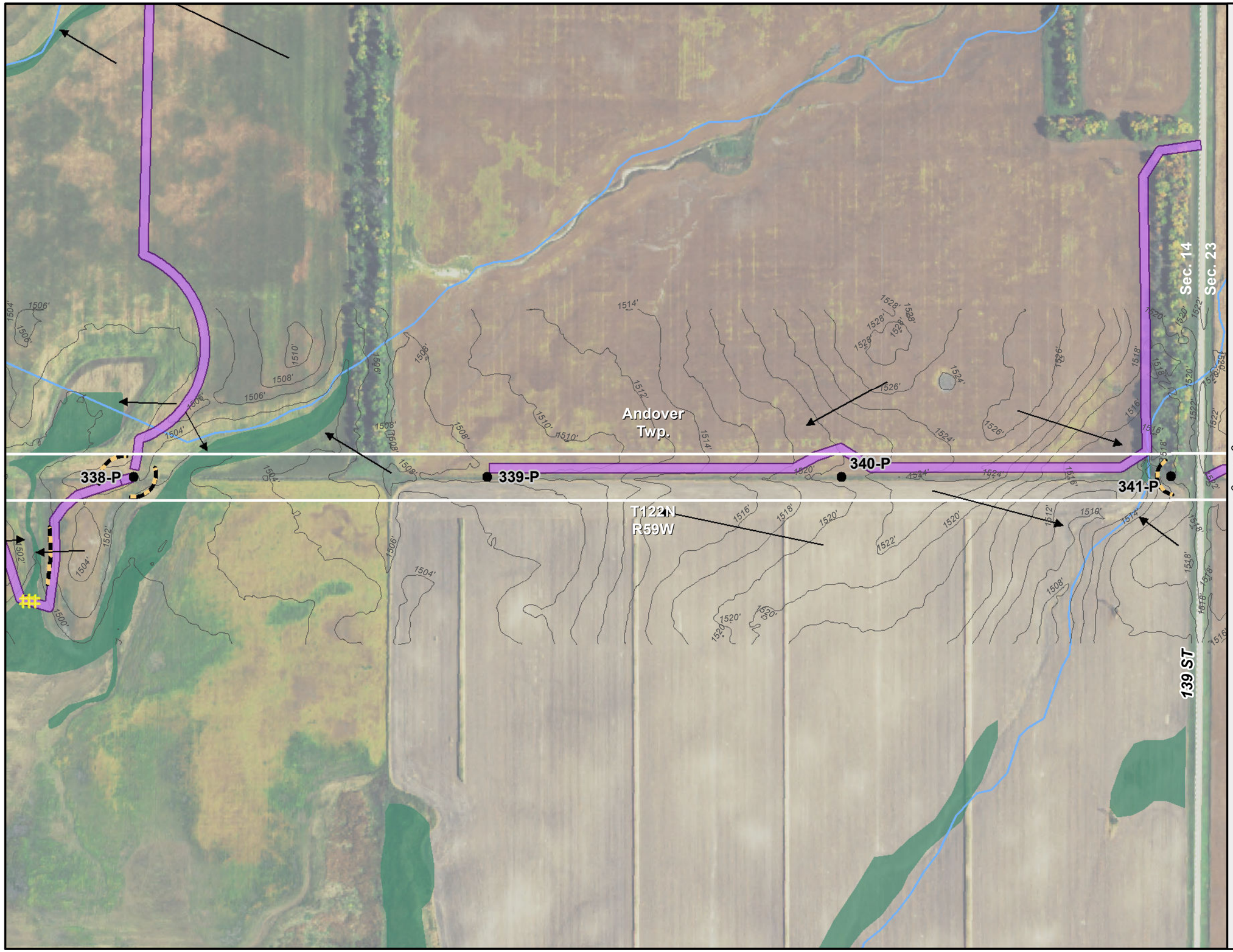


Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 9




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

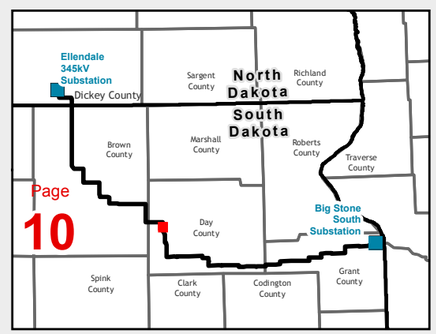
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 10

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Right: 11

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Andover Twp.

Sec. 14

Sec. 23

341-P

342-P

343-P

344-P

T122N
R59W

139 ST

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

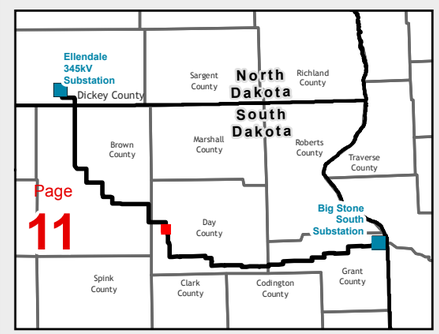
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

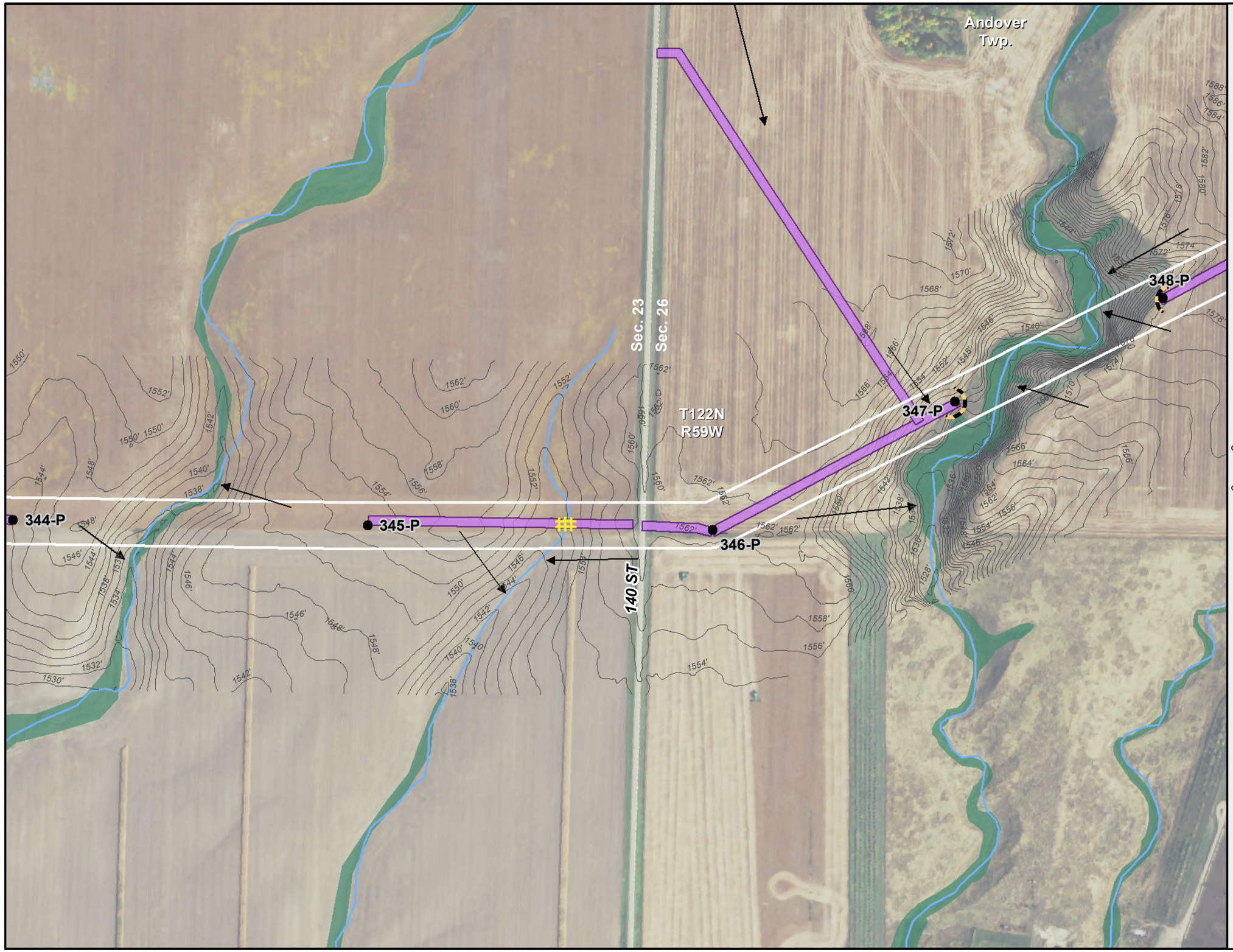
## Day County
## Page 11

1:3,600

0 300 600 Feet




Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

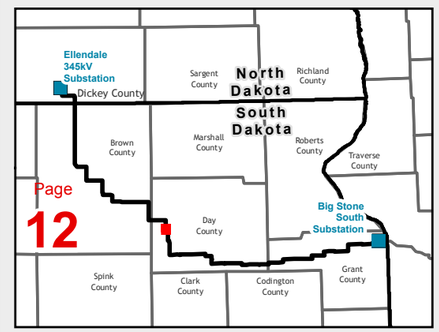
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 12

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015





Andover Twp.

Sec. 25
Sec. 26

417 AVE

T122N
R59W

348-P

349-P

350-P

351-P

Sec. 26
Sec. 35

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

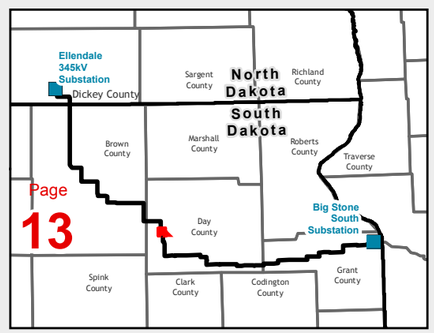
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 13

1:3,600

0 300 600 Feet



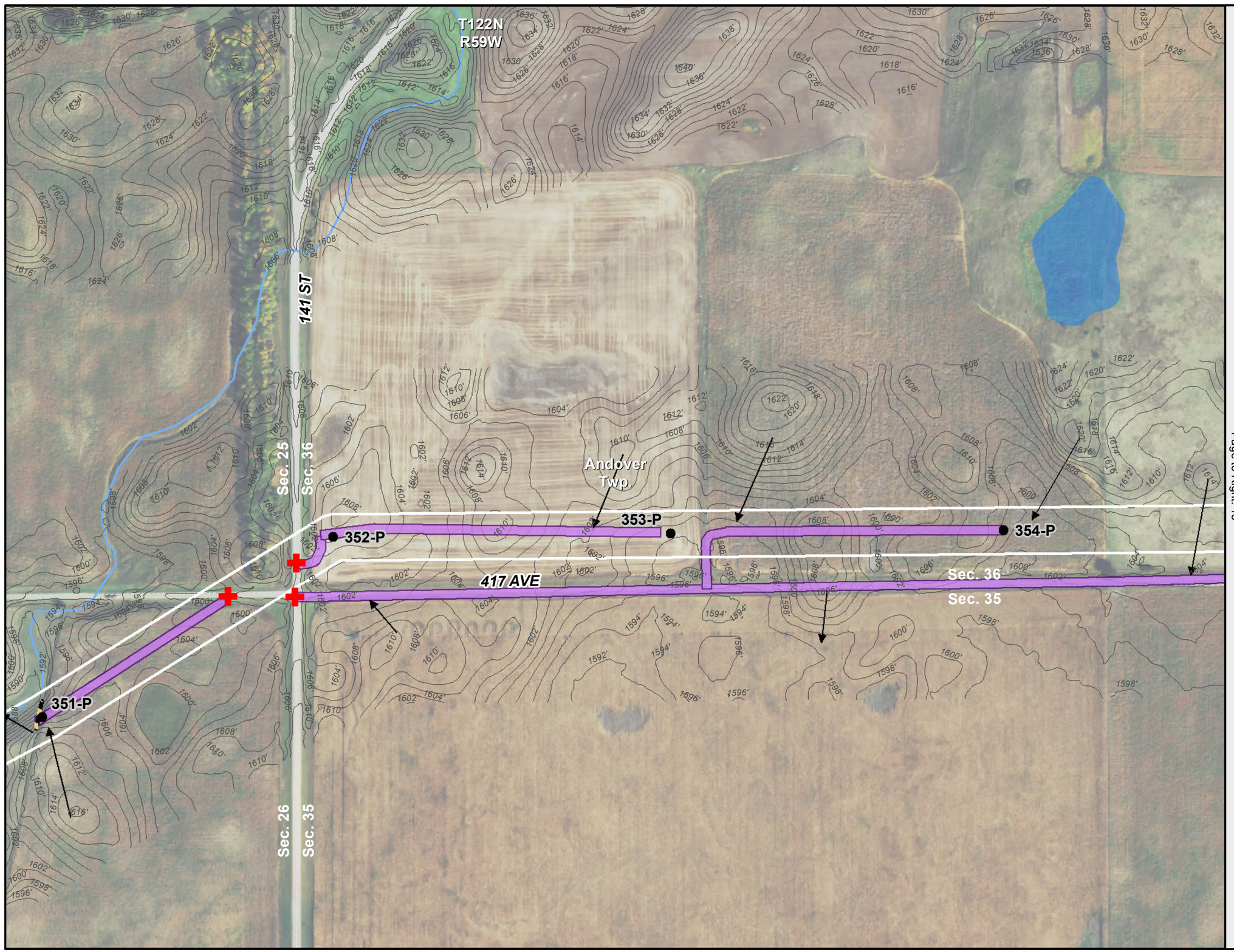

BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 13




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

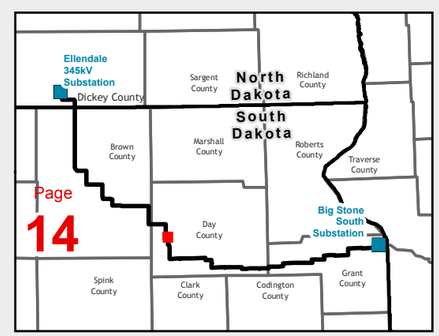
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 14

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 15

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

T121N
R59W

T122N
R59W

Sec. 36
Sec. 1
Sec. 35
Sec. 2

Andover
Twp.

Scotland
Twp.

355-P
356-P
357-P
358-P

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale
## 345 kV Transmission Line Project
## North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

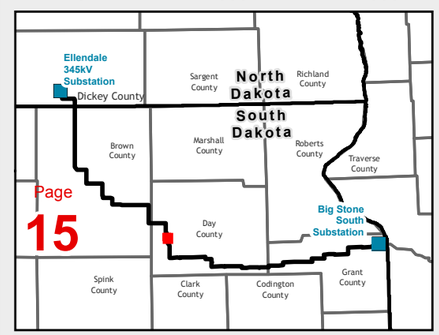
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 15

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

T122N R59W Andover Twp.

Bristol Twp. T122N R58W

Sec. 36 Sec. 31 418AVE

Sec. 36 Sec. 1 142 ST Sec. 31 Sec. 6

Scotland Twp. T121N R59W

Valley Twp. T121N R58W

Sec. 1 Sec. 6

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

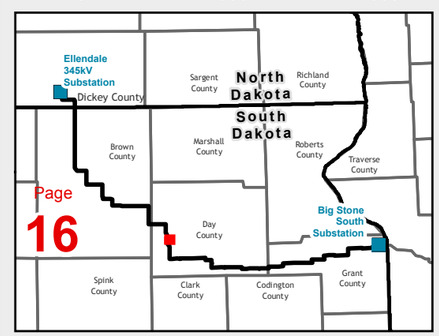
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 16

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Scotland Twp.

Mud Creek

358-P

359-P

360-P

361-P

Sec. 1

Sec. 2

T121N
R59W

Mud Creek

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

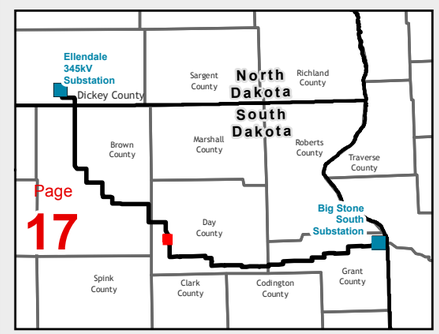
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 17

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Date: 10/24/2015

Page to Left: 17

Mud Creek

Sec. 1
Sec. 12
Sec. 2
Sec. 11

T121N
R59W

Scotland
Twp.

361-P
362-P
362.1-P
363-P
364-P

# Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

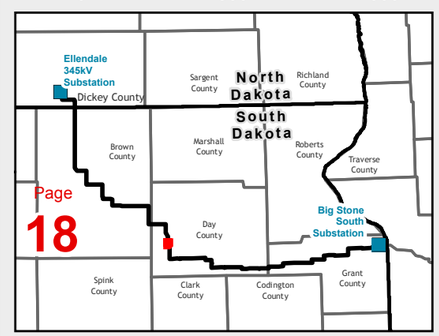
**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

Page to Right: 19

## Day County
## Page 18

1:3,600

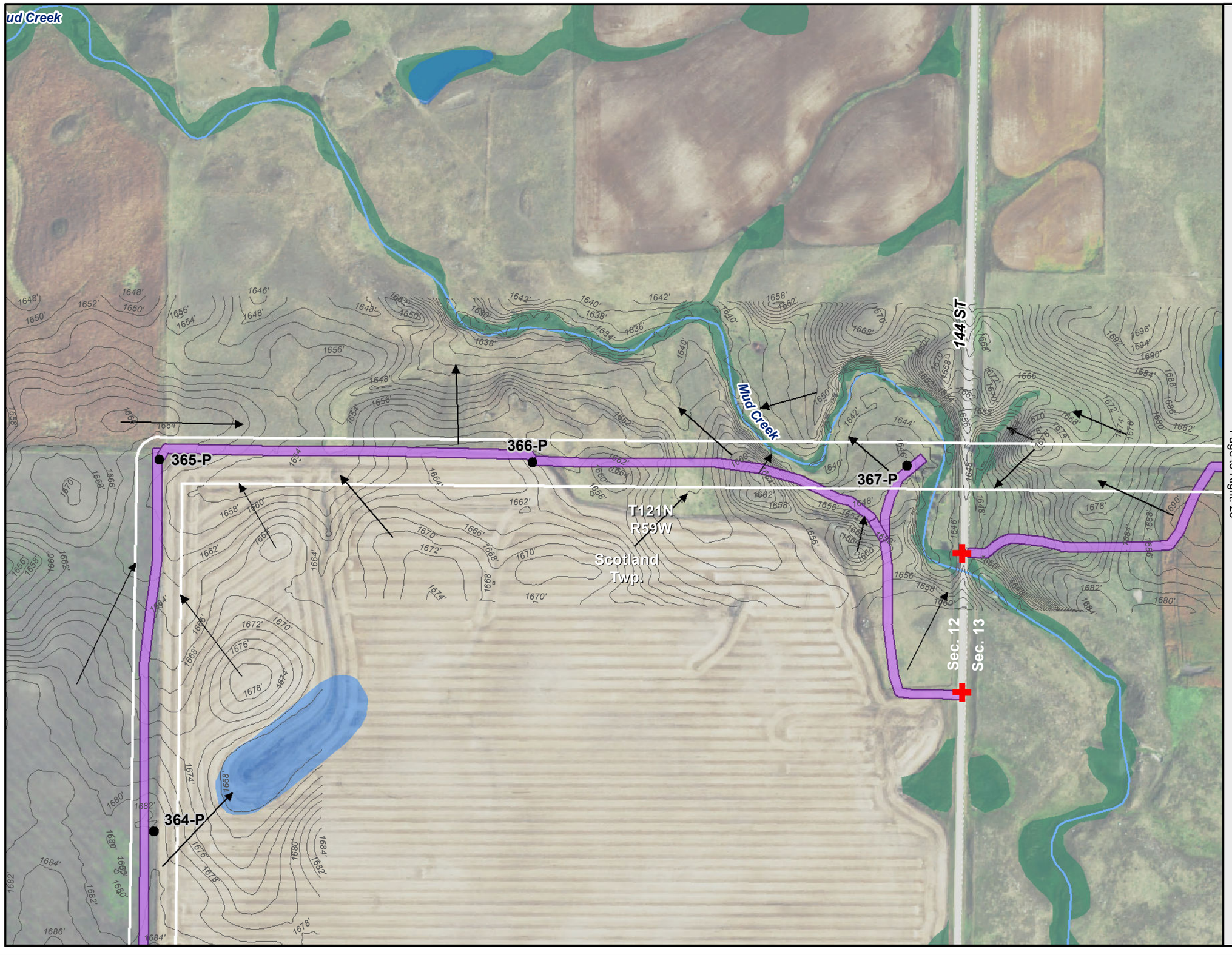
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

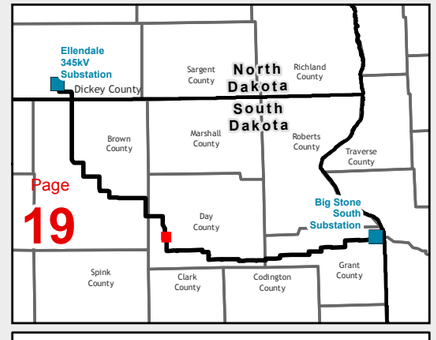
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

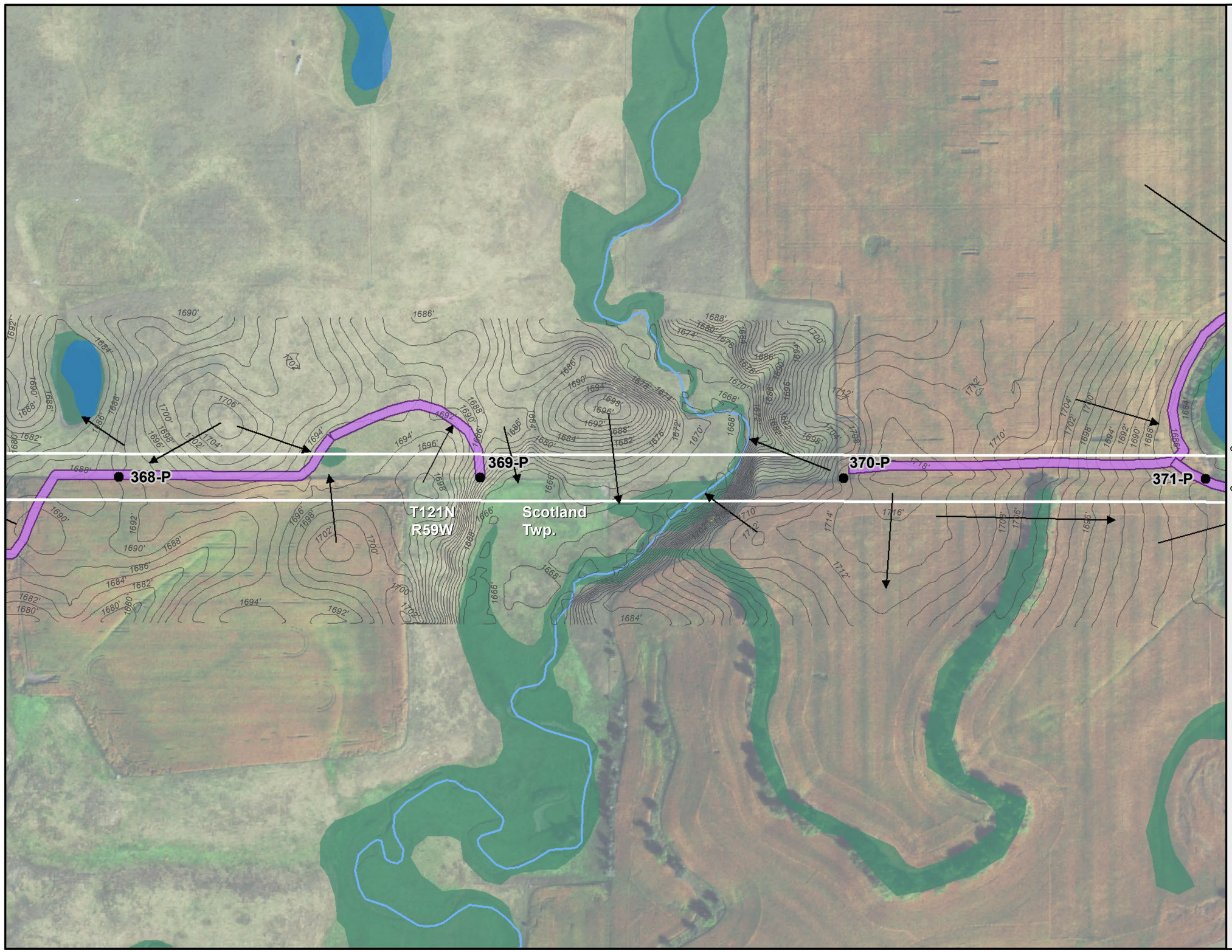
## Day County
## Page 19

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

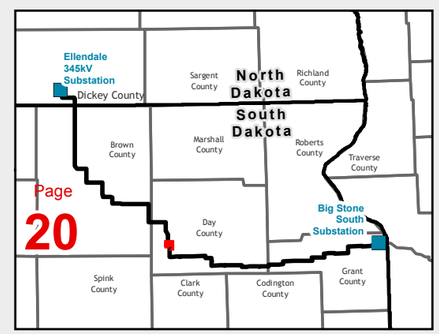
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 20

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Scotland Twp.

371-P

372-P

373-P

374-P

T121N
R59W

145 ST

Sec. 13

Sec. 24

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

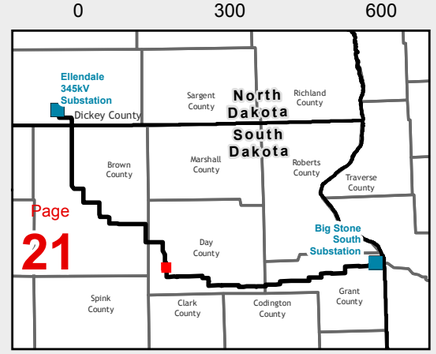
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 21

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

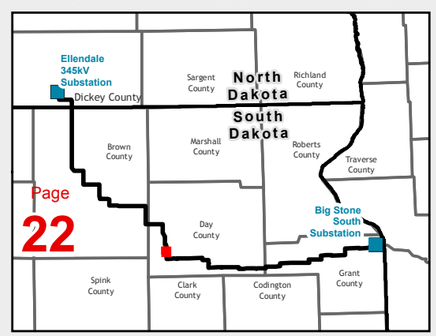
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 22

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Scotland Twp.

377.1-P

378-P

379-P

T121N
R59W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

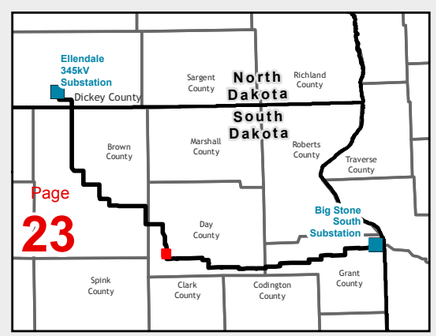
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 23

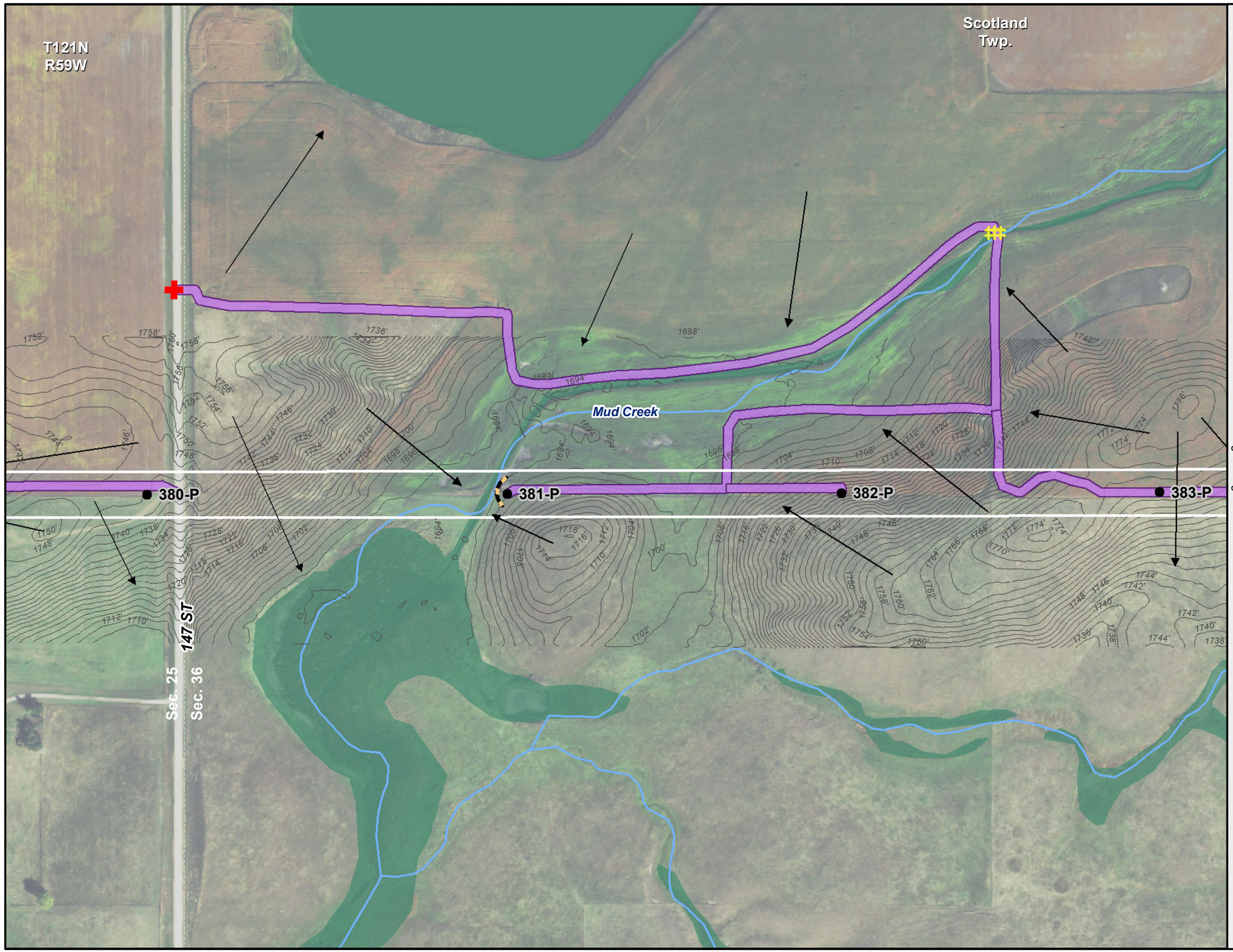
1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

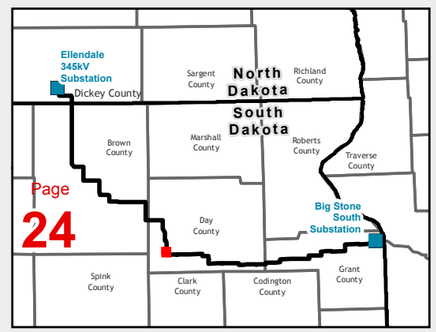
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 24

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left: 23

Page to Right: 25

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

T121N
R59W

Mud Creek

Scotland
Twp.

384-P

385-P

386-P

387-P

148 ST

Sec. 36
Sec. 1

Sec. 36
Sec. 6

Mud Creek

Oak
Gulch
Twp.

T120N
R59W

Sec. 1
Sec. 6

Troy
Twp.

T120N
R58W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

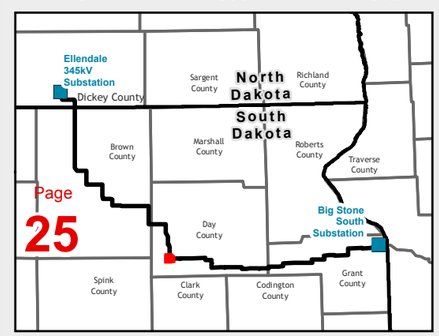
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 25

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Scotland Twp.

Mud Creek

Valley Twp.

T121N R58W

T121N R59W

Sec. 36

Sec. 31

Sec. 6

148 ST

388-P

389-P

390-P

Troy Twp.

T120N R58W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

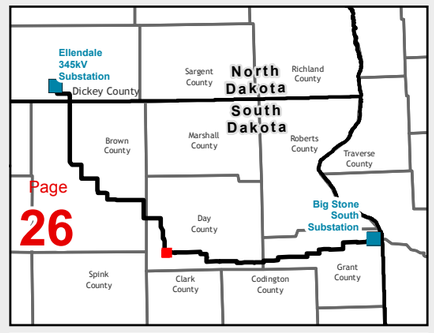
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 26

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Sec. 31
Sec. 32
419 AVE
T121N
R58W
Valley
Twp.
148 ST
Sec. 31
Sec. 6
Sec. 31
Sec. 5
Sec. 32
Sec. 5
391-P
392-P
393-P
394-P
Sec. 6
Sec. 5
419 AVE
T120N
R58W
Troy
Twp.

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

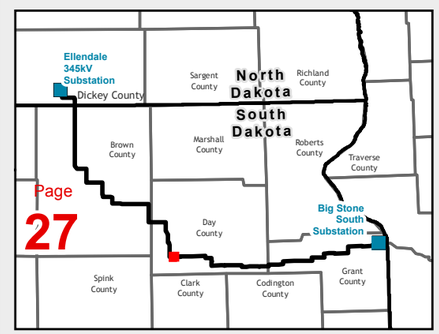
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 27

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 27

T121N
R58W

Valley
Twp.

420 AVE

Sec. 32

Sec. 33

148 ST

Sec. 32

Sec. 5

Sec. 4

394-P

395-P

396-P

397-P

T120N
R58W

Troy
Twp.

Sec. 5

Sec. 4

420 AVE

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

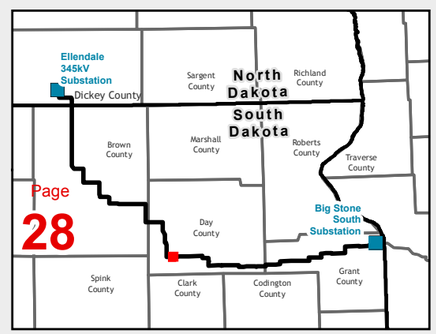
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 28

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 29

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Sec. 32
Sec. 33
420 AVE
Valley Twp.
T121N R58W
148 ST
Sec. 33
Sec. 4
397-P
398-P
399-P
400-P
Troy Twp.
T120N R58W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

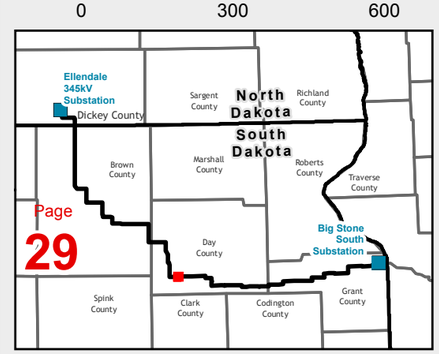
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 29

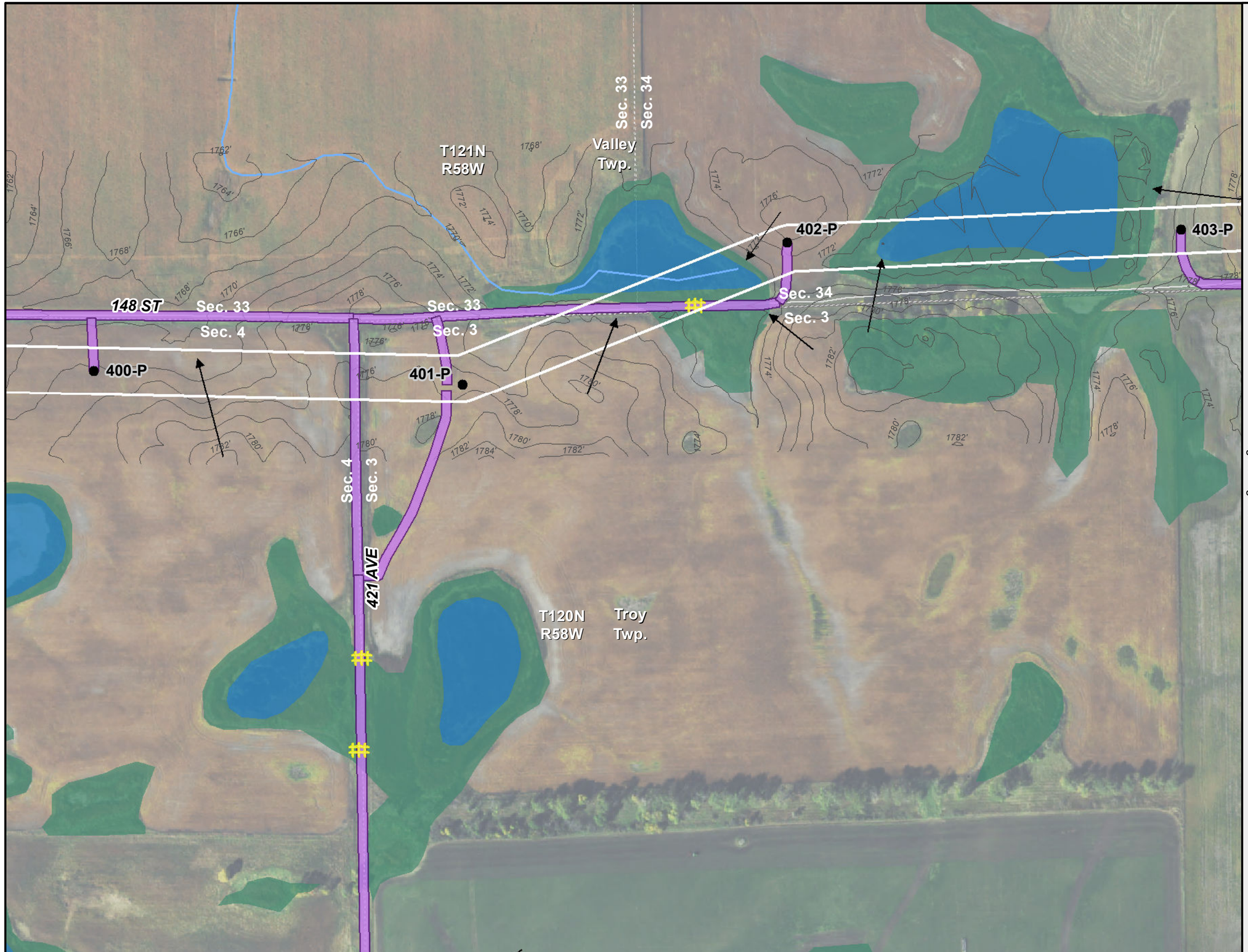
1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

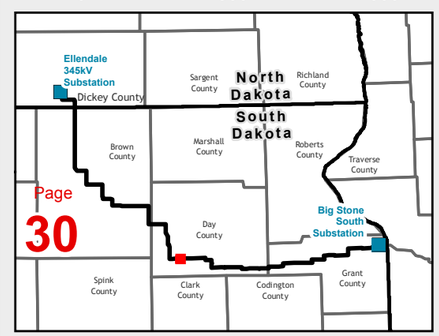
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 30

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015



Sec. 3 149 ST Sec. 10

Troy Twp.

T120N R58W

Sec. 3 421 AVE Sec. 10

Sec. 4 Sec. 9

Sec. 4 Sec. 9

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

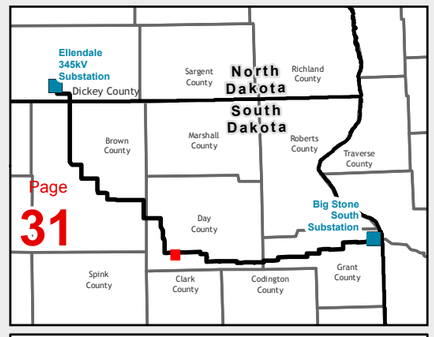
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 31

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Valley Twp.
T121N R58W

Troy Twp.
T120N R58W

403-P
404-P
405-P
406-P

148 ST

Sec. 34
Sec. 3
Sec. 2
Sec. 35

422 AVE

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

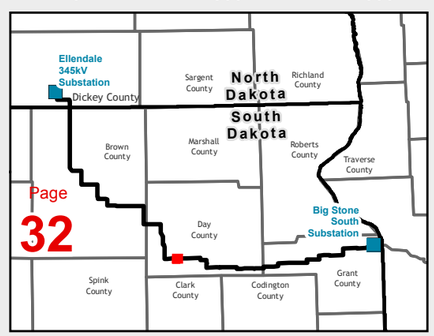
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 32

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015



422 AVE

Sec. 34

Sec. 35

Valley Twp.

T121N R58W

406-P

407-P

408-P

409-P

148 ST

Sec. 35

Sec. 2

Troy Twp.

T120N R58W

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

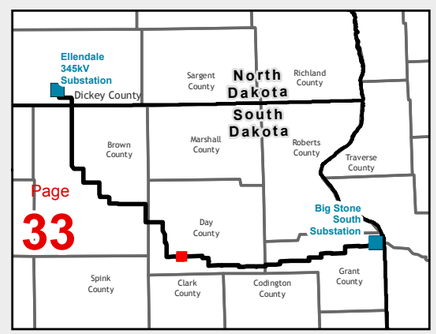
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 33

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Valley Twp.

Sec. 35

Sec. 36

T121N R58W

423 AVE

410-P

411-P

412-P

148 ST

Sec. 35 Sec. 2

Sec. 35 Sec. 1

Sec. 36 Sec. 1

T120N R58W

Troy Twp.

423 AVE

Sec. 2

Sec. 1

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

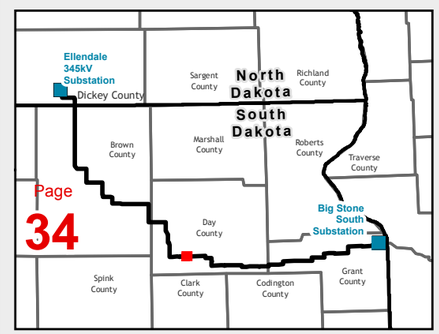
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 34

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015



Valley Twp.

T121N R58W

Butler Twp.

T121N R57W

Sec. 36

Sec. 31

413-P

414-P

415-P

148 ST

Sec. 36

Sec. 1

York Twp.

148 ST

Sec. 36

Sec. 6

Sec. 31

Sec. 6

T120N R58W

Troy Twp.

424 AVE

Sec. 1

Sec. 6

T120N R57W

1780'
1782'
1784'
1786'
1788'
1776'
1778'
1774'

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

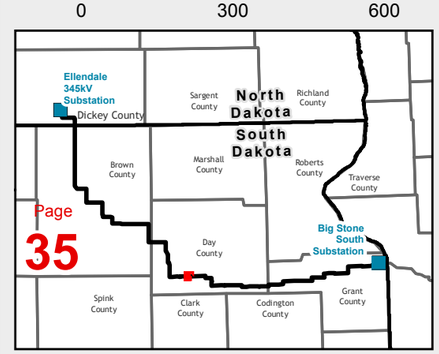
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 35

1:3,600

0 300 600 Feet



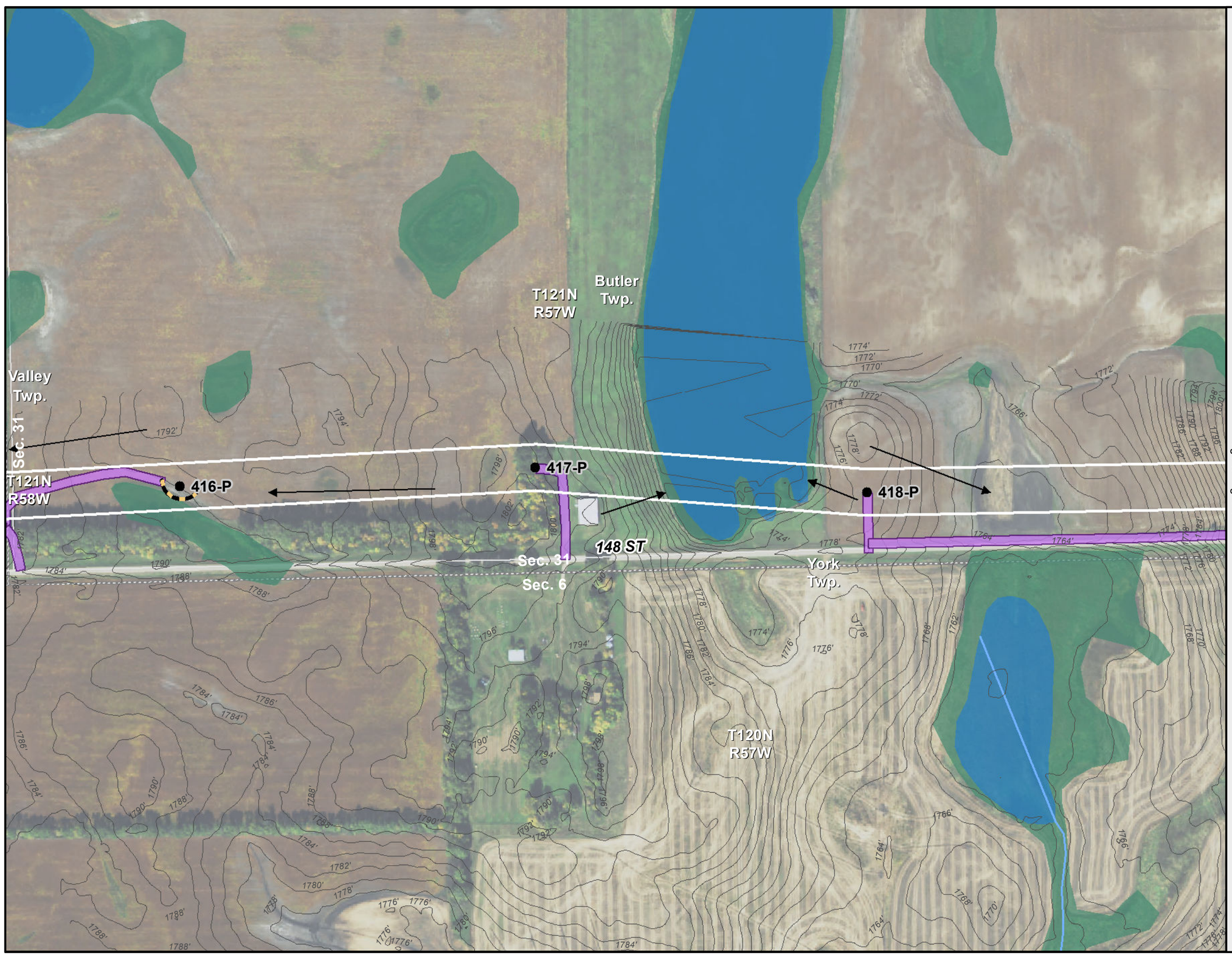

BSSE Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015

Page to Left: 35




Page to Right: 37

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

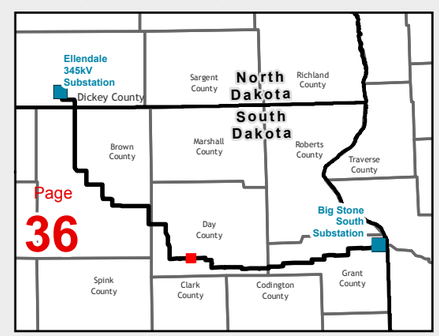
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 36

1:3,600

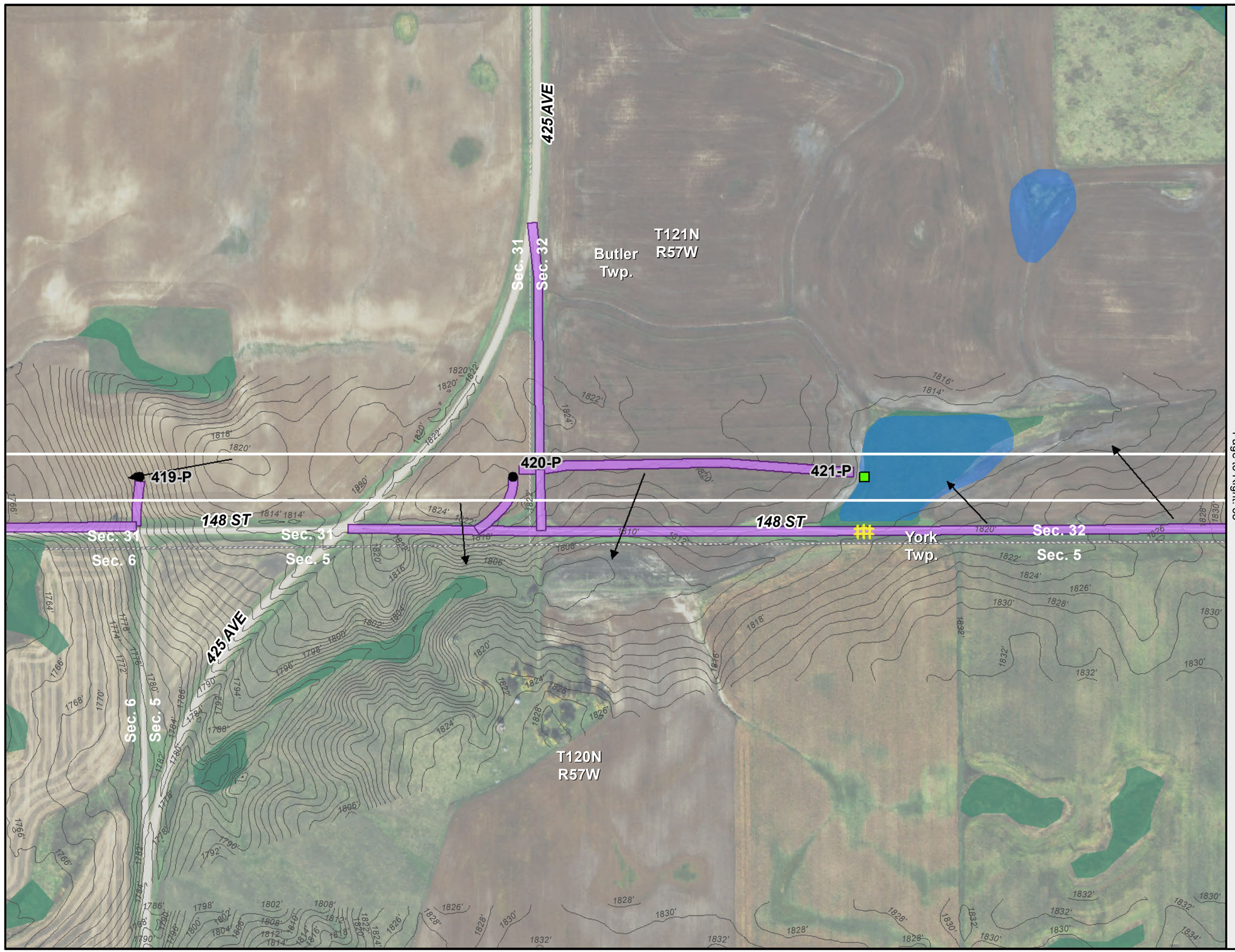
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:




## SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

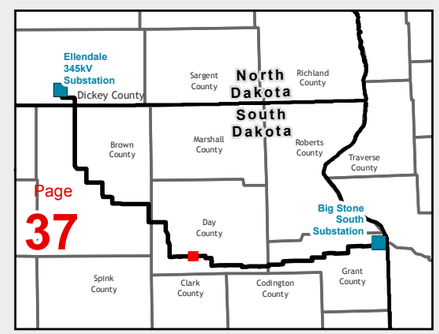
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 37

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Butler Twp.

T121N R57W

Sec. 32

Sec. 33

426 AVE

422-P

423-P

424-P

148 ST

Sec. 32

Sec. 5

York Twp.

Sec. 32

Sec. 4

T120N R57W

Sec. 5

Sec. 4

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

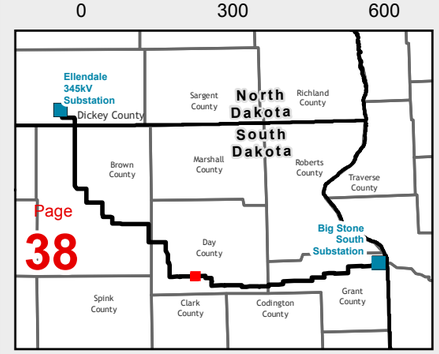
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 38

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

T121N
R57W
Butler
Twp.

425-P
426-P
427-P
428-P
148 ST
Sec. 33
Sec. 4
York
Twp.
T120N
R57W
Sec. 4
Sec. 3
427 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

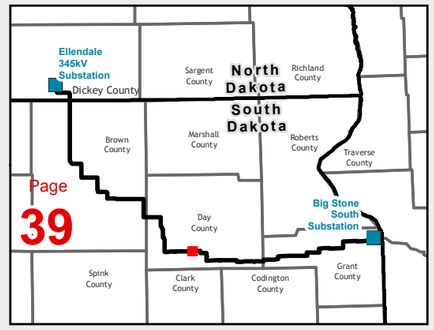
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 39

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

T121N
R57W

Butler
Twp.

Sec. 33
Sec. 34

428-P
429-P
430-P
431-P

Sec. 33
Sec. 3

Sec. 34
Sec. 3

York
Twp.

T120N
R57W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

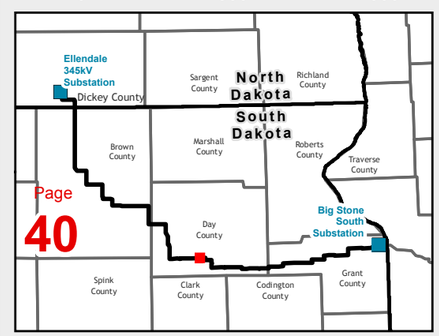
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 40

1:3,600

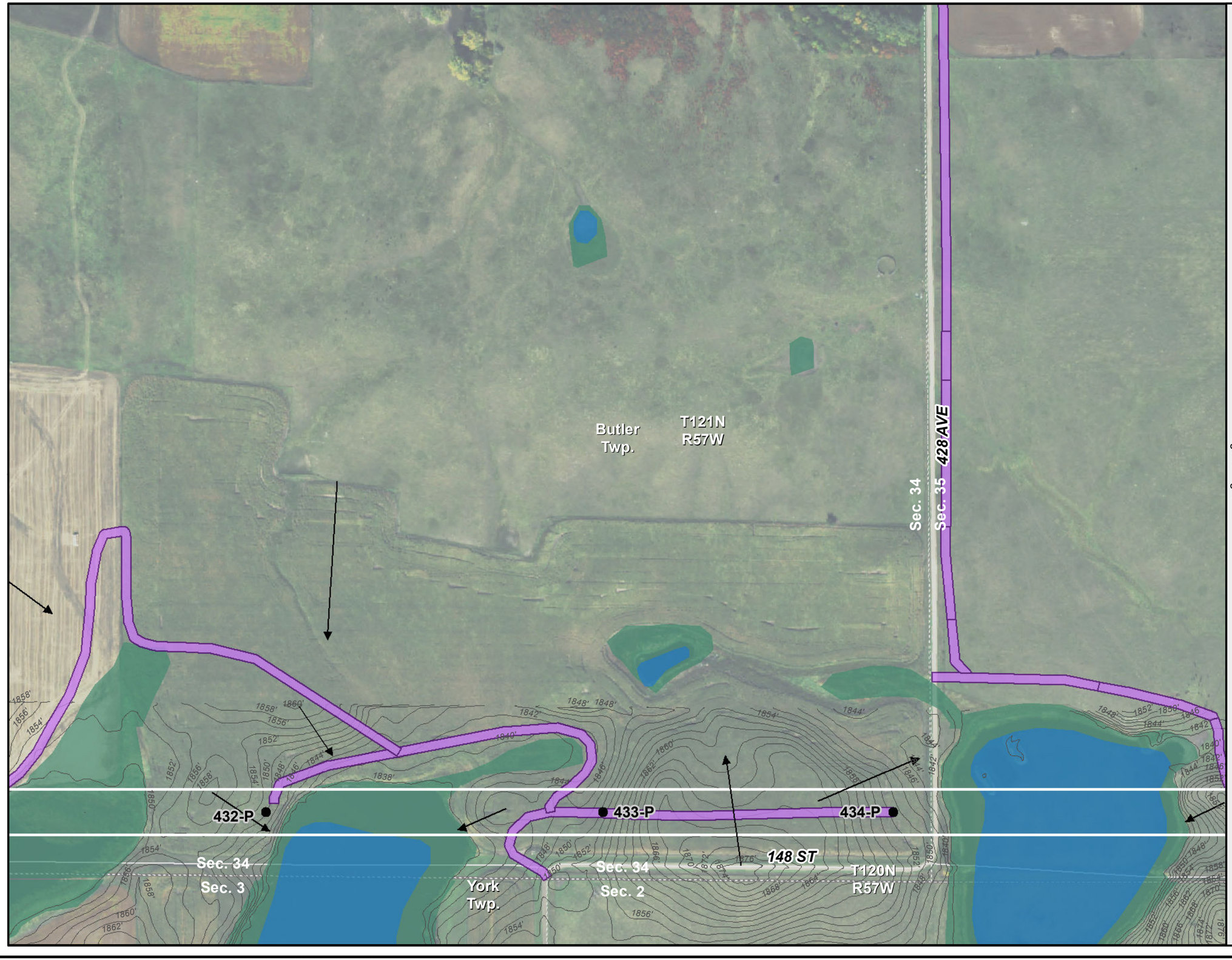
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

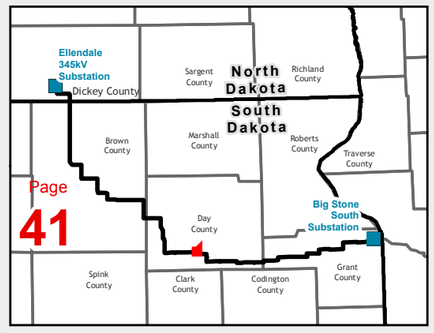
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 41

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

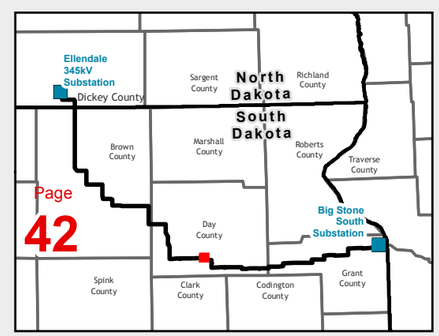
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 42

1:3,600

0 300 600 Feet




BIG STONE SOUTH TO ELLENDALE



T121N
R57W
Butler Twp.

T120N
R57W
York Twp.

435-P
436-P
437-P
438-P

Sec. 35
Sec. 2
Sec. 35
Sec. 1
Sec. 2
Sec. 1

429 AVE

Date: 10/24/2015



# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

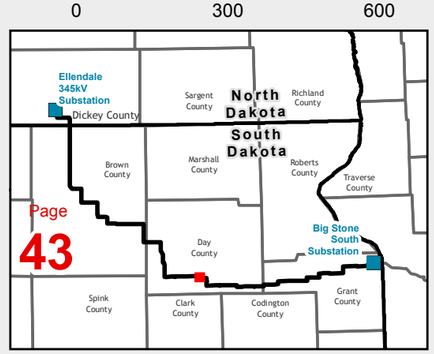
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 43

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Date: 10/24/2015



T120N
R57W

441-P

442-P

York
Twp.

Sec. 2

Sec. 1

429 AVE

149 ST

Sec. 2

Sec. 11

Sec. 1

Sec. 12

149 ST

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

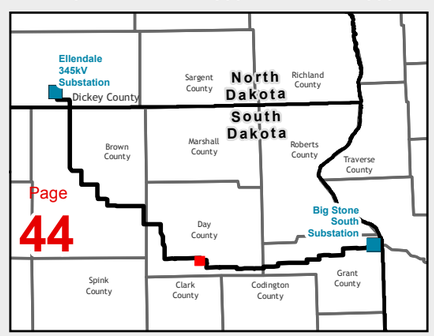
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 44

1:3,600

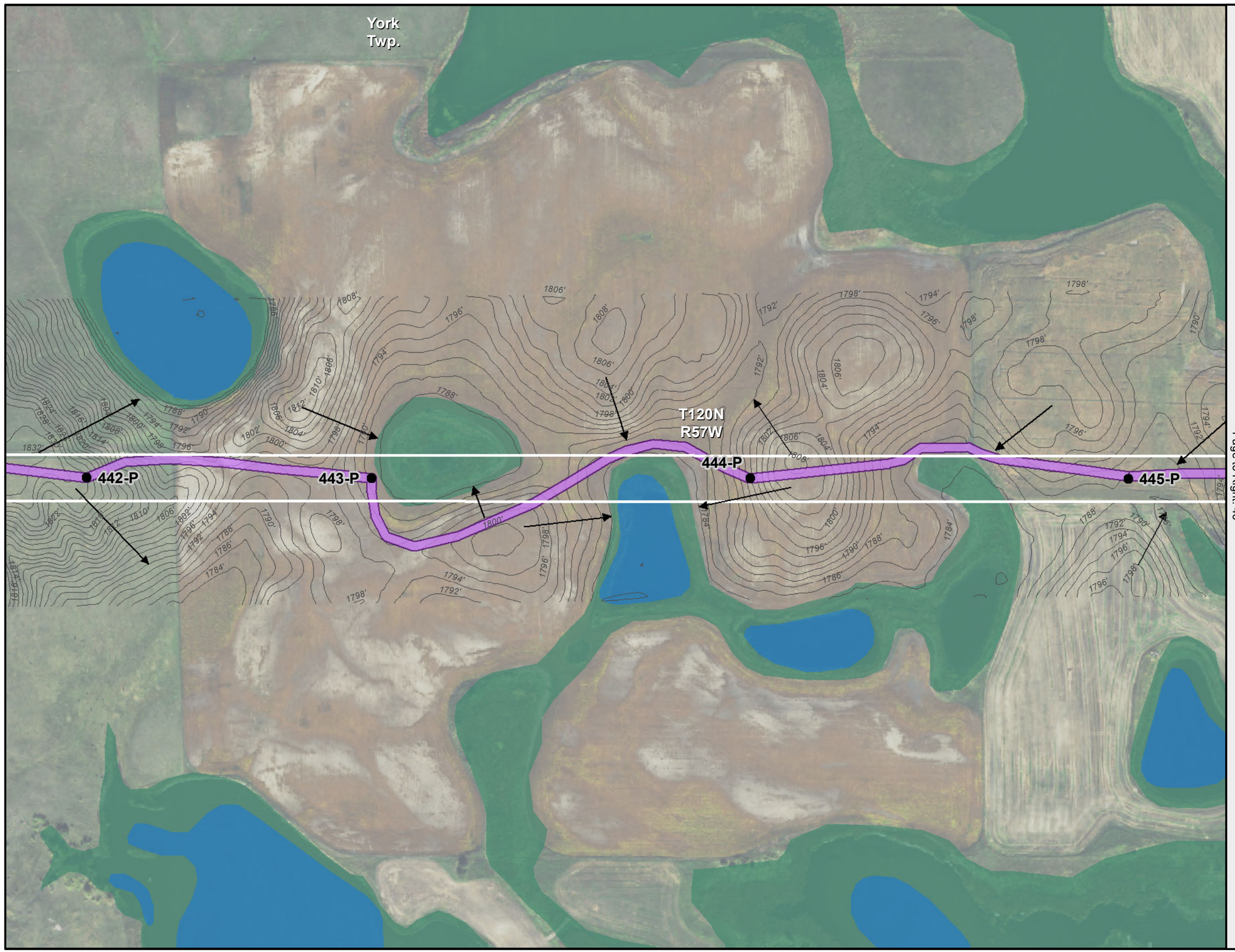
0 300 600 Feet




Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

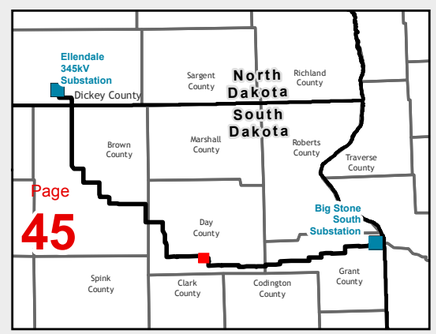
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 45

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

York Twp. T120N R57W

T120N R56W

Highland Twp.

Sec. 1

Sec. 6

445-P

446-P

447-P

448-P

1:3,600

0 300 600 Feet

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

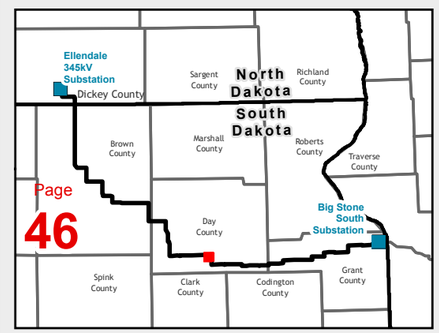
* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

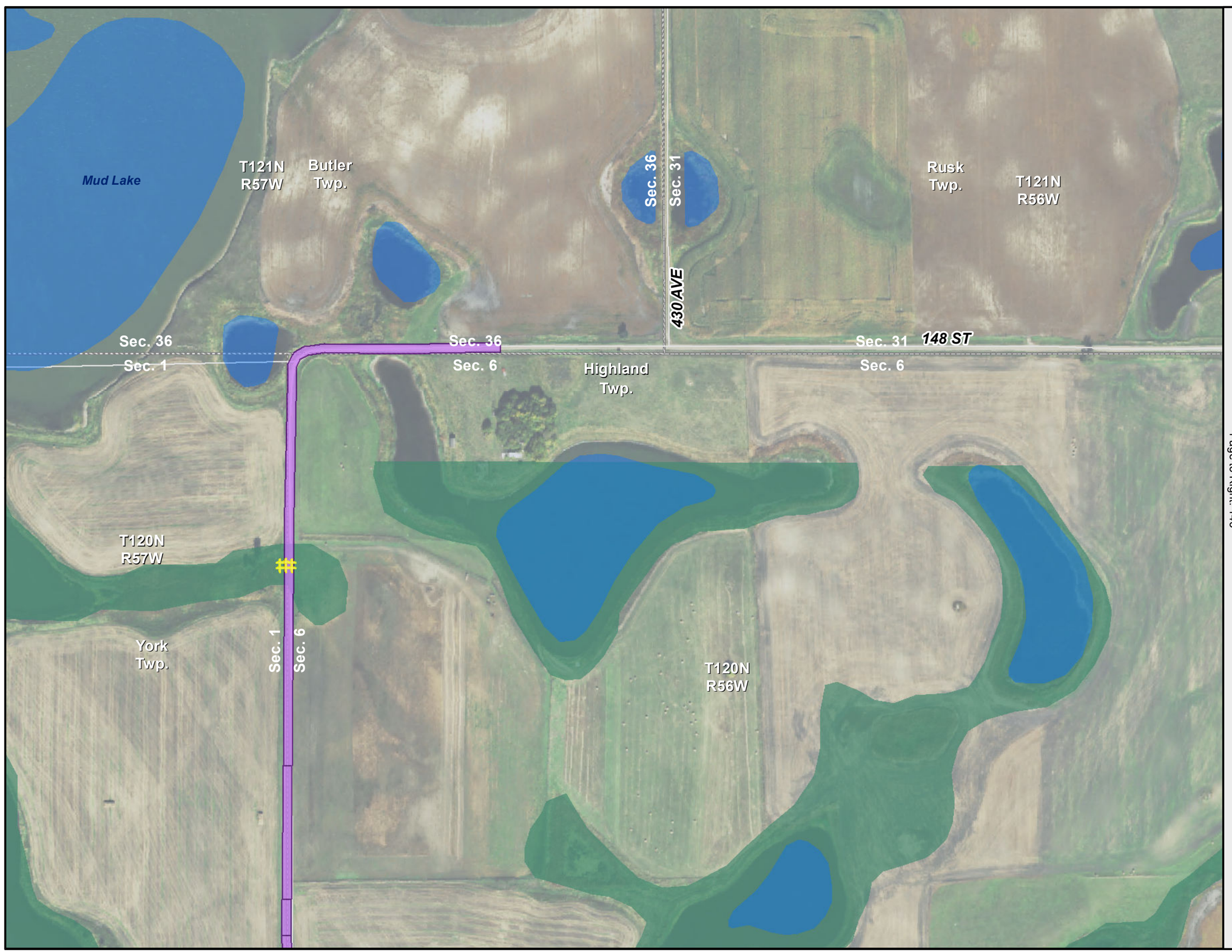
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 46




BSSE Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

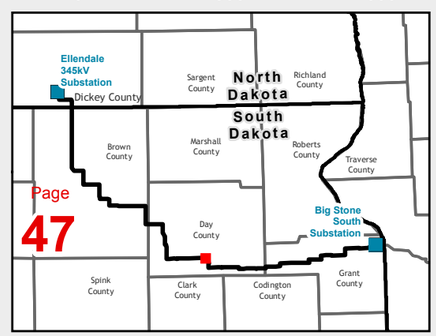
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 47

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Highland Twp.

Sec. 6

Sec. 5

431 AVE

T120N
R56W

448.1-P

449-P

450-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

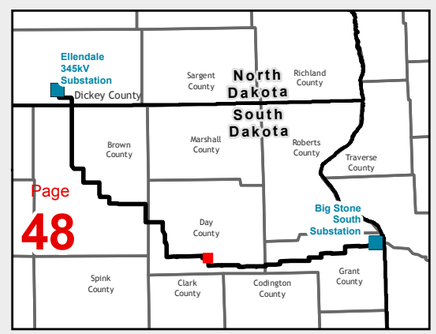
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

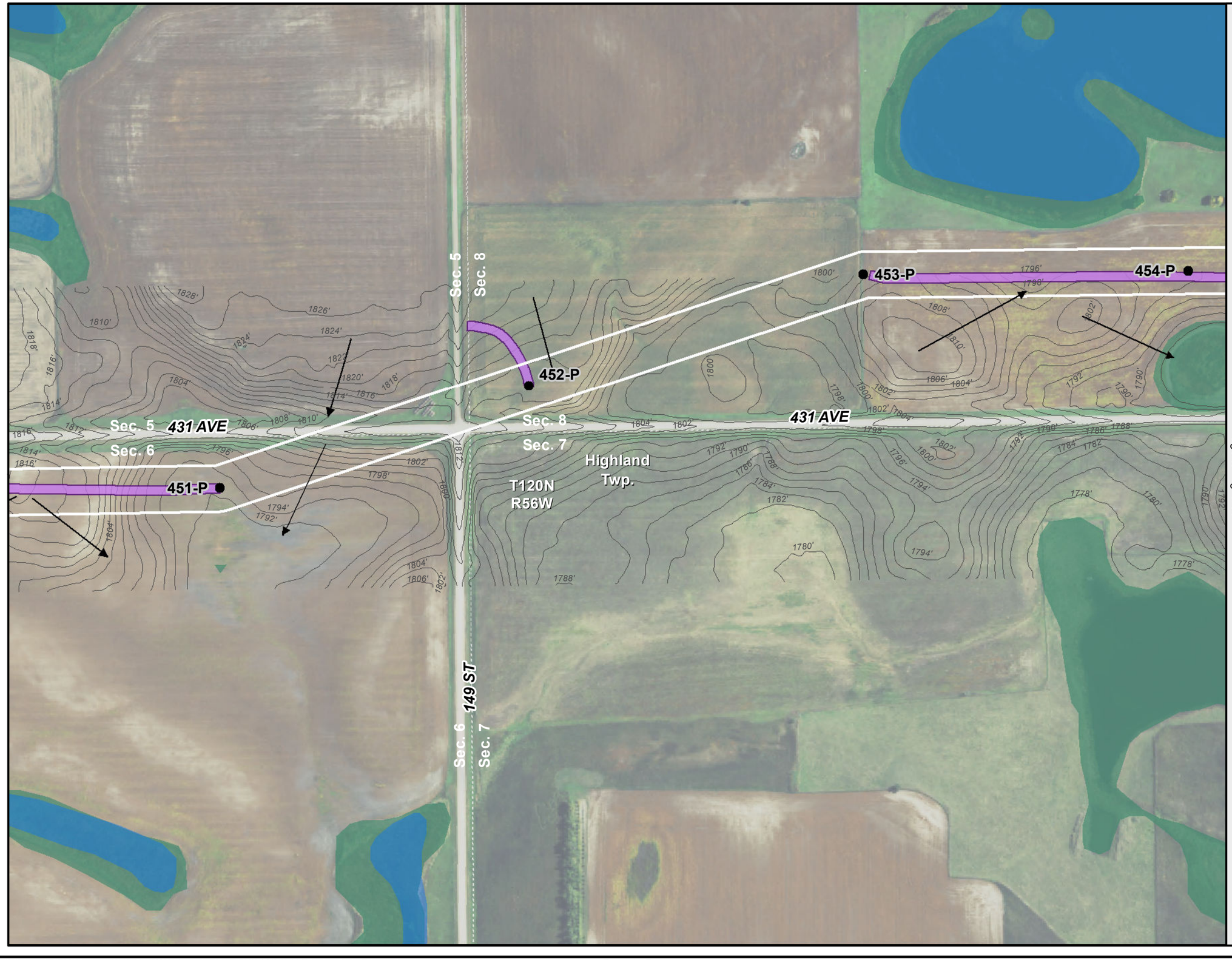
## Day County
## Page 48

1:3,600

0 300 600 Feet




Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

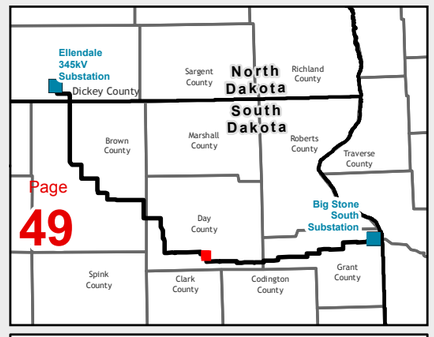
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 49

1:3,600

0 300 600 Feet

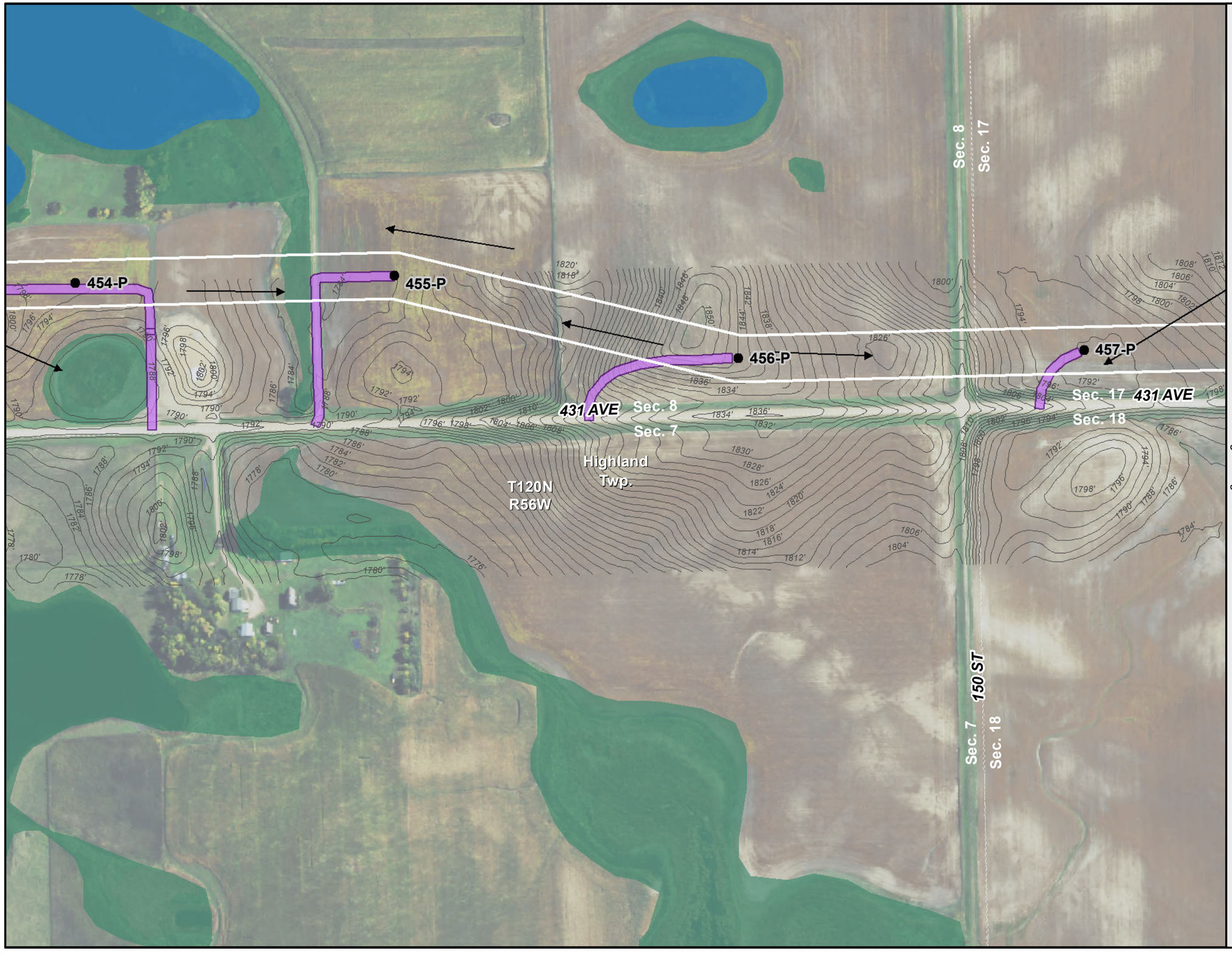



BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 49




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

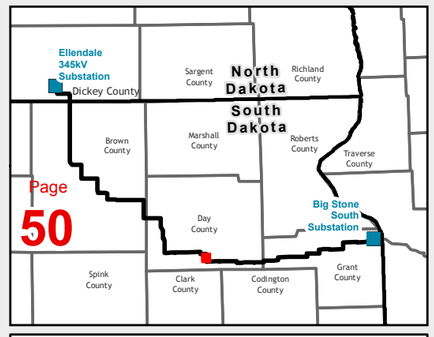
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 50

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 51



Page to Bottom:

Date: 10/24/2015

Page to Left: 50

Highland Twp. T120N R56W

457-P

458-P

459-P

460-P

Sec. 17

Sec. 18

431 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

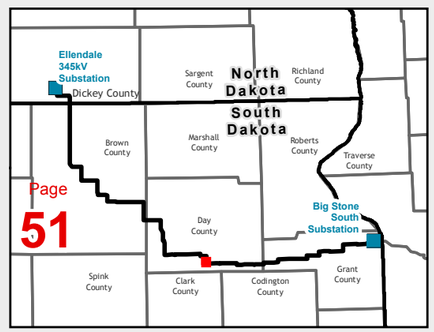
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 51

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Right: 52

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015

Highland Twp.

Sec. 18

Sec. 17

431 AVE

461-P

462-P

151 ST

Sec. 18

Sec. 19

Sec. 17

Sec. 20

T120N
R56W

Sec. 19

Sec. 20

431 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

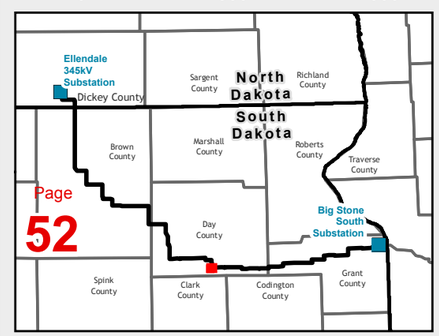
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 52

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left:

Page to Right: 53

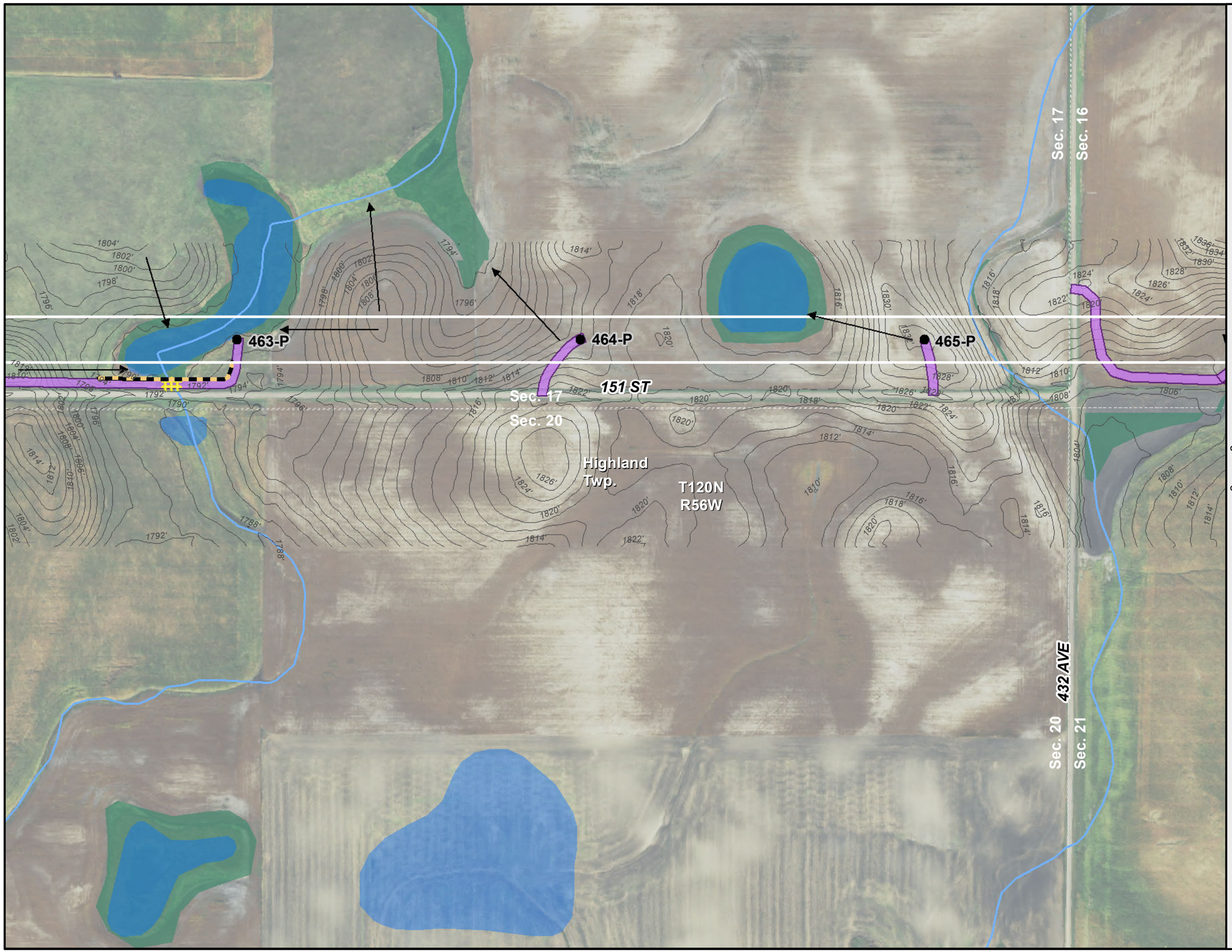
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 52




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

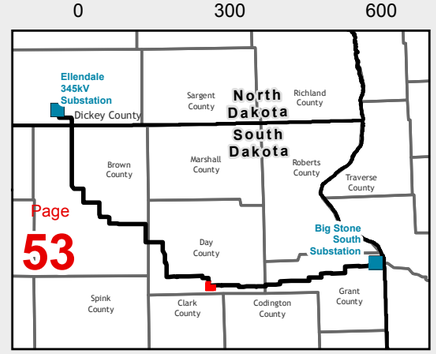
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 53

1:3,600

0 300 600 Feet



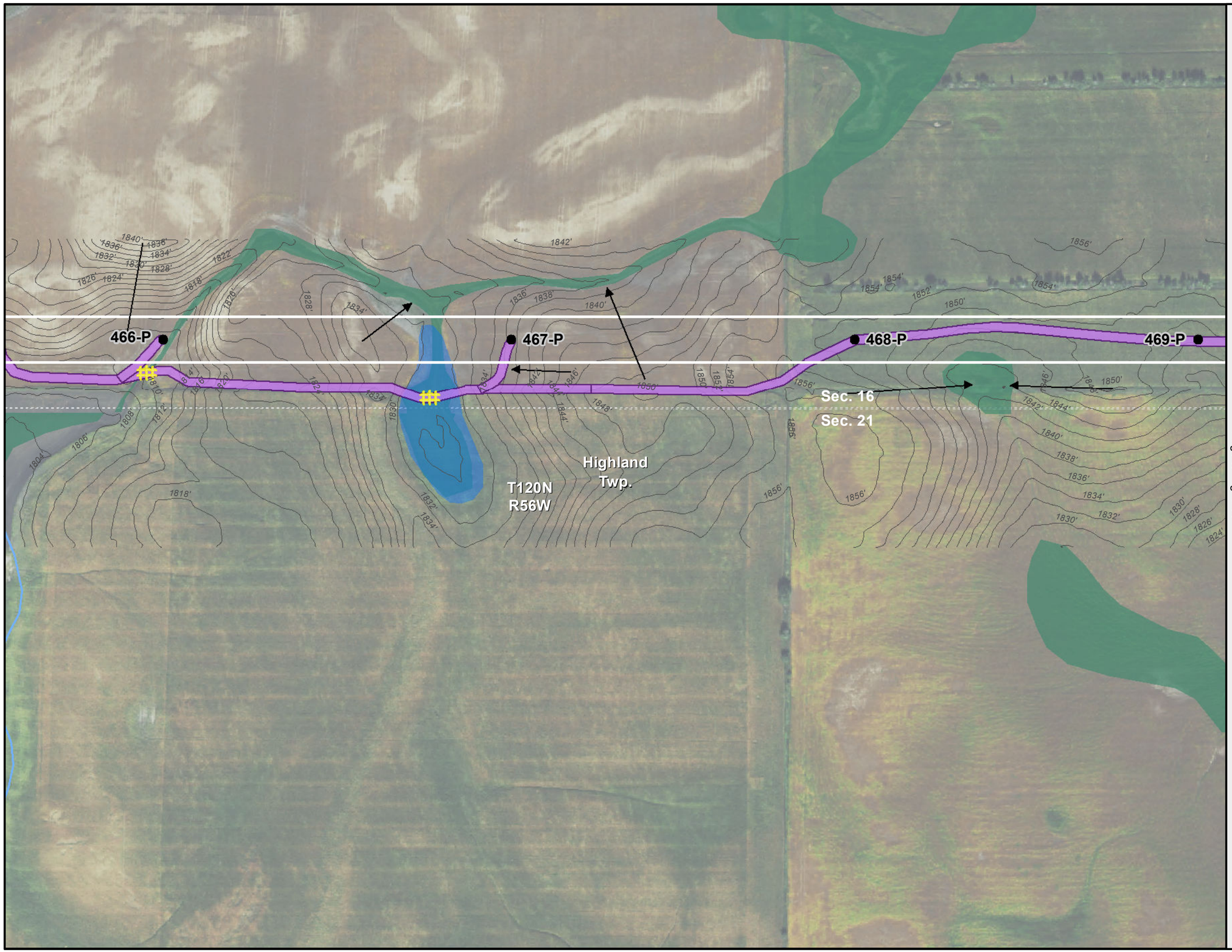

Big Stone South to Ellendale

Page to Right: 54

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015




# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

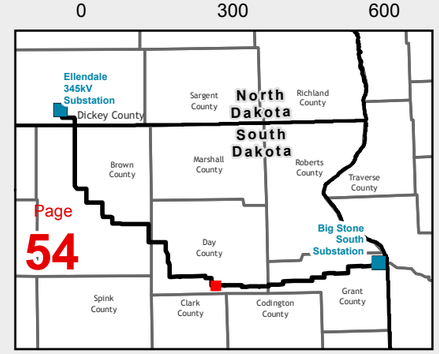
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 54

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left: 53

Page to Right: 55

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

469-P
469.1-P
470-P
471-P
433 AVE
151 ST
Sec. 16
Sec. 21
Sec. 15
Sec. 22
Highland Twp.
T120N
R56W
Sec. 21
Sec. 22

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

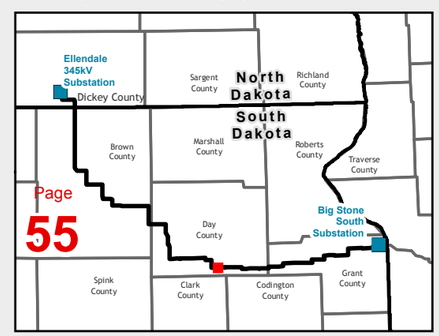
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 55

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left:

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

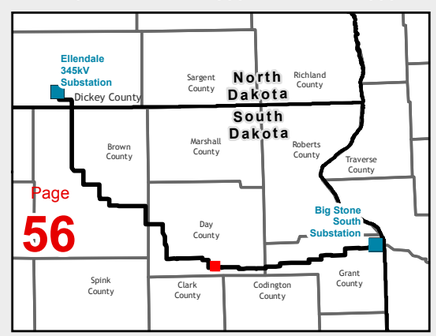
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 56

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 55

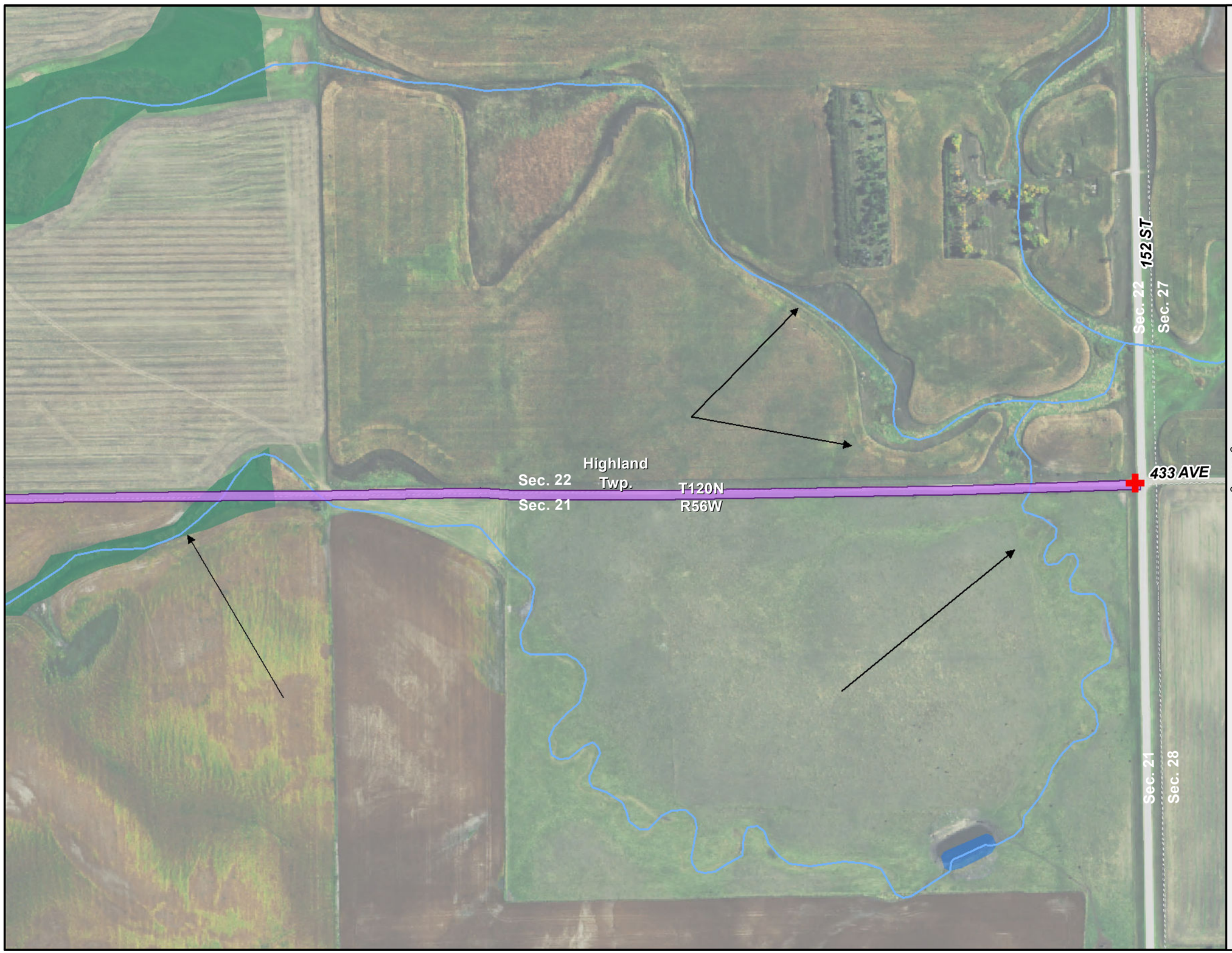
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 55




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

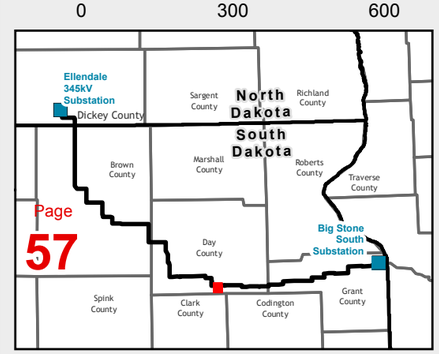
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 57

1:3,600

0 300 600 Feet

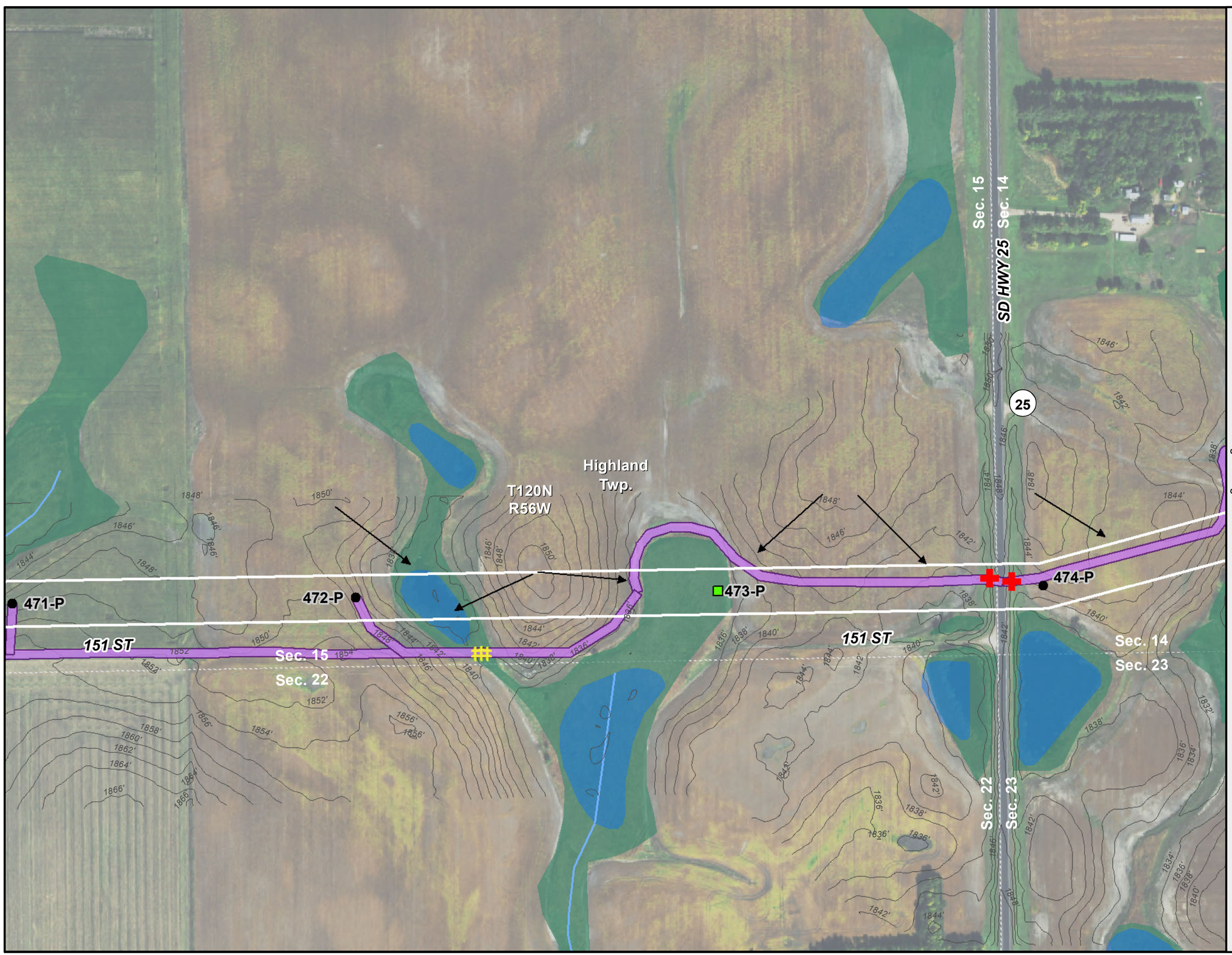



BSSE
Big Stone South to Ellendale

Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

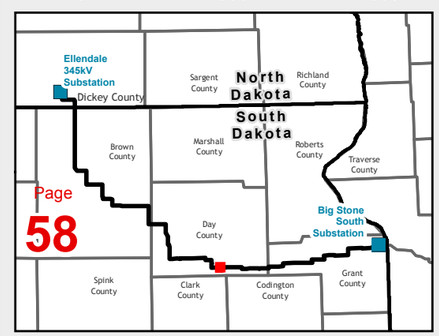
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 58

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

T120N
R56W

Highland
Twp.

475-P

476-P

477-P

Sec. 14
Sec. 23

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

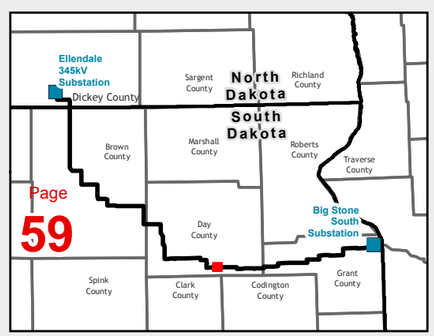
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 59

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

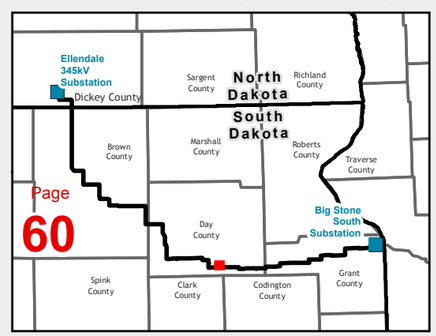
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 60

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left:
Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Highland Twp.

Sec. 14

Sec. 13

478-P

479-P

480-P

Sec. 14

Sec. 23

Sec. 13

Sec. 24

T120N

R56W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

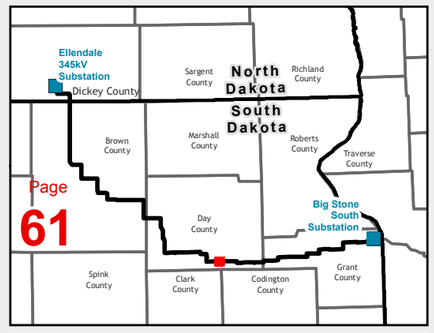
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 61

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

481-P
482-P
483-P
Sec. 13
Sec. 24
Highland Twp.
T120N R56W
Sec. 13
Sec. 18
151 ST
Sec. 18
Sec. 19
Wheatland Twp.
T120N R55W
436 AVE
Sec. 24
Sec. 19

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

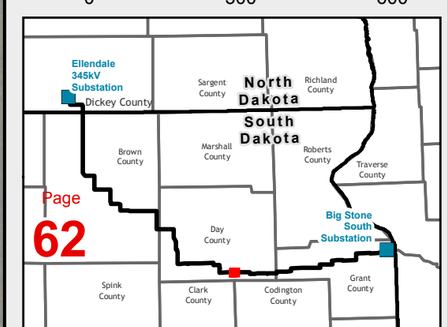
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 62

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015



T120N
R56W

Highland
Twp.

Wheatland
Twp.

Sec. 13

Sec. 18

T120N
R55W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

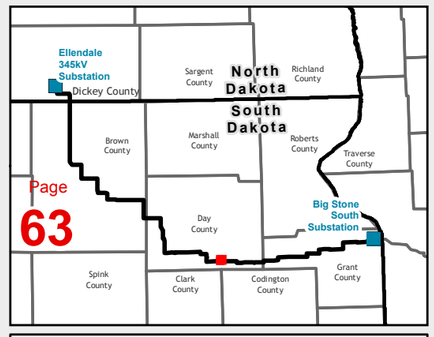
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 63

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Wheatland Twp.

484-P

485-P

486-P

151 ST

Sec. 18

Sec. 19

T120N
R55W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

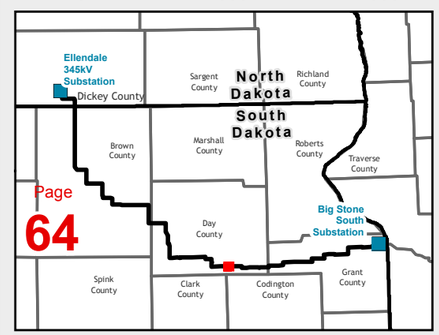
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 64

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Wheatland Twp.

Sec. 18

Sec. 17

487-P

488-P

489-P

490-P

Sec. 18

Sec. 19

151 ST

Sec. 17

Sec. 20

T120N
R55W

437 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

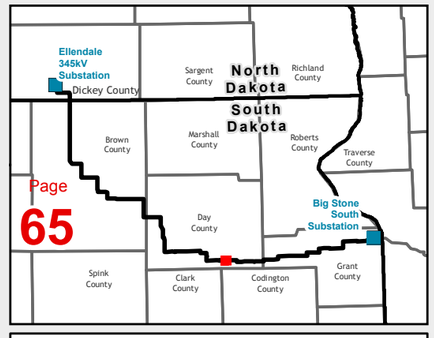
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 65

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Wheatland Twp.

Sec. 17

Sec. 16

438 AVE

490-P

491-P

492-P

493-P

151 ST

Sec. 17

Sec. 20

Sec. 16

Sec. 21

151 ST

T120N
R55W

Sec. 20

Sec. 21

438 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

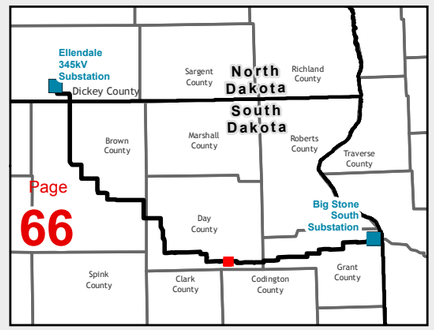
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 66

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

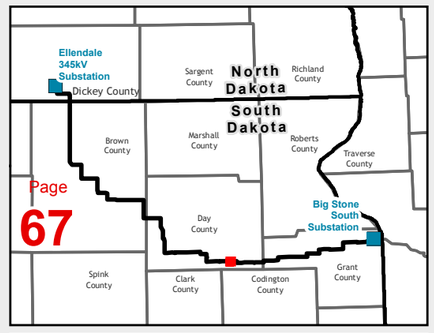
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 67

1:3,600
0 300 600 Feet




Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 67

Sec. 16
Sec. 15
Sec. 21
Sec. 22
439 AVE
497-P
498-P
499-P
Sec. 15
Sec. 22
151 ST
Wheatland Twp.
T120N
R55W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

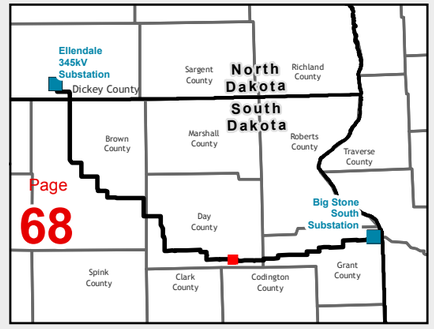
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 68

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 69

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 68

Wheatland Twp.

Sec. 15

Sec. 14

500-P

501-P

502-P

151 ST

Sec. 15

Sec. 22

Sec. 14

Sec. 23

T120N
R55W

440 AVE

Sec. 22

Sec. 23

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

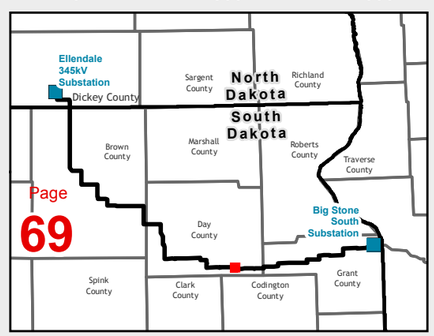
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 69

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 70

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

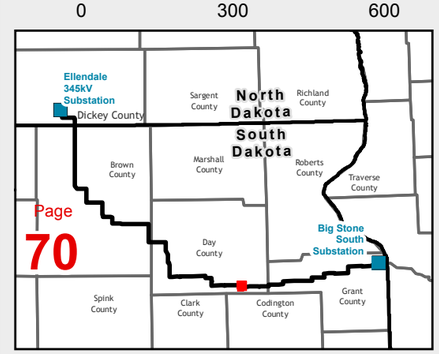
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 70

1:3,600

0 300 600 Feet

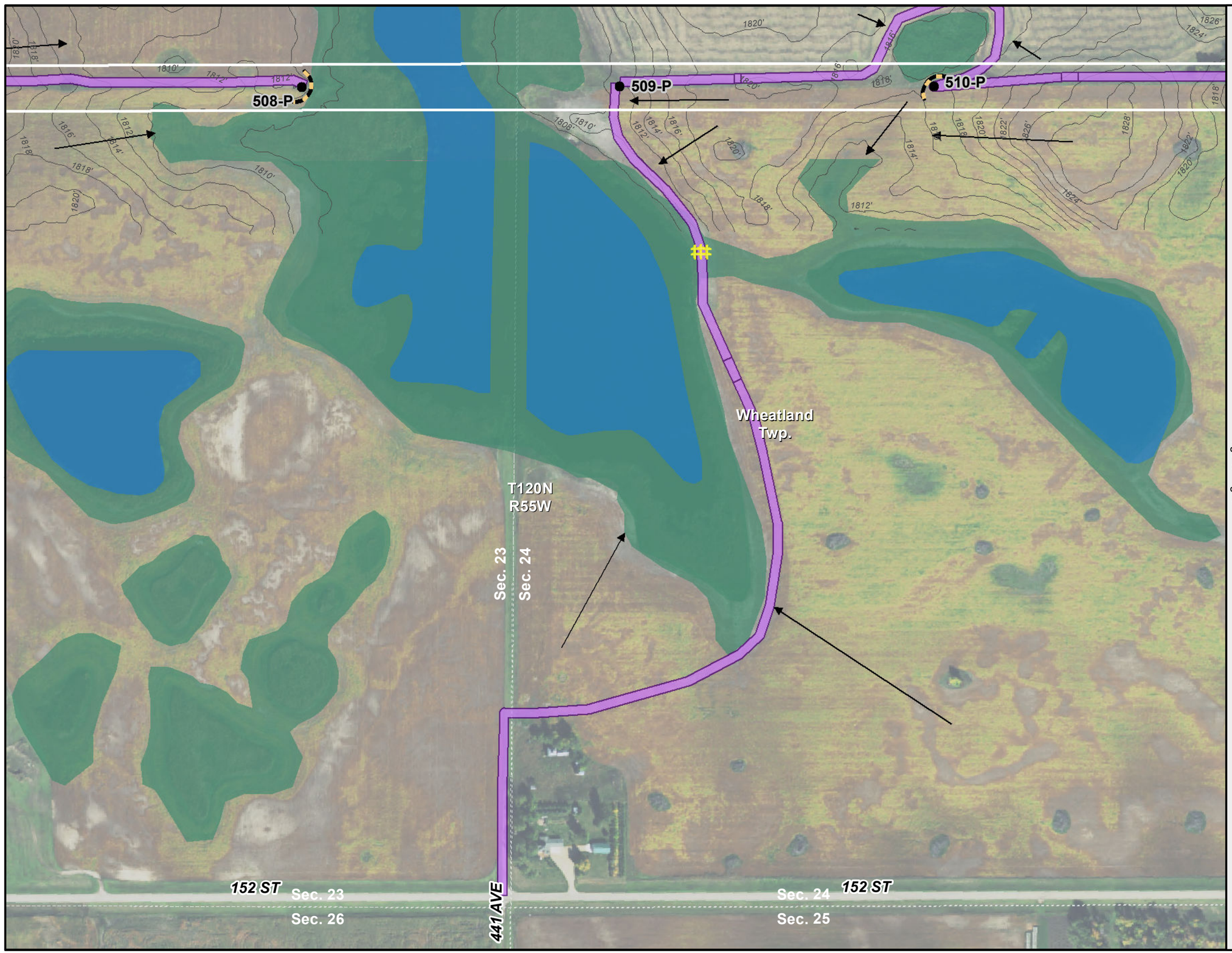



BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 70




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

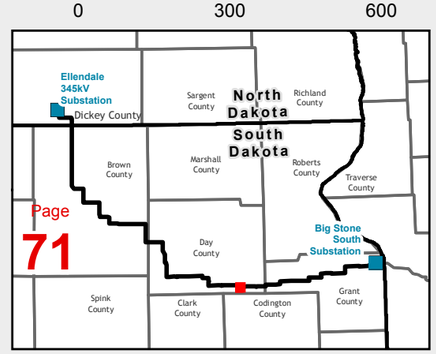
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 71

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Page to Right: 72

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Wheatland Twp.

T120N R55W

509-P

510-P

511-P

512-P

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

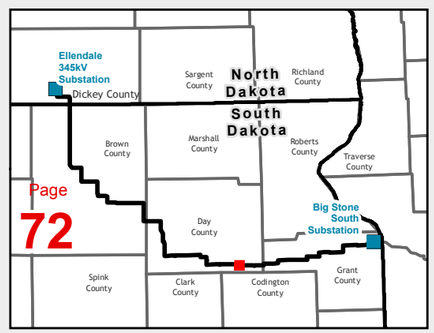
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 72

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 72

Egeland Twp.

Wheatland Twp.

Sec. 24

Sec. 19

442 AVE

513-P

514-P

515-P

T120N R55W

T120N R54W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

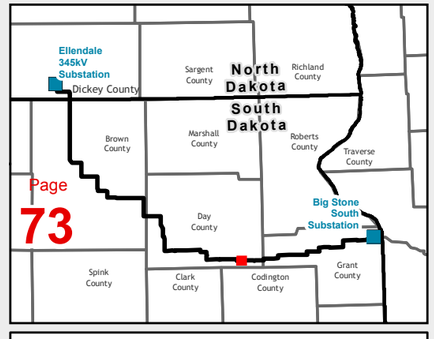
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 73

1:3,600

0 300 600 Feet

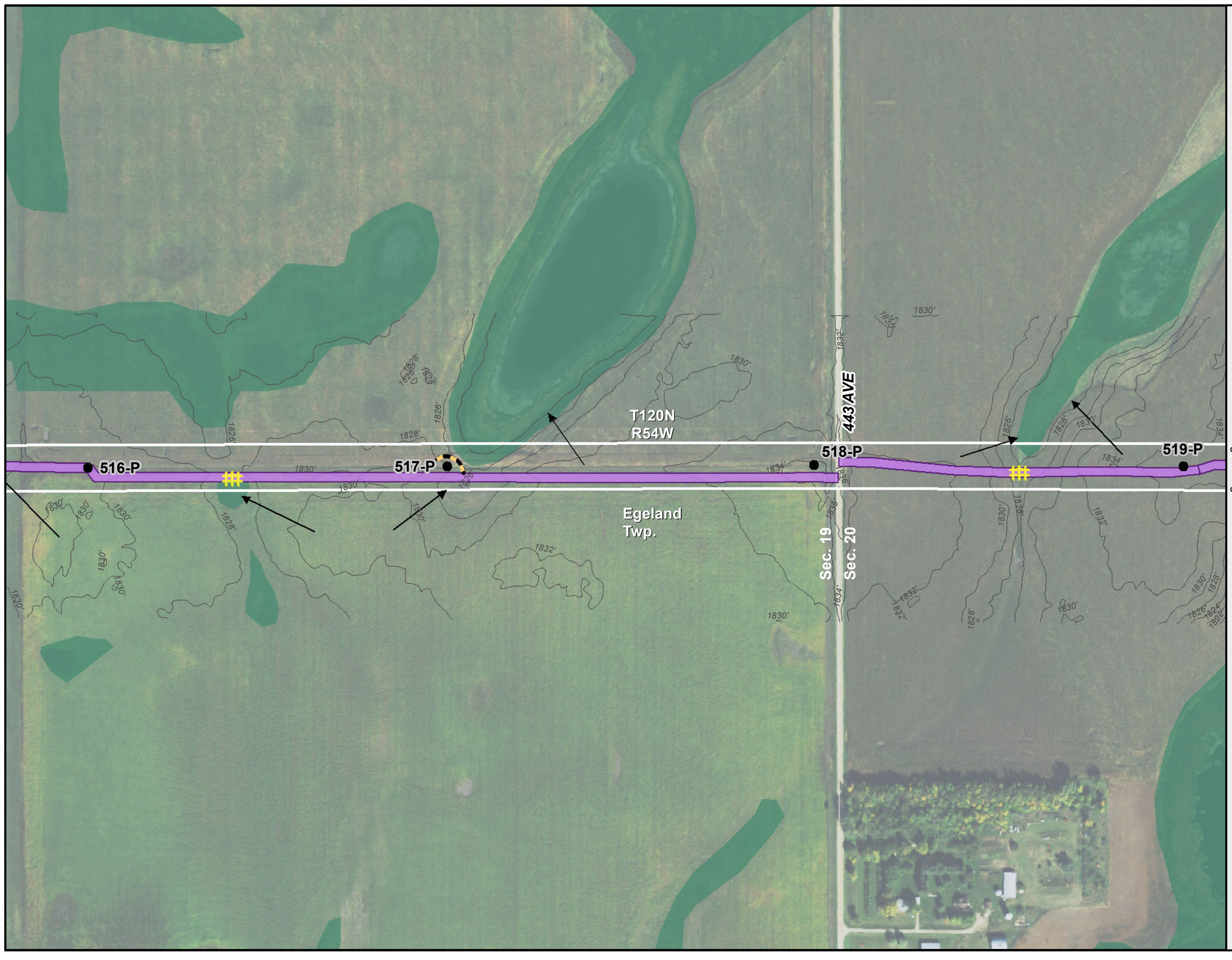



BSSE
Big Stone South to Ellendale

Page to Right: 74

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

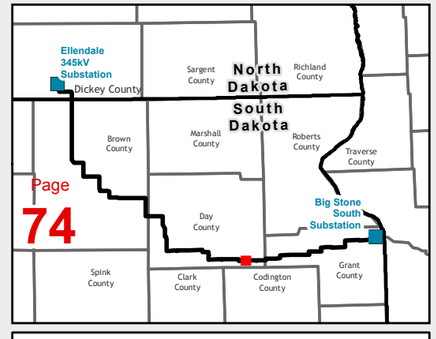
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 74

1:3,600

0 300 600 Feet

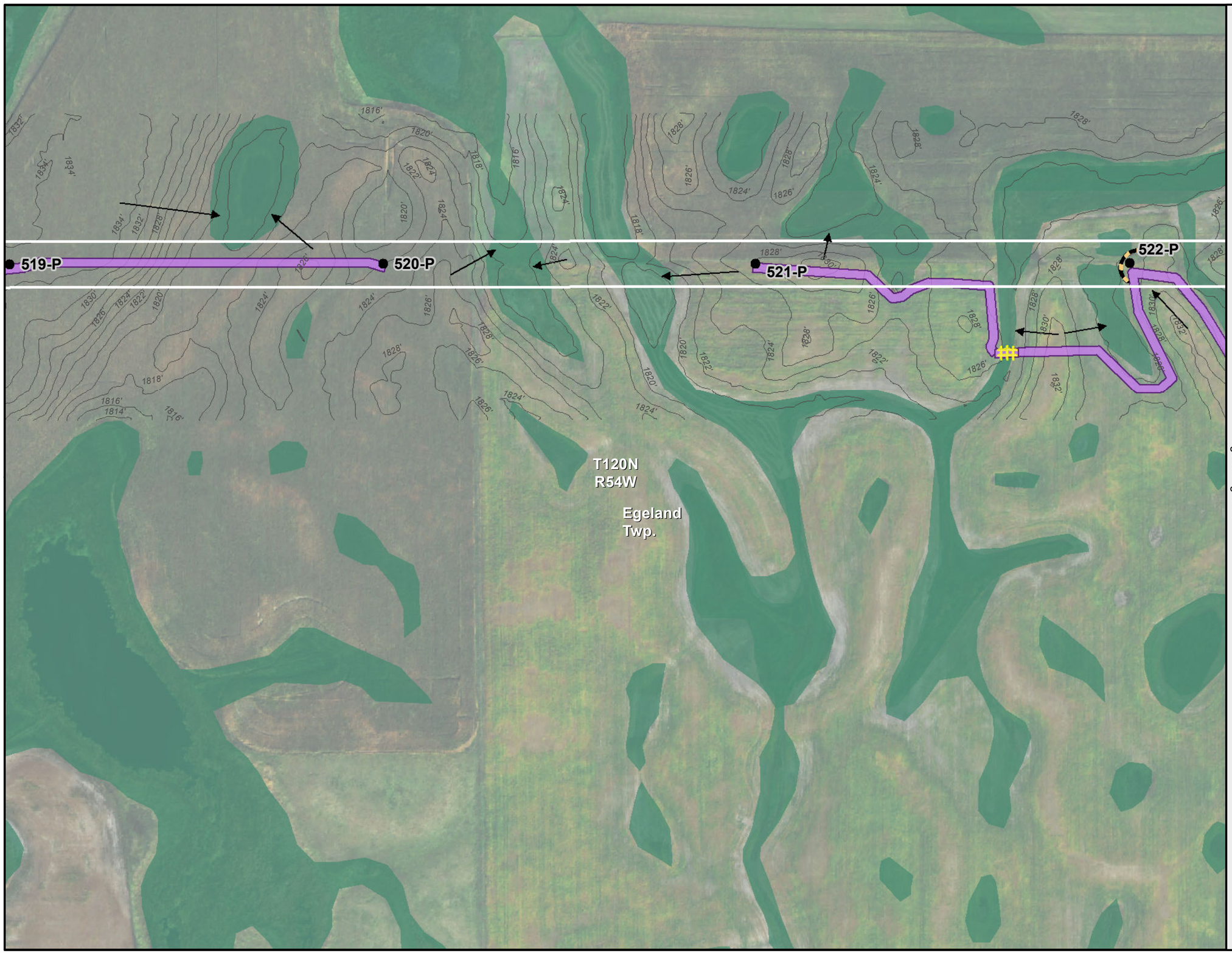



BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 74




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

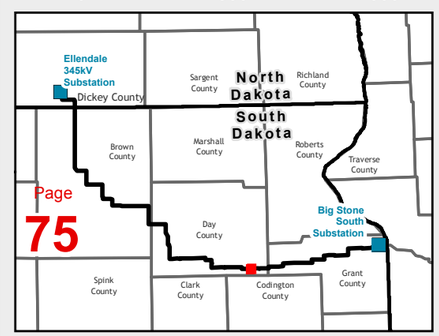
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 75

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 76

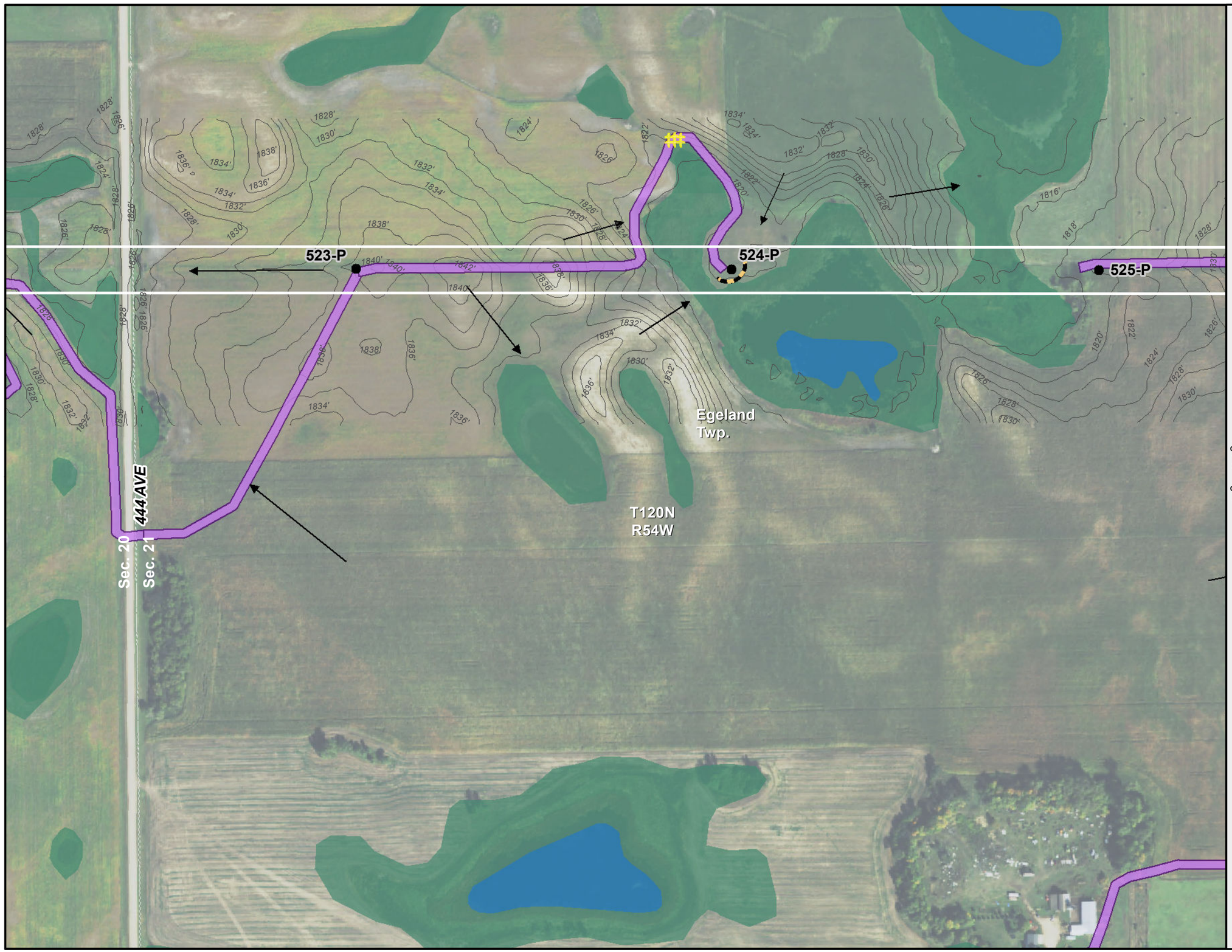
Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 75




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

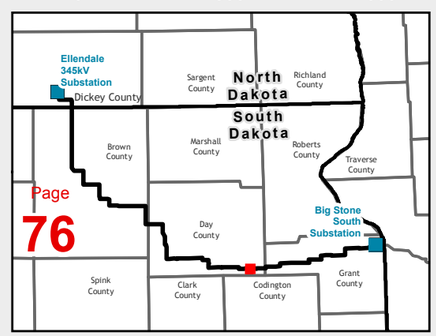
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 76

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 77

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

525-P

526-P

527-P

Egeland Twp.

T120N R54W

Sec. 21

Sec. 22

Sec. 28

Sec. 27

152 ST

445 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

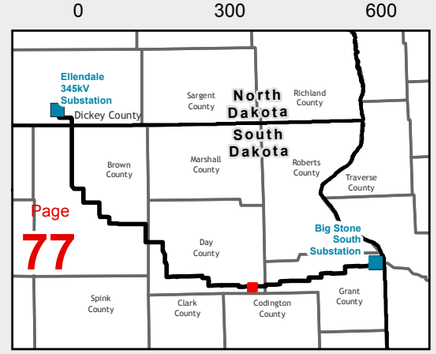
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 77

1:3,600

0 300 600 Feet




Big Stone South to Ellendale

Date: 10/24/2015



Egeland Twp.

151 ST

Sec. 16

Sec. 21

Sec. 16

Sec. 15

Sec. 15

Sec. 22

T120N
R54W

Sec. 21

Sec. 22

525-P

526-P

527-P

528-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

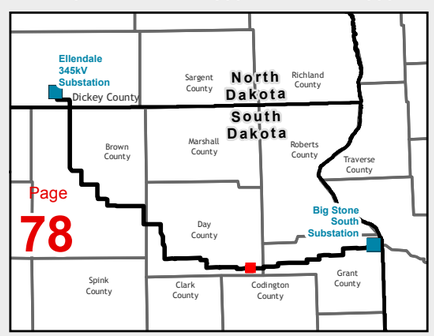
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 78

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

528-P
529-P
530-P
531-P
T120N
R54W
Egeland
Twp.
Sec. 22
152 ST
Sec. 27

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

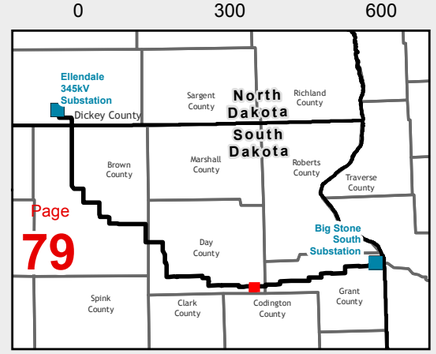
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

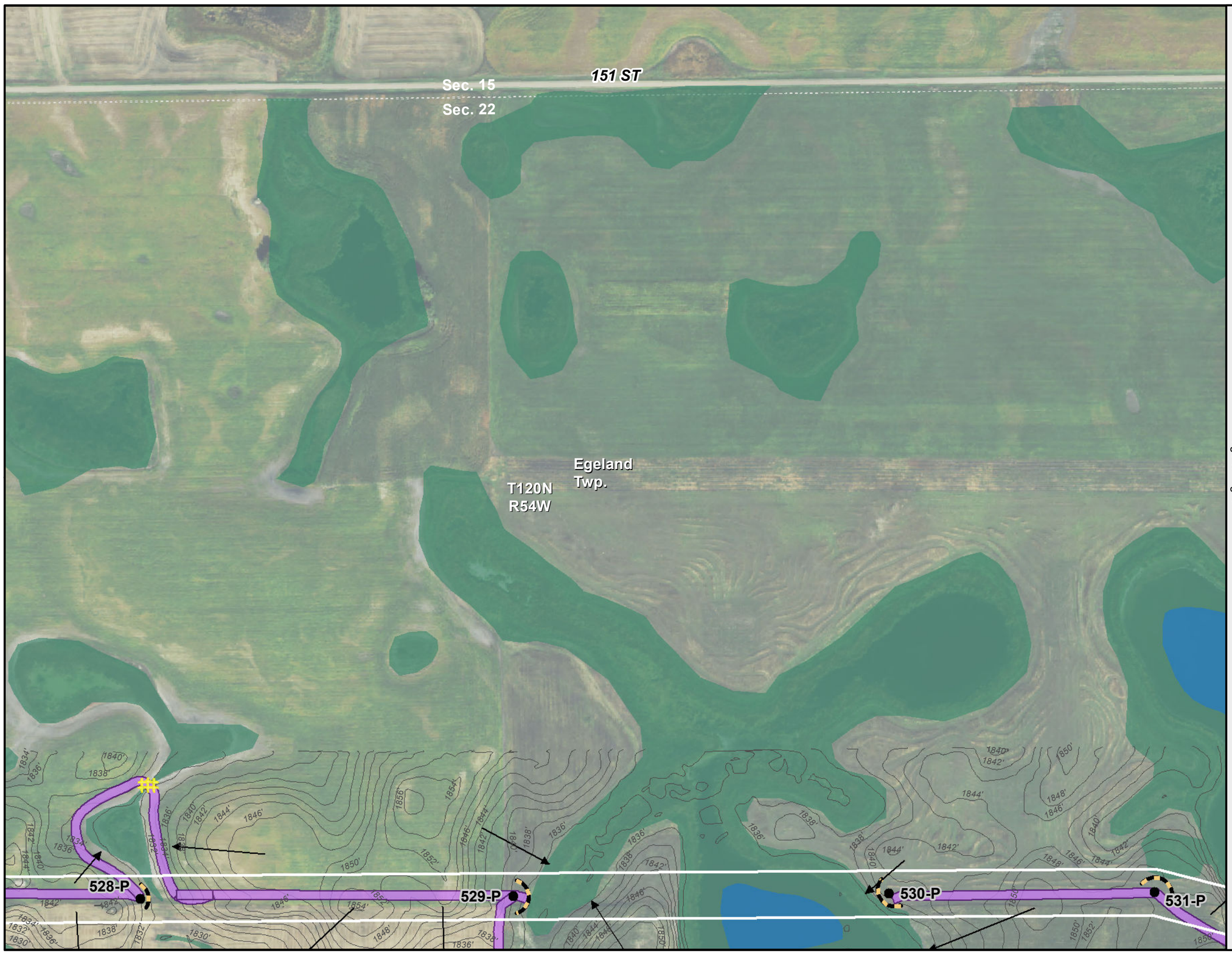
## Day County
## Page 79

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

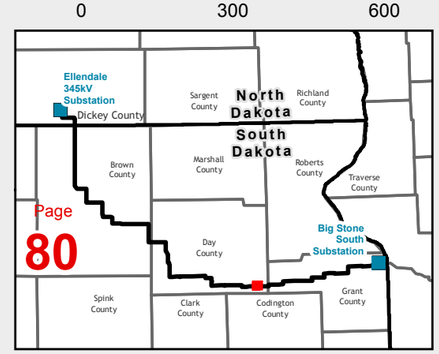
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

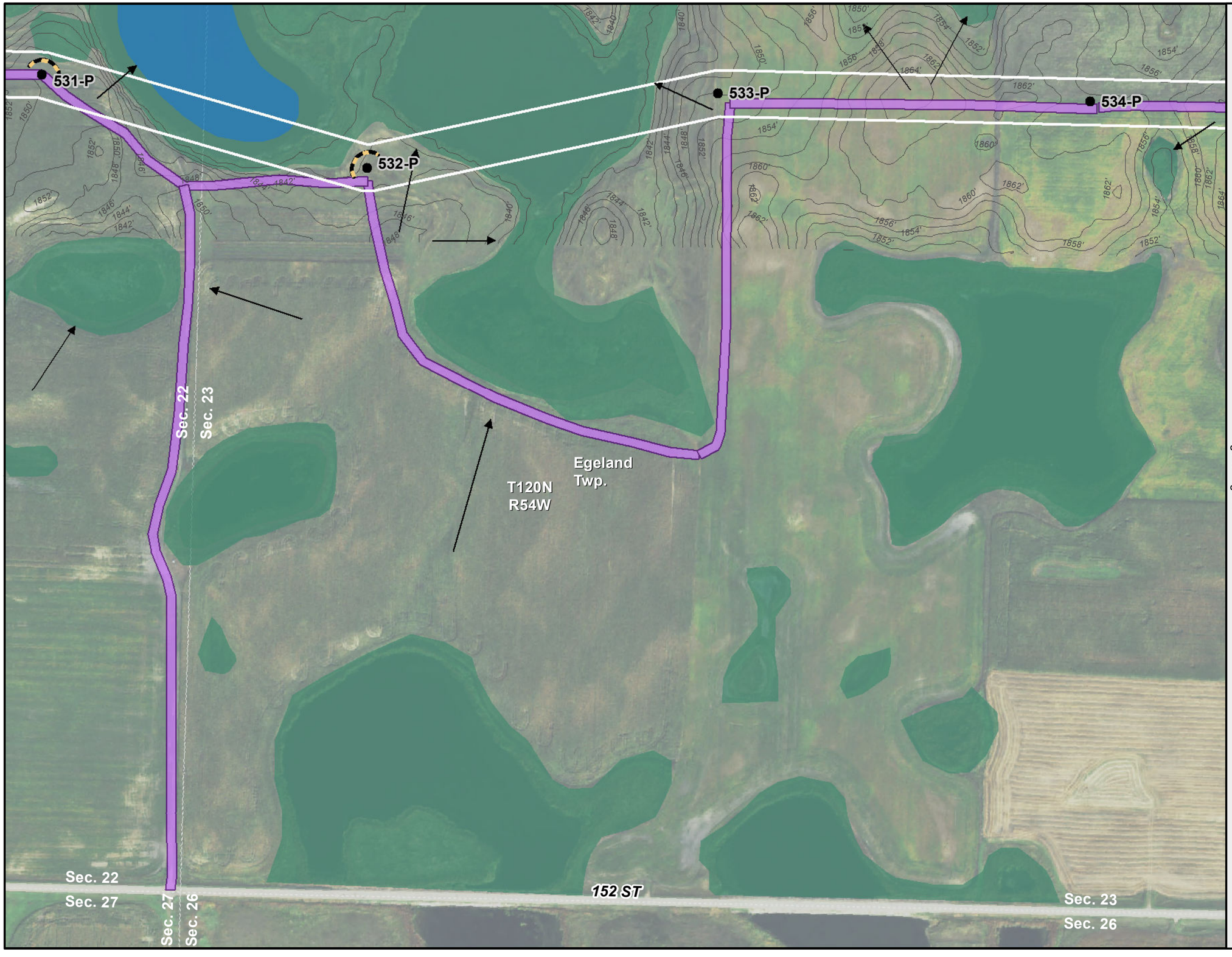
## Day County
## Page 80

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

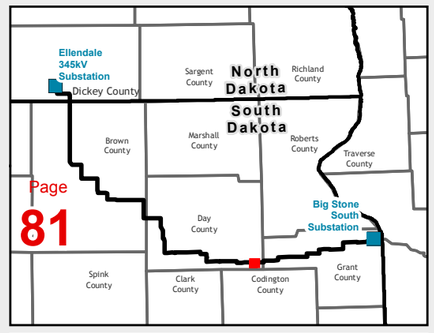
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 81

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Egeland Twp.

Sec. 23

Sec. 24

T120N
R54W

534-P

535-P

536-P

447 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

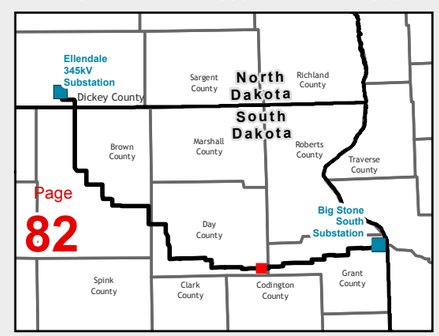
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

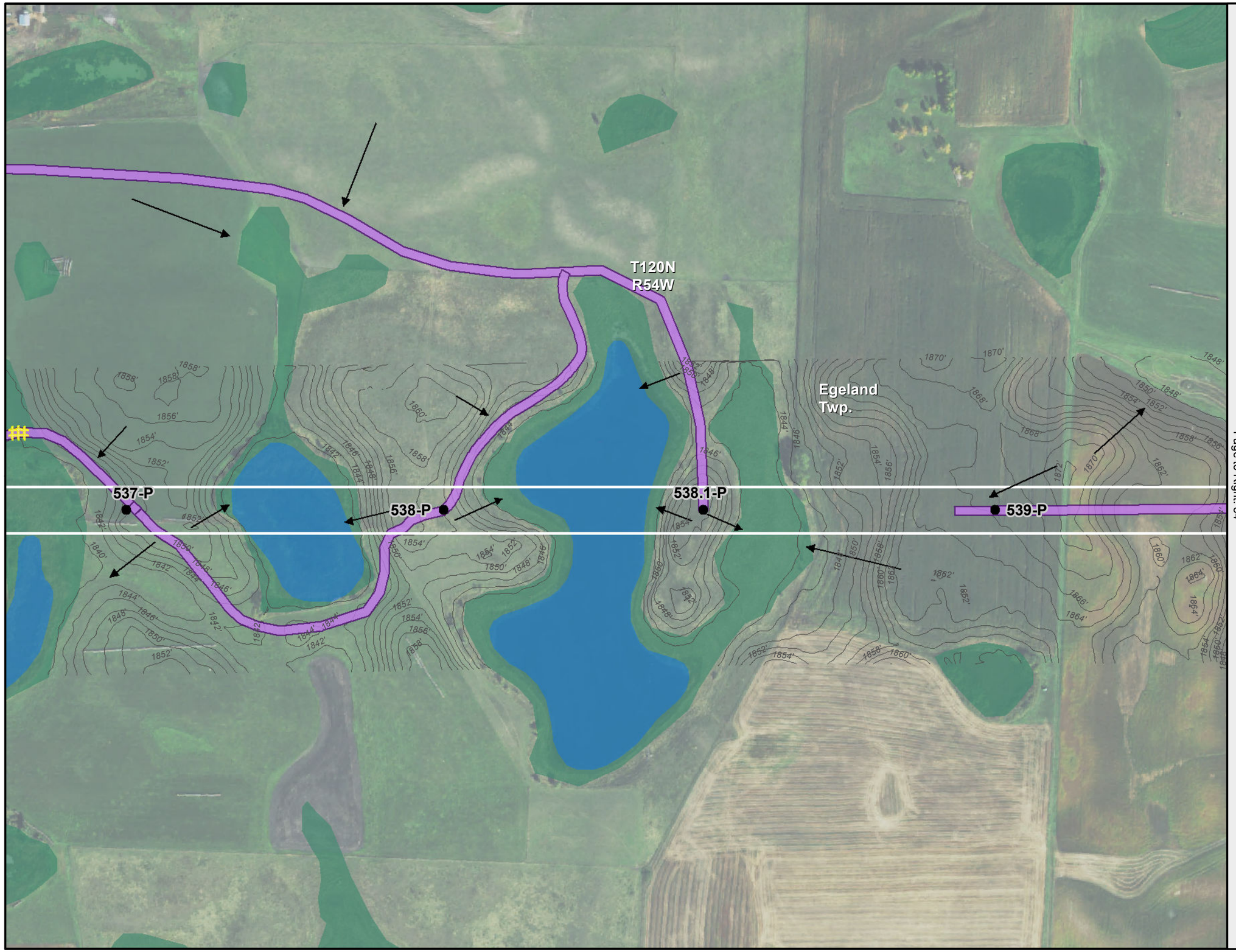
## Day County
## Page 82

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

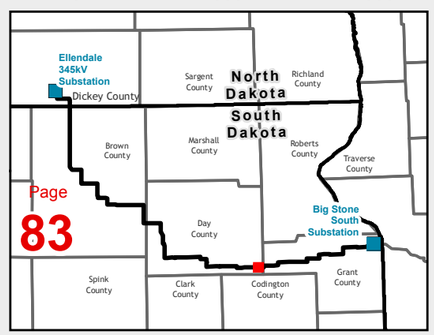
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 83

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 83

Egeland Twp.

Sec. 11

Sec. 24

Sec. 11

Sec. 12

448 AVE

540-P

541-P

542-P

T120N
R54W

T120N
R53W

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project

## North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

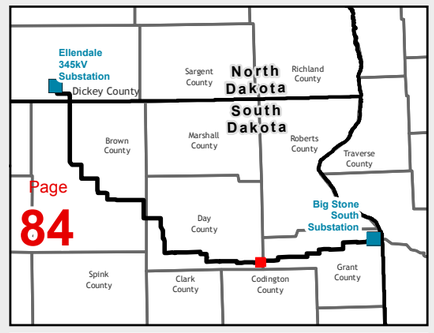
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 84

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 85

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Egeland Twp.

T120N R53W

547-P

546-P

545-P

544-P

543-P

Lura Twp.

T120N R52W

449 AVE

Sec. 12

Sec. 7

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

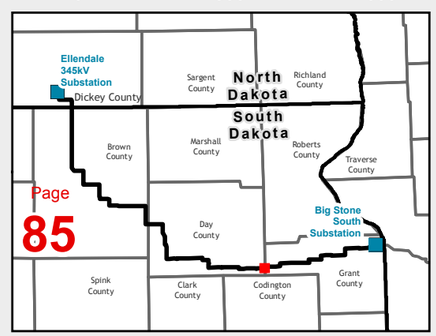
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Day County
## Page 85

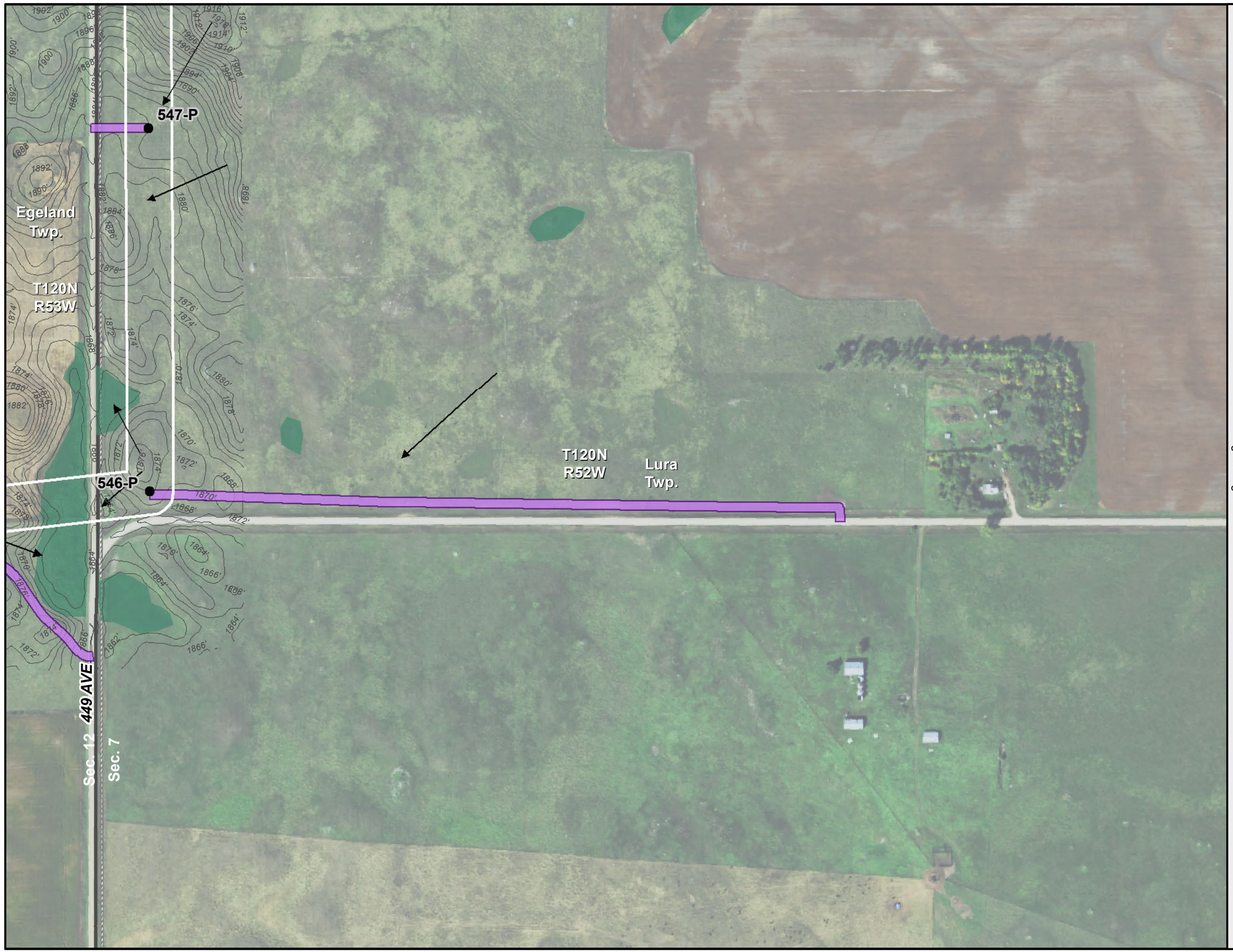
1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

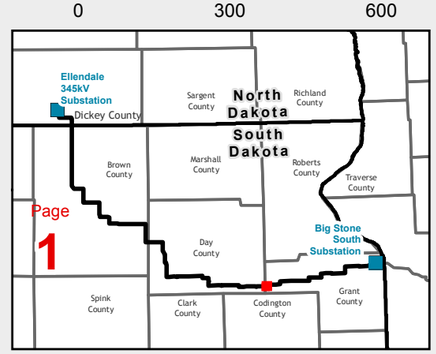
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 1

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

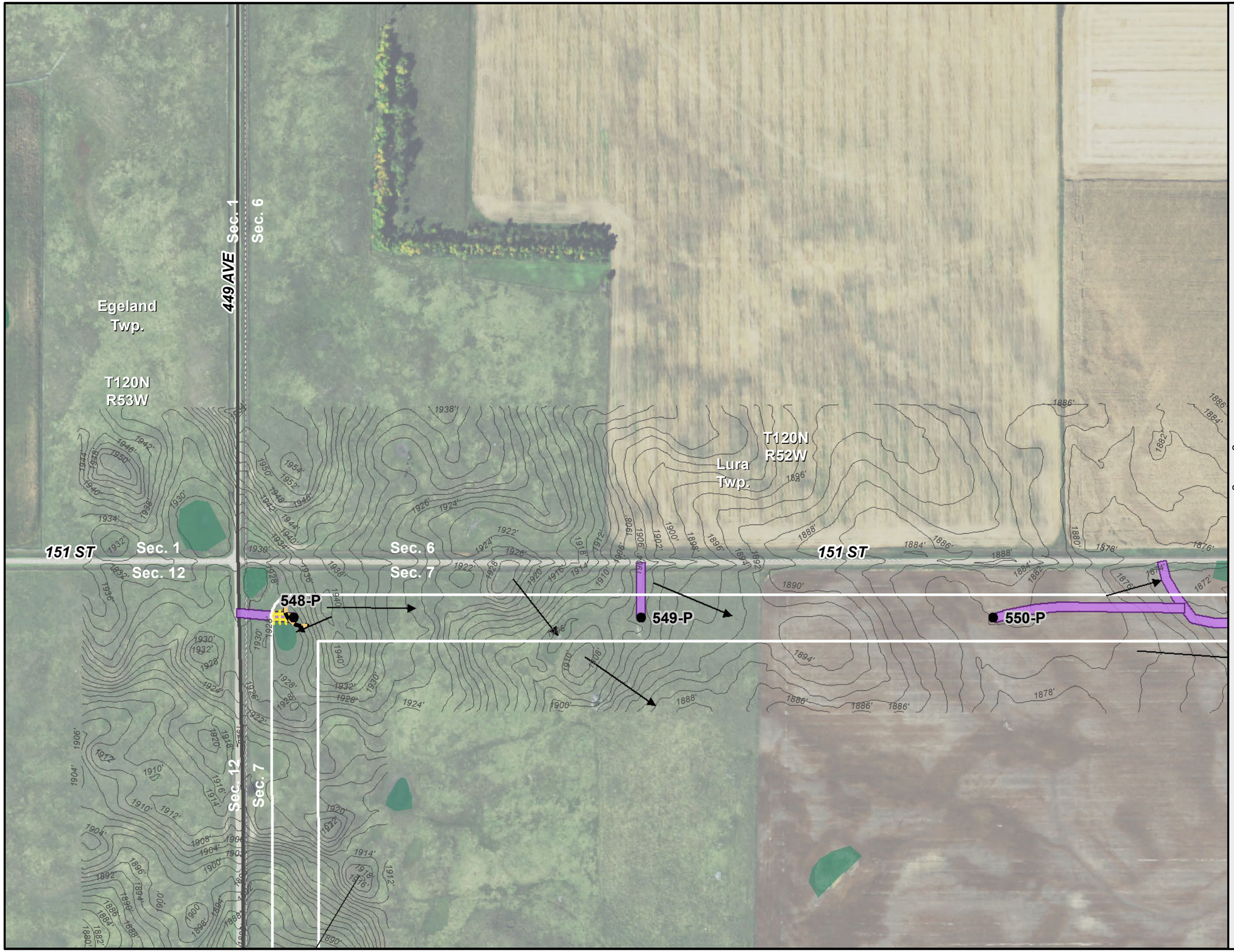
Page to Left:
Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

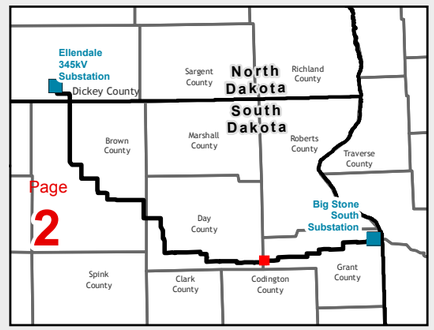
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 2

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

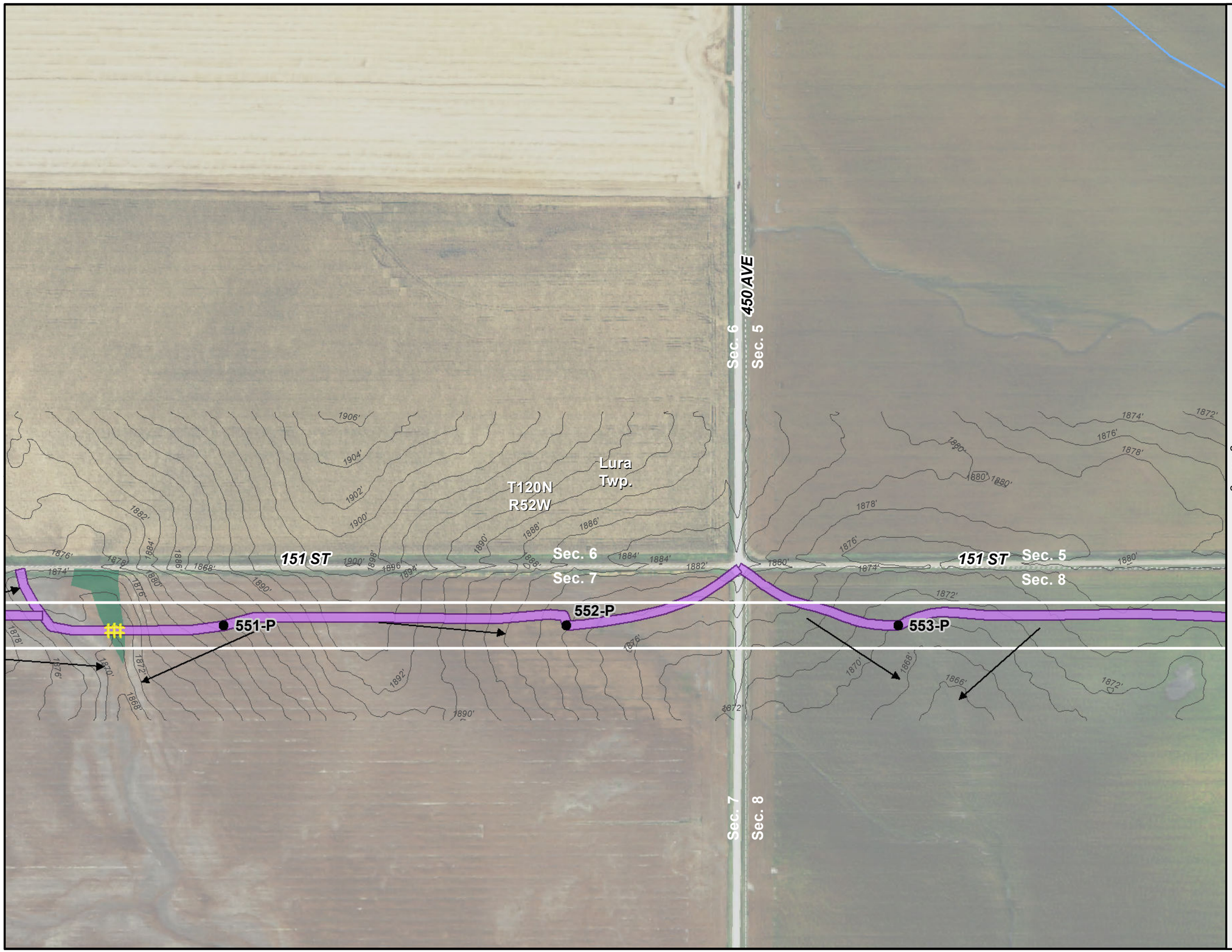
Page to Right: 3

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 2




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

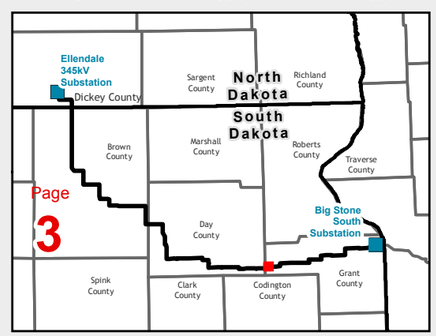
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 3

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 4

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

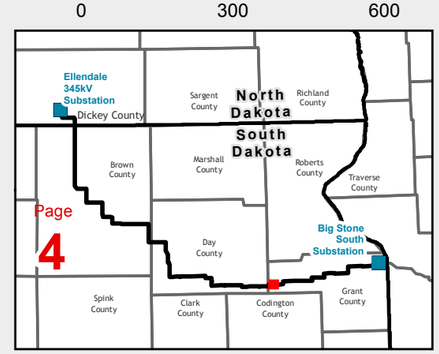
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 4

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Lura Twp.

451 AVE

Sec. 5

Sec. 4

T120N
R52W

151 ST

Sec. 4

Sec. 9

557-P

558-P

559-P

Perimeter control BMP for impaired water (Big Sioux River)

Perimeter control BMP for impaired water (Big Sioux River)

Big Sioux River

Sec. 8

Sec. 9

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

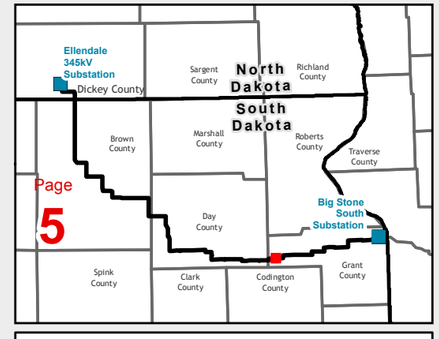
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 5

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 5

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

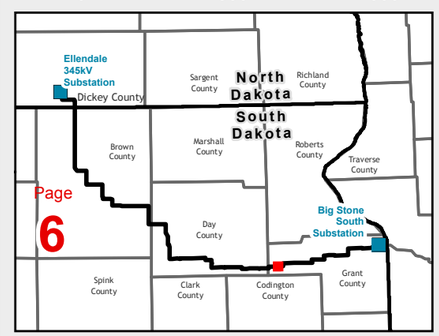
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 6

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 7

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

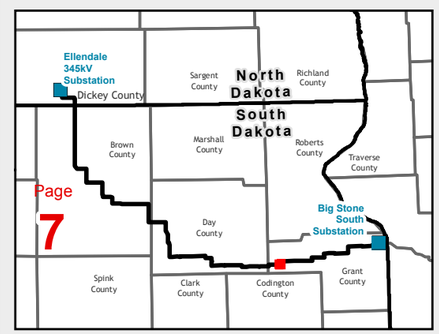
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 7

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015

Lura Twp. T120N R52W

453 AVE

Sec. 3 Sec. 2

Sec. 10 Sec. 11

151 ST

151 ST Sec. 2

Sec. 11

569-P

568-P

566-P

567-P

Indian River

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

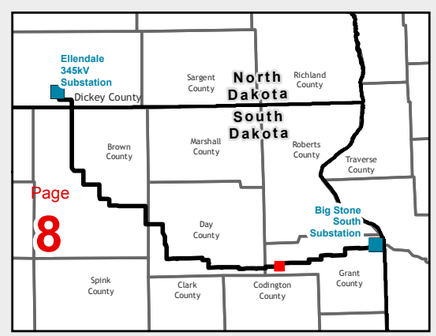
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County Page 8

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Page to Left: 7

Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

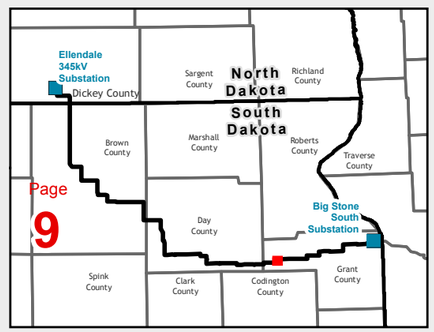
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 9

1:3,600

0 300 600 Feet



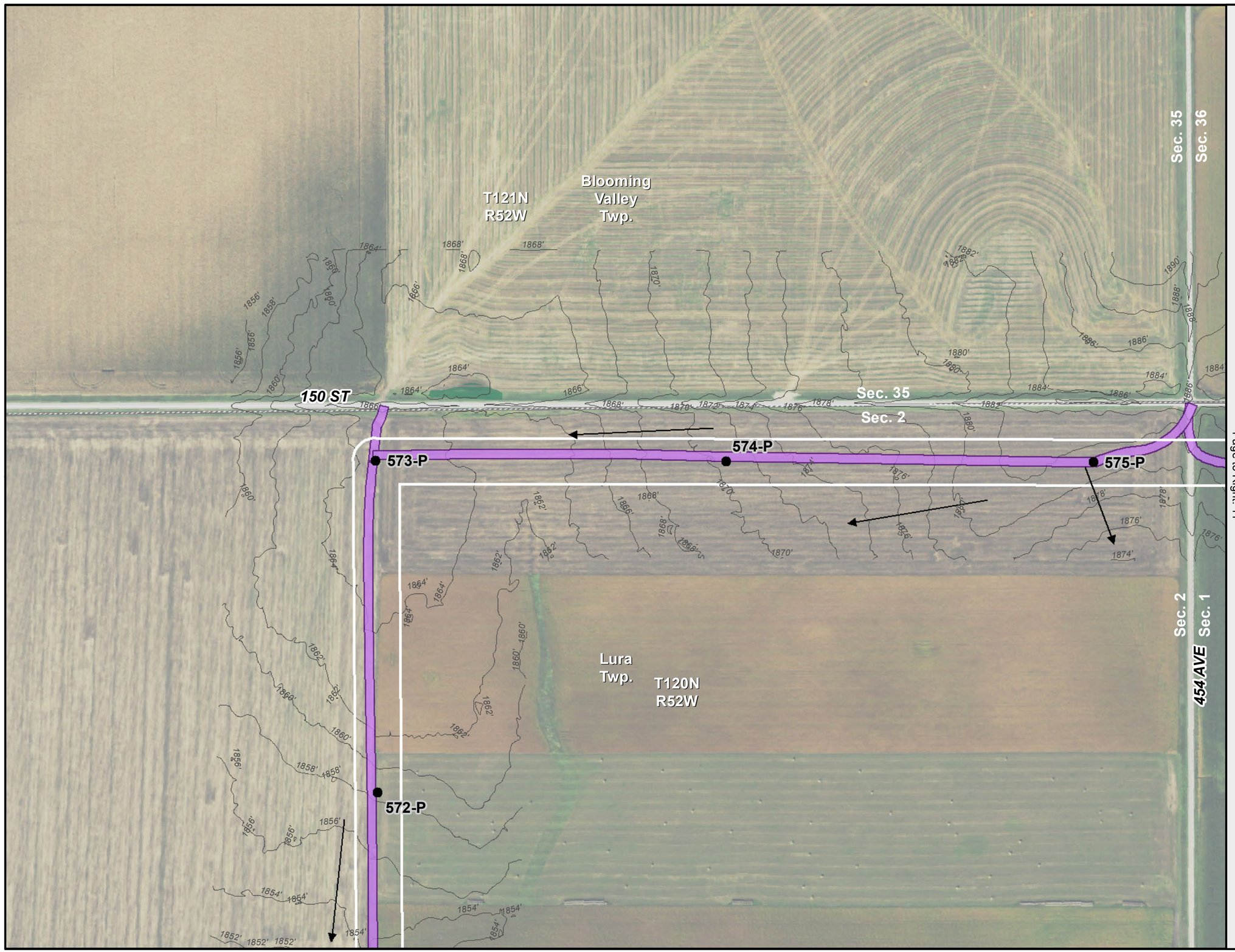

BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

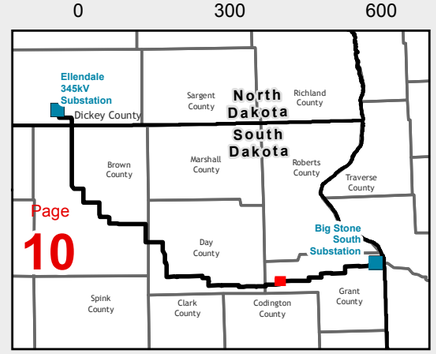
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 10

1:3,600

0 300 600 Feet




Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Sec. 35
Sec. 36
T121N
R52W
Blooming
Valley
Twp.
Sec. 36
Sec. 1
150 ST
576-P
577-P
578-P
Sec. 2
Sec. 1
454 AVE
Lura
Twp.
T120N
R52W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

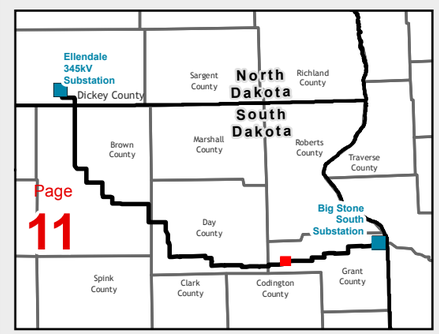
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 11

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 11

Blooming Valley Twp.

T121N R52W

Sec. 36

Sec. 31

455 AVE

Farmington Twp.

T121N R51W

Sec. 36 150 ST

Sec. 1

Sec. 31 150 ST

Sec. 6

579-P

580-P

581-P

Sec. 1

Sec. 6

Lura Twp.

T120N R52W

T120N R51W

455 AVE

Indian River

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

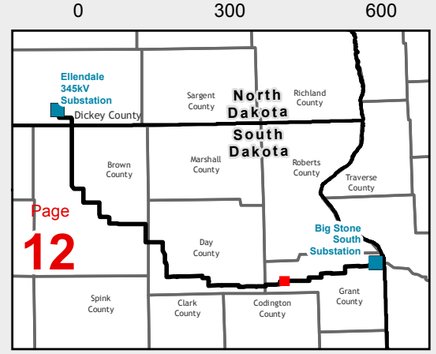
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 12

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Page to Right: 13

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 12

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

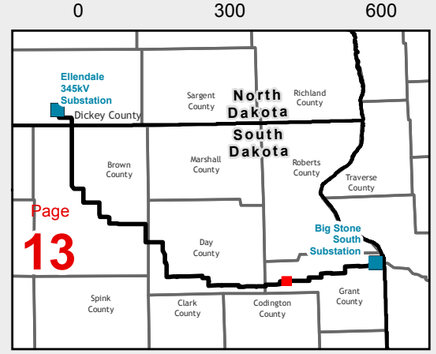
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 13

1:3,600
Feet
0 300 600




BSSE
Big Stone South to Ellendale

Page to Right: 14

Farmington Twp.
T121N R51W
Lura Twp.
T120N R51W
Sec. 31
Sec. 32
Sec. 6
Sec. 5
150 ST
456 AVE
Indian River
582-P
583-P
584-P

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Sec. 31
Sec. 32
Farmington Twp.
T121N R51W
Indian River
Sec. 32
Sec. 5
150 ST
585-P
586-P
587-P
Lura Twp.
T120N R51W
Sec. 6
Sec. 5
456 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

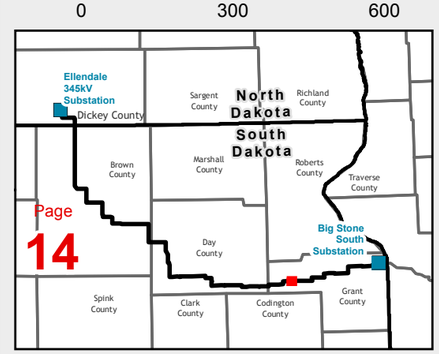
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

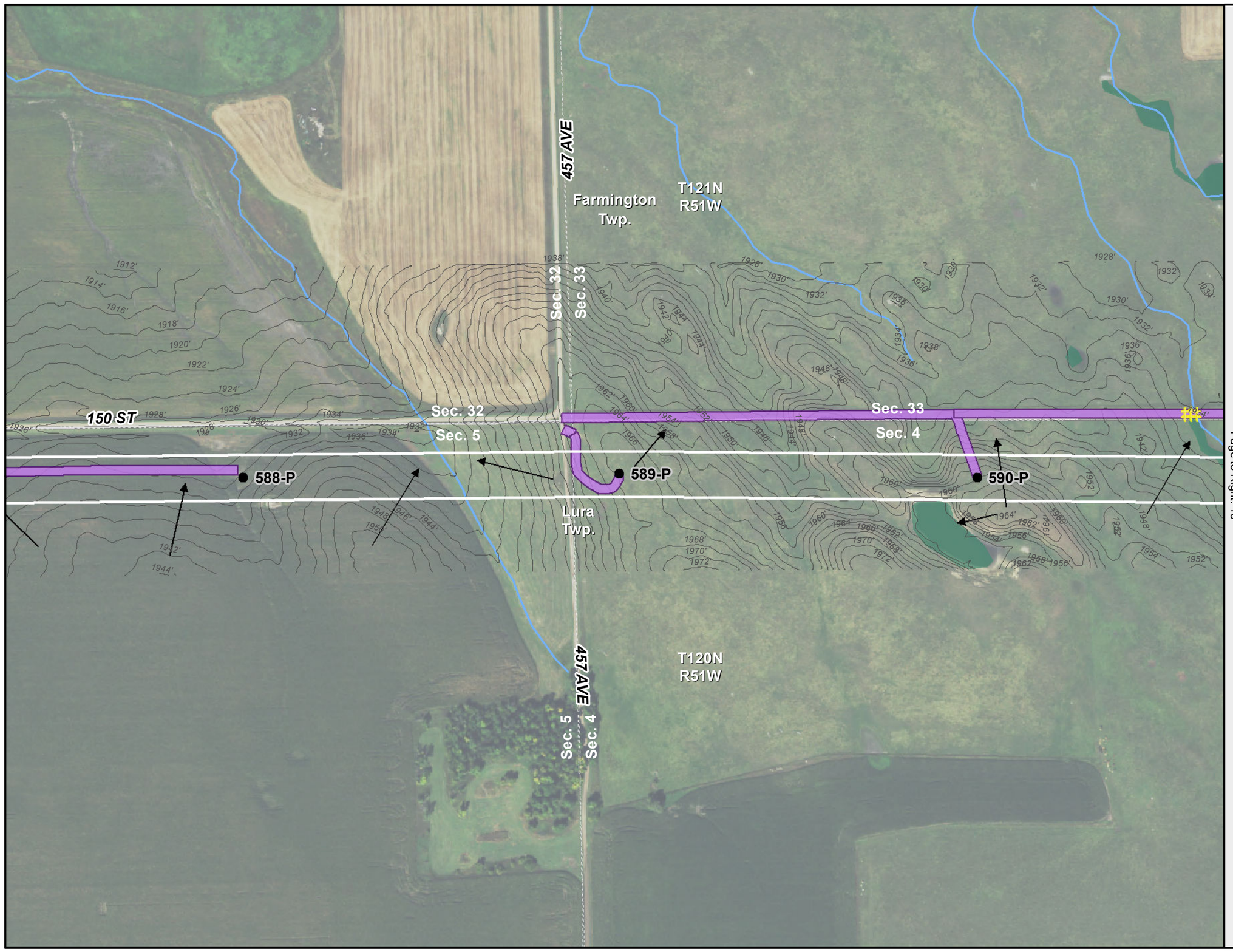
**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 14

1:3,600
0 300 600 Feet




Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

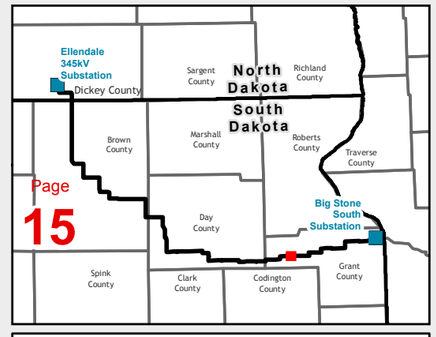
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 15

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Mazeppa Twp.

Farmington Twp.

T121N R51W

Sec. 33

Sec. 10

Sec. 10

Sec. 11

458 AVE

Sec. 33

Sec. 4

I29 N

Sec. 10

Sec. 15

Sec. 11

Sec. 14

591-P

592-P

593-P

I29 S

29

T120N R51W

T120N R52W

Lura Twp.

Sec. 4

Sec. 15

Sec. 15

Sec. 14

## SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

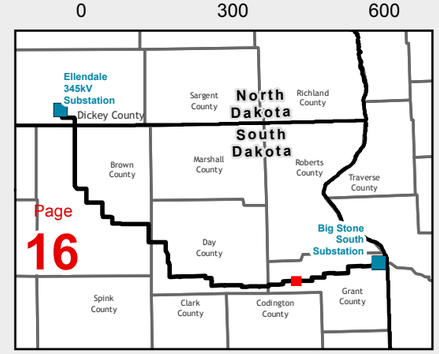
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 16

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 16

Sec. 11

Sec. 11
Sec. 14

Mazeppa
Twp.

T120N
R52W

594-P

595-P

596-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

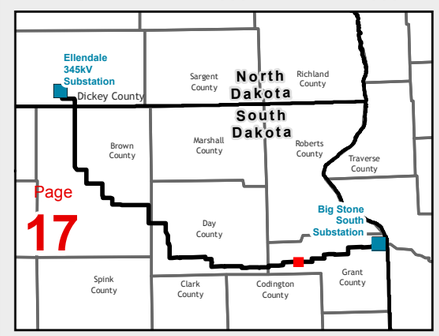
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 17

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 18



Page to Bottom:

Date: 10/24/2015



Mazeppa Twp.

Sec. 11 | Sec. 12

459 AVE

T120N
R52W

150 ST

Sec. 11
Sec. 14
Sec. 12
Sec. 13

597-P
598-P
599-P

Sec. 14 | Sec. 13

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

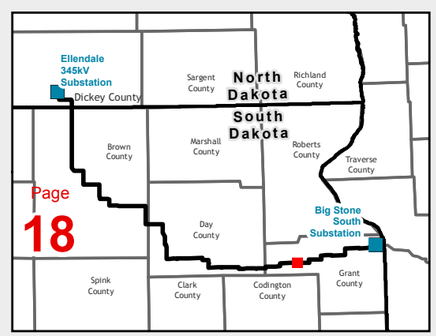
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 18

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Mazeppa Twp.

460 AVE

Sec. 12

Sec. 7

T120N R52W

T120N R51W

150 ST

Sec. 12

Sec. 13

Sec. 7

Sec. 18

600-P

601-P

602-P

603-P

Sec. 13

Sec. 18

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

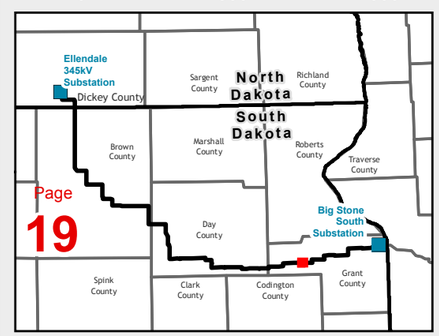
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 19

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

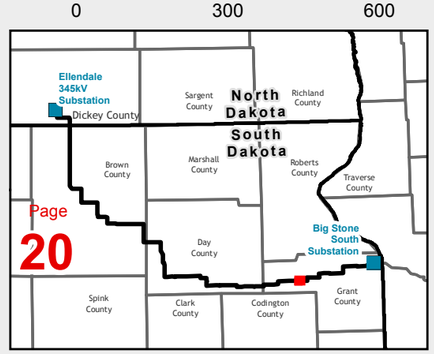
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 20

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Mazeppa Twp.
T120N R51W

Sec. 7 150 ST
Sec. 18
Sec. 8
Sec. 17
Sec. 7 461 AVE
Sec. 18
Sec. 17

603-P 604-P 605-P 606-P

Mazeppa Twp.

T120N
R51W

Sec. 8
Sec. 17

606-P
607-P
608-P
609-P

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

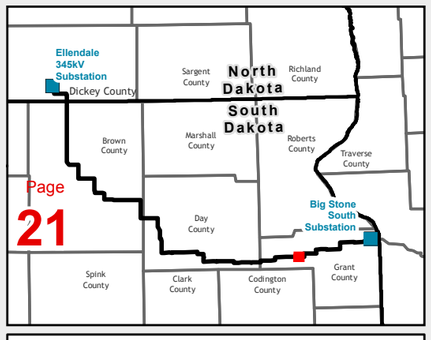
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 21

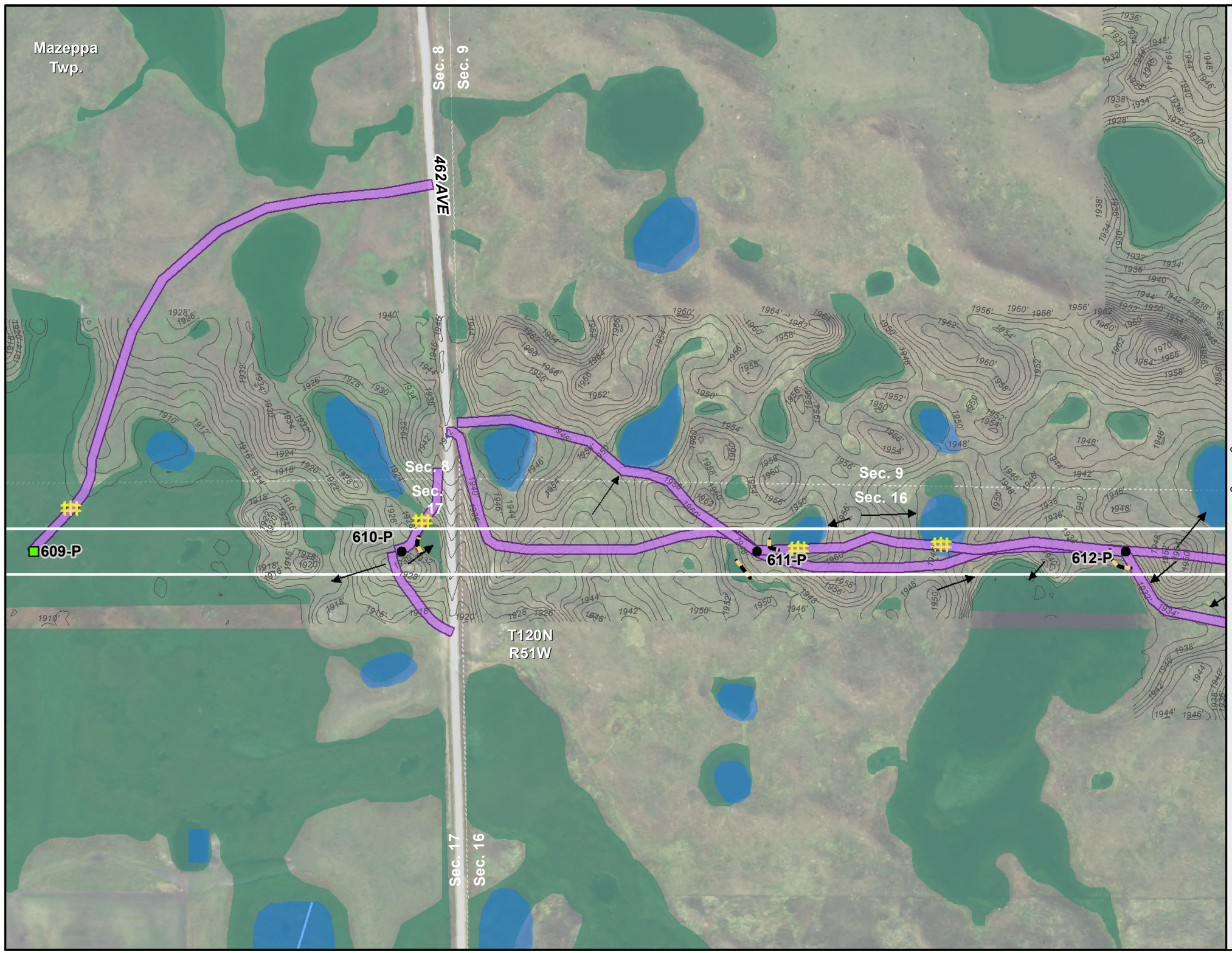
1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

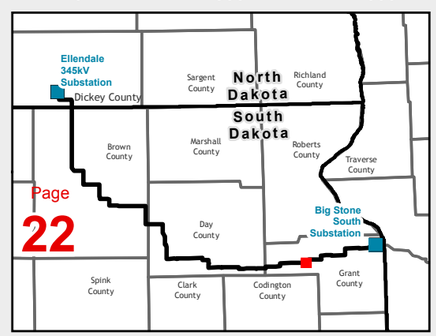
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 22

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Left: 21

Page to Right: 23

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015



Mazeppa Twp.

Sec. 9
Sec. 16
T120N
R51W

Sec. 9
Sec. 10
Sec. 16
Sec. 15

612-P
613-P
614-P
615-P
616-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

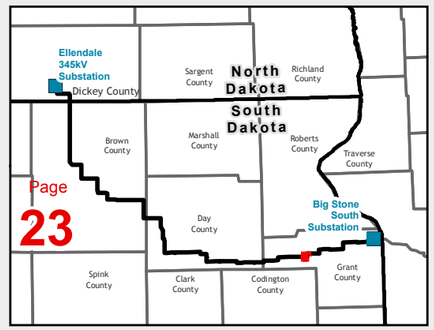
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 23

1:3,600

0 300 600 Feet



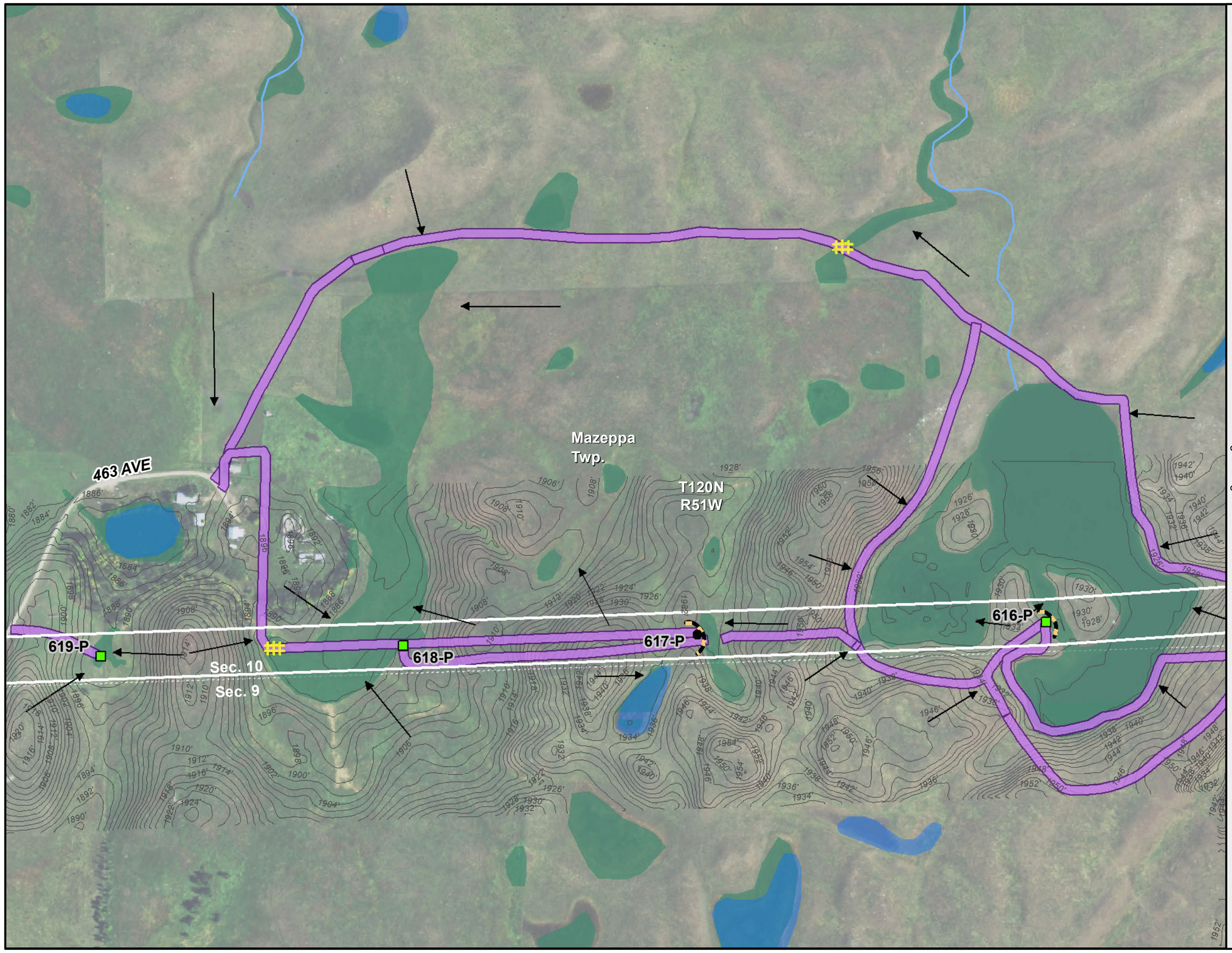

BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

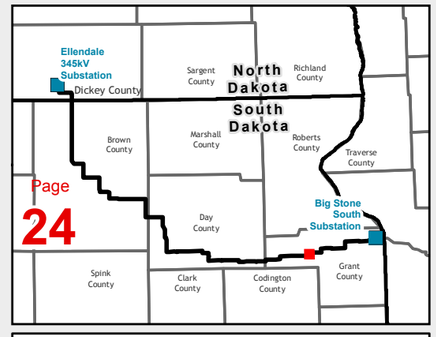
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 24

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

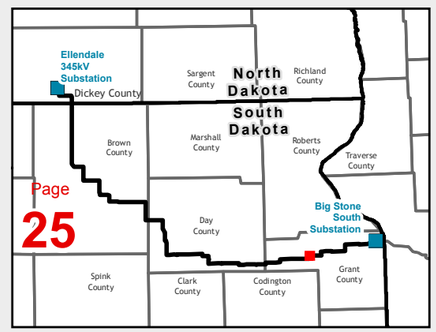
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 25

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 25

Sec. 3
Sec. 2
464 AVE
149 ST
Sec. 3
Sec. 10
Sec. 2
Sec. 11
624-P
625-P
626-P
T120N
R51W
Mazeppa
Twp.
Sec. 10
Sec. 11

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

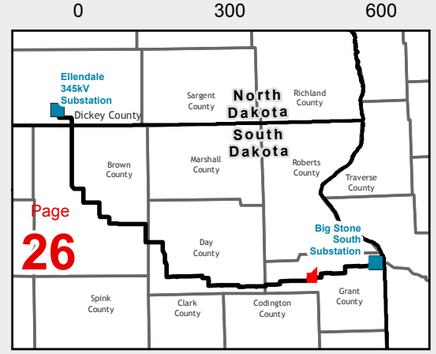
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 26

1:3,600
0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 27

Page to Bottom:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Left: 26

Mazeppa Twp.

Sec. 2

Sec. 1

149 ST

Sec. 2

Sec. 11

Sec. 1

Sec. 12

627-P

628-P

629-P

T120N
R51W

465 AVE

Sec. 11

Sec. 12

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

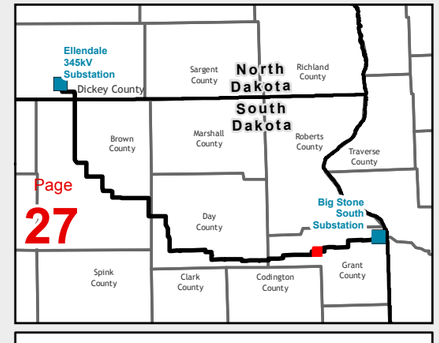
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 27

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 28

149 ST

Sec. 1

Sec. 12

630-P

631-P

632-P

633-P

Mazeppa Twp.

T120N
R51W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

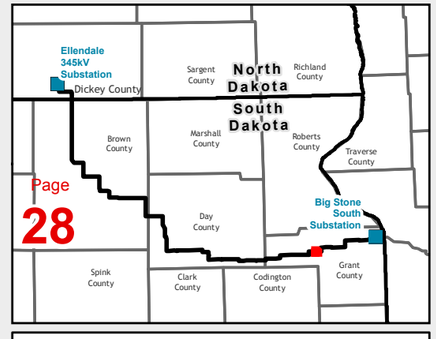
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 28

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Twin Brooks Twp.

T120N R50W

Sec. 1

Sec. 6

Sec. 1

Sec. 12

Sec. 6

Sec. 7

149 ST

633-P

634-P

635-P

636-P

Mazeppa Twp.

T120N R51W

466 AVE

Sec. 12

Sec. 7

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

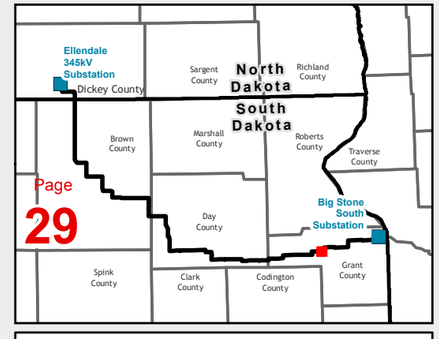
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 29

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

640-P

639-P

637-P

638-P

467 AVE

Sec. 6

Sec. 5

Sec. 7

Sec. 8

149 ST

Twin Brooks Twp.

T120N R50W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

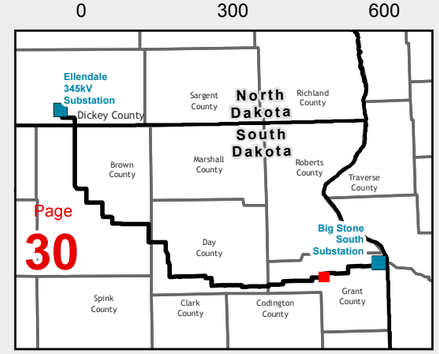
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 30

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Twin Brooks Twp.

T120N R50W

Sec. 5

Sec. 6

467 AVE

643-P

642-P

641-P

640-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

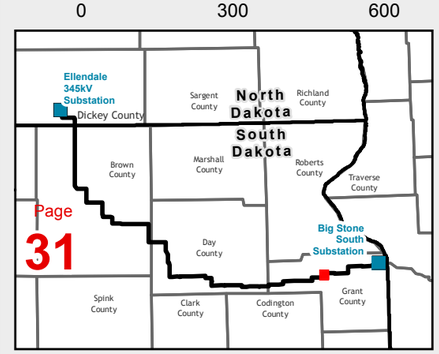
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 31

1:3,600

0 300 600 Feet

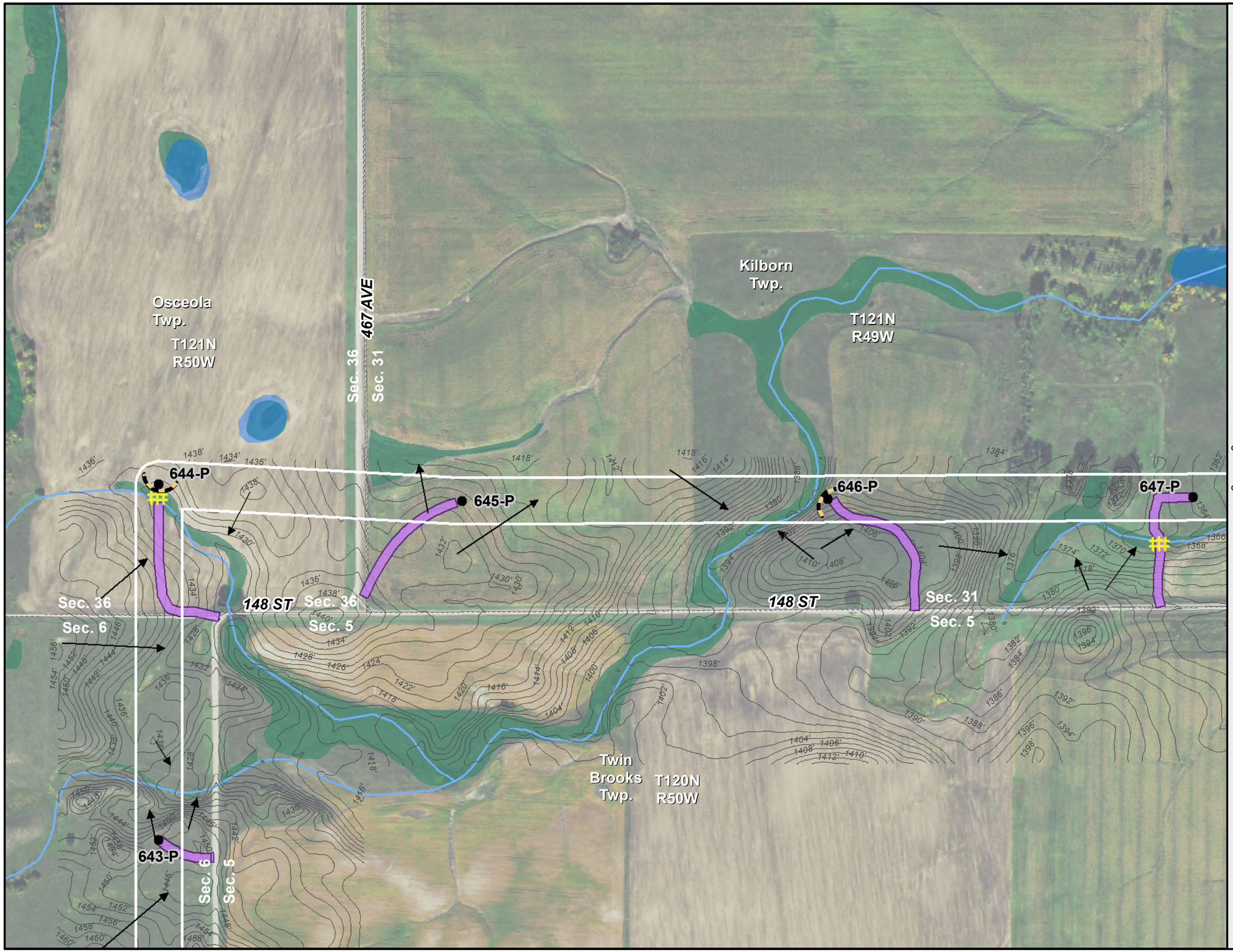



BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left:




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

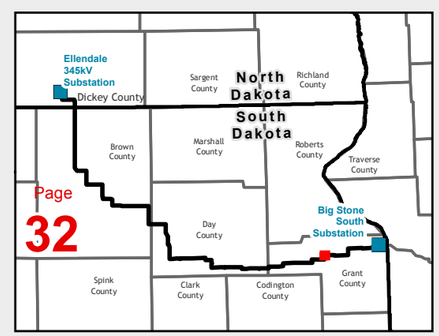
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 32

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

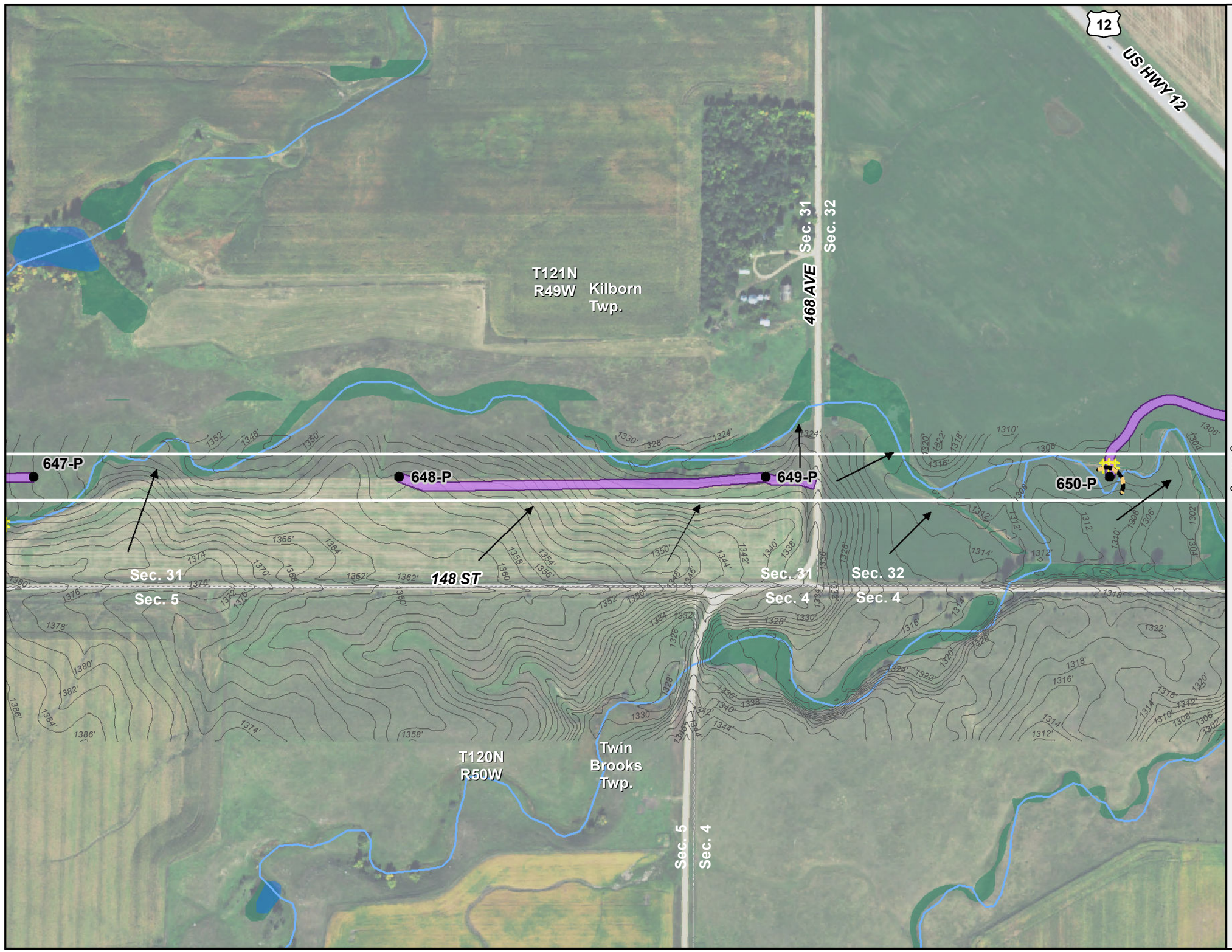
Page to Right: 33

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom: 31

Date: 10/24/2015

Page to Left: 32




## SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

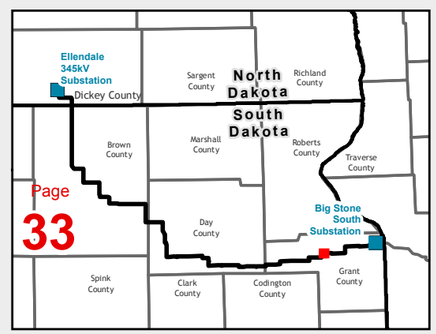
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 33

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 34

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

T121N
R49W
Kilborn
Twp.

12
US HWY 12

651-P
650-P
652-P
653-P
148 ST

Sec. 32
Sec. 4

Twin
Brooks
Twp.

T120N
R50W

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

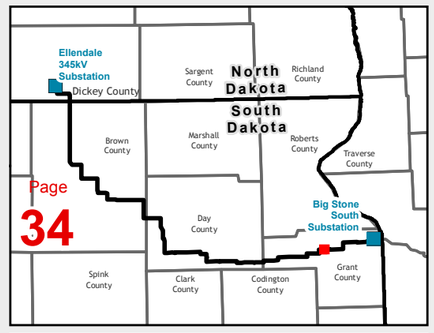
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 34

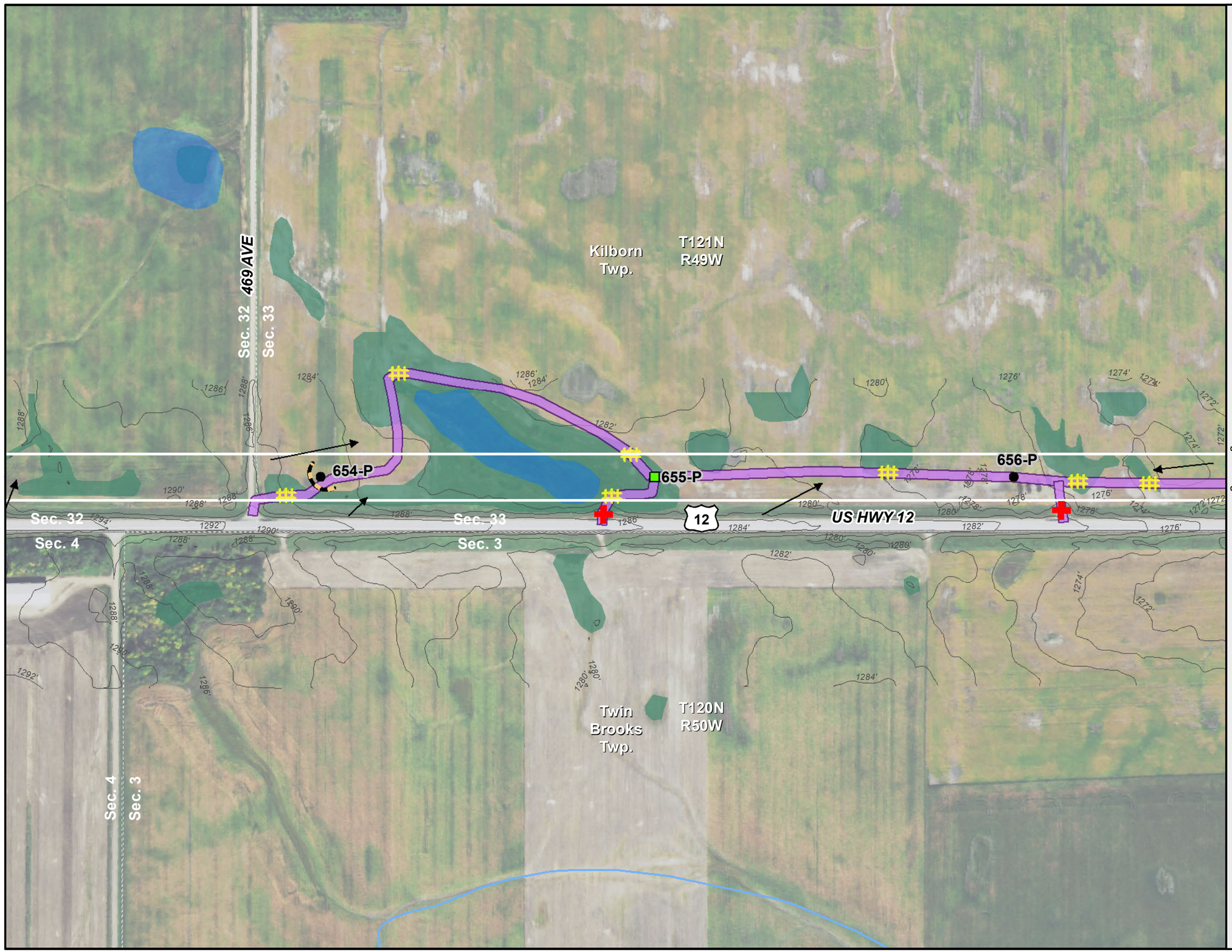
1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

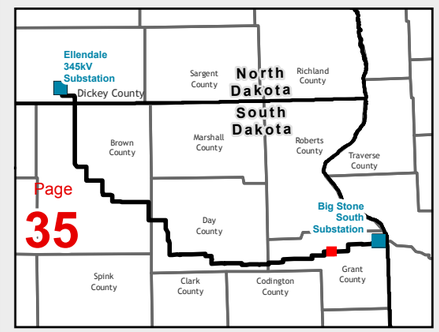
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 35

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 35

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

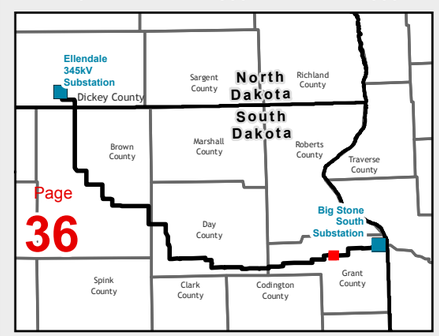
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 36

1:3,600

0 300 600 Feet




BIG STONE SOUTH TO ELLENDALE

Page to Right: 37

T121N R49W
Kilborn Twp.
Sec. 33
Sec. 34
470 AVE
657-P
658-P
659-P
US HWY 12
12
Sec. 33
Sec. 3
Sec. 33
Sec. 2
Sec. 34
Sec. 2
148 ST
Twin Brooks Twp.
T120N R50W
Sec. 3
Sec. 2

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 36

Page to Right: 38

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

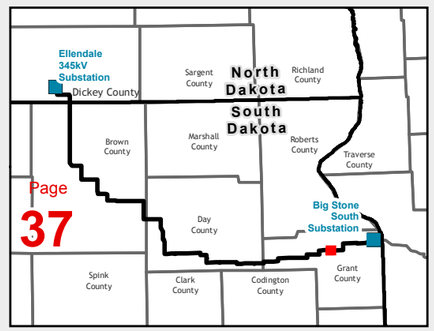
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 37

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Kilborn Twp.
T121N R49W
Twin Brooks Twp.
T120N R50W
Sec. 34
Sec. 2
Sec. 1
148 ST
471 AVE
US HWY 12
660-P
661-P
662-P

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 37

Page to Right: 39

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

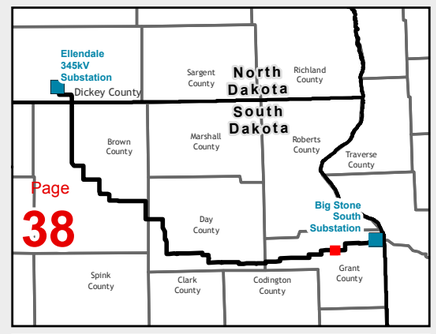
** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 38

1:3,600
0 300 600 Feet




Big Stone South to Ellendale

T121N R49W Kilborn Twp.

T120N R50W Twin Brooks Twp.

148 ST

Sec. 34 471 AVE

Sec. 35

Sec. 1

663-P 664-P 665-P 666-P

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Page to Top:

Date: 10/24/2015

Page to Left: 38

Page to Right: 40

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

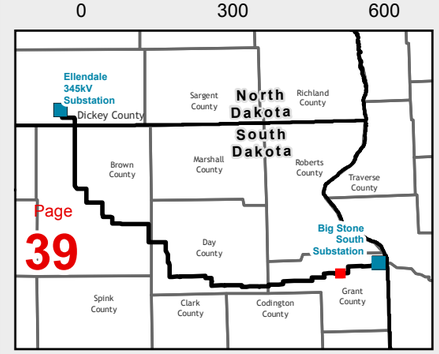
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 39

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

T121N R49W
Kilborn Twp.
Sec. 35
Sec. 36
148 ST
Sec. 35
Sec. 1
Sec. 35
Sec. 6
Sec. 36
Sec. 6
667-P
667.1-P
668-P
Twin Brooks Twp.
T120N R50W
472 AVE
Sec. 1
Sec. 6
T120N R49W
Grant Center Twp.

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

T121N
R49W
Kilborn
Twp.
473 AVE
Melrose
Twp.
T121N
R48W
Sec. 36
Sec. 31
148 ST
Sec. 36
Sec. 6
Sec. 36
Sec. 5
Sec. 31
Sec. 5
148 ST
669-P
670-P
671-P
T120N
R49W
Grant
Center
Twp.
Sec. 6
Sec. 5
473 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

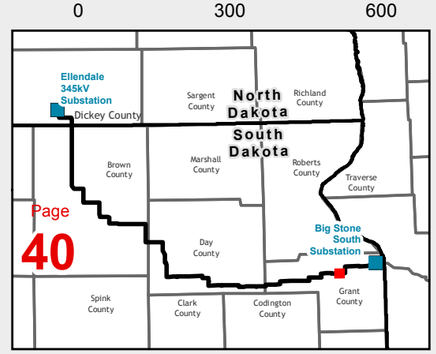
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 40

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

T121N
R48W

Melrose
Twp.

Sec. 31

Sec. 5

148 ST

673-P

672-P

674-P

T120N
R49W

Grant
Center
Twp.

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

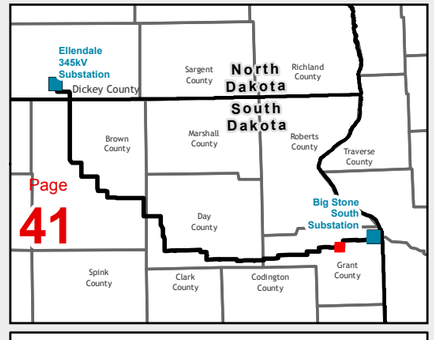
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 41

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Sec. 31
Sec. 32
T121N
R48W
Melrose
Twp.
679-P
Sec. 31
Sec. 5
148 ST
Sec. 31
Sec. 4
Sec. 32
Sec. 4
148 ST
675-P
676-P
677-P
678-P
Sec. 5
Sec. 4
474 AVE
T120N
R49W
Grant
Center
Twp.

## SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

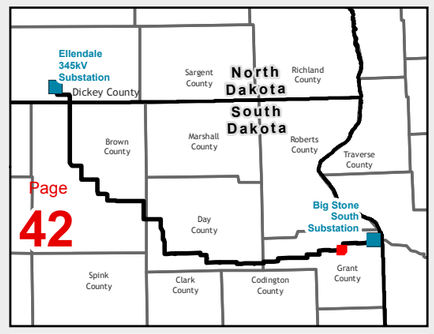
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 42

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Date: 10/24/2015

Page to Left: 42

Melrose Twp.

681-P

680-P

679-P

678-P

677-P

T121N R48W

T120N R49W

148 ST

Sec. 32

Sec. 4

Grant Center Twp.

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

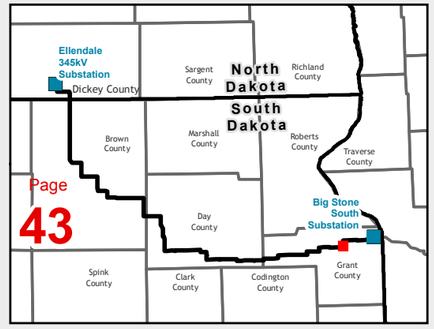
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 43

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 44

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Date: 10/24/2015



Melrose Twp. T121N R48W

147 ST

Sec. 29

Sec. 32

684-P

683-P

682-P

681-P

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

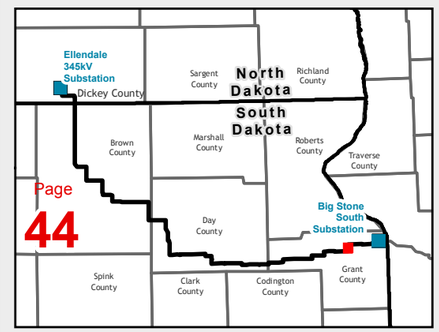
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 44

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Melrose Twp.

687-P

686-P

685-P

T121N
R48W

Sec. 29

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project

## North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

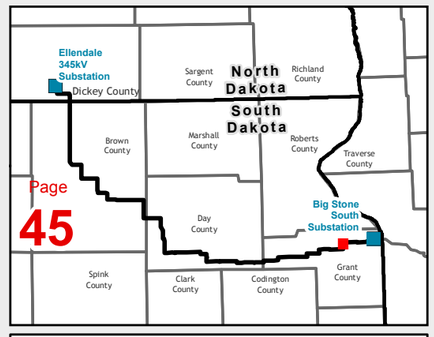
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 45

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Melrose Twp.

475 AVE

Sec. 20

Sec. 21

Sec. 29

Sec. 28

T121N
R48W

146 ST

146 ST

688-P

689-P

690-P

691-P

687-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

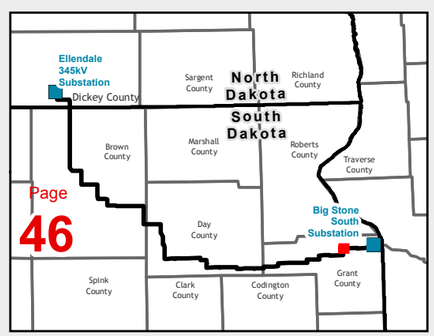
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

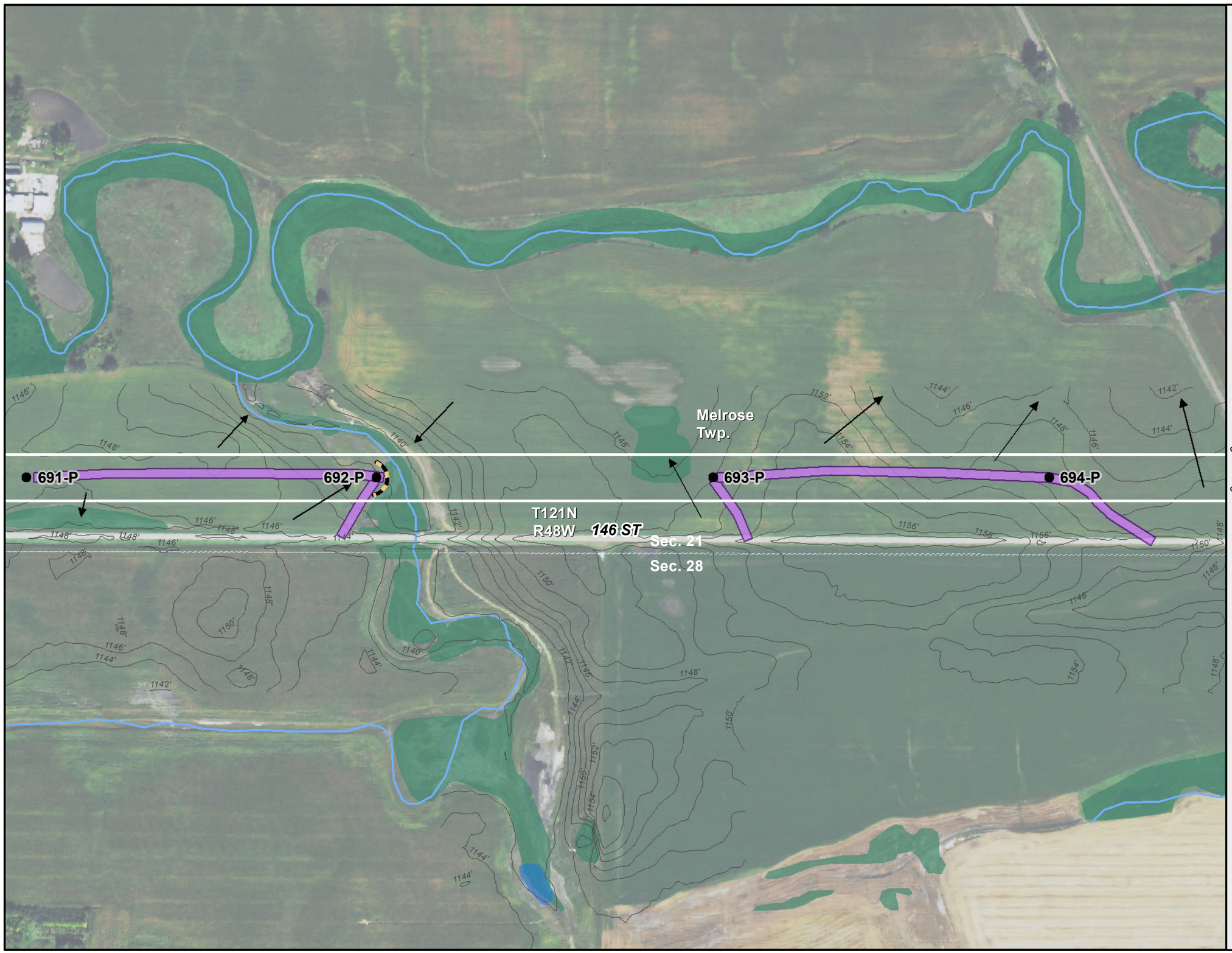
## Grant County
## Page 46

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

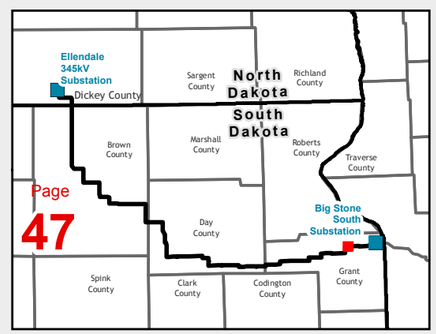
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 47

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Melrose Twp.

476 AVE

Sec. 21

Sec. 22

695-P

696-P

697-P

T121N
R48W

146 ST

146 ST

Sec. 21

Sec. 28

Sec. 22

Sec. 27

Sec. 28

Sec. 27

1142'
1144'
1146'
1148'
1150'
1152'
1154'

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

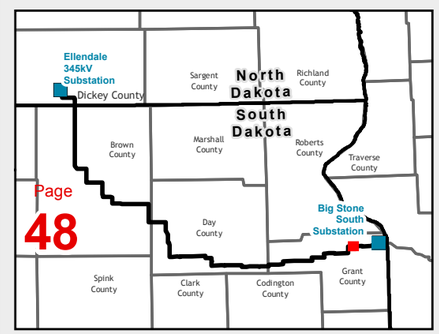
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 48

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Top:

Page to Left: 48

Date: 10/24/2015

Melrose Twp.

Sec. 22
Sec. 27
Sec. 23
Sec. 26

477 AVE

146 ST

T121N
R48W

698-P
699-P
700-P

1142'
1140'
1138'
1144'
1146'
1148'
1150'

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

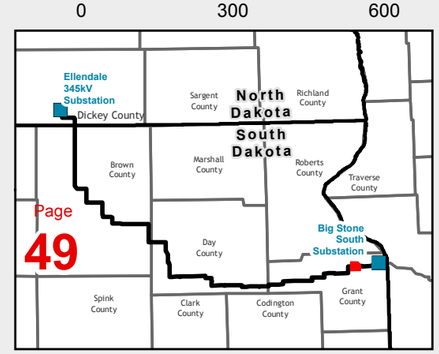
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 49

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 50

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Melrose Twp.

T121N R48W

Sec. 23

Sec. 26

146 ST

701-P

702-P

703-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

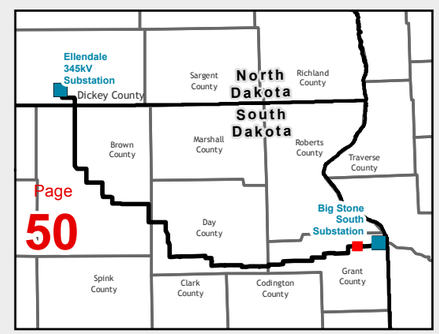
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 50

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Sec. 23
Sec. 24
Melrose Twp.
704-P
705-P
706-P
146 ST
15
T121N
R48W
Sec. 23
Sec. 26
Sec. 24
Sec. 25
SD HWY 15
Sec. 26
Sec. 25

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

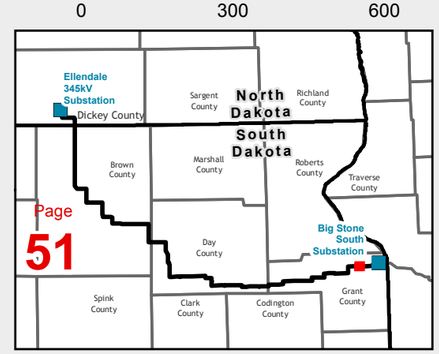
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 51

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015

Page to Left: 51

Page to Right: 53

Melrose Twp.

Sec. 24

Sec. 19

479 AVE

706.1-P

707-P

708-P

709-P

146 ST

Sec. 24

Sec. 25

T121N R48W

T121N R47W

Sec. 19

Sec. 30

Sec. 25

Sec. 30

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

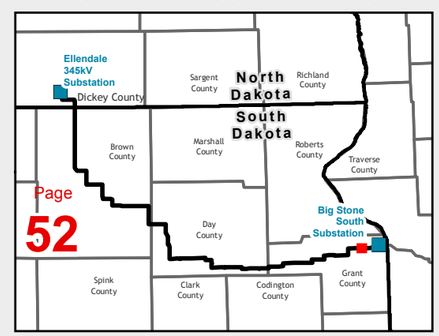
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 52

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom:

Melrose Twp. T121N R47W

146 ST

Sec. 19

Sec. 30

709-P

710-P

711-P

712-P

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

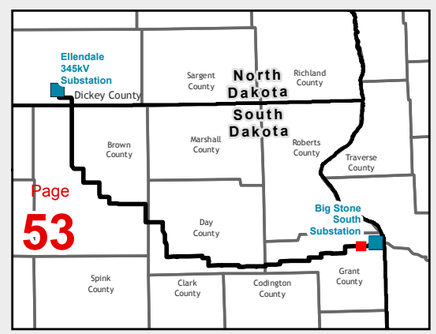
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

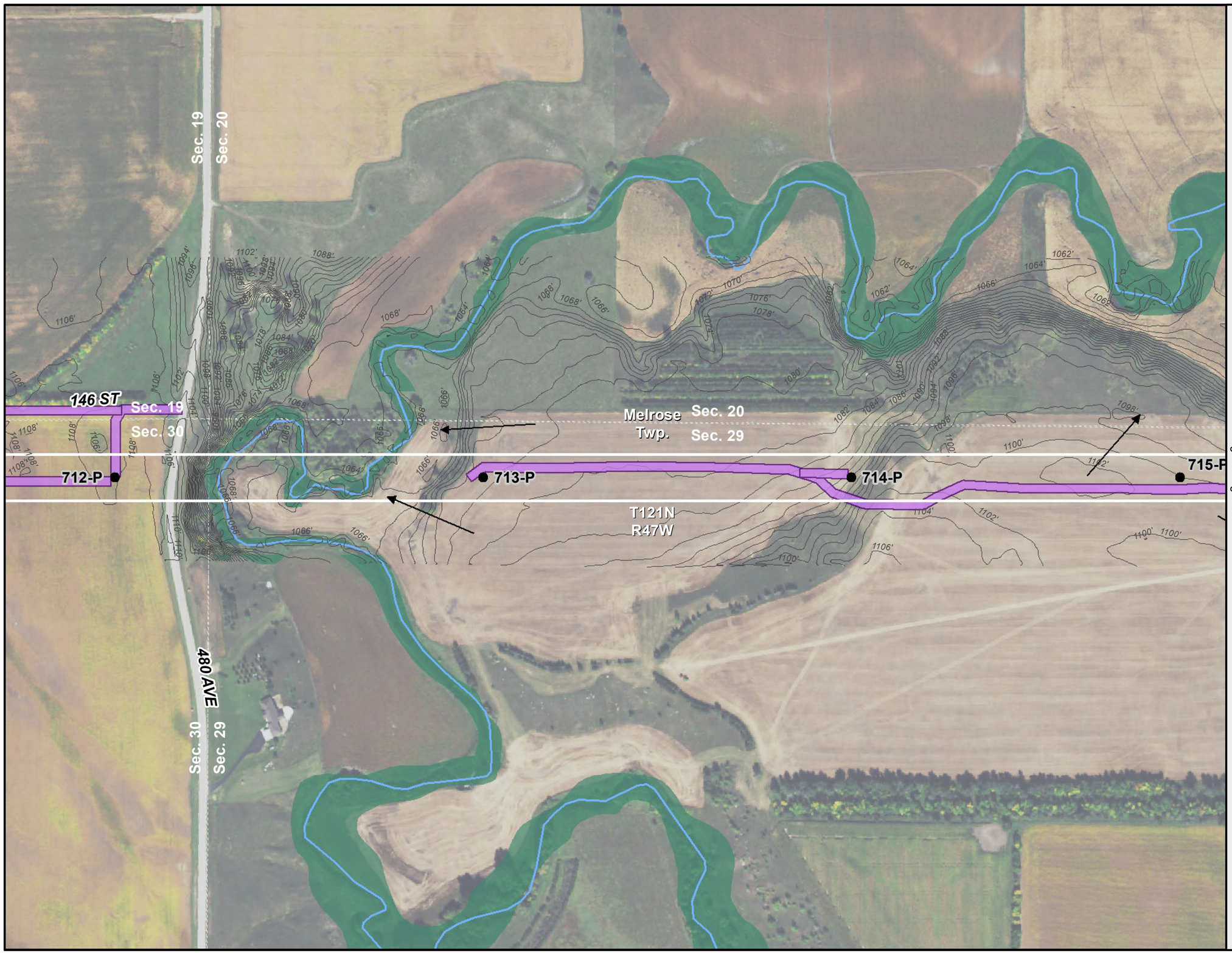
## Grant County
## Page 53

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale




# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

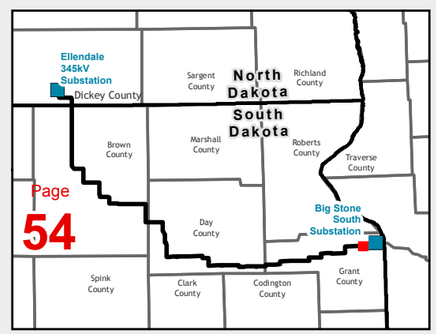
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 54

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Melrose Twp.

Big Stone Twp.

North Fork Whetstone River

Sec. 20

Sec. 21

Sec. 29

Sec. 28

715-P

716-P

717-P

718-P

T121N
R47W

481 AVE



# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

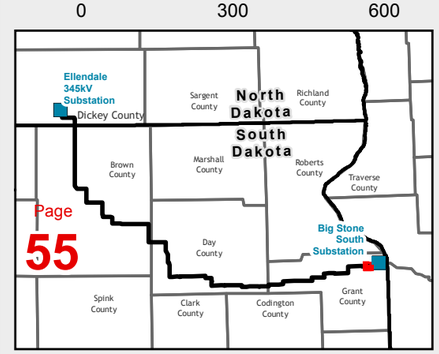
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 55

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015



Big Stone Twp. T121N R47W

North Fork Whetstone River

Whetstone River

South Fork Whetstone River

Sec. 21

Sec. 28

719-P

720-P

721-P

482 AVE

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

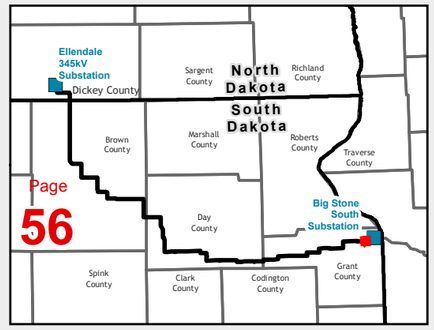
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 56

1:3,600

0 300 600 Feet



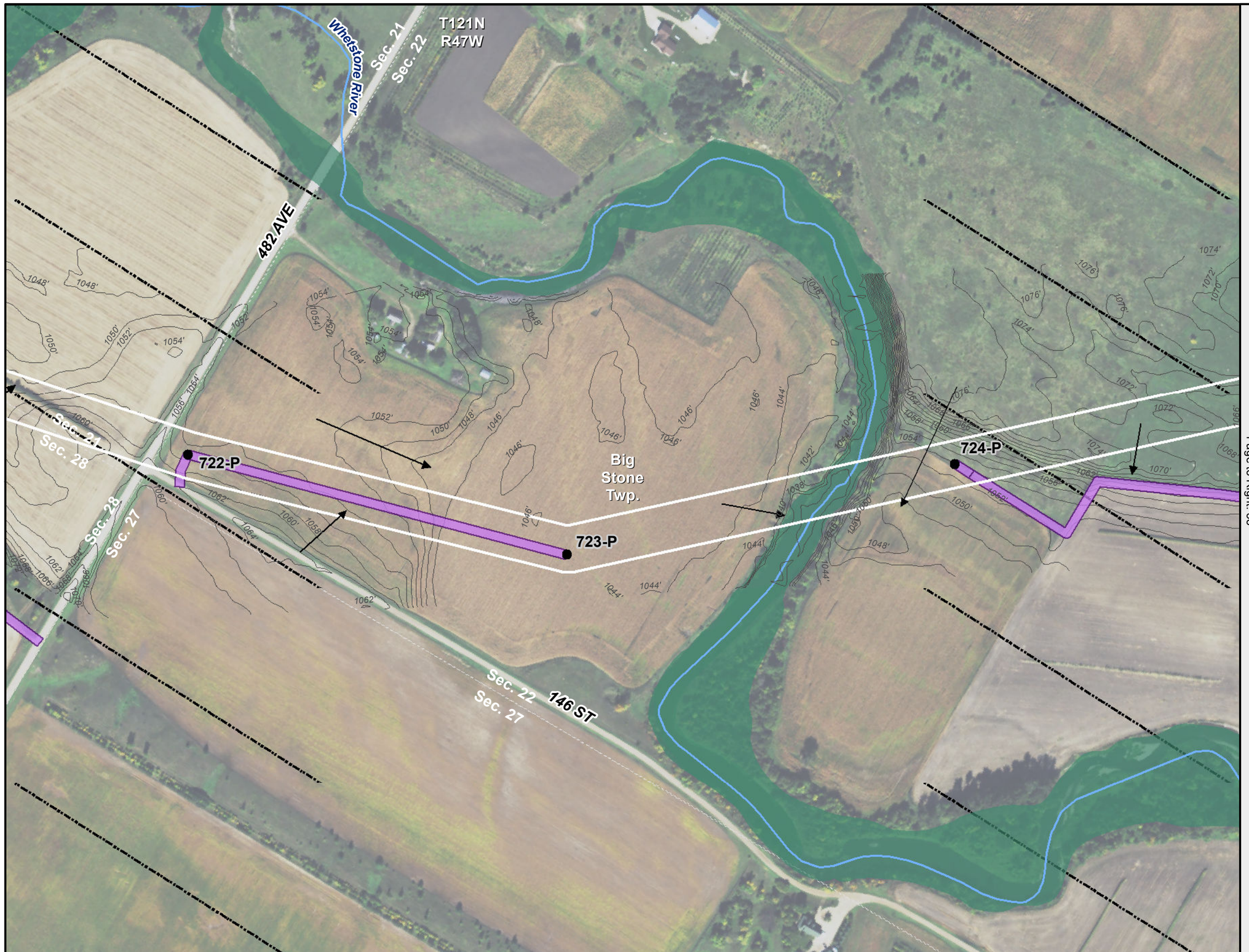

BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Date: 10/24/2015






# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

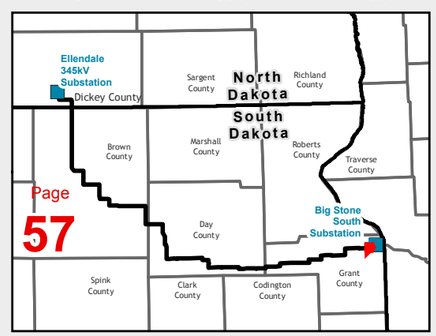
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 57

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale



Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

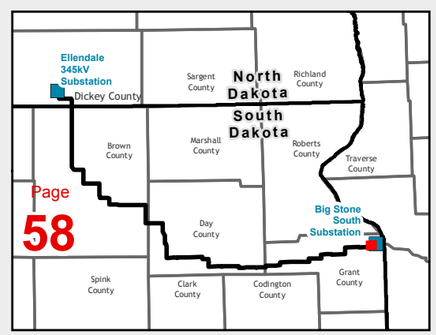
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 58

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Date: 10/24/2015

Page to Left: 58

# SWPPP - Erosion Control Plan

Big Stone South to Ellendale
345 kV Transmission Line Project
North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

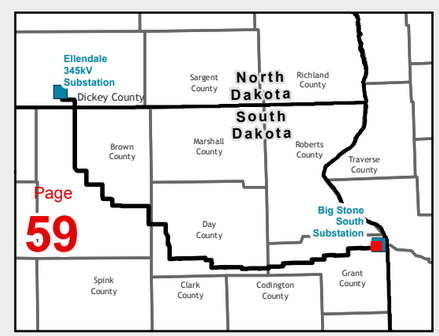
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 59

1:3,600

0 300 600 Feet




BSSE
Big Stone South to Ellendale

Page to Right: 60

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Top:

Date: 10/24/2015

Page to Left: 59

Big Stone Twp.

Whetstone River

484 AVE

Big Stone South Substation

735-P

BIG STONE SOUTH SUB-P

734-P

733-P

732-P

731-P

Sec. 23

Sec. 24

T121N R47W

# SWPPP - Erosion Control Plan

## Big Stone South to Ellendale 345 kV Transmission Line Project North Dakota and South Dakota

*Map Book Issued October 24, 2015*

- Project Start/End Point
- Structures (as of 8/28/2015)
- Structure in a Wetland *
- Right-of-Way (as of 8/28/2015)
- Temporary Access Roads - 30 Ft. Width (as of 8/17/15)
- Vehicle Tracking Control (VTC)**
- Perimeter Control BMP * **
- Perimeter Control for Impaired Waters
- Laydown Area
- Potential Wetland Crossing****
- Surface Water Flow Direction
- NHD Stream
- NHD Waterbody
- Wetlands
- Section
- Township
- County Boundary
- State Boundary

* Frozen ground conditions, composite mats or equivalent low ground-pressure equipment must be used around the construction area. Construction methods must minimize impacts to wetlands.

** VTCs must be provided at site access from paved roads. Vehicle cleaning and streep sweeping are the anticipated VTC. Additional controls, such as rock pads or mud mats, must be provided if necessary to minimize sediment tracking.

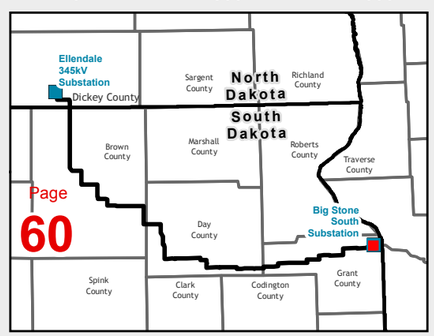
*** Perimeter control not to scale and subject to field locating and verification, See SWPPP narrative for more information.

**** Wetland crossing locations are subject to field verification and may vary from the identified locations, depending on hydrologic conditions during construction. BMPs must be provided where site access or construction crosses wetland environments. Ice roads are the priority wetland crossing BMP, when practical. Other potential BMPs include composite mats, timber roads, or equivalent.

## Grant County
## Page 60

1:3,600

0 300 600 Feet




BSSE Big Stone South to Ellendale

Page to Right:

Path: \\mspe-gis-file\GISProjLarge\MDU_OTP\186675\map_docs\Permits\SWPPP\SWPPP_Erosion_Control_Plan.mxd

Page to Bottom: