

Wetlands PQS Memorandum

DATE 12/27/2023
TO Dana Divine, NDOT EDU
FROM Jeff Hartman, NDOT TRU
SUBJECT Wetlands PQS Memo
Project No: LCLC-5233(4)
Control No: 13294
Project Name: N 33rd & Cornhusker

- ☒ A wetland delineation was completed 10/24/2019
Or
☐ A desktop review was completed on [Click here to enter a date.](#)
Or
☐ A field review was completed on [Click here to enter a date.](#)

Are there wetlands, stream channels, or other waters within the study area?

- ☒ Yes ☐ No

Will the action result in wetland impacts in accordance with Section 404 of the Clean Water Act and/or Nebraska State Title 117?

- ☒ Yes ☐ No ☐ Not Applicable

If the project is processed with a Nationwide Permit, is a Pre-construction Notification required?

- ☒ Yes ☐ No ☐ Not Applicable

Describe resources, potential impacts and anticipated permit type *(Include estimated permanent wetland impacts (acres). If known, also provide estimated temporary wetland impacts (acres), estimated channel impacts (linear feet/acres), special wetland areas, cause of impacts, and any Nationwide Permit information.):* A wetland delineation was conducted on 10/24/2019 and 10/14/2020. A total of nine PEMA/C | FD wetlands (1.05 acres), one perennial channel (Deadman's Run), and one intermittent channel were delineated. Due to construction of new bridge piers and contractor access for bridge construction, wetland and channel impacts will occur. Anticipated impacts include 0.047 acre of permanent PEMA/C wetlands impacts, 0.1240 acre of temporary PEMA/C wetland impacts, and 536 feet (0.3150 acre) of temporary channel impacts. This work will require a Section 404 Nationwide Permit and a Section 408 Authorization. Wetland mitigation is not anticipated to be required.

Cowardin Class Impacted *(Select all that apply)*

- ☒ Palustrine ☐ Riverine ☐ Lacustrine ☐ Not Applicable

Describe any coordination conducted to date with officials/agencies (*Include: Any coordination with USACE*): N/A

Wetlands/Waters of the U.S. Mitigation

☐ On-Site/Permittee Responsible ☐ USACE Approved Mitigation Bank Site ☒ Not Applicable

Wetlands/Waters of the U.S. Commitments:

The Contractor shall not stage, store, waste or stockpile materials and equipment in undisturbed locations, or in known/potential wetlands and/or known/potential streams that exhibit a clear “bed and bank” channel. Potential wetland areas consist of any area that is known to pond water, swampy areas or areas supporting known wetland vegetation or areas where there is a distinct difference in vegetation (at lower elevations) from the surrounding upland areas.

Check the box(s) that applies:

☐ No wetland/water resource impacts are anticipated for this project; however, if impacts are found during design, the required permits shall be obtained prior to letting. NDOT Environmental shall reevaluate the project for the change in impacts. If wetlands are identified within the project area they shall be marked on the project plan aerial sheets or on Attachment 1 of the Environmental Commitment for the Contractor as avoidance areas. (NDOT Design, NDOT Environmental)

☒ The project qualifies under a Notifying Nationwide Permit #14 – Linear Transportation. The contractor shall adhere to the permit conditions, including regional and general conditions, during construction. All wetlands/waters within the project area that are not permitted for impacts shall be marked on the project plan aerial sheets for the contractor as avoidance areas. (NDOT Design, NDOT Environmental, Contractor)

☐ The project will require a Title 117 Letter of Opinion for impacts to waters of the State. All wetlands/waters within the project area that are not permitted for impacts shall be marked on the project plan aerial sheets for the contractor as avoidance areas. (NDOT Design, NDOT Environmental, Contractor)

Project Description: 8/17/2022

The Preferred Alternative would construct a new viaduct on a new alignment to create a direct connection over the railroad tracks near N. 33rd Street and Cornhusker Highway (US 6). The Preferred Alternative would close two at-grade railroad crossings: N. 33rd Street and Adams Street.

The Preferred Alternative includes the expansion of Cornhusker Highway (US 6) to six lanes with turn lanes from Deadmans Run to just east of N. 35th Street. North 33rd Street would be on a new alignment that includes two bridges over the Deadmans Run channel and the BNSF railroad tracks. The realigned N 33rd Street connects at an intersection with Cornhusker Highway (US 6) near the existing N 31st Street and Cornhusker intersection. Intersections at Cornhusker Highway (US 6) and State Fair Park Drive, a re-aligned N. 33rd Street and Cornhusker Highway (US 6), N. 33rd Street and Huntington Avenue, N 33rd Street and Adams Street, and N. 35th Street and Cornhusker Highway (US 6) would operate as full access intersections.

The Preferred Alternative includes the realignment of Adams Street. Adams Street, no longer crossing the railroad tracks, would be extended southwest running roughly parallel to the railroad tracks, connecting to N. 33rd Street south of the railroad tracks and Cornhusker Highway (US 6). The new intersection would be located on the south end of the N. 33rd Street bridge and would be entirely elevated and supported by embankments, walls, or other structures.

The Preferred Alternative would maintain the present traffic flow on Cornhusker Highway (US 6) but would create a new access route for Adams Street via N 33rd Street, south of the BNSF railroad tracks. As a part of the Preferred Alternative, the existing at-grade crossing at N. 44th Street would remain open to vehicular and pedestrian traffic; however, improvements would be made to the crossing to bring it into compliance with ADA guidelines. Improvements would include the addition of detectable warning panels and ADA compliant slopes and extension of an 8-foot-wide multiuse path connecting from approximately Gladstone Street on the south and extending north to Colfax Circle. The project would construct an 8-foot-wide, approximately 670 foot long, multi-use path along the northside of Leighton Avenue right-of-way and extend to 33rd Street. This path would serve as a detour route for the John Dietrich Trail during construction and would remain in place upon project completion.

The newly constructed grade separated viaduct at N. 33rd and Adams Streets would include an 8-foot-wide sidewalk separated from traffic for pedestrians and bicycles. The Preferred Alternative would provide upgrades and enhance connectivity to the existing trail network by providing a reroute of the existing trail network. The trail would proceed under the newly constructed N 33rd Street bridge over Deadmans Run, cross over Deadmans Run on a dedicated trail bridge, run adjacent to Baldwin Avenue and south along Griffith Street to reconnect to the existing trail near Fleming Fields and Huntington Avenue.

The Preferred Alternative would include the installation of fencing along the BNSF rail corridor from approximately Deadmans Run to approximately N 36th Street with final locations and dimensions to be determined during final design in coordination with BNSF.

Additional side streets would be reconstructed to tie into the primary project elements and to maintain local connectivity, as follows:

- Huntington Avenue would be reconstructed on either side of the intersection of N 33rd Street to connect back to the existing road.
- N 31st Street would be reconstructed on the north side of Cornhusker Highway (US 6) where the newly aligned N 33rd Street meets at an intersection. Existing N 33rd Street would be reconstructed on the north and south sides of Cornhusker Highway (US 6) as well to connect back to the existing road.
- Existing N 33rd Street on the south side of Cornhusker Highway (US 6) would include the construction of a cul-de-sac just north of the BNSF railroad tracks to provide a turnaround for traffic near the closed at-grade railroad crossing.
- N 35th Street would be reconstructed on the north side of Cornhusker Highway (US 6). N 36th Street would be reconstructed on the south side of Adams Street.
- Griffith Street would be reconstructed between Huntington Avenue and Baldwin Avenue.
- A new local 33-foot-wide roadway called Greenwood Street would be constructed between 31st Street and 33rd Street. It would include a five-foot sidewalk on the southside.

- A new local roadway called 33rd Avenue would reconnect Madison Avenue to Saint Paul Avenue and Baldwin Avenue on the east side of the newly realigned N 33rd Street bridge. These streets would no longer have direct access onto N 33rd Street. Baldwin Avenue on the west side of N 33rd Street would not reconnect with N 33rd Street and would include a new cul-de-sac for traffic to turnaround.

The project would include sidewalk and curb ramp improvements to meet ADA guidelines at the intersection of N 29th Street and Cornhusker Highway (US 6). The existing traffic signal at N 29th Street and Cornhusker Highway (US 6) would be upgraded due to the addition of another westbound left turn lane and westbound outside through lane. Traffic signals at N. 31st Street and Cornhusker and N. 35th Street and Cornhusker Highway.

The project would include reconstruction of the storm sewer system, sanitary sewer system, water main system as well as traffic signal and underground fiber-optic lines due to the impacts from the project. The project would include impacts to private utility companies.

Construction of the project would require sections of N 33rd Street, Adams Street, and the intersection of N 33rd Street and Huntington Avenue to be closed to traffic. Detours would be required to reroute traffic due to the closure of N 33rd Street to construct the viaduct over Deadmans Run channel and the railroad tracks. The project would detour traffic onto roadways of the same, or higher functional roadway classification. No improvements would be made to detour routes as a part of the Preferred Alternative. Temporary detours would be required along sections of the 33rd Street, Huntington Avenue, and Dietrich Trails. Trail detours would use existing local roadways and sidewalks. No improvements would be required along any designated trail detour route.

WETLAND DELINEATION REPORT – NORTH 33RD AND CORNHUSKER

Prepared for:

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March 2020

RTSD No. 5919
City Project No. 702614
State Control No. 13294
Olsson Project No. A17-3604



ACRONYMS AND ABBREVIATIONS

ESRI	Earth Systems Research Institute
msl	Mean Sea Level
NHD	National Hydrography Dataset
NWI	National Wetlands Inventory
OHWM	Ordinary High-Water Mark
Olsson	Olsson, Inc.
PEMA	Palustrine Emergent Temporarily Flooded
PSSAx	Palustrine Scrub/Shrub Temporarily Flooded Excavated
PUBF	Palustrine Unconsolidated Bottom Semi-Permanently Flooded
RTSD	Railroad Transportation Safety District
SP	Sample Point
SSURGO	Soil Survey Geographic
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOUS	Waters of the U.S.

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1. INTRODUCTION

This report documents the findings of a wetland delineation completed for the North 33rd and Cornhusker project. The project involves new roadway alignments due to high volumes of vehicular and train traffic in the project area along the railroad corridor. The project is bounded by North 27th, Superior, North 48th, and Holdrege streets within the city limits of Lincoln in Lancaster County, Nebraska (Figure 1, Appendix A). Lincoln & Lancaster County Railroad Transportation Safety District (RTSD) contracted Olsson, Inc. (Olsson) to identify and delineate wetlands, stream channels, and other waters within the proposed study areas. This report provides a description of the study area, methods used, investigation results, and a discussion of the results.

The study areas consist of approximately 151 acres located in Sections 7, 8, and 18, Township 10 North, Range 7 East. The study area is divided into two portions, west and east. The geometric center of the western portion of the study areas is located at latitude 40.843519 and longitude -96.668875 degrees. The geometric center of the eastern portion of the study areas is located at latitude 40.848137 and longitude -96.656902 degrees. The study areas consist of a railroad corridor, Cornhusker Highway and its right-of-way, and surrounding streets in a commercial and industrial area of Lincoln (Figure 2, Appendix A).

2. DESKTOP REVIEW

Olsson reviewed publicly available information to identify areas with the potential to support wetlands, streams, and other aquatic resources. Data sources reviewed included Earth Systems Research Institute (ESRI) aerial imagery (ESRI 2018), U.S. Geological Survey (USGS) topographic maps (USGS 2014), U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) dataset (USFWS 2017), USGS National Hydrography Dataset (NHD) dataset (USGS 2017), and Lancaster County Soil data via the Soil Survey Geographic (SSURGO) database (SSURGO 2017). Data from these resources are shown on Figure 3 in Appendix A.

2.1 USGS Topographic Maps

The Location Map (Figure 1, Appendix A) indicates the relief is gently sloping to the northwest with elevations ranging from 1,140 feet above mean sea level (msl) on the western edge of the study areas to 1,150 feet above msl in the the study areas. The USGS topographic layer depicts a named, linear waterway (Deadman's Run) in the western portion of the study areas, flowing north outside of the western study area. The USGS topographic layer also depicts a railroad line running east and west through the study areas and one railroad line running north and south through the western study area. No wetland or other waterbodies are depicted on the USGS topographic layer within the study area.

2.2 NWI and NHD Databases

On the Natural Resources Map (Figure 3, Appendix A), the NWI layer depicts one riverine habitat running south to north through the western study area, one freshwater forested/shrub wetland just to the west from the riverine habitat, and one pond/lake in the northwest corner of the western study area. The NHD layer depicts Deadman's Run flowing north through the western study area and one unnamed flowline flowing to Deadman's Run in the northwestern corner of the western study area. Wetlands or waters are not depicted in the eastern study area.

2.3 SSURGO Database

The SSURGO identified the following five soil map units within the study area:

- 7015 – Salmo silt loam, occasionally flooded, two percent hydric
- 7099 – Zook silty clay loam, occasionally flooded, 100 percent hydric
- 9709 – Urban land-Kennebec complex, 0 to 2 percent slopes, non- hydric
- 9722 – Urban land-Wymore-Aksarben complex, 0 to 2 percent slopes, non- hydric
- 9728 – Urban land-Crete-Aksarben complex, 0 to 2 percent slopes, non-hydric

The hydric percentage indicates what percentage of the soil map unit meets the criteria for hydric soils, which may indicate wetland conditions. SSURGO soil map unit locations are shown on Figure 3 in Appendix A.

3. FIELD INVESTIGATION METHODS

Olsson staff visited the study area on October 24, 2019, to complete the wetland delineation field investigation. The wetland delineation followed methodology described in the *U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0, August 2010)*. All conditions described represent conditions at the time of the field investigation. USACE Wetland Determination Data Forms are included in Appendix B. Photographs were taken during the visit and are shown in Appendix C. Sample point locations, photo locations, and delineated wetlands and stream channels are shown on Figures 4A-4T, Appendix A.

4. RESULTS

A total of five Palustrine Emergent Temporarily Flooded (PEMA) wetlands were delineated within the study area. Wetland 2 was observed in the northwestern corner of the study area, in a swale at a culvert opening northwest of the intersection of Cornhusker Highway and North 29th Street. Wetland 4 was observed as a fringe wetland along the north bank of Channel 4 in the northwestern corner of the study area, southeast of the intersection of Cornhusker Highway and State Fair Park Drive. Wetland 9 was observed in a railroad ditch north of the tracks and west of North 33rd Street. Wetland 11 was observed in a small drainageway north of Fremont Street and

west of North 48th Street. Wetland 12 was observed in the railroad ditch between the two railroad tracks west of North 33rd Street. Table 1 summarizes the wetlands and other waters delineated within the study area.

Table 1. Delineated Wetlands

Feature ID	Sample Point(s)	Cowardin Classification*	Photograph(s)	Figure(s)	Size (Acres)
Wetland 2	2	PEMA	3	4A	0.03
Wetland 4	4	PEMA	8	4B	0.02
Wetland 9	9	PEMA	42	4J	0.16
Wetland 11	11	PEMA	25	4R	0.04
Wetland 12	12	PEMA	44	4I, 4J	0.17
TOTAL					0.42

*(Cowardin et al. 1979)

One unnamed, intermittent stream channel and one named, perennial channel (Deadman's Run) were observed in the study area. Deadman's Run is a perennial, concrete-lined, stream channel which was observed flowing from the southern end of the study area through the northwestern corner of the study area. Deadman's Run flows north outside of the study area into Salt Creek, a perennial stream channel. Channel 4 was observed in the northwestern corner of the study area flowing southwest to northeast into Deadman's Run, through a culvert, southeast of the State Fair Park Drive and Cornhusker Highway intersection. Channel 4 is an intermittent stream channel which begins southwest of the study area. Table 2 summarizes the stream channels identified within the study area.

Table 2. Delineated Stream Channels.

Feature ID	Sample Point(s)	Flow Type	Photograph(s)	Figure(s)	OHW* Width (Feet)	Length (Linear Feet)
Deadman's Run	1	Perennial	1-2, 10-12, 15, 18	4B, 4C, 4I, 4J, 4M, 4N	25	3,202
Channel 4	4	Intermittent	7-8	4B	6	143
TOTAL						3,345

*OHWM – Ordinary High-Water Mark

5. DISCUSSION

Sample Point (SP) 1 documents Deadman's Run as a perennial, concrete-lined, stream channel. No fringe wetlands were associated with this channel. This area was identified on the NWI map as a Riverine Intermittent Streambed Seasonally Flooded Excavated (R4SBCx) habitat.

March 2020

Wetland 2 (PEMA) is classified as a Palustrine Unconsolidated Bottom Semi-Permanently Flooded (PUBF) freshwater pond on the NWI map. SP 2 documents that the area had more than 30 percent emergent vegetation and was determined to be a PEMA wetland.

Wetland 4 (PEMA) is classified as a Palustrine Scrub/Shrub Temporarily Flooded Excavated (PSSAx) wetland on the NWI map. Tree canopy coverage did not reach 30 percent absolute coverage, therefore; it was determined to be a PEMA wetland. This wetland abuts Channel 4 an intermittent stream channel.

SPs 6, 7, and 8 were taken to document Deadman's Run as a concrete-lined, perennial channel with no associated fringe wetlands. SPs 7 and 8 were taken in areas that were identified as Riverine on the NWI map. SP 8 displayed hydrophytic vegetation, but due to the lack of hydric soils and insufficient hydrology indicators this area was determined to be upland. Deadman's Run is a perennial concrete-lined stream channel that flows north through and outside the study area.

Wetland 9 (PEMA) is located in a railroad track ditch on the north side of the tracks. This wetland is associated with SP 9.

Wetlands 11 (PEMA) and 12 (PEMA) existed on private properties. SPs 11 and 12 were taken visually and soils were assumed hydric due to the dominance of hydrophytic vegetation and sufficient wetland hydrology indicators. The boundaries of the wetlands were estimated based on aerial imagery.

This report has been prepared for the use of Lincoln & Lancaster County RTSD. It is intended for specific application to the proposed project and has been produced in accordance with generally accepted practices. If any changes occur within the study area, or regarding previously outlined methodologies or regulations, the information in this report cannot be considered valid unless it has been further reviewed and verified by Olsson.

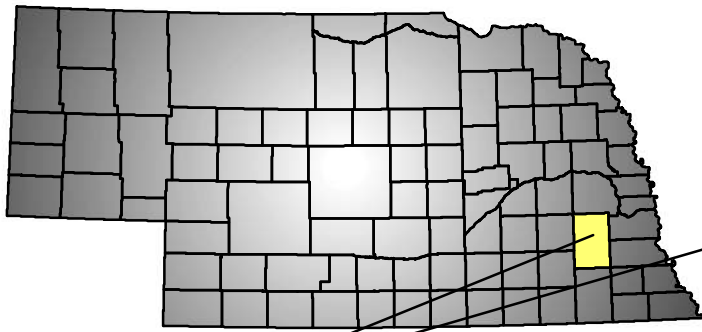
6. REFERENCES

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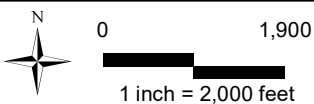
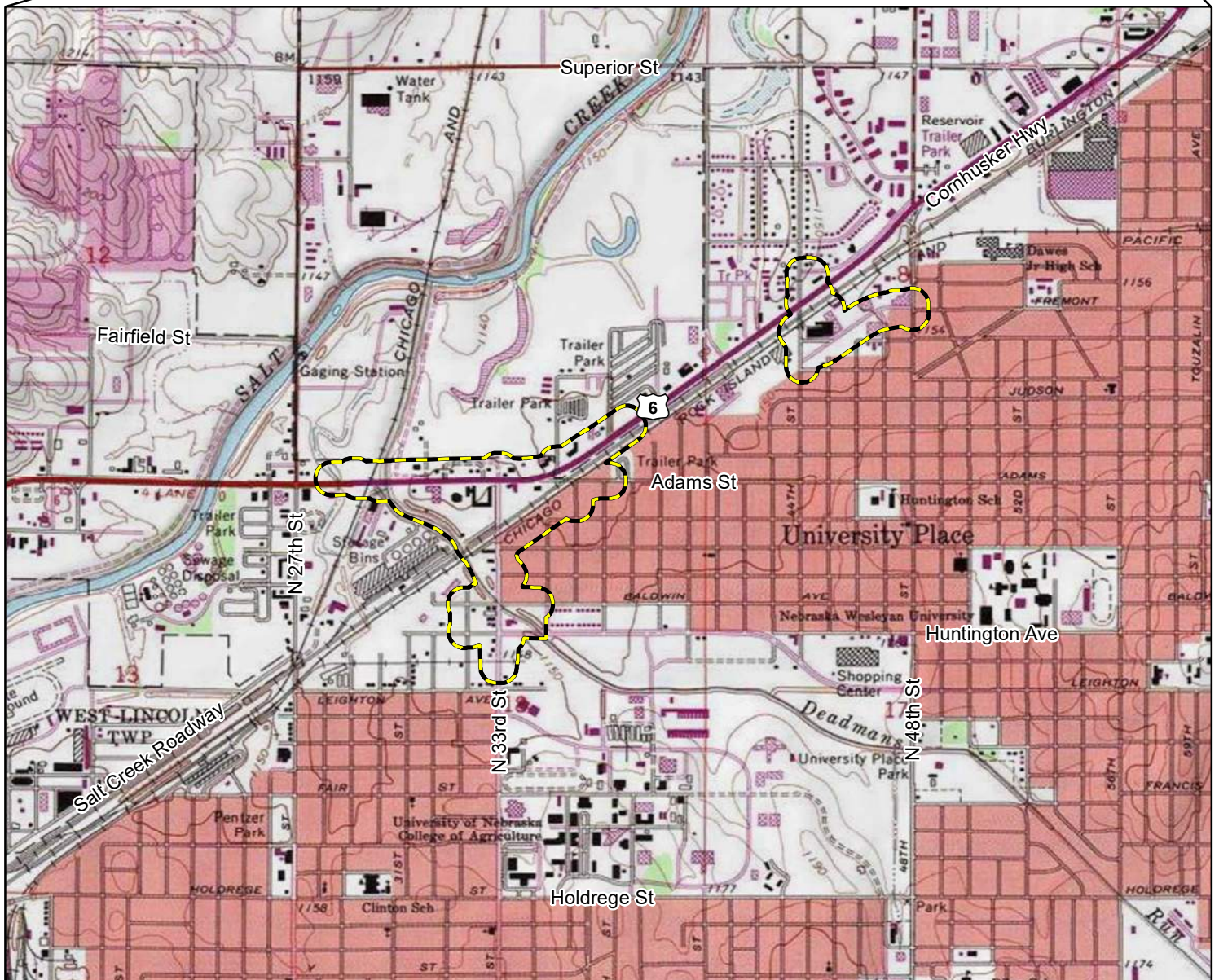
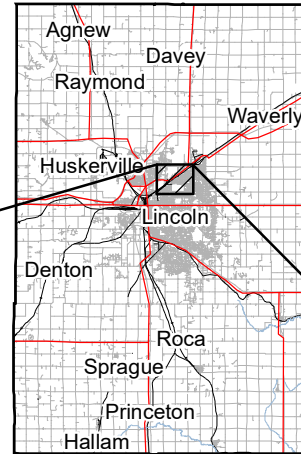
APPENDIX A
Figures

NEBRASKA

LANCASTER COUNTY



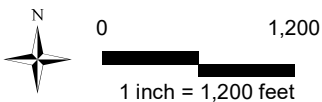
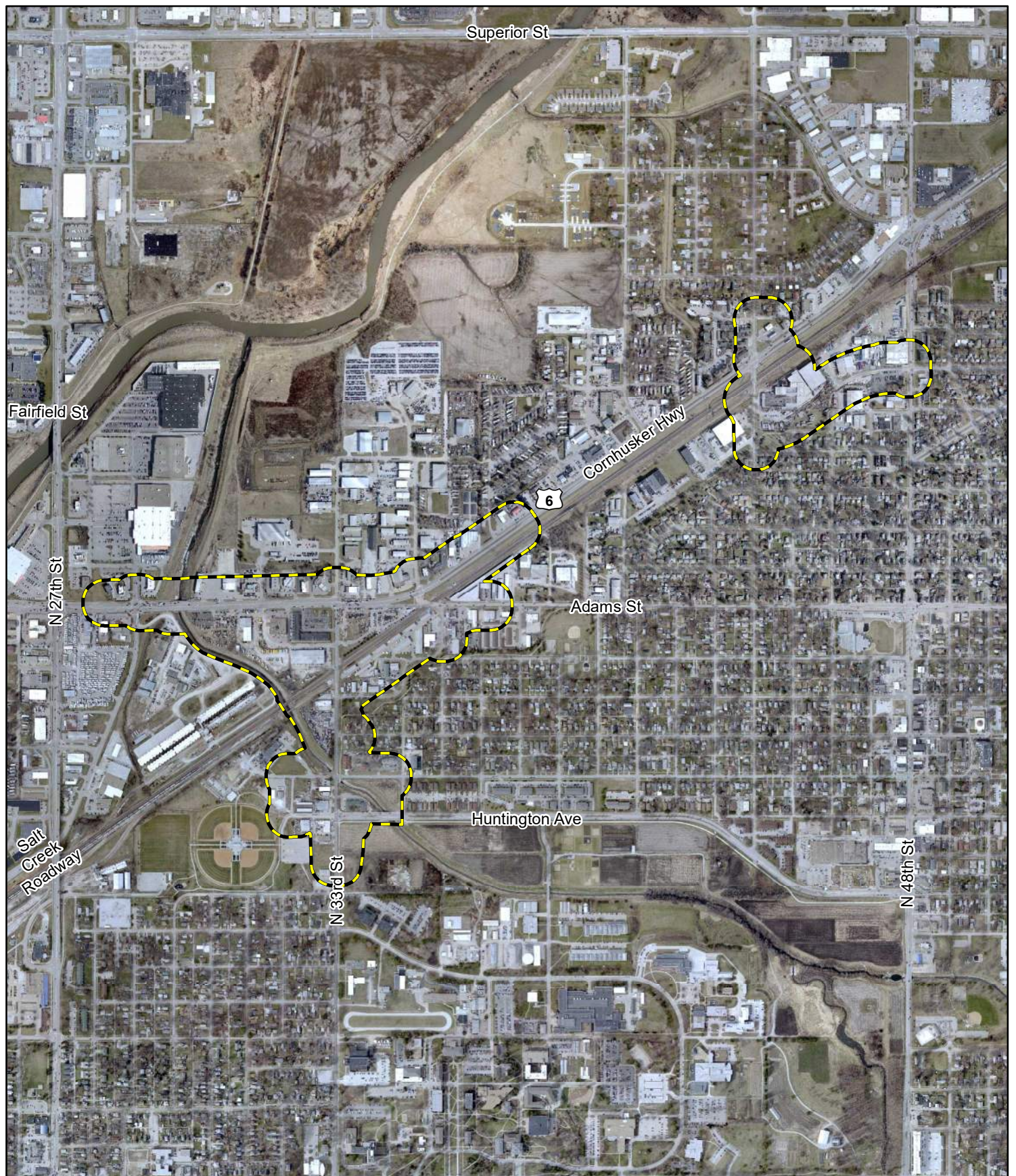
Project Location




Study Area

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Location Map
Figure 1





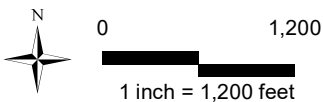
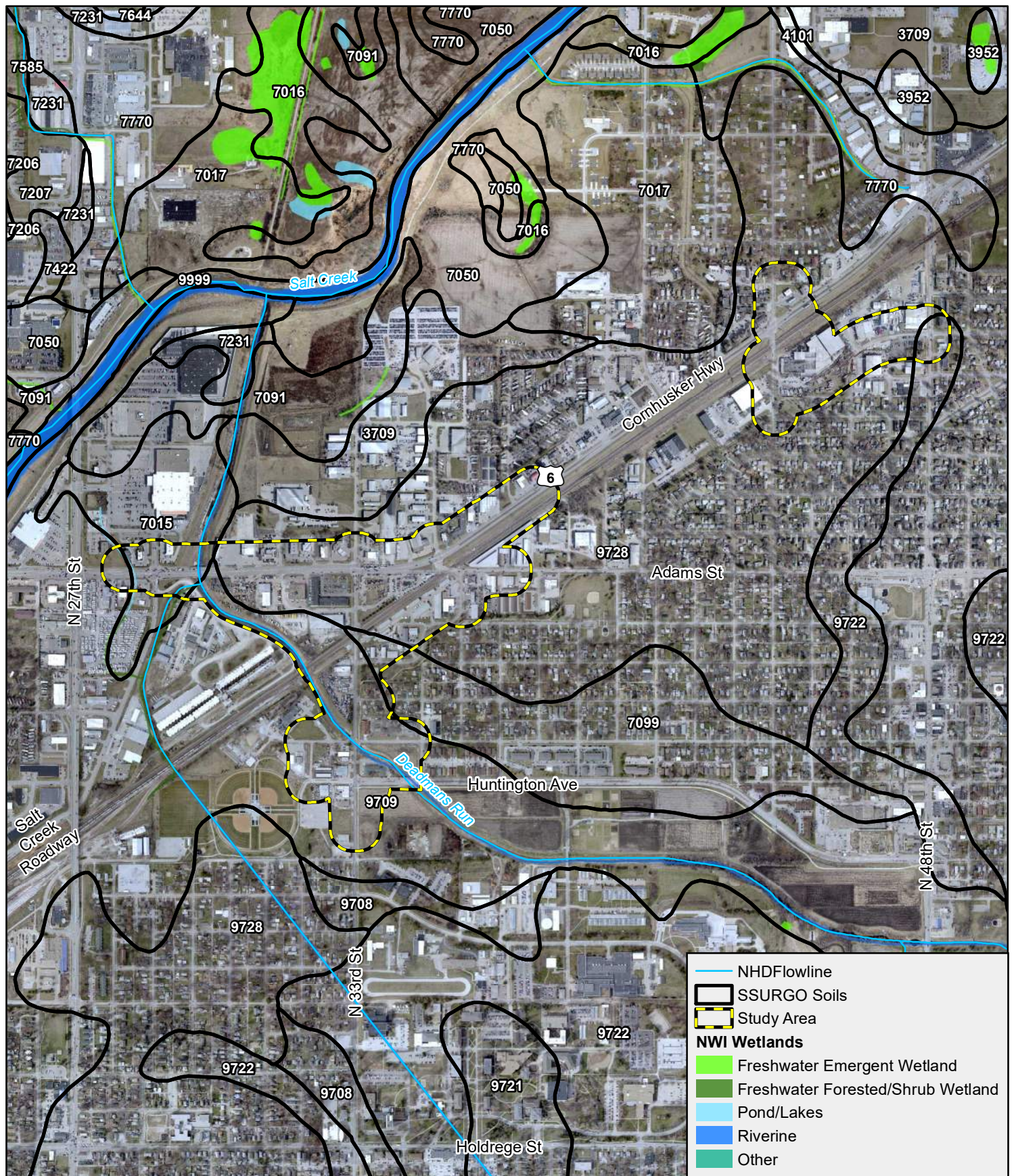
 Study Area

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Site Map
Figure 2

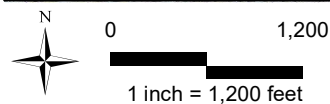
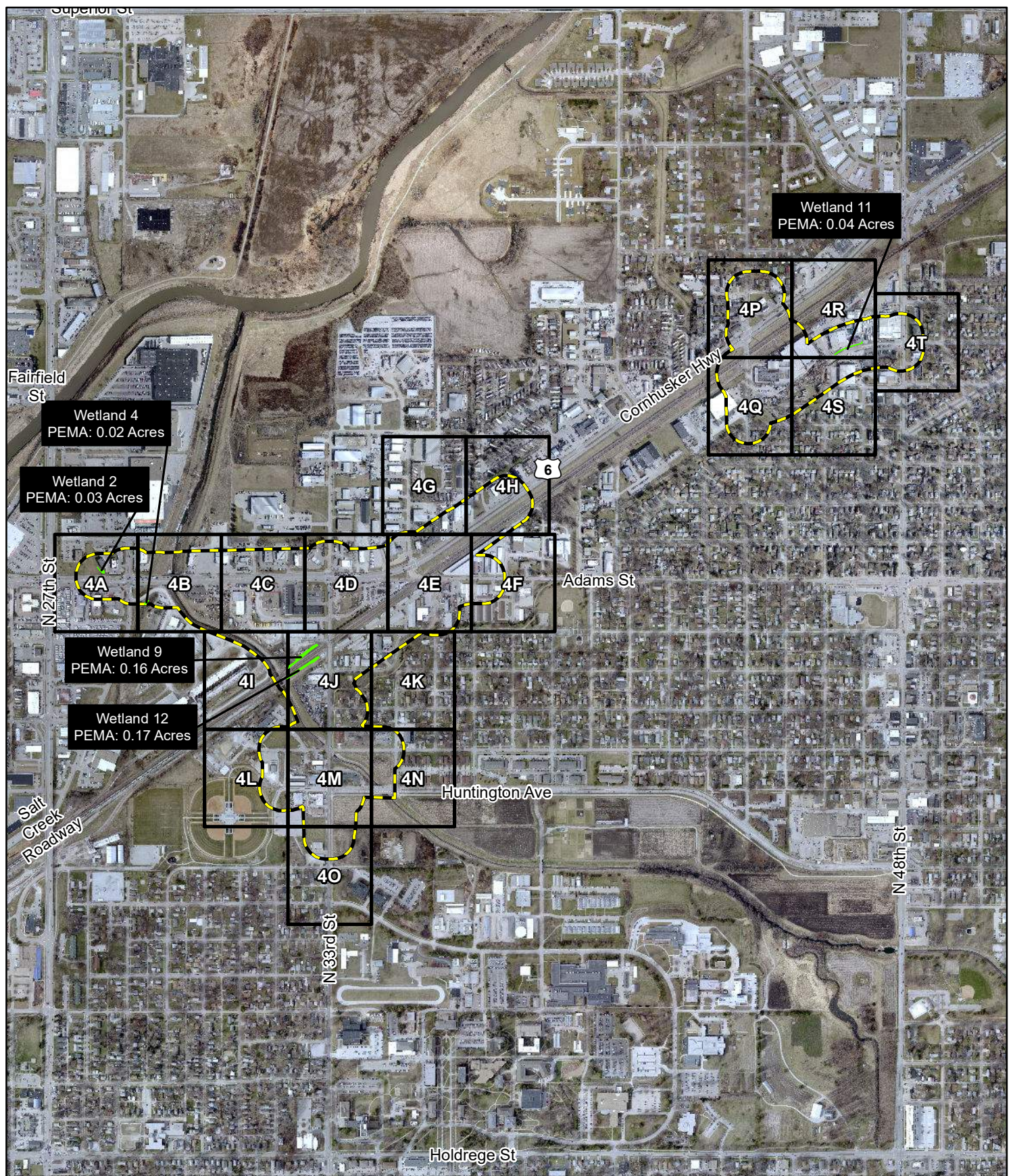




NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION





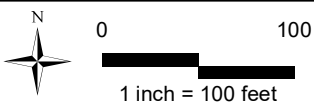
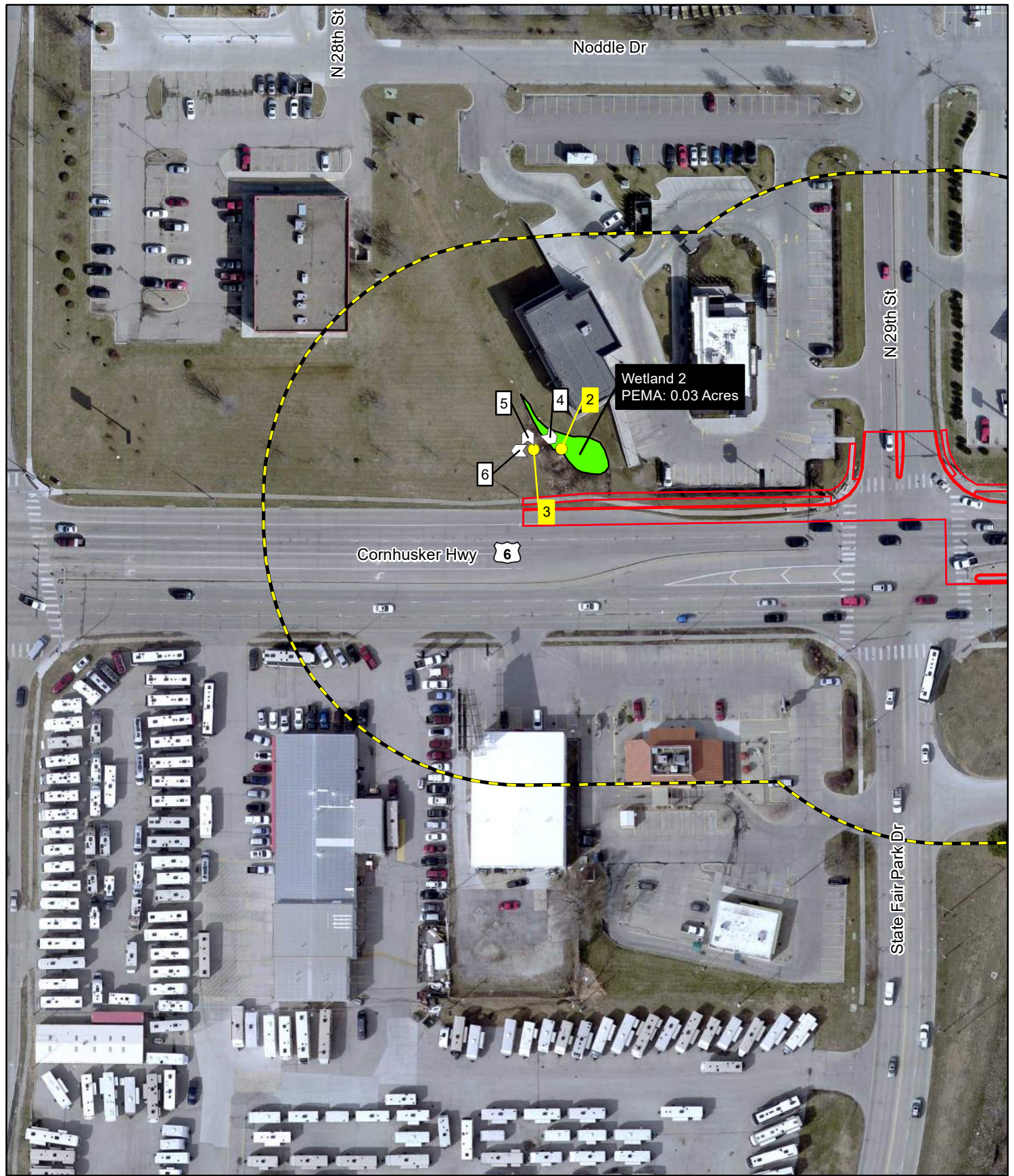
**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Natural Resource Map
Figure 3



 Study Area
 Delineation Map Index

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Delineation Map Index
Figure 4

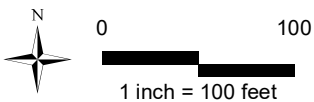
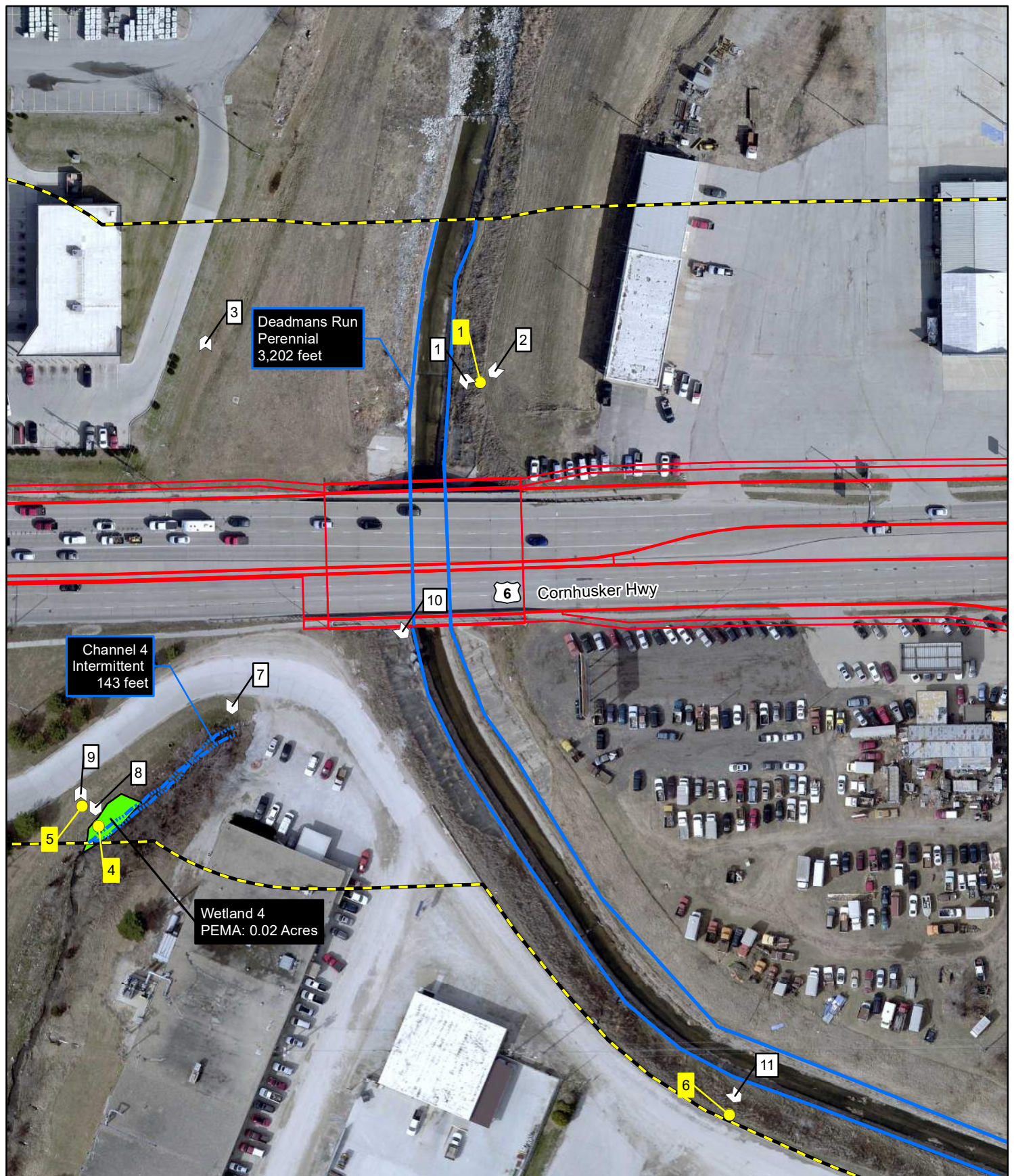




- Sample Point
- ▮ Photo Point
- Layout Option 1
- Layout Option 2
- Study Area
- Wetland

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Delineation Map
Figure 4A

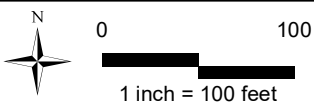
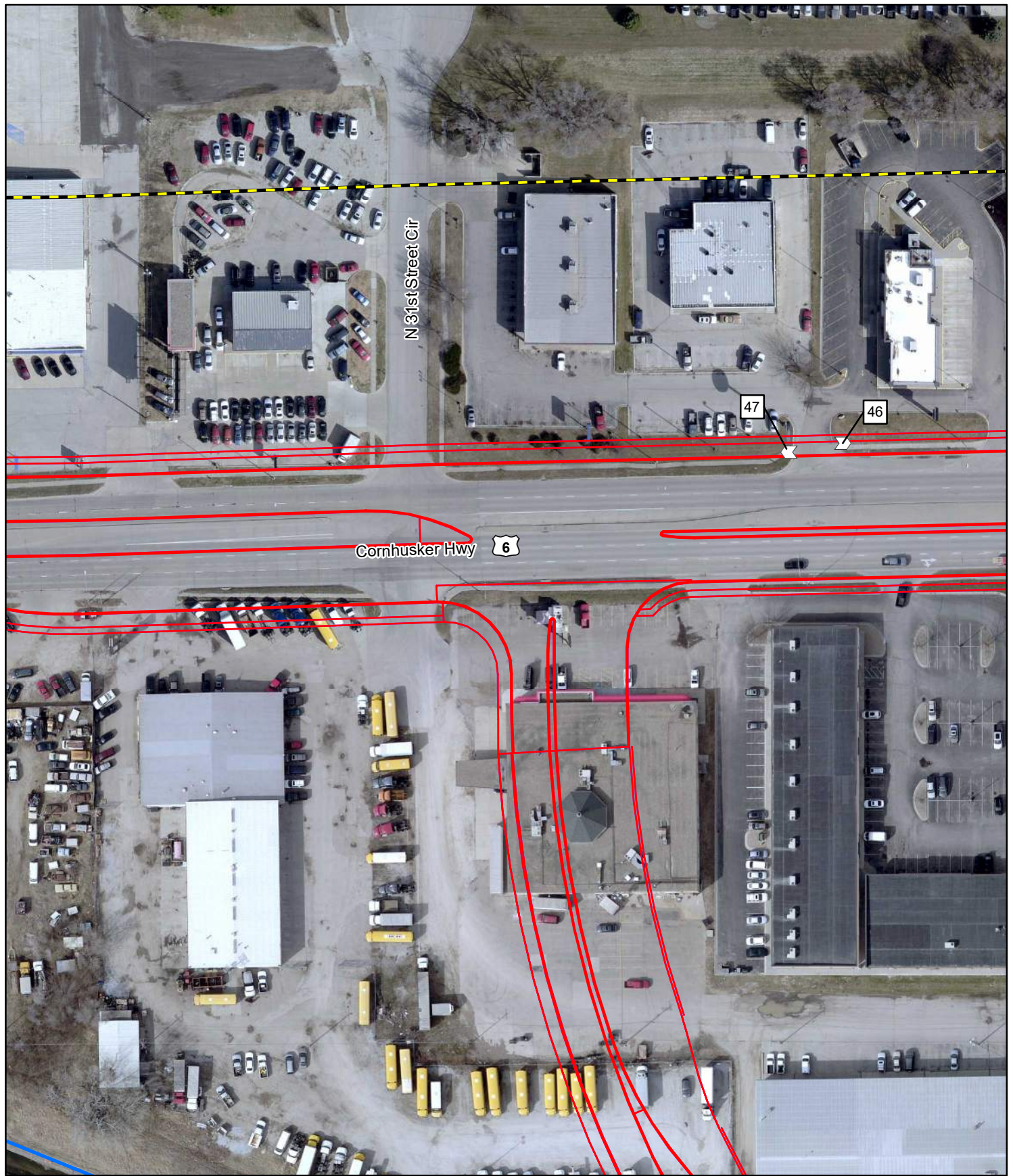




- Sample Point
- ◇ Photo Point
- Layout Option 1
- Layout Option 2
- Study Area
- Wetland
- · — · — · Intermittent Stream Channel
- Perennial Stream Channel

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4B

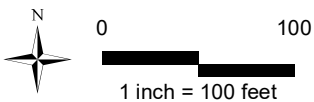
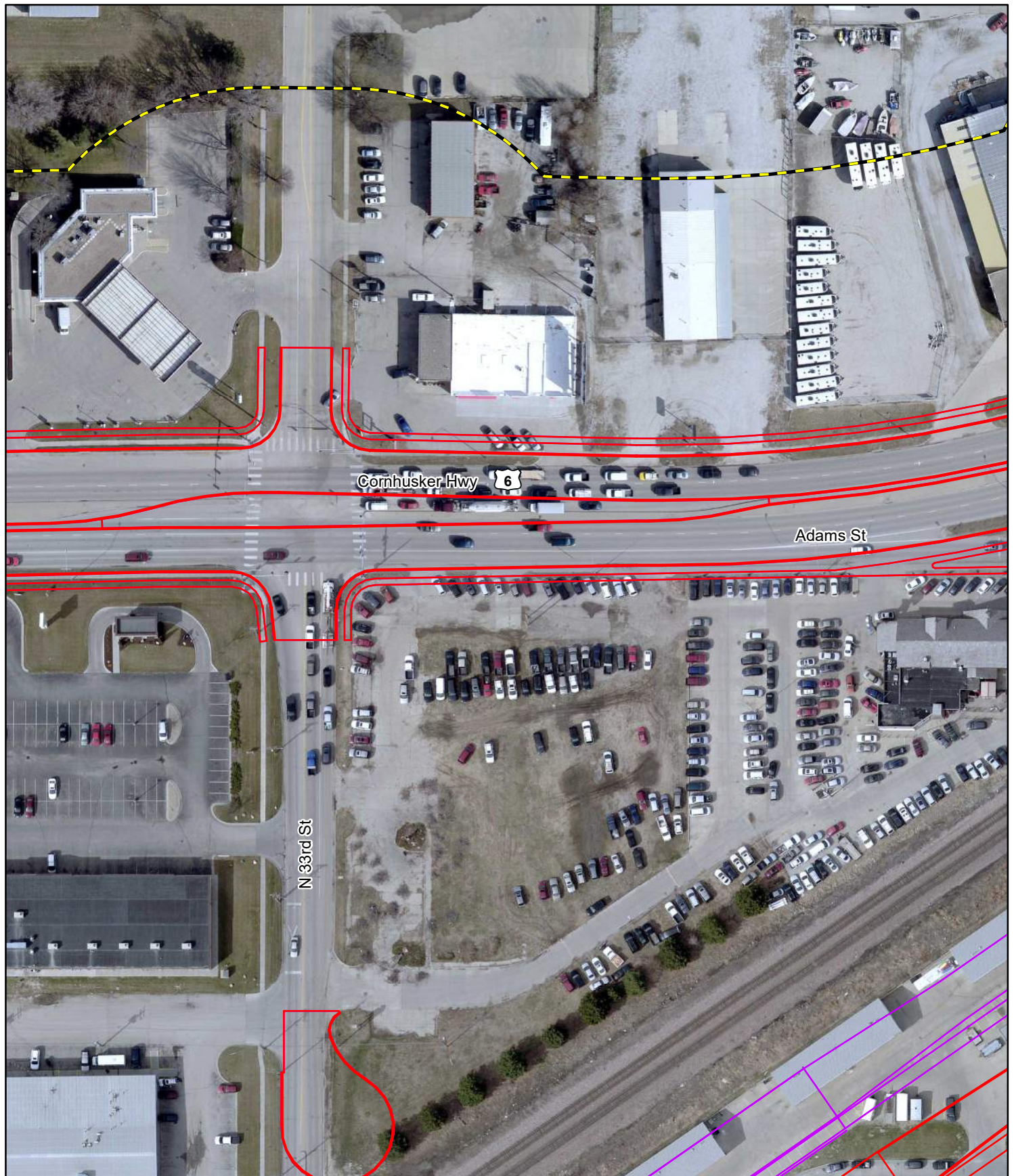





- Photo Point
- Study Area
- Layout Option 1
- Layout Option 2
- Perennial Stream Channel

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4C

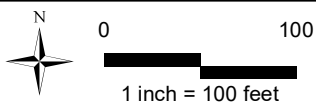
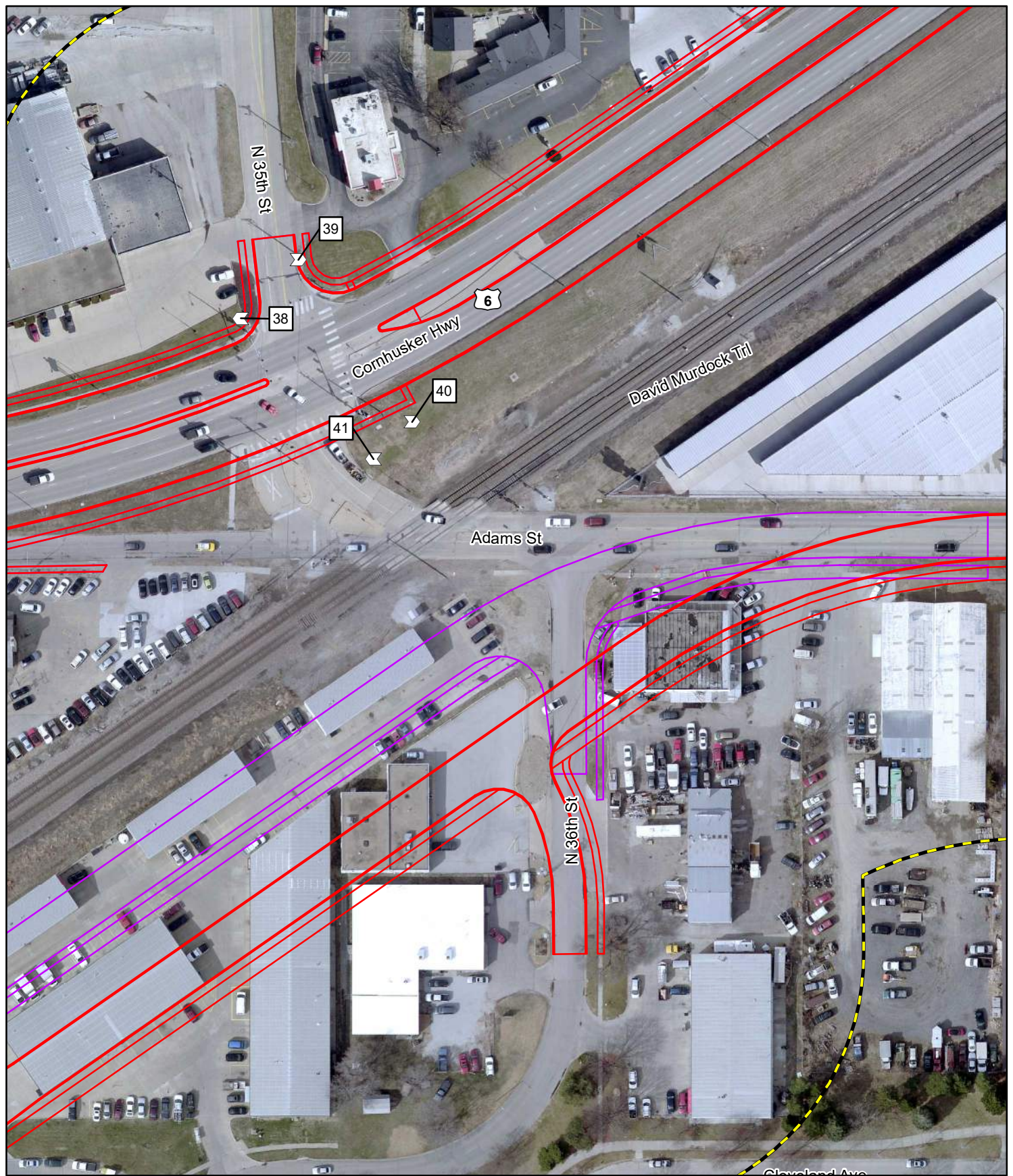








— Layout Option 1  Study Area
 — Layout Option 2

**North 33rd & Cornhusker
 2019 Wetland Delineation**
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4D



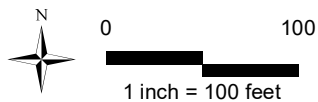
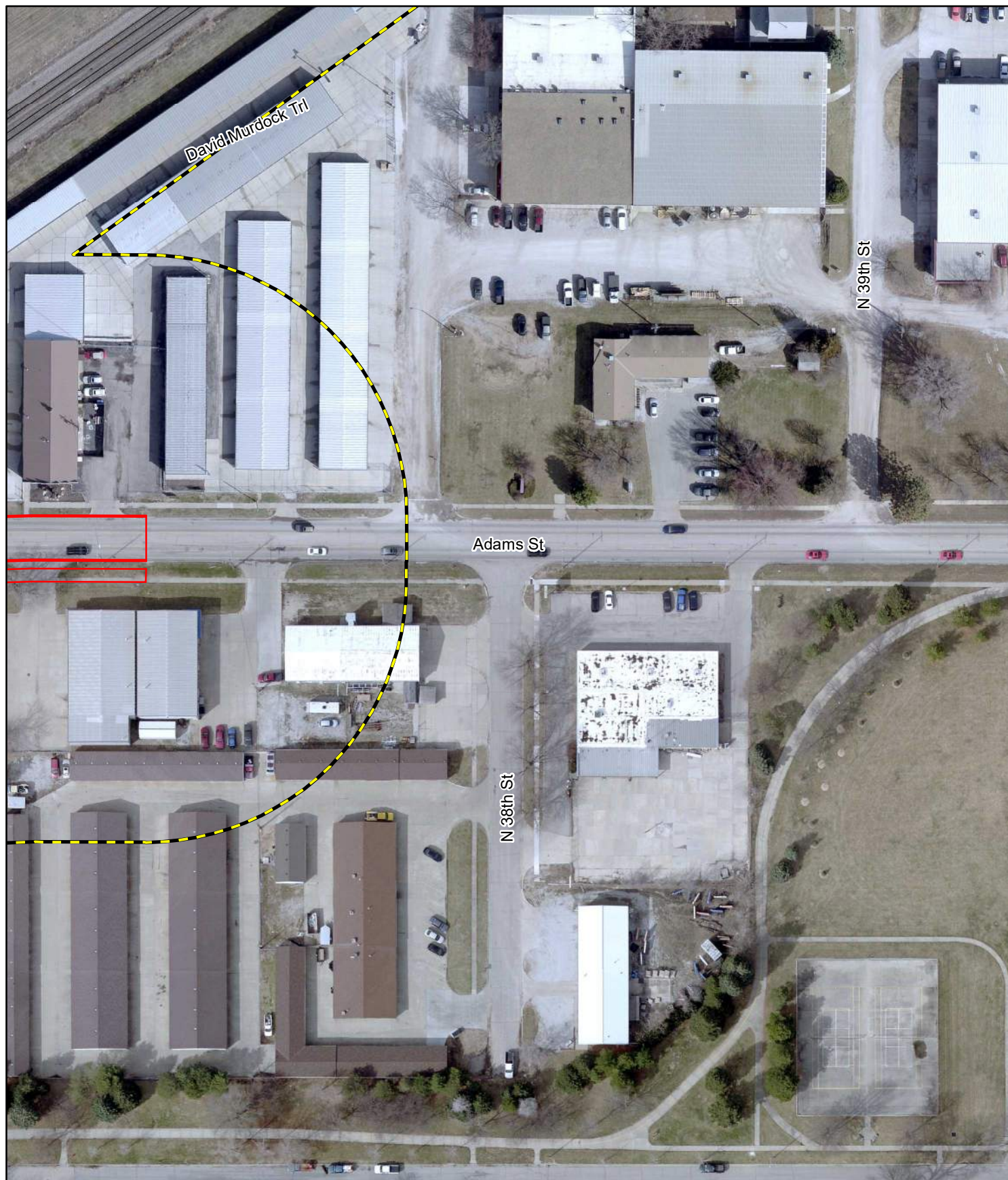



-  Photo Point
-  Layout Option 1
-  Layout Option 2

 Study Area

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4E





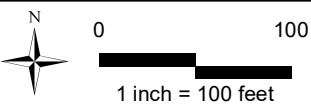
— Layout Option 1  Study Area
 — Layout Option 2


**North 33rd & Cornhusker
 2019 Wetland Delineation**
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4F



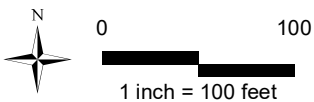



North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4G



— Layout Option 1  Study Area
 — Layout Option 2





— Layout Option 1  Study Area
— Layout Option 2

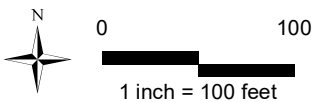
**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Delineation Map
Figure 4H





Deadmans Run
Perennial
3,202 feet

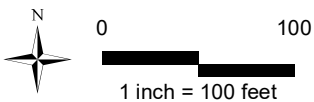
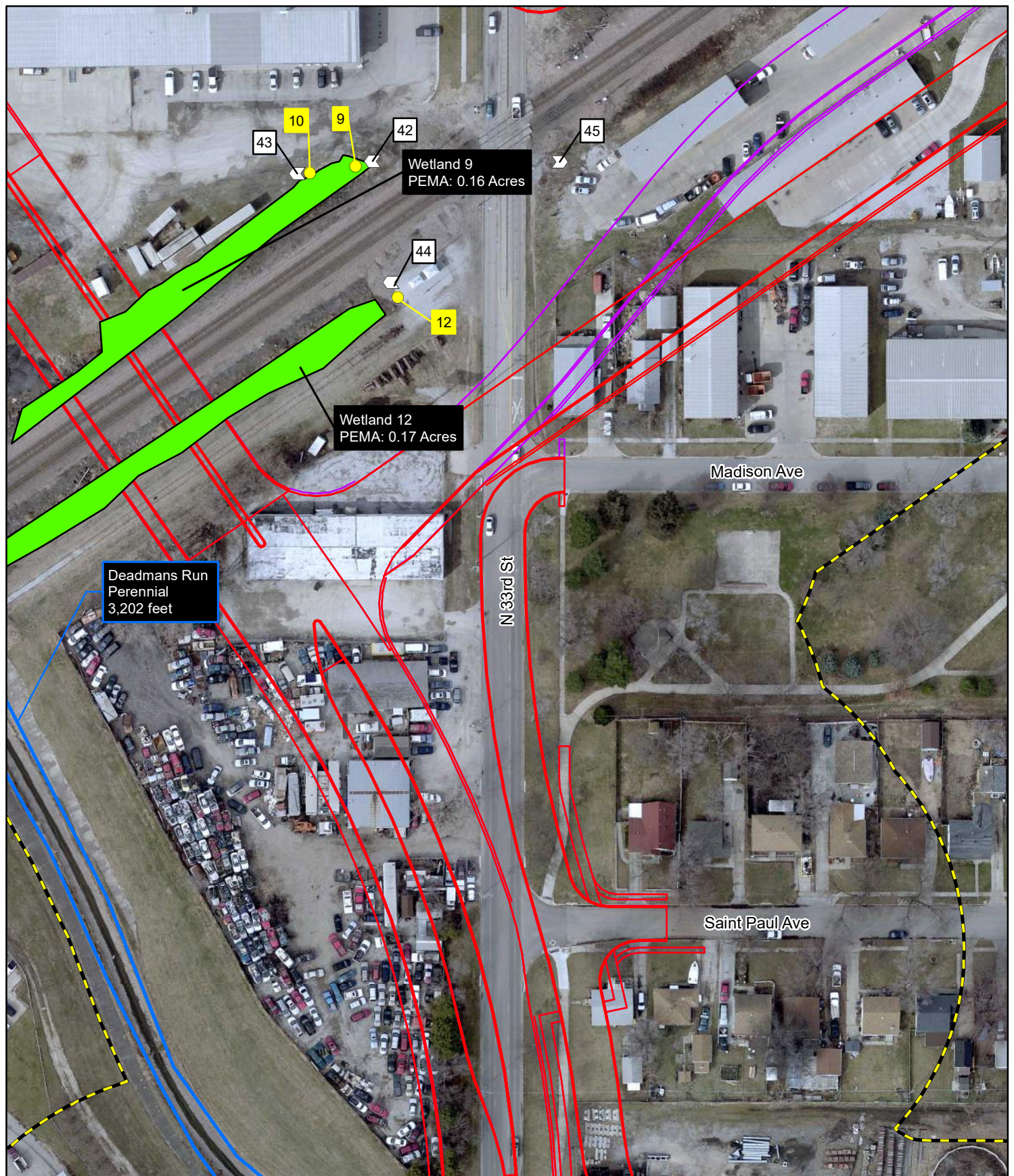
Wetland 12
PEMA: 0.17 Acres



- Layout Option 1
- Layout Option 2
- Study Area
- Wetland
- Perennial Stream Channel

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Delineation Map
Figure 41

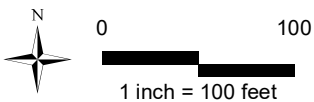




- Sample Point
- Photo Point
- Layout Option 1
- Layout Option 2
- ▭ Study Area
- Wetland
- Perennial Stream Channel

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Delineation Map
Figure 4J





— Layout Option 1 Study Area
 — Layout Option 2

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4K



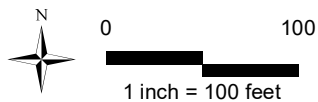
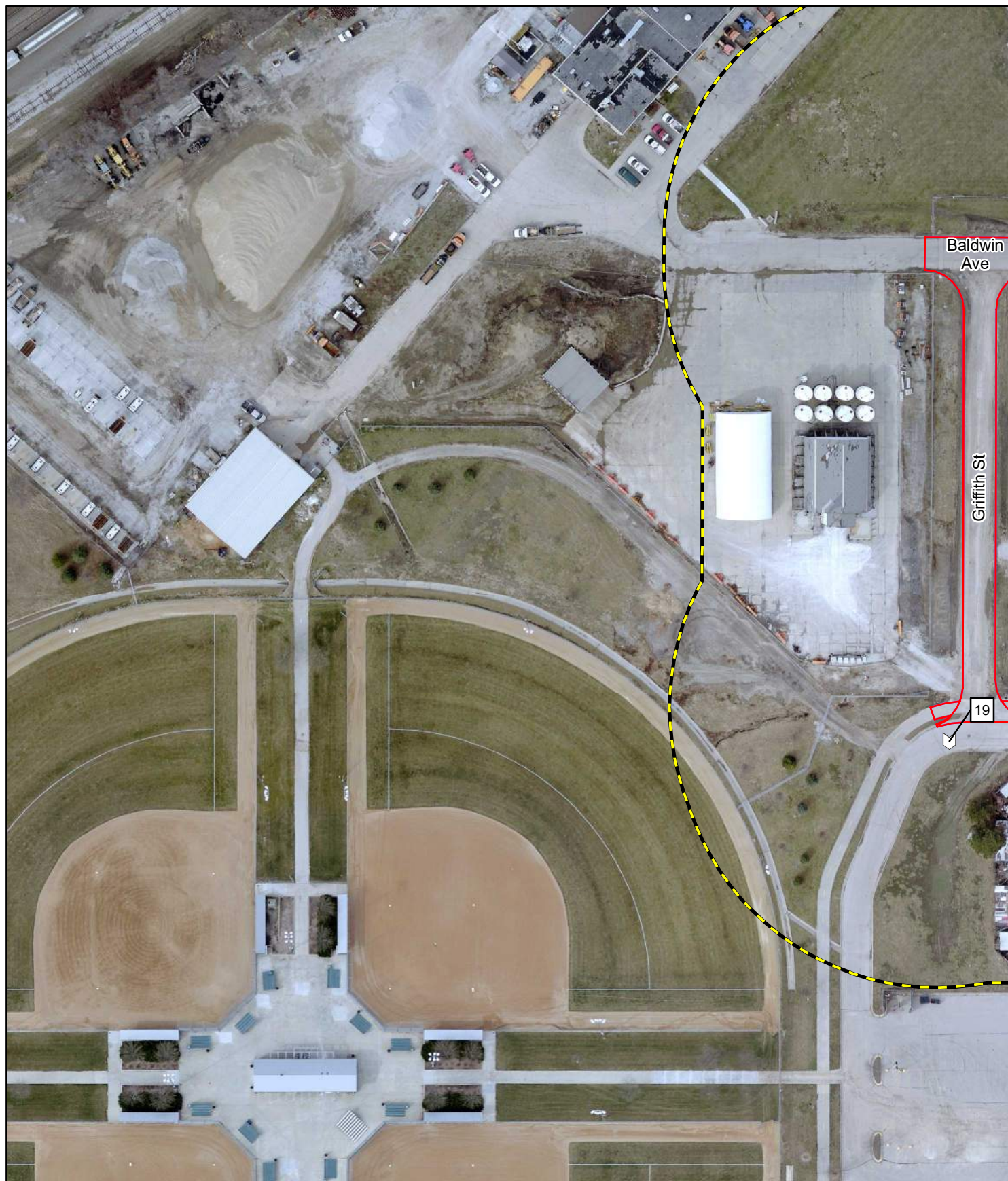


Photo Point

Study Area

Layout Option 1

Layout Option 2

North 33rd & Cornhusker 2019 Wetland Delineation

Lincoln, Nebraska

Project No. A17-3604

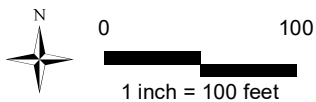
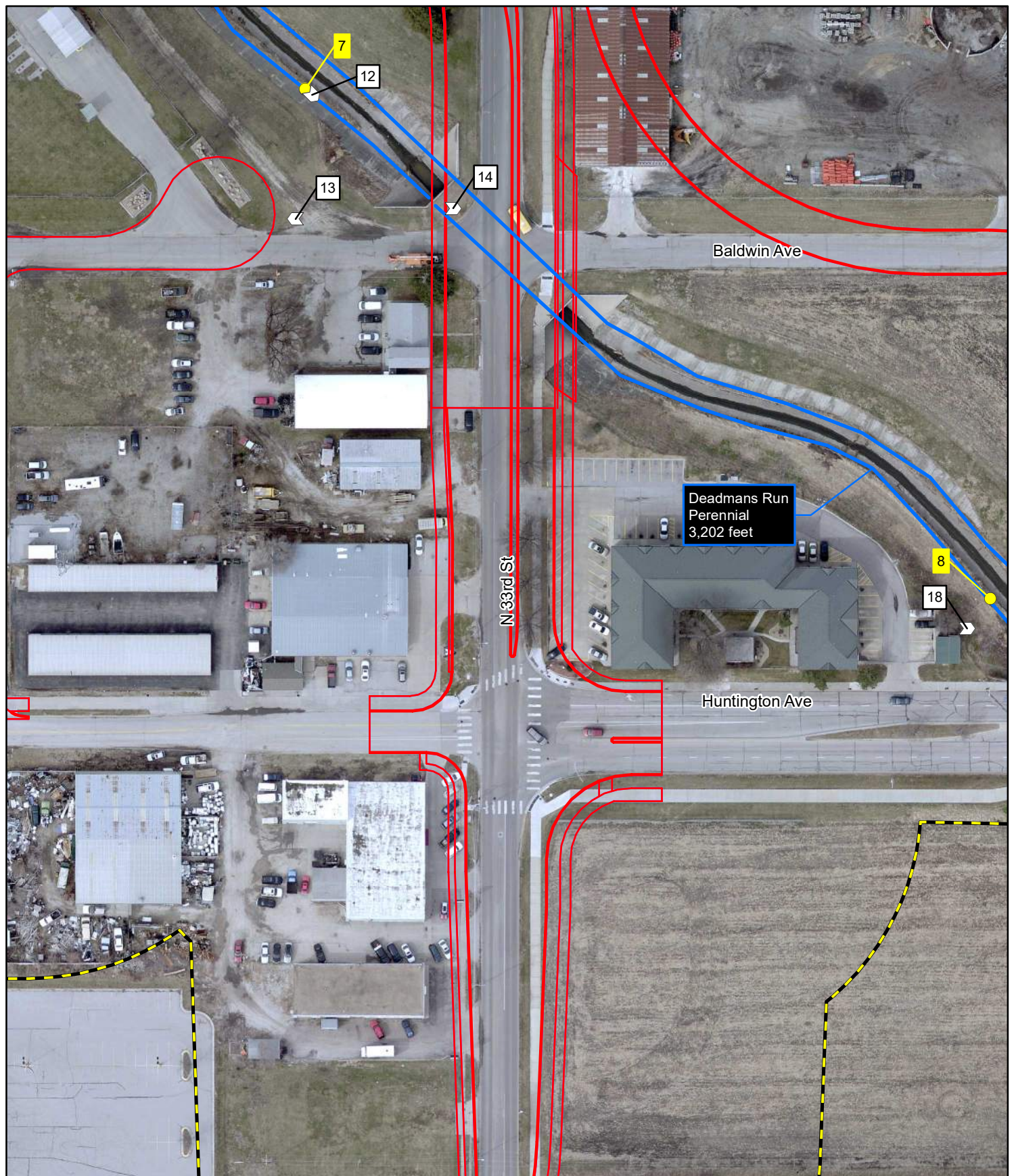
Delineation Map

Figure 4L



NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

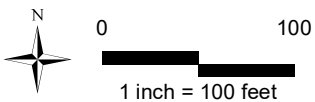









- Sample Point
- ▭ Study Area
- Perennial Stream Channel
- Layout Option 1
- Layout Option 2
- ◁ ▷ Photo Point

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Delineation Map
Figure 4M





-  Photo Point
-  Study Area
-  Layout Option 1
-  Perennial Stream Channel
-  Layout Option 2

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Delineation Map
Figure 4N



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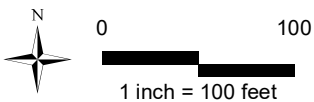
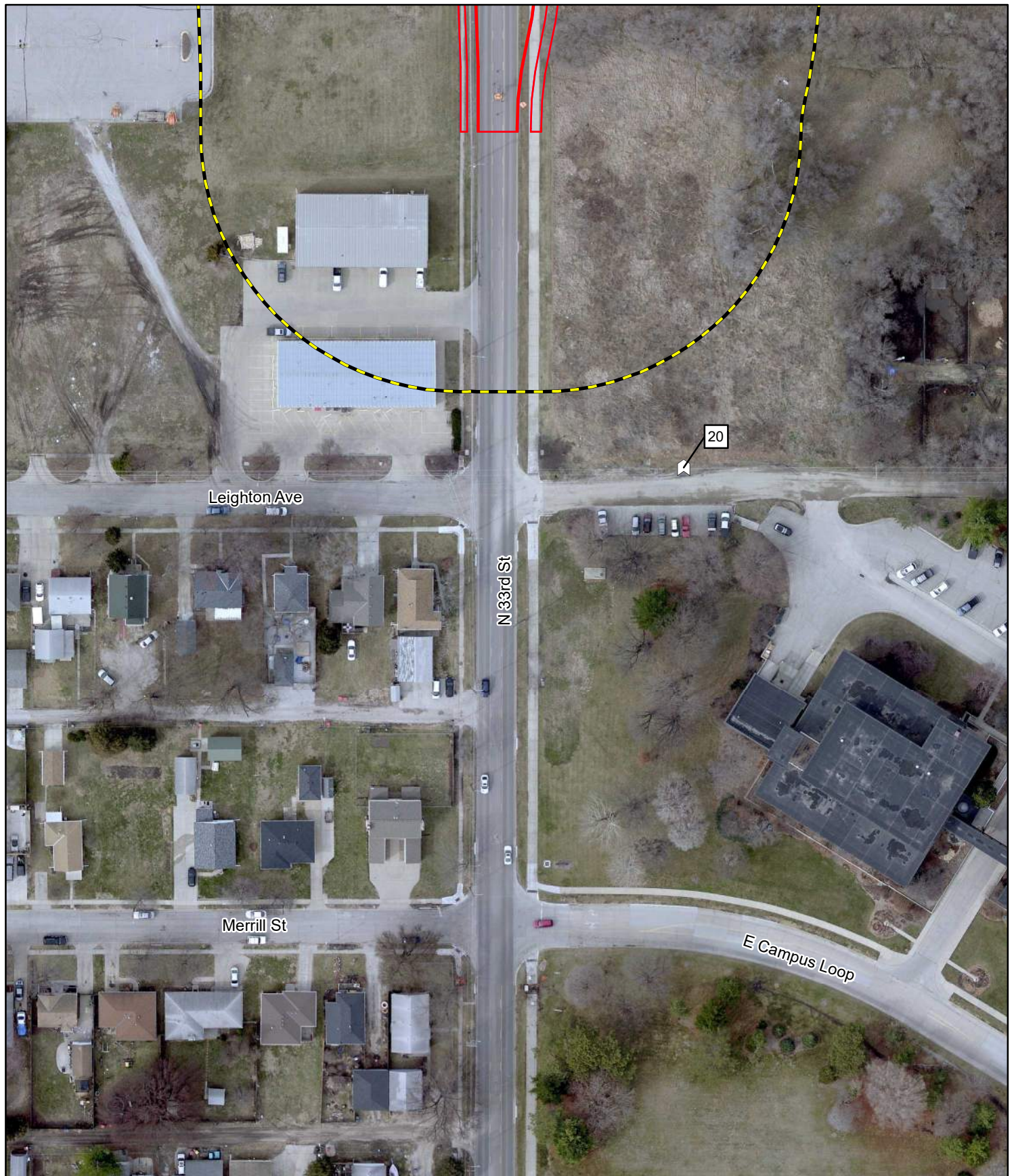


Photo Point

Study Area

Layout Option 1

Layout Option 2

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 40



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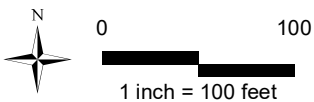
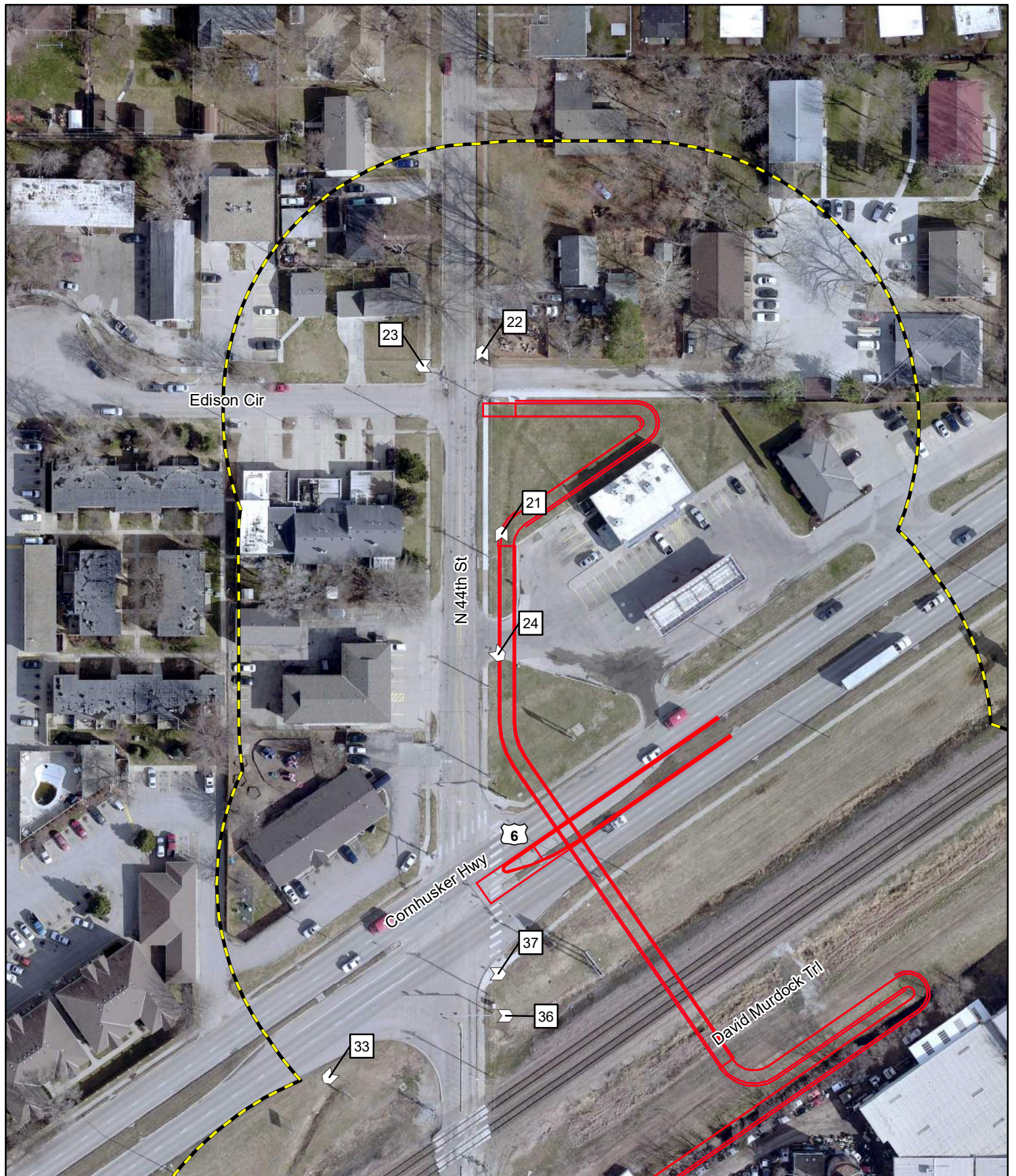


Photo Point

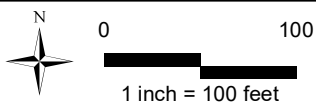
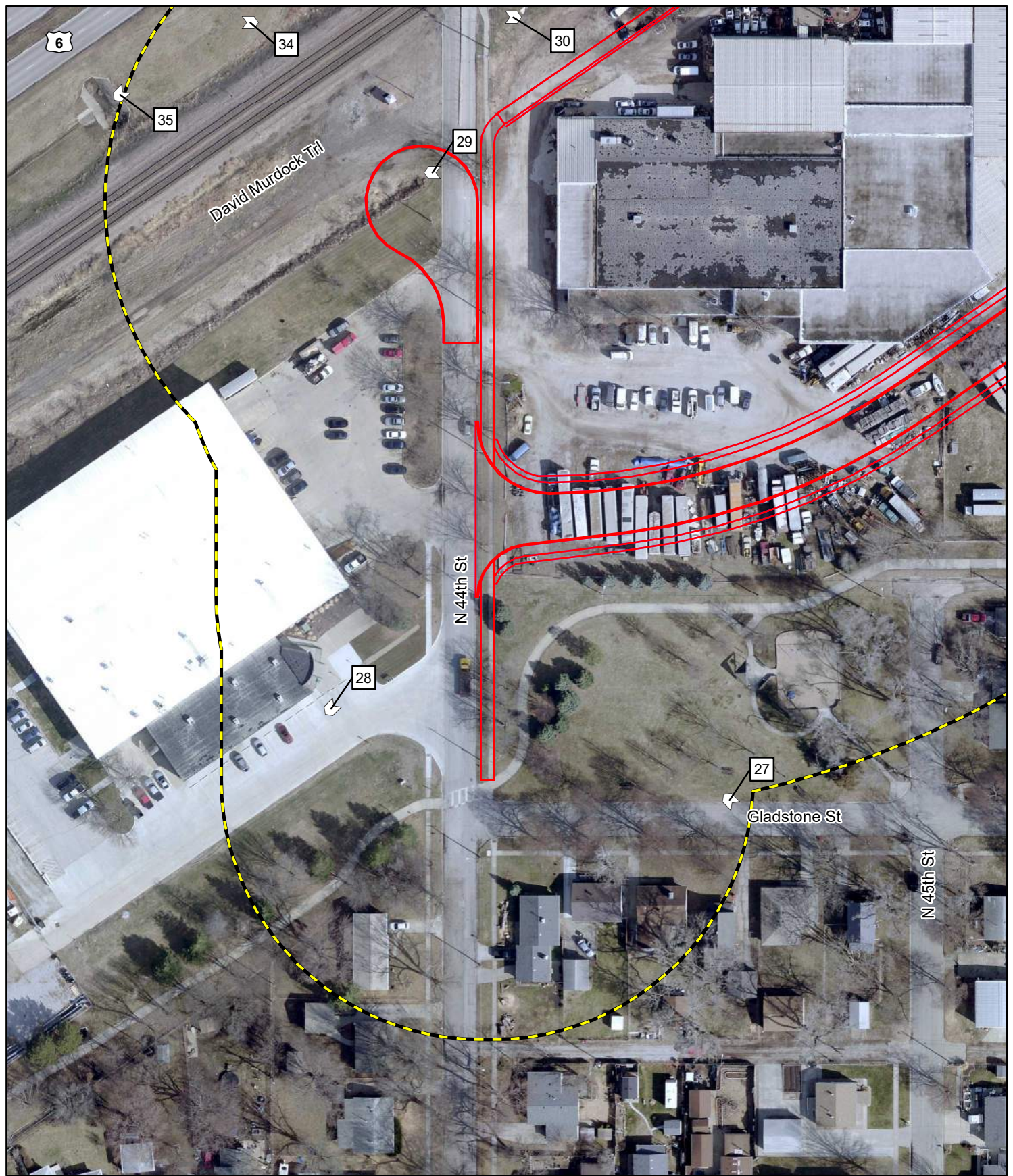
Study Area

Layout Option 1

Layout Option 2

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4P



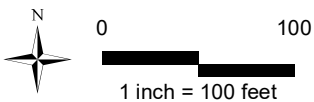
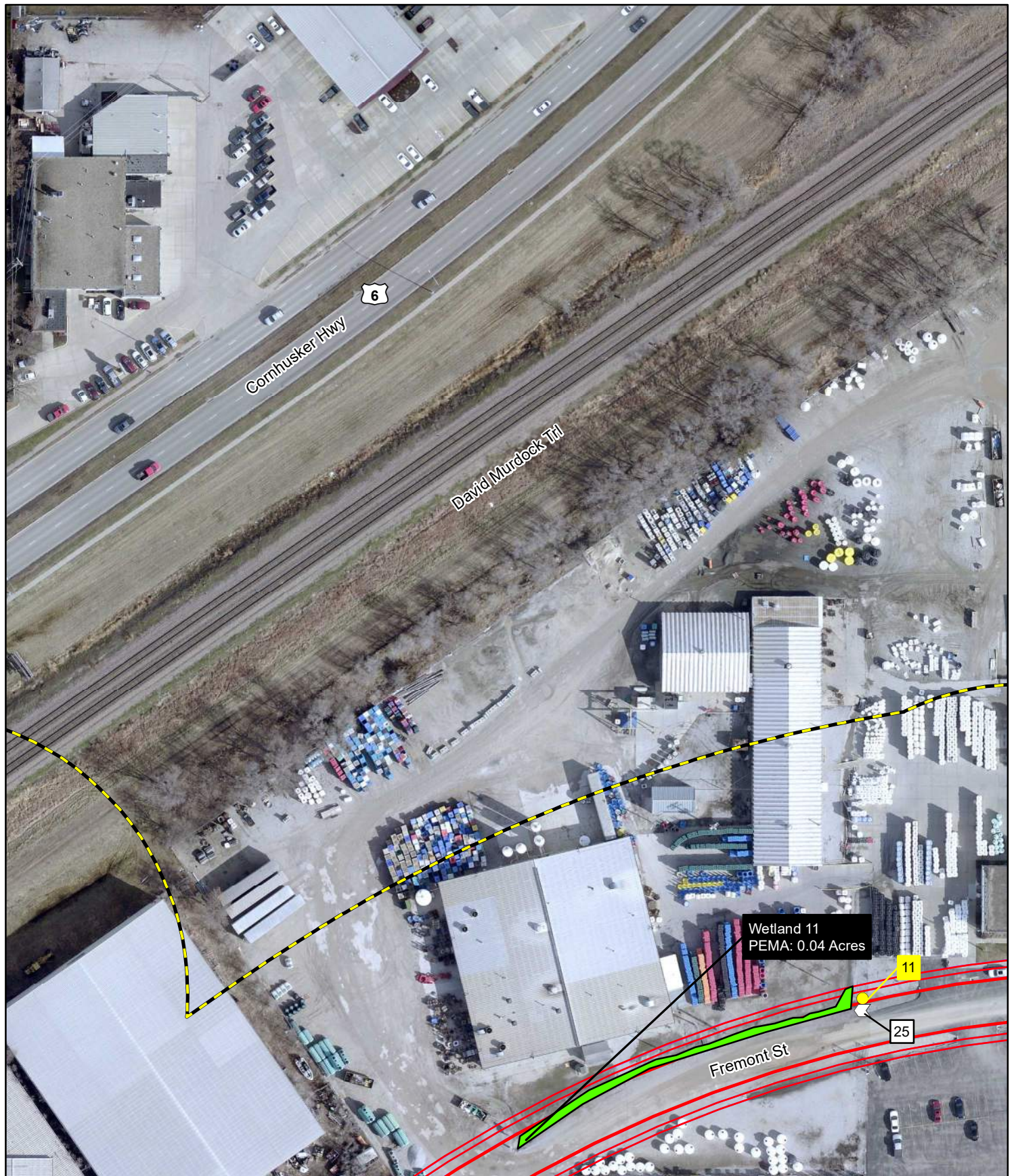


- ◇ Photo Point
- Layout Option 1
- Layout Option 2

Study Area

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4Q

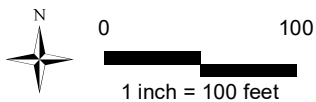
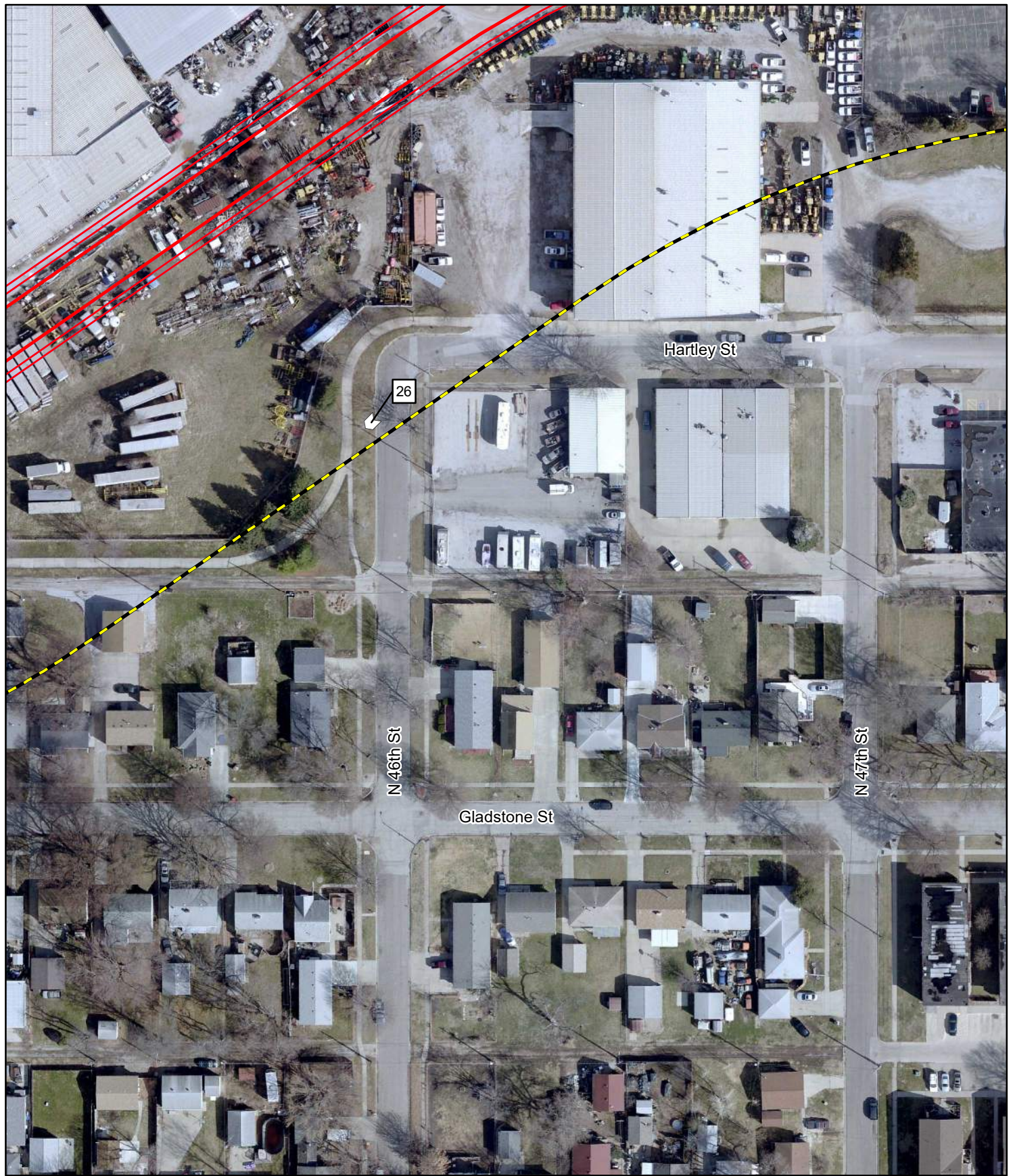




- Sample Point
- ▭ Study Area
- ▭ Wetland
- Layout Option 1
- Layout Option 2
- Photo Point

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4R





- Photo Point
- Layout Option 1
- Layout Option 2

Study Area

North 33rd & Cornhusker
2019 Wetland Delineation
 Lincoln, Nebraska
 Project No. A17-3604
Delineation Map
 Figure 4S



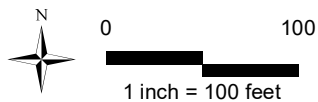


Photo Point

Study Area

Layout Option 1

Layout Option 2

**North 33rd & Cornhusker
2019 Wetland Delineation**
Lincoln, Nebraska
Project No. A17-3604
Delineation Map
Figure 4T



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APPENDIX B

Wetland Determination Data Forms

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 1
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S07 T10N R07E
 Landform (hillslope, terrace, etc.): Stream Bank Local relief (concave, convex, none): Convex
 Slope (%): 40-45 Lat: 40.84296041 Long: -96.67189287 Datum: UTM83
 Soil Map Unit Name: 7015: Salmo silt loam, occasionally flooded NWI classification: R4SBCx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>		
Remarks: This area is identified on the National Wetlands Inventory (NWI) map as a Riverine Intermittent Streambed Seasonally Flooded Excavated (R4SBCx) habitat. This Sample Point (SP) documents Deadman's Run as a perennial, concrete-lined stream channel. No fringe wetlands are associated with this channel. (Figure 4B)				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> </u>	x 1 = <u> </u>																			
FACW species <u> </u>	x 2 = <u> </u>																			
FAC species <u> </u>	x 3 = <u> </u>																			
FACU species <u> </u>	x 4 = <u> </u>																			
UPL species <u> </u>	x 5 = <u> </u>																			
Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>																			
Prevalence Index = B/A = <u> </u>																				
1. <u>Salix nigra</u>	<u>2</u>	<u> </u>	<u>OBL</u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u>2</u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Bromus inermis</u>	<u>90</u>	<u>X</u>	<u>FACU</u>																	
2. <u>Convolvulus arvensis</u>	<u>5</u>	<u> </u>	<u>UPL</u>																	
3. <u>Ambrosia trifida</u>	<u>5</u>	<u> </u>	<u>FAC</u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u>100</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)
 Photo 1 - Northwest; Photo 2- Southwest

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-22	10YR 4/2	80					Clay	Gravel mixed throughout
	10YR 3/1	20					Clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron-Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches) _____
Water Table Present? Yes _____ No ☒ Depth (inches) _____
Saturation Present? Yes _____ No ☒ Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The side slopes are covered in rock rip-rap and the channel is concrete-lined.

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 2
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S07 T10N R07E
 Landform (hillslope, terrace, etc.): Drainage Ditch Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 40.84281771 Long: -96.68045364 Datum: UTM83
 Soil Map Unit Name: 9709: Urban land-Kennebec complex, 0 to 2 percent slopes NWI classification: PUBF

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>		
Remarks: This area was identified on the NWI map as a Palustrine Unconsolidated Bottom Semi-Permanently Flooded (PUBF) freshwater pond. This area displays more than 30 percent emergent vegetation and is determined to be a Palustrine Emergent Temporarily Flooded (PEMA) wetland (Wetland 2). (Figure 4A)				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u> </u> = Total Cover Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u> </u> = Total Cover Herb Stratum (Plot size: <u>5'</u>) 1. <u>Spartina pectinata</u> 25 X FACW 2. <u>Persicaria sp.</u> 25 X FAC-OBL 3. <u>Daucus carota</u> 25 X UPL 4. <u>Rumex crispus</u> 15 FAC 5. <u>Phalaris arundinacea</u> 10 FACW 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> <u> </u> 100 = Total Cover Woody Vine Stratum (Plot size: <u>30'</u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B) Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table> Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																
OBL species <u> </u>	x 1 = <u> </u>																
FACW species <u> </u>	x 2 = <u> </u>																
FAC species <u> </u>	x 3 = <u> </u>																
FACU species <u> </u>	x 4 = <u> </u>																
UPL species <u> </u>	x 5 = <u> </u>																
Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>																
Prevalence Index = B/A = <u> </u>																	
Remarks: (Include photo numbers here or on a separate sheet.) Photo 4 - Southeast																	

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/2	100					Clay	With gravel
2-22	10YR 3/2	90	10YR 5/4	5	C	M	Clay	With gravel

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches) _____

Water Table Present? Yes ☐ No ☒ Depth (inches) _____

Saturation Present? Yes ☐ No ☒ Depth (inches) _____

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 3
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S07 T10N R07E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
 Slope (%): 0-2 Lat: 40.84248 Long: -96.680531 Datum: UTM83
 Soil Map Unit Name: 9709: Urban land-Kennebec complex, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>		
Remarks: <u>Outpoint to Wetland 2.</u> <u>This area is mowed and maintained. (Figure 4A)</u>				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
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= Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
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= Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Bromus inermis</u>	<u>50</u>	<u>X</u>	<u>FACU</u>																	
2. <u>Festuca arundinacea</u>	<u>50</u>	<u>X</u>	<u>FACU</u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
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100 = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
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Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																				
Remarks: (Include photo numbers here or on a separate sheet.) Photo 5 - North; Photo 6 - West																				

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-22	10YR 2/1	70					Clay	Gravel present
	10YR 3/2	30					Clay	Gravel present

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
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- ☐ Sandy Gleyed Matrix (S4)
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Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
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☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
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☐ Hydrogen Sulfide Odor (C1)
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☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches) _____

Water Table Present? Yes _____ No ☒ Depth (inches) _____

Saturation Present? Yes _____ No ☒ Depth (inches) _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 4
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S18 T10N R07E
 Landform (hillslope, terrace, etc.): Stream Bank Local relief (concave, convex, none): None
 Slope (%): 0-1 Lat: 40.842023 Long: -96.678955 Datum: UTM83
 Soil Map Unit Name: 7015: Salmo silt loam, occasionally flooded NWI classification: PSSAx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	<u>X</u>	No	<u> </u>
Hydric Soil Present?	Yes	<u>X</u>	No	<u> </u>
Wetland Hydrology Present?	Yes	<u>X</u>	No	<u> </u>
Is the Sampled Area within a Wetland?				Yes <u>X</u> No <u> </u>
Remarks: Wetland 4 is a PEMA wetland fringe along Channel 4 (intermittent). This area was identified as a Palustrine Scrub/Shrub Temporarily Flooded Excavated (PSSAx) wetland and as a perennial channel on the Natural Resource Map. Tree canopy coverage did not reach 30 percent absolute coverage, therefore; it is determined to be a PEMA wetland. (Figure 4B)				

VEGETATION - Use scientific names of plants.

<p><u>Tree Stratum</u> (Plot size: <u>30'</u>)</p> <table border="1"> <thead> <tr> <th></th> <th>Absolute % Cover</th> <th>Dominant Species?</th> <th>Indicator Status</th> </tr> </thead> <tbody> <tr> <td>1. <u>Gleditsia triacanthos</u></td> <td><u>10</u></td> <td><u>X</u></td> <td><u>FACU</u></td> </tr> <tr> <td>2. <u>Ulmus americana</u></td> <td><u>5</u></td> <td><u>X</u></td> <td><u>FACW</u></td> </tr> <tr> <td>3. <u>Acer saccharinum</u></td> <td><u>5</u></td> <td><u>X</u></td> <td><u>FACW</u></td> </tr> <tr> <td>4. <u>Fraxinus pennsylvanica</u></td> <td><u>5</u></td> <td><u>X</u></td> <td><u>FACW</u></td> </tr> <tr> <td>5. <u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> <tr> <td colspan="2"><u>25</u></td> <td colspan="2">= Total Cover</td> </tr> </tbody> </table> <p><u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)</p> <table border="1"> <tbody> <tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td colspan="2"><u> </u></td><td colspan="2">= Total Cover</td></tr> </tbody> </table> <p><u>Herb Stratum</u> (Plot size: <u>5'</u>)</p> <table border="1"> <tbody> <tr> <td>1. <u>Phalaris arundinacea</u></td> <td><u>60</u></td> <td><u>X</u></td> <td><u>FACW</u></td> </tr> <tr> <td>2. <u>Bromus inermis</u></td> <td><u>20</u></td> <td><u>X</u></td> <td><u>FACU</u></td> </tr> <tr> <td>3. <u>Elymus virginicus</u></td> <td><u>20</u></td> <td><u>X</u></td> <td><u>FACW</u></td> </tr> <tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>6. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>7. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>8. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>9. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>10. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td colspan="2"><u>100</u></td><td colspan="2">= Total Cover</td></tr> </tbody> </table> <p><u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)</p> <table border="1"> <tbody> <tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td colspan="2"><u> </u></td><td colspan="2">= Total Cover</td></tr> </tbody> </table>		Absolute % Cover	Dominant Species?	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SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
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¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
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☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
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☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐**Remarks:**

Soils are assumed hydric due to the dominance of hydrophytic vegetation and presence of sufficient wetland hydrology indicators.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☒ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches) _____
 Water Table Present? Yes ☐ No ☒ Depth (inches) _____
 Saturation Present? Yes ☐ No ☒ Depth (inches) _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 5
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S18 T10N R07E
 Landform (hillslope, terrace, etc.): Top of bank Local relief (concave, convex, none): Convex
 Slope (%): 0-1 Lat: 40.842065 Long: -96.679001 Datum: UTM83
 Soil Map Unit Name: 7015: Salmo silt loam, occasionally flooded NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>		
Remarks: Outpoint to Wetland 4. This area is mowed and maintained. (Figure 4B)				

VEGETATION - Use scientific names of plants.

<p>Tree Stratum (Plot size: <u>30'</u>)</p> <table border="1"> <thead> <tr> <th></th> <th>Absolute % Cover</th> <th>Dominant Species?</th> <th>Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td>= Total Cover</td> <td></td> </tr> </tbody> </table> <p>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</p> <table border="1"> <thead> <tr> <th></th> <th>Absolute % Cover</th> <th>Dominant Species?</th> <th>Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td>= Total Cover</td> <td></td> </tr> </tbody> </table> <p>Herb Stratum (Plot size: <u>5'</u>)</p> <table border="1"> <thead> <tr> <th></th> <th>Absolute % Cover</th> <th>Dominant Species?</th> <th>Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u>Schedonorus arundinaceus</u></td><td><u>60</u></td><td><u>X</u></td><td><u>FACU</u></td></tr> <tr><td>2. <u>Bromus inermis</u></td><td><u>30</u></td><td><u>X</u></td><td><u>FACU</u></td></tr> <tr><td>3. <u>Taraxacum officinale</u></td><td><u>5</u></td><td><u> </u></td><td><u>FACU</u></td></tr> <tr><td>4. <u>Cirsium undulatum</u></td><td><u>5</u></td><td><u> </u></td><td><u>FACU</u></td></tr> <tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>6. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>7. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>8. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>9. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>10. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td>100 = Total Cover</td> <td></td> </tr> </tbody> </table> <p>Woody Vine Stratum (Plot size: <u>30'</u>)</p> <table border="1"> <thead> <tr> <th></th> <th>Absolute % Cover</th> <th>Dominant Species?</th> <th>Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr> <td colspan="2"></td> <td>= Total Cover</td> <td></td> </tr> </tbody> </table>		Absolute % Cover	Dominant Species?	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SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-22	10YR 3/1	70					Clay	
	10YR 4/2	30					Clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

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- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches) _____
Water Table Present? Yes _____ No ☒ Depth (inches) _____
Saturation Present? Yes _____ No ☒ Depth (inches) _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 6
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S18 T10N R07E
 Landform (hillslope, terrace, etc.): Bank Local relief (concave, convex, none): Convex
 Slope (%): 60 Lat: 40.841413 Long: -96.677199 Datum: UTM83
 Soil Map Unit Name: 9709: Urban land-Kennebec complex, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>		
Remarks: This SP was taken to document Deadman's Run as a concrete-lined perennial channel with no associated fringe wetlands. (Figure 4B)				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> </u>	x 1 = <u> </u>																			
FACW species <u> </u>	x 2 = <u> </u>																			
FAC species <u> </u>	x 3 = <u> </u>																			
FACU species <u> </u>	x 4 = <u> </u>																			
UPL species <u> </u>	x 5 = <u> </u>																			
Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>																			
Prevalence Index = B/A = <u> </u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Bromus inermis</u>	<u>70</u>	<u>X</u>	<u>FACU</u>																	
2. <u>Solidago canadensis</u>	<u>30</u>	<u>X</u>	<u>FACU</u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u>100</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.) Photo 11 - South																				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-22	10YR 4/2	100					Sandy Clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____

Water Table Present? Yes _____ No X Depth (inches) _____

Saturation Present? Yes _____ No X Depth (inches) _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 7
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S18 T10N R07E
 Landform (hillslope, terrace, etc.): Bank Local relief (concave, convex, none): Convex
 Slope (%): 30 Lat: 40.03863 Long: -96.673369 Datum: UTM83
 Soil Map Unit Name: 9709: Urban land-Kennebec complex, 0 to 2 percent slopes NWI classification: R4SBCx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>		
Remarks: This area is mapped as a Riverine on the NWI map. This SP was taken to document Deadman's Run as a concrete-lined perennial channel with no associated fringe wetlands. (Figure 4M)				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Juglans nigra</u>	<u>5</u>	<u>X</u>	<u>FACU</u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> </u>	x 1 = <u> </u>																			
FACW species <u> </u>	x 2 = <u> </u>																			
FAC species <u> </u>	x 3 = <u> </u>																			
FACU species <u> </u>	x 4 = <u> </u>																			
UPL species <u> </u>	x 5 = <u> </u>																			
Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>																			
Prevalence Index = B/A = <u> </u>																				
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u>5</u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Bromus inermis</u>	<u>50</u>	<u>X</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Solidago canadensis</u>	<u>40</u>	<u>X</u>	<u>FACU</u>																	
3. <u>Panicum virgatum</u>	<u>10</u>	<u> </u>	<u>FAC</u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u>100</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.) Photo 12 - Southeast																				

SOIL

Sampling Point: 7**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X**Remarks:**

No soil sample taken due to concrete lining. Soils area assumed non-hydric due to the lack of hydrophytic vegetation and insufficient wetland hydrology indicators.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches) _____
 Water Table Present? Yes _____ No X Depth (inches) _____
 Saturation Present? Yes _____ No X Depth (inches) _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 8
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S18 T10N R07E
 Landform (hillslope, terrace, etc.): Bank Local relief (concave, convex, none): Convex
 Slope (%): 30-35 Lat: 40.837552 Long: -96.671462 Datum: UTM83
 Soil Map Unit Name: 9709: Urban land-Kennebec complex, 0 to 2 percent slopes NWI classification: R4SBCx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>		
Remarks: This area was mapped as a Riverine on the NWI map. This SP was taken to document Deadman's Run as a concrete-lined perennial channel with no associated fringe wetlands. Although this area displays hydrophytic vegetation, it is determined to be upland due to the lack of hydric soils and insufficient wetland hydrology indicators. (Figure 4M)				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> </u>	x 1 = <u> </u>																			
FACW species <u> </u>	x 2 = <u> </u>																			
FAC species <u> </u>	x 3 = <u> </u>																			
FACU species <u> </u>	x 4 = <u> </u>																			
UPL species <u> </u>	x 5 = <u> </u>																			
Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>																			
Prevalence Index = B/A = <u> </u>																				
1. <u>Fraxinus pennsylvanica</u>	<u>10</u>	<u>X</u>	<u>FACW</u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u>10</u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Phalaris arundinacea</u>	<u>90</u>	<u>X</u>	<u>FACW</u>																	
2. <u>Bromus inermis</u>	<u>5</u>	<u> </u>	<u>FACU</u>																	
3. <u>Solidago canadensis</u>	<u>5</u>	<u> </u>	<u>FACU</u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u>100</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.) Photo 18 - East																				

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 4/2	100					Clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____ Rock _____

Depth (inches): _____ 16" _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches) _____

Water Table Present? Yes _____ No ☒ Depth (inches) _____

Saturation Present? Yes _____ No ☒ Depth (inches) _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

This SP was taken on the side slope and would not hold water for a sufficient amount of time to form a wetland.

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 9
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S18 T10N R07E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 40.840942 Long: -96.673228 Datum: UTM83
 Soil Map Unit Name: 9709: Urban land-Kennebec complex, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	<u>X</u>	No	<u> </u>
Hydric Soil Present?	Yes	<u>X</u>	No	<u> </u>
Wetland Hydrology Present?	Yes	<u>X</u>	No	<u> </u>
Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>				
Remarks: Wetland 9 is a PEMA wetland in a railroad track ditch north of the tracks. (Figure 4J)				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u> = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15'</u>)			
1. <u>Acer saccharinum</u>	<u>5</u>	<u>X</u>	<u>FACW</u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>5</u> = Total Cover			
Herb Stratum (Plot size: <u>5'</u>)			
1. <u>Spartina pectinata</u>	<u>95</u>	<u>X</u>	<u>FACW</u>
2. <u>Ambrosia trifida</u>	<u>5</u>	<u> </u>	<u>FAC</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>100</u> = Total Cover			
Woody Vine Stratum (Plot size: <u>30'</u>)			
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u> = Total Cover			

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

 Total Number of Dominant Species Across All Strata: 2 (B)

 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u> </u>	x 1 = <u> </u>
FACW species <u> </u>	x 2 = <u> </u>
FAC species <u> </u>	x 3 = <u> </u>
FACU species <u> </u>	x 4 = <u> </u>
UPL species <u> </u>	x 5 = <u> </u>
Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>
Prevalence Index = B/A = <u> </u>	

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)
 Photo 42 - West

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100					Clay Loam	Gravel and sand
4-6	10YR 2/1	100					Clay	very compacted
6-22	10 YR 2/1	95	10YR 4/6	5	C	M	Clay Loam	Gravel and sand

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1)
☐ High Water Table (A2)
☒ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches) 0-4

Water Table Present? Yes ☐ No ☒ Depth (inches) _____

Saturation Present? Yes ☒ No ☐ Depth (inches) 10

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

There was a small, very compacted, clay layer that was present from 4-6 inches that possibly could have stop the surface water from draining.

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 10
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S18 T10N R07E
 Landform (hillslope, terrace, etc.): Top of slope Local relief (concave, convex, none): None
 Slope (%): 0 Lat: 40.840927 Long: -96.673356 Datum: UTM83
 Soil Map Unit Name: 9709: Urban land-Kennebec complex, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>		
Remarks: Outpoint to Wetland 9. (Figure 4J)				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> </u>	x 1 = <u> </u>																			
FACW species <u> </u>	x 2 = <u> </u>																			
FAC species <u> </u>	x 3 = <u> </u>																			
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Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>																			
Prevalence Index = B/A = <u> </u>																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: — 1 - Rapid Test for Hydrophytic Vegetation — 2 - Dominance Test is >50% — 3 - Prevalence Index is ≤3.0 ¹ — 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) — Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Setaria viridis</u>	<u>10</u>	<u> </u>	<u>UPL</u>																	
2. <u>Taraxacum officinale</u>	<u>10</u>	<u> </u>	<u>FACU</u>																	
3. <u>Festuca arundinacea</u>	<u>40</u>	<u>X</u>	<u>FACU</u>																	
4. <u>Chloris verticillata</u>	<u>15</u>	<u>X</u>	<u>UPL</u>																	
5. <u>Panicum virgatum</u>	<u>15</u>	<u>X</u>	<u>FAC</u>																	
6. <u>Spartina pectinata</u>	<u>5</u>	<u> </u>	<u>FACW</u>																	
7. <u>Apocynum androsaemifolium</u>	<u>5</u>	<u> </u>	<u>UPL</u>																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u>100</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.) Photo 43 - West																				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____ Rock _____

Depth (inches): _____ 0" _____

Hydric Soil Present? Yes _____ No ☒**Remarks:**

Soil sample was not taken due to rock layer. Soils area assumed non-hydric due to the lack of hydrophytic vegetation and insufficient wetland hydrology.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches) _____

Water Table Present? Yes _____ No ☒ Depth (inches) _____

Saturation Present? Yes _____ No ☒ Depth (inches) _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 11
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S08 T10N R07E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 40.848627 Long: -96.654958 Datum: UTM83
 Soil Map Unit Name: 9728: Urban land-Crete-Aksarben complex, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>	
Remarks: Wetland 11 is a PEMA wetland located within a swale. SP was not taken in wetland as it was private property with no access signs posted. However, due to the visual dominance of hydrophytic vegetation and primary wetland hydrology indicators this was determined to be a wetland. (Figure 4R)			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)																
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																	
<u> </u> = Total Cover				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> </u>	x 1 = <u> </u>																			
FACW species <u> </u>	x 2 = <u> </u>																			
FAC species <u> </u>	x 3 = <u> </u>																			
FACU species <u> </u>	x 4 = <u> </u>																			
UPL species <u> </u>	x 5 = <u> </u>																			
Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>																			
Prevalence Index = B/A = <u> </u>																				
<u> </u> = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u> </u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>) 1. <u>Typha angustifolia</u> <u>10</u> <u>X</u> <u>OBL</u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> <u>10</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover																				
Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)																				
Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																				
Remarks: (Include photo numbers here or on a separate sheet.) Photo 25 - West; 90 percent bare ground																				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐**Remarks:**

No soil sample taken. Soils are assumed hydric due to dominance of hydrophytic vegetation and primary wetland hydrology indicators.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches) 0-2

Water Table Present? Yes ☐ No ☒ Depth (inches) _____

Saturation Present? Yes ☐ No ☒ Depth (inches) _____

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: North 33rd and Cornhusker City/County: Lincoln/Lancaster Sampling Date: 10/24/2019
 Applicant/Owner: Lincoln & Lancaster County RTSD State: NE Sampling Point: 12
 Investigator(s): Jessica Casey, Alisa Halpin Section, Township, Range: S18 T10N R07E
 Landform (hillslope, terrace, etc.): Railroad ditch Local relief (concave, convex, none): Concave
 Slope (%): 0-2 Lat: 40.840656 Long: -96.673113 Datum: UTM83
 Soil Map Unit Name: 9709: Urban land-Kennebec complex, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>		
Remarks: Wetland 12 is a PEMA wetland in swale. SP was not taken in wetland as it was railroad property. However, due to the visual dominance of hydrophytic vegetation and primary wetland hydrology indicators this was determined to be a wetland. (Figure 4J)				

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u> </u> = Total Cover Sapling/Shrub Stratum (Plot size: <u>15'</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u> </u> = Total Cover Herb Stratum (Plot size: <u>5'</u>) 1. <u>Spartina pectinata</u> 70 X FACW 2. <u>Ambrosia trifida</u> 30 X FAC 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> <u>100</u> = Total Cover Woody Vine Stratum (Plot size: <u>30'</u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B) Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u></td> <td>(A) <u> </u> (B) <u> </u></td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table> Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																
OBL species <u> </u>	x 1 = <u> </u>																
FACW species <u> </u>	x 2 = <u> </u>																
FAC species <u> </u>	x 3 = <u> </u>																
FACU species <u> </u>	x 4 = <u> </u>																
UPL species <u> </u>	x 5 = <u> </u>																
Column Totals: <u> </u>	(A) <u> </u> (B) <u> </u>																
Prevalence Index = B/A = <u> </u>																	
Remarks: (Include photo numbers here or on a separate sheet.) Photo 44 - West																	

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ Coast Prairie Redox (A16)
☐ Dark Surface (S7)
☐ Iron-Manganese Masses (F12)
☐ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐**Remarks:**

No soil pit. Soils assumed hydric due to dominance of hydrophytic vegetation and sufficient wetland hydrology indicators.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
☐ Aquatic Fauna (B13)
☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Gauge or Well Data (D9)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches) _____

Water Table Present? Yes ☐ No ☐ Depth (inches) _____

Saturation Present? Yes ☐ No ☐ Depth (inches) _____

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX C

Photolog



Photo No.	1	Photo Dir.	NW	Figure No.	4B
Description:	This area is identified on the National Wetlands Inventory (NWI) map as a Riverine Intermittent Streambed Seasonally Flooded Excavated (R4SBCx) habitat. Sample Point (SP) 1 documents Deadman's Run as a perennial, concrete-lined stream channel. No fringe wetlands are associated with this channel.				



Photo No.	2	Photo Dir.	SW	Figure No.	4B
Description:	View of a perennial, concrete-lined stream channel; Deadman's Run flowing underneath Cornhusker Highway. This area is associated with SP 2.				



Photo No.	3	Photo Dir.	N	Figure No.	4B
Description:	View facing north at an upland swale comprised of smooth brome (<i>Bromus inermis</i>) and tall fescue (<i>Schedonorus arundinaceus</i>).				



Photo No.	4	Photo Dir.	SE	Figure No.	4A
Description:	This area was identified on the NWI map as a Palustrine Unconsolidated Bottom Semi-Permanently Flooded (PUBF) freshwater pond. This area displays more than 30 percent emergent vegetation and is determined to be a Palustrine Emergent Temporarily Flooded (PEMA) wetland (Wetland 2) and is associated with SP 2.				



Photo No.	5	Photo Dir.	N	Figure No.	4A
Description: This area is associated with SP 3, the outpoint for Wetland 2. This area is mowed and maintained.					



Photo No.	6	Photo Dir.	W	Figure No.	4A
Description: This area is associated with SP 3, the outpoint for Wetland 2. This area is mowed and maintained.					



Photo No.	7	Photo Dir.	S	Figure No.	4B
Description: View at Channel 4, an intermittent stream channel located southeast of Cornhusker Highway and State Fair Park Drive.					



Photo No.	8	Photo Dir.	S	Figure No.	4B
Description: View at Wetland 4 a PEMA fringe wetland along Channel 4 (intermittent). This area was identified as a Palustrine Scrub/Shrub Temporarily Flooded Excavated (PSSAx) wetland and as a perennial channel on the Natural Resource Map. Tree canopy coverage did not reach 30 percent absolute coverage, therefore; it is determined to be a PEMA wetland.					



Photo No.	9	Photo Dir.	N	Figure No.	4B
Description: This area is associated with SP 5, the outpoint to Wetland 4. This area is mowed and maintained.					



Photo No.	10	Photo Dir.	SE	Figure No.	4B
Description: View at Deadman's Run immediately south of Cornhusker Highway.					



Photo No.	11	Photo Dir.	SE	Figure No.	4B
Description:	View of area associated with SP 6. This SP was taken to document Deadman's Run as a concrete-lined perennial channel with no associated fringe wetlands				



Photo No.	12	Photo Dir.	SE	Figure No.	4M
Description:	View of area associated with SP 7. This area is mapped as a Riverine on the NWI map. This SP was taken to document Deadman's Run as a concrete-lined perennial channel with no associated fringe wetlands.				



Photo No. 13

Photo Dir. W

Figure No. 4M

Description: View of upland area along the north side of Baldwin Avenue. This area is mowed and maintained.



Photo No. 14

Photo Dir. E

Figure No. 4M

Description: View of upland area from the west side of North 33rd Street along the north side of Baldwin Avenue. This area is mowed and maintained.



Photo No.	15	Photo Dir.	S	Figure No.	4N
Description: View at Deadman's Run just south of Huntington Avenue.					



Photo No.	16	Photo Dir.	NW	Figure No.	4N
Description: View at upland agricultural field to the north of Huntington Avenue and east of Deadman's Run.					



Photo No.	17	Photo Dir.	SW	Figure No.	4N
Description: View at upland agricultural field south of Huntington Avenue and west of Deadman's Run.					



Photo No.	18	Photo Dir.	E	Figure No.	4M
Description: This area was mapped as a Riverine on the NWI map. SP 8 was taken to document Deadman's Run as a concrete-lined perennial channel with no associated fringe wetlands. Although this area displays hydrophytic vegetation, it is determined to be upland due to the lack of hydric soils and insufficient wet-					



Photo No.	19	Photo Dir.	S	Figure No.	4L
Description: View of an upland area south of Griffin Street. This area is mowed and maintained.					



Photo No.	20	Photo Dir.	N	Figure No.	4O
Description: View of an upland area northeast of the intersection of North 33rd Street and Leighton Avenue.					



Photo No.	21	Photo Dir.	N	Figure No.	4P
Description: View of an upland roadside ditch northeast of intersection of North 44th Street and Cornhusker Highway. This area is mowed and maintained.					



Photo No.	22	Photo Dir.	N	Figure No.	4P
Description: View facing north at an upland roadside northeast of the intersection of North 44 th Street and Edison Circle.					



Photo No.	23	Photo Dir.	W	Figure No.	4P
Description: View at an upland roadside northwest of the intersection of North 44th Street and Edison Circle. This area is mowed and maintained.					



Photo No.	24	Photo Dir.	SE	Figure No.	4P
Description: View at an upland area northeast of the intersection of North 44th Street and Cornhusker Highway. This area is mowed and maintained.					



Photo No.	25	Photo Dir.	W	Figure No.	4R
Description:	View at Wetland 11, a PEMA wetland located within a swale. SP 11 was not taken in wetland as it was private property with no access signs posted. However, due to the visual dominance of hydrophytic vegetation and primary wetland hydrology indicators this was determined to be a wetland.				



Photo No.	26	Photo Dir.	SW	Figure No.	4S
Description:	View at an upland area southwest of the intersection of Hartley Street and North 46th Street. This area is mowed and maintained.				



Photo No.	27	Photo Dir.	NW	Figure No.	4Q
Description:	View at an upland park area northwest of the intersection of North 45th Street and Gladstone Street. This area is mowed and maintained.				



Photo No.	28	Photo Dir.	SW	Figure No.	4Q
Description:	View at an upland area southwest of David Murdock Trail and North 44th Street. This area is mowed and maintained.				



Photo No.	29	Photo Dir.	W	Figure No.	4Q
Description:	View at an upland swale immediately south of David Murdock Trail and west of North 44th Street. Dominant vegetation includes smooth brome (<i>Bromus inermis</i>), common hackberry (<i>Celtis occidentalis</i>), giant foxtail (<i>Setaria faberi</i>).				



Photo No.	30	Photo Dir.	E	Figure No.	4Q
Description:	View at an upland area south of the railroad track and east of North 44th Street.				



Photo No.	31	Photo Dir.	N	Figure No.	4T
Description: View at an upland roadside northeast of the intersection of Fremont Street and North 48th Street. This area is mowed and maintained.					



Photo No.	32	Photo Dir.	S	Figure No.	4T
Description: View at an upland roadside southeast of the intersection of Fremont Street and North 48th Street. This area is mowed and maintained.					



Photo No.	33	Photo Dir.	SW	Figure No.	4P
Description:	View at an upland swale located southwest of the intersection of Cornhusker Highway and North 44th Street. Dominant vegetation includes smooth brome (<i>Bromus inermis</i>), bluegrass species (<i>Poa</i> sp.), and western ragweed (<i>Ambrosia psilostachya</i>). This area is mowed and maintained.				



Photo No.	34	Photo Dir.	E	Figure No.	4Q
Description:	View at an upland trackside ditch north of the track and southwest of the intersection of Cornhusker Highway and North 44th Street. Dominant vegetation includes big bluestem (<i>Andropogon gerardii</i>), smooth brome (<i>Bromus inermis</i>), giant foxtail (<i>Setaria faberi</i>), and kochia (<i>Bassia scoparia</i>). This area is mowed and maintained.				



Photo No.	35	Photo Dir.	SW	Figure No.	4Q
Description:	View at a concrete lined culvert southwest of the intersection of Cornhusker Highway and North 44th Street.				



Photo No.	36	Photo Dir.	E	Figure No.	4P
Description:	View at an upland trackside ditch, southeast of the intersection of North 44th Street and Cornhusker Highway. Dominant vegetation includes smooth brome (<i>Bromus inermis</i>), kochia (<i>Bassia scoparia</i>), and dandelion (<i>Taraxacum officinale</i>). This area is mowed and maintained.				



Photo No.	37	Photo Dir.	E	Figure No.	4P
Description: View at an upland area southeast of the intersection of North 44th Street and Cornhusker Highway. This area is mowed and maintained.					



Photo No.	38	Photo Dir.	W	Figure No.	4E
Description: View at an upland roadside northwest of the intersection of North 35th Street and Cornhusker Highway. This area is mowed and maintained.					



Photo No.	39	Photo Dir.	E	Figure No.	4E
Description: View at an upland area northeast of the intersection of North 35 th Street and Cornhusker Highway. This area is mowed and maintained.					



Photo No.	40	Photo Dir.	E	Figure No.	4E
Description: View at an upland area between the railroad track and Cornhusker Highway on the east side of Adams Street. This area is mowed and maintained.					



Photo No.	41	Photo Dir.	W	Figure No.	4E
Description:	View at an upland area between the railroad track and Cornhusker Highway on the west side of Adams Street. This area is mowed and maintained.				



Photo No.	42	Photo Dir.	W	Figure No.	4J
Description:	View at Wetland 9 a PEMA wetland in the trackside ditch north of the railroad track. This area is associated with SP 9.				



Photo No.	43	Photo Dir.	W	Figure No.	4J
Description: View at SP 10, an outpoint to Wetland 9.					



Photo No.	44	Photo Dir.	W	Figure No.	4J
Description: View at Wetland 12 (PEMA) located in swale. SP 12 was not taken in wetland as it was railroad property. However, due to the visual dominance of hydrophytic vegetation and primary wetland hydrology indicators this was determined to be a wetland.					



Photo No.	45	Photo Dir.	E	Figure No.	4J
Description:	View at an upland area south of the railroad track and west of North 33rd Street. Dominant vegetation included giant foxtail (<i>Setaria faberi</i>), kochia (<i>Bassia scoparia</i>), daisy fleabane (<i>Erigeron strigosus</i>), and dandelion (<i>Taraxacum officinale</i>).				



Photo No.	46	Photo Dir.	E	Figure No.	4C
Description:	View at an upland roadside northeast of the intersection of North 31st Street Circle and Cornhusker Highway. This area is mowed and maintained.				



Photo No.	47	Photo Dir.	W	Figure No.	4C
Description:	View at an upland area north of Cornhusker Highway and east of North 31st Street Circle. This area is mowed and maintained.				