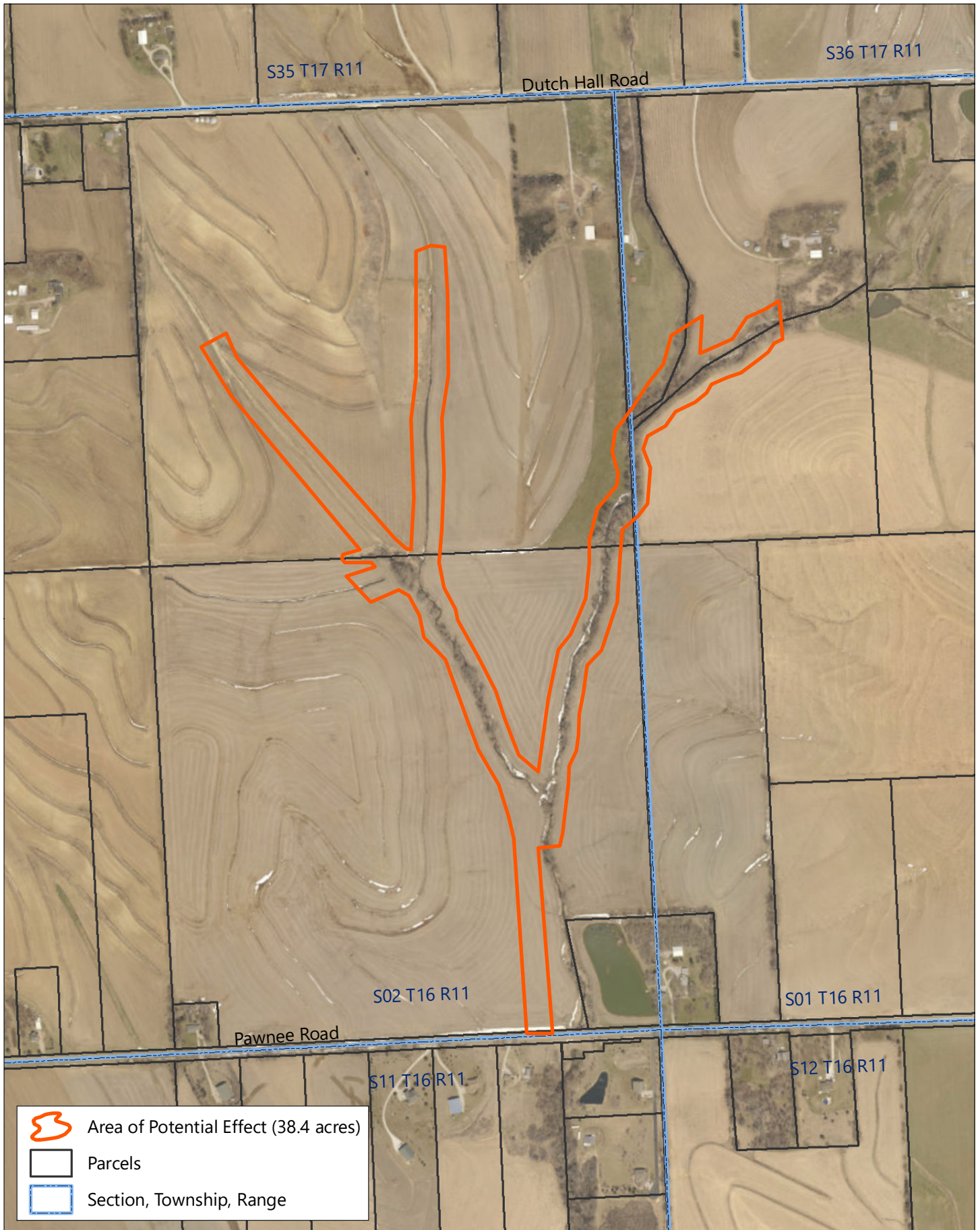




**Figure C1.1. D-2 Area of Potential Effect**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C1.2. D-78 Area of Potential Effect**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



0 700 Feet





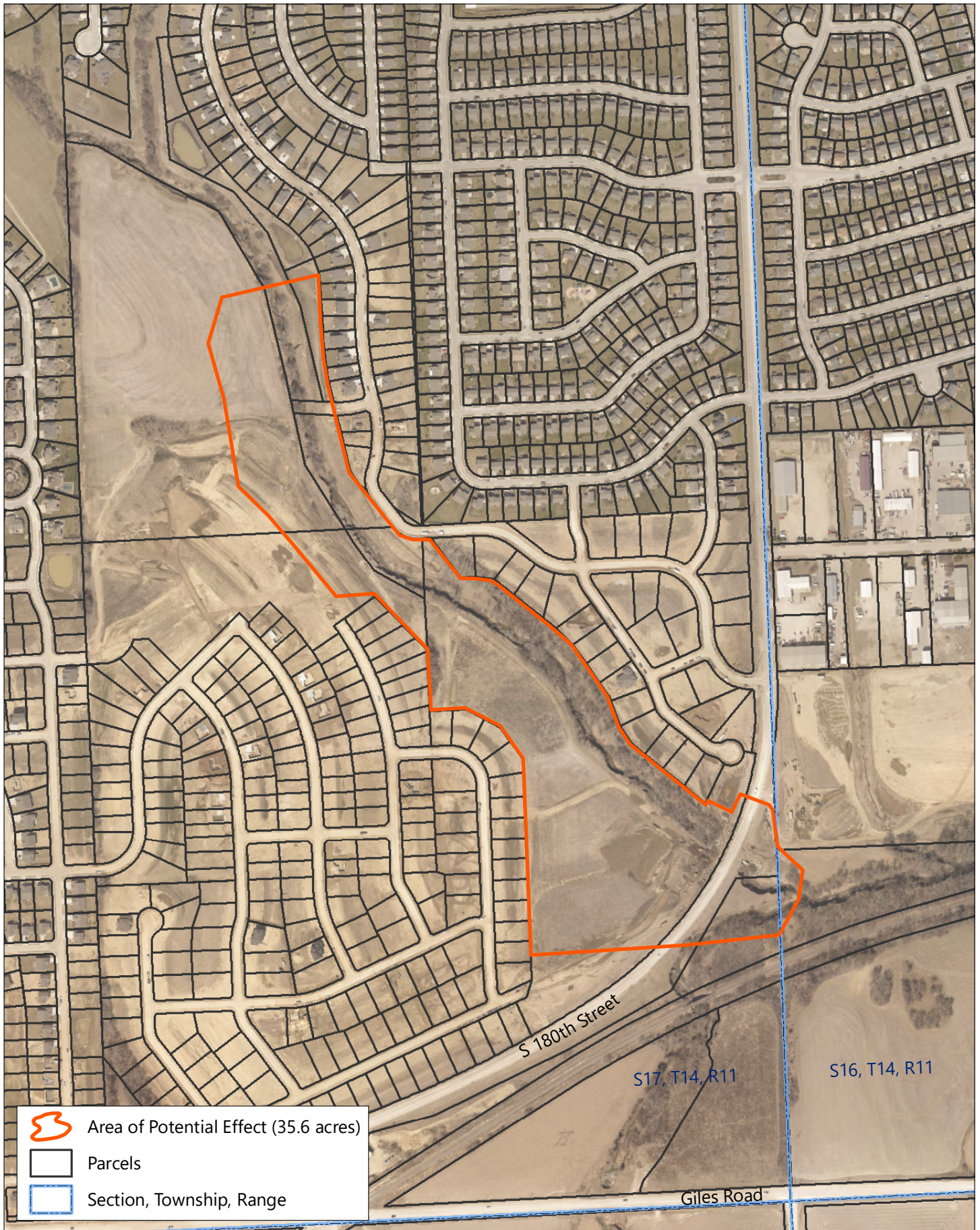
**Figure C1.3. S-1 Area of Potential Effect**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



0 950 Feet

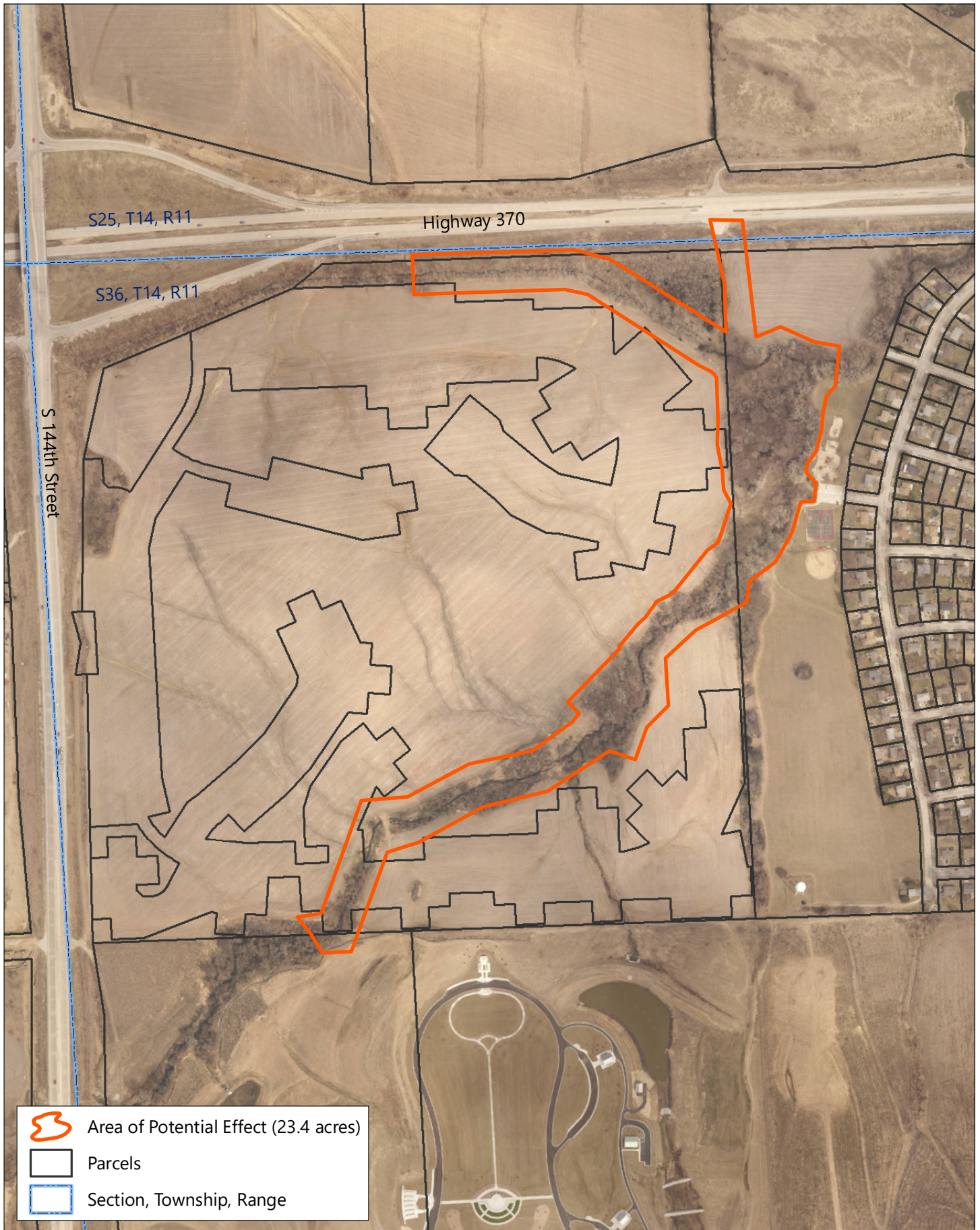




**Figure C1.4. S-5 Area of Potential Effect**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





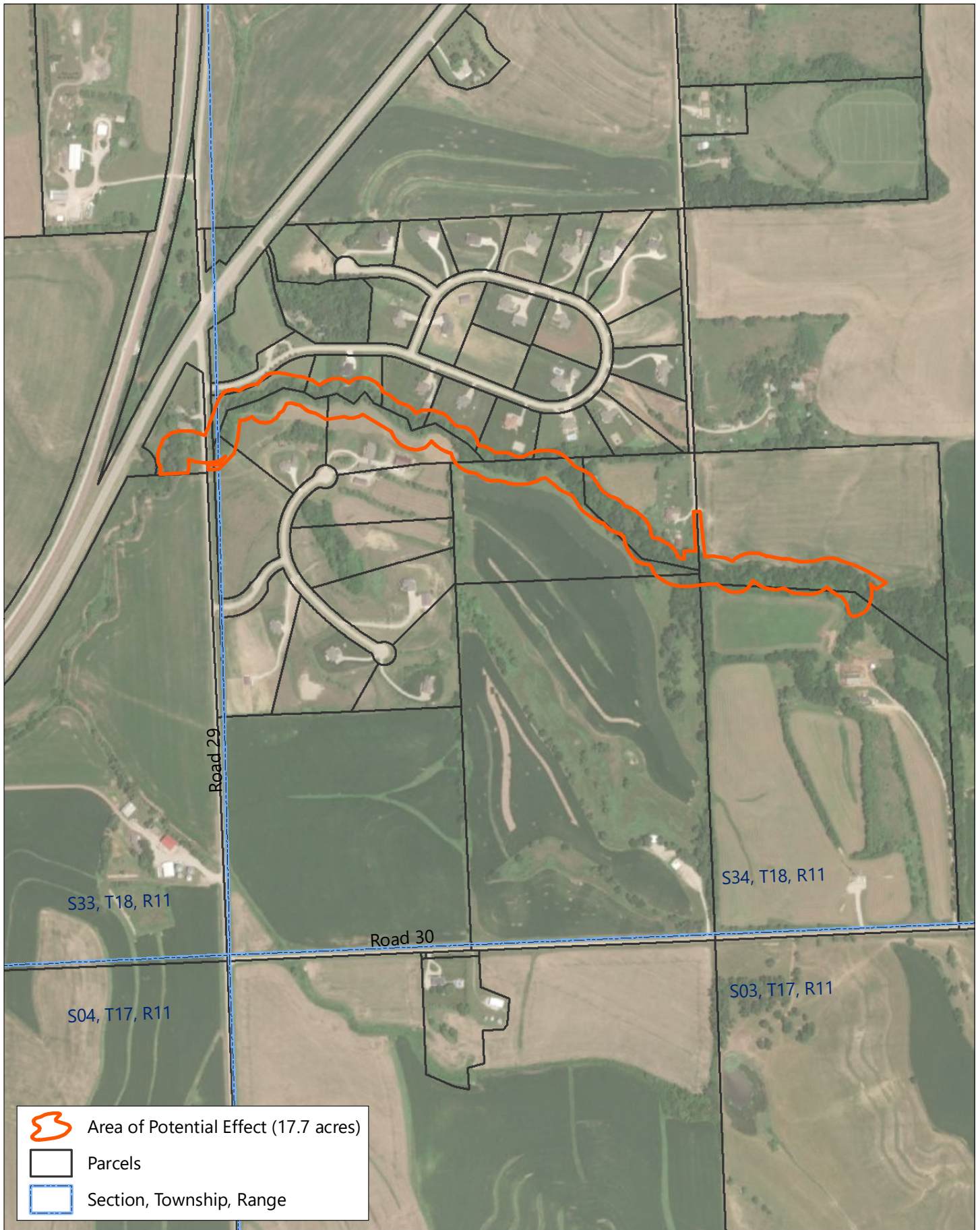
**Figure C1.5. S-15 Area of Potential Effect**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



0 500 Feet

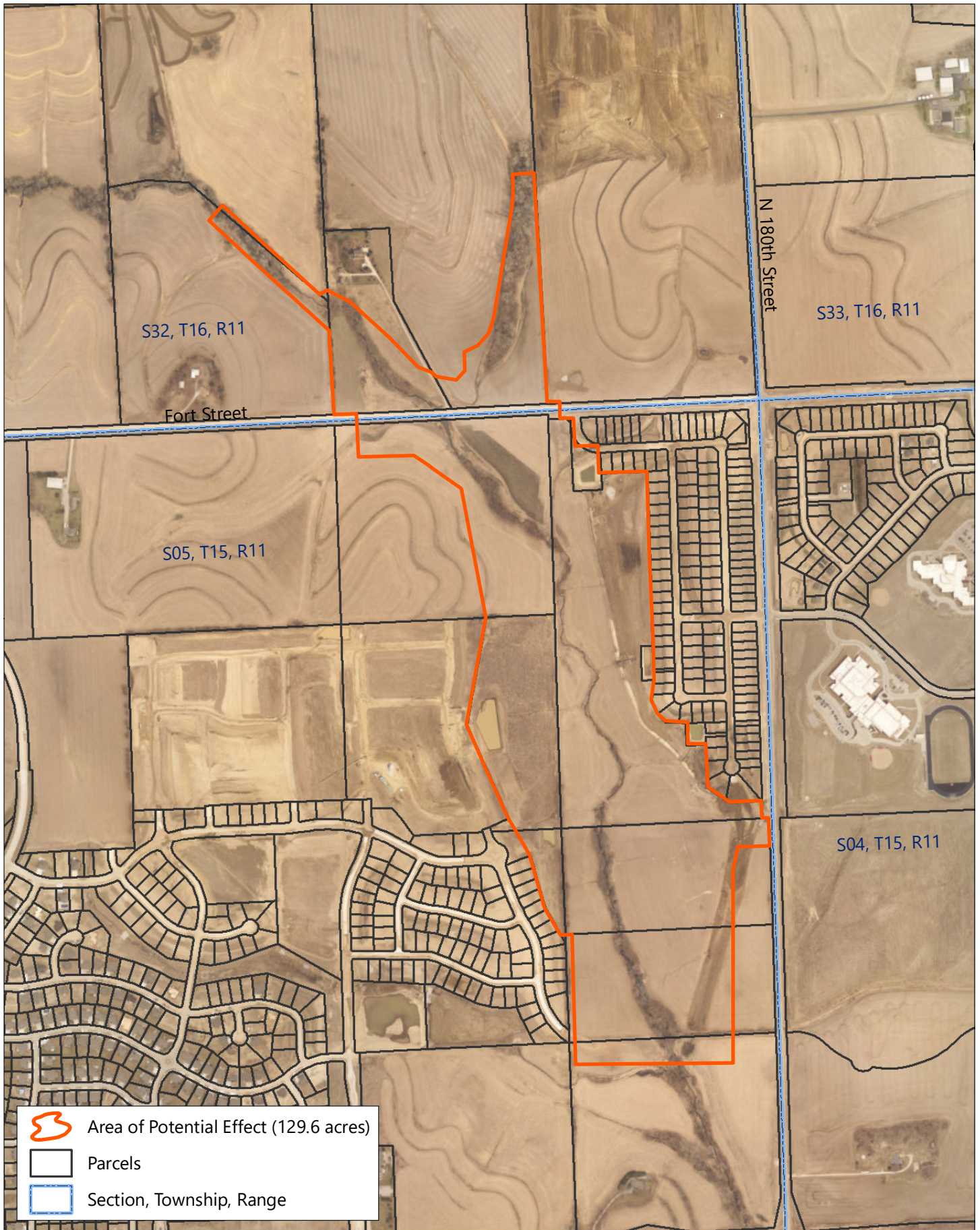




**Figure C1.6. W-5 Area of Potential Effect**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C1.7. WP-1 Area of Potential Effect**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



0 800 Feet





**Figure C2.1. S-1 100-Year Flood**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



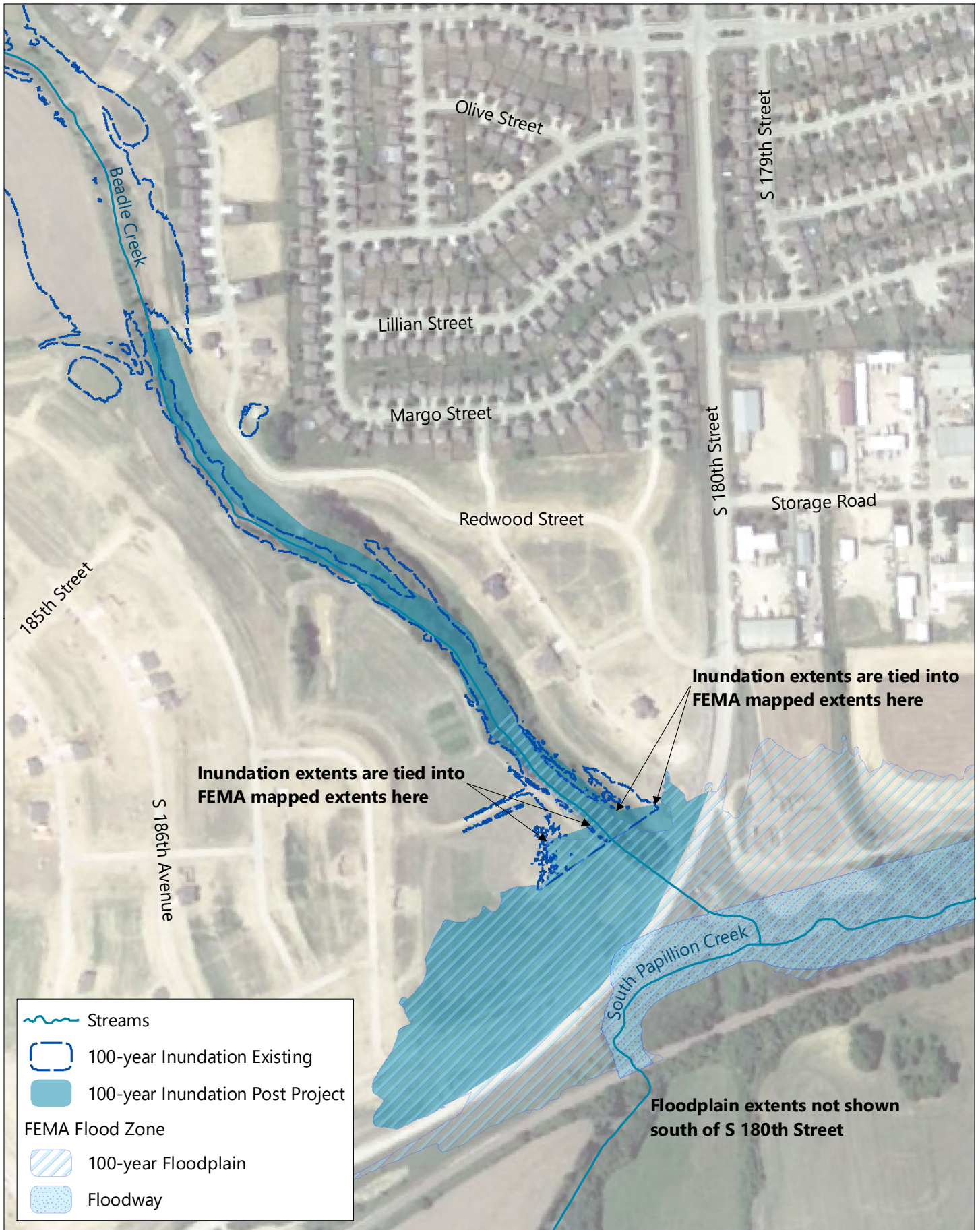
0 1,000  
 Feet





**Figure C2.2. S-1 500-Year Flood**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C2.3. S-5 100-Year Flood**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



0 400 Feet

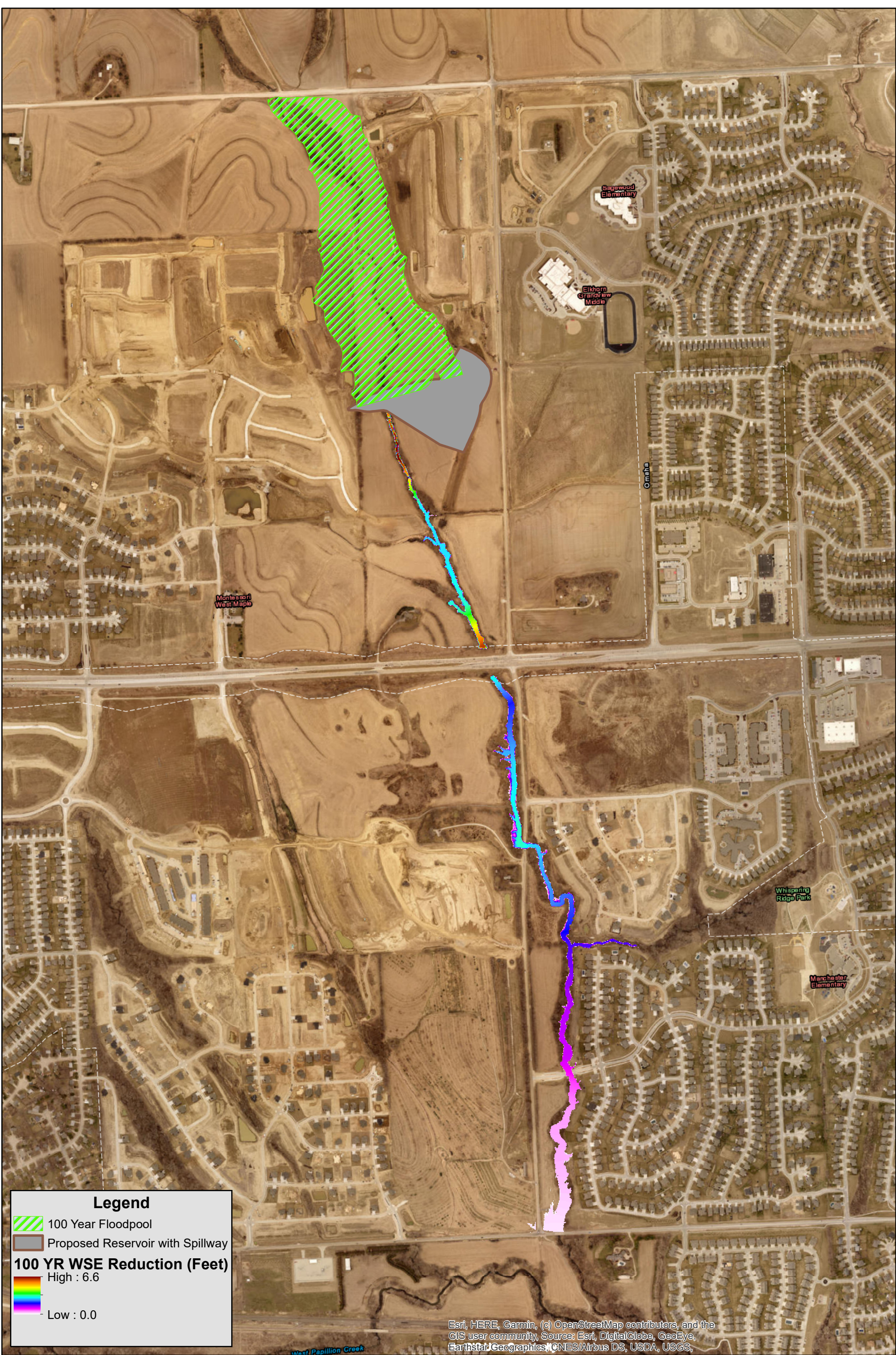






**Figure C2.4. S-5 500-Year Flood**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



F:\2017\1001-1500\A17-1185\40-Design\H&H Modeling\Floodplain modeling\WP1 Floodplain depth comparison\_BS\_Final\_100YR.mxd PUBLISHED BY: bstams DATE: January 18, 2021




**Legend**

-  100 Year Floodpool
-  Proposed Reservoir with Spillway

**100 YR WSE Reduction (Feet)**

High : 6.6




Low : 0.0

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,



N



0 200 400 800  
Feet

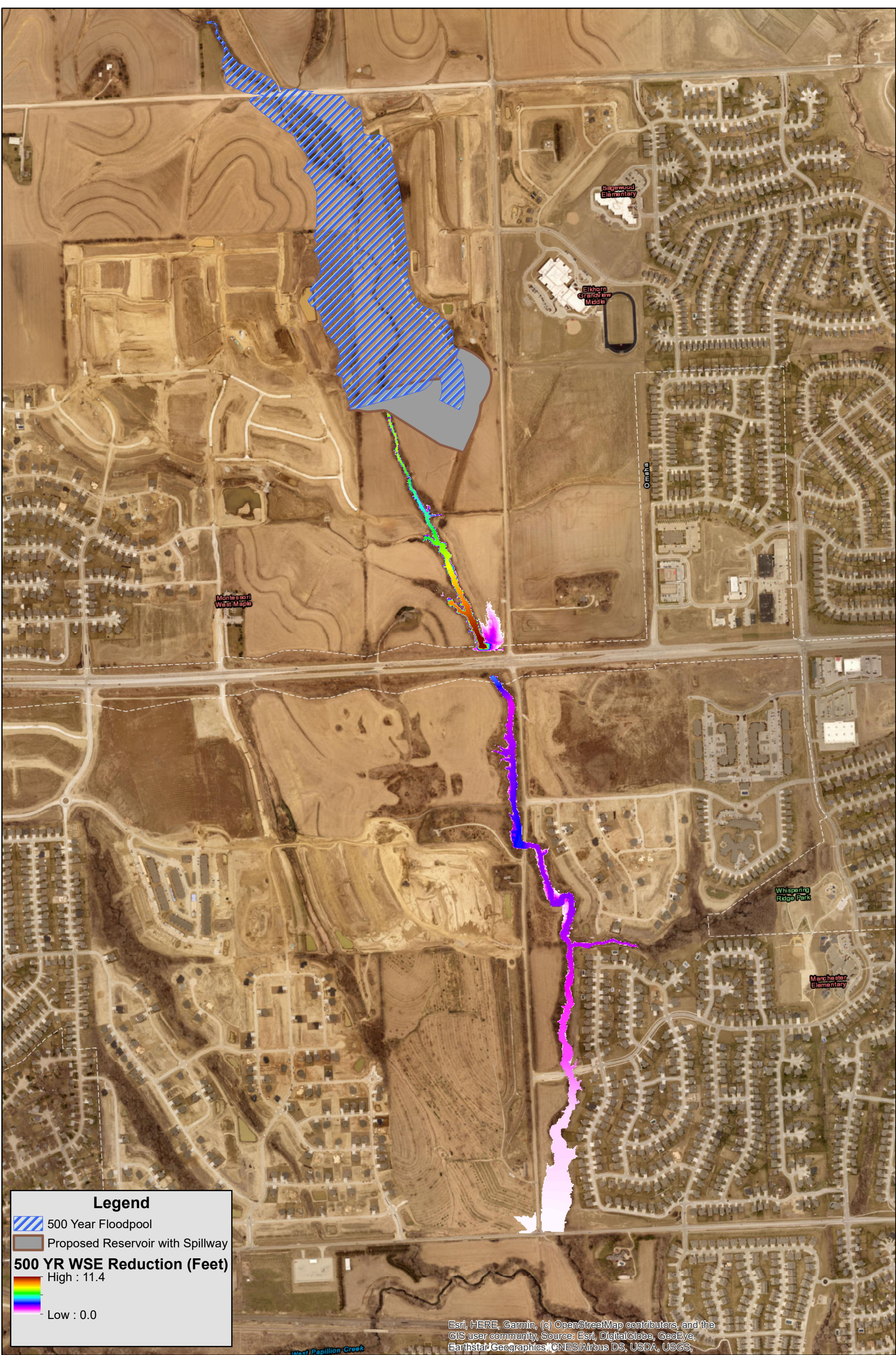
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Original Published Resolution  
NAD 1983 StatePlane Nebraska FIPS 2600 Feet  
USGS Topographic Map



P-MRNRD WP-1  
Douglas County, NE


FIGURE  
1

F:\2017\1001-1500A\17-1185\40-Design\H&H Modeling\Floodplain modeling\WP1 Floodplain depth comparison\_BS\_Final\_500YR.mxd PUBLISHED BY: bstams DATE: January 18, 2021



**Legend**

-  500 Year Floodpool
-  Proposed Reservoir with Spillway

**500 YR WSE Reduction (Feet)**  
 High : 11.4  
  
 Low : 0.0

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

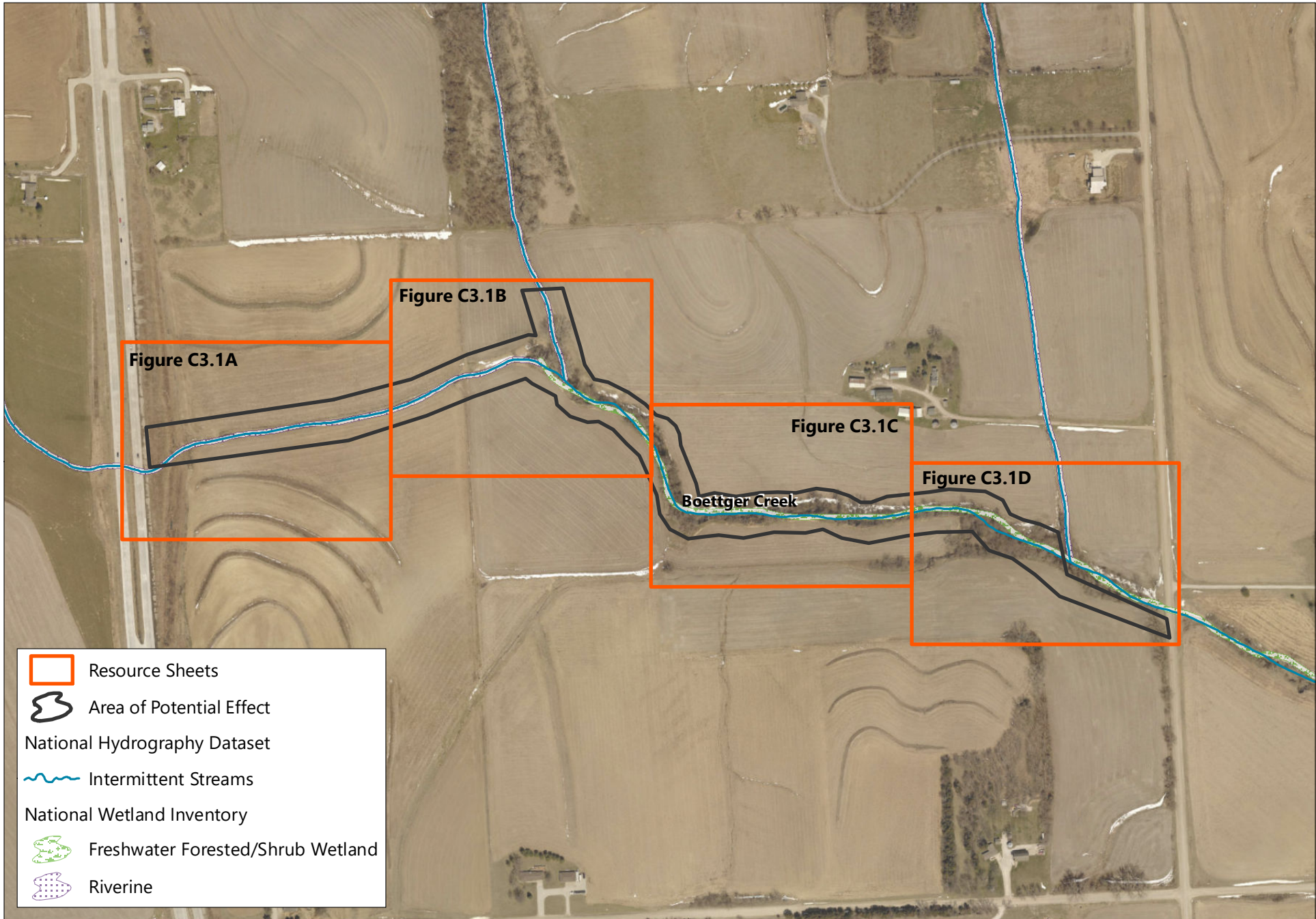


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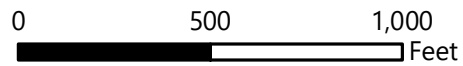
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 NAD 1983 StatePlane Nebraska FIPS 2600 Feet  
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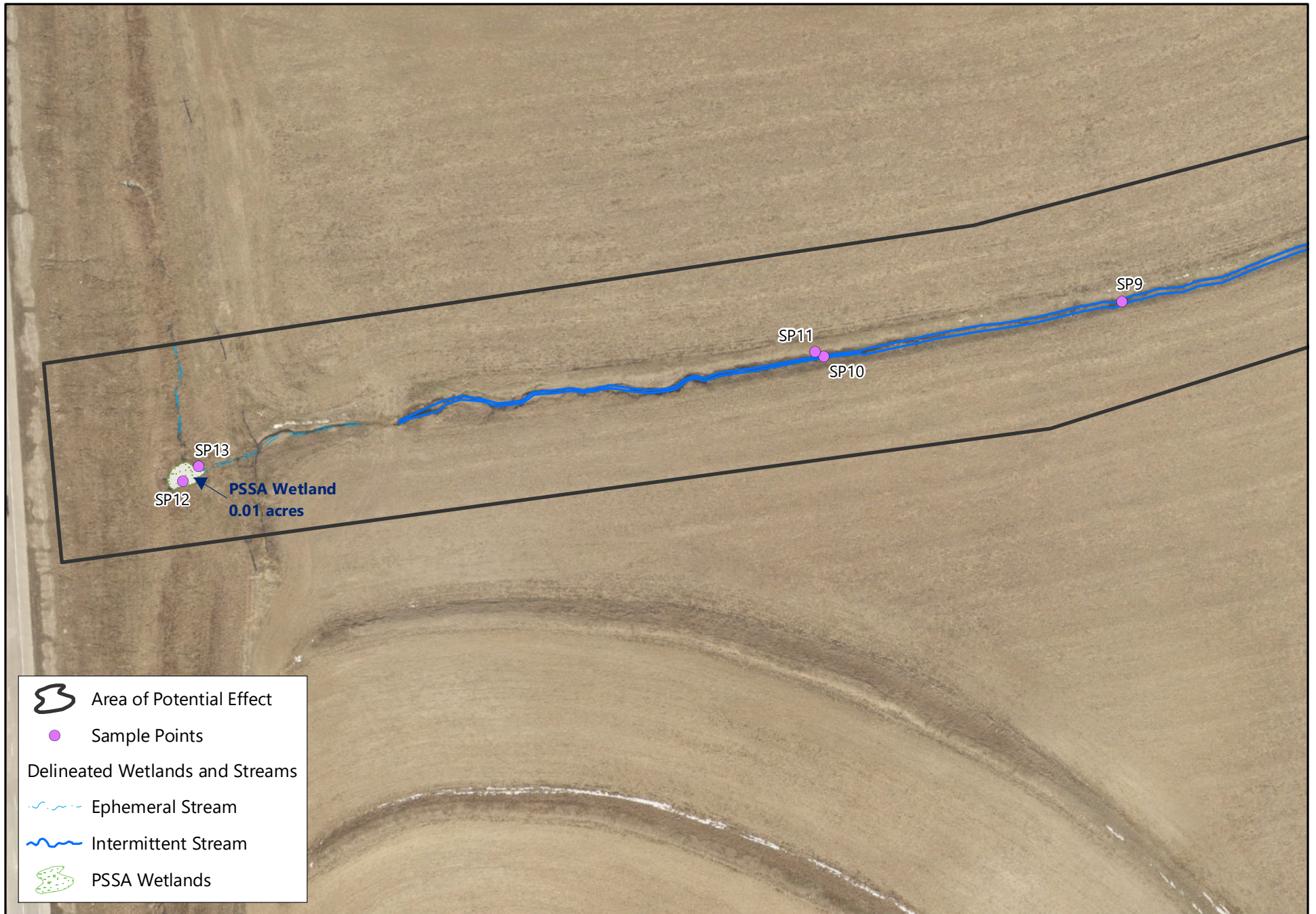
P-MRNRD WP-1  
Douglas County, NE

FIGURE  
2

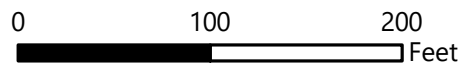


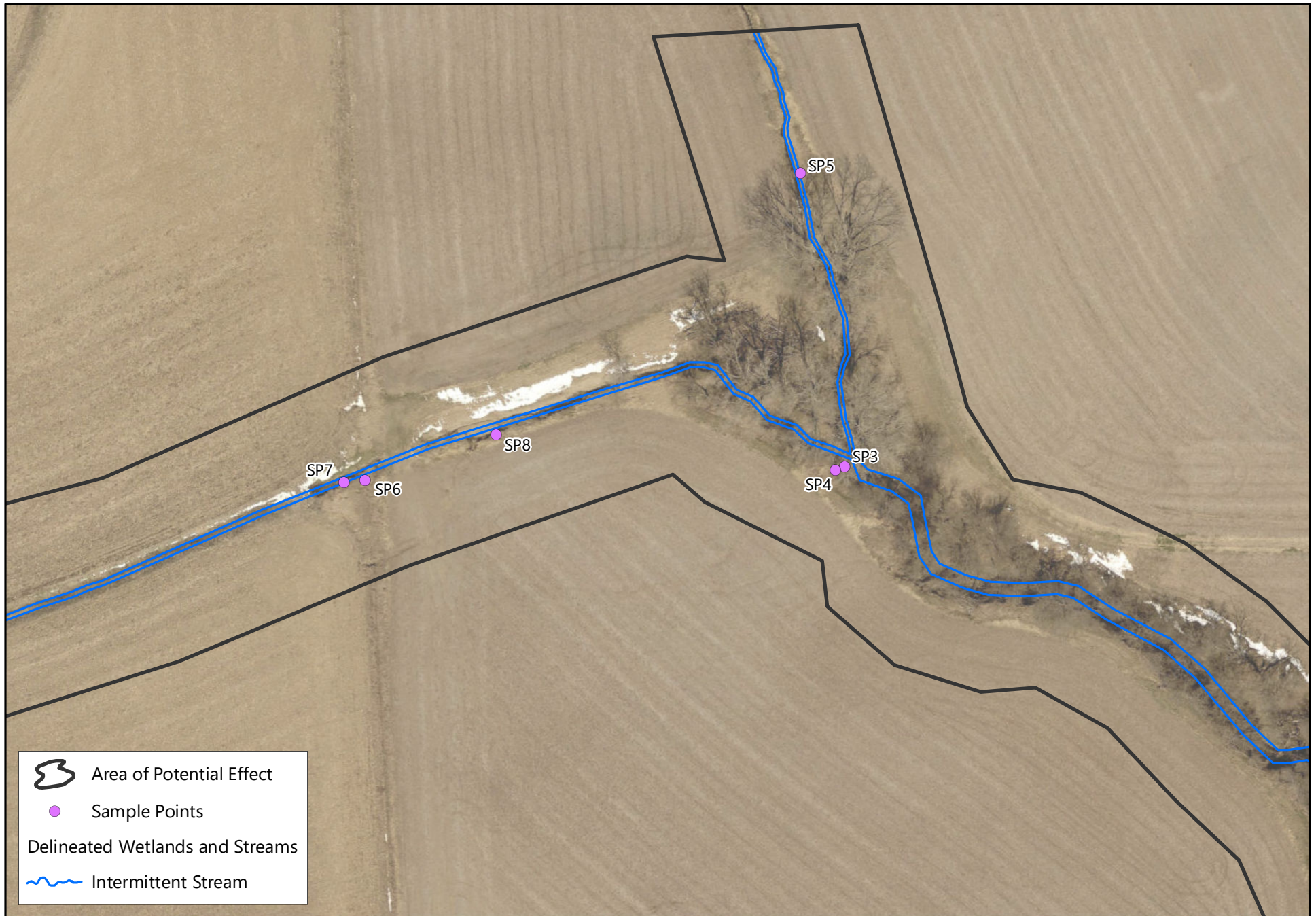
**Figure C3.1. Site D-2 Wetlands and Streams Index Sheet**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



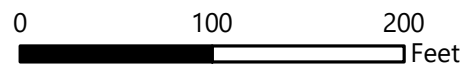


**Figure C3.1A. Site D-2 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD








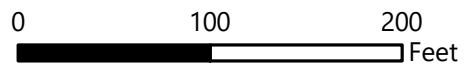
**Figure C3.1B. Site D-2 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD









 Area of Potential Effect  
 Delineated Wetlands and Streams  
 Intermittent Stream

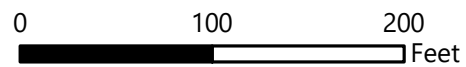
**Figure C3.1C. Site D-2 Wetlands and Streams**  
Papillion Creek Supplemental Watershed Plan-EA  
Natural Resources Conservation Service  
Papio-Missouri River NRD

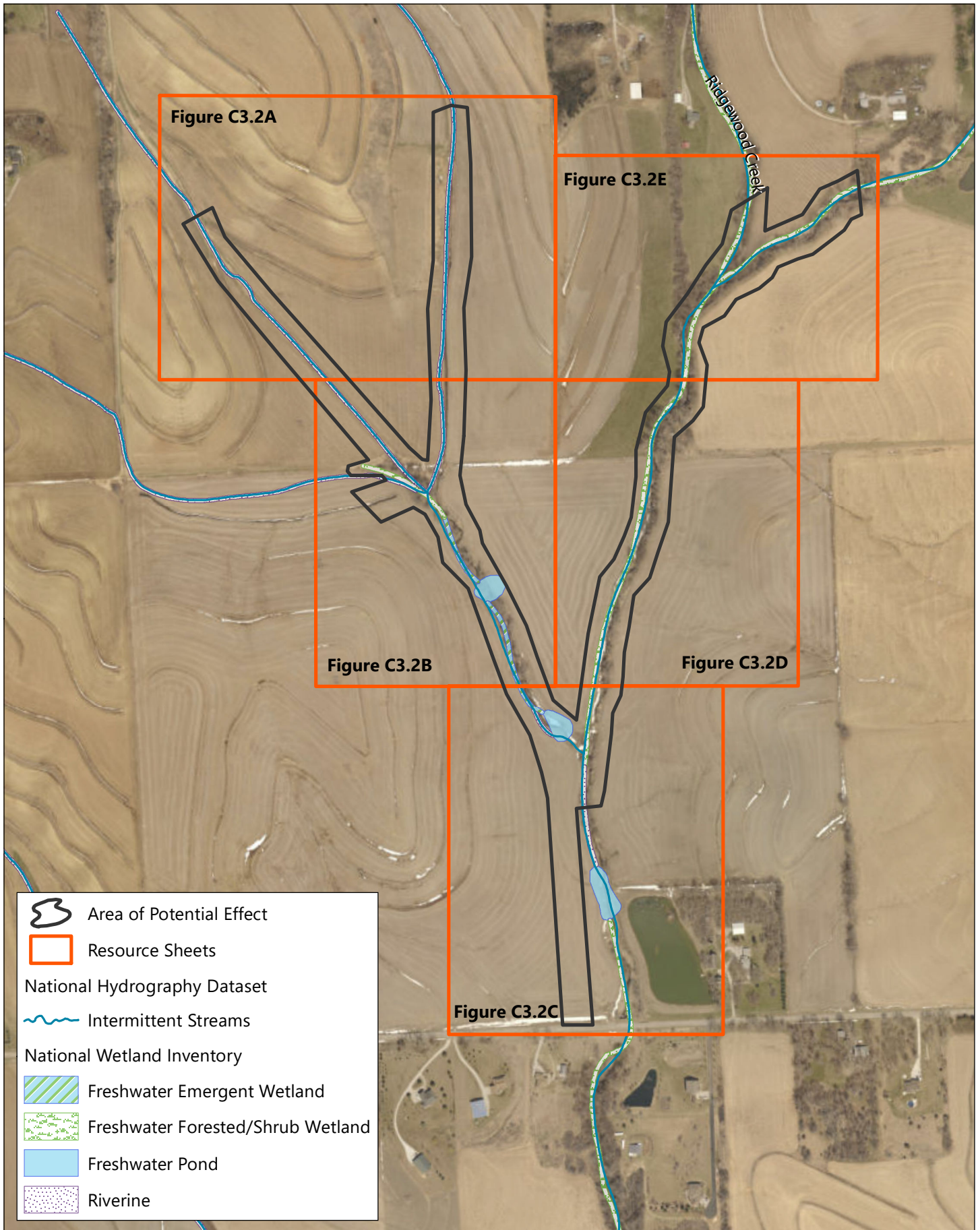




	Area of Potential Effect
	Sample Points
Delineated Wetlands and Streams	
	Ephemeral Stream
	Intermittent Stream

**Figure C3.1D. Site D-2 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C3.2. Site D-78 Wetlands and Streams Index Sheet**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

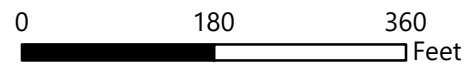


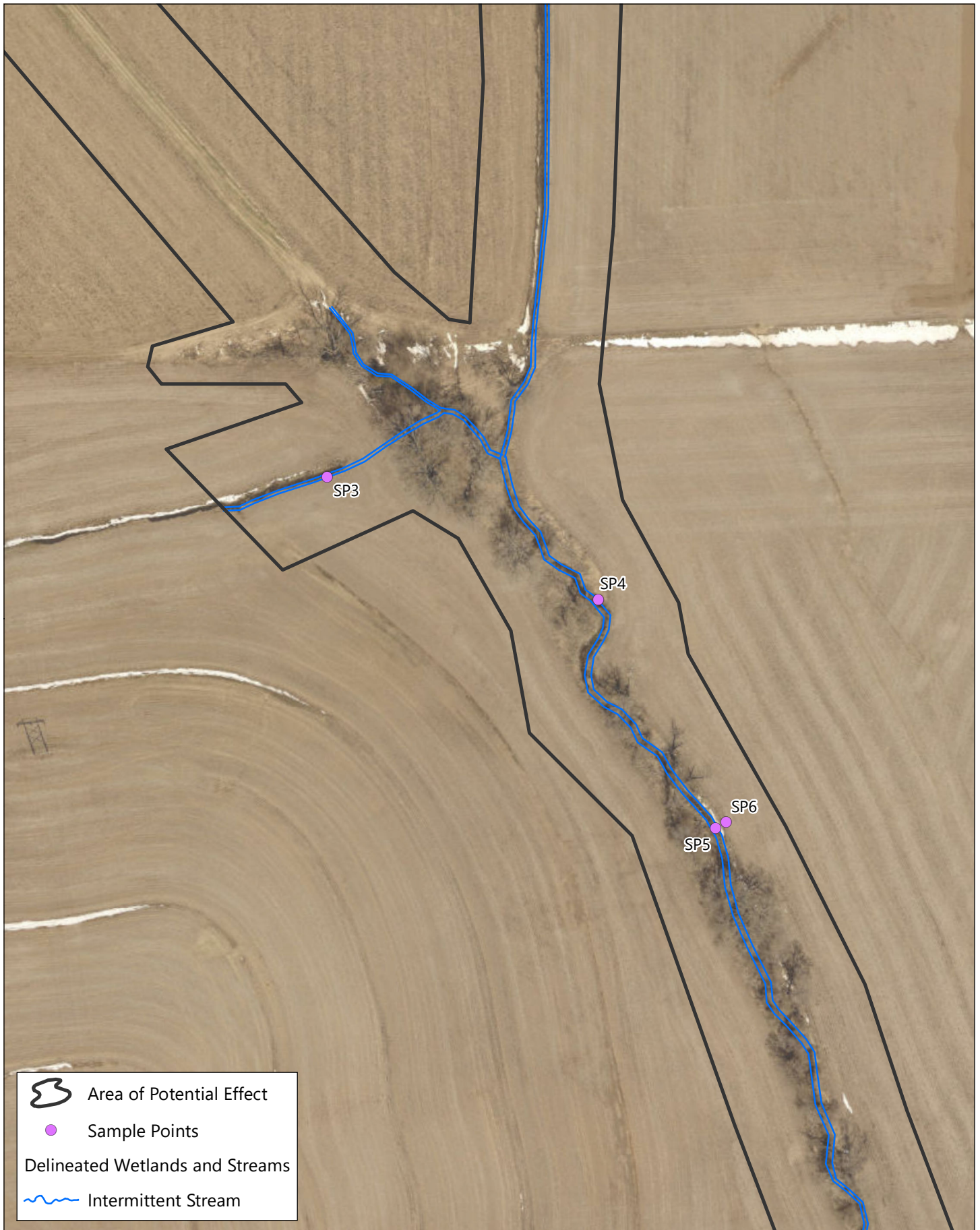
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 Feet





**Figure C3.2A. Site D-78 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C3.2B. Site D-78 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

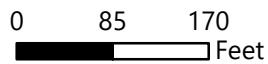


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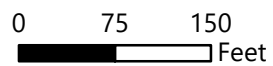


**Figure C3.2C. Site D-78 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



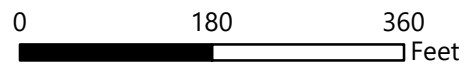


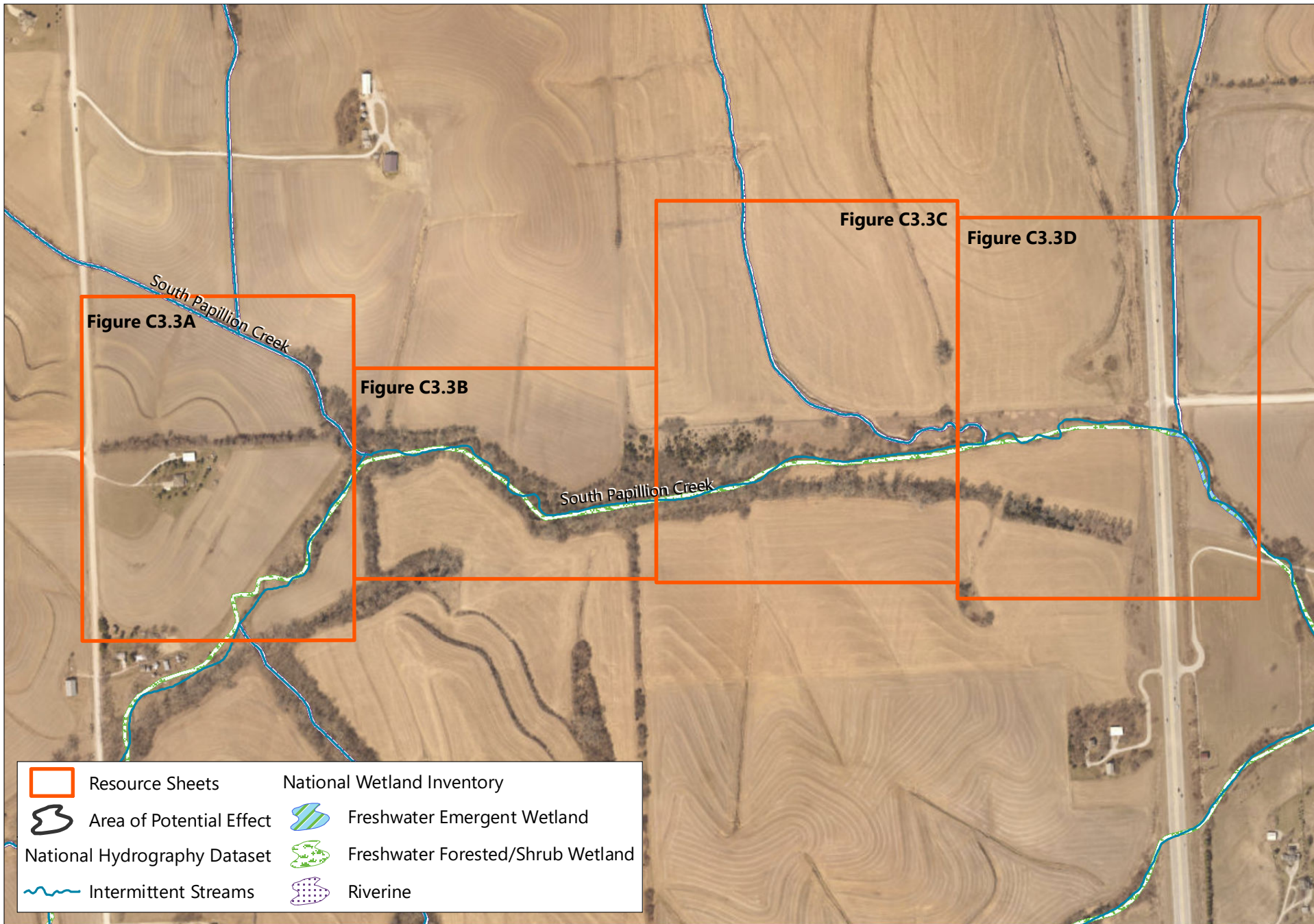
**Figure C3.2D. Site D-78 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



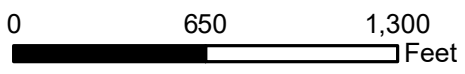


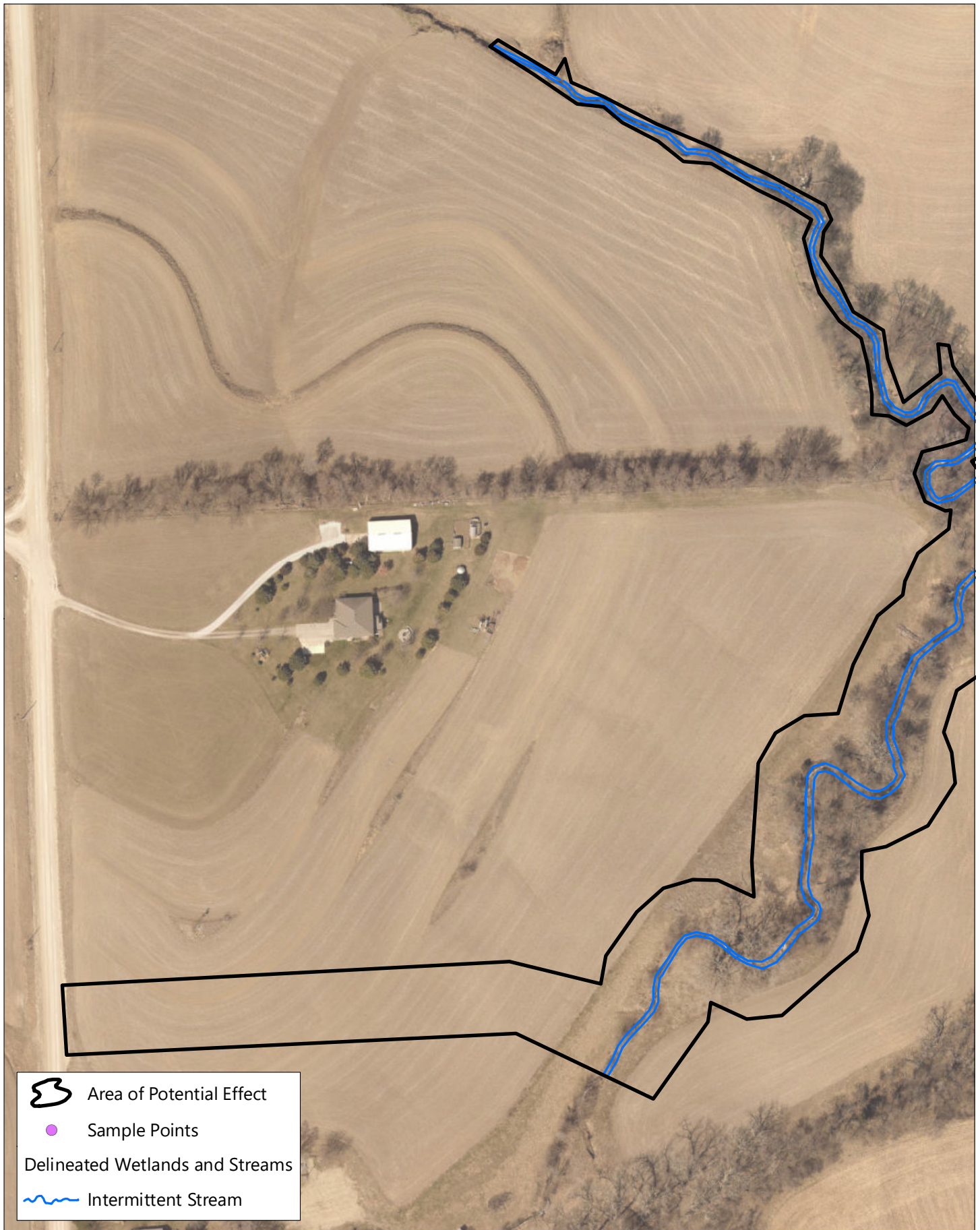
**Figure C3.2E. Site D-78 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



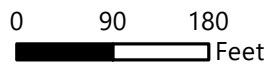


**Figure C3.3. Site S-1 Wetlands and Streams**  
**Index Sheet**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



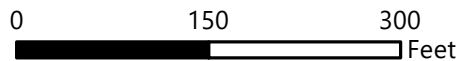


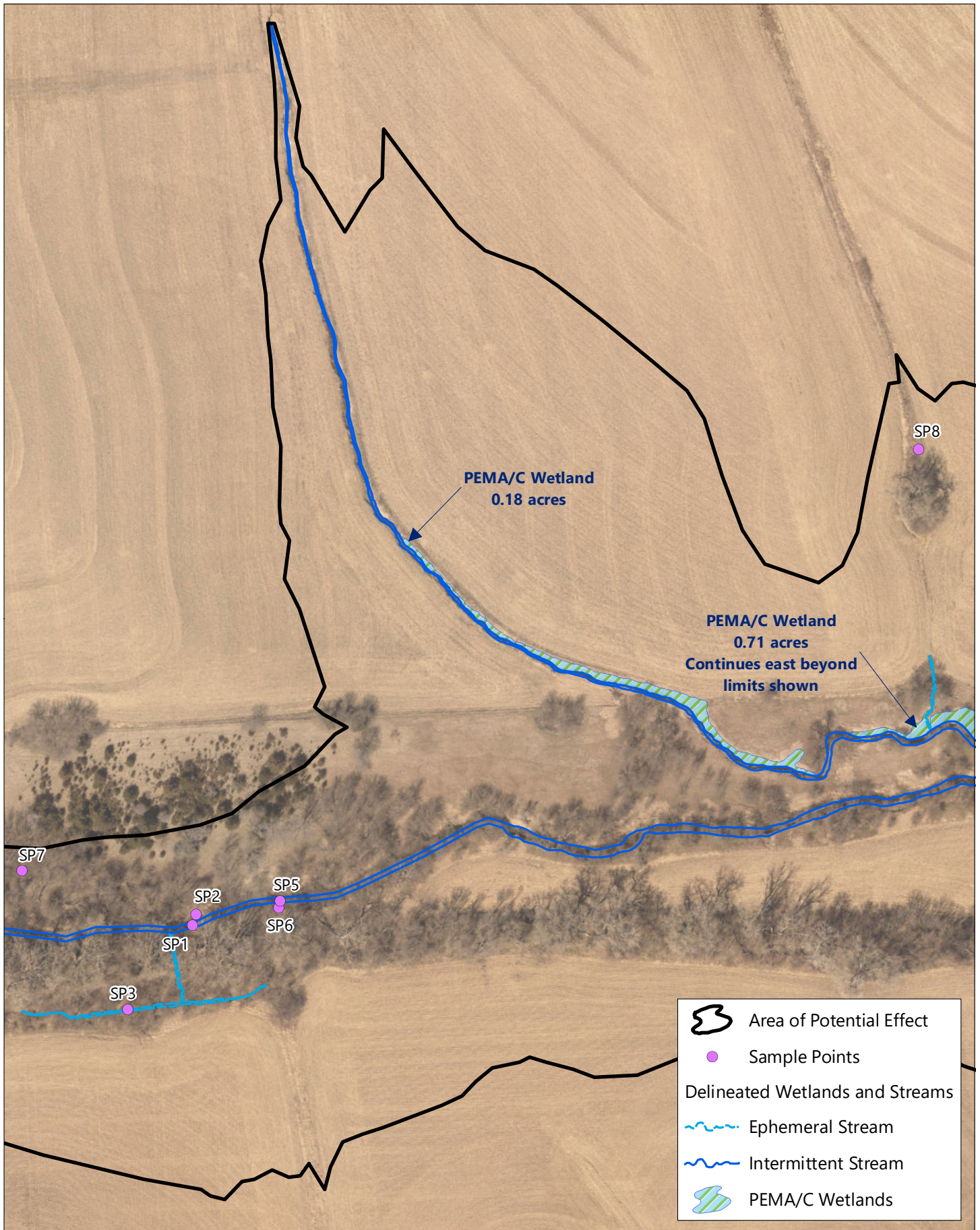
**Figure C3.3A. Site S-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



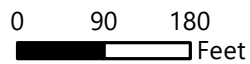


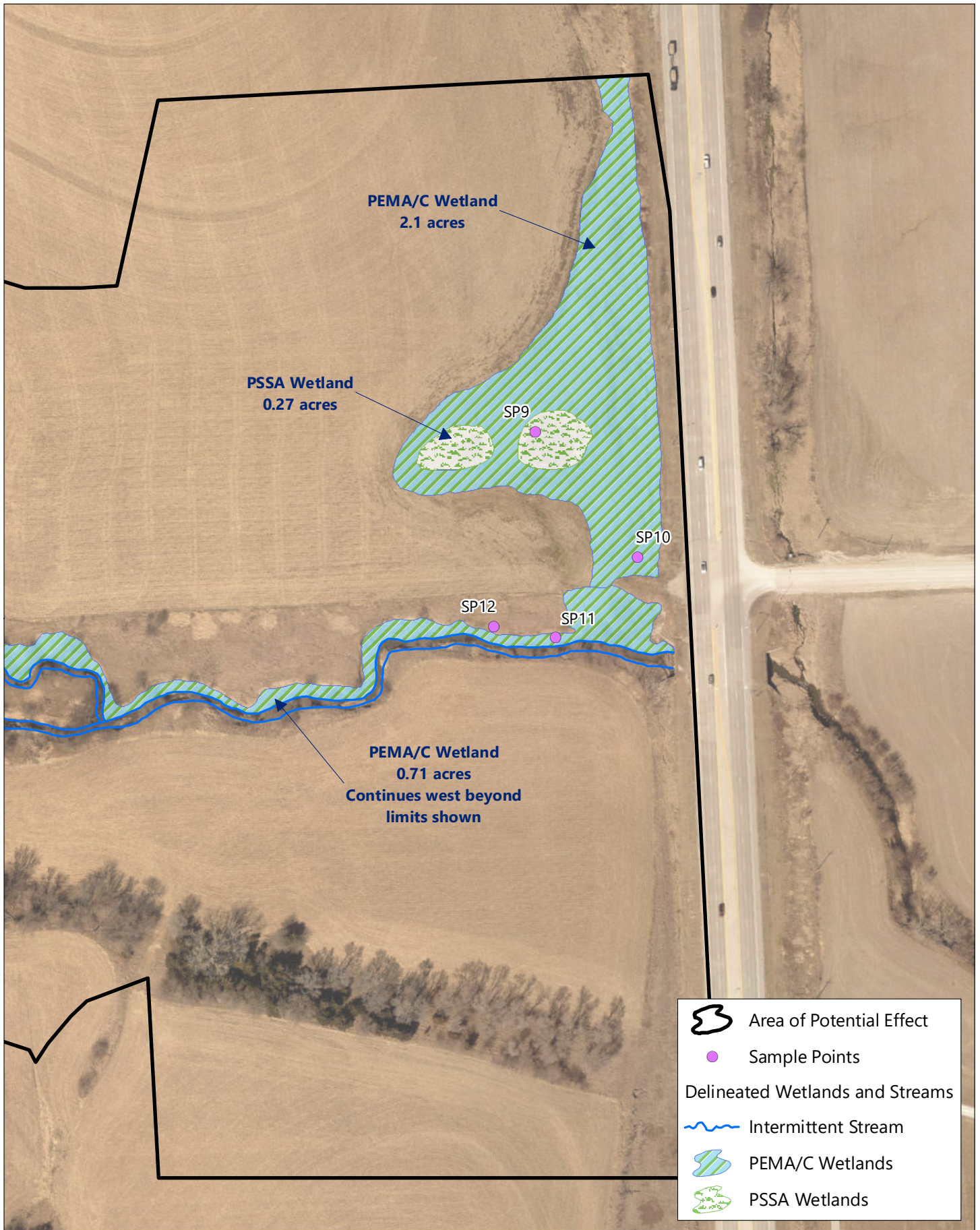
**Figure C3.3B. Site S-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C3.3C. Site S-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



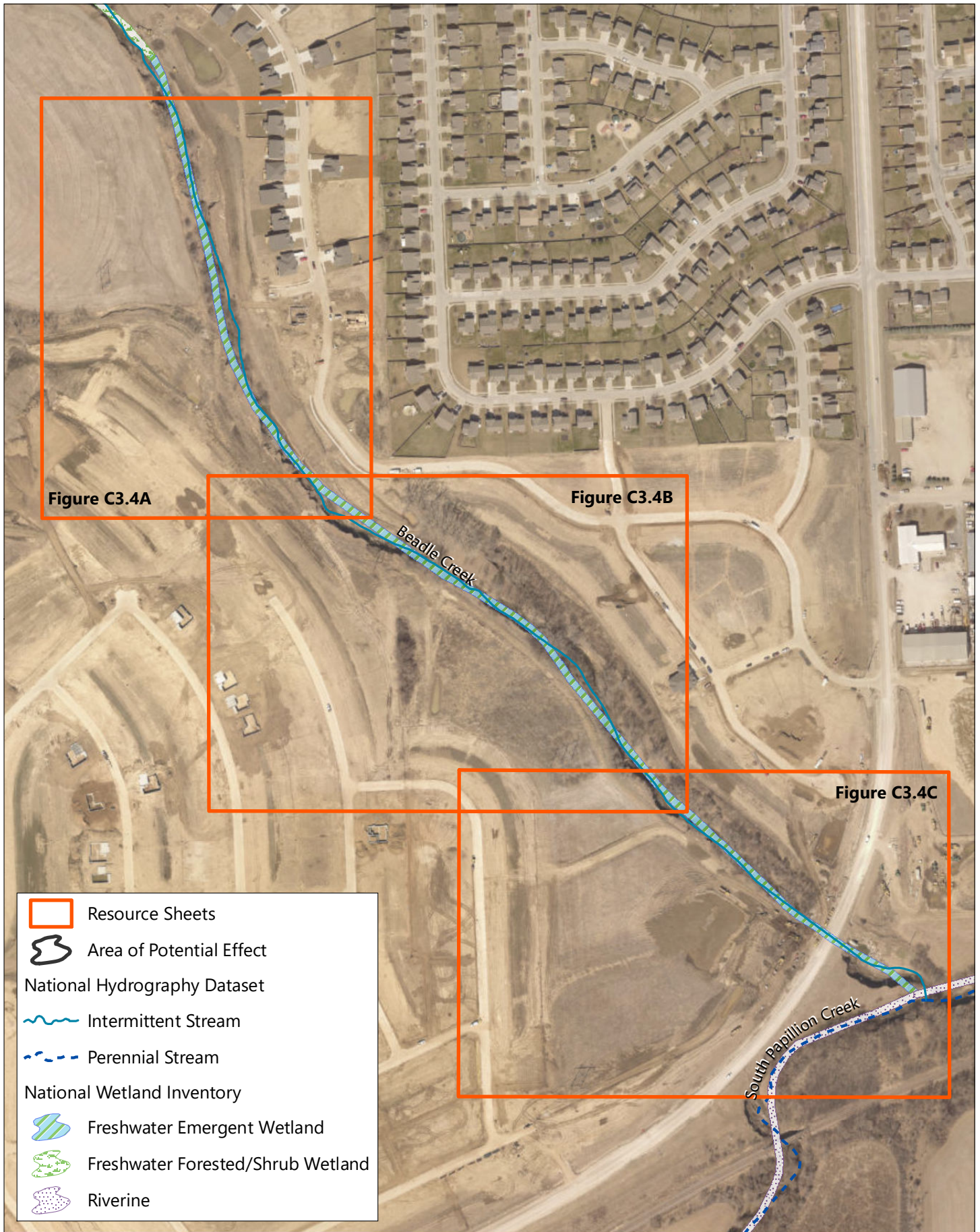


**Figure C3.3D. Site S-1 Wetlands and Streams**  
Papillion Creek Supplemental Watershed Plan-EA  
Natural Resources Conservation Service  
Papio-Missouri River NRD



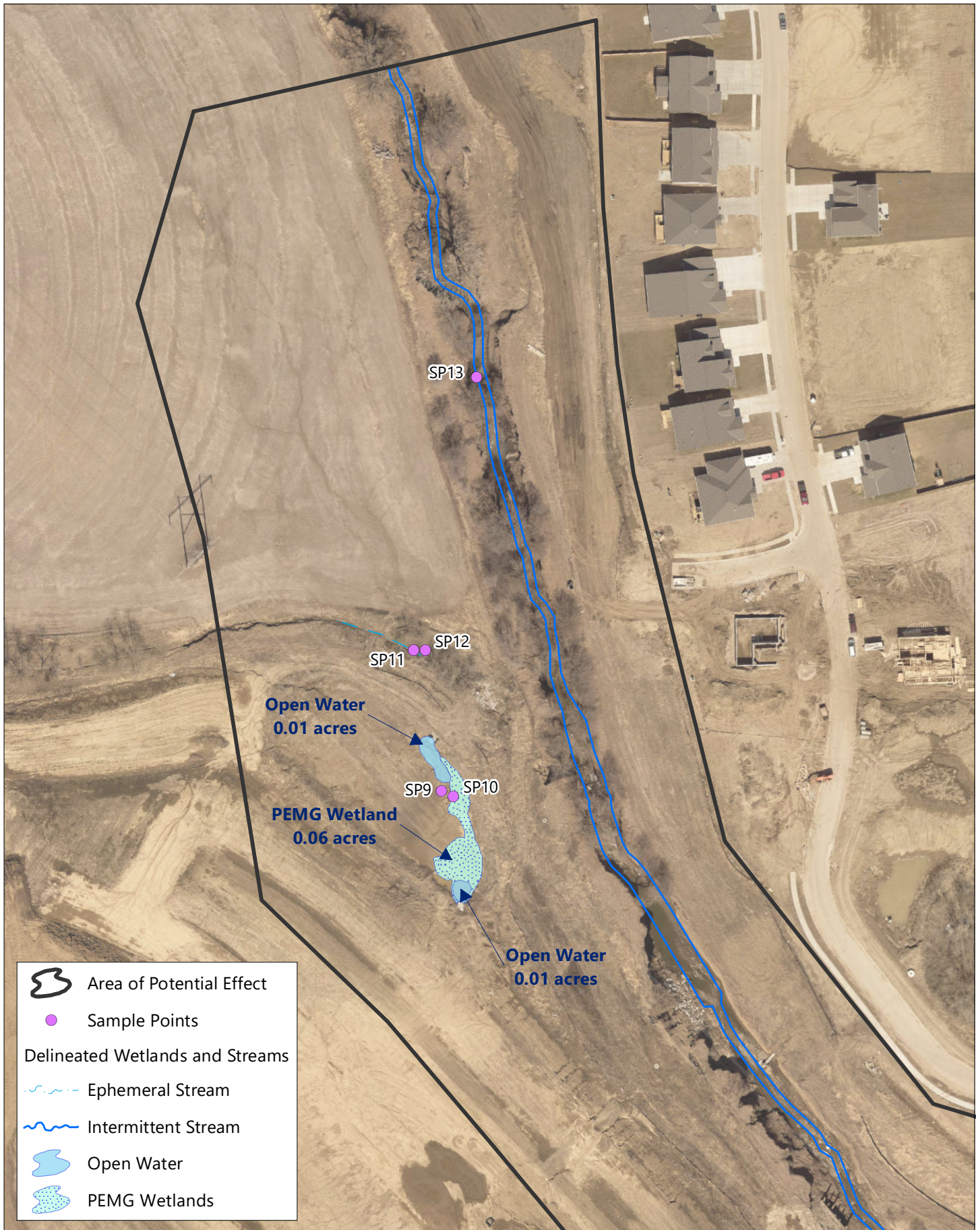
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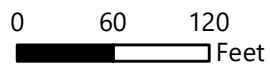


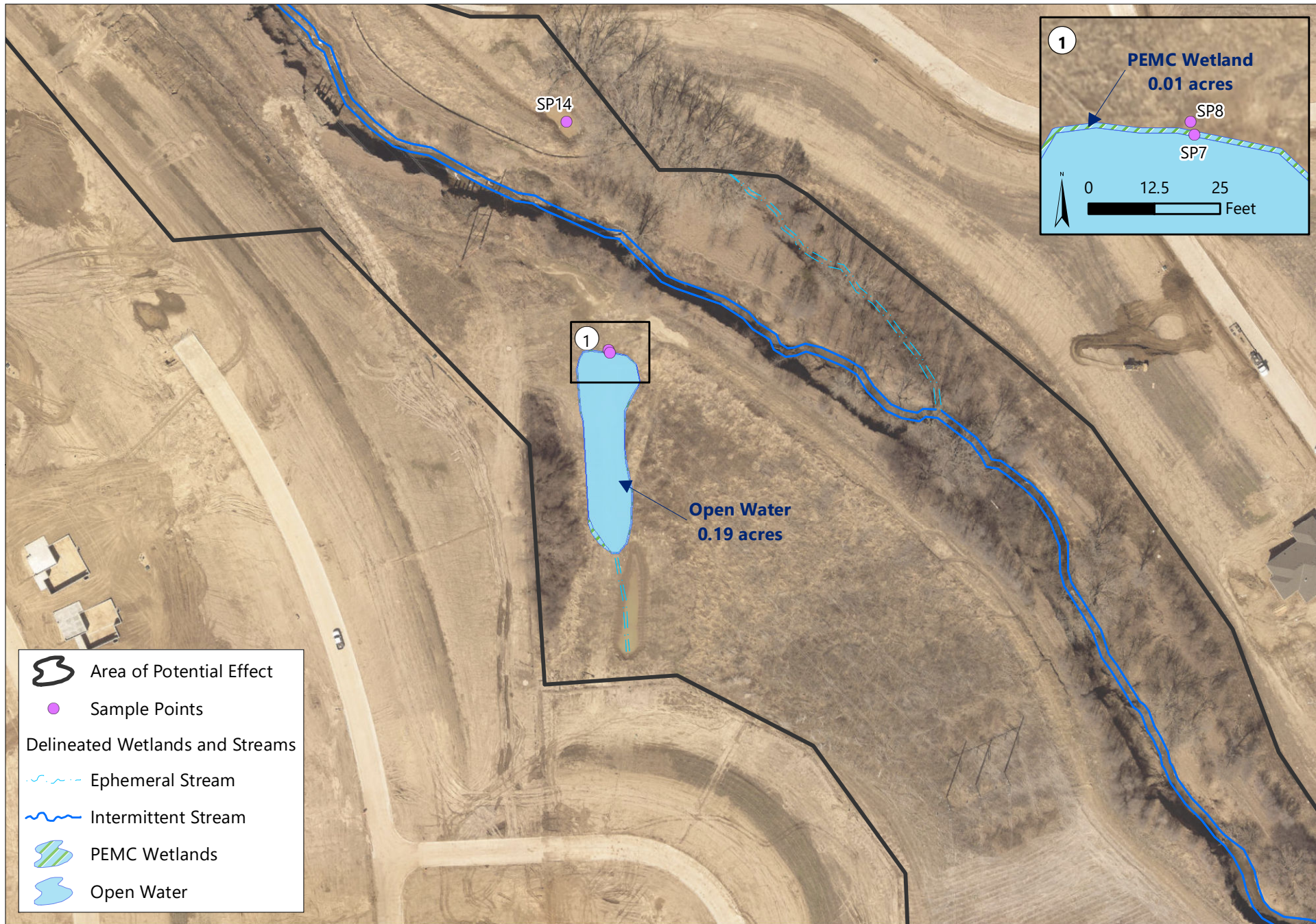
**Figure C3.4. Site S-5 Wetlands and Streams Index Sheet**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



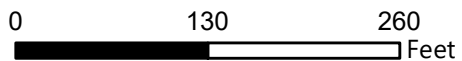


**Figure C3.4A. Site S-5 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



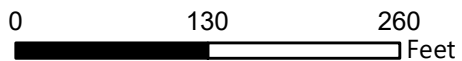


**Figure C3.4B. Site S-5 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



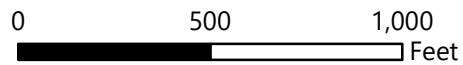


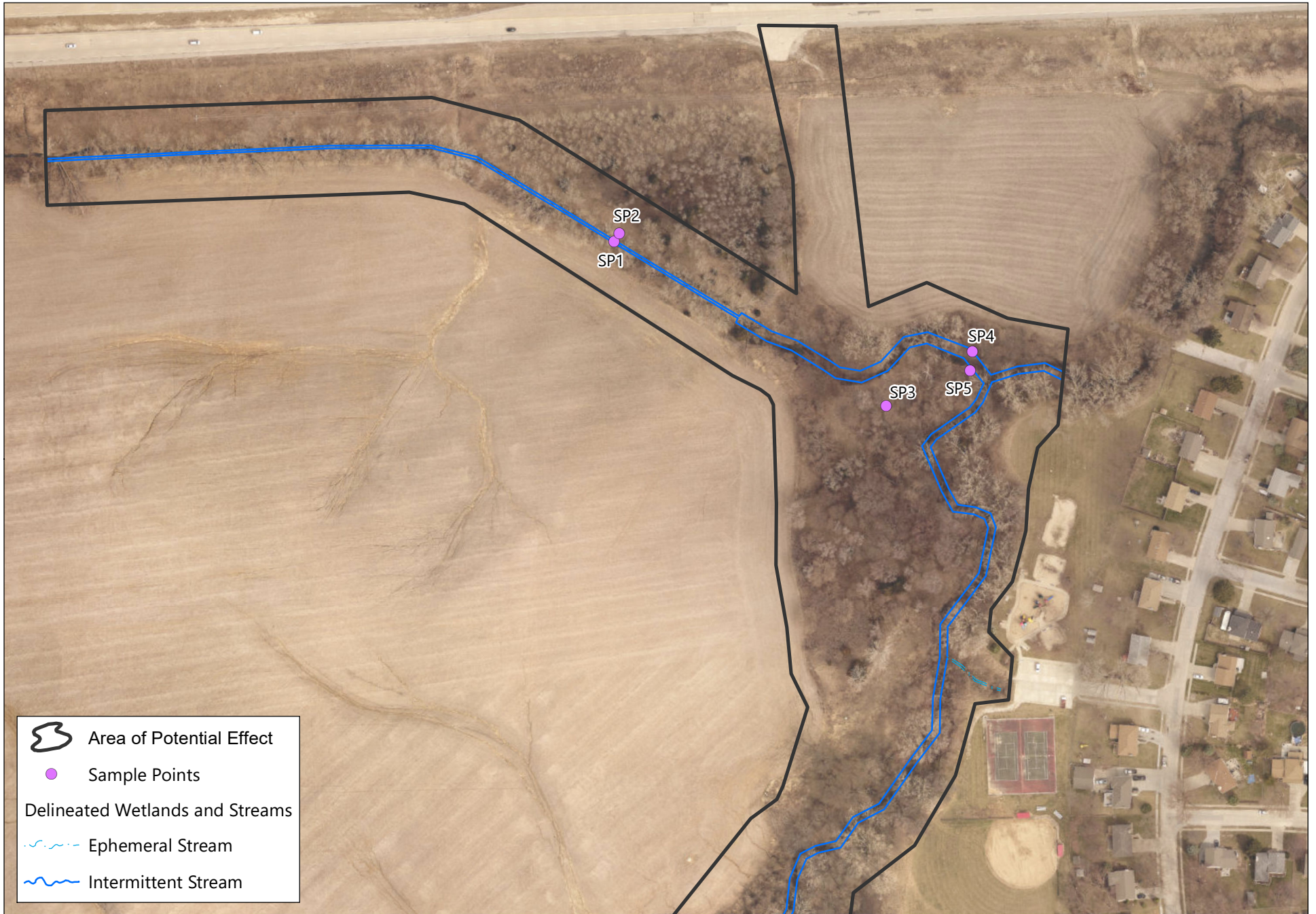
**Figure C3.4C. Site S-5 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



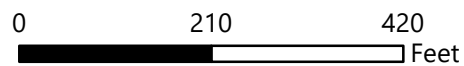


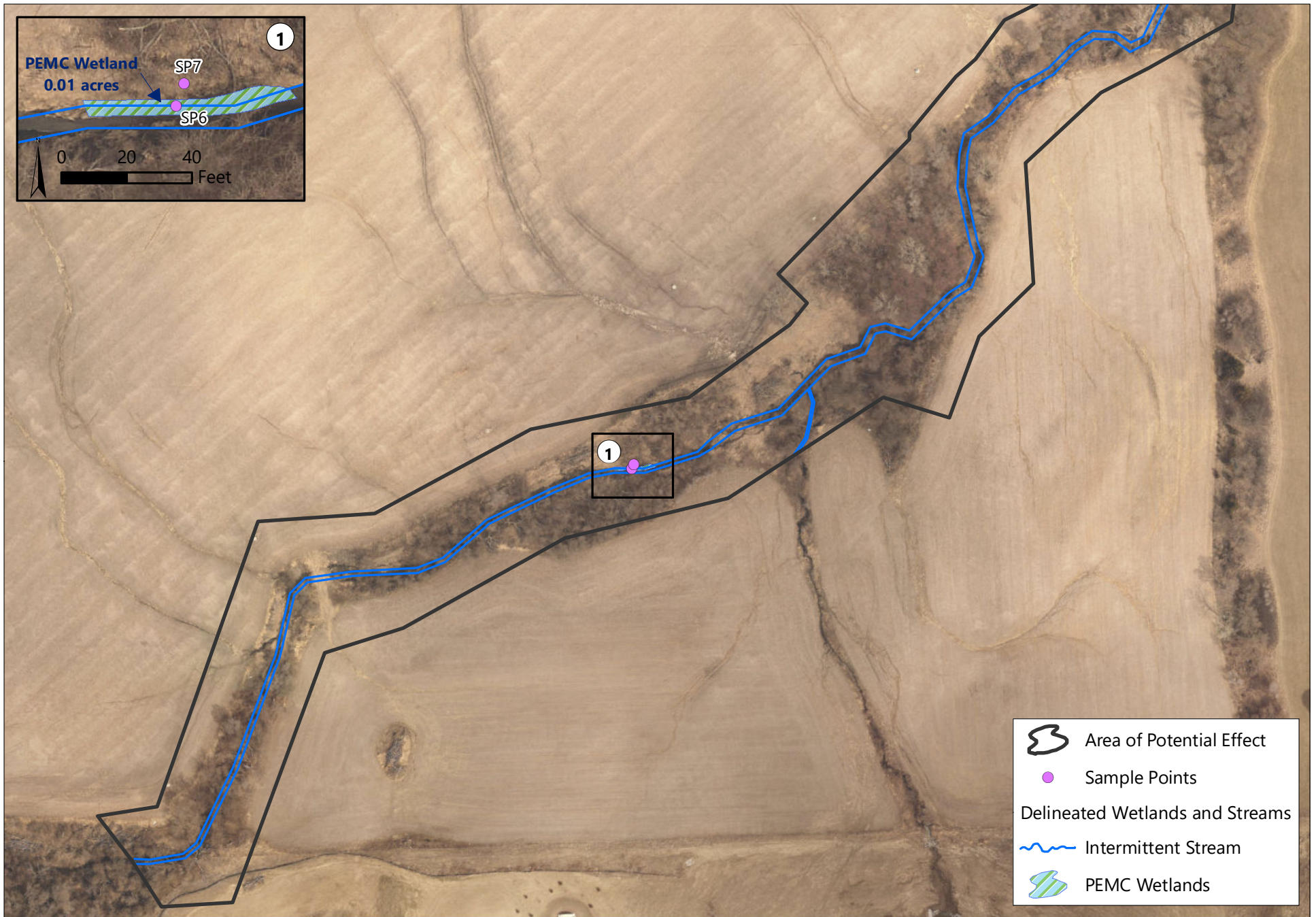
**Figure C3.5. Site S-15 Wetlands and Streams Index Sheet**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



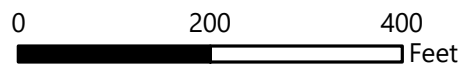






**Figure C3.5A. Site S-15 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



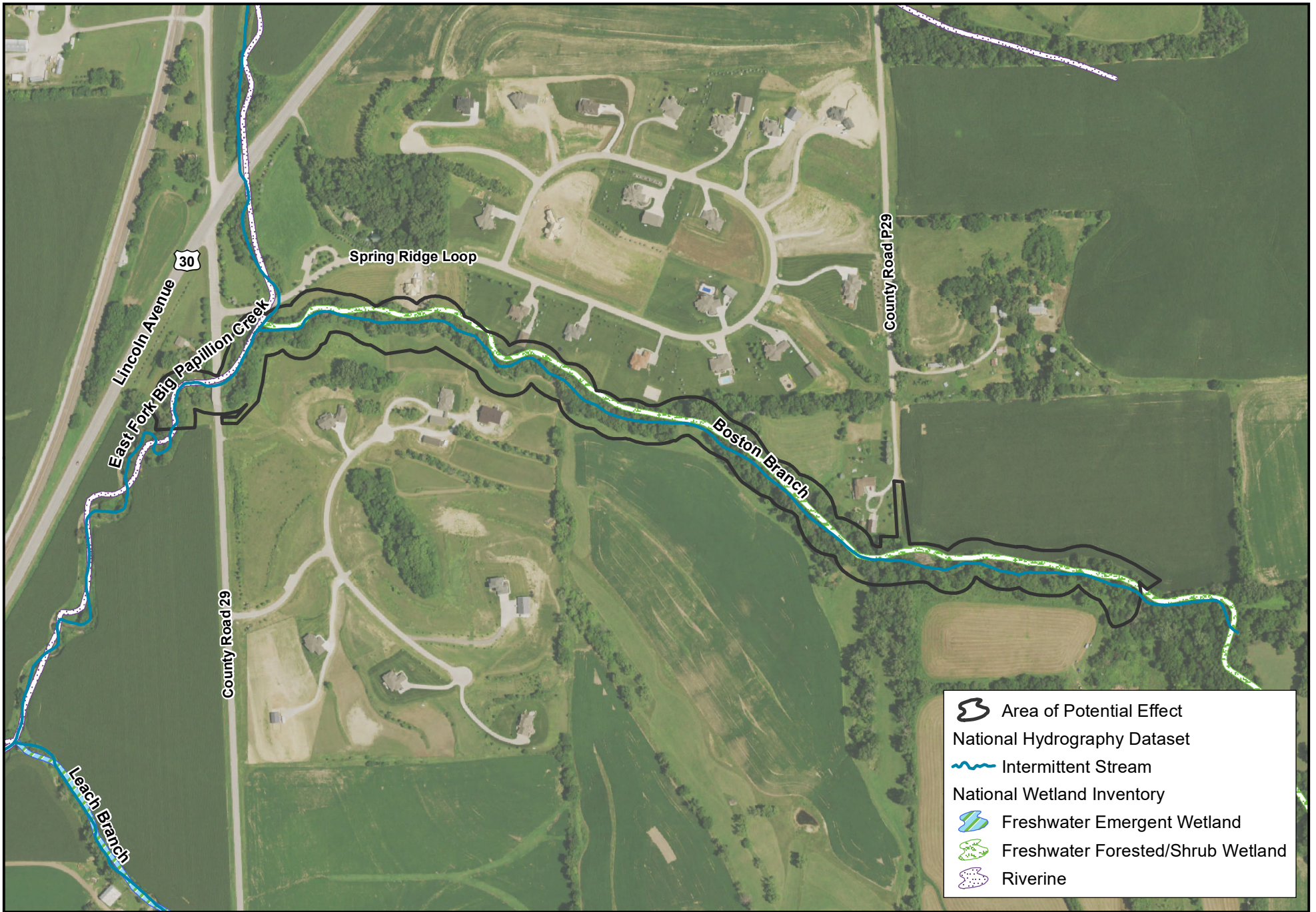


**Figure C3.5B. Site S-15 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



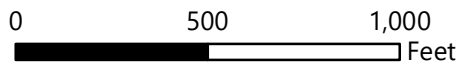
-  Area of Potential Effect
-  Sample Points
- Delineated Wetlands and Streams**
-  Intermittent Stream
-  PEMC Wetlands

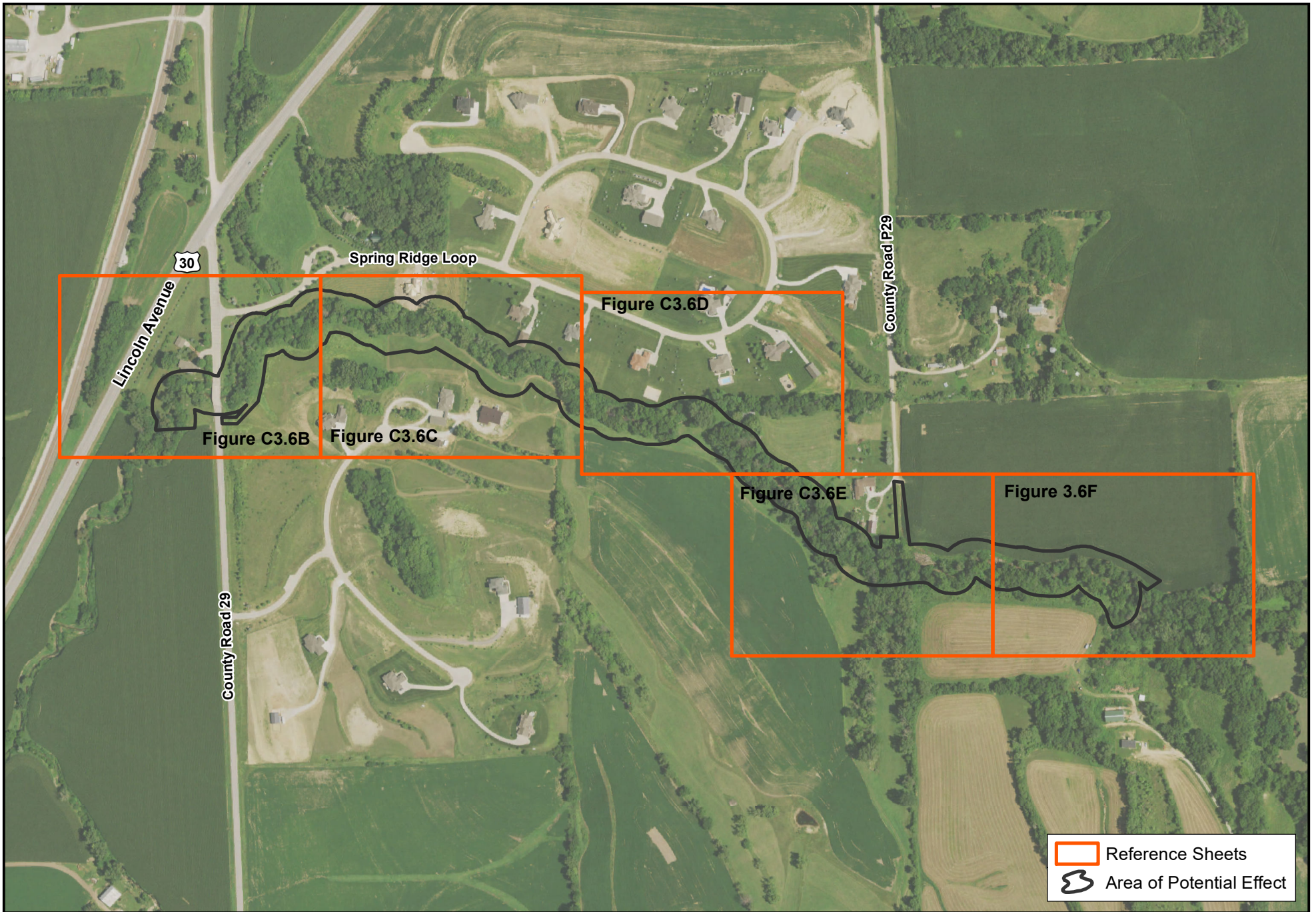




**Figure C3.6. Site W-5 - NWI Map**

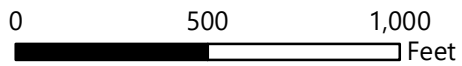
Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

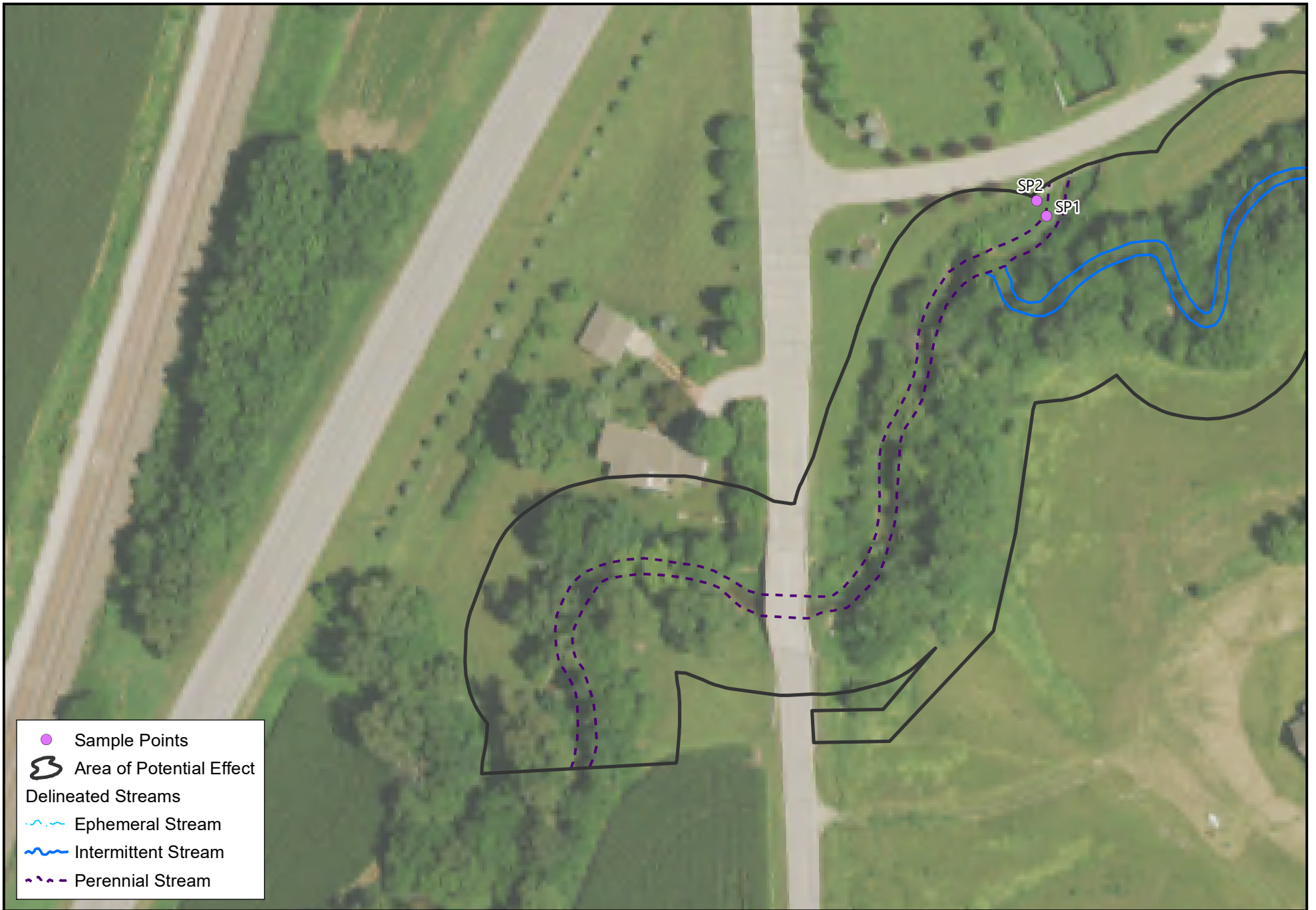




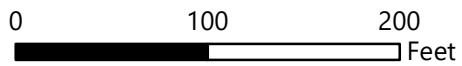
**Figure C3.6A. Site W-5 Wetlands and Streams Index Sheet**

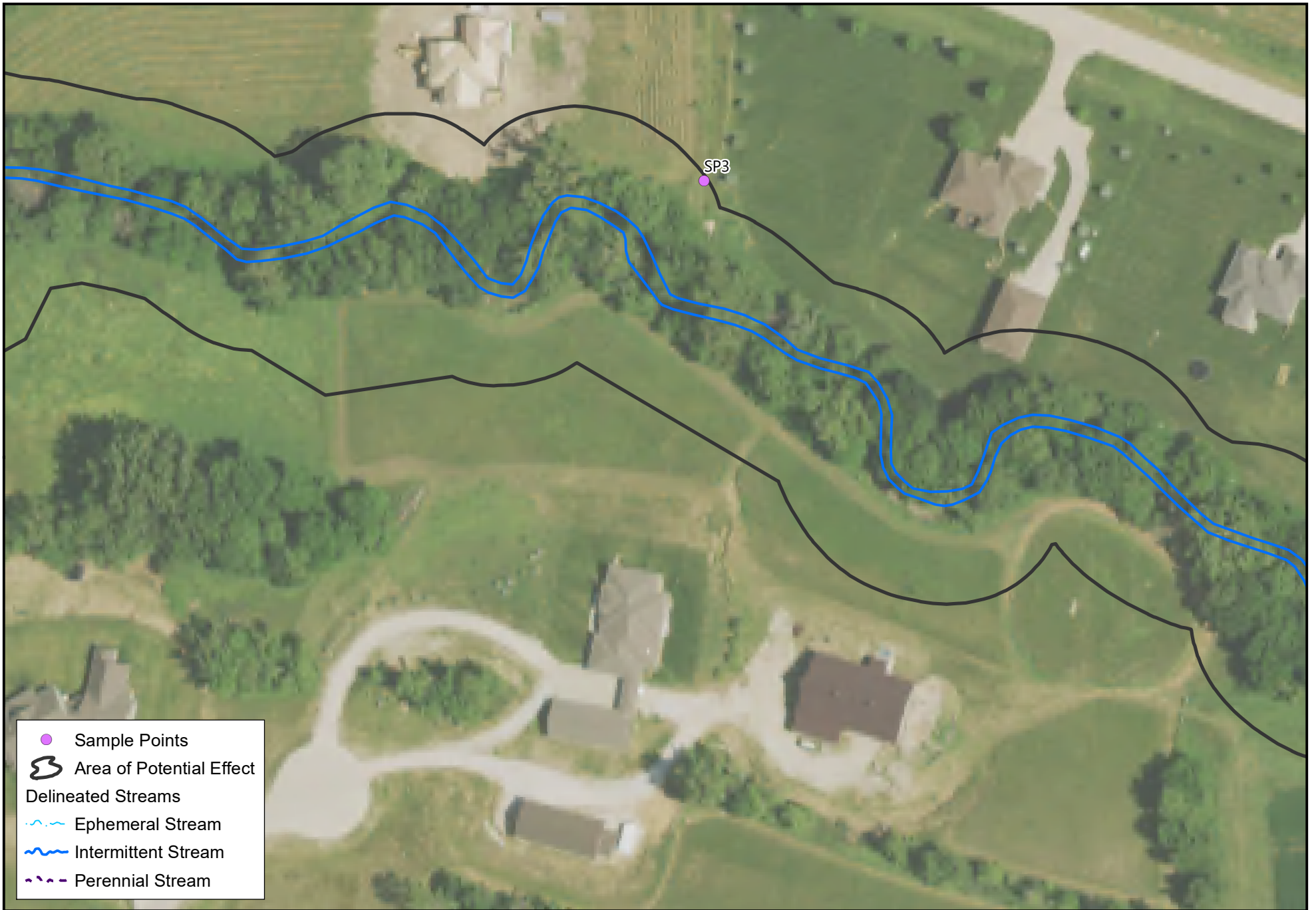
Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





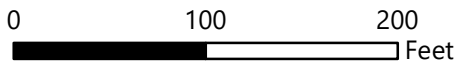
**Figure C3.6B. Site W-5 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





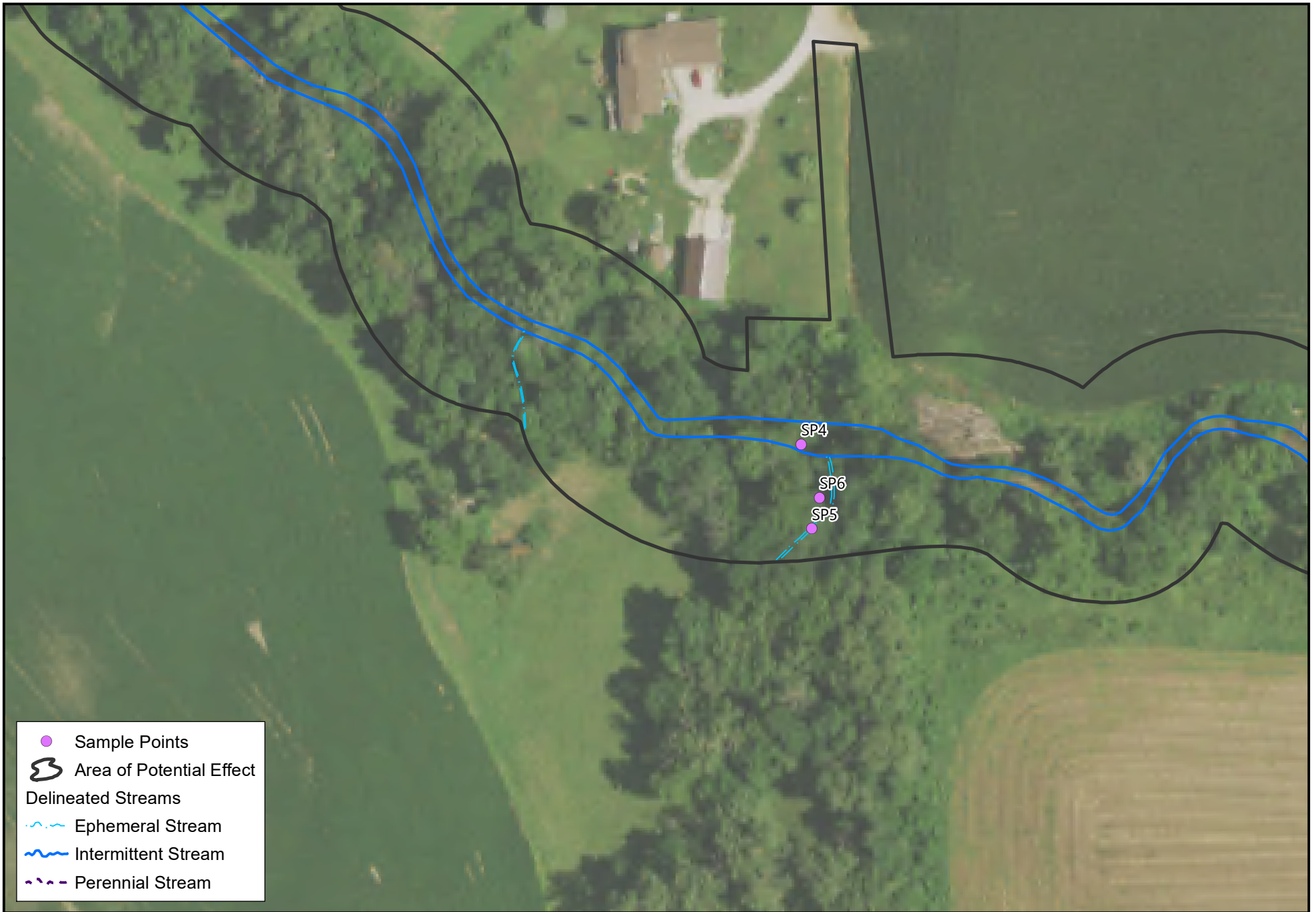
- Sample Points
- Ⓕ Area of Potential Effect
- Delineated Streams
- Ephemeral Stream
- Intermittent Stream
- Perennial Stream

**Figure C3.6C. Site W-5 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

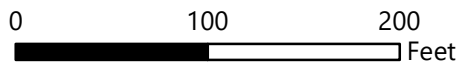




**Figure C3.6D. Site W-5 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

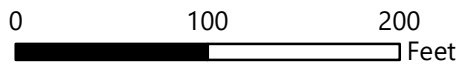


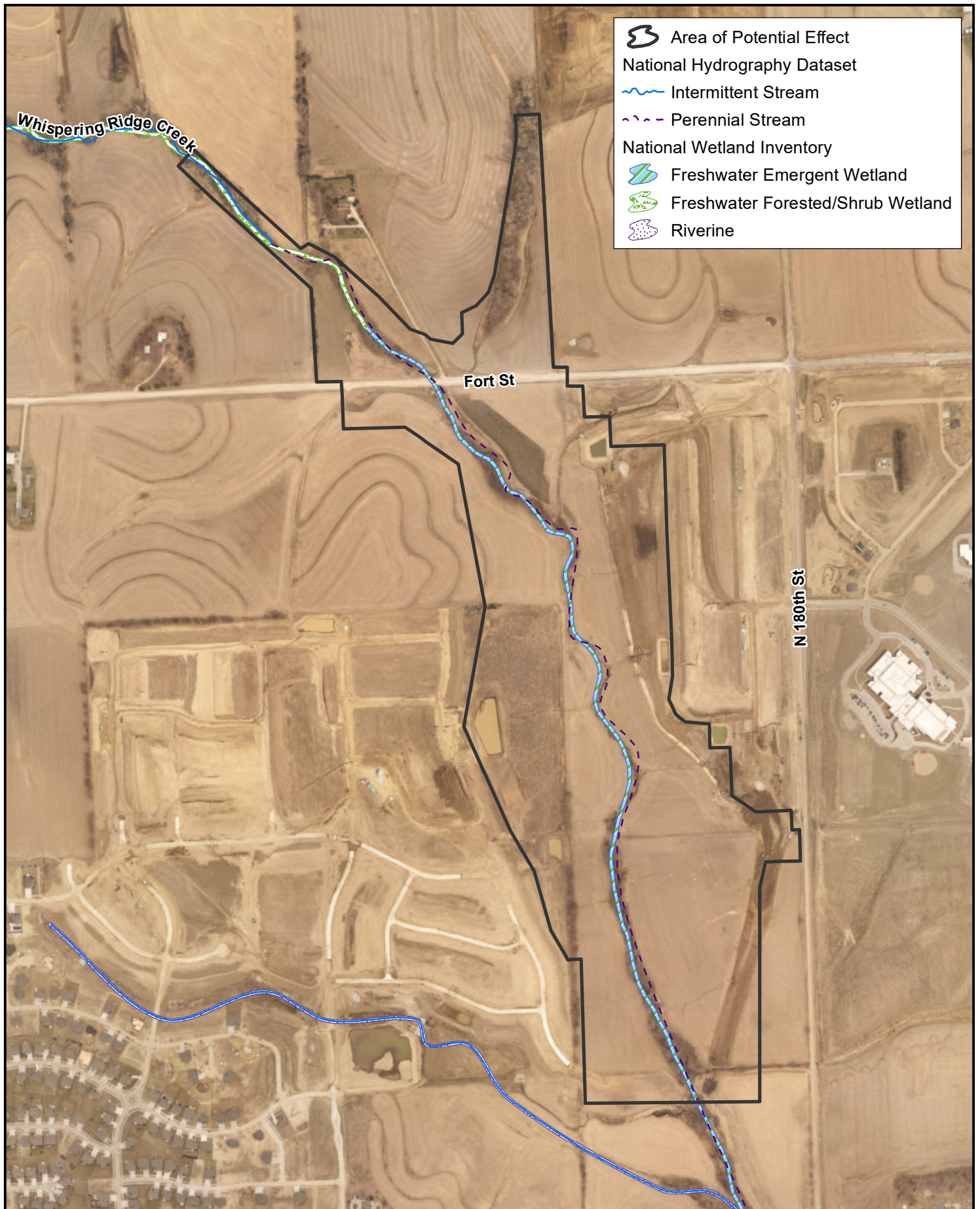
**Figure C3.6E. Site W-5 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



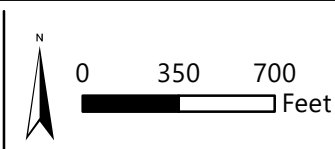


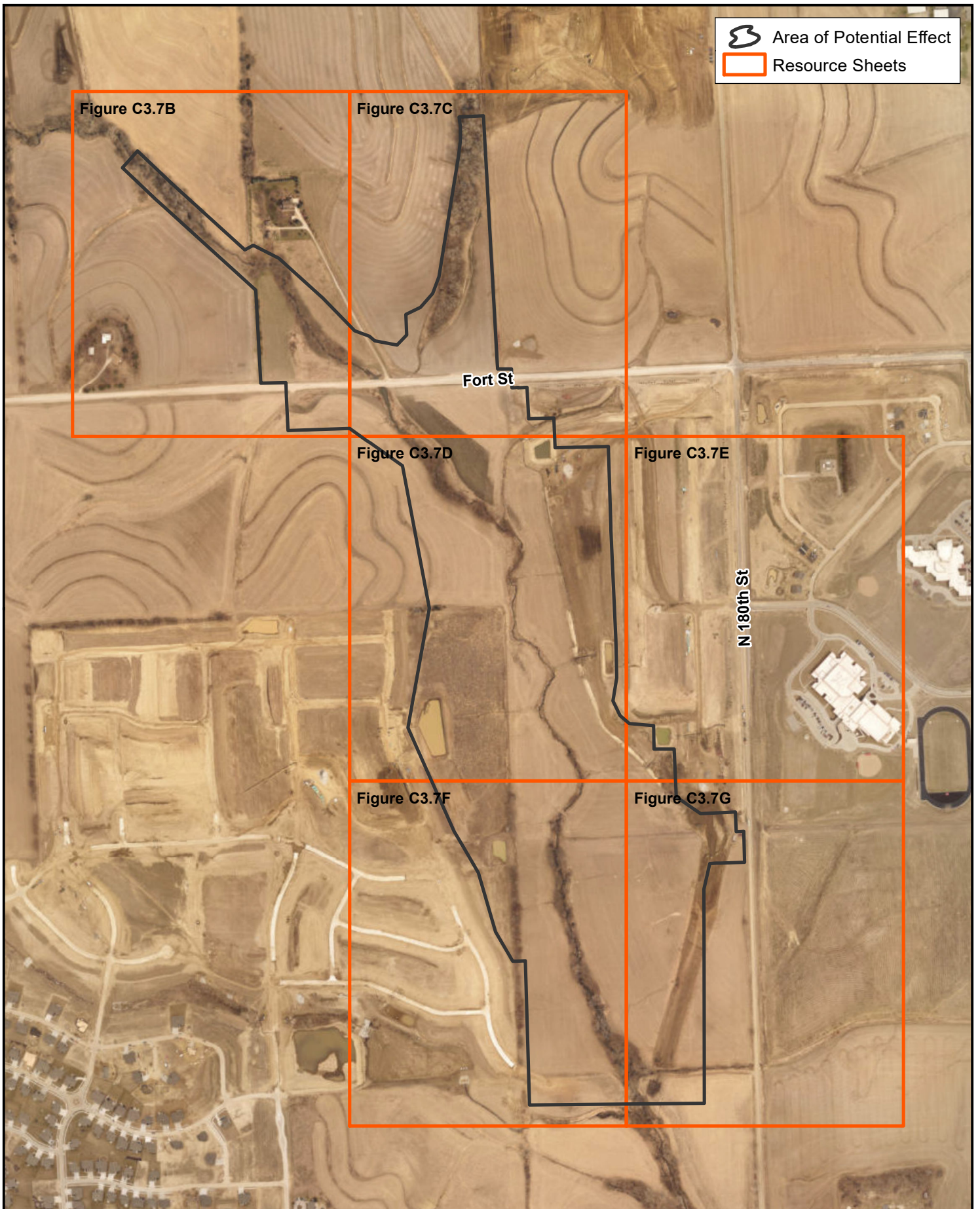
**Figure C3.6F. Site W-5 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C3.7. Site WP-1 - NWI Map**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

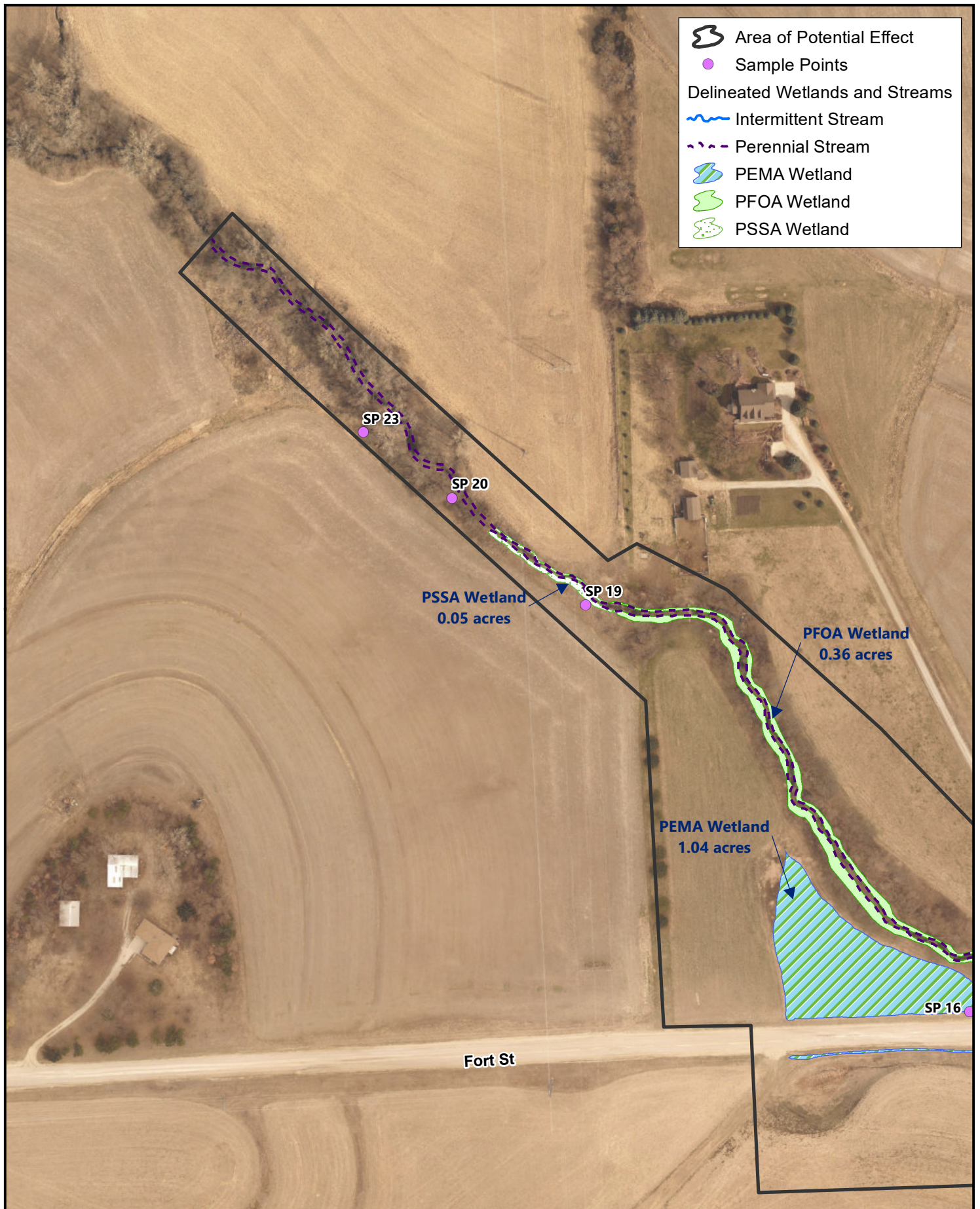




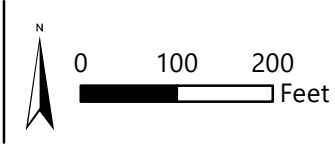
**Figure C3.7A. Site WP-1 Wetlands and Streams Index Sheet**

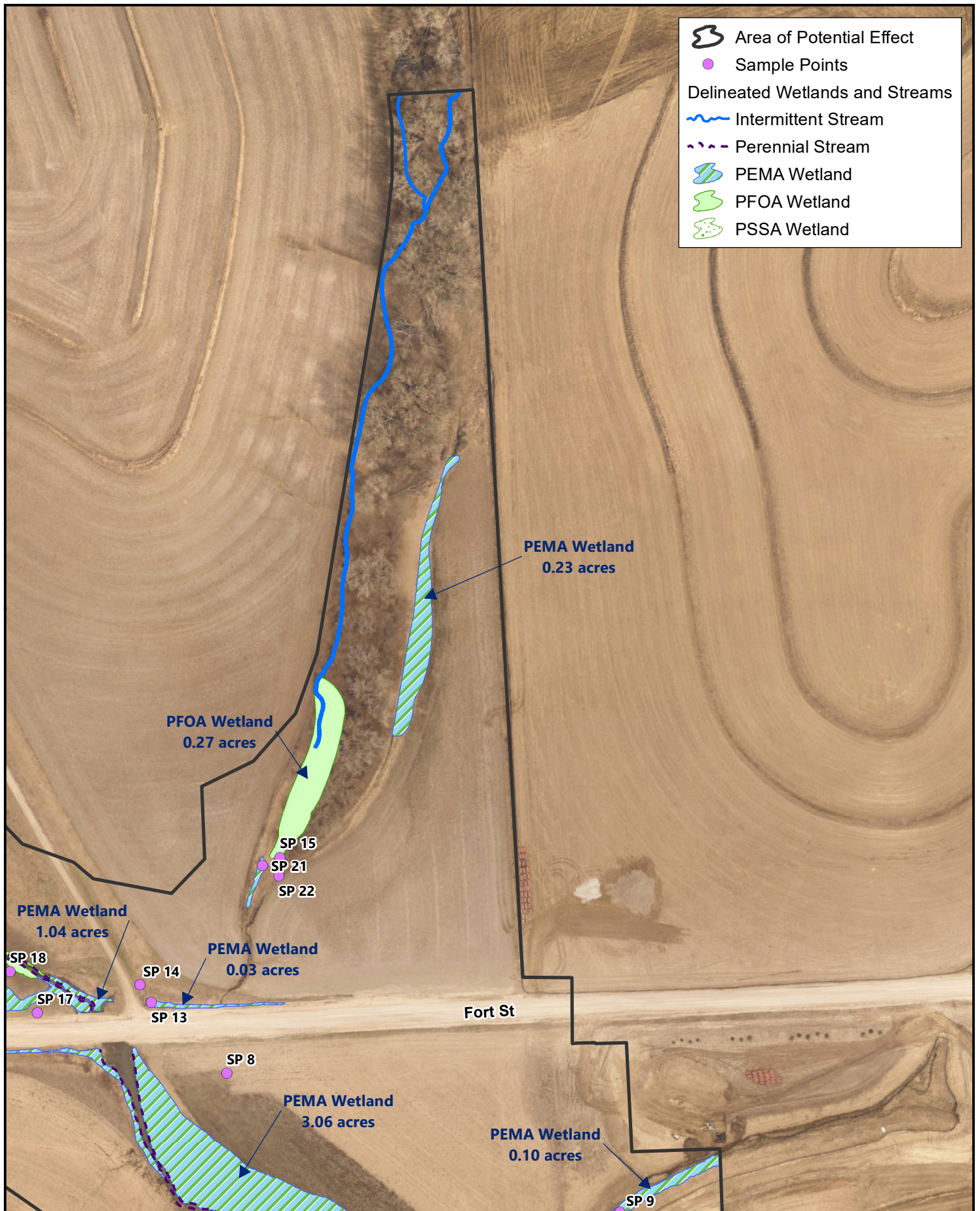
Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



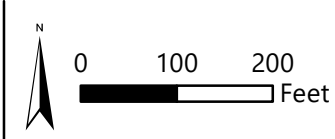


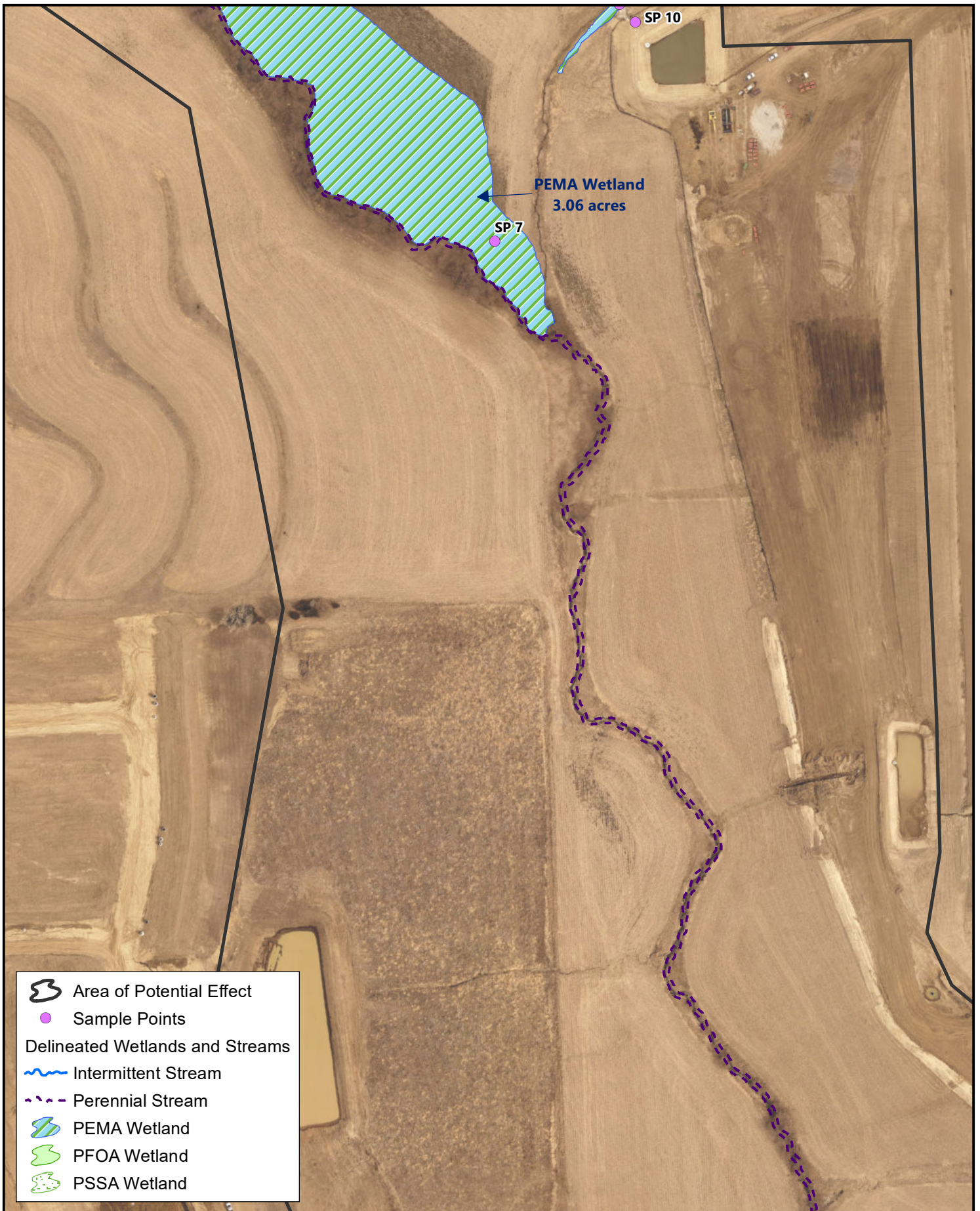
**Figure C3.7B. Site WP-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



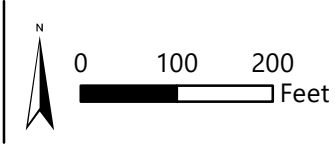


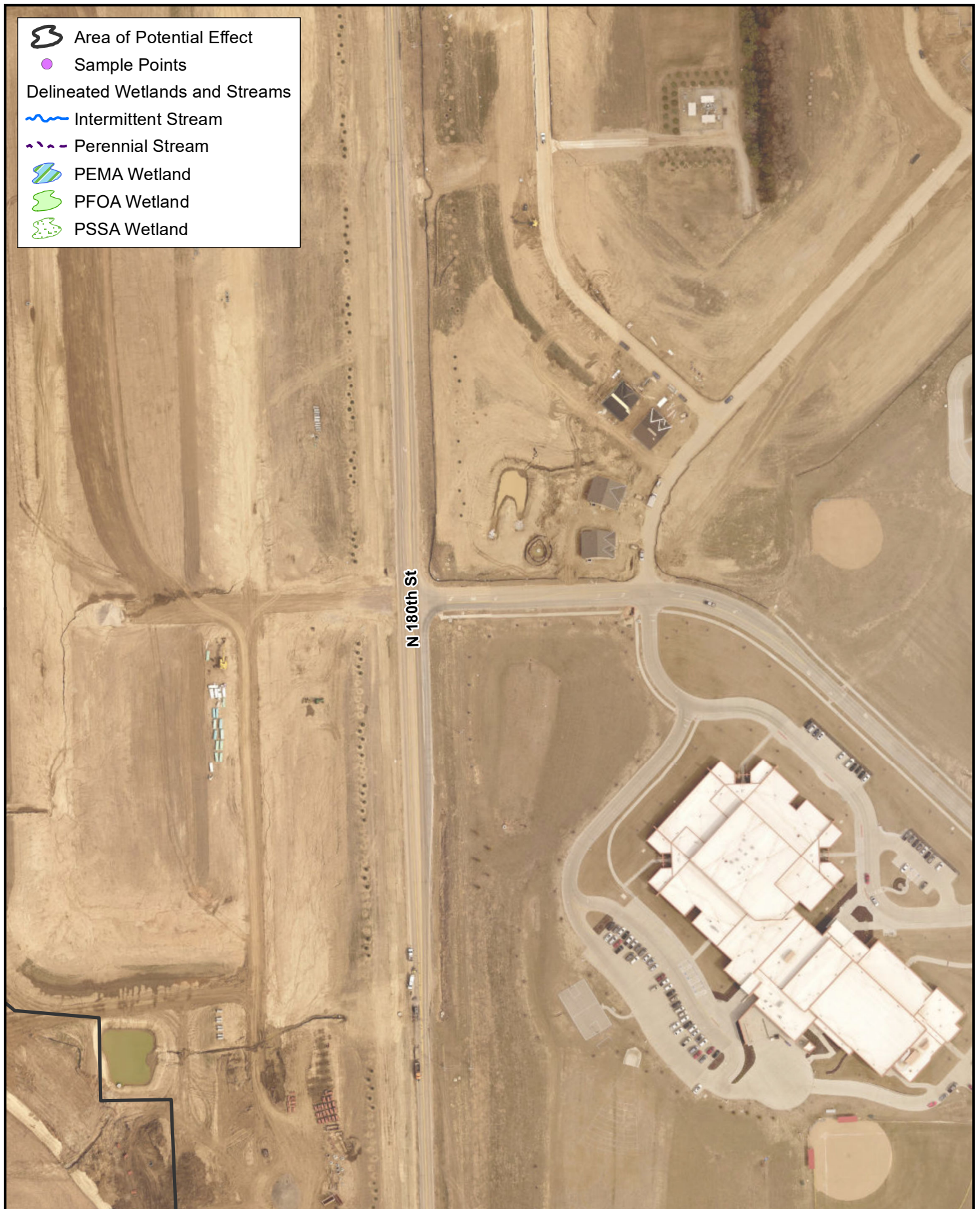
**Figure C3.7C. Site WP-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C3.7D. Site WP-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



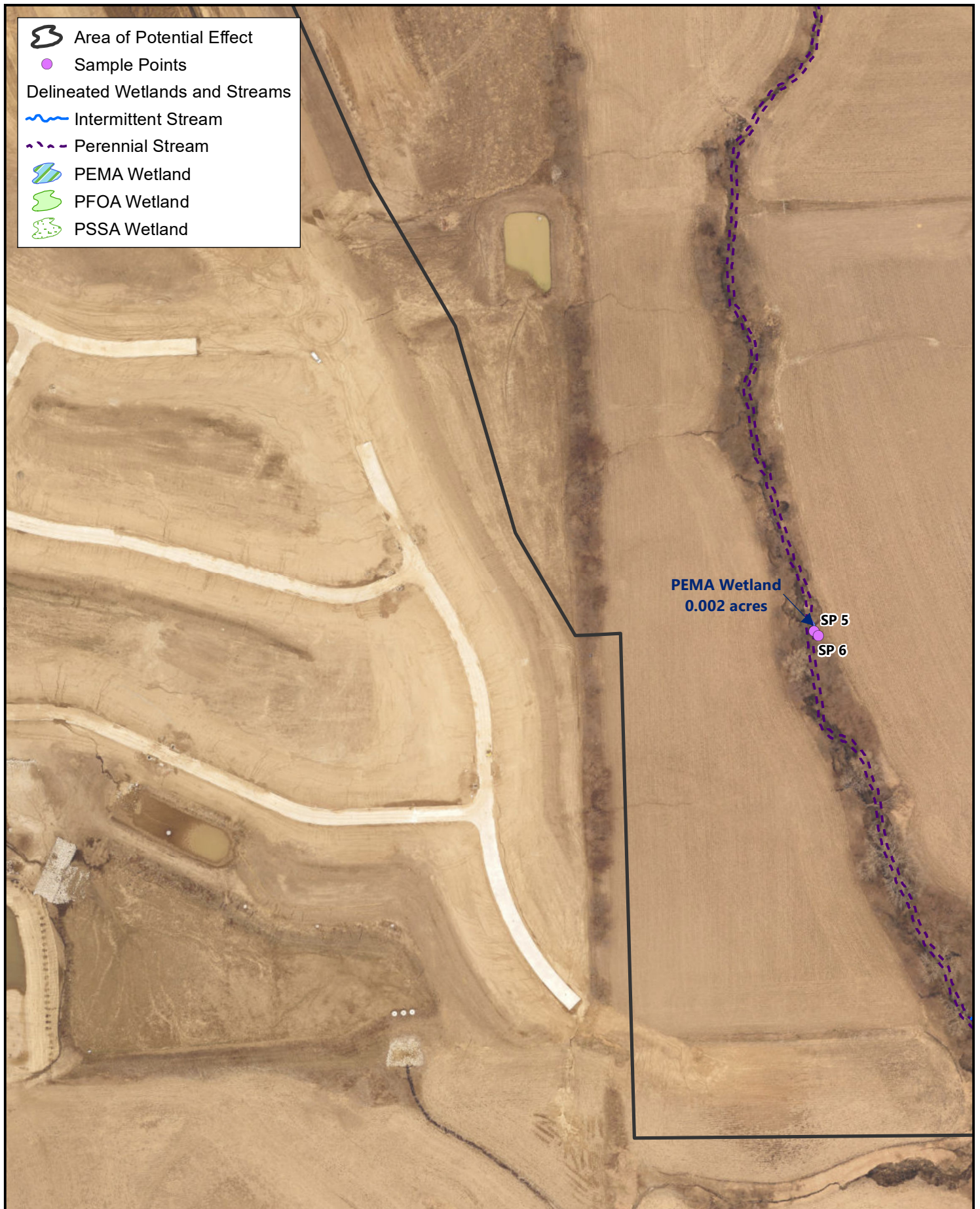


**Figure C3.7E. Site WP-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

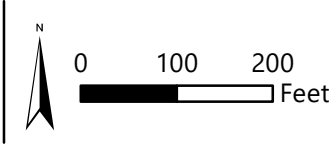


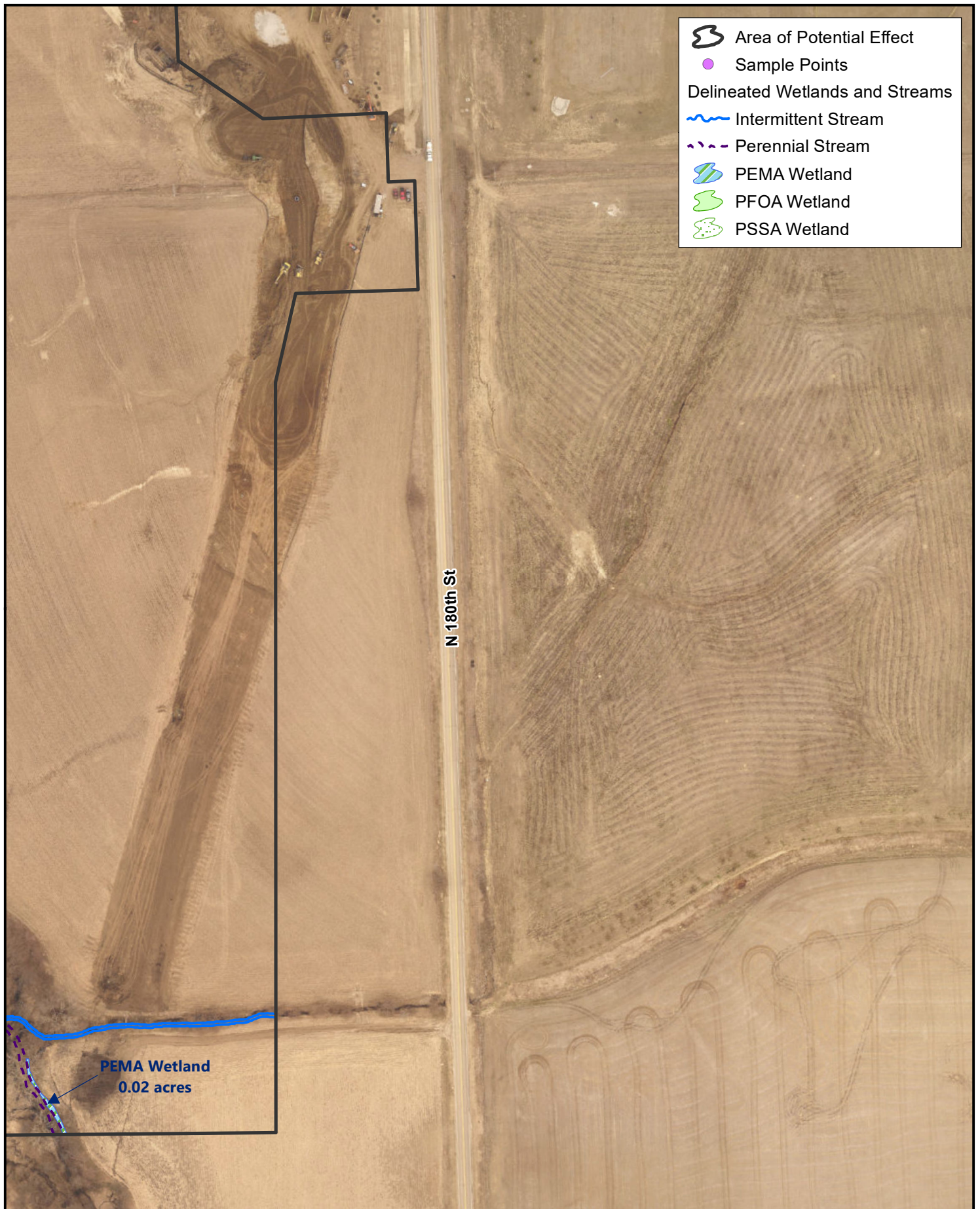
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 Feet



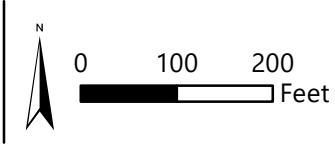


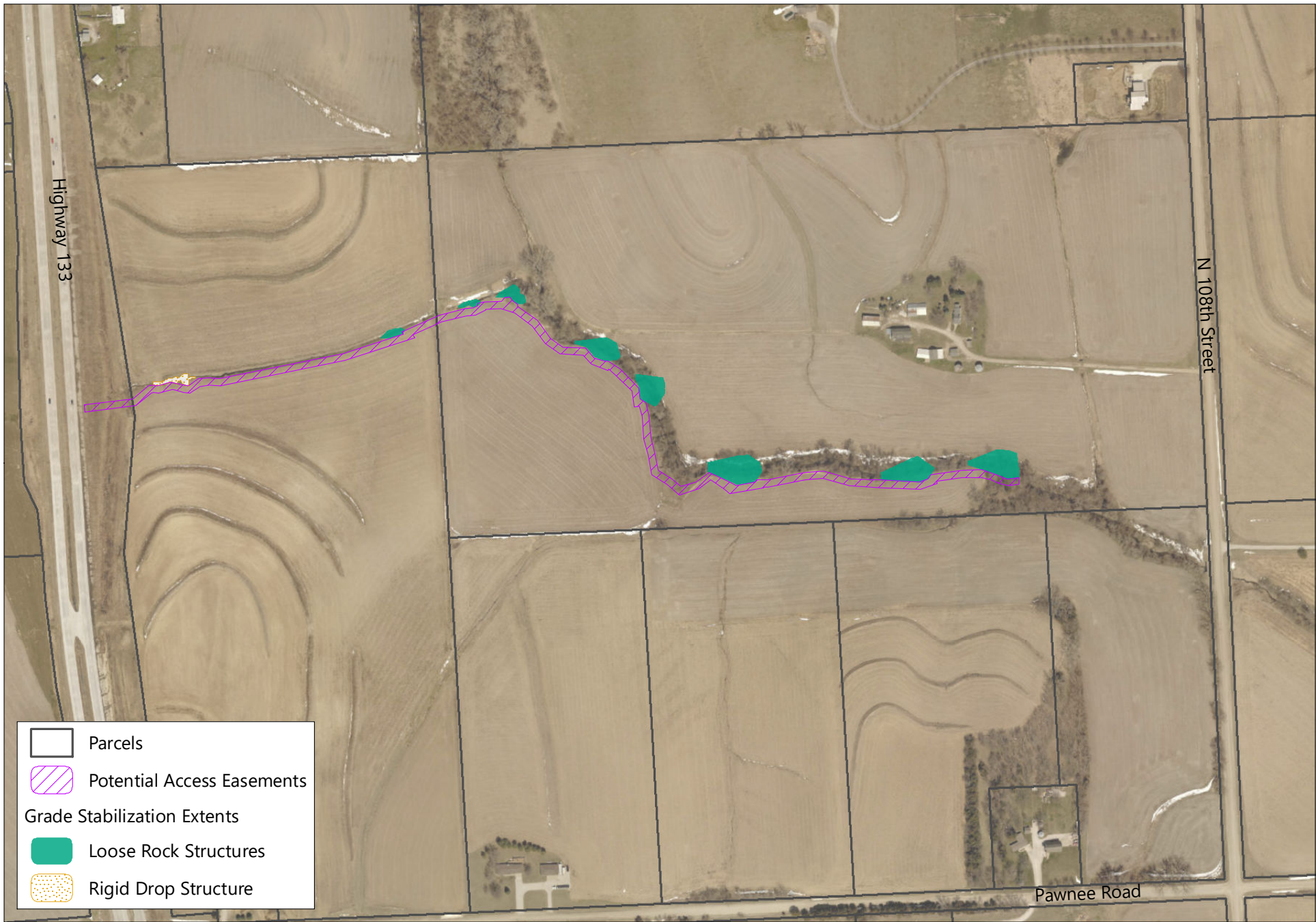
**Figure C3.7F. Site WP-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C3.7G. Site WP-1 Wetlands and Streams**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

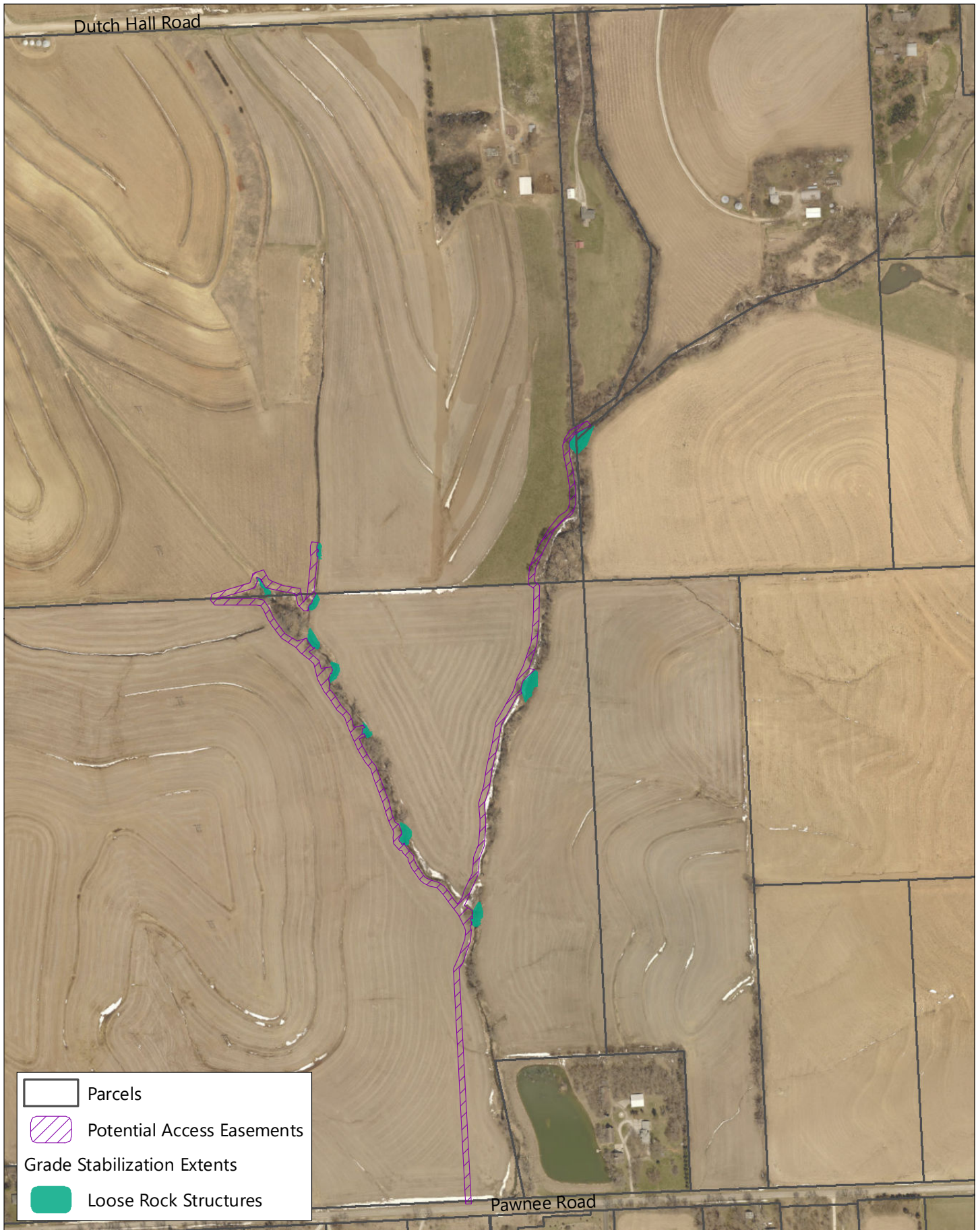




**Figure C4.1. D-2 Project Extents**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



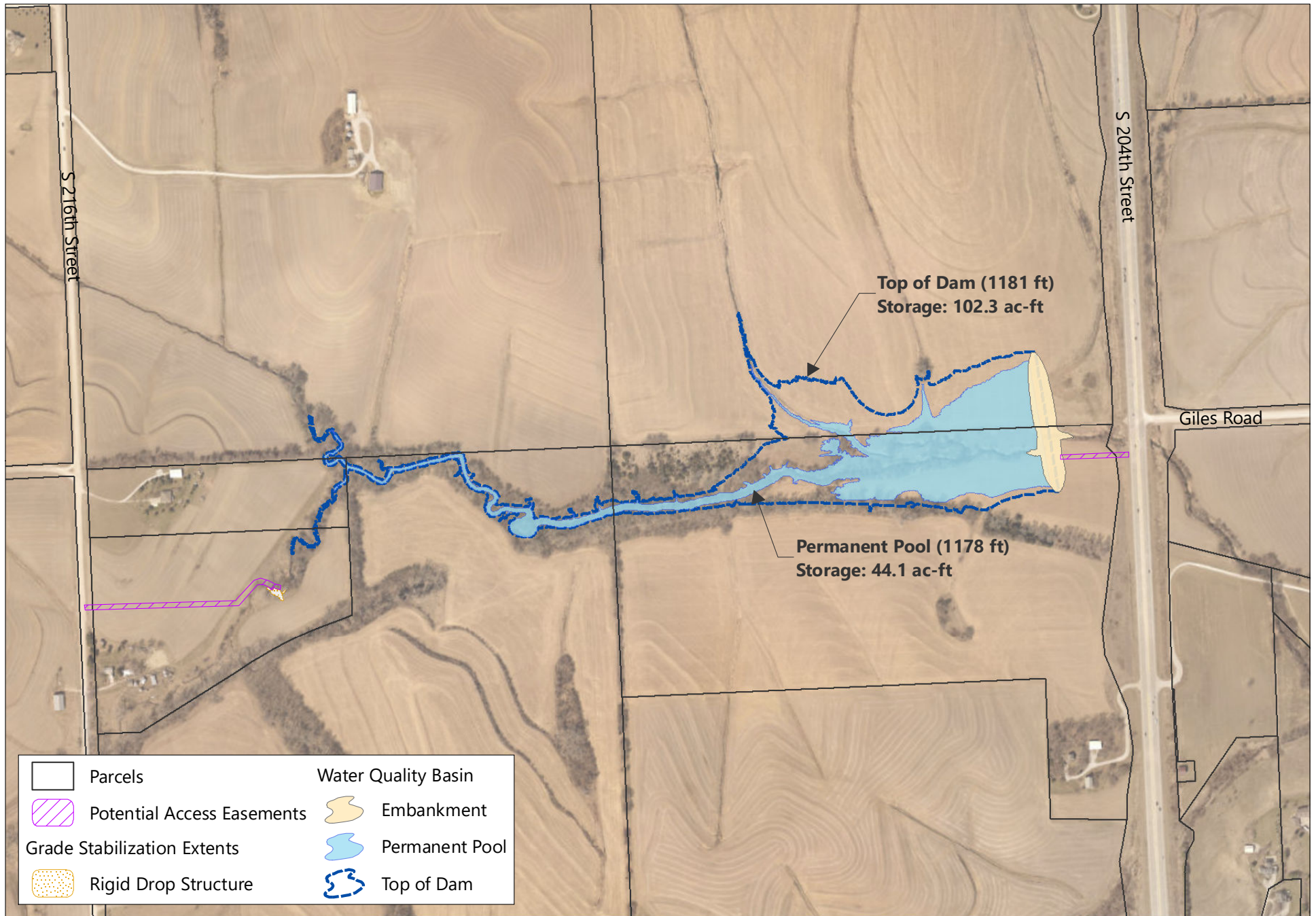


**Figure C4.2. D-78 Project Extents**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



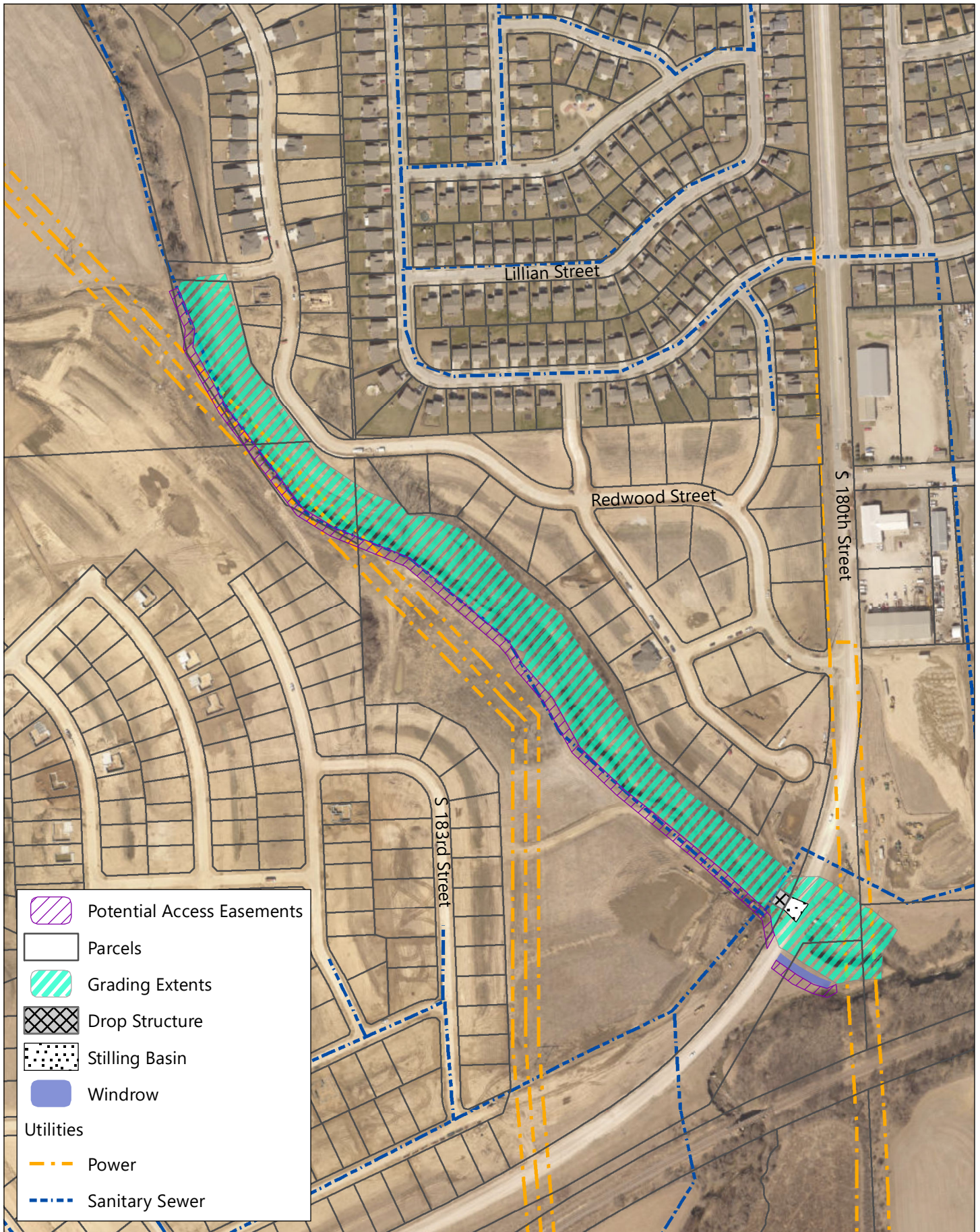
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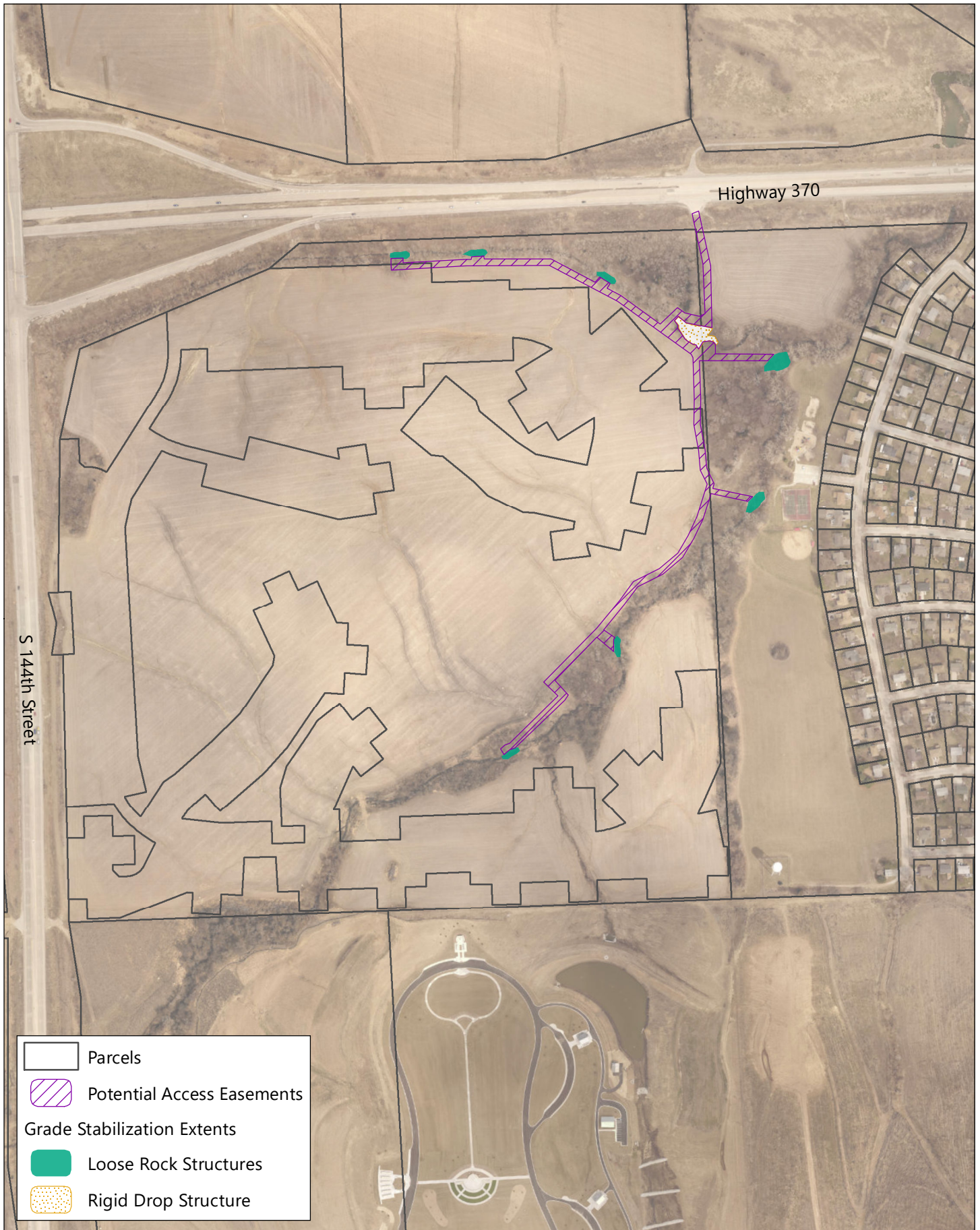
**Figure C4.3. S-1 Project Extents**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C4.4. S-5 Project Extents**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C4.5. S-15 Project Extents**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



0 500 Feet





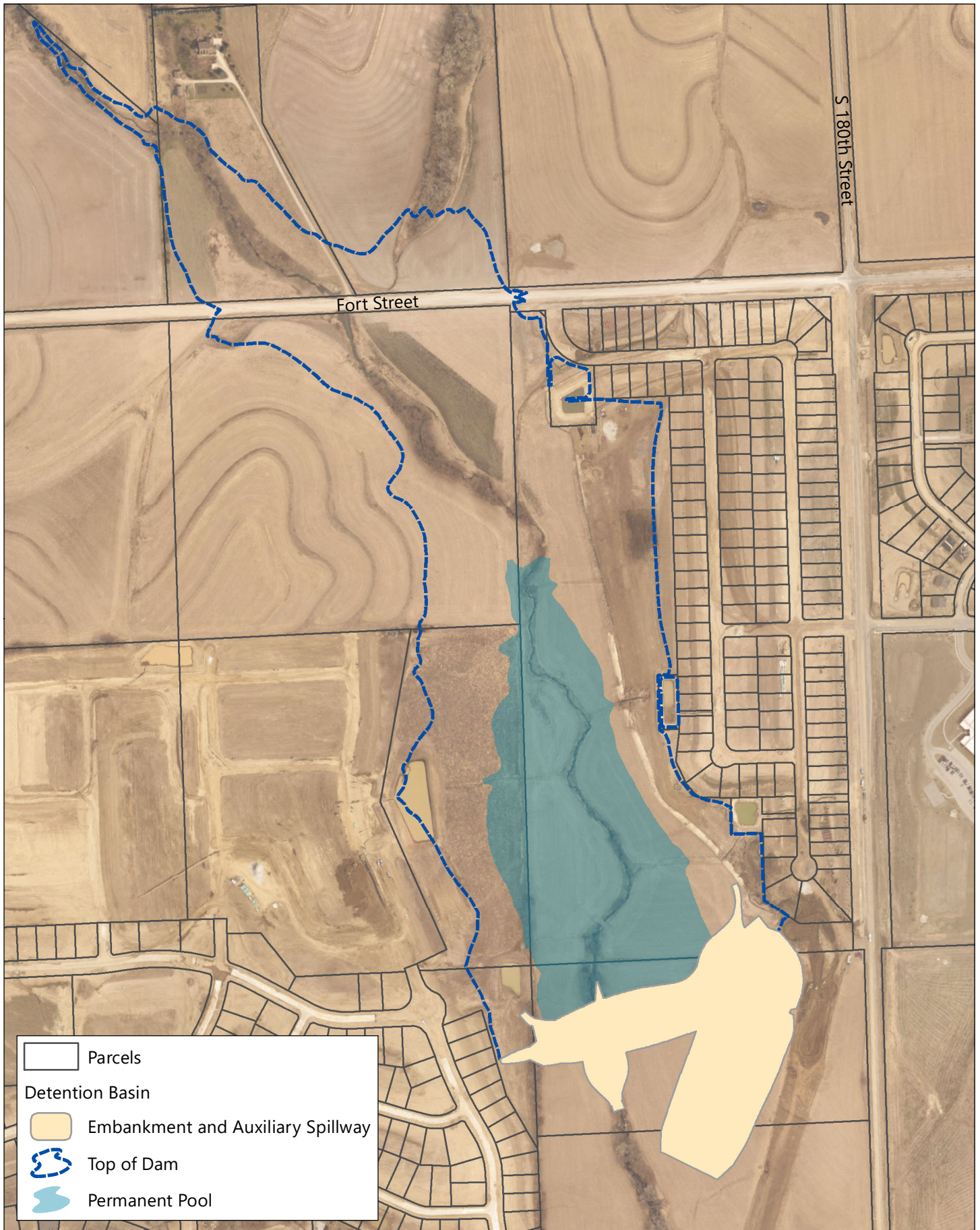
**Figure C4.6. W-5 Project Extents**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



0 450  
 Feet



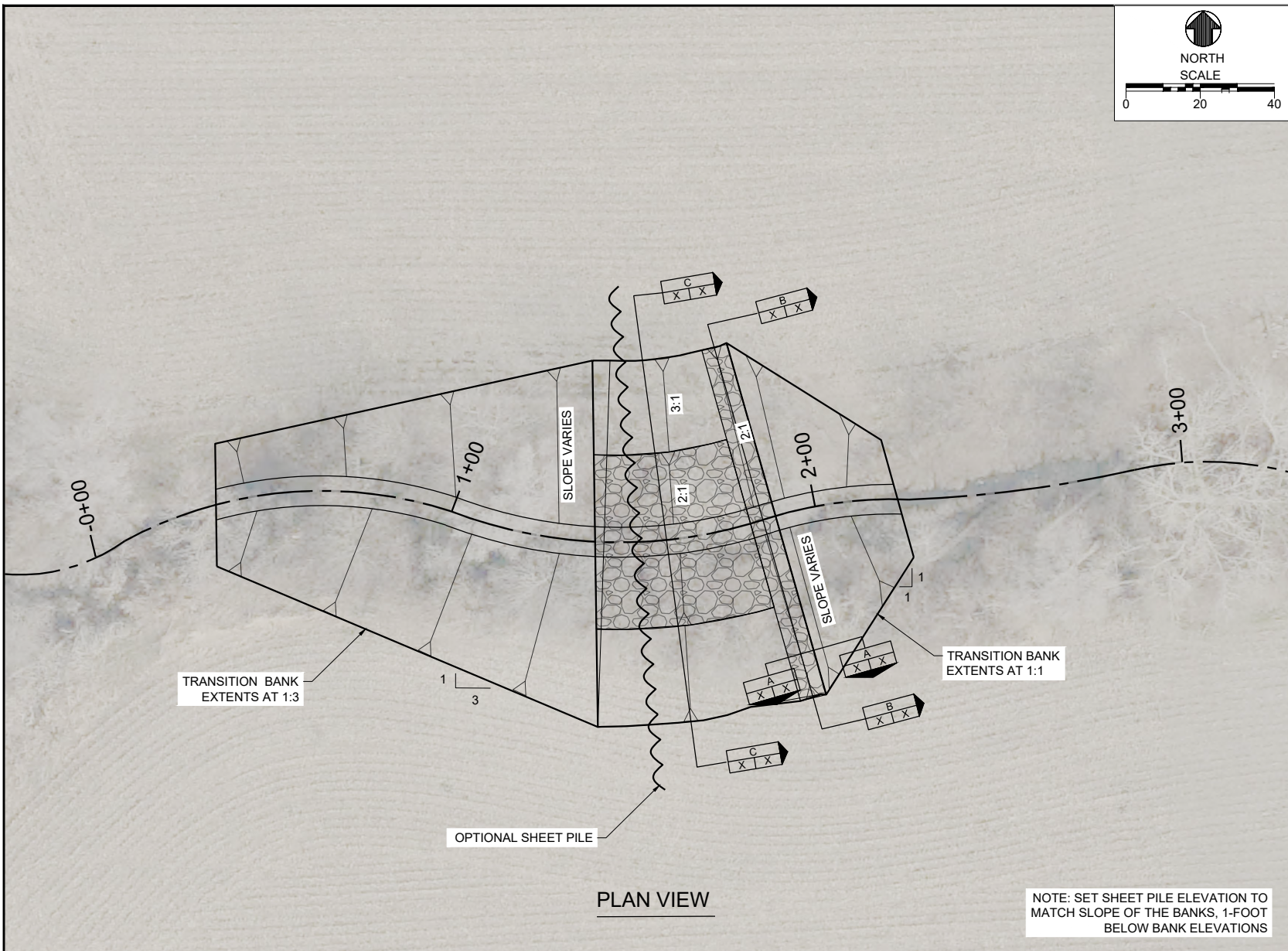
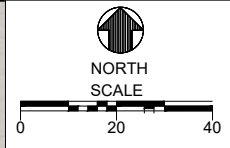


**Figure C4.7. WP-1 Project Extents**  
 Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD



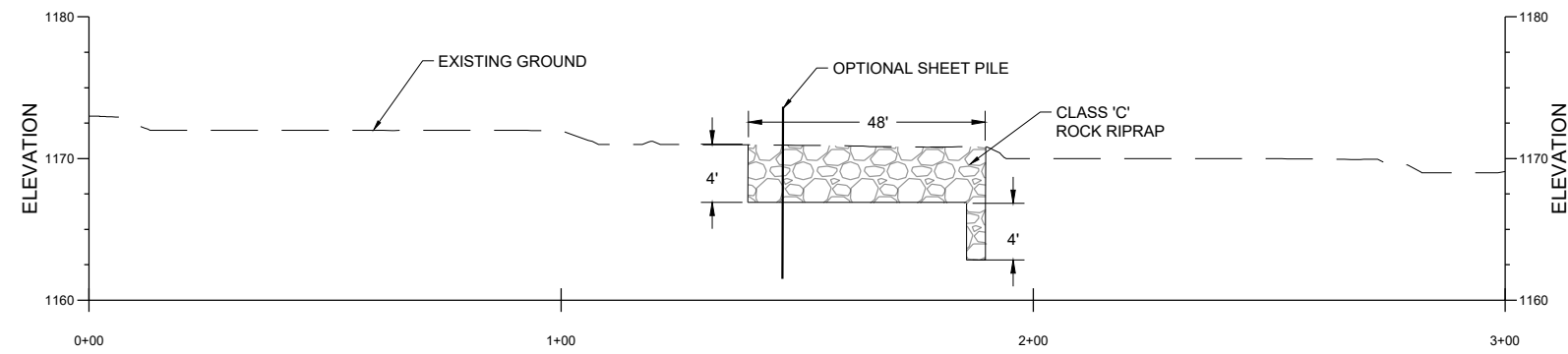
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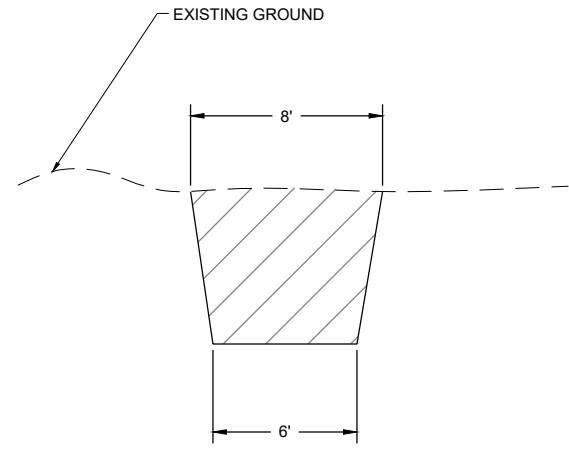
PLAN VIEW

NOTE: SET SHEET PILE ELEVATION TO MATCH SLOPE OF THE BANKS, 1-FOOT BELOW BANK ELEVATIONS

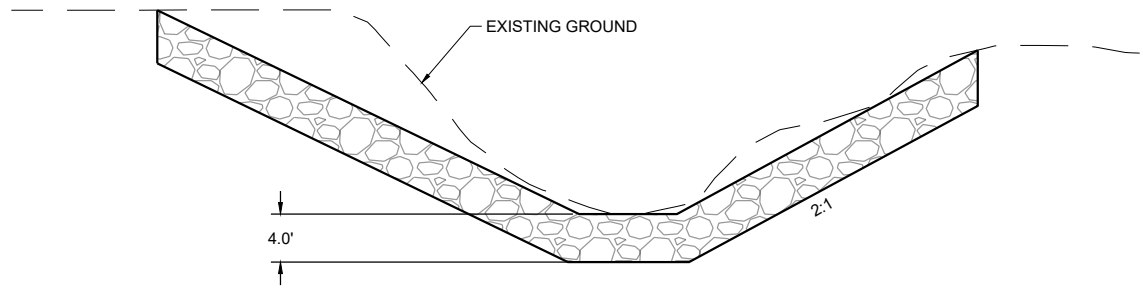


PROFILE VIEW

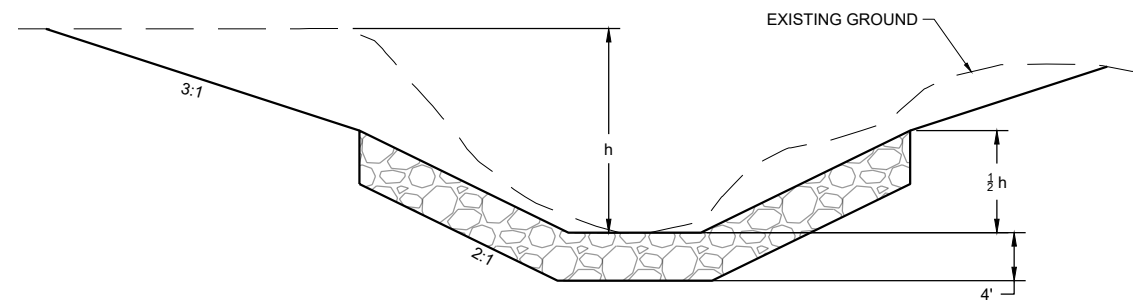
FOR PLANNING PURPOSES ONLY  
NOT FOR CONSTRUCTION



SILL DETAIL A  
X X



SILL DETAIL B  
X X



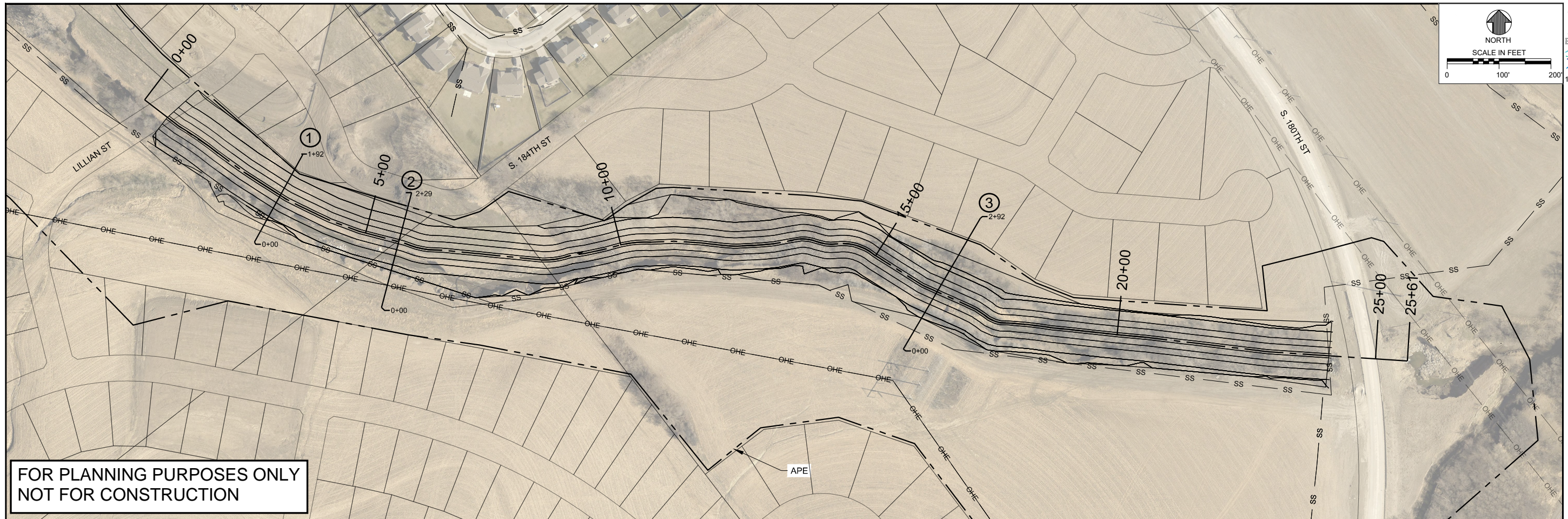
ROCK RAMP DETAIL C  
X X

ENGINEER'S SEAL

REVISIONS	
NO.	DATE

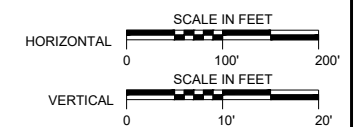
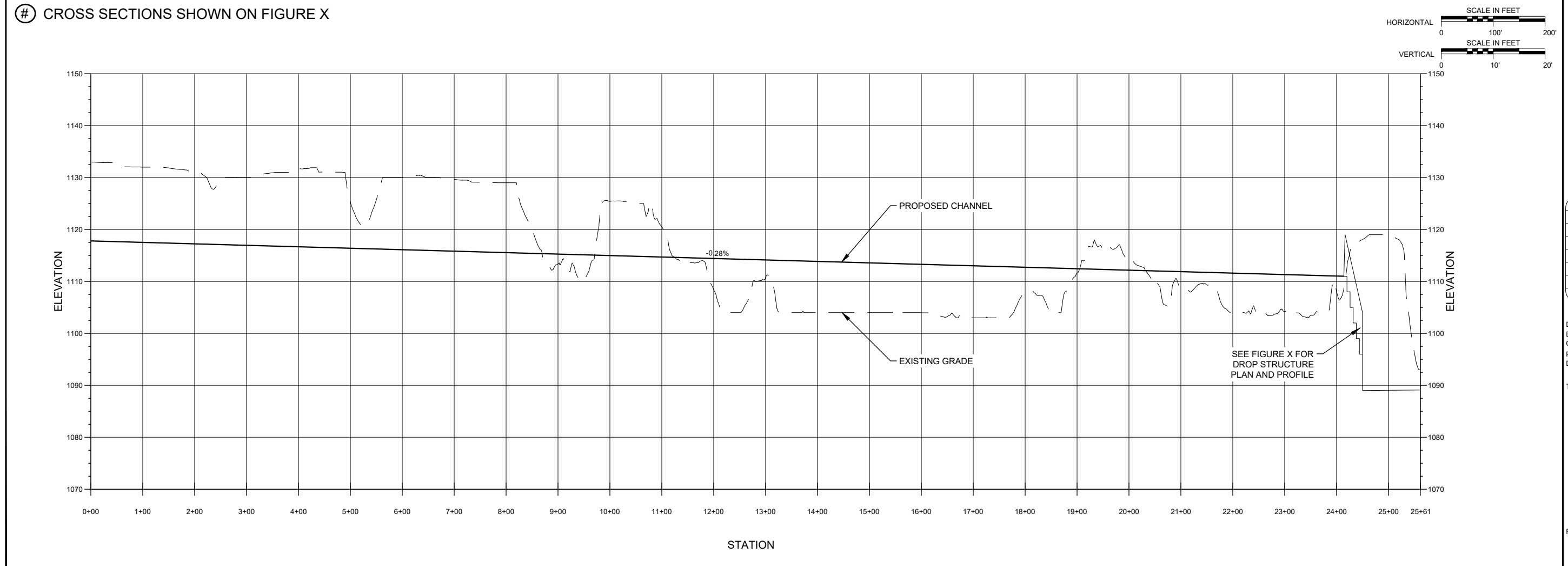
DESIGNED BY: BG  
DRAWN BY: MRJ  
QA / QC BY: MKS  
PROJECT NO.: 001-17-07  
DATE: APRIL 2020

TITLE  
TYPICAL  
LOOSE ROCK  
STRUCTURE



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NOT FOR CONSTRUCTION

# CROSS SECTIONS SHOWN ON FIGURE X



ENGINEER'S SEAL

REVISIONS	
NO.	DATE

DESIGNED BY: BG  
DRAWN BY: CKW  
QA / QC BY: BG  
PROJECT NO.: 001-17-07  
DATE: MARCH 2020

TITLE  
**SITE S-5  
PLAN AND  
PROFILE**

ENGINEER'S SEAL

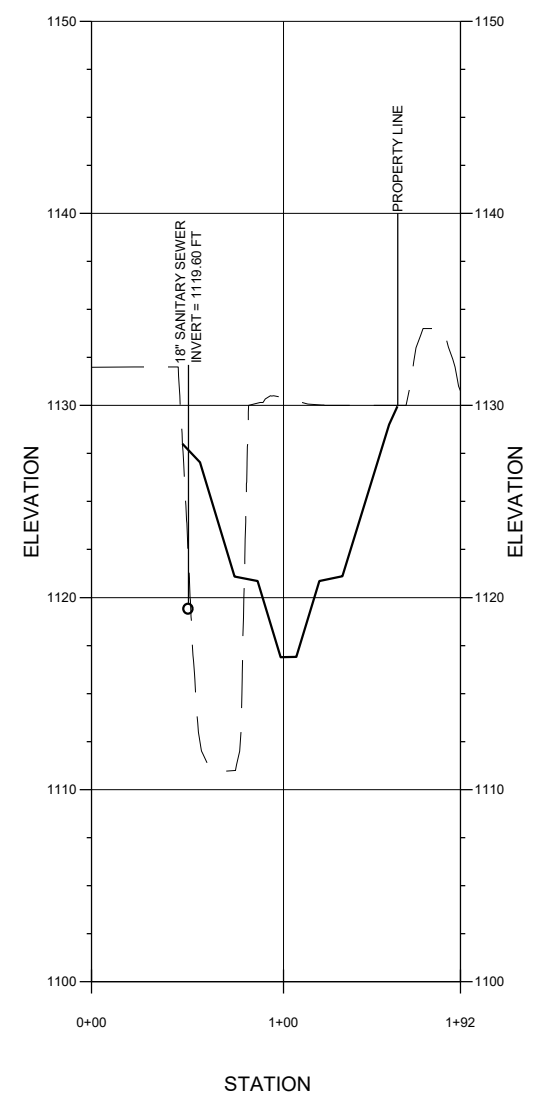
REVISIONS	
NO.	DATE

DESIGNED BY: BG  
DRAWN BY: CKW  
QA / QC BY: BG  
PROJECT NO.: 001-17-07  
DATE: MARCH 2020

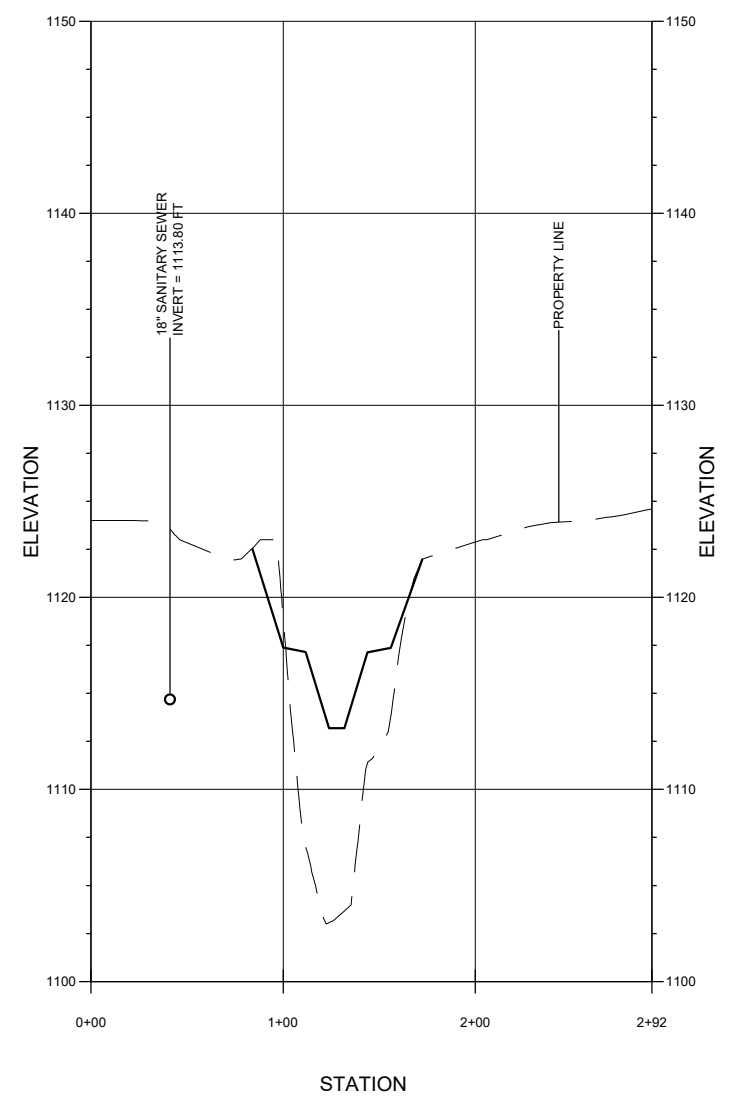
TITLE  
**SITE S-5  
CROSS  
SECTIONS**

FIGURE  
**C5.2B**

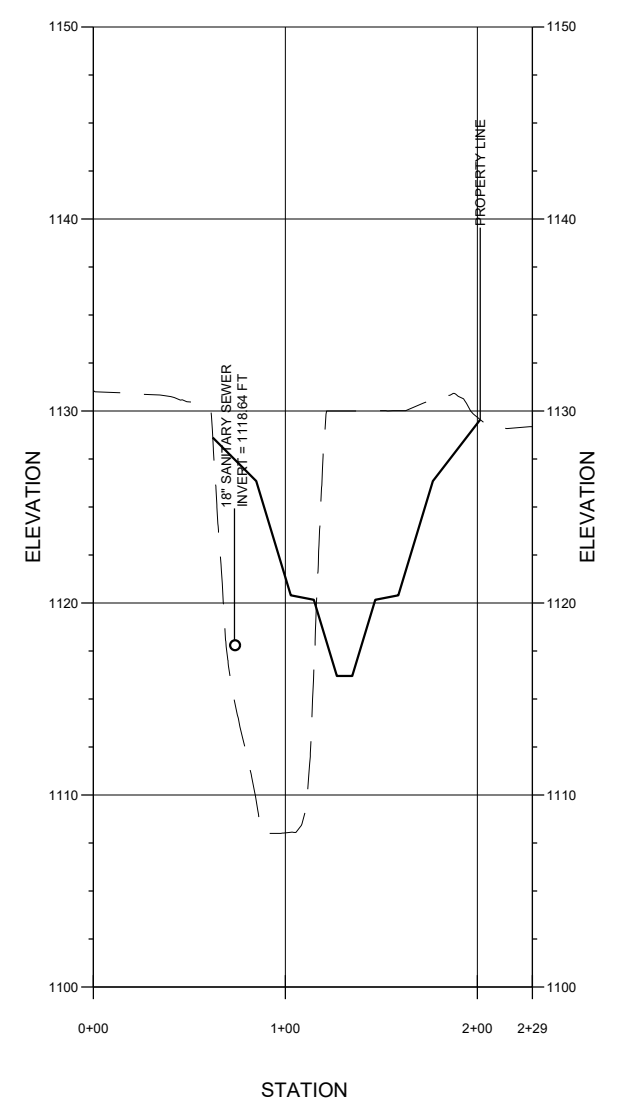
CROSS SECTION ①, STATION 3+19'



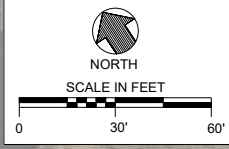
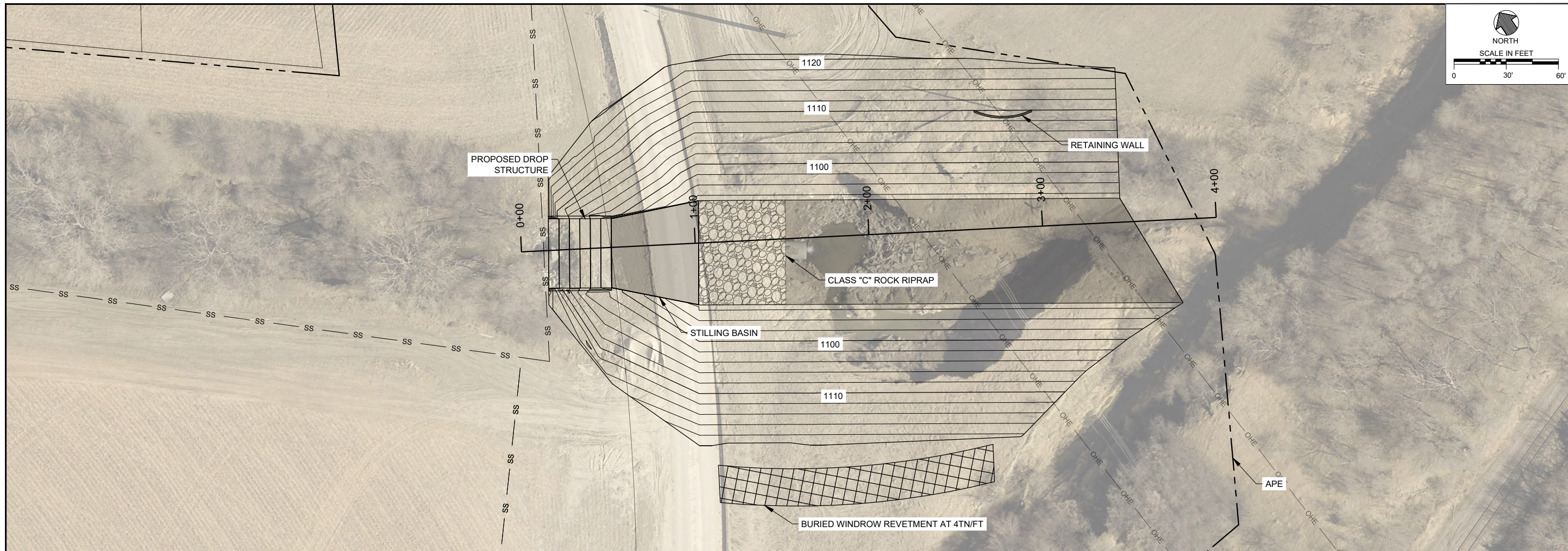
CROSS SECTION ③, STATION 16+37'



CROSS SECTION ②, STATION 5+66'

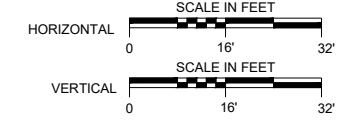


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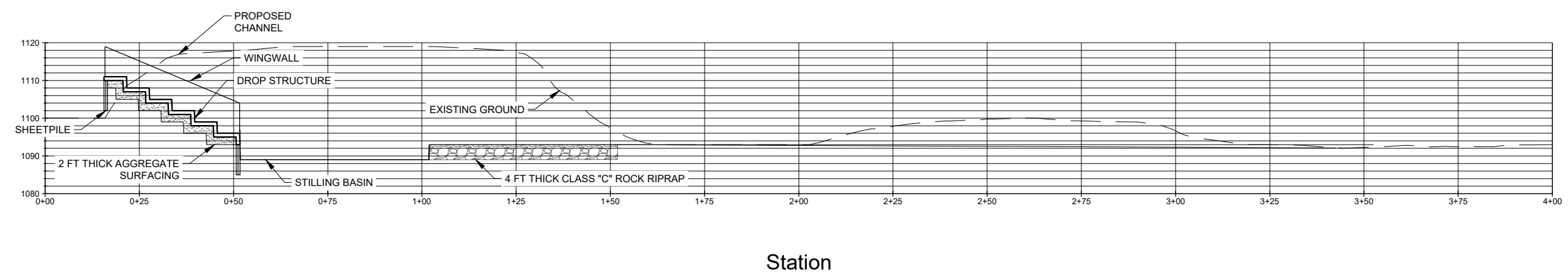


**FYRA**  
ENGINEERING  
12702 Westport Pkwy, Ste 300  
Omaha, Nebraska 68138  
402.502.7131  
www.fyraengineering.com

PAPILLION CREEK SUPPLEMENTAL WATERSHED PLAN - EA  
NATURAL RESOURCES CONSERVATION SERVICE  
PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT  
2020



ENGINEER'S SEAL



REVISIONS	
NO.	DATE

DESIGNED BY: BG  
DRAWN BY: CKW  
QA / QC BY: BG  
PROJECT NO.: 001-17-07  
DATE: MARCH 2020

TITLE  
**S-5 DROP  
STRUCTURE  
PLAN AND  
PROFILE**

FOR PLANNING PURPOSES ONLY  
NOT FOR CONSTRUCTION

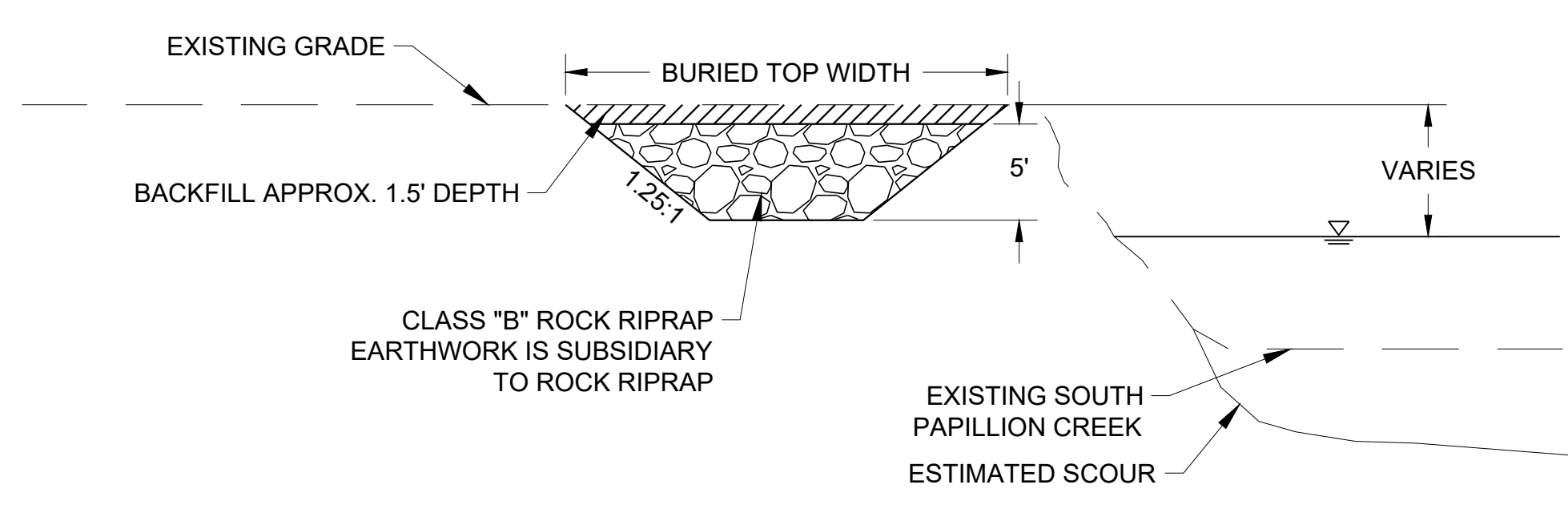
SHEET  
**C5.2C**

ENGINEER'S SEAL

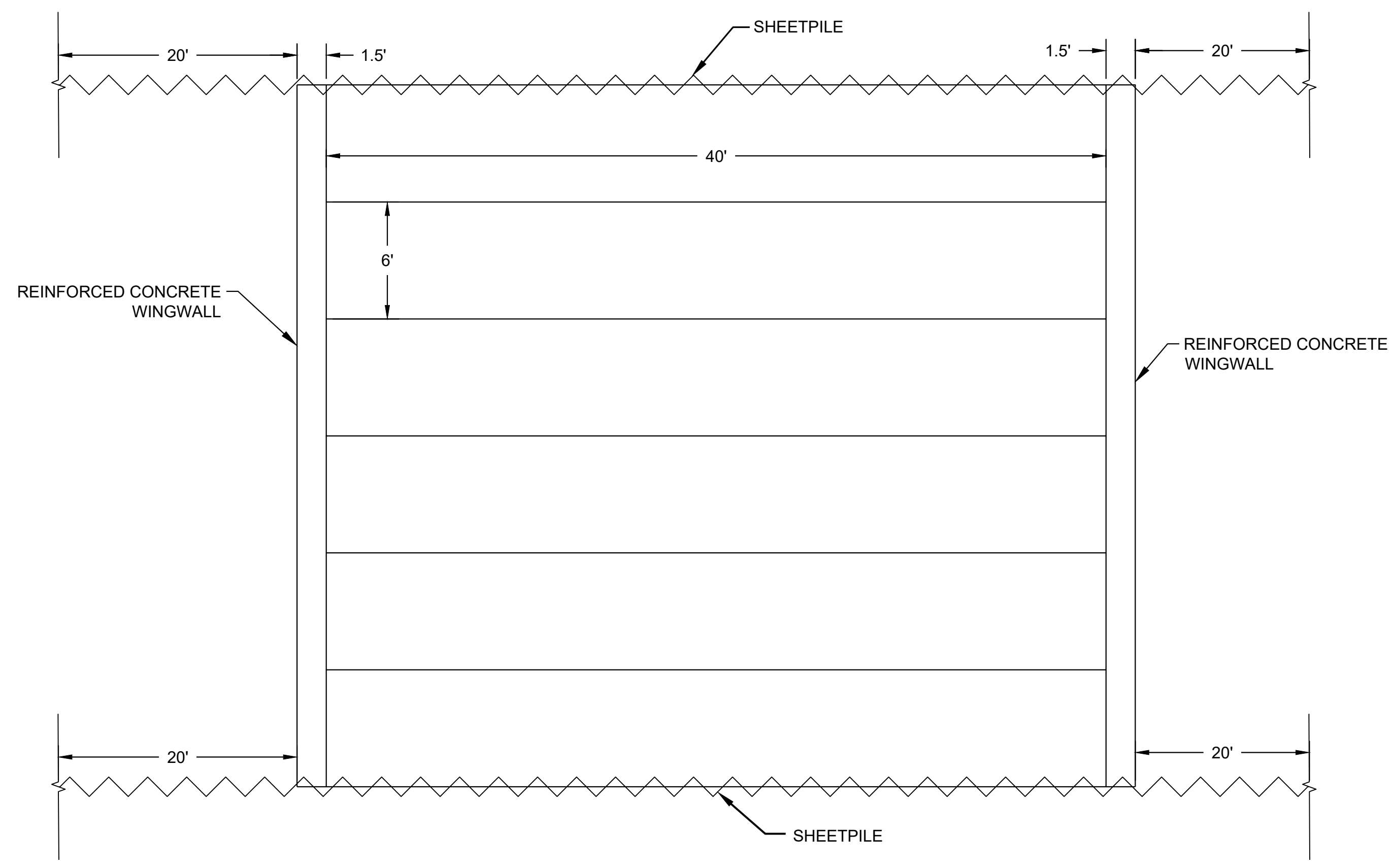
REVISIONS	
NO.	DATE

DESIGNED BY: BG  
DRAWN BY: CKW  
QA / QC BY: BG  
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DATE: MARCH 2020

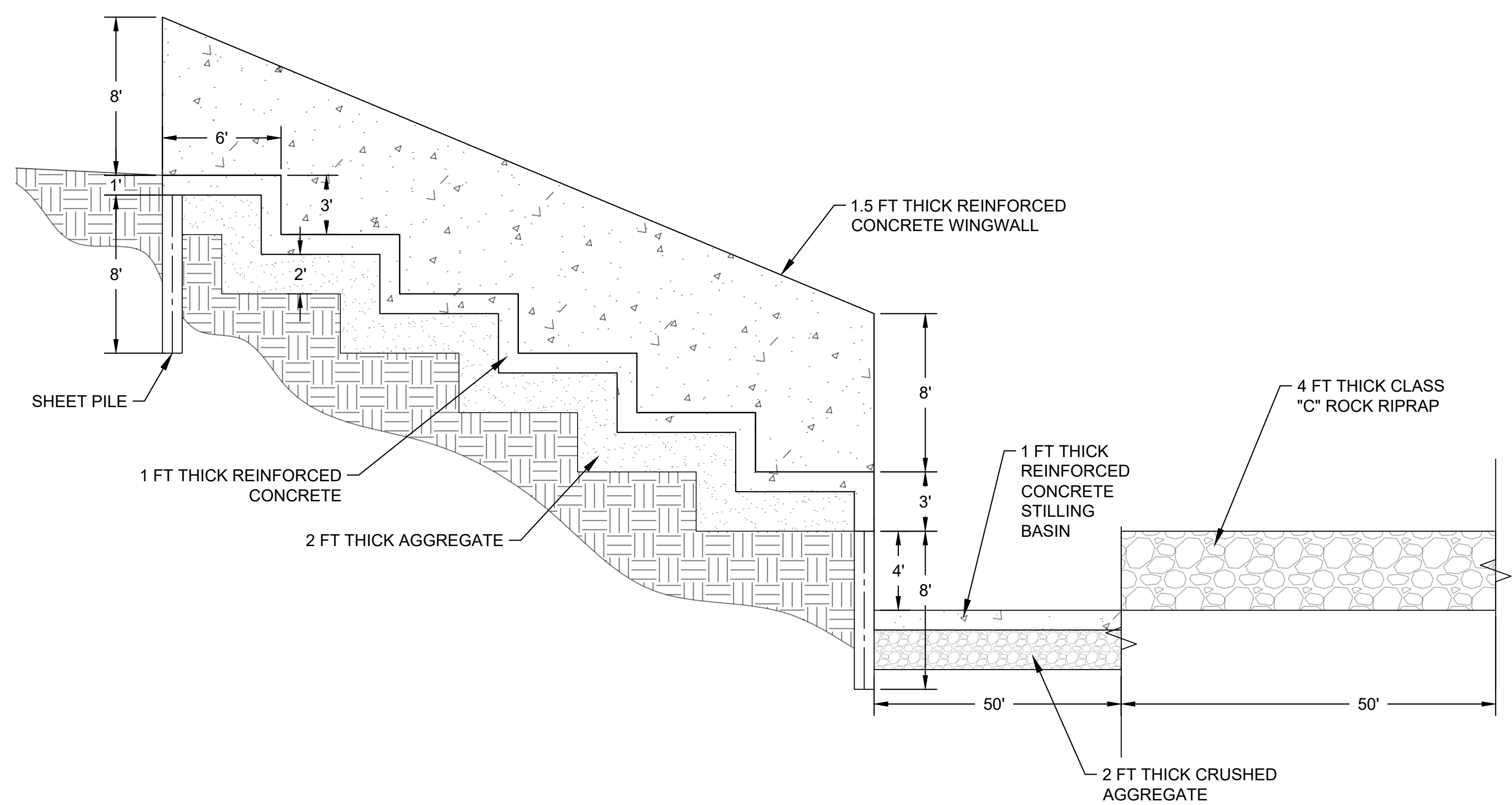
TITLE  
**S-5 DROP STRUCTURE TYPICAL SECTIONS**



**TYPICAL CROSS SECTION OF BURIED WINDROW REVETMENT**  
NOT TO SCALE

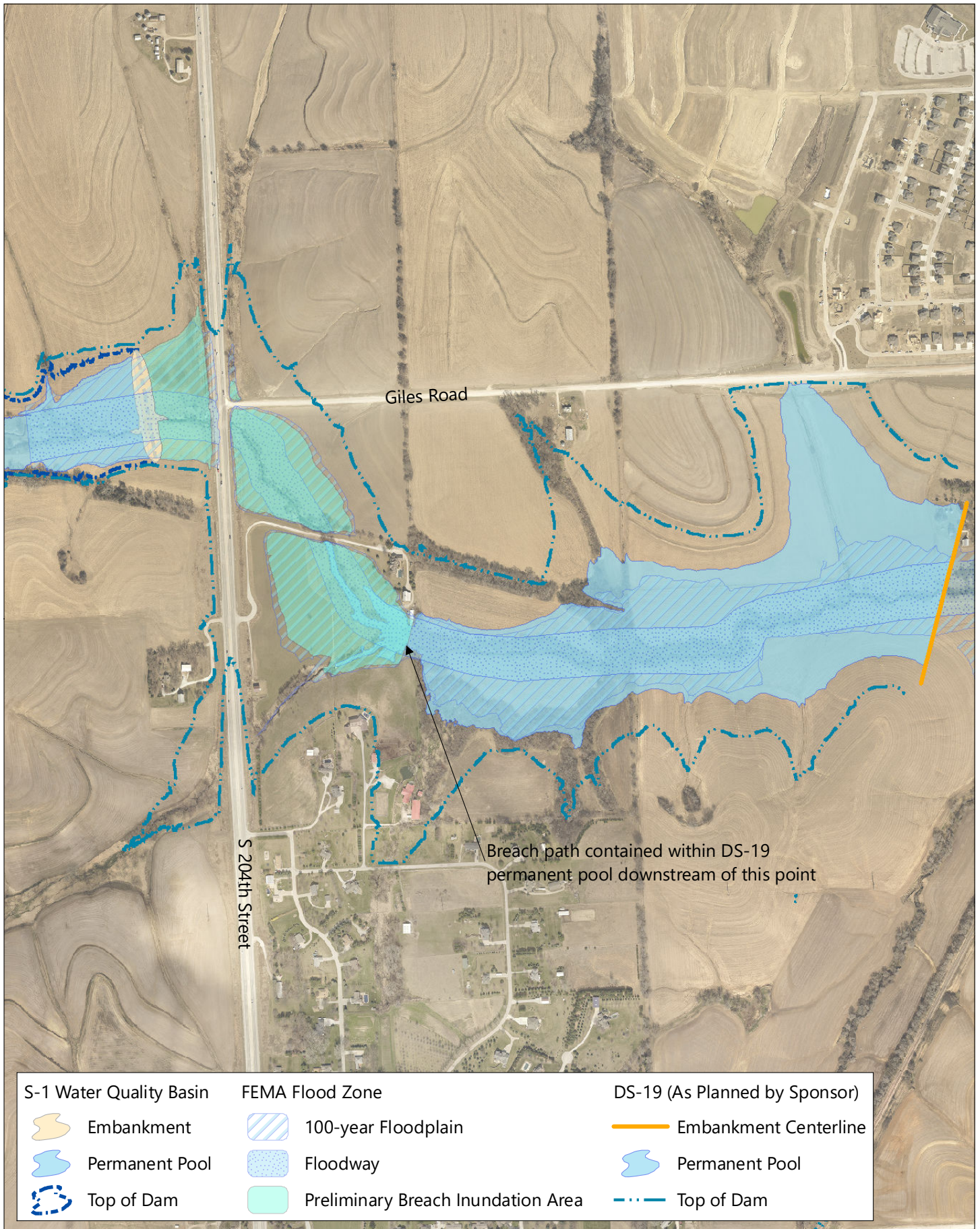


**DROP STRUCTURE PLAN VIEW DETAIL**  
NOT TO SCALE



**DROP STRUCTURE PROFILE DETAIL**  
NOT TO SCALE

FOR PLANNING PURPOSES ONLY  
NOT FOR CONSTRUCTION



**Figure C6.1. S-1 Breach Inundation**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD





**Figure C6.2. Site WP-1 - Breach Boundary**

Papillion Creek Supplemental Watershed Plan-EA  
 Natural Resources Conservation Service  
 Papio-Missouri River NRD

