May 6, 2024

Project No. LCLC-5233(4)
Control Number: 13294
RTSD B.U. Number: 5919
North 33rd and Cornhusker
Lincoln, Lancaster County, Nebraska

DRAFT ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to 42 U.S.C. 4332 (2)(c) and 23 CFR 771 and 774

To the U.S. Department of Transportation, Federal Highway Administration
By Nebraska Department of Transportation and City of Lincoln/Lancaster County Railroad Transportation Safety District

Project sponsor signature indicates verification that the content of this document accurately reflects the scope of this project. Federal Highway Administration (FHWA) signature gives approval to distribute this information for public and agency review and comment. Such approval does not commit to approve any future grant requests to fund the preferred alternative.

Roger Figard — For City of Lincoln/Lancaster County Railroad Transportation Safety District

May 6, 2024 — Date

Brandie Neemann — For Nebraska Department of Transportation

05/10/2024 — Date

For Federal Highway Administration

May 22, 2024 — Date

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NORTH 33RD & CORNHUSKER

Draft Environmental Assessment

Prepared For:

City of Lincoln/Lancaster County Railroad Transportation Safety District
Lincoln, Nebraska

RTSD B.U. Number: 5919
City Project Number: 702614
Control Number: 13294

May 2024

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List of Acronyms and Abbreviations

ACM	Asbestos Containing Materials
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
APP	Avian Protection Plan
BGEPA	Bald and Golden Eagle Protection Act
BMPs	Best Management Practices
BNSF	BNSF Railway
CAA	Clean Air Act
CEP	Cornhusker Highway Enhancement Plan
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CGL	Certified Local Government
EA	Environmental Assessment
EO	Executive Order
ESA	Environmental Study Area
FHWA	Federal Highway Administration
HMR	Hazardous Materials Review
I-80	Interstate 80
I-180	Interstate 180
LEP	Limited English Proficiency
LOS	Level of Service
LRTP	Long Range Transportation Plan
LTU	Lincoln Transportation and Utilities
LWCF	Land and Water Conservation Fund
MBTA	Migratory Bird Treaty Act
MPO	Metropolitan Planning Organization
MSATs	Mobile Source Air Toxics
MS4s	Municipal separate storm sewer systems
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NDHHS	Nebraska Department of Health and Human Services
NDNR	Nebraska Department of Natural Resources
NDOT	Nebraska Department of Transportation
NEPA	National Environmental Policy Act
NESCA	Nebraska Nongame and Endangered Species Conservation Act
NeSHPO	Nebraska State Historic Preservation Officer
NGPC	Nebraska Game and Parks Commission
NHPA	National Historic Preservation Act of 1966
NLEB	Northern Long-eared Bat

NPDES	National Pollutant Discharge Elimination System
NPS	National Parks Service
NRHP	National Register of Historic Places
NWP	Nationwide Permit
PCBs	Polychlorinated Biphenyls
PEL	Planning and Environmental Linkages study
PQS	Professionally Qualified Staff
RCRA	Resource Conservation and Recovery Act
RFFA	Reasonably Foreseeable Future Action
ROW	Right-of-way
RTSD	Railroad Transportation Safety District
SAP	SubArea Plan
SWPPP	Stormwater Pollution Prevention Plan
TDP	Transit Development Plan
TIP	Transportation Improvement Program
TMDLs	Total Maximum Daily Loads
WOUS	Waters of the United States
UNL	University of Nebraska - Lincoln
UPS	United Parcel Service
US-6	Cornhusker Highway (U.S. Highway 6)
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWAP	NDOT Unexpected Waste Action Plan

1.0 Introduction

The Federal Highway Administration (FHWA), in cooperation with the Nebraska Department of Transportation (NDOT) and the City of Lincoln/Lancaster County Railroad Transportation Safety District (RTSD), is acting as the lead federal agency regarding compliance with the National Environmental Policy Act (NEPA, 42 United States Code [U.S.C.] 4331 et seq) for the proposed North 33rd and Cornhusker project (the Project) located in the City of Lincoln in Lancaster County, Nebraska (Figure 1).

The proposed Project would utilize federal funding, which requires the proposed transportation project to comply with NEPA. The proposed Project has been included in the fiscally constrained Lincoln Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP).

NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. The NEPA process is documented in this Environmental Assessment (EA). The NEPA process:

- Identifies the purpose and need for the Project
- Identifies reasonable alternatives to satisfy the Project purpose and need
- Evaluates the social, economic, and environmental impacts of the reasonable alternative(s)
- Presents this information to the public and agencies for review and comment

1.1 What is the North 33rd and Cornhusker Project?

The BNSF Railway (BNSF) railroad corridor contains three at-grade crossings within northeast Lincoln between N. 27th Street and N. 48th Street. These crossings are located at N. 33rd Street south of Cornhusker Highway (U.S. Highway 6 (US-6)), Adams Street at approximately N. 35th Street, and N. 44th Street south of Cornhusker Highway (Figure 2). The RTSD is proposing to eliminate the at-grade crossings at N. 33rd Street and Adams Street by improving the roadway network in this area and constructing a grade separation across the BNSF railroad tracks at approximately N. 31st Street, south of Cornhusker Highway. The existing at-grade crossing at N. 44th Street would remain open to vehicle, bicycle, and pedestrian traffic and would be improved to comply with the Americans with Disabilities Act (ADA) requirements.

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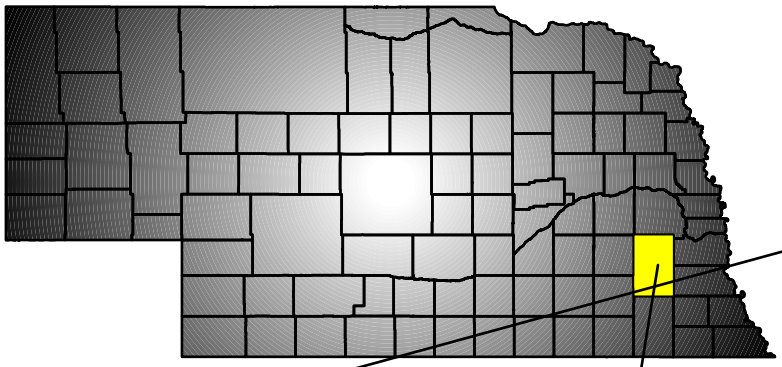
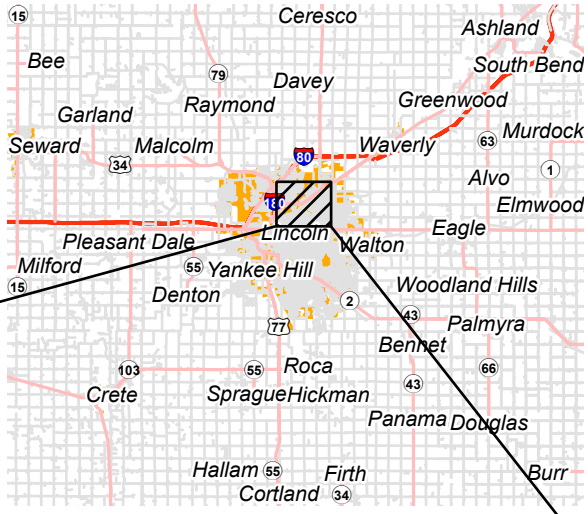
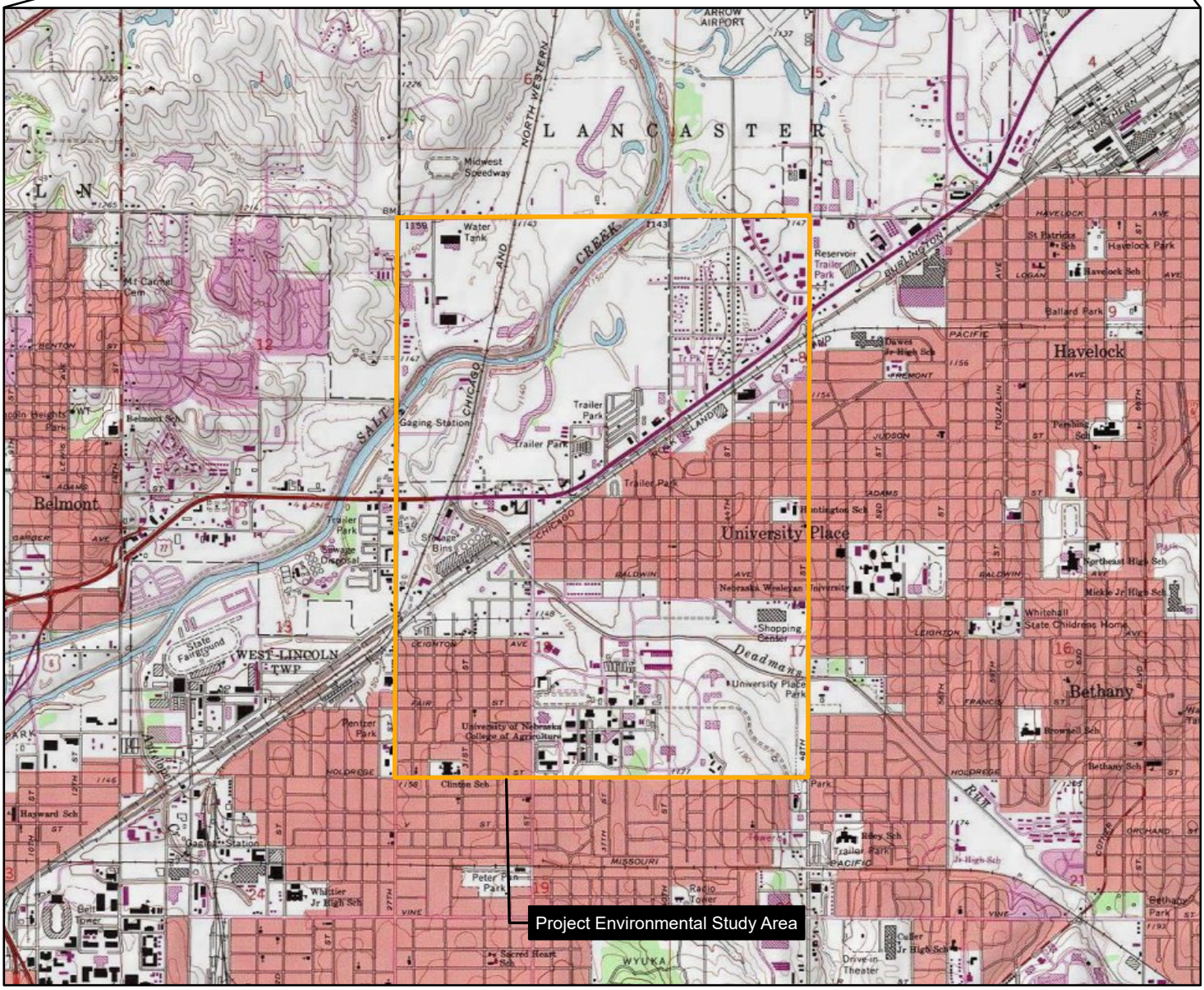


LANCASTER COUNTY





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N

0 0.1250.25 0.5 Miles
1 inch = 1 mile
Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI USA Topographic Map

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Project Location

FIGURE
1

Project No. 702614, RTSD BU 5919, CN 13294

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North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
At-Grade Railroad Crossing

FIGURE
2

Project No. 702614, RTSD BU 5919, CN 13294

1.2 What Other Studies and Recommendations have been Completed?

The RTSD, recognizing the safety, mobility, and congestion concerns caused by at-grade railroad crossings, undertook a Planning and Environmental Linkages (PEL) study (RTSD 2016), and the City of Lincoln developed a SubArea Plan (SAP) to identify potential future land uses in this area if a proposed transportation improvement were to be completed.

1.2.1 Planning and Environmental Linkages

The planning process began with a PEL study, which assessed existing conditions, determined multimodal transportation needs, developed and evaluated multimodal improvements, and engaged the public between N. 27th Street and N. 48th Street in north central Lincoln. The PEL provided a framework for the long-term implementation of a transportation improvement project as federal funding became available and served as a resource for additional alternative development and this EA.

The PEL established the following Project objectives:

- Eliminate or reduce vehicular, pedestrian, and bicyclist conflicts at the at-grade crossings with the BNSF Railway tracks between N. 27th and N. 48th Streets in northern Lincoln
- Provide multimodal (i.e., vehicles, pedestrians, bicyclists, transit) accommodations resulting in an efficient transportation system that has independent utility for short-term needs
- Provide multimodal accommodations that meet the City of Lincoln's long-range planning objectives for this area

These objectives were combined with the purpose and need to develop a set of screening parameters for each alternative.

The PEL is publicly available for review on the City of Lincoln's website: https://www.lincoln.ne.gov/City/Departments/RTSD/33rd-Cornhusker/Phases/PEL

1.2.2 SubArea Plan

Subsequent to the PEL, the City of Lincoln coordinated with the RTSD to develop the SAP (RTSD 2018) that provided a broader framework for land use, new development, and redevelopment in the area with transportation playing a key role for users. The SAP analyzed land uses, zoning, utilities and infrastructure, transportation routes (transit, rail, bicycles, pedestrians, and automobiles), market-supported economic development opportunities, parks and open space enhancement opportunities, aesthetics, urban design, and environmental conditions.

The SAP set forth land use and zoning, development and redevelopment, transportation, aesthetics and urban design, and sustainability recommendations for the subarea within northeast

Lincoln. Additionally, multiple roadway alignment alternatives were identified and evaluated. This Alternative Screening evaluation is included in Appendix B, and alternatives recommended through the SAP are discussed in more detail in Section 3.

The SAP is publicly available for review on the City of Lincoln's website: https://www.lincoln.ne.gov/City/Departments/RTSD/33rd-Cornhusker/Phases/Subarea-Plan

2.0 Purpose and Need

Cornhusker Highway, a critical east-west arterial in the roadway system, serves northern Lincoln, Nebraska. Adams Street, a minor arterial, provides a direct east-west connection from Cornhusker Highway at its at-grade crossing with the rail corridor to the eastern city limits. Together, the Adams Street/Cornhusker Highway corridor provides the only east-west streets connecting Interstate 80 (I-80) and Interstate 180 (I-180) to N. 84th Street in northern Lincoln between O Street and Superior Street. With the potential of trains blocking Adams Street, commuters between I-180 and N. 84th Street must travel north one mile or south two miles for another direct east-west connection between I-180 and N. 84th Street. The potential train blockage causes substantial delay in an urbanized area with some of Lincoln's largest employment and commercial centers.

North 27th Street, N. 33rd Street, and N. 48th Street function as primary north-south roadways in northern Lincoln. N. 27th Street crosses the rail corridor via a grade-separated viaduct, while N. 33rd Street crosses the rail corridor at-grade. N. 48th Street crosses the rail corridor via a grade-separated underpass. Currently, an average of 65 trains per day (63 freight and two passenger trains) operate on the rail corridor.

For transportation applications, traffic analysis is generally required for the anticipated opening year and the long-range planning horizon year (2040). Projections for 2040 refer to 2040 conditions without improvements throughout the Purpose and Need discussion.

2.1 What is the Purpose of the Project?

Improvements are intended to meet the following objectives for the area:

- Improve safety along the rail corridor between N. 27th and N. 48th Streets by eliminating or reducing the potential conflict points between trains and other transportation modes (vehicles, pedestrians, and bicyclists)
- Reduce delay for motorists, pedestrians, and bicyclists crossing the rail corridor, including rerouting of emergency response vehicles due to crossings blocked by trains
- Accommodate existing and future traffic (Year 2040) to reduce congestion along roadways crossing the rail corridor
- Improve mobility across the rail corridor in northern Lincoln, including public safety response times
- Improve multimodal connectivity in northern Lincoln for vehicles, pedestrians, bicyclists, and bus transit

2.2 Why is the Project Needed?

Transportation improvements in northern Lincoln are needed due to the high volume of vehicular and train traffic in the area along the BNSF rail corridor between N. 27th and N. 48th Streets. While N. 27th and N. 48th Streets provide grade-separated crossings of the rail corridor, there are three at-grade crossings within the 1.8-mile-long corridor: N. 33rd Street, Adams Street, and N. 44th Street. High volumes of vehicular and train traffic create undesirable conditions regarding safety, traffic congestion, traffic delay, and mobility within the Project Environmental Study Area (ESA), which is bounded by N. 27th, Superior, N. 48th, and Holdrege Streets (Figure 3). A full description and definition of the Project ESA is provided in Section 4.1. In addition, facilities for walking, cycling, and public transit do not meet existing, or future (2040) needs for the area. Based on the Needs Assessment Report for the PEL study. Since the completion of the PEL, the needs remain valid. The needs are supported as follows:

- **Safety:** Six fatalities and two disabling injuries have occurred in crashes between BNSF trains and motor vehicles or pedestrians over the last 30 years at the N. 33rd Street and Adams Street crossings (there have been no crashes at the N. 44th Street crossing). Based on 2015 information, an average of 65 trains travel the railroad tracks daily, and approximately 20,200 motor vehicles cross the railroad tracks at N. 33rd Street and Adams Street combined. The current daily railroad crossing exposure rating (daily trains multiplied by the number of vehicles per day) is approximately 1,313,000 potential conflicts between trains and motor vehicles for three crossings combined. NDOT – Rail and Public Transportation Division generally requires a minimum exposure rating of 50,000 for possible construction of a grade separation (underpass or overpass). The exposure rating is expected to increase, as rail freight traffic in the United States is projected to increase by 37 percent over the next 25 years (United States Department of Transportation [USDOT] 2015).
- **Traffic Congestion and Delay:** Traffic operations are inadequate, and delays are excessive due to passing trains that block N. 33rd Street, Adams Street, and N. 44th Street for approximately 15 percent of each day, or a cumulative 3.6 hours. Lincoln Fire and Rescue uses alternative routes to avoid delays to emergency vehicles. Alternative routes that cross the rail corridor in the Project ESA, primarily N. 27th Street, are becoming increasingly congested. Vehicular traffic volumes are projected to increase over the next 25 years (Lincoln/Lancaster County MPO Long Range Transportation Plan [LRTP]).
- **Mobility:** Established in 1870, the rail corridor extends northeast from Downtown Lincoln through the northern part of Lincoln. The rail corridor is crossed at-grade by N. 33rd Street and Adams Street (Urban Minor Arterials), and N. 44th Street (Local Residential Collector) along the 1.8-mile segment of the rail corridor between the N. 27th Street viaduct over the rail corridor and the N. 48th Street underpass. Demand for connectivity across the rail corridor is expected to increase over the next 25 years due to local and regional population and employment growth. In addition, should the pumps fail at either or both of the rail corridor underpasses on N. 48th Street or Havelock Avenue east of N. 48th Street, flooding

events would increase the traffic demand on other north-south roadways and associated railroad crossings in the area.

- **Lack of Bus, Bicycle, and Pedestrian Accommodations:** Facilities for and connectivity between alternative travel modes (bus, bicycle, and pedestrian) do not meet the existing or future (2040) community needs, as identified in the Lincoln/Lancaster County MPO's LRTP. The existing crossings at N. 33rd Street and Adams Street have no provisions for pedestrians or bicycles despite closer proximity to attractors such as the Murdock Trail, Fleming Fields, University of Nebraska – Lincoln (UNL) East Campus, and Nebraska Innovation Campus. The N. 44th Street at-grade crossing has a sidewalk on the east side of the street. StarTran currently has no bus routes that cross the rail corridor at grade on N. 33rd Street, Adams Street, or N. 44th Street due to the unpredictability of delays caused by trains.

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N

0 375 750 1,500 ft

1" = 1,500'

Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker

City of Lincoln
Lancaster County, Nebraska

Project Environmental Study Area

FIGURE 3

Project No. 702614, RTSD BU 5919, CN 13294

2.2.1 Safety

While collisions involving trains represent a small proportion of total crashes reported in the community, they usually result in a higher likelihood of a fatality or a serious injury. Table 2.1 below summarizes the railroad crossing train crash data for each at-grade crossing of the rail corridor within the Project ESA.

The North 33rd Street crossing has experienced the greatest frequency of total crashes (11) resulting in four fatalities and two injuries. Gates and flashing lights were in place in all but one of the crashes at the N. 33rd Street crossing with motorists driving around the gate arms. One of the N. 33rd Street crossing fatalities was the result of a pedestrian being struck by a train after the pedestrian walked around a lowered gate. The Adams Street crossing has experienced 10 total crashes with two fatalities and one injury. Two of the crashes at the Adams Street crossing involved vehicles driving around the lowered gate arms; six involved vehicles stopped on the tracks; and three involved vehicles that did not stop. No train-involved crashes have been reported at the N. 44th Street crossing.

Table 2.1 Railroad Crossing Crash Summary (1980-2020)

Crossing	Crashes	Injured	Fatalities
N. 33rd Street	11	2	4
Adams Street	10	1	2
N. 44th Street	0	0	0
Total	21	3	6

Source: City of Lincoln & RTSD 2022

Exposure Factor

A railroad crossing's exposure factor is one of the criteria typically considered when studying if a grade-separated viaduct is warranted. Exposure factor is the most common indicator of crash potential at an at-grade crossing. The exposure factor is calculated by multiplying the number of trains per day times the average number of vehicles per day sharing the crossing. In Nebraska, a minimum exposure factor of 50,000 is required for crossings to be considered for grade separations (Nebraska Administrative Code, Title 415, Chapter 5). Table 2.2 uses the 2019 data available from both the City of Lincoln and the USDOT to summarize the exposure factors for the N. 33rd Street and Adams Street crossings and estimates the 2040 exposure factor for each at-grade crossing within the rail corridor.

The exposure factor for all three of the at-grade crossings far exceeds the 50,000-exposure factor threshold for 2019 and 2040, and combined is among the highest of crossings currently under consideration for a grade-separation in the State (RTSD 2016).

Table 2.2 Current (2019) and Future (2040) No-Action Exposure Factors

Crossing	2019 Trains/ Day	2019 Vehicles/ Day	2019 Exposure Factor	2040 Trains/ Day	2040 Vehicles/ Day	2040 Exposure Factor
N. 33rd Street	65	10,510	683,150	88	9,300	818,400
Adams Street	65	10,573	687,245	88	12,700	1,117,600
N. 44th Street	65	1,830	118,950	88	1,600	140,800

Source: Olsson 2019a & RTSD 2016

2.2.2 Traffic Congestion and Delay

Major traffic generators within or immediately adjacent to the Project ESA include:

- The UNL-East Campus between N. 33rd Street and N. 48th Street, Huntington Avenue to Holdrege Street.
- The retail commercial center north of Cornhusker Highway between N. 27th Street and Deadmans Run.
- The retail commercial center along N. 27th Street north of Superior Street.
- The Hansen-Mueller grain elevator on the south side of Cornhusker Highway between State Fair Park Drive and Deadmans Run.
- The developing Nebraska Innovation Campus located on the north side of Salt Creek Roadway west of N. 27th Street.

Existing daily, a.m. peak, and p.m. peak traffic volumes were gathered from the City of Lincoln Transportation and Utilities Department as part of the 2016 PEL Study and updated in 2019 for the EA. Based on these existing volumes, the most heavily traveled roadways in the study area are Cornhusker Highway west of Adams Street, N. 27th Street from Theresa Street to the north study area boundary, and the entire length of Superior Street.

Figure 4, below, summarizes the ranges of traffic delay associated with each level of service (LOS) for signalized intersections within the study area. Figure 5 shows the results of the LOS analysis performed for the existing intersections.

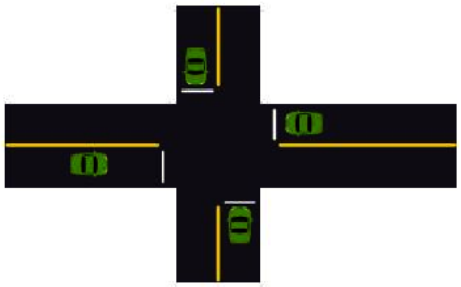
Based on the Lincoln/Lancaster County MPO's travel demand model, future (2040) volumes were forecasted for the Project ESA roadways and intersections. This data can be found in the 2019 Transportation Alternatives Traffic Analysis Report and are shown below on Figure 6. The results of this analysis indicate that between existing and 2040 No-Action conditions, 10 of the 14

intersections within the Project ESA would experience a decrease in LOS for the overall intersection and/or one or more intersection approaches.

Traffic Signal Level of Service

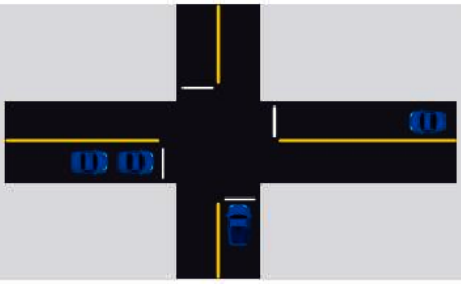
A

- Highly stable, free-flow condition with little or no congestion
- No vehicle waits longer than one signal indication
- Delay: <10 seconds/vehicle



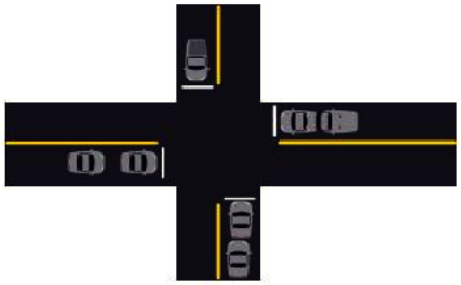
B

- Stable, free-flow condition with little congestion
- On rare occasions vehicles wait through more than one signal indication
- Delay 10 to 20 seconds/vehicle



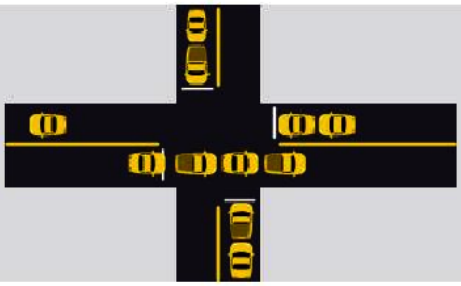
C

- Free-flow conditions with moderate congestion
- Intermittently vehicles wait through more than one signal indication and occasional backups may develop
- Delay: 20 to 35 seconds/vehicle



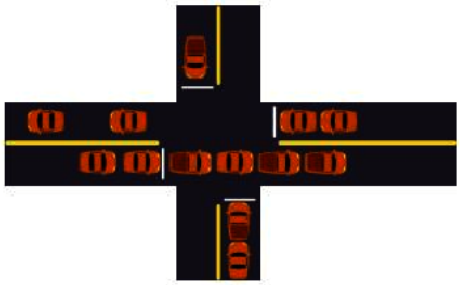
D

- Approaching unstable condition with increasing congestion but without excessive backups
- Level of service D has historically been regarded as a desirable design in urban areas
- Delay: 35 to 55 seconds/vehicle



E

- Unstable, congested condition
- Very long queues may create lengthy delays
- Delay: 55 to 80 seconds/vehicle



F

- Stop and go
- Backups from locations downstream restrict or prevent movement of vehicles out of approach creating "gridlock" condition
- Delay: >80 seconds/vehicle

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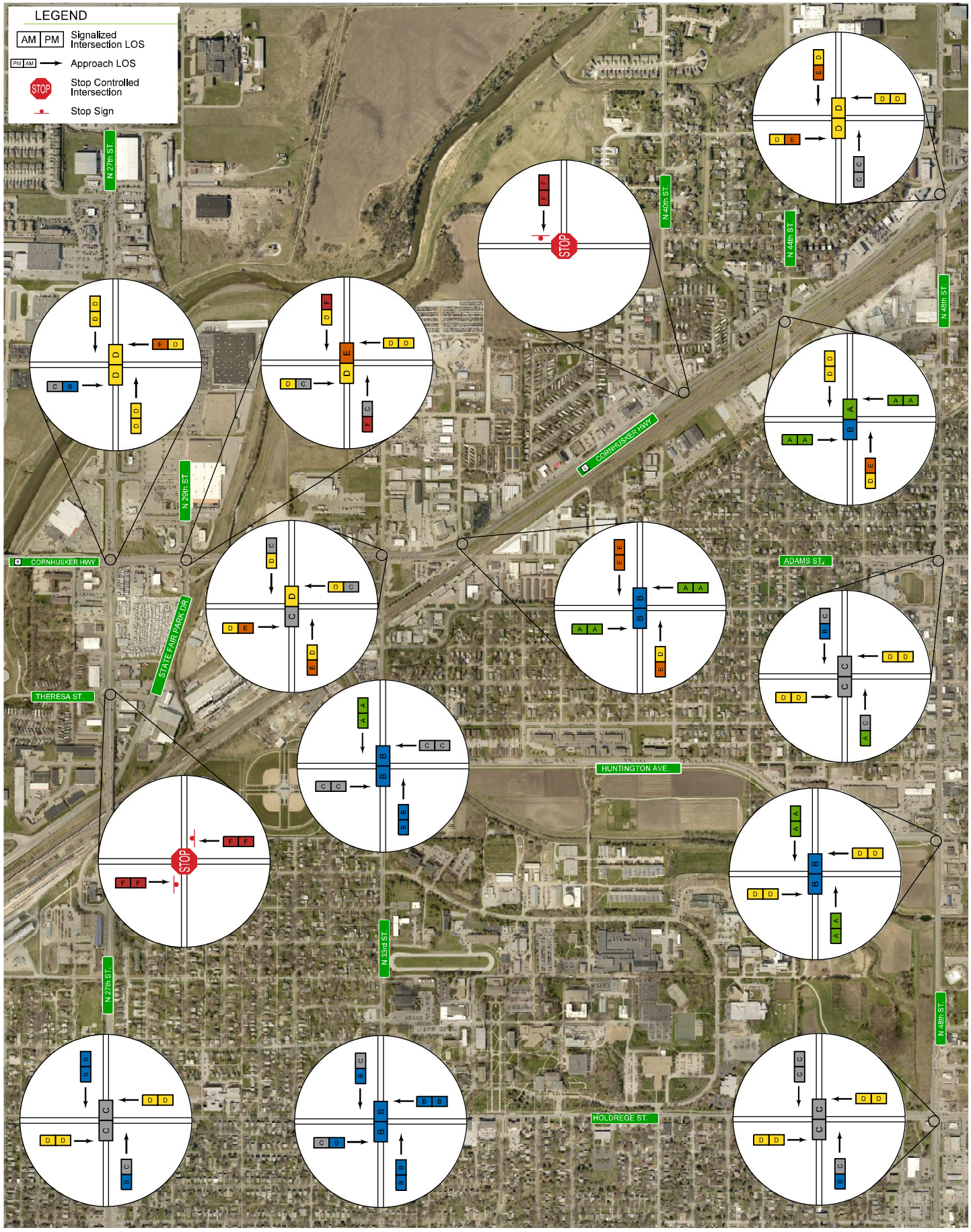
North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Traffic Delay Level Of Service

FIGURE
4

Project No. 702614, RTSD BU 5919, CN 13294



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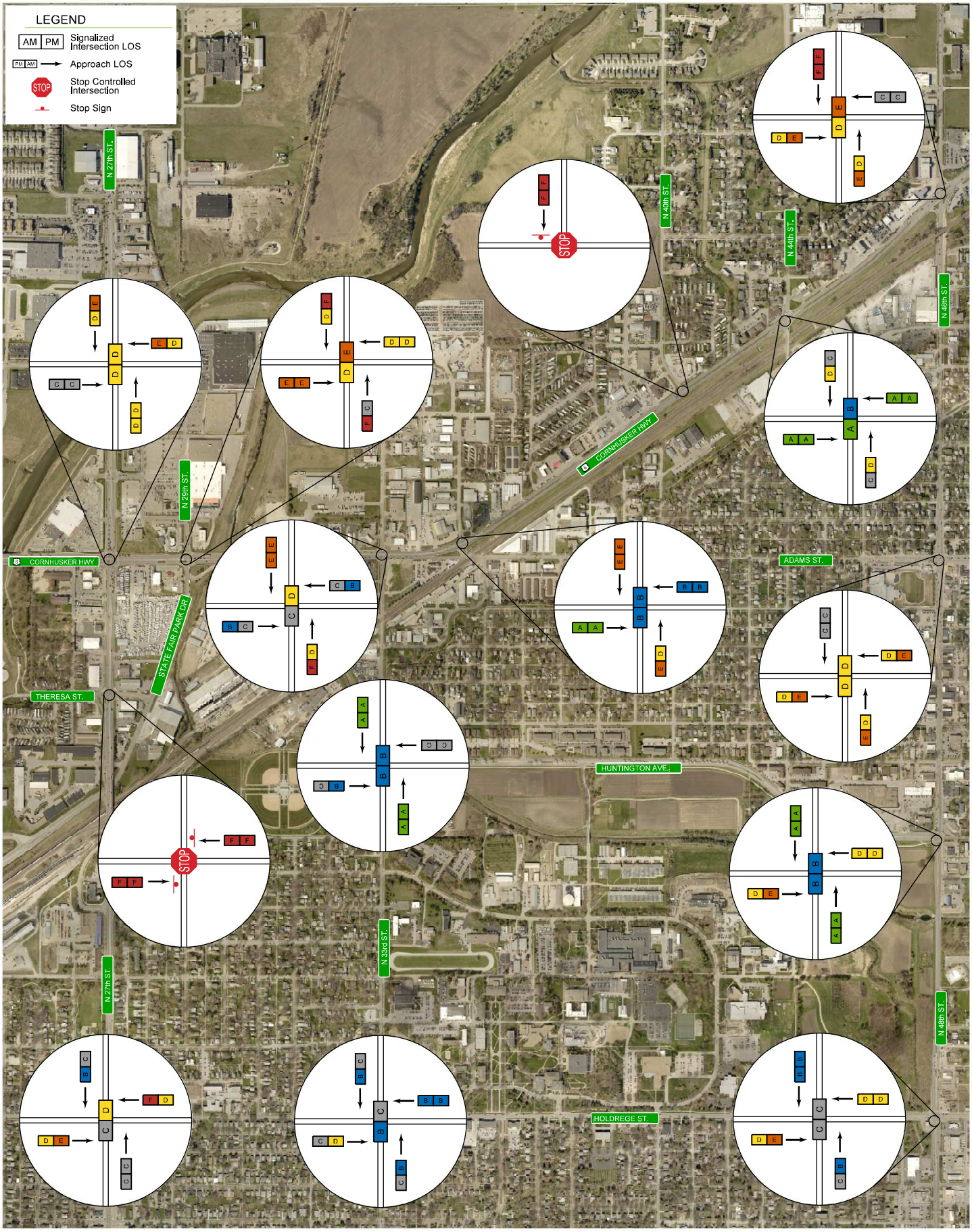
North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Existing Intersection Operations (LOS)

FIGURE 5

Project No. 702614, RTSD BU 5919, CN 13294



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North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Future (2040) No-Action
Intersection Operations (LOS)

FIGURE
6

Project No. 702614, RTSD BU 5919, CN 13294

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2.2.3 Mobility

In 2010, the RTSD installed supplementary safety measures at the three at-grade crossings within the Project ESA to implement a railroad quiet zone, which resulted in the silencing of locomotive horns. The Adams Street crossing has in-place wayside horns activated by an approaching train through the track circuitry. The N. 33rd Street and N. 44th Street crossings were equipped with raised medians to reduce the risk of motorists circumventing lowering or lowered gates as trains were approaching or passing through the crossing.

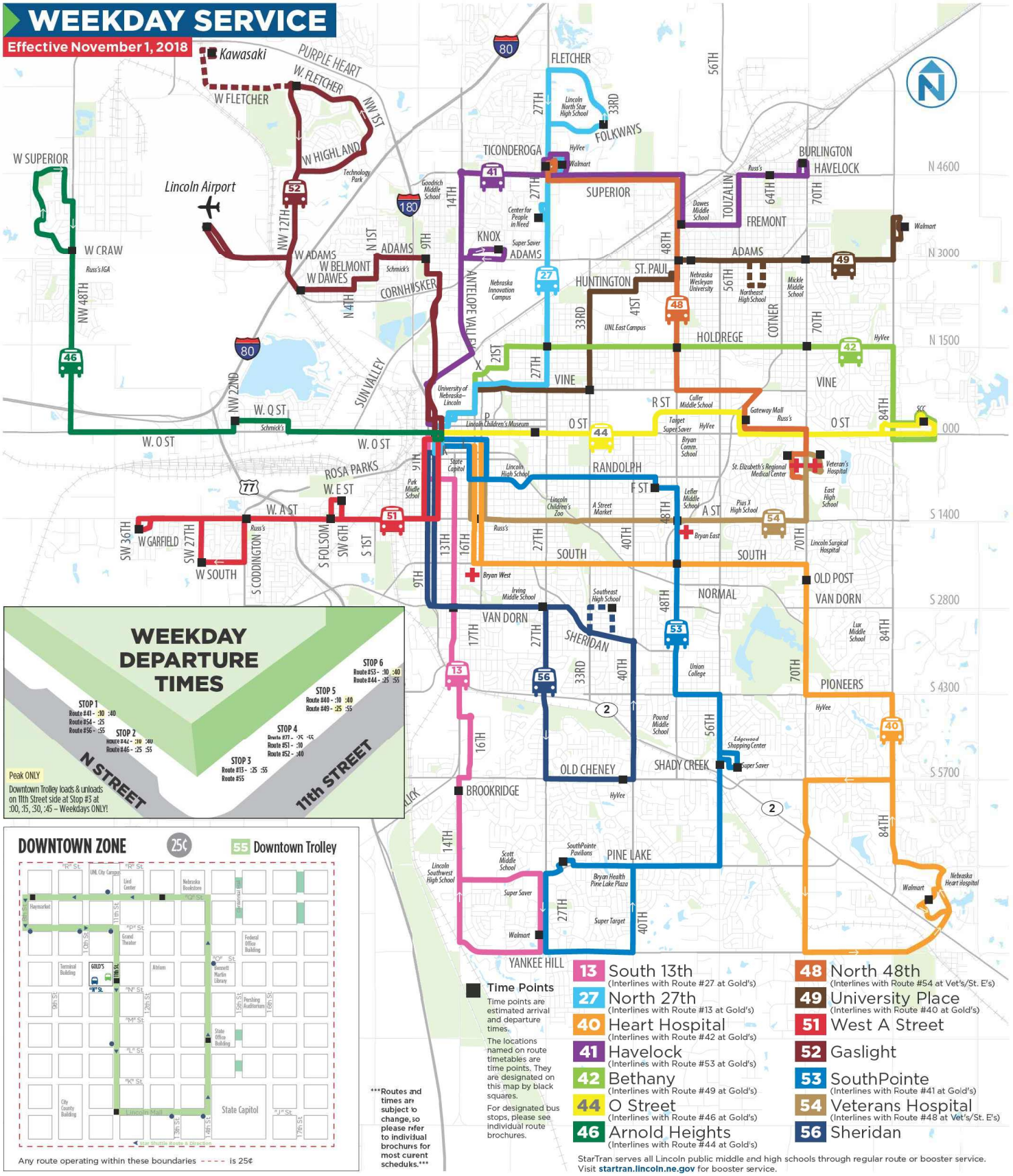
The frequency and duration of train blockages from when gates were lowering as a train was approaching to when the gates were lifting were reviewed in May 2015. From this review, it was estimated that over a typical 24-hour period, the crossings are blocked for approximately 3.6 hours of the day, or 15 percent of a 24-hour period. This level of delay likely causes many drivers to adjust their travel patterns and seek alternate routes. Alternative routes can become congested during train blockages which contribute to mobility limitations for all vehicular traffic along the railroad corridor in northeast Lincoln. Train blockages and delays limit the ability of public transportation such as StarTran and emergency services to serve areas adjacent to the crossings, adding to mobility and access limitations for populations located in northeast Lincoln. Currently there is no pedestrian or bicycle infrastructure (sidewalks, trails) at the railroad crossing on North 33rd Street or North 48th Street which limits alternative transportation mobility.

The RTSD has provided a steady source of local funding to leverage state and federal funds for reducing conflicts and improving the quality of life for residents traveling across railroad corridors in Lancaster County. City, County, and State leaders have aggressively pursued construction of grade separations and at-grade crossing closures along the rail corridor in northern Lincoln as depicted on Figure 2. The at-grade crossings of N. 33rd Street, Adams Street, and N. 44th Street are three of only four remaining at-grade crossings within the Lincoln city limits along the BNSF Creston-Lincoln Branch in the northern part of Lincoln. The remaining at-grade crossing is located at 70th Street, south of Cornhusker Highway.

2.2.4 Alternative Travel Modes

StarTran provides regular bus service on several routes within or immediately adjacent to the Project ESA. Route 41, which is the only route that crosses the rail corridor in the area, uses the N. 48th Street underpass and the N. 27th Street overpass to avoid unpredictable travel times and delays due to train blockages at the N. 33rd Street and Adams Street railroad crossings. StarTran has completed and adopted a Transit Development Plan (TDP) which evaluated alternatives for improving service and operations on the system. The preliminary results showed a relatively high “propensity” for transit in the residential area southeast of N. 33rd Street and Adams Street. One of the alternate plans evaluated included service along Adams Street between N. 20th Street and N. 84th Street. That route plan was not selected due to the uncertainty of travel times crossing the BNSF rail corridor. The StarTran routes shown in Figure 7 were implemented in May 2021.

The City of Lincoln has an extensive trails and sidewalk network, including the northern portion of the Project ESA. The LRTP identifies several trails projects within the Project ESA to fill critical gaps in the trail and sidewalk system within the Project ESA (Figure 8).



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NEBRASKA
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DEPARTMENT OF TRANSPORTATION

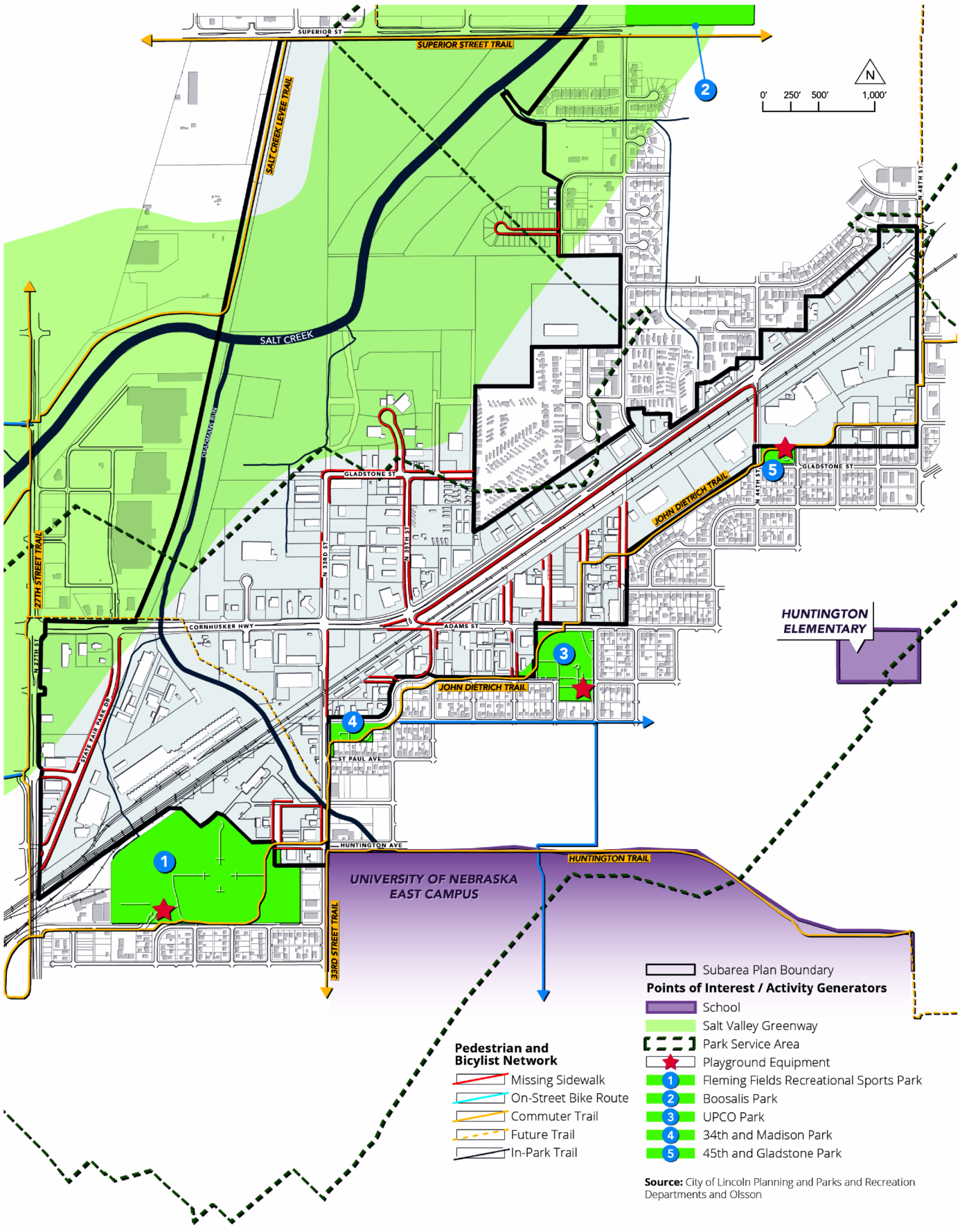
N

Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
2021 StarTran Routes

FIGURE
7

Project No. 702614, RTSD BU 5919, CN 13294



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NEBRASKA
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DEPARTMENT OF TRANSPORTATION

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Original Published Resolution
WGS 1984 ARC System Zone 11

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Pedestrian and Bicycle Network

FIGURE
8

Project No. 702614, RTSD BU 5919, CN 13294

3.0 Development of Alternatives

This section describes the process used to develop and screen alternatives to address the purpose and need for the Project.

3.1 What is the No-Action Alternative and Why is it Included?

In accordance with NEPA and Council on Environmental Quality (CEQ) regulations (40 CFR Part 1502.14), the No-Action Alternative is included in the analysis as the baseline against which the alternatives may be compared.

The No-Action Alternative would essentially leave the transportation system as it currently exists and would not provide any major improvements to address the purpose and need; however, the No-Action Alternative would include safety and maintenance activities that would be required to sustain an operational transportation system. The No-Action Alternative does not meet the purpose and need.

3.2 What Alternatives were Recommended from the PEL?

The PEL alternative development process began with the identification of 10 alternatives: nine build alternatives and the No-Action Alternative. Each build alternative included a grade-separated crossing of the rail corridor, as well as closure of the at-grade crossings of N. 33rd Street and Adams Street with the rail corridor. A full description of the PEL alternatives development can be found in Section 4.2 of the PEL (RTSD 2016). The PEL recommended two build alternatives be carried forward for future consideration: Alternative C and Alternative C3.

3.3 What Alternatives were Recommended from the SAP?

Subsequent to the PEL, the RTSD and City of Lincoln undertook the SAP process. The intent of the SAP was to provide a broader framework for land use, new development, and redevelopment in the area.

A total of 29 transportation alternatives, including Alternative C and Alternative C3 from the PEL, were developed in coordination with the SAP. These alternatives were developed by the project team (City of Lincoln, RTSD, Advisory Group, and public) to investigate whether additional transportation alternatives existed that could meet the Project purpose and need and align with the SAP and LRTP. The public involvement to recommend alternatives is also included in Section 5. The LRTP was updated in 2017, after the PEL, and included the extension of Salt Creek Roadway from State Fair Park Drive to Cornhusker Highway as a Candidate Roadway Capital Project (Lincoln MPO 2017). This extension of Salt Creek Roadway intersects the Project area

and could be impacted or precluded from construction if alternatives do not accommodate for this planned future extension.

Appendix B presents the Alternatives Screening, Floodplain Summary, and Environmental Red Flag Review. As a result of this review, 22 of the 29 alternatives were dismissed from consideration as part of the SAP process, and seven alternatives were retained for consideration in this EA. These seven alternatives are shown in Figures 9a to 9g, below.

Upon completion of the Draft SAP, the City of Lincoln requested, with concurrence from the RTSD, only one alternative should be shown in the Final SAP. The City of Lincoln determined that Alternative 1D would be shown for illustrative purposes, although any of the seven alternatives could be implemented with the SAP.

It should be noted that one of the seven alternatives retained for additional analysis is Alternative Modified PEL C, described in Section 3.2 of this EA.

The seven alternatives retained for additional analysis were evaluated through a three-tiered iterative screening process described below in Section 3.4.

Figure 9a. Alternative 1B

Alternative 1B would include the expansion of Cornhusker Highway as well as an elevated structure along a realigned N. 33rd Street to eliminate the at-grade railroad crossings at N. 33rd Street and Adams Street. Alternative 1B would eliminate the at-grade railroad crossing at N. 44th Street and would provide access for traffic to get to Cornhusker Highway via a new Fremont Street connection to N. 48th Street. A pedestrian bridge would be constructed at the N. 44th Street intersection to allow pedestrian access over Cornhusker Highway and the railroad tracks.

Cornhusker Highway would be expanded to provide three lanes of traffic in both directions from Deadmans Run to N. 33rd Street. East of N. 33rd Street, Cornhusker Highway transitions from three lanes to two lanes in both directions to match the existing roadway section near N. 37th Street. Access along Cornhusker Highway would be limited at N. 29th, N. 33rd, and N. 37th Streets and given full access at the new N. 31st and N. 35th Street intersections for safety and mobility along the corridor.

N. 33rd Street would be reconstructed north of Huntington Avenue on a new alignment to bridge over the railroad tracks and connect to Cornhusker Highway near N. 31st Street at a full-access intersection. Existing N. 33rd Street would be realigned next to the new N. 33rd Street bridge between Saint Paul Avenue and Baldwin Avenue to provide circulation for the neighborhood.

Alternative 1B would close off access of Adams Street to Cornhusker Highway, turning Adams Street into a local road. Access to the existing businesses on and south of Adams Street would be maintained on the existing roadway network.

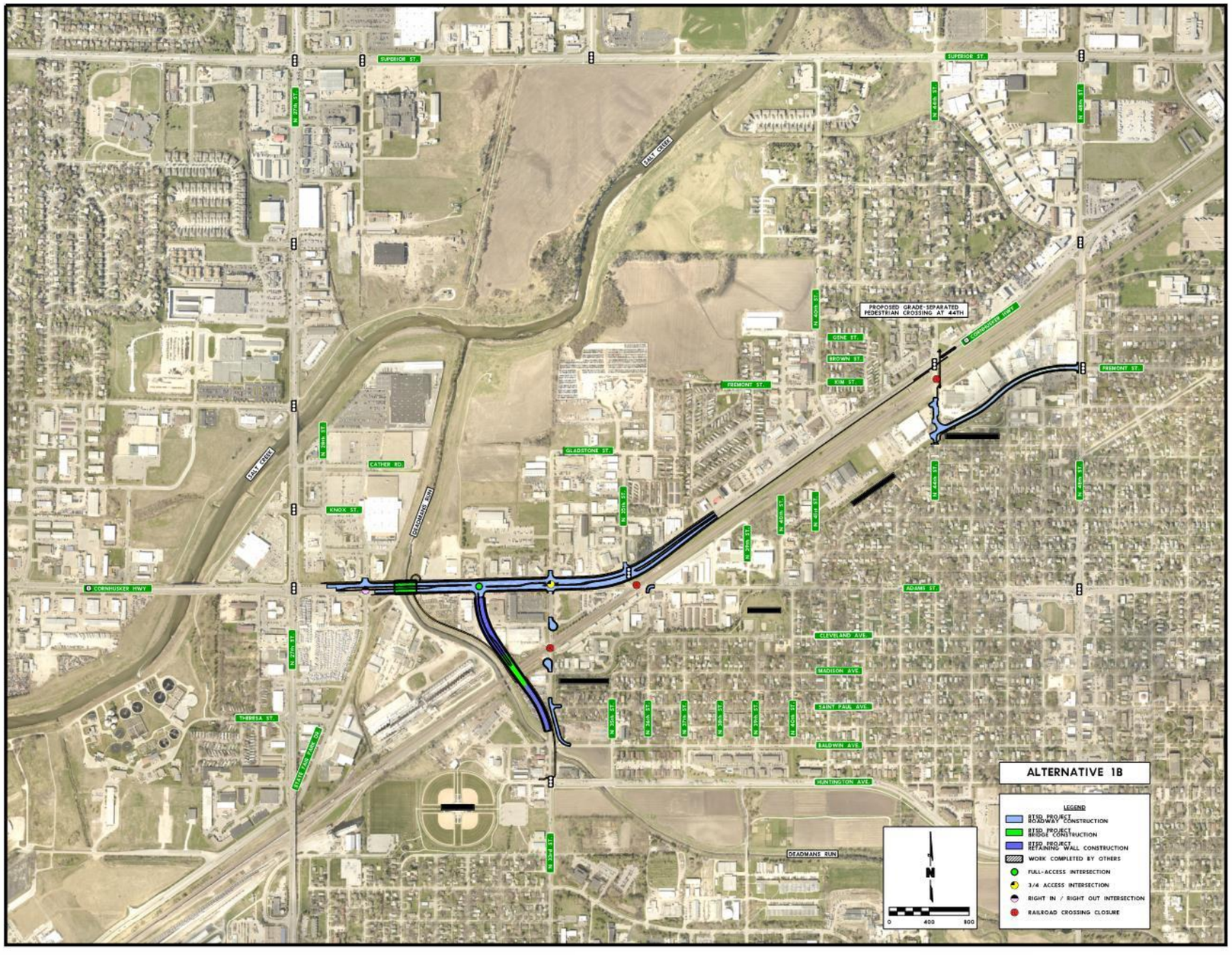


Figure 9b. Alternative 1D

Alternative 1D would include the expansion of Cornhusker Highway as well as elevated structures along a realigned N. 33rd and Adams Streets to eliminate the at-grade railroad crossings along those streets. Alternative 1D would eliminate the at-grade railroad crossing at N. 44th Street and provide access for traffic to get to Cornhusker Highway via a new Fremont Street connection to N. 48th Street. A pedestrian bridge would be constructed at the N. 44th Street intersection to allow pedestrian access over Cornhusker Highway and the railroad tracks.

Cornhusker Highway would be expanded to provide three lanes of traffic in both directions from Deadmans Run to N. 40th Street. East of N. 40th Street, Cornhusker Highway transitions from three lanes to two lanes in both directions to match the existing roadway section near N. 44th Street. Access along Cornhusker Highway would be limited at N. 29th, N. 33rd, and N. 37th Streets and given full access at the new N. 31st, N. 35th, and N. 40th Street intersections for safety and mobility along the corridor.

N. 33rd Street would be reconstructed north of Huntington Avenue on a new alignment to bridge over the railroad tracks and connect back down to Cornhusker Highway near N. 31st Street at a full-access intersection. Existing N. 33rd Street would be realigned next to the new N. 33rd Street bridge between Saint Paul Avenue and Baldwin Avenue to provide circulation for the neighborhood.

Adams Street would be reconstructed on a new alignment to bridge over Cornhusker Highway and the railroad tracks and loop back down to connect with Cornhusker Highway at a new N. 40th Street intersection.

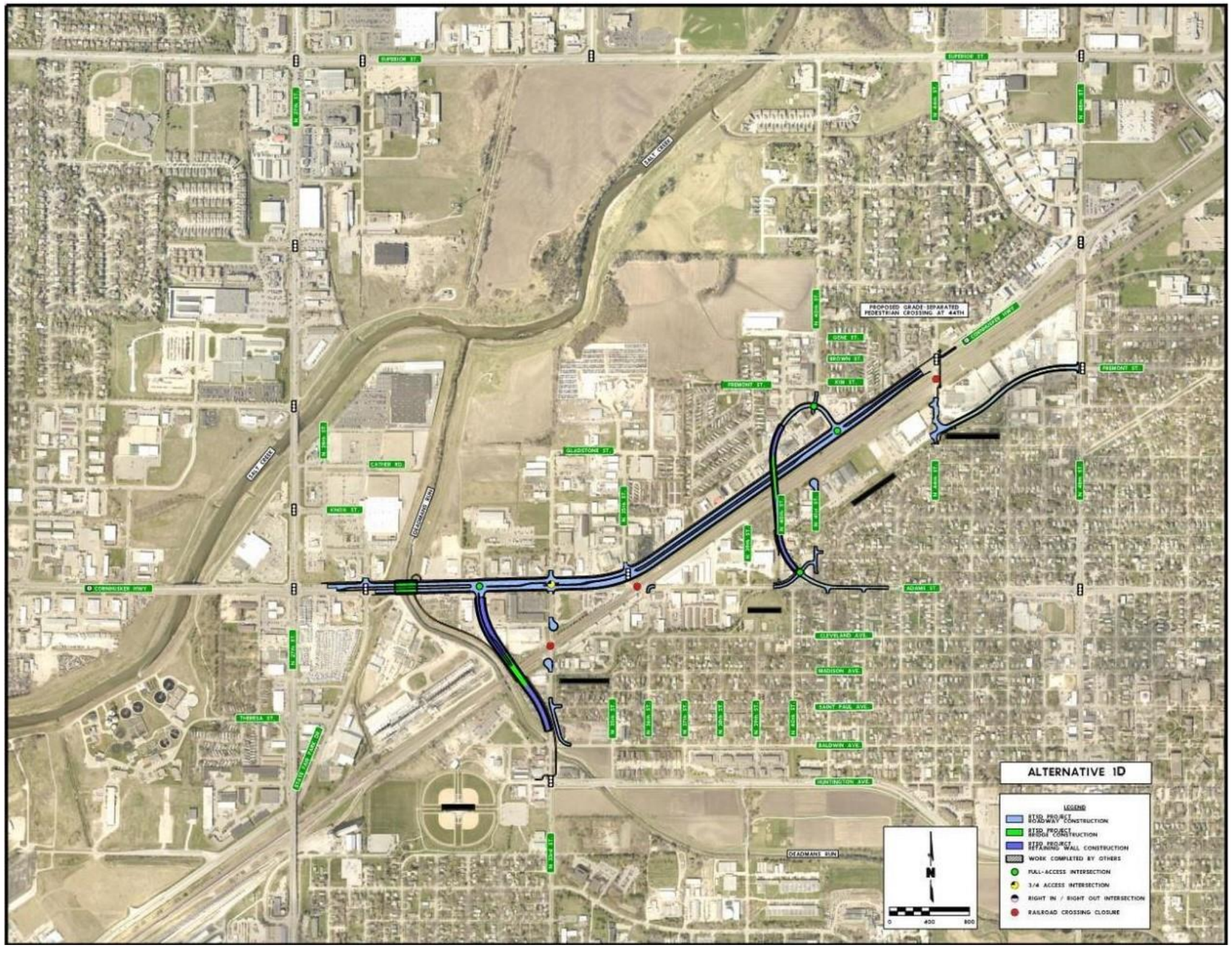


Figure 9c. Alternative 1E

Alternative 1E would include the expansion of Cornhusker Highway as well as elevated structures along a realigned N. 33rd and Adams Streets to eliminate the at-grade railroad crossings along those streets. Alternative 1E would eliminate the at-grade railroad crossing at N. 44th Street and provides access for traffic to get to Cornhusker Highway via a new Fremont Street connection to N. 48th Street. A pedestrian bridge would be constructed at the N. 44th Street intersection to allow pedestrian access over Cornhusker Highway and the railroad tracks.

Cornhusker Highway would be expanded to provide three lanes of traffic in both directions from Deadmans Run to N. 33rd Street. East of N. 33rd Street, Cornhusker Highway transitions from three lanes to two lanes in both directions to match the existing roadway section near N. 37th Street. Access along Cornhusker Highway would be limited at N. 29th, N. 33rd, N. 35th and N. 37th Streets and given full access at the new N. 31st Street intersection for safety and mobility along the corridor.

N. 33rd Street would be reconstructed north of Huntington Avenue on a new alignment to bridge over the railroad tracks and connect back down to Cornhusker Highway near N. 31st Street at a full-access intersection. North of that intersection, N. 33rd Street would be constructed on a new alignment to connect to a new intersection with Adams Street on the east side of Deadmans Run. Existing N. 33rd Street is realigned next to the new N. 33rd Street bridge between Saint Paul Avenue and Baldwin Avenue to provide circulation for the neighborhood.

Adams Street would be reconstructed east of the intersection with N. 33rd Street on a new alignment to bridge over Cornhusker Highway and the railroad tracks to connect back down to existing Adams Street near N. 41st Street. Local access would be maintained to the existing businesses along Adams Street via a new frontage road a block north which connects back under the Adams Street bridge to existing Adams Street.

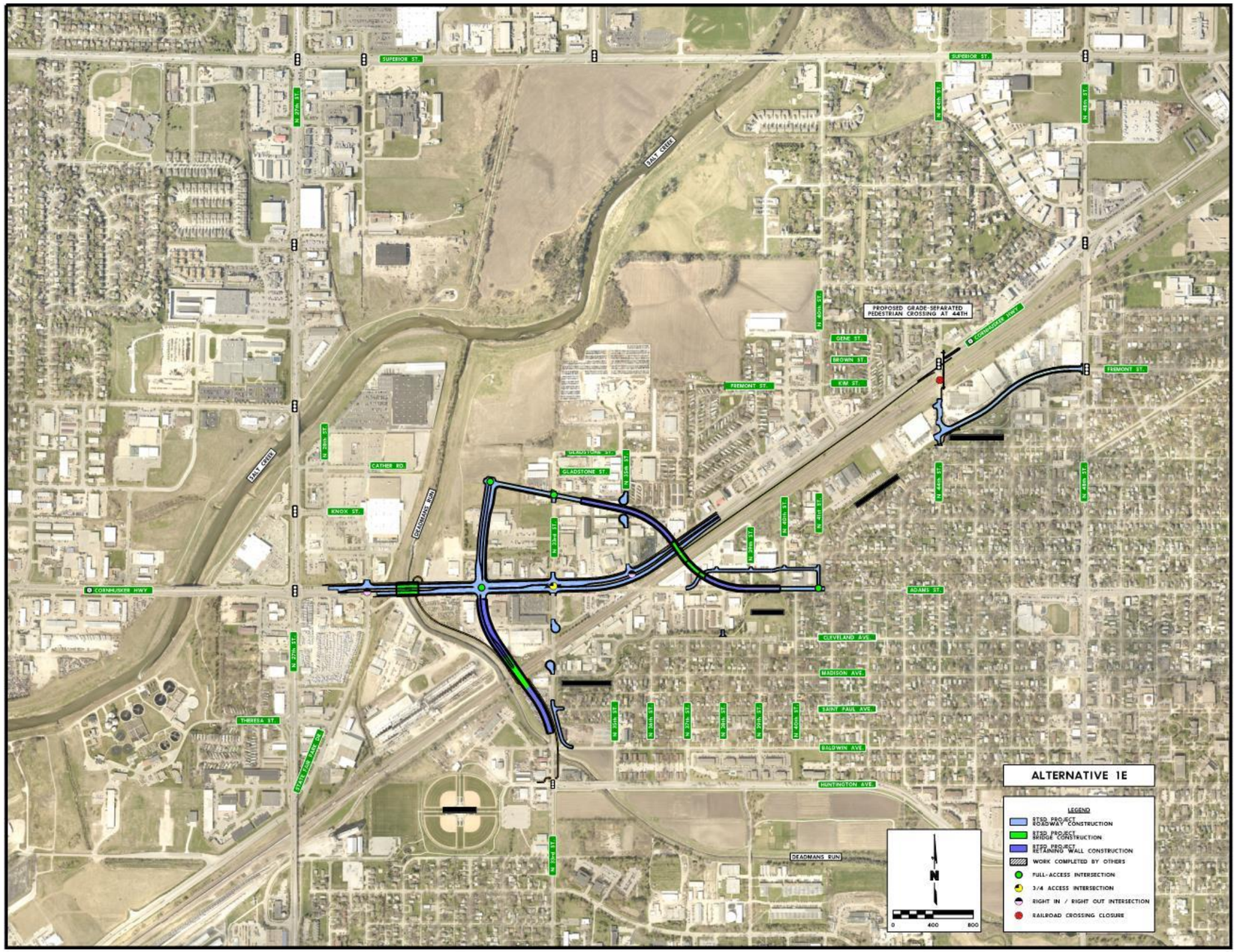


Figure 9d. Alternative 12B

Alternative 12B would include the expansion and realignment of Cornhusker Highway as well as elevated structures along N. 33rd Street and realigned Adams Street to eliminate the at-grade railroad crossings along those streets. Alternative 12B would eliminate the at-grade railroad crossing at N. 44th Street and provide access for traffic to get to Cornhusker Highway via a new Fremont Street connection to N. 48th Street.

Cornhusker Highway would be expanded to provide three lanes of traffic in both directions from Deadmans Run to N. 48th Street with bypass lanes below the new elevated intersection at Adams Street. Cornhusker would be realigned from Deadmans Run to N. 35th Street, and intersections would be constructed at N. 31st and N. 34th Streets for access back to existing Cornhusker Highway for local business to get onto the N. 33rd Street overpass. Access along Cornhusker Highway would be limited at N. 29th, N. 31st, N. 34th, N. 37th and N. 40th Streets and given full access at the N. 35th and N. 44th Street intersections for safety and mobility along the corridor.

Adams Street would be reconstructed on a new alignment to bridge over Cornhusker Highway and the railroad tracks and loop back down to connect with Cornhusker Highway at a new N. 40th Street intersection.

N. 33rd Street would be reconstructed beginning at Huntington Avenue and heading north on its existing alignment to bridge over the railroad tracks and Cornhusker Highway to connect back down to existing N. 33rd Street near Gladstone Street. A new connection would be constructed west along Gladstone Street to cross Deadmans Run over to Cather Street as well as a new connection south to existing Cornhusker Highway and N. 33rd Street below the overpass structure.

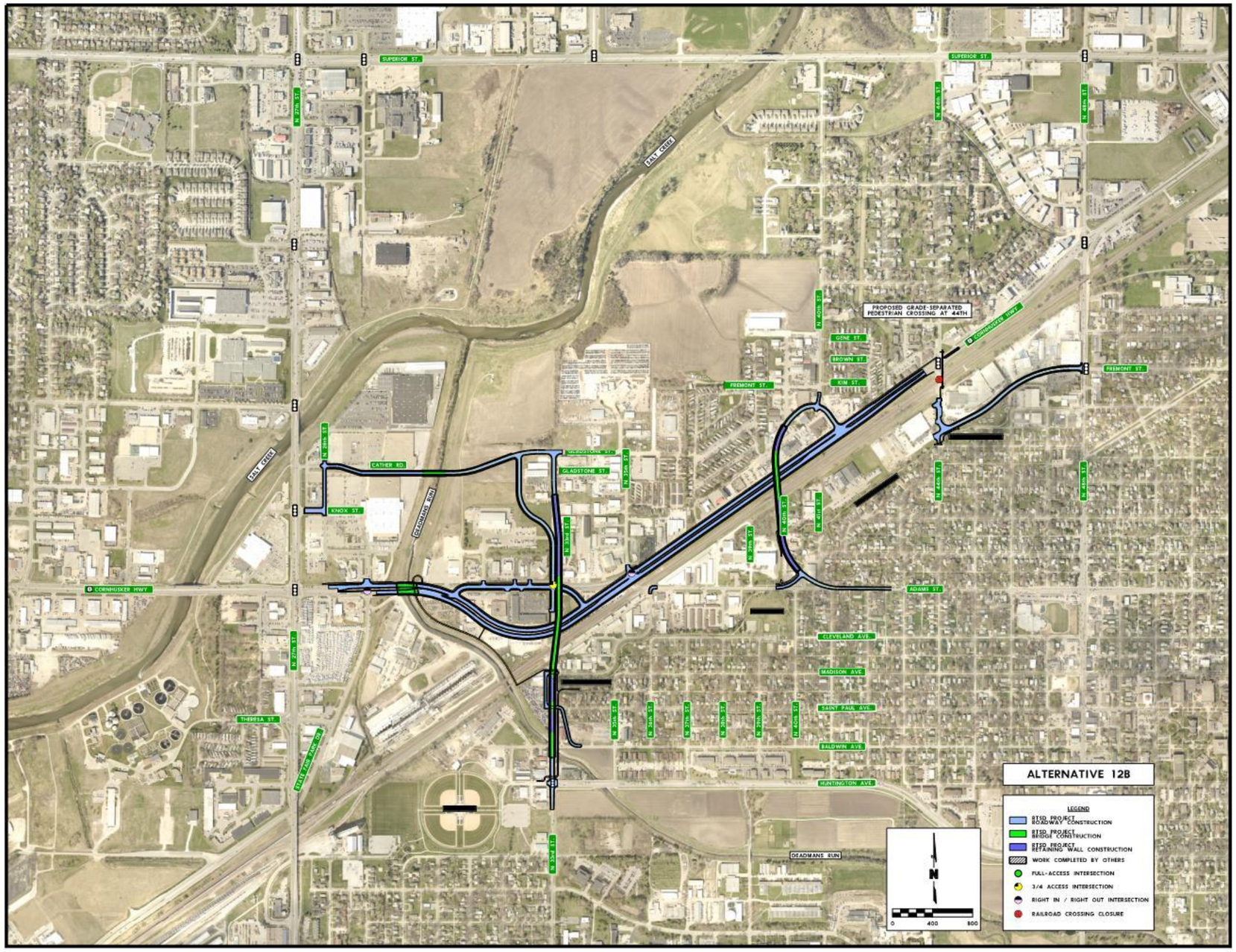


Figure 9e. Alternative 14

Alternative 14 would include the expansion and realignment of Cornhusker Highway as well as elevated structures along N. 33rd Street and Adams Street to eliminate the at-grade railroad crossings along those streets. Alternative 14 would eliminate the at-grade railroad crossing at N. 44th Street and provide access for traffic to get to Cornhusker Highway via a new Fremont Street connection to N. 48th Street. A pedestrian bridge would be constructed at the N. 44th Street intersection to allow access for pedestrians over Cornhusker Highway and the railroad tracks.

Cornhusker Highway would be expanded to provide three lanes of traffic in both directions from Deadmans Run to N. 35th Street. Cornhusker would be realigned from Deadmans Run to N. 35th Street and intersections would be constructed at N. 31st and N. 33rd Streets for access to existing Cornhusker Highway and to access north onto the N. 33rd Street overpass. Access along Cornhusker Highway would be limited at N. 29th and N. 33rd Streets and with full access at N. 31st and N. 35th Street intersections for safety and mobility along the corridor.

N. 33rd Street would be reconstructed beginning at Huntington Avenue and north on its existing alignment to bridge over the railroad tracks and Cornhusker Highway and connect back down to existing N. 33rd Street near Gladstone Street. A new connection would be constructed west along Gladstone to cross Deadmans Run over to Cather Street as well as a new connection south to existing Cornhusker Highway and N. 33rd Street below the overpass structure.

State Fair Park Drive would be reconstructed on a new alignment beginning below the N. 27th Street overpass and extending over Deadmans Run to Cornhusker Highway at N. 31st Street.

Adams Street would be reconstructed on existing alignment to bridge over the railroad tracks to connect back down to existing Cornhusker Highway near N. 33rd Street beneath the N. 33rd Street overpass. Local access would be maintained to the existing businesses along Adams Street via a new frontage road a block north which connects back under the Adams Street bridge to existing Adams Street.

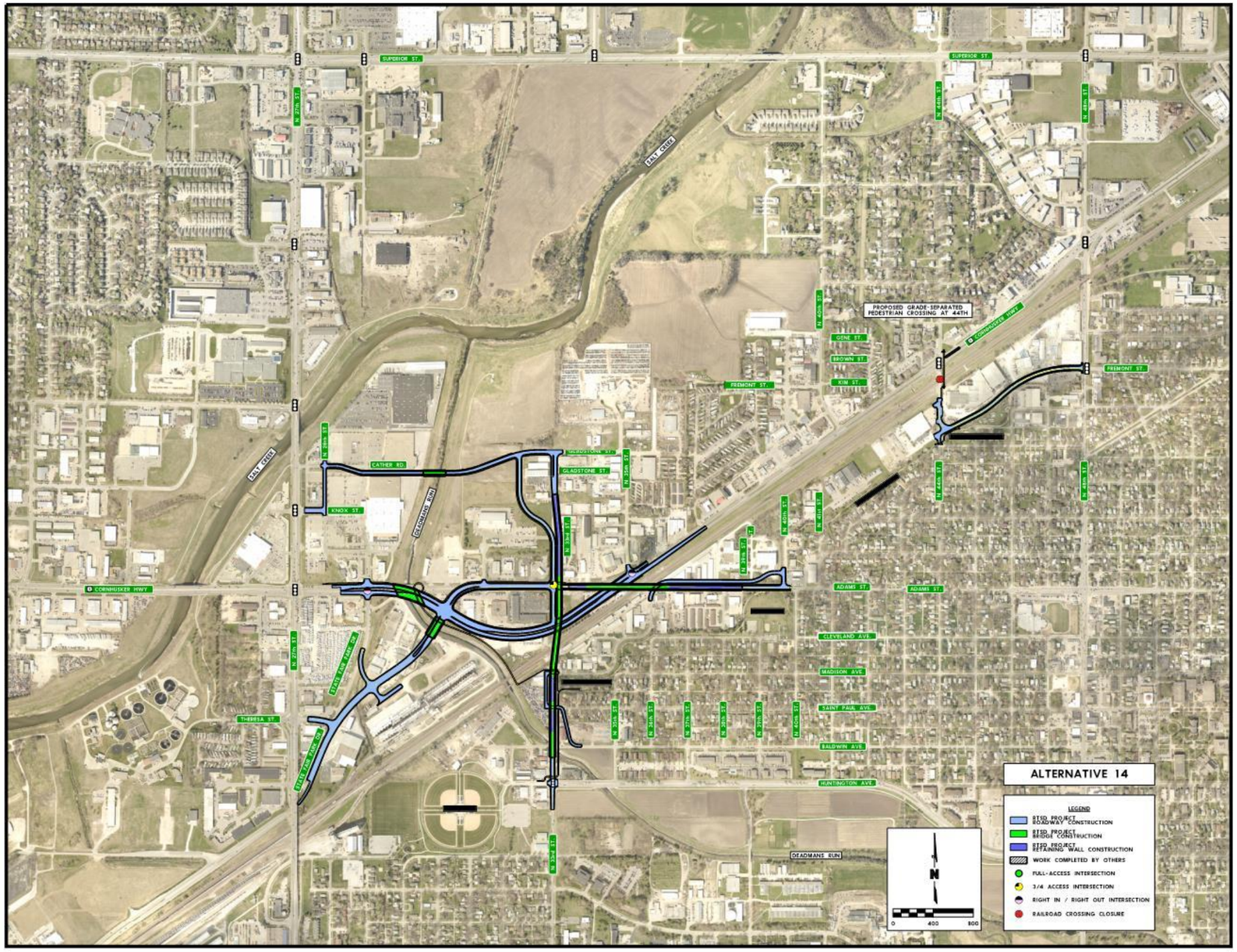


Figure 9f. Alternative 15A

Alternative 15A would include elevated structures along the realigned Cornhusker Highway, N. 33rd Street, and Adams Street to eliminate the at-grade railroad crossings at N. 33rd Street and Adams Street. Alternative 15A would eliminate the at-grade railroad crossing at N. 44th Street and provide access for traffic to get to Cornhusker Highway via a new Fremont Street connection to N. 48th Street. A pedestrian bridge would be constructed at the N. 44th Street intersection to allow pedestrian access over Cornhusker Highway and the railroad tracks.

N. 33rd Street would be reconstructed beginning with a roundabout at Huntington Avenue and extending north on a new alignment to bridge over the railroad tracks to connect with Cornhusker Highway at an elevated intersection. Cornhusker Highway and N. 33rd Street traffic could then turn northeast to connect back down to existing Cornhusker Highway near N. 37th Street. Existing Cornhusker Highway between N. 31st and N. 35th Streets would require local access from the intersection at N. 31st Street and Cornhusker Highway.

Adams Street would be reconstructed west of N. 40th Street on a new alignment to bridge over the railroad tracks to connect to Cornhusker Highway at an elevated intersection. Local access would be maintained to the existing businesses along Adams Street via a new frontage road a block north which would connect back under the Adams Street bridge to existing Adams Street.

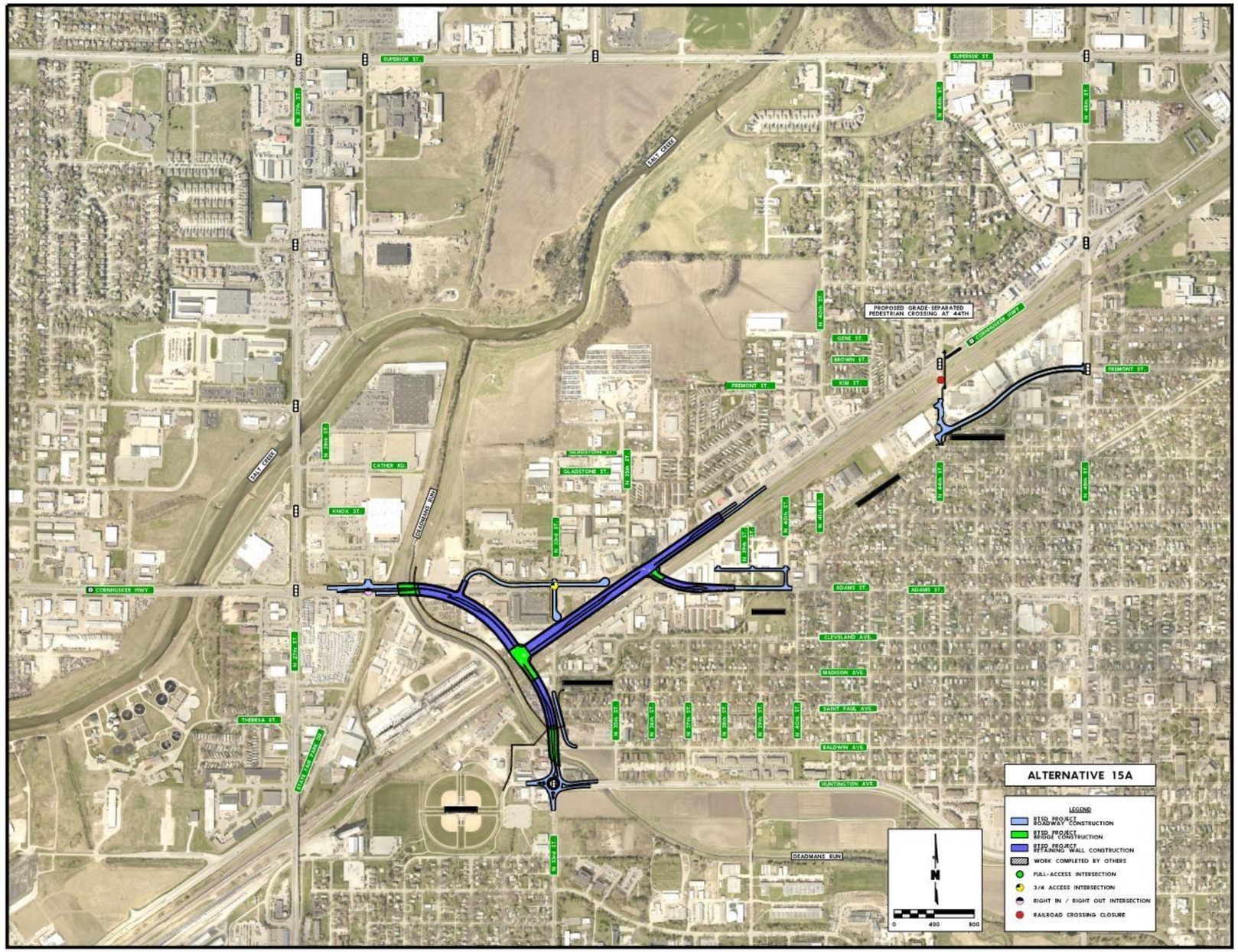


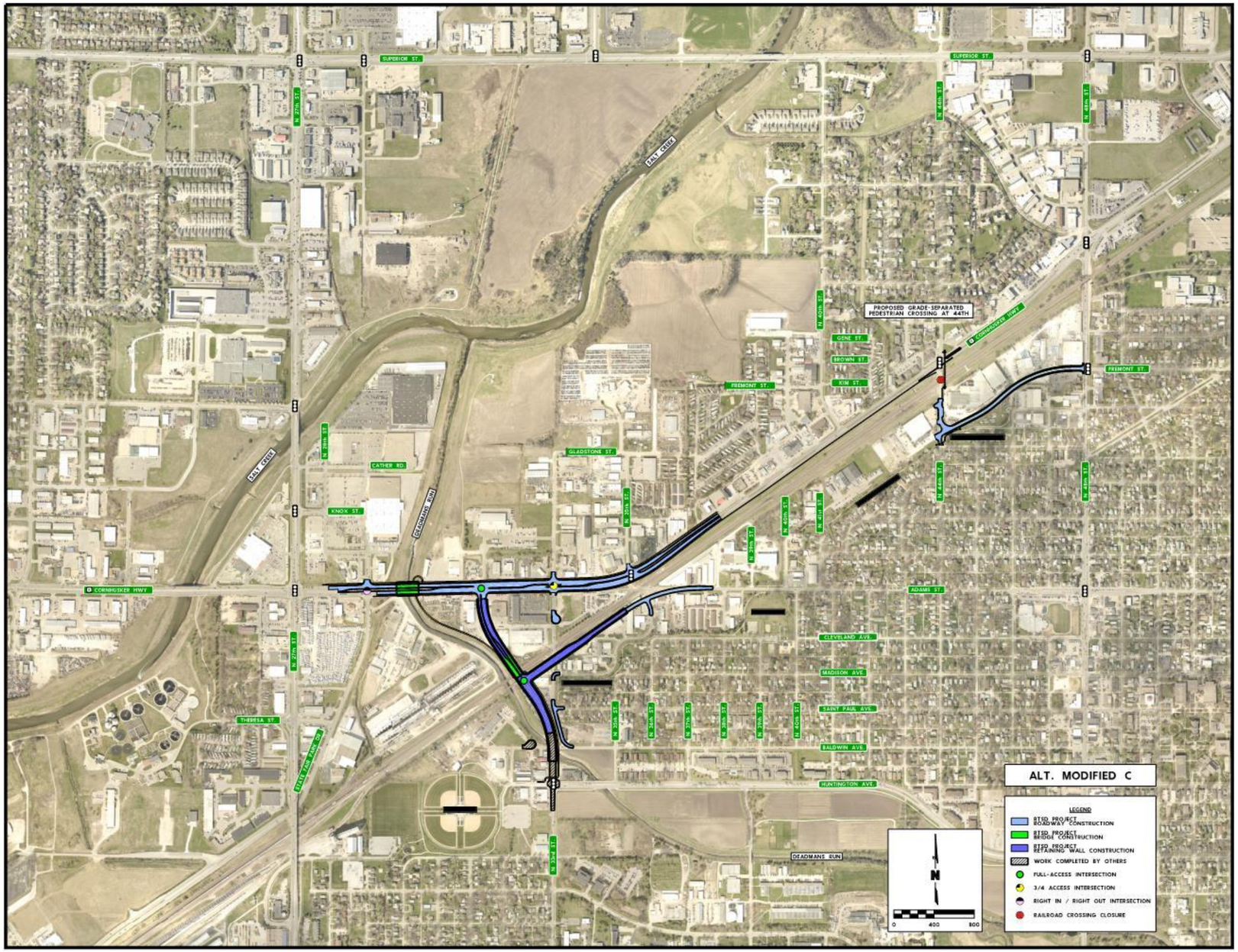
Figure 9g. Alternative Modified PEL C

Alternative Modified PEL C would include the expansion of Cornhusker Highway as well as elevated structures along a realigned N. 33rd and Adams Street to eliminate the at-grade railroad crossings along those streets. Alternative Modified PEL C would eliminate the at-grade railroad crossing at N. 44th Street and provide access for traffic to get to Cornhusker Highway via a new Fremont Street connection to N. 48th Street. A pedestrian bridge would be constructed at the N. 44th Street intersection to allow pedestrian access over Cornhusker Highway and the railroad tracks. Huntington Avenue north to the elevated structure would be completed by the Deadmans Run Project.

Cornhusker Highway would be expanded to provide three lanes of traffic in both directions from Deadmans Run to N. 33rd Street. East of N. 33rd Street Cornhusker Highway would transition from three lanes to two lanes in both directions to match the existing roadway section near N. 37th Street. Access along Cornhusker Highway would be limited at N. 29th, N. 33rd, and N. 37th Streets and full access at the new N. 31st and N. 35th Street intersections for safety and mobility along the corridor.

N. 33rd Street would be reconstructed north of Huntington Avenue on a new alignment to bridge over the railroad tracks and connect back down to Cornhusker Highway near N. 31st Street at a full-access intersection. Existing N. 33rd Street would be realigned next to the new N. 33rd Street bridge between Saint Paul Avenue and Baldwin Avenue to provide circulation for the neighborhood.

Adams Street would be reconstructed west of N. 40th Street and follow along the railroad tracks south to connect to an elevated intersection with N. 33rd Street.



3.4 How Were These Alternatives Evaluated?

The alternatives evaluation and screening process for the seven alternatives retained from the SAP process consisted of an iterative three-tiered process that was initially developed as part of the PEL Study. The criteria were developed to be aligned to the purpose and need of the Project; the Project goals consistent with RTSD's mission and the LRTP; the potential for transportation benefits; and community and natural resources within the Project ESA.

The three-tiered screening process was developed to identify alternatives that would be carried forward for further consideration and alternatives that have been considered and dismissed from further consideration. The responsiveness of each alternative to the screening criteria determined if the alternative was advanced to the next Tier for further screening. The following sections summarize the evaluation criteria by each Tier and explain the process to evaluate and refine the alternatives. The full alternatives screening report is included in Appendix B.

3.4.1 Tier 0 Screening

The Tier 0 screening criteria evaluates whether an alternative meets the purpose and need of the Project. Alternatives that would not satisfy the purpose and need would be eliminated at Tier 0 screening.

The following questions were used to screen the alternatives at Tier 0:

- Does the alternative improve safety by eliminating or reducing the potential conflicts between trains and other transportation modes (vehicles, pedestrians, and bicycles) along the rail corridor between N. 27th and N. 48th Streets?
    - Goal: Reduce potential conflicts for vehicles by 80 percent, or more. Once alternatives have been screened, measures to reduce exposure for pedestrians and bicyclists will be identified.
- Does the alternative reduce delay for motorists, pedestrians, and bicyclists crossing the rail corridor between N. 27th and N. 48th Streets?
    - Goal: Combined reduction in delays at the at-grade crossings due to train blockages in the Project ESA rail corridor from an average of 15 percent daily to one percent.
- Does the alternative accommodate existing and future traffic (Year 2040) and reduce congestion along roadways crossing the rail corridor between N. 27th and N. 48th Streets?
    - Goal: Minimized out-of-direction travel for major traffic movements (i.e., those existing peak hour movements with 400, or more, vehicles per hour).

- Does the alternative improve mobility across the rail corridor in northern Lincoln?
    - Goal: Maximized spacing (¼-mile preferred) between signalized intersections; resulting in peak hour left-turn volumes requiring no more than two left-turn lanes in any one direction.
- Does the alternative improve multimodal connectivity in northern Lincoln for vehicles, pedestrians, bicyclists, and transit?
    - Goal: Provisions provided for bicycle/pedestrian and transit crossing of the rail corridor at N. 33rd Street, Adams Street, and N. 44th Streets.

None of the alternatives carried forward from the PEL or SAP were initially eliminated as part of Tier 0 screening. During the review of reasonable alternatives, new data (e.g., updated traffic study, public scoping meeting, benefit cost analysis) was collected that required revisiting Tier 0 and Tier 1 screening. The RTSD concurred with FHWA's assessment that Alternative 1B does not prioritize east/west connections from Adams Street and would be eliminated from consideration during the Tier 0 screening process.

Results of Tier 0 screening are presented in Table 3.1, below.

Table 3.1 Tier 0 Alternatives Screening Summary

Alternative	Carried forward to Tier 1 Screening?
1B	Eliminated because it does not prioritize east/west connections from Adams Street. Alternative 1B was originally retained in the Tier 0 alternative Screen but was re-evaluated in 2019 and removed from consideration.
1D	Retained because it met the Project purpose and need.
1E	Retained because it met the Project purpose and need.
12B	Retained because it met the Project purpose and need.
14	Retained because it met the Project purpose and need.
15A	Retained because it met the Project purpose and need.
Modified PEL C	Retained because it met the Project purpose and need.
No-Action	Retained as a baseline to compare alternatives for evaluation and environmental analysis purposes

3.4.2 Tier 1 Screening

Tier 1 screening evaluates alternatives retained following Tier 0 screening. Tier 1 criteria include comparative transportation effectiveness and environmental impact. Alternatives determined to be incompatible with transportation plans or unfeasible are eliminated at Tier 1 screening.

The following criteria were used to evaluate the alternatives at Tier 1:

- Improve safety by incorporating access management
    - Goal: Satisfy engineering design standards and practices including City of Lincoln and NDOT Access Management Policies and evaluate alternatives based on potential fatal flaws related to engineering design standards and criteria
- Minimize delay at existing and proposed major intersections
    - Goal: Maintain or improve 2020 No-Action peak hour LOS at existing major Project ESA intersections and achieve peak hour LOS D or better for all newly created major intersections.
- Improve vehicular mobility/connectivity across the roadway network/minimize out-of-direction travel
    - Goal: Minimize future out-of-direction travel for major movements as determined by 2040 travel demand forecasting model and select-link analysis
- Improve multimodal connectivity in northern Lincoln
    - Goal: Fill gaps in trails and sidewalk routes that traverse the rail corridor and improve efficiency of transit system by allowing more direct extension of transit routes
- Does the alternative negatively affect vehicle operations during construction?
    - Maintain traffic along Cornhusker Highway during construction
- Is the alternative “simple”?
    - Perceived complexity of an alternative and how intuitive travel routes are to motorists
- Avoid/minimize direct and indirect impacts to community resources
    - Acquisition of residential and business properties (partial or full)
    - Business and resident displacements
    - Neighborhood integrity and cohesion
    - Compatibility with existing and future local land use
- Avoid/minimize direct and indirect impacts to environmental resources
    - Floodways and floodplains
    - Parks and recreation areas

  - Historic resources
  - Sites with hazardous materials risk
  - Wetlands and Waters of the U.S.
  - Sensitive, threatened, and endangered species
  - Minority and low-income populations
- Is the alternative compatible with the LRTP and Lincoln-Lancaster County 2040 Comprehensive Plan?
- Is the alternative compatible with the USACE Deadmans Run Project? Details on the USACE Deadmans Run Project are included in Section 4.2.1

The results of the Tier 1 screening are presented in Table 3.2, below:

Table 3.2 Tier 1 Alternatives Screening Summary

Alternative	Carried forward to Reasonable Review
1D	**Retained** because it would provide a direct connection of N. 33rd Street to Cornhusker Highway with a traditional intersection configuration familiar to local commuters and provides a connection for Adams Street over the railroad tracks.
1E	**Retained** because it would provide a direct connection of N. 33rd Street to Cornhusker Highway with a traditional intersection configuration familiar to local commuters and provides a connection for Adams Street over the railroad tracks.
12B	**Retained** because it would provide a direct connection of N. 33rd Street to Cornhusker Highway with a traditional intersection configuration familiar to local commuters and provides a connection for Adams Street over the railroad tracks.
14	**Retained** because it would provide a direct connection of N. 33rd Street to Cornhusker Highway with a traditional intersection configuration familiar to local commuters and provides a connection for Adams Street over the railroad tracks.
15A	**Retained** because it would provide a direct connection of N. 33rd Street to Cornhusker Highway with a traditional intersection configuration familiar to local commuters and provides a connection for Adams Street over the railroad tracks.
Modified PEL C	**Retained** because it would provide a direct connection of N. 33rd Street to Cornhusker Highway with a traditional intersection configuration familiar to local commuters and provides a connection for Adams Street over the railroad tracks.
No-Action	**Retained** as a baseline to compare alternatives for evaluation and environmental analysis purposes.

3.5 Are all Seven of These Alternatives Reasonable?

After the Tier 1 screening process, the no build alternative and the remaining seven alternatives were evaluated for reasonableness. For an alternative to be "reasonable", it must be practical or feasible from the technical and economic standpoint per 40 CFR 1508.1(z). Six action alternatives and the No Action Alternative were retained after the Tier 1 screening process. These alternatives are:

- Alternative 1D
- Alternative 1E
- Alternative 12B
- Alternative 14
- Alternative 15A
- Alternative Modified PEL C
- No Action Alternative

Initial capital costs and maintenance costs were developed for the seven alternatives retained from the Tier 1 screening process. The total capital costs for Alternatives 12B, 14, and 15A are estimated at $145.8 million, $165.3 million, and $176.1 million, respectively. When compared to the cost of the remaining alternatives (ranging from $75.3 million to $109.8 million), these three alternatives have been determined to be unreasonable due to the high cost to construct. Alternatives 12B, 14, and 15A would not be constructed, as there is not sufficient RTSD funding to complete these projects; therefore, they were removed from further consideration and not carried through the Tier 2 screening process as part of the reasonable range of alternatives.

Subsequent to the Tier 0 and Tier 1 screening, additional evaluation was completed for Alternative 1D, Alternative 1E, and Alternative Modified PEL C. As part of the additional evaluation process, the RTSD held a public meeting and comment period in June 2019, completed a traffic study, completed the benefit cost analysis, and refined environmental impact estimates. Based on these additional data analyses, the following issues were identified regarding Alternative 1D:

- Vocal public opposition. Approximately 72 percent (118 of 162) of the public comments received were in support of not impacting Virginia's Café, which would be acquired and relocated as part of Alternative 1D. This information is summarized in the Public Meeting Report (Olsson 2019b).
- Large number (12) of full commercial acquisitions.
- Largest number of residential acquisitions in a low-income neighborhood south of the railroad tracks, with potential for additional low-income impacts as further information about long-term motel rooms at Virginia's Café and Lincoln Tent and Awning was gathered through the public involvement process.

- Relatively total high cost ($101.4 million) compared to other reasonable alternatives.

Thus, Alternative 1D was removed from further consideration and not carried through the Tier 2 screening process as part of the reasonable range of alternatives.

Alternative 1E and Alternative Modified PEL C were determined to be reasonable and were carried forward into Tier 2 screening.

Table 3.3 Tier 1 Alternatives Reasonable Screening Summary

Alternative	Carried Forward to Tier 2 Screening
1D	**Eliminated** because of public objection, 12 full commercial acquisitions, large number of residential acquisitions, potential for impacts to low income populations, and a relatively total high cost of $101.4 million (2019).
1E	**Retained** because it would provide a direct connection of N. 33rd Street to Cornhusker Highway with a traditional intersection configuration familiar to local commuters and provides a connection for Adams Street over the railroad tracks. Alternative E meets the cost benefit analysis and is retained.
12B	**Eliminated** because the cost of $145.8 million (2019) was determined to be unreasonable and there is not sufficient RTSD funding to complete this alternative.
14	**Eliminated** because the cost $165.3 million (2019) was determined to be unreasonable and there is not sufficient RTSD funding to complete this alternative
15A	**Eliminated** because the cost $176.1 million (2019) was determined to be unreasonable and there is not sufficient RTSD funding to complete this alternative
Modified PEL C	**Retained** because it would provide a direct connection of N. 33rd Street to Cornhusker Highway with a traditional intersection configuration familiar to local commuters and provides a connection for Adams Street over the railroad tracks. The Modified PEL C meets the cost benefit analysis and is retained.
No-Action	**Retained** as a baseline to compare alternatives for evaluation and environmental analysis purposes.

3.6 Tier 2 Screening – Comparing the Remaining Two Alternatives

The Tier 2 screening criteria include quantitative and qualitative comparisons related to construction cost, long-term maintenance and operations costs, safety and congestion benefits in relation to cost, public preference, and community and environmental resource benefits and impacts.
The following criteria were used to evaluate alternatives at Tier 2:

- Does the Alternative minimize potential capital investment cost?

  - Minimize capital costs for construction, design, acquisition of property for right-of-way (ROW), utility relocations, etc.
- Does the Alternative minimize long-term operations and maintenance costs?
  - Length of roadways, bridge structures, retaining walls, and traffic signals
- Does the Alternative maximize safety and congestion benefit to cost ratio?
  - Reduced crashes, improved travel time, and reduced delay
- Community and Environmental Resource Benefits and Impacts
  - Does the alternative avoid/minimize direct and indirect impacts to community resources?
    - Acquisition of residential and business properties (partial or full)
    - Business and resident displacements
    - Neighborhood integrity and cohesion
  - Does the alternative avoid/minimize direct and indirect impacts to environmental resources?
    - Floodways and floodplains
    - Parks and recreation areas
    - Historic resources
    - Sites with hazardous materials risk
    - Wetlands and Waters of the U.S.
    - Sensitive, threatened, and endangered species
    - Minority and low-income populations

Table 3.4, below, presents a brief summary of the Tier 2 screening. A detailed summary of the results of the Tier 2 screening for Alternative 1E and Alternative Modified PEL C are presented in Table 3.5.

Table 3.4 Tier 2 Alternatives Screening Summary

Alternative	Tier 2 Screening Results
1E	**Eliminated** because Alternative 1E does not maximize the benefit cost ratio, does not minimize potential capital costs or long-term operations and maintenance costs. Alternative 1E would realign Adams Street and the new Adams Street alignment would bisect existing commercial properties, resulting in larger impacts to commercial properties.
Modified PEL C	**Retained** because Alternative Modified PEL C would provide the highest cost benefit to the community, provide the lowest construction costs and 30-year maintenance cost, and result in the fewest impacts to environmental and community resources. Alternative Modified PEL C would be compatible with the LRTP and Lincoln-Lancaster County 2040 Comprehensive Plan.
No-Action	**Retained** as a baseline to compare alternatives for evaluation and environmental analysis purposes.

Table 3.5 Tier 2 Screening Detailed Analysis

Purpose and Need and other Basic Requirements		Alternative 1E	Alternative Modified PEL C
Screening Criteria	**Goal**		
Does the Alternative minimize potential capital investment cost?	Minimize capital costs for construction, design, acquisition of property for ROW, utility relocations, etc.	Total Project Cost: $109.8 million [1#]	Total Project Cost: $89.1 million [1#]
Does the Alternative minimize long-term operations and maintenance costs?	Length of roadways, bridge structures, retaining walls, and traffic signals	Estimated 30-Year Maintenance Cost: $27.5 Million [2#]	Estimated 30-Year Maintenance Cost: $21.5 Million [2#]
Does the Alternative maximize Benefit (reduced crashes, travel time and delay) to Cost Ratio?	Maximize benefit cost ratio	Benefit to Cost Ratio: 0.88	Benefit to Cost Ratio: 1.09
Does the Alternative minimize impacts to wetlands and Waters of the US (WOUS)?	<0.5 acres of wetlands or 300 feet of channel	No permanent impacts are anticipated to wetlands or streams based on review of mapping and aerial imagery; limited ground-truthing; and the assumption that all WOUS crossings will span jurisdictional waters. Delineations will be conducted for the final alternatives during future phases of the Project to confirm. Temporary channel impacts are anticipated during construction. No anticipated channel reconstruction.	No permanent impacts are anticipated to wetlands or streams based on review of mapping and aerial imagery; limited ground-truthing; and the assumption that all WOUS crossings will span jurisdictional waters. Delineations will be conducted for the final alternatives during future phases of the Project to confirm. Temporary channel impacts are anticipated during construction. No anticipated channel reconstruction.
Does the Alternative avoid/minimize direct and indirect impacts to community resources?	Avoid/minimize direct and indirect residential and business impacts and business and resident displacements (number of properties impacted, acreage of property potentially acquired, number of potential business and resident displacements, number of property access modifications); maintain neighborhood integrity and cohesion; and maintain compatibility with existing and future local land use	Acquisitions [3] Residential Full: 1 (0.12 acre) / Residential Partial: 12 Commercial Full: 13 (20.70 acres) / Commercial Partial: 50 Other Full: 5 (1.02 acres) / Other Partial: 14 Impact on neighborhood integrity and cohesion (qualitative): New Adams Street alignment would bisect existing	Acquisitions [3] Residential Full: 2 (0.28 acre) / Residential Partial: 5 Commercial Full: 15 (9.0 acres) / Commercial Partial: 47 Other Full: 5 (1.02 acres) / Other Partial: 11 Impact on neighborhood integrity and cohesion (qualitative): minimal

Purpose and Need and other Basic Requirements		Alternative 1E	Alternative Modified PEL C
Screening Criteria	**Goal**		
		commercial properties Compatibility with existing and future local land use (qualitative): Minimal impact	Compatibility with existing and future local land use (qualitative): Minimal impact
Does the Alternative avoid/minimize direct and indirect impacts to environmental resources?	Avoid/minimize impacts to floodways and floodplains (square feet/acres); parks and recreation areas (temporary use during construction and permanent conversion to a transportation use); historic resources (sites eligible for the National Register of Historic Places); sites with hazardous materials risk; sensitive, threatened, and endangered species (square feet/acres of potential habitat); minority and low-income populations (direct and indirect impacts to community facilities).	**Potential Impacts Section 4(f) and 6(f) Resources:** parks: 0.10 acre; trails: approx. 2,130 feet shifted as road widens, approx. 6,400 feet additional new trails; schools: 0 **Section 106 Resources immediately adjacent to Project alignment:** historic properties (known): 0 ; (potential): 5 **Section 404 Resources:** wetland (acres): 0 ; NHD Stream Crossings: 2 **Section 7 Resources: endangered species impacts:** none **EJ & Civil Rights:** Likelihood that the Project would impact an EJ Population*: Low **Alternative compliments US Army Corps of Engineers (USACE) Section 205 Alternatives for Deadmans Run:** Yes	**Potential Impacts Section 4(f) and 6(f) Resources:** parks: 0.09 acre ; trails: approx. 1,440 feet shifted as road widens, approx. 5,695 feet additional new multi-use paths; schools: 0 **Section 106 Resources immediately adjacent to Project alignment:** historic properties (known): 0 ; (potential): 5 **Section 404 Resources: wetland (acres):** 0 ; NHD Stream Crossings: 2 **Section 7 Resources: endangered species impacts:** none **EJ & Civil Rights:** Likelihood that the Project would impact an EJ Population*: Low **Alternative compliments USACE Section 205 Alternatives for Deadmans Run:** Yes
Does the Alternative Meet the Purpose and Need?		Yes	Yes

[1] Cost estimate dated 05/14/2019
[2] Maintenance calculation dated 06/20/2019
[3] ROW impacts calculated from information used to gather cost estimate dated 05/14/2019. Data is consistent with that presented to the public at the June 27, 2019, open house for Alternatives 1B, 1D, 1E, Modified PEL C
Cost Estimates shown as Future Year of Expenditures Dollars
* Low is defined as a full acquisition of 2 or less residential properties, High is defined as full acquisition of more than 2 residential properties

3.7 Additional Public and Stakeholder Input After the Tier 2 Screening Process

As a result of Tier 2 screening, the Modified PEL C Alternative was carried forward for further analysis as the Preliminary Preferred Alternative. This section describes additional coordination with the public and stakeholder groups that occurred as a part of the project development process. Full details describing the public involvement process are provided in Section 5.0.

North 44th Street Crossing

The initial Preliminary Preferred Alternative presented to the public in 2019 included the proposal to close the at grade crossing at N. 44th Street to vehicular traffic and providing a grade separation for pedestrians at N. 44th Street. Comments received as a result of public and stakeholder meetings did not indicate a consensus solution regarding pedestrian access options at N. 44th Street. Comments included multiple perspectives, with some indicating a lack of support for an overpass structure and some indicating concern for closing the N. 44th Street crossing without maintaining pedestrian access. Adjacent landowners were generally not supportive of a pedestrian overpass adjacent to their properties. Neighborhood representatives wanted to maintain pedestrian access with either an at-grade crossing or pedestrian overpass. Neighborhood representatives were not supportive of options that would divert pedestrians away from N. 44th Street (e.g., to N. 48th Street). During this public involvement process, minimal concerns were raised regarding closing the existing at-grade crossing assuming pedestrian access at N. 44th Street remained available.

As part of the preliminary design concept, multiple configurations were evaluated, primarily as pedestrian overpass designs, including a corkscrew configuration, long ramp with switchback configuration, and a multiple switchback configuration. During preliminary design of the pedestrian grade separation, multiple project constraints came into view, including limited available areas to locate a structure, the presence of the primary water transmission lines for Lincoln between Cornhusker Highway and the BNSF tracks, and vertical clearance requirements for structures located above the BNSF tracks.

Although public and stakeholder input did not indicate a consensus regarding a pedestrian overpass, comments indicated support for maintaining pedestrian access at N. 44th Street. Enhancing the existing at-grade crossing at N. 44th Street and eliminating the overpass concept appears to be the option that satisfies the greatest amount of public and stakeholder comments and concerns.

Based on the lack of support from the public engagement process and design constraints, the RTSD removed the pedestrian grade separation from the Project and determined the N. 44th Street crossing would remain open to traffic and pedestrians. There would be no improvements to the at-grade traffic crossing at N. 44th The N. 44th Street pedestrian crossing would be

improved to meet current ADA standards and provide a consistent, accessible crossing for nonvehicular traffic.

3.8 Preferred Alternative

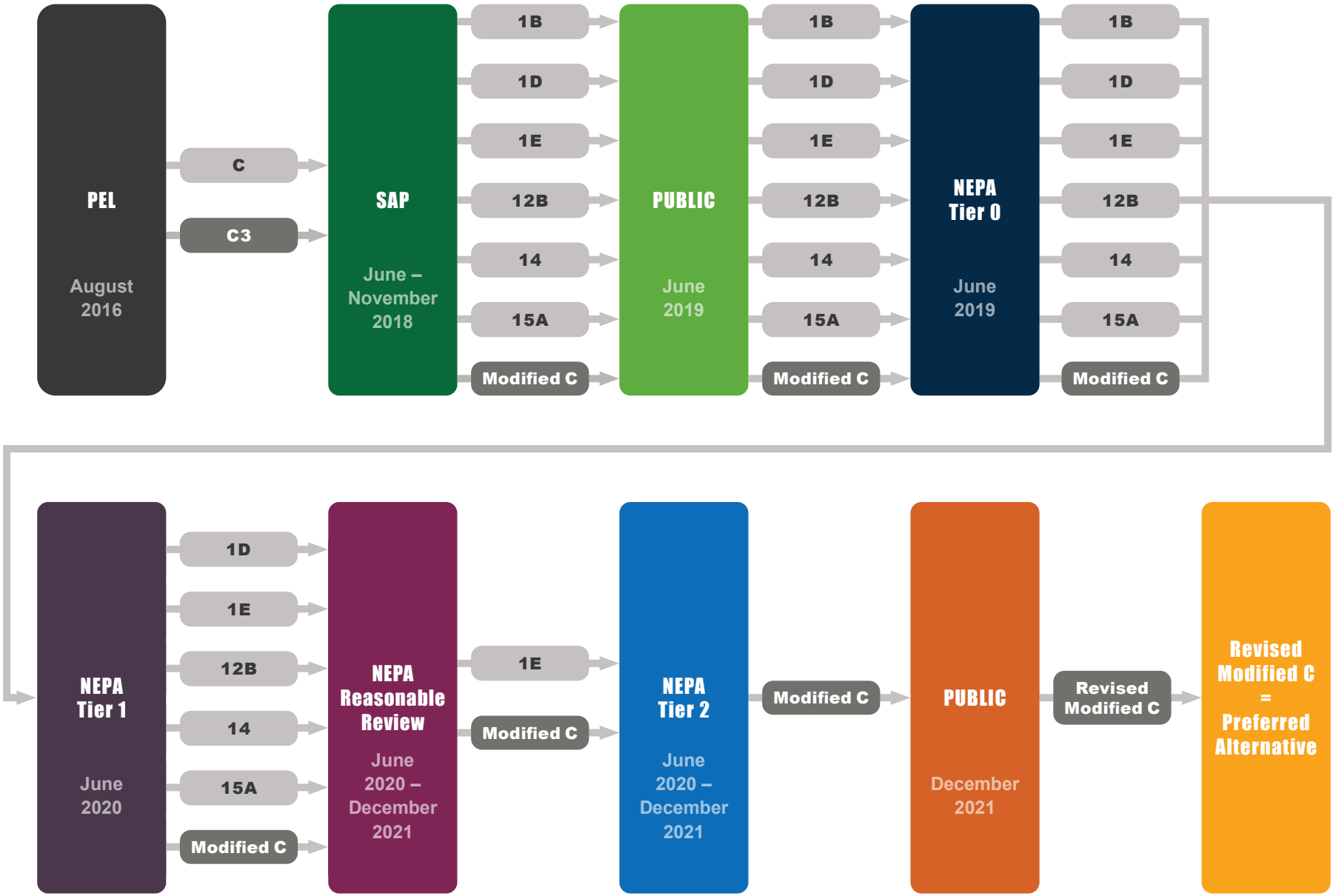
The Preferred Alternative was selected because it:

- Meets the Project purpose and need
- Provides the highest benefit for the cost to the community
- Provides the lowest construction costs and 30-year maintenance cost
- Results in the fewest impacts to environmental and community resources
- Is compatible with the LRTP and Lincoln-Lancaster County 2040 Comprehensive Plan

3.8.1 What is the Preferred Alternative?

Figure 10 shows the development history of the Preferred Alternative.

DEVELOPMENT PROCESS FOR THE PREFERRED ALTERNATIVE



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Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Development Process for the Preferred Alternative

FIGURE
10

Project No. 702614, RTSD BU 5919, CN 13294

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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. 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 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 would connect at an intersection with Cornhusker Highway near the existing N. 31st Street and Cornhusker Highway intersection. Intersections at Cornhusker Highway and State Fair Park Drive, a re-aligned N. 33rd Street and Cornhusker Highway, N. 33rd Street and Huntington Avenue, N. 33rd Street and Adams Street, and N. 35th Street and Cornhusker Highway 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. 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 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 multi-use 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 north side 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 rerouted 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.

If required and negotiated with BNSF, the Preferred Alternative could 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.

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 at N. 33rd and Huntington Avenue.
- Existing N. 33rd Street would be reconstructed on the north side of Cornhusker Highway as well to connect back to the existing road.
- Existing N. 33rd Street on the south side of Cornhusker Highway 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. 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 N. 31st Street and N. 33rd Street, north of Cornhusker Highway. It would include a five-foot sidewalk on the southside. City of Lincoln Planning approved the Greenwood Street name on July 10, 2020.
- N. 31st Street would be reconstructed on the north side of Cornhusker Highway where the newly aligned N. 33rd Street meets at an intersection with Greenwood Street.
- A new local roadway called (preliminary name 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. A traffic signal at N. 29th Street and Cornhusker Highway would be upgraded due to the addition of another westbound left turn lane and westbound outside through lane. A traffic signals would be added to N. 31st Street and Cornhusker Highway and the traffic signal at N. 35th Street and Cornhusker Highway would be reconstructed.

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 coordinate reconstruction as required for 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 bridge over Deadmans Run channel and the viaduct over 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 utilize newly constructed muti-use paths along Leighton and 35th Street. No improvements would be required along any designated trail detour route.

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Original Published Resolution
NAD 1983 Nebraska Lancaster County FtUS
2022 Lancaster County Aerial

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Preferred Alternative

FIGURE
11

Project No. 702614, RTSD BU 5919, CN 13294

3.8.2 Alternatives Carried Forward

Based upon the results of the alternatives screening process, the Preferred Alternative and No-Action Alternative were carried forward for detailed analysis (Section 4). While the No-Action Alternative does not meet the Project purpose and need, it is being carried forward as a basis of comparison with the Preferred Alternative.

3.8.3 Anticipated Funding and General Project Schedule

Funding for the design and ROW for the Project is currently scheduled for Fiscal Year 2022 through 2026 with construction funding beginning in Fiscal Year 2027 in the Lincoln MPO TIP (Lincoln MPO 2023). Final design would be completed by 2026. Construction is anticipated to begin in 2027 with a three-year construction duration.

The project is eligible for up to 80 percent Federal Aid funding; however, the actual federal contribution is anticipated to be between 50 and 80 percent with a minimum 20 percent local match. The estimated construction cost in current (2024) dollars is $66.5 million. The estimated total project cost in future (2027) dollars is approximately $120 million. Total project cost is a combination of construction cost, preliminary engineering (including environmental documentation), ROW costs, construction engineering, and utility relocation costs (when utilities are outside the existing ROW).

4.0 Affected Environment and Environmental Impacts

This section presents the beneficial and negative environmental impacts of the Preferred Alternative and the No-Action Alternative. Each section discusses the evaluated resource; the contextual setting of the affected environment; impacts of the alternatives; proposed mitigation measures to be carried forward through the subsequent stages of planning, design, and construction; and applicable standard specifications and special provisions (when they are used to minimize or avoid impacts).

4.1 Environmental Study Area

The Project ESA encompasses approximately 1,900 acres (ac) within the City of Lincoln (Figure 3). The Project ESA is bound by Superior Street on the north, N. 27th Street on the west, Holdrege Street on the South, and N. 48th Street on the east. The BNSF Railway corridor runs through the center of the Project ESA from the southwest to the northeast, with Cornhusker Highway running east-west in the western portion of the Project ESA before paralleling the BNSF rail corridor moving to the northeast. Major features within the Project ESA include Salt Creek, Deadmans Run, UNL East Campus and associated facilities, major industrial and commercial corridors, and the Clinton, University Place, and Sunset Acres neighborhoods.

The Project ESA was developed to encompass the N. 33rd Street and Cornhusker Highway intersection, and the N. 33rd Street, N. 35th and Adams Streets, and N. 44th Street at-grade BNSF rail crossings. The Project ESA encompasses adjacent neighborhoods and affected areas.

It is anticipated the Project ESA presented in Figure 3 will be appropriate for most resources evaluated in this EA; however, resource-specific ESAs are appropriate for certain resource evaluations. Resource-specific ESAs may be used to better characterize the resource within the vicinity of the Project or may be required based upon widely accepted methods for analysis of a particular resource in accordance with standard agency or scientific protocols. The use of resource-specific ESAs is outlined where appropriate in Sections 4.1 through 4.17 of this section.

4.1.1 Resources Eliminated from Further Consideration

Resources considered, but not discussed herein, are those that are not applicable to the EA, including:

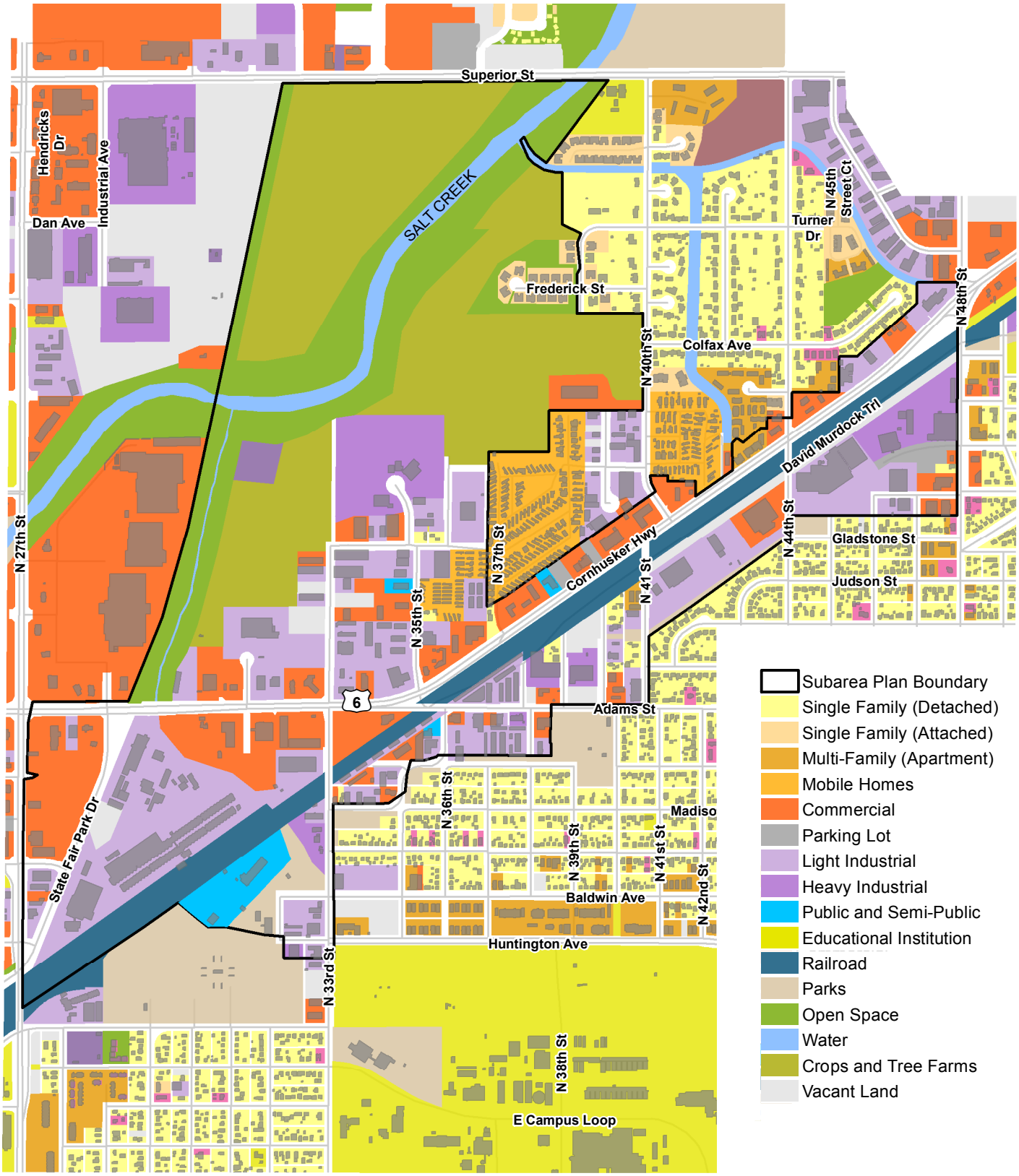
- Platte River Depletions and Borrow are not evaluated because the Project is not located within the Platte River Recovery Implementation Program area and would not deplete flows to the Platte River. (Reviewed resources: https://platteriverprogram.org/map and https://platteriverprogram.org/about/program-details)

- Wild and Scenic Rivers were eliminated from further study because the Project ESA includes no Wild and Scenic Rivers or National Rivers Inventory rivers. (Reviewed resource: https://www.rivers.gov/mapping-gis.php)
- Farmlands were eliminated from further study because the Project ESA occurs in a developed area and does not include agricultural lands considered to be prime, unique, or of statewide or local importance.

  (Reviewed resource:
  https://www.environment.fhwa.dot.gov/env_topics/ecosystems_vegetation.aspx)

4.2 Land Use and Planning

Land use planning is the process of regulating the use of land in effort to promote more desirable social and environmental outcomes as well as a more efficient use of resources. This section addresses the consistency of the proposed Project with existing and planned land use within the Project ESA.



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Original Published Resolution
WGS 1984 ARC System Zone 11

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
2023 Existing Land Use

FIGURE
12

Project No. 702614, RTSD BU 5919, CN 13294

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4.2.1 Affected Environment

The area within the Project ESA is heavily urbanized, containing a mixture of commercial, residential, and industrial land uses that is typical of older highway corridors. These land uses have developed along four major features:

- The floodplains of Salt Creek and Deadmans Run, which, because of flooding, are primarily limited to industrial and agricultural land uses.
- The BNSF railway corridor, established in 1870, and Cornhusker Highway, constructed along the north side of the railway, encouraged the development of industrial and commercial land uses along their margins. Only a few residential properties are located along the railway corridor, and the City discourages further residential development within 300 feet of railway tracks.
- UNL East Campus, surrounded by single-family residential neighborhoods with houses generally constructed between the 1920s and the 1970s.
- Lincoln Municipal Airport, established in 1941, Runway 35 is located approximately 3.75 miles west from the closest point of the project.

Other commercial corridors are established along three of the arterial streets that define the edge of the Project ESA: N. 27th Street, N. 48th Street, and Superior Street. In particular, N. 27th Street has developed into a major commercial corridor with a direct connection to I-80. Existing land uses are shown in Figure 12.

In addition to the PEL and SAP documents previously described (RTSD 2016, RTSD 2018), additional planning documents are available for reference, including:

- The Lincoln MPO 2040 Comprehensive Plan (Lincoln MPO 2016)
- The Lincoln MPO 2050 Long Range Transportation Plan (Lincoln MPO 2021)
- The Deadmans Run Watershed Master Plan (CDM 2007)

The Project ESA contains some of the oldest sections of the City of Lincoln, including the UNL East Campus, which was acquired to establish the College of Agriculture in 1874, seven years after the City of Lincoln was platted in 1867. The campus contains agricultural research facilities including test fields, orchards, and greenhouses; and other unique open spaces including UNL's arboretum, tractor test facility, and rodeo training area.

The majority of the Project ESA is zoned for industrial and highway commercial use. Most undeveloped or open areas are located within the floodplain, thus the likely reason for the lack of development.

USACE Deadmans Run Project

Within the Project ESA, the U.S. Army Corps of Engineers (USACE) identified the need to consider a feasibility study along the Deadmans Run channel from its confluence with Salt Creek, at Cornhusker Highway, and extending upstream along Deadmans Run to approximately N. 48th Street. Deadmans Run is almost completely urbanized and has contributed to numerous past flood events in that area of Lincoln. Due to the high density of residential and commercial properties within the Deadmans Run floodplain, and the previous history of flooding, the USACE evaluated the feasibility of three action alternatives to reduce the flood risk from Deadmans Run.

The USACE Deadmans Run project includes widening the channel and replacing the existing concrete mat and gabions with rip-rap to mitigate erosion of the streambed. Above the rip-rap, a channel bench would be installed on one bank to allow for the planting of native grass and vegetation, as well as to provide additional flow capacity within the channel cross-section. The channel banks would then be cut back to allow for a 3:1, horizontal-to-vertical slope to be installed from the channel bench, or rip-rap depending upon the bank, to the surrounding existing grade. The Preferred Alternative would require the replacement of several bridge sized structures along Deadmans Run, including removal of the existing box culvert at N. 33rd Street. The existing box culvert would be replaced with a new bridge structure spanning Deadmans Run.

Due to extent of the Project and the location of the new N. 33rd Street bridge over Deadmans Run, the City of Lincoln and RTSD determined the new N. 33rd Street bridge would be best served if built as a part of the North 33rd and Cornhusker project.

4.2.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would not result in the construction of the Project. The No-Action Alternative would be inconsistent with the LRTP, SAP, and comprehensive plan because it would not eliminate at-grade crossings; improve safety along the rail corridor; reduce delays for motorists, pedestrians, and cyclists; or improve multimodal connectivity for vehicles, pedestrians, cyclists, and bus transit.

4.2.3 Environmental Impacts of the Preferred Alternative

Through improved safety, connectivity, and reduced delays, the Preferred Alternative would have a beneficial impact on neighborhood integrity and cohesion. The Project would be integrated into new future land use plans which may have a positive effect on future development, reuse, redevelopment, and infill.

The Preferred Alternative would have direct impacts on existing land use. The realignment of N. 33rd Street and Adams Street along with the improvements to Cornhusker Highway and other side streets would require ROW acquisition and permanent easements. This would result in the conversion of approximately 11 to 13 acres of public and privately owned land to publicly owned ROW; the exact area of ROW needed for the project would be determined during final design.

Relocations would be necessary for some of the 15 properties that would be fully acquired due to the impacts of the Project. A majority of the 15 properties are commercial or industrial land uses. Approximately 11 to 13 acres of temporary easements would also be necessary for construction within the project footprint; the exact area of easements needed for the Project would be determined during final design.

Current access points would be perpetuated or consolidated where reasonable and feasible with adjacent properties. Details regarding access point changes would be determined in the final design process in coordination with local property owners, taking into consideration existing and future land use, operations, and land value in accordance with the City of Lincoln's Access Management Policy (Lincoln 2022). As a result, changes in access due to the proposed Project are not anticipated to negatively affect adjacent properties.

Reasonable access to the individual businesses, residences, and other facilities in the area would be maintained during construction. The Contractor would coordinate any potential access restrictions with individual landowners and the City of Lincoln prior to restrictions.

The Preferred Alternative would be compatible with planned land uses outlined in the LRTP, SAP, and comprehensive plan which include areas for redevelopment and infill. By removing the delays associated with the at-grade crossings and providing a cohesive pedestrian network of sidewalks and trails, developments would be more readily accessible.

4.2.4 Land Use and Planning Mitigation

The end of the nearest runway at Lincoln Municipal Airport (Runway 35) is approximately 3.75 miles to the closest point of the Project. Due to the proximity to the Lincoln Municipal Airport to the Project, the height of any equipment used in the construction of the project (or any antennae installed on the equipment) shall not exceed the local airport's Height Restriction Zoning. Any Contractor involved in the project shall use the Notice Criteria Tool available at https://oeaaa.faa.gov/oeaaa/external/portal.jsp. (Contractor)

If required, the Contractor shall file a 7460-1 Form with the Federal Aviation Administration (FAA). The form shall be required if the Contractor uses any equipment over 200' tall, or the equipment breaks a 100:1 slope from a public-use airport. This includes any trucks or equipment used during the construction of the project. (Contractor)

4.3 Socioeconomic, Community Continuity, Cohesion, and Pedestrian Considerations

Socioeconomic resources refer to aspects of a project that are either social or economic in nature. Social impacts are modifications to the community which could include issues such as travel patterns, accessibility, transit operations, school districts and their operations (busing), emergency services, induced development, or changes to the community's continuity, cohesion, and access. Economic impacts may affect the regional or local economy and could include changes to tax revenues, public expenditures, employment opportunities, retail sales, or other impacts to businesses. Socioeconomic impacts may be permanent or temporary.

4.3.1 Affected Environment

Of the total population of the City of Lincoln, approximately 55 percent is considered eligible to work. Of that population, 27.5 percent is in healthcare, education, and other social service occupations; 18.9 percent is in retail, entertainment, and food service occupations; 15.5 percent is in construction and manufacturing occupations; 11.2 percent is in professional, management, and scientific occupations; and 7.5 percent is in finance, insurance, and real estate occupations (USCB 2020). Unemployment is approximately 2.3 percent (USCB 2020).

The project is within the urban core of Lincoln with industrial and commercial uses located along the Cornhusker Highway and BNSF Railroad corridors. Residential areas are located south of the railroad corridor from approximately N. 33rd Street east toward N. 48th Street and north of the railroad corridor between N. 40th Street east to N. 44th Street.

Businesses located in the Project ESA include commercial employers such as motor vehicle sales, repair, and suppliers (LKQ Autoparts, Advanced Auto Parts, Cornhusker International Trucks, Vicharra Auto Repair, Capital Auto Glass), American Fencing, Graybar Electric Supply, Lincoln Tent and Awning, and numerous other commercial businesses. Industrial businesses in the area include Snyder Industries, Cheever Construction, metal manufacturing businesses, and self-storage facilities. Other businesses include restaurants (fast food chains and locally owned restaurants such as Virginia's Café), gas stations, insurance agencies, and others.

The at-grade railroad crossings in the Project ESA have contributed to limited north-south connectivity in the area with N. 33rd Street serving as the main north-south connection for the area. Commercial development and businesses are located throughout the Project ESA but are more concentrated along Cornhusker Highway and the railroad tracks.

Transit is limited in the area due to the limited north-south connectivity and the unpredictability of the railroad crossing. Currently, StarTran Route #49 travels north and south up N. 33rd Street, then travels east and west along Huntington Avenue, north and south up N. 41st Street to St. Paul Avenue and exits the Project ESA along N. 48th Street where it connects to Adams Street.

4.3.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would not result in the construction of the Project; thus, the No-Action Alternative would perpetuate the existing conditions and limit public transportation accessibility in this area of Lincoln. There would be indirect impacts to public services and economic conditions of the area with the No-Build Alternative. The response times for emergency responders such as police, fire, and ambulance services could be adversely affected by delays due to wait times when trains are present under the No-Build Alternative. The No-Build Alternative would result in increased traffic congestion in the area as growth and development continue. This could impede travel to and from destinations and make it difficult to attract or retain businesses in and around the study area.

4.3.3 Environmental Impacts of the Preferred Alternative

The Preferred Alternative would be built with minimal disruption to the traveling public to the extent practicable. Adams Street and 33rd Street would be closed during construction and would be detoured onto similar or higher functional classification roadways. Cornhusker Highway would remain open to traffic during construction. Specific detour routes would be developed as a part of the final design process for the project. School and emergency services routes, truck delivery for manufacturing and businesses, traffic transporting goods and services, as well as general traffic would be minimally inconvenienced during construction, equipment movements, and material deliveries.

Long-term impacts of the Preferred Alternative would be positive, resulting in a railroad viaduct that would be better suited to the nature of the study area and result in faster responses by emergency services to the area businesses. Additionally, future commercial and industrial growth in currently undeveloped areas north of Cornhusker Highway would be served by the Preferred Alternative due to the increase in traffic and intersection improvements to the area.

In addition, it is anticipated that the proposed project would result in economic benefit in the region by reducing delays associated with the at-grade crossings at 33rd Street and Adams Street and eliminating the potential for train-vehicle collisions. Improvements to sidewalks, crosswalks, the John Dietrich Trail, a new multi-use path along the west side of 35th Street from Huntington Avenue north to 34th and Madison Park, as well as a multi-use path on the new 33rd Street structure would further enhance accessibility to businesses along Adams Street as well as Cornhusker Highway and provide residents of northeast Lincoln another option for getting from their point of origin (e.g., residences) to destination (e.g., local businesses).

Construction of new sidewalks and crosswalks would satisfy the requirements contained in the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (36 CFR 1190), and ADA guidelines (42 USC 12101 et seq.).

Closing the Adams Street crossing after completion of the N. 33rd Street viaduct construction and the reconstruction of Adams Street would require approximately 0.75 mile of additional travel to connect to destinations on the opposite sides of the BNSF corridor along Cornhusker Highway. Adams Street would be reconfigured to the proposed 33rd Street viaduct over the railroad, starting at N. 37th Street and curving south of the railroad to tie into the N. 33rd Street realignment located south and west of the N. 33rd Street grade-separated crossing. The new intersection where Adams Street connects to N. 33rd Street south of Cornhusker Highway is expected to operate at LOS A and LOS C in the AM and PM peak hour, respectively, in the design year (Appendix C).

Additional travel due to closure of the Adams Street crossing is not expected to adversely impact community cohesion and accessibility, as improved safety and reduced delays are anticipated to benefit overall cohesion and accessibility. The residential neighborhood to the east is already physically separated by the BNSF tracks from commercial destinations along Cornhusker Highway. East-west vehicular connectivity through the area would be improved through reduced delays from crossings blocked by trains. N. 33rd Street would remain the primary corridor for connecting northeast Lincoln residential neighborhoods and businesses to northern or southern destinations. North of the BNSF corridor, east-west travel along Cornhusker Highway would remain largely unchanged. City of Lincoln residential neighborhoods and businesses north and south of the BNSF corridor would maintain direct vehicular access to commercial, residential, and industrial destinations along Cornhusker Highway via the N. 33rd Street crossing and the N. 44th Street crossing.

Destinations along the BNSF corridor include commercial and industrial developments primarily located along Cornhusker Highway between Deadmans Run and N. 48th Street with residential development located north and south of the corridor, roughly between N. 35th Street and extending east to N. 48th Street south of the BNSF corridor and between N. 37th Street and N. 48th Street north of the BNSF corridor. Few destinations exist south of the BNSF corridor south of Adams Street and are mostly concentrated along the BNSF corridor itself, accessible via neighborhood streets.

Additional travel due to closure of the Adams Street crossing is not expected to adversely impact pedestrian cohesion and accessibility. The Preferred Alternative would improve pedestrian accessibility through improved safety and reduced delays. Pedestrian crossings across the BNSF tracks would be available at N. 33rd Street and N. 44th Street. The N. 33rd Street viaduct would include an 8-foot-wide path that would separate pedestrians from vehicular and train traffic. The existing N. 44th Street pedestrian crossing would be maintained and improved to meet ADA standards and provide a consistent, accessible crossing for non-vehicular traffic. The Preferred Alternative would provide additional connectivity to the pedestrian network by the addition of a multi-use path along Leighton Avenue west of N. 33rd Street and N. 35th Street, as well as extending a multi-use path from N. 44th Street north to Colfax Avenue. The Preferred Alternative would result in a net gain of trail length. Improvements to the multi-use and recreational trail network are described in Section 4.8.

The potential property impacts associated with the Preferred Alternative are provided in Table 4.1. These impacts are also illustrated in Figures 13a-13e. Each property tract has a numerical identifier (shown in the left-hand column of Table 4.1) that corresponds to its location on Figures 13a-13e. Full Acquisition is defined as the potential purchase of a property and, if applicable, the relocation of the existing residence or business. Impacted Property is defined as the potential purchase of some ROW, Temporary and/or Permanent Easement on a property while maintaining existing use of the property. Coordination with USACE would be completed prior to ROW acquisitions to avoid conflicts with the USACE Deadmans Run project.

Table 4.1 Preliminary Design – Impacted Property Details

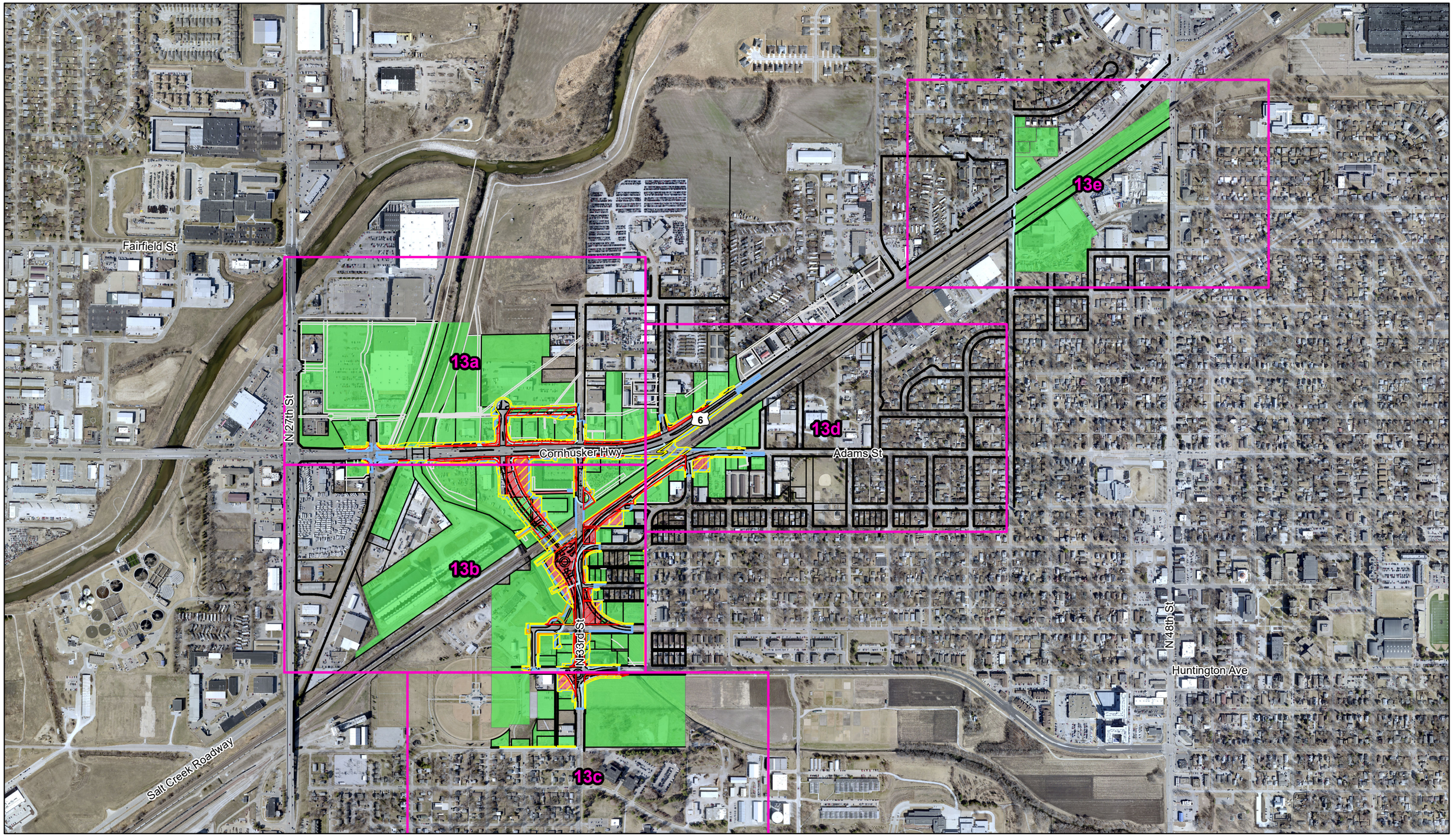
Tract ID	Full Acquisition?	Driveway Impacts?	Property Type	Notes
1		None closed	Industrial	Awning Manufacturer
2		None closed	Industrial	Grain Silos
3		1 closed, 1 relocated and would be shared	Commercial	Used Car Dealership
4		2 closed, 1 remaining and would be shared	Commercial	Commercial Truck Dealership
5	X	All closed	Commercial	Retail & Restaurant
6		2 closed, 1 remaining	Commercial	Retail & Restaurant
7		None closed	Commercial	Hardware Wholesaler
8	X	None closed	Commercial	Auto Parts Distributor
9		None closed	Commercial	Hardware Wholesaler
10	X	None closed	Commercial	Hardware Wholesaler
11		2 closed, 1 remaining and would be shared	Commercial	Used Car Dealership
12		1 closed, 1 relocated and would be shared	Commercial	Used Car Dealership
13		2 closed, 1 remaining and would be shared	Commercial	Used Car Dealership
14		None closed	Industrial	Railroad
15		None closed	Commercial	Auto Parts Retailer
16		None closed	Commercial	Fast Food & Retail
17		None closed	Other	Deadmans Run, City of Lincoln
18		None closed	Other	Deadmans Run, NRD
19		1 relocated and would be shared	Commercial	Auto Repair Shop

Tract ID	Full Acquisition?	Driveway Impacts?	Property Type	Notes
20		2 closed, 2 remaining, 1 of which would be shared	Commercial	Window/ Door Business
21		2 closed, 1 relocated	Commercial	Used Car Dealership
22		None closed	Commercial	Auto Parts Retailer
23		1 relocated	Commercial	Auto Repair Shop
24		1 closed, 1 relocated	Commercial	Fast Food
25		1 relocated, 1 remaining	Commercial	Gas Station
27		2 closed, 1 remaining	Commercial	Auto Repair Shop & Retail
31		1 closed, 1 remaining	Commercial	Roofing Distributor
32		1 closed, 2 remaining	Commercial	Electrical Supply Wholesaler
34		1 closed, 2 remaining	Commercial	Fast Food
35		None closed	Commercial	Motel
36		1 relocated and would be shared	Commercial	Boat Dealership
37		1 relocated and would be shared, 1 remaining	Commercial	Auto Repair Shops
38		None closed	Residential	
63		None closed	Other	City of Lincoln
64	X	All closed	Industrial	Salvage Yard
66	X	All closed	Industrial	Construction Company
67		2 closed, 2 remaining, 1 of which would be shared	Commercial	Roof Construction Company
68		1 closed, 1 remaining and would be shared	Commercial	Private Landowner

Tract ID	Full Acquisition?	Driveway Impacts?	Property Type	Notes
69		1 closed, 2 remaining, 1 of which would be shared	Commercial	Auto Repair Shop
70		None closed	Commercial	Storage Units
71	X	All closed	Commercial	Auto Repair Shop
72		1 relocated and would be shared	Commercial	Auto Repair Shop
73		1 relocated and would be shared	Commercial	Private Landowner
77		None closed	Other	University of Nebraska
78		2 remaining	Residential	Apartments
79		None closed	Other	Natural Resources District
81		N/A	Other	University of Nebraska
82		None closed	Other	University of Nebraska
83		None closed	Other	Natural Resources District
93	X	All closed	Other	City of Lincoln
94	X	All closed	Other	City of Lincoln
95		All closed	Other	City of Lincoln
96		All closed	Other	City of Lincoln
97		All closed	Other	City of Lincoln
98	X	N/A	Other	City of Lincoln
99	X	All closed	Residential	-
100		None closed	Residential	-
101		None closed	Residential	-
109		N/A	Other	Park
110		None closed	Residential	-
111		None closed	Residential	-
112		None closed	Residential	-
113		N/A	Other	Park

Tract ID	Full Acquisition?	Driveway Impacts?	Property Type	Notes
114		N/A	Other	Park
115		N/A	Other	Park
117	X	All closed	Commercial	Motorcycle Parts Retailer
119	X	All closed	Residential	-
167		None closed	Industrial	Auto Repair
174		None closed	Industrial	Auto Repair
175		None closed	Industrial	Railroad
176		None closed	Commercial	Gas Station
192		None closed	Commercial	Storage Units
198		None closed	Commercial	Moving Company
199	X	All closed	Commercial	General Contractor
201	X	All closed	Commercial	General Contractor
202		None closed	Commercial	Commercial Businesses
203		1 closed, 1 remaining	Commercial	Plumbers Union
205	X	All closed	Commercial	Warehouse
206		None closed	Commercial	Auto Repair Shop
207		None closed	Commercial	Vacant Business
208		None closed	Commercial	Auto Repair Shop
209		None closed	Commercial	Commercial Business
210		None closed	Commercial	A/C Company
211		None closed	Commercial	A/C Company
227	X	All closed	Commercial	Fast Food
228		None closed	Commercial	Hardware Store
229		None closed	Commercial	Storage Units
230		None closed	Commercial	Moving Company
231		None closed	Other	Park
232		N/A	Other	Park

Tract ID	Full Acquisition?	Driveway Impacts?	Property Type	Notes
233		N/A	Other	Park
234		None closed	Other	Park
235		None closed	Other	Park
236		None closed	Other	University of Nebraska
237		None closed	Residential	-
238		None closed	Residential	-
239		None closed	Residential	-
240		None closed	Residential	-
241		None closed	Residential	-
242		N/A	Other	Park
243		None closed	Residential	Apartments
244		None closed	Residential	-
245		None closed	Residential	-
246		None closed	Residential	-
Total Residential Displacements			**2**	
Total Non-Residential Displacements			**14**	



N

0 400 800

1 inch = 800 feet

Edge of Roadway
Sidewalk
Limits of Construction
Existing Permanent Easement
Property Line
ROW
Proposed Right of Way
Proposed Permanent Easement
Proposed Temporary Easement
Full Acquisition
Impacted Property

33rd & Cornhusker
Lincoln, Nebraska
Olsson project No. 017-3604-A
Property Acquisition Map Index
Figure 13

Data Source: 2020 Lancaster County Aerial

City of Lincoln Project No. 702614, RTSD BU 5919, CN 13294

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Menard Dr
Cather Rd
Gladstone St
N 27th St
N 28th St
Knox St
K-Mart Dr
N 33rd St
Noddle Dr
N 29th St
N 31st Street Cir
Cornhusker Hwy
Adams St
230
228
17
18
20
31
19
16
15
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22
23
24
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27
32
229
1
2
3
4
5
6
11
12
13

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0 100 200
1 inch = 200 feet

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Edge of Roadway
Sidewalk
Limits of Construction
Existing Permanent Easement
Property Line
ROW
Proposed Right of Way
Proposed Permanent Easement
Proposed Temporary Easement
Full Acquisition
Impacted Property

Tract Id / Property Type (See Table 4.1 - Preliminary Design Impacted Property Details)
Commercial
Industrial
Residential
Other

33rd & Cornhusker
Lincoln, Nebraska
Olsson project No. 017-3604-A
Property Acquisition Map
Figure 13a

Data Source: 2020 Lancaster County Aerial

City of Lincoln Project No. 702614, RTSD BU 5919, CN 13294

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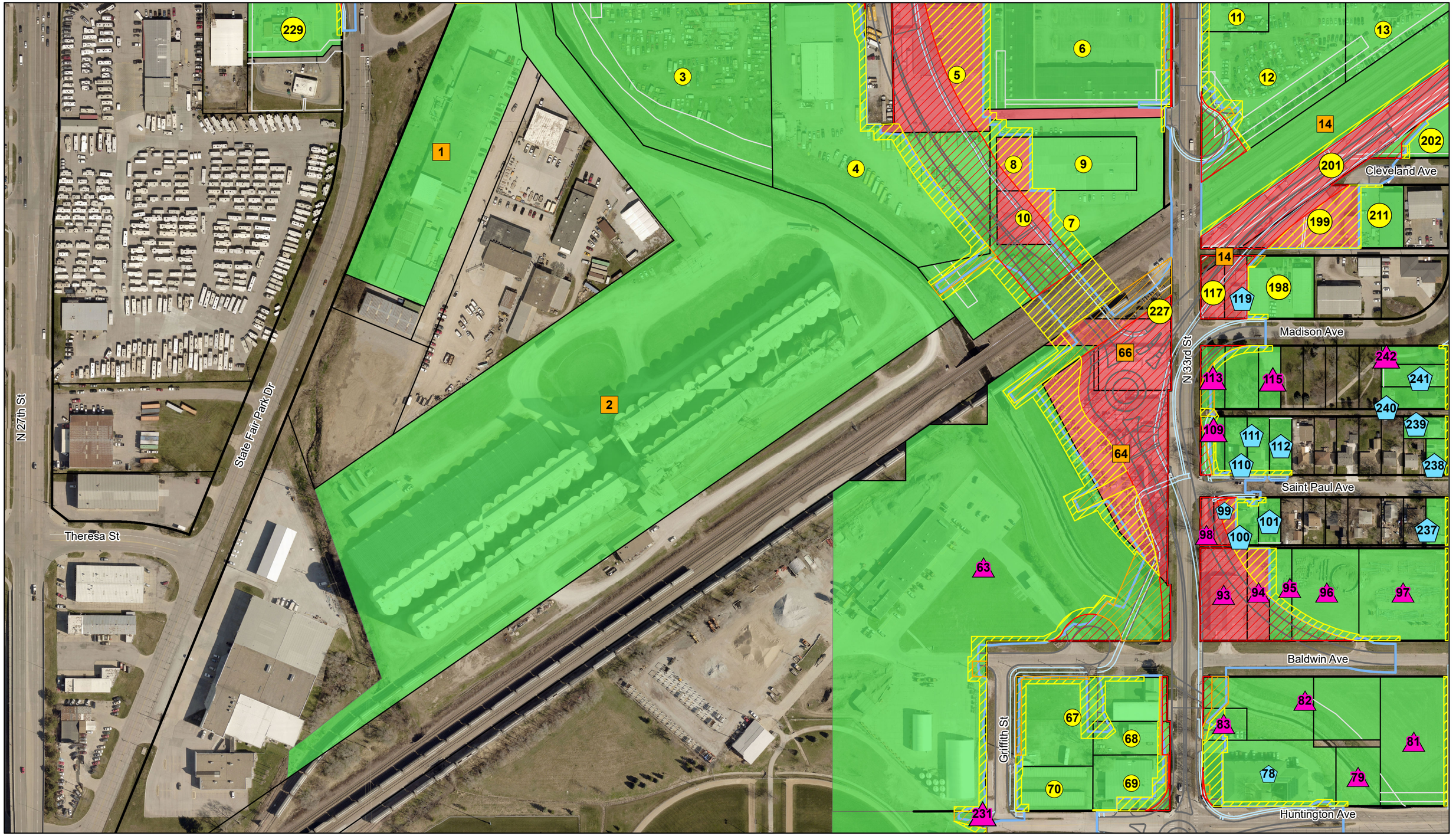

N

0 100 200

1 inch = 200 feet

NEBRASKA
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DEPARTMENT OF TRANSPORTATION

- Edge of Roadway
- Sidewalk
- Limits of Construction
- Existing Permanent Easement
- Property Line
- ROW
- Proposed Right of Way
- Proposed Permanent Easement
- Proposed Temporary Easement
- Full Acquisition
- Impacted Property

Tract Id / Property Type (See Table 4.1 - Preliminary Design Impacted Property Details)

- Commercial
- Industrial
- Residential
- Other

33rd & Cornhusker
Lincoln, Nebraska
Olsson project No. 017-3604-A
Property Acquisition Map
Figure 13b

Data Source: 2020 Lancaster County Aerial

City of Lincoln Project No. 702614, RTSD BU 5919, CN 13294

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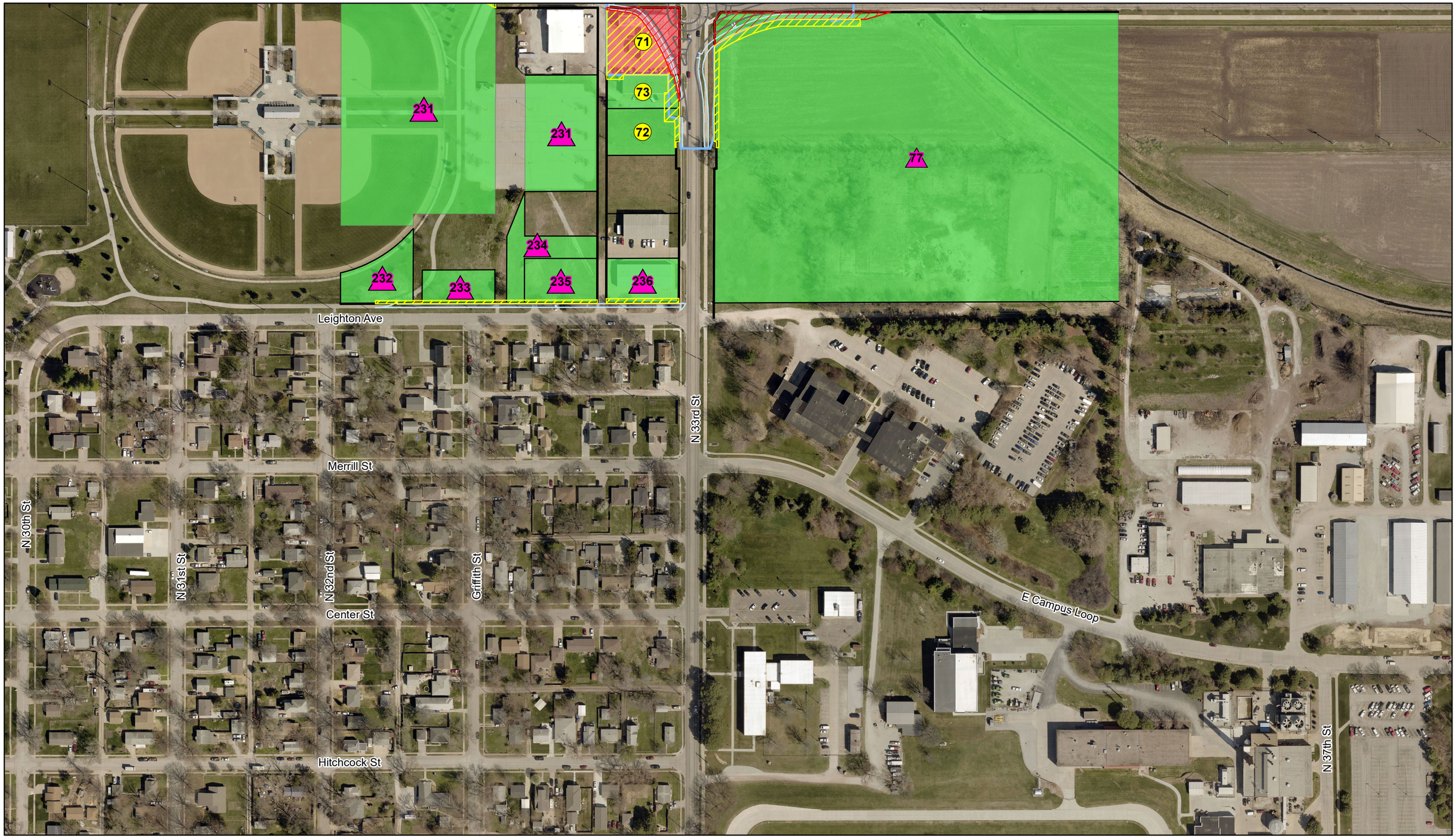

0 100 200

1 inch = 200 feet

Edge of Roadway
Sidewalk
Limits of Construction
Property Line
ROW
Proposed Right of Way
Proposed Permanent Easement
Proposed Temporary Easement
Full Acquisition
Impacted Property

Tract Id / Property Type (See Table 4.1 - Preliminary Design Impacted Property Details)

Commercial
Industrial
Residential
Other

33rd & Cornhusker
Lincoln, Nebraska
Olsson project No. 017-3604-A
Property Acquisition Map
Figure 13c

Data Source: 2020 Lancaster County Aerial

City of Lincoln Project No. 702614, RTSD BU 5919, CN 13294

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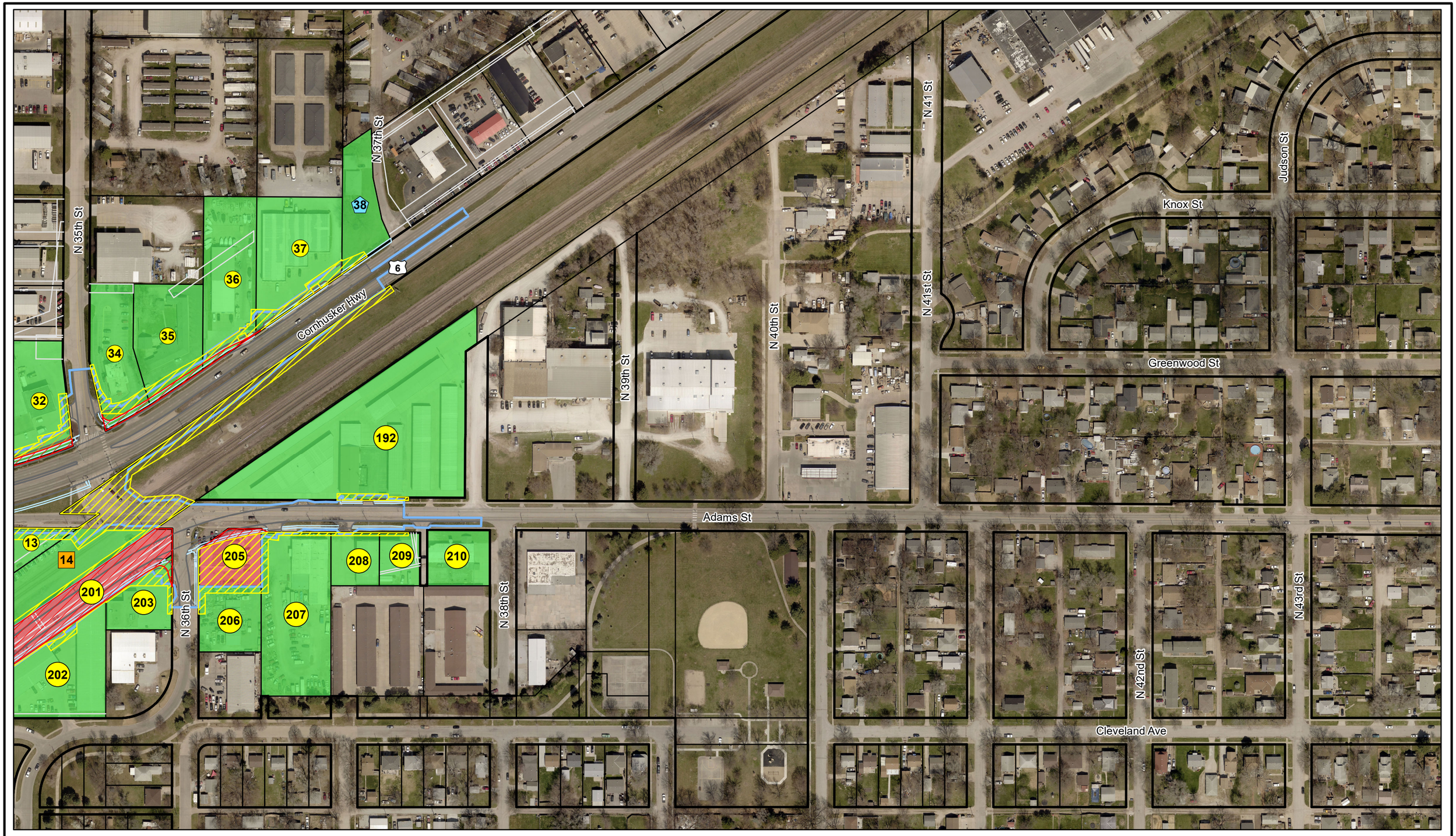

N

0 100 200

1 inch = 200 feet

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

- Edge of Roadway
- Sidewalk
- Limits of Construction
- Existing Permanent Easement
- Property Line
- ROW
- Proposed Right of Way
- Proposed Permanent Easement
- Proposed Temporary Easement
- Full Acquisition
- Impacted Property

Tract Id / Property Type (See Table 4.1 - Preliminary Design Impacted Property Details)

- Commercial
- Industrial
- Residential
- Other

33rd & Cornhusker
Lincoln, Nebraska
Olsson project No. 017-3604-A
Property Acquisition Map
Figure 13d

Data Source: 2020 Lancaster County Aerial

City of Lincoln Project No. 702614, RTSD BU 5919, CN 13294

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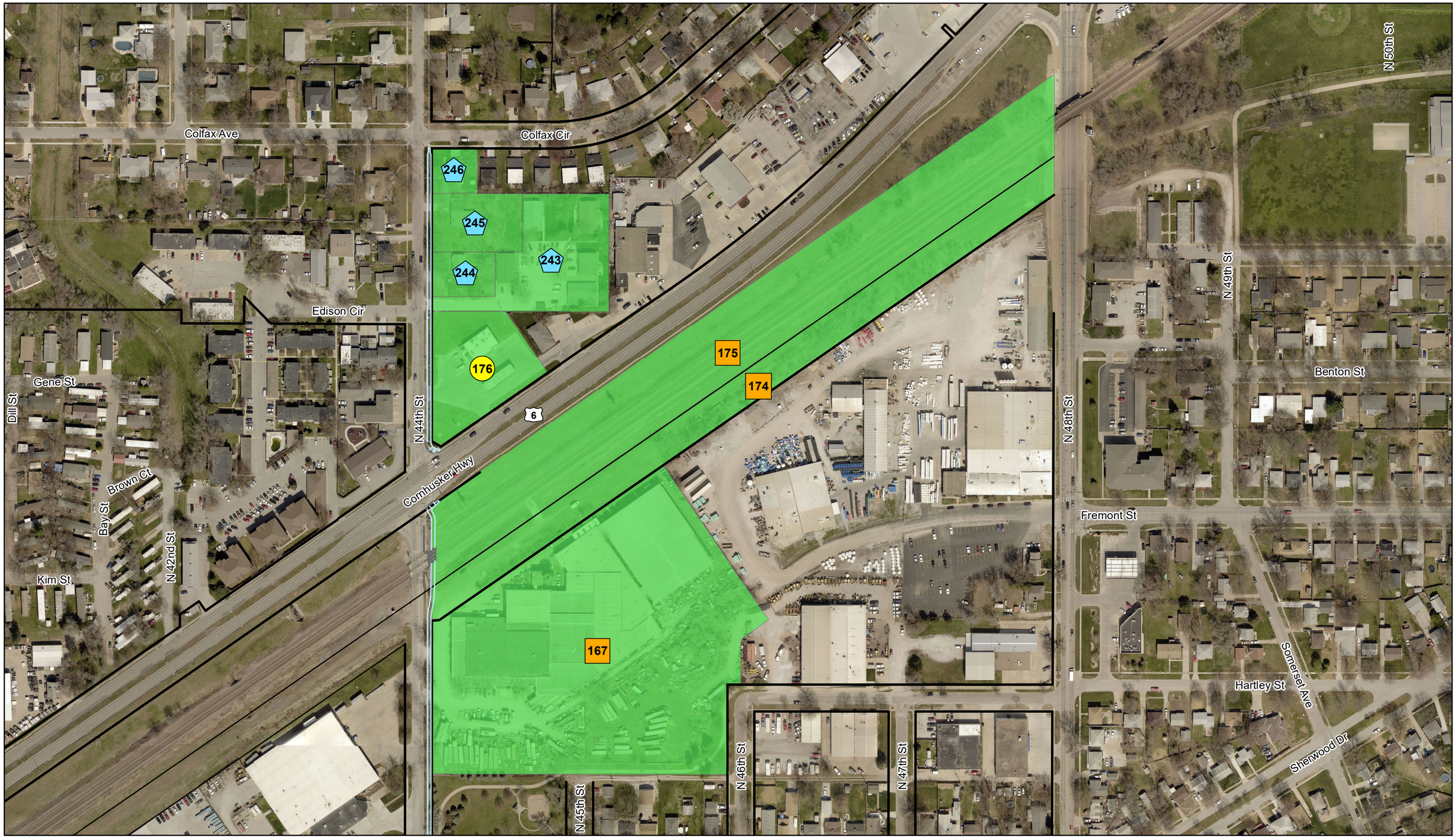

N

0 100 200

1 inch = 200 feet

Edge of Roadway
Sidewalk
Property Line
ROW
Proposed Right of Way
Proposed Permanent Easement
Proposed Temporary Easement
Full Acquisition
Impacted Property

Tract Id / Property Type (See Table 4.1 - Preliminary Design Impacted Property Details)

- Commercial
- Industrial
- Residential
- Other

33rd & Cornhusker
Lincoln, Nebraska
Olsson project No. 017-3604-A
Property Acquisition Map
Figure 13e

Data Source: 2020 Lancaster County Aerial

City of Lincoln Project No. 702614, RTSD BU 5919, CN 13294

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4.3.4 Socioeconomic, Community Continuity, Cohesion and Pedestrian Considerations Mitigation

The Project Sponsor (RTSD) shall notify the public at the start of construction by placing notices in the newspapers with local circulation including, the Lincoln Journal Star and El-Perico, 14 calendar days prior to construction. Websites and social media (Facebook, "X" formerly Twitter) will also be used as public notification mechanisms prior to the beginning of construction activities. The Project Sponsor shall also notify emergency services such as police and fire departments before construction activities begin, as well as maintain continued coordination throughout construction. Emergency services providers shall be invited to the pre-construction meeting for this Project in order to provide input on accessibility during construction activities as well as future accessibility upon Project completion. (Project Sponsor)

The Contractor shall; at all times, to the extent practicable, provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street. Accommodations shall be made to ensure local traffic passing within the limits of the Project has access to all private dwellings, commercial properties, businesses, and public facilities. During those periods when a road is closed, even for a short duration, limited access must be maintained for authorized local traffic. If access is to be closed longer than one day, the Contractor shall coordinate with the affected property owners to address temporary access issues. Access details shall be coordinated among the Project Sponsor's Project Manager, the Contractor, and property owners. (Contractor, Project Sponsor)

Coordination with USACE would be completed prior to ROW acquisitions to avoid conflicts with the USACE Deadmans Run project. (Project Sponsor)

4.4 Title VI/Environmental Justice

Title VI of the Civil Rights Act of 1964 is a federal law that assures individuals and groups are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance; on the basis of race, color, and national origin (42 USC 2000d et seq.).

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* focuses the attention of federal agencies on human health and environmental conditions in minority communities and low-income communities. Further, FHWA issued Order 6640.23A, *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* which establishes policies and procedures for FHWA to use in compliance with EO 12898 (FHWA 2012).

EO 13166, *Improving Access to Services for Persons with Limited English Proficiency* (LEP), requires recipients of federal financial assistance to provide language services (oral or written) to

ensure meaningful access for any language, upon request. Identification of LEP persons is required for the purpose of devising appropriate strategies for meaningful public involvement and ensuring access pursuant to this executive order. LEP persons are individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.

The rights of women, the elderly, and the disabled are protected under related statutes, including Section 162 (a) of the Federal-Aid Highway Act of 1973 (23 USC 324) (sex), Age Discrimination Act of 1975 (age), and Section 504 of the Rehabilitation Act of 1973/American with Disabilities Act of 1990 (disability).

Taken together, these statutes ensure that FHWA policies, programs, and activities do not discriminate based on race, color, national origin, income, sex, age, disability, or limited English proficiency.

In the context of environmental justice, an adverse effect is a totality of significant individual or cumulative human health or environmental effect (e.g., the displacement of a household structure or business, disruptions to transit access, excessive dust in areas where people are likely to work or recreate). A disproportionately high and adverse effect on minority and low-income populations is an adverse effect that:

- Is predominately borne by a minority population and/or a low-income population, or
- Would be suffered by the minority populations and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-minority population and/or non-low-income population.

4.4.1 Affected Environment

For this Title VI and environmental justice evaluation, specific demographic characteristics (race/ethnicity, low income, and LEP) were collected for those populations that could potentially be directly or indirectly affected by the project. The study area populations were compared against data for City of Lincoln, however data for the State of Nebraska and Lancaster County is also provided for reference.

From U.S. Census Bureau maps, a total of four census tracts (CT) were identified in the ESA: CT 3, 4, 9, and 29. Within the four CTs, seven block groups (BG) were identified: CT 3 BG 1, BG 2, and BG 3; CT 4 BG 1 and BG 2; CT 9 BG 1; and CT 29 BG 3. Figures 14a-c depict the boundaries of the CTs and BGs in relation to the Proposed Project.

Data used in the analysis for race/ethnicity, low income, and LEP were taken from the 2020 U.S. Census (USCB 2022a) and the U.S. Census Bureau American Community Survey Five-Year (2016–2020) Estimates (USCB 2022b).

Minority Populations

Racial and ethnic demographic data were collected for the ESA. Data on the following categories of race and Hispanic or Latino origin were collected from the 2020 Census:

- Black (a person having origins in any of the black racial groups of Africa)
- Hispanic or Latino (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race)
- Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, and the Indian subcontinent)
- American Indian and Alaskan Native (a person having origins in any of the original people of North America, South America, including Central America, and who maintains cultural identification through tribal affiliation or community recognition)
- Native Hawaiian or Other Pacific Islander (people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands)

A racial minority is described as a resident or residents who identify themselves as any race other than White (i.e., Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian or other Pacific Islander, some other race, and two or more races). Total minority is composed of all people who consider themselves non-White racially plus those who consider themselves White racially and Hispanic or Latino.

Table 4.2, below, includes the minority racial and ethnic composition for each BG within the ESA as well as for the City of Lincoln, Lancaster County, and the State of Nebraska. Census data indicates that there are racial minorities and people of Hispanic or Latino origin residing in each of the seven BGs (USCB 2022a, 2022b).

Table 4.2 2020 Census Minority Racial and Ethnic Demographics

Category		Geographic Area										
		CT 3, BG 1	CT 3, BG 2	CT 3, BG 3	CT 4, BG 1	CT 4, BG 2	CT 9, BG 1	CT 29, BG 3	Sum of all BGs in ESA	City of Lincoln	Lancaster County	Nebraska
Total Population		990	1,301	1,200	1,631	1,121	1,604	1,801	9,648	291,082	322,608	1,961,504
Black or African American	Total #	52	67	114	173	175	116	80	777	13,605	13,759	96,535
	% of population	5.3%	5.1%	9.5%	10.6%	15.6%	7.2%	4.4%	8.1%	4.7%	4.3%	4.9%
American Indian or Alaska Native	Total #	9	22	14	21	13	22	30	131	2,589	2,665	23,102
	% of population	0.9%	1.7%	1.2%	1.3%	1.2%	1.4%	1.7%	1.4%	0.9%	0.8%	1.2%
Asian	Total #	23	15	78	68	75	96	61	416	13,871	14,086	52,951
	% of population	2.3%	1.2%	6.5%	4.2%	6.7%	6.0%	3.4%	4.3%	4.8%	4.4%	2.7%
Native Hawaiian or Pacific Islander	Total #	0	1	0	0	0	3	0	4	96	206	1,534
	% of population	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	>0.1%	0.1%	0.1%	0.1%
Hispanic or Latino*	Total #	66	130	164	226	118	174	349	1,227	24,934	25,844	234,715
	% of population	6.7%	10.0%	13.7%	13.9%	10.5%	10.8%	19.4%	12.7%	8.6%	8.0%	12.0%
White, not Hispanic or Latino	Total #	769	960	741	1,029	683	1,129	1,155	6,466	222,749	251,962	1,484,687
	% of population	77.7%	73.8%	61.8%	63.1%	60.9%	70.4%	64.1%	67.0%	76.5%	78.1%	75.7%
Other (Populations that identify as two or more categories of race)	Total #	71	106	89	114	57	64	126	627	13,238	14,086	67,980
	% of population	7.2%	8.2%	7.4%	7.0%	5.1%	4.0%	7.0%	6.5%	4.6%	4.4%	3.5%

Source: USCB 2022a. Table P1, Race

 # = number, % = percentage, CT = census tract, BG = block group, ESA = environmental study area

** In addition to race, residents were asked to categorize themselves by one of two ethnicities: Hispanic or Latino and Not Hispanic or Latino. "Hispanic or Latino by Origin" is derived from the total population, not as a separate race.*

Shading indicates a percentage that is meaningfully greater than the city of Lincoln or Lancaster County

In addition to race, the Census also asks residents to identify whether they consider themselves of Hispanic or Latino origin. Total minorities, as used in this evaluation, are composed of racial minorities plus those of Hispanic or Latino origin who are not already counted in the racial minority category.

Table 4.3, below, summarizes total racial minorities, total residents of Hispanic or Latino origin, and total minorities for the ESA. Census data indicate that racial minorities and persons of Hispanic or Latino origin live in the seven BGs. Five of the seven BGs contain total minority population percentages that are meaningfully greater (more than six percent above) than the City of Lincoln. Figure 14a depicts the ESA and the total minority population percentages by BG.

Table 4.3 2020 Total Racial Minority, Total Hispanic or Latino Origin, and Total Racial and Hispanic or Latino Minority

Geographic Area	Total Population	Total Racial Minority		Total Hispanic or Latino Origin		Total Minority (Racial and Hispanic or Latino Origin)	
		Total #	% of population	Total #	% of population	Total #	% of population
Census Tract 3, Block Group 1	990	155	15.7%	66	6.7%	145	14.6%
Census Tract 3, Block Group 2	1,301	211	16.2%	130	10.0%	229	17.6%
Census Tract 3, Block Group 3	1,200	295	24.6%	164	13.7%	364	30.3%
Census Tract 4, Block Group 1	1,631	376	23.1%	226	13.9%	476	29.2%
Census Tract 4, Block Group 2	1,121	320	28.5%	118	10.5%	373	33.3%
Census Tract 9, Block Group 1	1,604	301	18.8%	174	10.8%	401	25.0%
Census Tract 29, Block Group 3	1,801	297	16.5%	349	19.4%	503	27.9%
City of Lincoln	291,082	43,399	14.9%	24,934	8.6%	53,729	18.5%
Lancaster County	322,608	44,802	13.9%	25,844	8.0%	55,065	17.1%
Nebraska	1,961,504	242,102	12.3%	234,715	12.0%	397,848	20.3%

Source: USCB 2022a. Table P2, Hispanic or Latino, and Not Hispanic or Latino by Race # = number, % = percentage

** In addition to race, residents were asked to categorize themselves by one of two ethnicities: Hispanic or Latino and Not Hispanic or Latino. "Hispanic or Latino by Origin" is derived from the total population, not as a separate race.*

Shading indicates a percentage that is meaningfully greater than the City of Lincoln or Lancaster County

Low Income Populations

A low-income population is defined as a population whose median household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines for a family of four. The poverty guidelines for a family of four living in the 48 contiguous states and the District of Columbia is $26,200 for the year 2020.

Table 4.4, below, provides the percentage of low-income residents for each CT within the ESA as well as for the State of Nebraska, Lancaster County, and City of Lincoln. Figure 14b provides a graphic representation of each CT and the percent below poverty level. Census data indicate there are six BGs that have low-income populations that are meaningfully greater (more than six percent above) than the City of Lincoln.

Table 4.4 Population Below Poverty Level

Geographic Area	Population	Population Below Poverty Level	
		Total #	% of population
Census Tract 3, Block Group 1	990	285	28.8%
Census Tract 3, Block Group 2	1,301	389	29.8%
Census Tract 3, Block Group 3	1,200	169	17.1%
Census Tract 4, Block Group 1	1,631	587	36.0%
Census Tract 4, Block Group 2	1,121	252	22.5%
Census Tract 9, Block Group 1	1,604	422	26.3%
Census Tract 29, Block Group 3	1,801	331	18.4%
City of Lincoln	297,082	38,026	12.8%
Lancaster County	322,608	38,390	11.9%
Nebraska	1,961,504	203,996	10.4%

Sources: 2016 - 2020 American Community Survey 5-Year Estimates Table B17021 # - number, % - percentage.
Shading indicates a percentage that is meaningfully greater than the City of Lincoln or Lancaster County

Limited English Proficiency

Title VI and Executive Order 13166 prohibit recipients of federal financial assistance from discrimination based on national origin and the ability to speak English as a primary language. LEP persons are individuals who do not speak English as their primary language and who have limited ability to read, speak, write, or understand English. In accordance with Title VI and Executive Order 13166, the number of individuals who are not proficient in the English language was collected from the U.S. Census Bureau American Community Survey for 2016–2020 for each of the selected populations associated with this project (USCB 2022b). Table 4.5 identifies the number of individuals for each CT who do not speak English as their primary language and speak English less than very well. The languages spoken by this population are also noted. Refer to Figure 14c for a graphic representation of the data.

In compliance with Federal Register Volume 70, No. 239 Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons , an LEP language group is one that constitutes five percent or 1,000 individuals, whichever is less, of the population of persons eligible to be served or likely to be affected or encountered. Although data from the American Community Survey indicates LEP populations above 5 percent in CT 29 BG 3, the combined Project ESA does not exceed LEP population thresholds. Thus, non-English translations of written public involvement materials for the Project would not be conducted in advance. However, to maintain continuity of communications previously provided for the Project, all written materials presented to the public as a part of the public outreach effort for the project will be translated into Spanish and a Spanish translator will be available at public meetings for the project.

Table 4.5 Limited English Proficiency Populations

Geographic Area	Population of Area Age 5 and Above	Population Age 5 and Above that Speaks Languages Other Than English, and Speak English Less Than "Very Well"
Census Tract 3, Block Group 1	1,334	Spanish: 0 (0.0%) Other Indo-European Languages: 0 (0.0%) Asian and Pacific Island Languages: 0 (0.0%) Other Languages: 0 (0.0%)
Census Tract 3, Block Group 2	1,252	Spanish: 0 (0.0%) Other Indo-European Languages: 10 (<0.1%) Asian and Pacific Island Languages: 0 (0.0%) Other Languages: 0 (0.0%)
Census Tract 3, Block Group 3	1,230	Spanish: 0 (0.0%) Other Indo-European Languages: 0 (0.0%) Asian and Pacific Island Languages: 9 (<0.1%) Other Languages: 0 (0.0%)
Census Tract 4, Block Group 1	2,263	Spanish: 24 (1.1%) Other Indo-European Languages: 7 (<0.1%) Asian and Pacific Island Languages: 0 (0.0%) Other Languages: 27(1.2%)
Census Tract 4, Block Group 2	874	Spanish: 19 (2.2%) Other Indo-European Languages: 0 (0.0%) Asian and Pacific Island Languages: 23 (2.6%) Other Languages: 16 (1.8%)
Census Tract 9, Block Group 1	1,239	Spanish: 30 (2.4%) Other Indo-European Languages: 2 (<0.1%) Asian and Pacific Island Languages: 60 (4.8%) Other Languages: 0 (0.0%)
Census Tract 29, Block Group 3	1,237	**Spanish: 108 (8.7%)** Other Indo-European Languages: 0 (0.0%) Asian and Pacific Island Languages: 0 (0.0%) **Other Languages: 153 (12.4%)***
Total Project ESA	9,429	Spanish: 181 (2.0%) Other Indo-European Languages: 19 (0.2%) Asian and Pacific Island Languages: 92 (1%) Other Languages: 196 (2.1%)

Source: USCB 2022b. Table B16004, Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over
2016 - 2020 American Community Survey 5-Year Estimates
*Note: *Other languages may include Arabic, Hebrew, Navajo, etc.*

Community Comparison

The purpose of this section is to compare adverse effects from the Preferred Alternative within Environmental Justice (EJ) populations to adverse effects within a non-EJ population reference community. The information presented is intended to assess whether the Preferred Alternative will disproportionately adversely impact environmental justice communities and to ensure that the project complies with federal environmental justice regulations as described above in Section 4.4.

Based on "Promising Practices for EJ Methodologies in NEPA Reviews" published in March 2016, we have selected a comparison group to compare impacts to minority populations and low-income populations in the affected environment with an appropriate comparison group within the affected environment. The comparison group consists of those individuals within the affected environment block groups that are not considered low-income or minority. Section 4.4.3 provides a clear explanation of the potential impacts to various environmental resources resulting from the Preferred Alternative. It also compares these impacts on EJ populations with those in a comparison group. The section aims to determine whether the project results in disproportionately high and adverse impacts on EJ populations.

Four CTs, seven block groups (BG) were identified within the Project ESA: CT 3 BG 1, BG 2, and BG 3; CT 4 BG 1 and BG 2; CT 9 BG 1; and CT 29 BG 3. Data used in the analysis for race/ethnicity, low income, and LEP were taken from the 2020 U.S. Census (USCB 2022a) and the U.S. Census Bureau American Community Survey Five-Year (2016–2020) Estimates (USCB 2022b). CTs and BGs locations are shown on Figures 14a-14c. Total minority populations are present in CT3 BG 3, CT 4 BG 1, CT 4 BG 2, CT 9 BG 1, and CT 29 BG 3 at percentages that are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County. Low-income populations are present in CT 3 BG 1, CT 3 BG 2, CT 4 BG 1, CT 4 BG 2, CT 9 BG 1, and CT 29 BG 3 at percentages that are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County. LEP persons are present at a concentration that is above 5 percent of the population in CT 29 BG 3. The text below provides a detailed description of each BG in the Project ESA and provides a comparison of these BGs for Total Minority and Low-Income populations as well as LEP persons.

CT 3 BG 1

CT 3 BG 1 is located south of the BNSF tracks between 44th and 48th Streets and south to Baldwin Avenue.

Total Minority: CT 3 BG 1 has a total minority percentage at 14.6 percent, which is below the City of Lincoln (18.5 percent) and Lancaster County (17.1 percent). This is the block group within the ESA with the lowest percentage of total minority (Racial and Hispanic or Latino Origin) populations.

Low Income Populations (population below poverty level): CT 3 BG 1 has 28.8 percent of the population below poverty level which is higher than the City of Lincoln at 12.8 percent and Lancaster County at 11.9 percent. This population is considered EJ because the populations present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

CT 3 BG 2

CT 3 BG 2 is located south of the BNSF tracks between 33rd Street to 44th Street and south to Baldwin Avenue.

Total Minority: CT 3 BG 2 has total minority populations at 17.6 percent, which is below the City of Lincoln at 18.5 percent and slightly above Lancaster County at 17.1 percent. This BG has the second lowest percentage of total minority populations in the BGs within the ESA, behind CT 3 BG 1. This population is not considered EJ because the populations present are not meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

Low Income Populations (population below poverty level): CT 3 BG 2 has the second highest percentage of population below poverty level at 29.8 percent, behind CT 4, BG 1. It is greater than the City of Lincoln at 12.8 percent and Lancaster County at 11.9 percent. This population is considered EJ because the populations present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

CT 3 BG 3

CT 3 BG 3 is located south of the BNSF tracks extending east from 33rd Street to 48th Street, between Baldwin Avenue and Huntington Avenue.

Total Minority: CT 3 BG 3 has total minority populations of 30.3 percent, which is greater than the City of Lincoln at 18.5 percent and Lancaster County at 17.1 percent. This BG has the second highest percentage of total minority populations in the BGs within the ESA, behind CT 4 BG 2 at 33.3 percent. This population is considered EJ because the populations present are meaningfully greater than the City of Lincoln and Lancaster County.

Low Income Populations (population below poverty level): CT 3 BG 3 has a population below poverty level at 17.1 percent, while the City of Lincoln at 12.8 percent and Lancaster County at 11.9 percent.

CT 4 BG 1

CT 4 BG 1 is located south of the BNSF tracks extending west from 33rd Street to approximately 21st Street and extending south to Fair Street and Holdrege Street.

Total Minority: CT 4 BG 1 has total minority population of 29.2 percent, which is greater than the City of Lincoln at 18.5 percent and Lancaster County at 17.1 percent. This BG has the third highest percentage of total minority populations in the BGs within the ESA. This population is considered EJ because the populations present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

Low Income Populations (population below poverty level): CT 4, BG 1 has 36.0 percent of population living below poverty level. It is greater than the City of Lincoln (12.8 percent) and Lancaster County (11.9 percent). This population is considered EJ because the populations present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

CT 4 BG 2

CT 4 BG 2 is located south of the BNSF tracks, bound by Fair Street on the north and Dudley Street to the south, extending west from 33rd Street to 27th Street.

Total Minority: CT 4 BG 2 has total minority populations of 33.3 percent, which is higher than the City of Lincoln at 18.5 percent, higher than Lancaster County at 17.1 percent, and is the highest percentage of total minority populations of the BGs within the ESA. This population is considered EJ because the populations present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

Low Income Populations (population below poverty level): CT 4, BG 2 has 22.5 percent of the of population living below poverty level at 22.5 percent. It is greater than the City of Lincoln (12.85 percent) and Lancaster County (11.9 percent). This population is considered EJ because the populations present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

CT 9 BG 1

CT 9 BG 1 is located between Huntington Avenue on the north, 33rd Street on the west, 48th Street on the east and Holdrege Street on the south, with a portion between 40th and 48th Streets extending south to Vine Street.

Total Minority: CT 9 BG 1 has total minority populations of 25.0 percent, which is greater than the City of Lincoln (18.5 percent) and Lancaster County (17.1 percent). This population is considered EJ because the populations present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

Low Income Populations (population below poverty level): CT 9 BG 1 has 26.3 percent of population living below poverty level, which is greater than the City of Lincoln (12.8 percent) and Lancaster County (11.9 percent). This population is considered EJ because the populations

present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

CT 29 BG 3

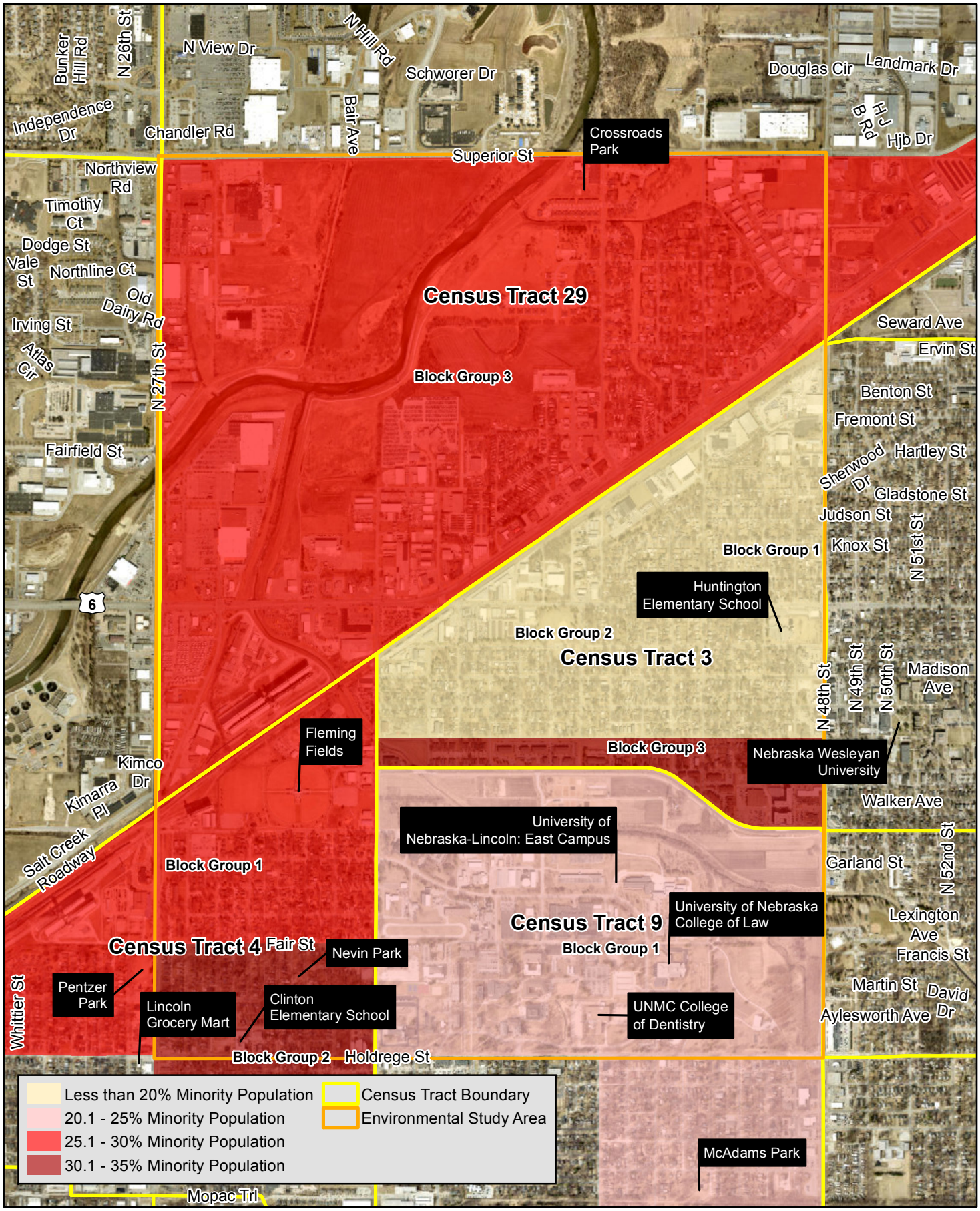
CT 29 BG 3 is located north of the BNSF tracks, bound by Superior Street to the north, the BNSF tracks to the south, 27th Street to the west, and 48th Street to the west.

Total Minority: CT 29 BG 3 has total minority populations of 27.9 percent, which is greater than the City of Lincoln (18.5 percent) and Lancaster County (17.1 percent). This population is considered EJ because the populations present are meaningfully greater (more than 6% above) than the City of Lincoln and Lancaster County.

Low Income Populations (population below poverty level): CT 29 BG 3 has 18.4 percent of population living below the poverty level, which is higher than the City of Lincoln (12.8 percent) and Lancaster County (11.9 percent).

In summary, Census data indicates there are racial minorities and people of Hispanic or Latino origin residing in each of the seven BGs (USCB 2022a, 2022b). Five BGs within the ESA have minority populations with percentages that are meaningfully greater than the percentages within the City of Lincoln or Lancaster County. Figure 14a depicts the ESA and the total minority population percentages by BG. Table 4.3 summarizes the total racial minorities, total residents of Hispanic or Latino origin, and total minorities for each block group as well as the City of Lincoln, Lancaster County, and the State of Nebraska.

Census data indicate there are residents living below the HHS low-income guideline within all seven BGs (USCB 2022b). The percentage of the population within the ESA living below the HHS low-income guideline is generally higher than that of the City of Lincoln (12.8 percent) and Lancaster County (11.9 percent). Six BGs within the ESA have low-income populations with percentages that are meaningfully greater than the City of Lincoln or Lancaster County. Table 4.4 provides the percentage of low-income residents for each BG within the ESA as well as for the State of Nebraska, Lancaster County, and the City of Lincoln. Figure 14b provides a graphic representation of each CT and the percent below poverty level.
Based on the information presented in the above sections, there are readily identifiable groups or clusters of minority and low-income persons in the EJ study area. These groups or clusters are represented graphically in Figures 14a and Figures 14b with specific demographic information for each BG presented in Tables 4.3 and 4.4, above.



NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

N

0 500 1,000 2,000 ft

1" = 2,000'

Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Minority Populations

FIGURE
14a

Project No. 702614, RTSD BU 5919, CN 13294

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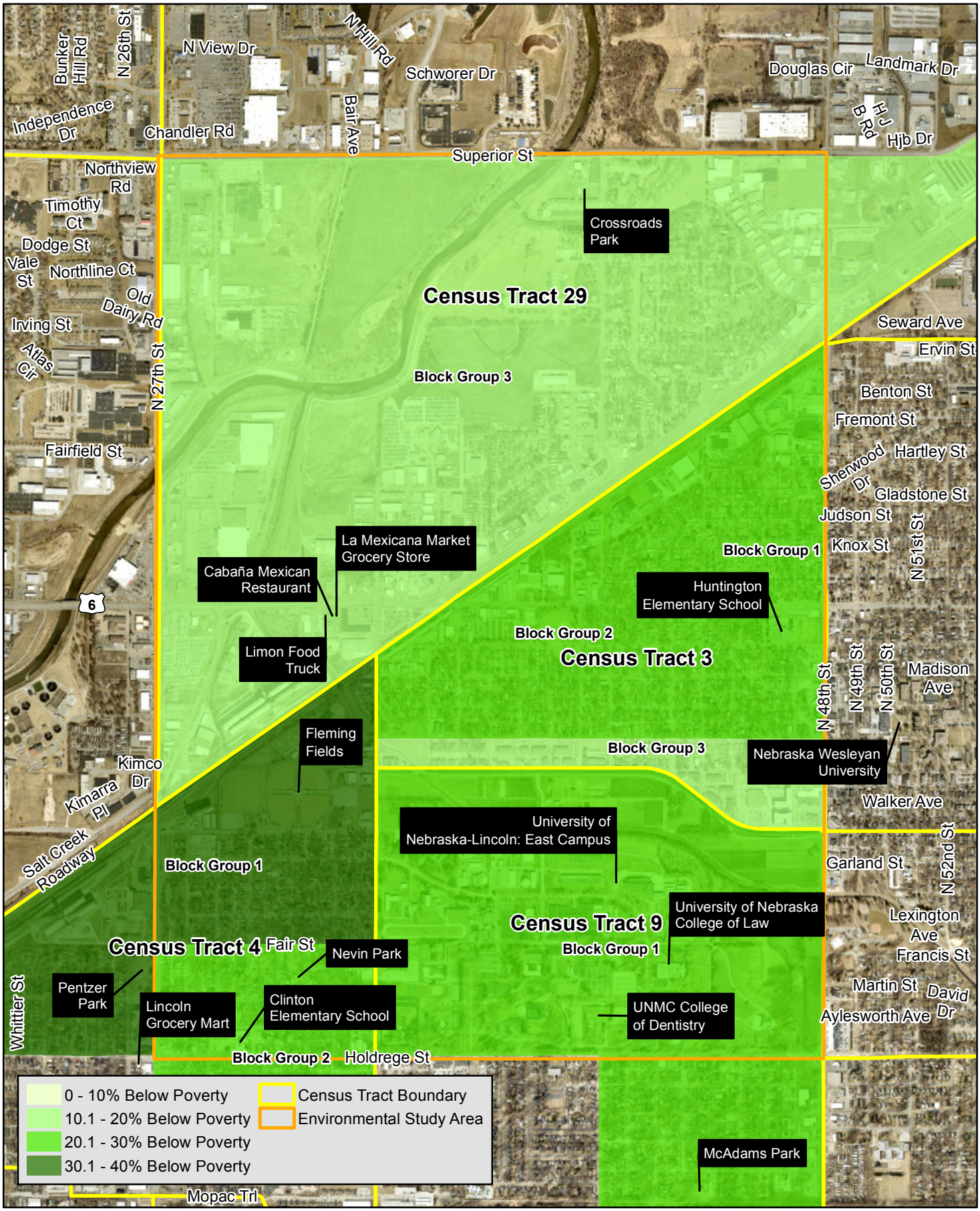

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N

0 500 1,000 2,000 ft

1" = 2,000'

Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Low Income Populations

FIGURE
14b

Project No. 702614, RTSD BU 5919, CN 13294

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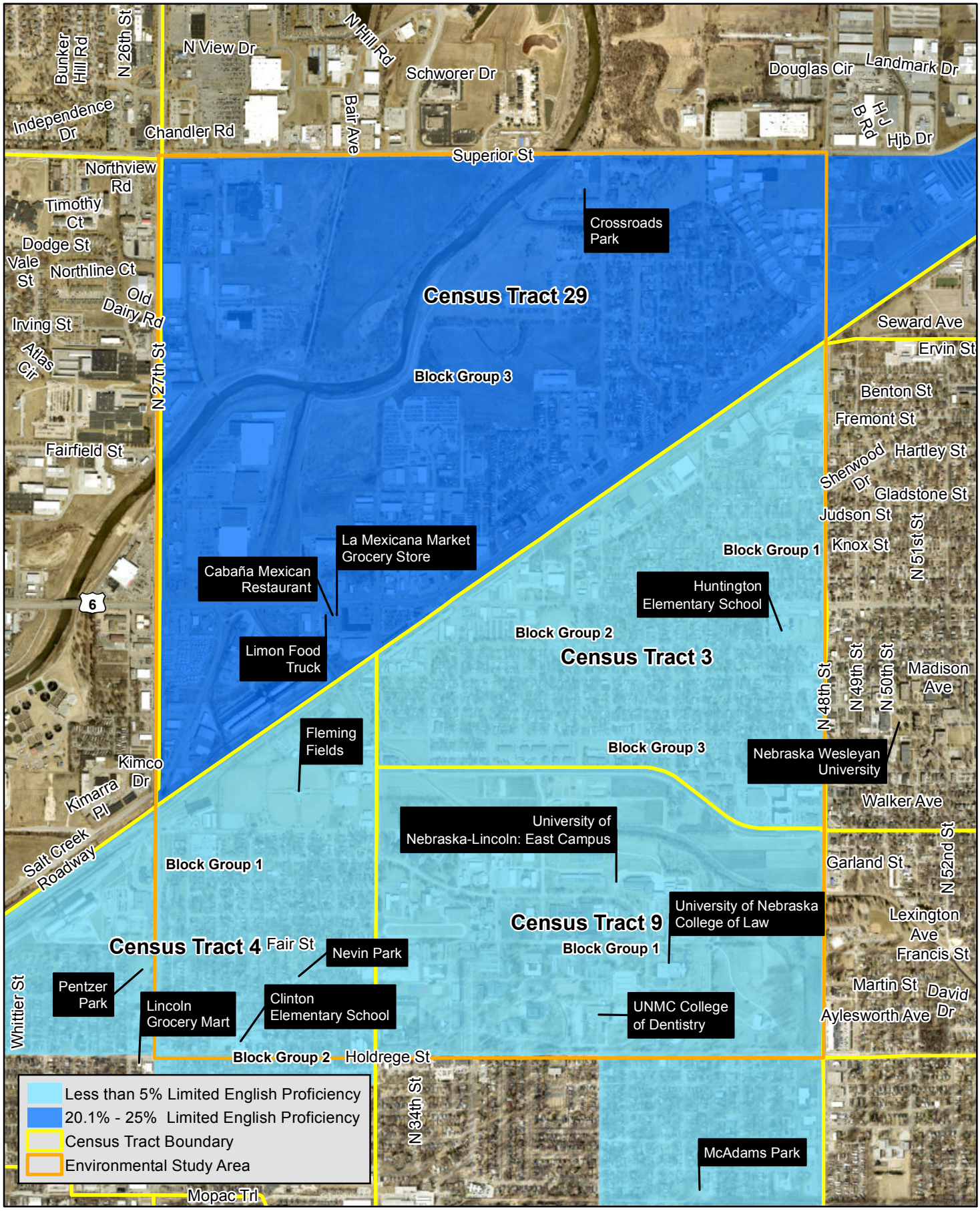

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NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

N

0 500 1,000 2,000 ft

1" = 2,000'

Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Limited English Proficiency Persons

FIGURE
14c

Project No. 702614, RTSD BU 5919, CN 13294

Targeted Public EJ Involvement and Outreach

Specific targeted outreach to the EJ, LEP, and low-income communities was completed and is planned to continue throughout the NEPA process. Official legal notices were translated to Spanish and published in the *El Perico* newspaper in Omaha, Nebraska. English and Spanish versions of the notification postcards/newsletters were individually hand delivered or placed as door hangers to key community organizations identified in the geographic areas containing EJ, LEP, and low-income populations. Examples of businesses or organizations where targeted outreach occurred includes:

Malone Community Center: Is a community center that serves people in need within Lincoln, Nebraska and provides support against poverty.

Center for People in Need: Is an organization that provides basic needs, education, and professional development with the goal of breaking cycles of poverty and help the people in Lincoln achieve economic dependance.

El Centro De Las Américas: Originally founded as the Hispanic Community Center, El Centro De Las Américas is a cultural center that is focused on the promotion, awareness, appreciation, and acceptance of diversity through cultural activities and education.

Salvation Army: Is an organization that serves the Lincoln area though various areas of service, including feeding programs, youth development, and Pathways of Hope to the community and offer solutions to those who need help.

Civic Nebraska: Is an organization that builds a community in with Nebraskans of all ages and backgrounds can join to take action in democracy in innovate and meaningful ways.

A complete list of key community organizations and business's that received hand delivered Project information is included in Appendix K.

In addition to the outreach at organizations and businesses, door hangers and Project notifications were hand delivered to the residential units above Virginia's Café, Lincoln Tent and Awning, the strip malls within the study area, and mailed directly to the owners and occupants of the individual mobile homes within the study area. Additional information on the public involvement and public notification process for this Project can be found in Section 5.

4.4.2 Environmental Impacts of the No-Action Alternative

Under the No-Action Alternative, the Proposed Project would not be implemented and there would be no construction or land acquisition. The No-Action Alternative would continue the status quo and would not result in new disproportionately high and adverse impacts to environmental justice populations. Under the No-Action Alternative, the entire community, including minority

and low-income populations, would continue to experience impacts related to a lack of community cohesion associated with the BNSF rail lines, risks associated with at-grade rail crossings, delays to emergency services, and overall lack of multi modal improvement and access to services such as StarTran. However, the environmental justice populations in the area would also not experience the benefits of decreased traffic congestion, improved mobility, improved bikeway and pedestrian access, and improved safety conditions resulting from the Proposed Project.

4.4.3 Environmental Impacts of the Preferred Alternative

As previously noted, there are readily identifiable groups or clusters of minority or low-income persons in the ESA.. Depending on their proximity to the project, construction of the Preferred Alternative could temporarily affect low-income and minority populations residing in the Project area, including temporary, short-term impacts related to construction equipment noise, emissions and fugitive dust affecting local air quality, and traffic disruption/detours necessary to accommodate construction. Mitigation measures specifically designed to reduce construction-related impacts are described in Section 4.4.4 and 4.18.4. With the implementation of mitigation measures, construction-related impacts would not be considered high and adverse.

The Project ESA does not exceed the LEP persons thresholds of five percent of the total population or 1,000 persons requiring translation of written materials. Although non-English translations are not required for the Project, materials developed early in the public involvement process were translated into Spanish due to the presence of previously identified LEP persons that are no longer present. In keeping with NDOT policy, public involvement materials for the Project will continue to be translated into Spanish for the sake of continuity and consistency.

To evaluate potential traffic noise impacts associated with long-term operation of the project, existing and future traffic noise levels were modeled. As documented in the Traffic Noise Evaluation (Appendix D), traffic noise levels predicted for each noise sensitive receiver location did not approach or exceed the noise abatement criteria (NAC) for future traffic conditions. The predicted future noise levels do not substantially exceed the existing levels. Because the future noise levels of the preferred alternative would not approach or exceed the NAC and would not substantially exceed existing noise levels, it was determined there would be no impact and that noise abatement measures were not required. Additional discussion of traffic noise and mitigation is provided in Section 4.7.

As described in Section 4.3, property acquisitions would be required under the Preferred Alternative, including the acquisition of residential homes and commercial and industrial properties (refer to Table 4.1 and Figures 13a-e). These property acquisitions, which include two residential properties and 14 non-residential properties, would occur within BGs with minority and low-income populations. All acquisitions would follow the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). The Uniform Act requires the owners of acquired property be paid fair market value for the acquisition

and ensures that displaced persons are provided with comparable replacement property prior to displacement. The Uniform Act also includes provisions for relocation assistance for persons displaced from residential homes and rental properties. To the extent feasible, businesses would be relocated within the same neighborhood or, if that is not possible, in nearby neighborhoods to maintain patronage.

Throughout the NEPA process, opportunities were provided for the public and other stakeholders to be involved in the identification of potential social, economic, and environmental concerns related to the project, beginning with the PEL study, through the SAP and extending through the development of the EA. Multiple public open houses were conducted to provide information about the project and accept comments. During these open houses various alternatives were presented and there was strong opposition by the public for initial concepts that would have had a greater effect on minority and low-income populations (i.e., potential acquisitions associated with Virginia's Café, low-income short-term housing, and a mobile home park). Based on the public engagement and design constraints, the Preferred Alternative was selected because it meets the project purpose and need and solicited broader support from the public as it reduced impacts to community resources such as Virginia's Café, short-term low- income housing located above Virginia's Café and Lincoln Tent and Awning and avoided impacts to the mobile home park. Refer to Section 5 and Appendix K of this document for detailed information on public involvement and direct outreach to environmental justice populations in the ESA.

The parcel located at 3223 Cornhusker Highway currently provides services as La Cabaña Mexican restaurant, Taquiera Limon food truck, and La Mexicana Market grocery store, as well as a photographer, warehouse tenants, and a check-cashing business. Le Mexicana Market grocery store is the only grocery store of its kind that provides goods and services to the Hispanic/Latino community in northeast Lincoln (as of the June 2023, the nearest alternate grocery store that services the Hispanic/Latino community is Lobo City Mex Supermarket, located approximately 2.8 miles away, near N. 27th and R Streets and is accessible from 3223 Cornhusker Highway via StarTran bus routes) and provides goods and services to the Hispanic and Latino community located in the ESA. No additional residences, businesses, or organizations likely to be predominantly used by minority or low- income populations were identified near the Project. The loss of these businesses represents an adverse impact; however, these impacts to the property and businesses owners would be mitigated through the Uniform Act. Project representatives spoke with the property owner in April 2020 and a summary of this stakeholder meeting is provided in Appendix K (see Tract 5).

The Preferred Alternative has the potential to impact minority and low-income populations within the ESA. However, the Preferred Alternative takes into consideration comments received from the public during an extensive outreach process and has been designed to include mitigation measures that reduce impacts to minority and low-income populations. While the Preferred Alternative would result in temporary, short-term construction impacts and property acquisitions/displacements, mitigation measures have been included in the project such that these impacts are not considered adverse, nor would they be disproportionately high and

adverse with respect to minority and/or low-income populations. Under the Preferred Alternative, impacts to minority and low-income persons would not be more severe or greater in magnitude than the effects suffered by the non-minority population and/or non-low-income population. The Preferred Alternative is anticipated to have a positive long-term impact on all communities within the ESA, including minority and low-income populations, as it would:

- Improve safety along the rail corridor between N. 27th and N. 48th Streets by eliminating or reducing the potential conflict points between trains and other transportation modes (vehicles, pedestrians, and bicyclists)
- Reduce delay for motorists, pedestrians, and bicyclists crossing the rail corridor, including rerouting of emergency response vehicles due to crossings blocked by trains
- Accommodate existing and future traffic (Year 2040) to reduce congestion along roadways crossing the rail corridor
- Improve mobility across the rail corridor in northern Lincoln, including public safety response times
- Improve multimodal connectivity in northern Lincoln for vehicles, pedestrians, bicyclists, and bus transit
- Will not restrict access to emergency service facilities or providers during construction.

This review was for the project as described. If detour routes are determined in final design, this project will need to be re-evaluated for EJ/LEP to include the determined route(s) and any proposed associated work.

Through this analysis, refinements made to the Preferred Alternative as a result of public engagement, and mitigation measures, the RTSD has concluded the project has been designed and planned in a manner that avoids disproportionately high and adverse impacts on EJ communities. RTSD has concluded that the Preferred Alternative as a whole would not have “disproportionately high and adverse effects” on minority and low-income populations in accordance with the provisions of E.O. 12898 and FHWA Order 6640.23A. Under the Preferred Alternative, impacts to minority and low-income persons would not be more severe or greater in magnitude than the effects suffered by the non-minority population and/or non-low-income population. The Preferred Alternative is anticipated to have a positive long-term impact on all communities within the ESA, including minority and low-income populations, through increased safety, reduced traffic delay, and improved multi-modal access. Section 3 includes a detailed description of the process used to develop and screen alternatives to address the purpose and need for the Project, including consideration of all environmental and community resources.

Resource Impacts to EJ Populations

This section provides a brief description of the resource impacts that are fully described throughout Section 4 and how they relate to EJ populations in the ESA.

Land Use and Planning

Land use planning is the process of regulating the use of land in effort to promote more desirable social and environmental outcomes as well as a more efficient use of resources. Through improved safety, connectivity, and reduced delays, the Preferred Alternative would have a beneficial impact on neighborhood integrity and cohesion, including census tracts with EJ populations. ROW acquisition and permanent easements would be required. These property acquisitions, which include two residential properties and 14 non-residential properties, would occur within BGs with minority and low-income populations. Section 4.2 provides a full description of Land Use and Planning, the impact analysis, and determination.

Socioeconomic, Community Continuity, Cohesion, and Pedestrian Considerations

Socioeconomic resources refer to aspects of a project that are either social or economic in nature. The Preferred Alternative would be built with minimal disruption to the traveling public to the extent practicable. Long-term impacts would be positive, resulting in a railroad viaduct that would be better suited to the nature of the study area and result in faster responses by emergency services to the area businesses. It is anticipated that the proposed project would result in economic benefit in the region by reducing delays associated with the at-grade crossings at 33rd Street and Adams Street and eliminating the potential for train-vehicle collisions. Improvements to sidewalks, crosswalks, the John Dietrich Trail, and a new multi-use path would further enhance accessibility to businesses. The Preferred Alternative would improve pedestrian accessibility through improved safety and reduced delays for all population segments and would be affected to the same degree. Accommodations shall be made to ensure local traffic passing within the limits of the Project has access to all private dwellings, commercial properties, businesses, and public facilities. Thus, these impacts do not represent a disproportionately high and adverse effect on EJ populations. A full description of Socioeconomic, Community Continuity, Cohesion, and Pedestrian Considerations are described in Section 4.3.

Visual Resources and Aesthetics

Elevated structures are proposed to be built within the Project ESA; therefore, it is important to consider the impact on the visual aesthetics of the Project. The Cornhusker Highway corridor currently consists of a heavily developed urban landscape. It is anticipated that views of the Project would be compatible with existing and future uses in the area as projected in the LRTP. The elevated structure would be visible from adjacent recreational properties, businesses, and residential homes; however, construction would be similar to existing transportation features within the vicinity; therefore, CTs with EJ populations would not experience a disproportionately high and adverse effect by this change in viewshed. Section 4.5 contains a full description of Visual Resources and Aesthetics, the impact analysis, and determination.

Air

Lincoln, Nebraska is in Attainment for all National Ambient Air Quality Standards (NAAQS) pollutants. Areas in Attainment are classified as such because the concentrations of the criteria

pollutants are below the levels established by the U.S. Environmental Protection Agency (USEPA). No permanent structures that would directly result in increased air emissions will be constructed. The Preferred Alternative would not result in significant changes to traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in Mobile Source Air Toxics (MSAT) impacts; therefore, no increase in MSAT levels is anticipated for all population segments, including EJ populations. There are no significant air related impacts, and thus do not present a disproportionately high and adverse effect to EJ populations. A full description of Air, impact analysis, and determination is provided in Section 4.6.

Noise

Noise is defined as unwanted sound that disrupts normal activities or otherwise diminishes the quality of the environment. The traffic noise level predicted for each noise sensitive receiver location does not approach or exceed the Noise Abatement Criteria provided in Title 23 CFR 772. The predicted future noise levels do not substantially exceed the existing levels in all the locations depicted in Appendix D, Figures 2 through 2G; therefore, EJ populations would not be disproportionately or adversely affected. Section 4.7 provides a full description of noise, the impact analysis, and determination.

Parks and Trails / Section 4(f) / Section 6(f)

Section 4(f) of the US Department of Transportation Act of 1966 (USDOT) as amended stipulates that FHWA and other USDOT agencies cannot approve the use of land from planned or existing publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless certain conditions apply (49 USC 303[c]).

Section 6(f)(3) of the LWCF Act of 1965, now codified as Section 200305(f)(3), Section 6(f), stipulates that recreational resources developed with federal funding through the Land and Water Conservation Fund (LWCF) are protected under Section 6(f) of the LWCF Act, which prohibits the conversion of these properties to anything other than public outdoor recreation uses.

All Section 4(f) resources located within the Project ESA or in the vicinity of the Project are listed in Section 4.8.1 and shown on Figure 15a.

Access to the following Section 4(f) properties shall be maintained during construction via temporary traffic control such as signing, striping, and/or barricading:

- **Fleming Fields Recreation Sports Park**
- **34th and Madison Park**
- **45th and Gladstone Park**

The following Section 4(f) properties shall be avoided during construction and access shall be maintained at all times.

- **UPCO Park**
- **Dietrich Trail Connector**
- **Theresa Trail**

Trail continuity would be maintained at all times during construction via detour. A temporary surface would be constructed to provide a trail detour for the following locations:

- **Dietrich Trail**
- **Huntington Trail**
- **33rd Street Trail**

Section 4(f) properties and trail continuity would be maintained during construction. EJ populations would not be disproportionately or adversely affected as access to these properties would be maintained with detours and temporary traffic controls. A full discussion of parks, trails, Section 4(f) and Section6(f) properties is provided in Section 4.8.

Utilities

Numerous public and private utilities are located within the Project ESA. Some of these are within the existing ROW, and others are within separate utility easements that may run adjacent to or within the ROW. Under the Preferred Alternative, there would be a need to relocate certain utilities. All utilities in the area have been notified of the Project. Environmental impacts are not anticipated as a result of utility adjustments; therefore, disproportionately high and adverse impacts to EJ populations are not anticipated. A full discussion of utilities, impact analysis, and determination are included in Section 4.9.

Wetlands and Waters of the United States

Wetlands are areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Other Waters of the United States (WOUS) include features such as rivers, streams, and lakes that are not classified as wetlands. Preliminary Design indicates the Preferred Alternative would have no permanent impacts to channels and would not likely impact over 1/10 of an acre of jurisdictional WOUS. Impacts are anticipated to be authorized by a Nationwide Permit (NWP) 14 - Linear Transportation Projects. Temporary impacts to Deadmans Run are anticipated due to contractor access crossings or work platforms. Impacts to WOUS would not represent a disproportionately high and adverse effect on EJ populations. A full discussion of Wetlands and Waters of the United States, impact analysis, and determinations are included in Section 4.10.

Surface Water Quality (Impaired/Unique Waters)

The Clean Water Act of 1972, the Safe Drinking Water Act of 1974, and several other laws provide protection for water quality and public water systems. Therefore, potential impacts to water resources were considered with respect to groundwater and surface water resources, quantity and quality of runoff, and regulatory requirements. The Preferred Alternative, including temporary detours, would not adversely affect the water quality of Deadmans Run or Salt Creek, and therefore, would not represent a disproportionately high and adverse effect to EJ populations. Proper decommissioning of any registered or unregistered wells within the Project ESA would not have a considerable impact on groundwater quality, and therefore, would not have disproportionately high and adverse effects to EJ populations. A full description of Surface Water Quality (Impaired/Unique Waters), impact analysis, and determinations are included in Section 4.11.

Vegetation and Invasive Species

Invasive species are defined as non-native species that negatively affect the economy, the environment, or human health where they establish. The Preferred Alternative would require the conversion of some agricultural areas or maintained lawns into pavement and ROW; the project may also require tree removals and clearing and grubbing in certain areas. Due to the amount of disturbance that has already occurred in the project area, these actions are unlikely to lower the overall quality of the area's vegetation. As described in Section 4.12.4, erosion control measures would be implemented requiring disturbed areas to be re-seeded with a native seed mix. This would minimize or prevent invasive species from re-establishing in the Project ESA. With the implementation of the mitigation measures as described in Section 2.14.4, there would be no disproportionately high and adverse effect to EJ populations. For a full description of Vegetation and Invasive species, refer to Section 4.12.

Threatened, Endangered, and Special Status Species

Federally listed threatened and endangered species are protected under the Endangered Species Act of 1973 as amended (16 USC 1531 et seq.). Bald and golden eagles have specific protection under the BGEPA (16 USC 668-668c). Under the MBTA (16 USC 703-712: Ch. 128 *as amended*), construction activities in grassland, wetland, stream, and woodland habitats, and those that occur on bridges (for example, which may affect swallow nests on bridge girders) that would otherwise result in "taking' of migratory birds, eggs, young, and/or active nests should be avoided.

The NGPC and USFWS reviewed the Biological Assessment for the Preferred Alternative and both agencies concurred with the findings that the project would result in a "May Affect, Not Likely to Adversely Affect" determination for the eastern black rail and the northern long-eared bat.

Construction activity along the Preferred Alternative would likely remove trees, grassland, and wetland vegetation in ditches; however, this loss of habitat would likely be temporary. Direct impacts to migratory birds from construction activities associated with the Preferred Alternative are not likely to be adverse and would be similar to other construction projects in urban areas.

The Preferred Alternative and associated construction activities are unlikely to affect bald or golden eagles due to the lack of suitable habitat in the vicinity of the Project ESA.

Any effects to threatened, endangered, and special status species would not represent a disproportionately high and adverse effect to EJ populations in the Project ESA. For a full discussion of threatened, endangered, and special status species and their impact analyses and determinations, refer to Section 4.13.

Floodplains

EO 11988, Floodplain Management, May 24, 1977, outlines the responsibility of federal agencies in the role of floodplain management (42 FR 26951). Deadmans Run is located within a special flood hazard area (100-year floodplain) and a regulatory floodway. Construction of the proposed Project is anticipated to remove the majority of the current Deadmans Run floodplain from the Project ESA. The Preferred Alternative would impact portions of the Salt Creek floodplain with the construction of the proposed overpass, as well as the widening of Cornhusker Highway and the Cornhusker Highway bridge across Deadmans Run. The Project construction would have a floodplain encroachment and a Floodplain Development Permit shall be obtained from the City of Lincoln prior to construction to certify that the proposed Project shall not raise the base flood elevation more than one foot and there would be no rise in the floodway. The regulatory floodway is outside of residential areas within the Project ESA; thus, these impacts do not represent a disproportionately high and adverse effect to EJ populations within the Project ESA. Section 4.14 provides a full description, impact analysis, and determination for Floodplains within the Project ESA.

Cultural Resources

Cultural resources include a broad pattern of material and non-material sites or objects that represent contemporary, historic, and pre-historic human life, ways, or practices. No National Register of Historic Places (NRHP) eligible properties within the Area of Potential Effect (APE) or supplemental APEs for the Preferred Alternative were identified. Consultation was initiated with 13 tribal historic preservation officials. Documentation of tribal coordination is included in Appendix I. Consultation with the Lincoln Certified Local Government concurred that the project would result in no historic properties affected. The Preferred Alternative would have no effect to cultural, historic, or archaeological resources in the APE, as there are none present; therefore, there would be no disproportionately high and adverse effect to EJ populations. Section 4.15 provides a full description, impact analysis, and determination for Cultural Resources in the Project ESA.

Hazardous Materials

Hazardous materials are defined as substances that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may present a substantial danger to public health or the environment if released. A determination of medium potential was made for contamination in soil and/or groundwater to be encountered during construction of the Preferred

Alternative at fifteen sites. The Medium Potential Category Sites are scattered throughout the Project ESA, plus a 1/10-mile buffer. If contamination is encountered during construction, mitigation measures would be implemented to minimize the exposure potential for workers and residents in the area and would not represent a disproportionately high and adverse effect to EJ populations. Section 4.16 provides a summary of these sites, impact analysis and determination. The locations of these sites are shown on Figure 18.

Material Sources and Waste Materials

Material sources (borrow sites) would be used for the construction of the Project and must adhere to environmental laws before their use. The Preferred Alternative involves areas of cut and fill. Because more fill material is needed than is being cut from the Project site, the use of borrow material (clean fill) is needed. Borrow materials are anticipated to be available for site preparation in the general area. No material source has currently been identified for borrow material. The use of borrow sites and materials do not represent a disproportionately high and adverse effect to EJ populations. A full discussion of Material Sources and Waste Materials is included in Section 4.17.

Temporary Construction Impacts

Project construction activities may lead to temporary short-term impacts including construction noise, dust, traffic accommodations during construction activities, access to adjoining properties, and construction accommodations needed to build the Project. The Preferred Alternative would likely be built in three distinct sections with phases. Phasing is primarily intended to maintain traffic and access. Phasing details will be determined during Final Design.

As noted in the Noise Study completed for the project (Appendix D), the Preferred Alternative would not result in post construction increased traffic noise levels. Best Management Practices would be used to mitigate construction-related noise impacts and would generally limit construction activities to daylight hours.

Visibility of construction equipment would create adverse, but minor, visual impacts. This impact would be expected to last until construction is completed.

Short-term air quality impacts during construction of the Preferred Alternative would occur from grading activities that would generate dust. Short-term air quality impacts would also include exhaust emissions from construction vehicles and related equipment. BMPs, such as wetting the ground surface and temporarily seeding, would minimize much of the impact from fugitive dust. Construction contractors would be required to comply with statutory regulations for state air pollution control and to receive permits, as needed. Dust from construction activities would be minor and temporary.

Temporary BMPs for the abovementioned resources would mitigate temporary construction impacts to the extent practicable. Due to the implementation of construction phasing, detour

routes, NDOTs Standard Specifications, and BMPs, construction related impacts would not represent a disproportionately high and adverse effects to EJ populations. For a full discussion of temporary construction impacts refer to Section 4.18.

Secondary and Cumulative Effects According to NEPA, secondary (indirect) impacts are those that are "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable" (40 CFR 1508.1(g)(2)). Commercial and retail development has slowed along Cornhusker Highway and N. 33rd Street over the last 40 years due to the undeveloped areas adjacent to and within the floodplain of Deadmans Run and Salt Creek.

Present Actions include the federal-aid project on Adams Street from N. 36th Street to N. 49th Street and the USACE Deadmans Run project.

Reasonably Foreseeable Future Actions include projects that have advanced through most of the planning process, regardless of funding source. The following future actions, proposed by the City of Lincoln, RTSD, and other entities, appear to be reasonably foreseeable within the geographic extent and time period for this assessment.

- Cornhusker Highway, N. 20th Street to N. 33rd Street – This project will consist of intersection improvements. Fiscal Year 2027
- N. 33rd Street, Cornhusker Highway to Superior Street – This project will consist of four lanes, intersection improvements, and bridge. This project is included in the unfunded portion of the comprehensive plan, therefore meaning that it is not programmed and there is no date set for the work. The unfunded projects may extend beyond 15 years before there is any activity.
- Cornhusker Highway, 39th to L-55X – This project will improve approximately 1.6 miles of Cornhusker Highway. Work will consist of pavement rehabilitation, curb repairs, upgrades to existing pedestrian ramps, and intersection improvements at Havelock and Superior. Fiscal year 2026
- Adams Street, 36th to 48th – This project will improve approximately one mile of Adams Street. Work will consist of pavement rehabilitation, curb ramp reconstruction, and upgrades to existing pedestrian ramps. Fiscal year 2024 - 2025

None of the resources evaluated are considered to have strong or lasting negative cumulative effects, and all are anticipated to benefit in the long term from construction of the Project due to better connectivity as a result of improvements to the highway corridor. No reasonably foreseeable secondary effects of the projects listed above are anticipated to have a disproportionately high and adverse effect on EJ populations within the Project ESA.

4.4.4 Title VI/Environmental Justice Mitigation

The Contractor shall provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street to the extent practicable. Accommodations shall be made to ensure local traffic passing within the limits of the Project has access to private dwellings, commercial properties, businesses, and public facilities. During those periods when a road is closed, even for a short duration, limited access shall be maintained for authorized local traffic. If access is to be closed longer than one day, the Contractor shall coordinate with the affected property owners. (Contractor, Project Sponsor)

During construction, access to neighborhoods and community facilities shall be maintained through controlled construction scheduling and/or provisions for alternate routes of entry. Any access changes shall be indicated by providing adequate signage and, where necessary, by working with the facility and/or property owner throughout the construction period to provide advanced notification of the changes. (Contractor, Project Sponsor)

The RTSD shall notify the public, school districts within the Project ESA, and civic organizations serving LEP residents and emergency services providers, such as police and fire departments, before construction activities begin, as well as maintain continued coordination throughout construction. Notifications shall include in-person as well as virtual methods. Civic organizations and school districts serving LEP residents and emergency service providers shall be invited to the pre-construction open house meeting for the Project. (Project Sponsor)

The RTSD would continue to engage the owner of the property located at 3223 Cornhusker Highway regarding acquisition of their property and impacts to the tenants and patrons that serve environmental justice populations located at this address (La Cabaña restaurant, Taquiera Limon food truck, and La Mexicana grocery store) as well as potential future relocation options. This coordination would be documented through the NEPA Re-Evaluation Process (Project Sponsor).

All written information that is dispersed to the public about this Project shall be translated into Spanish. Dispersed information does not include highway signs or electronic messaging boards, but does include, for example, public meeting invitations, mailers and postcards, legal notices, news releases, and project map/information handouts. Project information that is placed on websites of the NDOT, the city of Lincoln, or RTSD regarding this project must be translated into Spanish. Legal notices and news releases do not need to be translated if they are only to be placed in an English-language media source. Information that is distributed to businesses, public agencies, or to departments/representatives of public agencies, does not need to be translated (Project Sponsor, Contractor).

For the public hearing, Spanish language interpreters shall be present. The written documents prepared for public dispersal (for example, project map/information handouts) at the hearing must be translated into Spanish. There must be a Spanish interpreter present. There must also be clear notices posted in Spanish at the hearing that interpreters are available. "I Speak" cards

will be placed on the front table during any Public Meeting, in the event that an LEP person of an unanticipated language is in attendance. If a person who primarily speaks an unanticipated language is in attendance, their language will be recorded as part of the LEP data collection process and the Nebraska Language Line will be used to communicate. (Project Sponsor)

4.5 Visual Resources and Aesthetics

Because elevated structures are proposed to be built within the Project ESA, it is important to consider the impact on visual aesthetics of the Project. This section describes the character of the landscape in the Project ESA, as well as local government planning, as is relevant to physical appearance and visual aesthetics of Project components. This section also describes whether the Project would be compatible with the local area, as well as the measures and methods available for reducing visual impacts.

The Cornhusker Highway Corridor Enhancement Plan (CEP) was developed in 2020 as part of the revitalization strategy for North 33rd and Cornhusker Highway subarea. The CEP provides an overview of how updated lighting, landscaping, pedestrian amenities, and other streetscape enhancements could address the visual enhancements of the Cornhusker Highway corridor from N. 11th to N. 56th Street. The CEP was developed with the consideration of safety, connectivity, economic sustainability, identity and quality of life, and environmental sustainability (Lincoln 2020). Future construction or improvements on Cornhusker Highway would utilize the recommendations from the CEP.

4.5.1 Affected Environment

The visual landscape within the Project ESA is characterized by the Cornhusker Highway corridor, which is a multi-lane highway bordered by a BNSF double mainline track, surrounded by commercial and industrial facilities with residential neighborhoods located outside the commercial and industrial area.

The area north of Cornhusker Highway consists primarily of commercial properties fronting the highway, with a residential neighborhood between N. 40th and N. 48th Streets. Cornhusker Highway and the BNSF tracks bisect the area, with a strip of commercial properties immediately south of the BNSF tracks. South of the commercial properties is a residential neighborhood with both single family and multifamily residences.

The existing viewshed along Cornhusker Highway consists of a heavily developed urban landscape. The commercial properties provide an urbanized aesthetic and buffer to the residential properties.

Multiple parks and recreational features are located within the Project ESA, including the Dietrich Bike Trail, UPCO Park, Fleming Fields, and other parks and trails (see Section 4.8 for a full list

of recreational features within the Project ESA). The viewshed from these recreational areas includes heavily developed urban landscape as well as Deadmans Run and Salt Creek.

Currently, no plans exist for additional scenic resources within the Project ESA, and there are no scenic highways or byways within or near the Project.

4.5.2 Environmental Impacts of the No-Action Alternative

The No-action Alternative would have no visual resource impacts because no construction activities would occur.

4.5.3 Environmental Impacts of the Preferred Alternative

Construction of the Preferred Alternative would change the visual aesthetics within the Project ESA, especially with the addition of an elevated structure. The proposed grade separation would rise approximately 40 feet above the existing railroad tracks. During construction, activities and machinery would temporarily change the visual landscape of the area, however, these changes would be temporary in nature and would be consistent with typical construction projects that occur within developed urban areas.

The elevated structure would be visible from adjacent recreational properties, businesses, and residential homes; however, construction of the Project would be consistent with the urban environment. The grade separation would be similar to existing transportation features within the vicinity, including the N. 27th Street overpass approximately 0.5 mile west of the Preferred Alternative. It is anticipated that views of the Project would be compatible with existing and future uses in the area as projected in the LRTP.

4.5.4 Visual Resources and Aesthetics Mitigation

No mitigation would be required.

4.6 Air

The NAAQS established by the USEPA define the allowable concentrations of pollutants that may be reached but not exceeded, in a given time period to protect human health (primary standard) and welfare (secondary standard) with a reasonable margin of safety. These standards include maximum concentrations for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, particulate matter with a diameter of 10 microns (PM10), and fine particulate matter with a diameter of 2.5 microns (PM2.5). Any level of pollutants beyond the USEPA NAAQS constitutes an impact to air quality.

Analysis is required for Mobile Source Air Toxics (MSATs), which are regulated under the Clean Air Act (CAA) and administered by the USEPA. Under Section 202 of the CAA, the USEPA

issued a Final Rule on Control of Emissions of Hazardous Air Pollutants from Mobile Sources (66 FR 17229, March 29, 2001). FHWA published an updated interim guidance on January 2023 (FHWA Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents) to aid proponents in addressing MSATs.

Potential MSAT effects from the Project operation were evaluated following the FHWA Memorandum. FHWA developed three categories for analysis depending on Project circumstances:

- No analysis for projects with no potential for meaningful MSAT effects
- Qualitative analysis for projects with low potential MSAT effects; or
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

4.6.1 Affected Environment

Lincoln, Nebraska is in Attainment for all NAAQS pollutants. Areas in Attainment are classified as such because the concentrations of the criteria pollutants are below the levels established by the abovementioned standards.

4.6.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would not result in modifications to existing traffic patterns. The No-Action Alternative does not provide a grade separation; vehicles would still be stopped by passing trains. As a result, the stopped vehicles would continue to idle and not reduce potential greenhouse gas emissions in the area.

4.6.3 Environmental Impacts of the Preferred Alternative

No permanent structures that would directly result in increased air emissions will be constructed. In accordance with the 2023 FHWA Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents (FHWA 2023), the Preferred Alternative would be considered a Category 2 project with low potential MSAT effects. This determination is based on the assessment that the Preferred Alternative would improve operations within the Project Corridor but would not add substantial new capacity that would exceed the need for air quality monitoring.

The Preferred Alternative would not result in significant changes to traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts from the No-Action Alternative, as outlined in the Traffic Analysis in Appendix C. Additionally, USEPA regulations for vehicle engines and fuels will continue to cause MSAT emissions to decline over time. The USEPA MOVES model forecasts a combined reduction of over 80 percent of the annual emission rate for the priority MSAT from 2010 to 2050 as vehicle traffic is projected to

increase by over 100 percent (USEPA 2022). This reduces both the background level of MSAT as well as the possibility of even minor MSAT emissions from the Project.

4.6.4 Air Mitigation

No increase in MSAT levels is anticipated as a result of the Project. No mitigation would be required.

4.7 Noise

Noise may be defined as unwanted sound that disrupts normal activities or otherwise diminishes the quality of the environment. Noise events that occur during the night (10 p.m. to 6 a.m.) can be perceived as being more disruptive than those that occur during normal waking hours (6 a.m. to 10 p.m.).

Title 23 CFR 772 was written by FHWA with the purpose of providing Noise Abatement Criteria (NAC) and procedures for noise studies. Title 23 CFR 772 provides noise abatement measures to help protect public health and welfare, supplies noise abatement criteria, and establishes requirements for traffic noise information to be given to those officials who have planning and zoning authority in a project area.

Noise studies are performed using an “A”-weighted frequency response characteristic. This modified scale provides for better prediction of when sound is considered “noisy” by the subjective human sensation of loudness, especially at the upper and lower ends of the detectable frequency range. An “A-weighted decibel” (dBA) equivalent sound level (LAeq) is used for impact assessment because it mimics a human’s varying sensitivity to sounds at different frequencies. The NDOT Noise Analysis and Abatement Policy (NDOT Noise Policy) issued October 2018 was written to implement the policy and guidelines outlined in Title 23 CFR 772.

According to the NDOT Noise Policy, a traffic noise impact occurs if:

- The design year (year 2040) noise levels approach (defined as 1 decibel less than the NAC) or exceed the NAC.
- The predicted future noise levels “substantially exceed” existing levels. The NDOT Noise Policy defines this as an increase in noise levels of 15 dBA or more above existing levels in the design year.

4.7.1 Affected Environment

In accordance with the NDOT Noise Policy, traffic noise measurements were recorded on March 10, 2020, at three locations along the Project. These field measurements are used as aids in identifying the existing noise environment within the Project ESA.

The noise analysis demonstrated that receivers experience noise levels ranging from 46 dBA to 67 dBA under existing conditions. The majority of receptors along the N. 33rd and Cornhusker corridor are categorized as “developed lands that are not sensitive to highway traffic noise”, such as industrial areas, maintenance facilities, manufacturing, rail yards, retail facilities, utilities, and warehousing. The remaining receivers are categorized as “single-family and multi-family dwellings”, “non-residential lands such as schools, parks, and cemeteries”, and “developed lands less sensitive to noise such as hotels, motels, offices, restaurants, and bars. None of the noise receptors were found to “approach or exceed the NAC” under existing noise conditions.

The Noise Analysis is provided in Appendix D.

4.7.2 Environmental Impacts of the No-Action Alternative

No construction activities would occur under the No-Action Alternative; however, noise levels would be anticipated to increase in the future in correspondence with increased predicted traffic volumes.

4.7.3 Environmental Impacts of the Preferred Alternative

The evaluated and impacted noise receivers are depicted in Appendix D, Figures 2 through 2G. The traffic noise level predicted for each noise sensitive receiver location does not approach or exceed the NAC for the future traffic conditions. The predicted future noise levels do not substantially exceed the existing levels. Because the future noise levels of the Preferred Alternative would not approach or exceed the NAC and would not substantially exceed existing noise levels, noise abatement measures are not required for the Preferred Alternative.

4.7.4 Noise Mitigation

Construction shall be completed during normal working hours, typically between 6 a.m. and 6 p.m., 6 to 7 days a week. Standard construction noise mitigation best management practices (BMPs) such as mufflers shall be utilized on construction equipment. (Contractor)

4.8 Parks and Trails / Section 4(f) / Section 6(f)

Section 4(f) of the US Department of Transportation Act of 1966 (USDOT) as amended stipulates that FHWA and other USDOT agencies cannot approve the use of land from planned or existing publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless certain conditions apply (49 USC 303[c]).

A property is most likely a Section 4(f) property if:

- It is publicly owned (except historic resources, which may be privately owned)

- It is listed on or determined eligible for listing on the NRHP
- It is open to the public during normal hours of operation (except under certain circumstances for refuges and not required for historic resources)
- It serves recreation activities (i.e., walking, hiking, bird watching, or organized sports) as a major purpose as stated in the area's master plan
- Public use is allowed (i.e., school property used after-hours for practice fields, playgrounds, etc.)

A "use" of a Section 4(f) resource, as defined in 23 CFR 774, occurs: (1) when land is permanently incorporated into a transportation facility, (2) when there is a temporary occupancy of land that is adverse in terms of the statute's preservationist purpose, or (3) when there is a constructive use of land. A constructive use of a Section 4(f) resource occurs when the transportation project does not incorporate land from the Section 4(f) resource, but the Project's proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. For example, a property considered a Section 4(f) resource based on peace and tranquility could have noise or vibration impacts from a nearby project.

Section 6(f)(3) of the LWCF Act of 1965, now codified as Section 200305(f)(3), Section 6(f), includes recreational resources developed with federal funding through the Land and Water Conservation Fund (LWCF) are protected under Section 6(f) of the LWCF Act, which prohibits the conversion of these properties to anything other than public outdoor recreation uses.

4.8.1 Affected Environment

Several Section 4(f) resources are located within the Project ESA or are in the vicinity of the Project. These resources are shown on Figure 15a. Properties outside the Project ESA that would not be affected in any way by the Preferred Alternative are not described in detail.

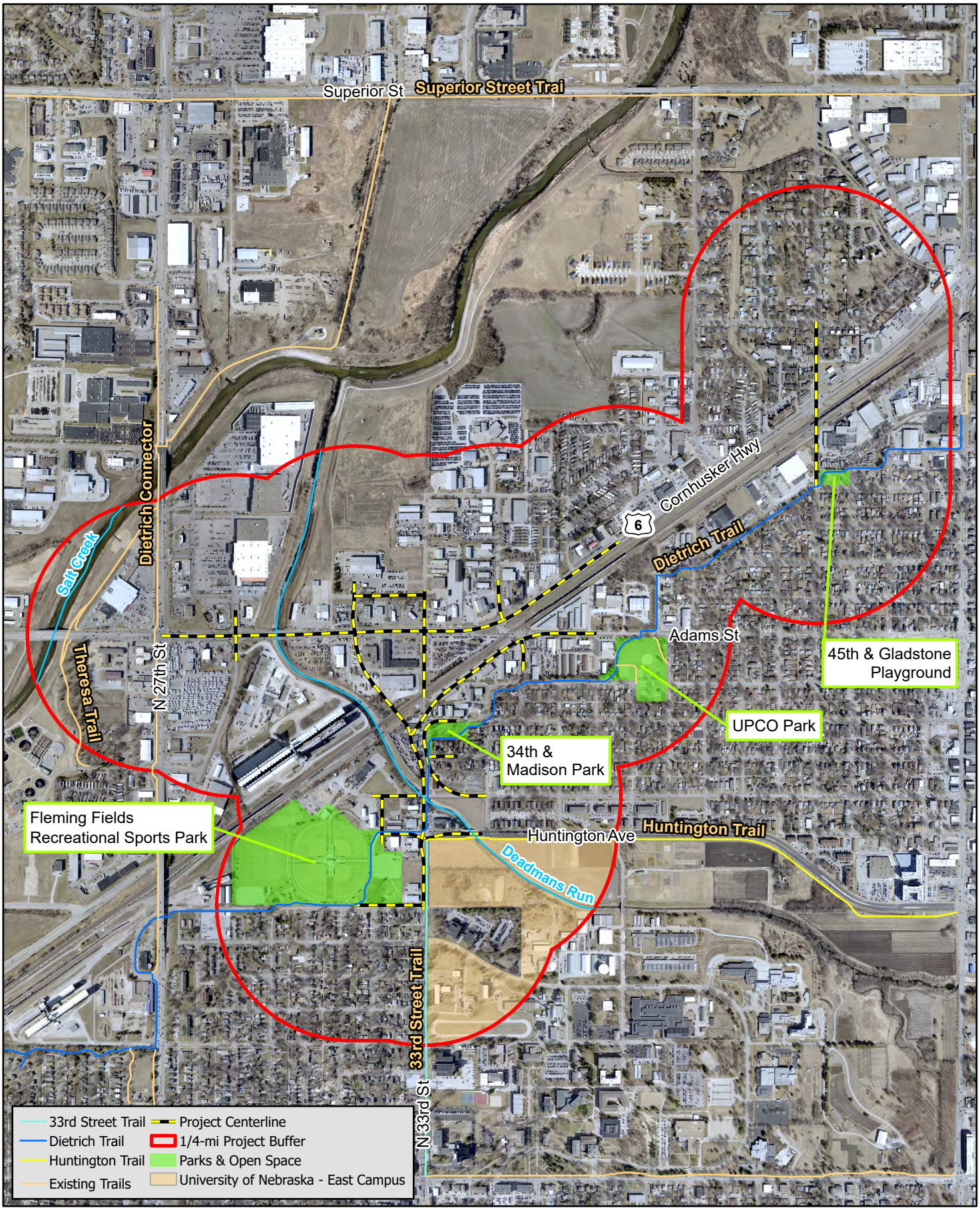
Pedestrian and Bike Trails

- **Dietrich Connector Trail** runs north and south along N. 27th Street, approximately 0.1 mile west of the proposed Project at the intersection of N. 27th Street and Cornhusker Highway.
- **Dietrich Trail** runs northeast and southwest, paralleling the proposed Project. The Dietrich Trail passes through Fleming Fields Recreational Sports Park, 34th and Madison Park, UPCO Park, and the 45th and Gladstone Playground. The Dietrich Trail intersects the proposed Project alignment near the intersection of N. 33rd Street and Huntington Avenue.
- **33rd Street Trail** runs north and south along N. 33rd Street, abutting the proposed Project.

- **Huntington Trail** – begins at the intersection of North 33rd Street and Huntington Avenue and runs along the south side of Huntington Avenue to the east. Huntington Trail is located at the southern end of the proposed Project.
- **Theresa Trail** is located along Salt Creek, intersecting with the Dietrich Connector Trail near N. 27th Street and Cather Road, approximately 0.20 mile from the proposed Project.

Parks and Recreation Areas

- **Fleming Fields Recreation Sports Park** is located northwest of the intersection of N. 33rd Street and Leighton Avenue, abutting the proposed Project.
- **UPCO Park** is located southwest of the intersection of N. 40th Street and Adams Street, approximately 0.1 mile from the proposed Project. This Park also utilized 6(f) funds.
- **45th and Gladstone Park** is located north of Gladstone Street, between N. 44th Street and N. 45th Street, approximately 0.5 mile from the proposed Project. This Park also utilized 6(f) funds.
- **34th and Madison Park** is located south of Madison Avenue, between N. 33rd Street and N. 35th Street, abutting the proposed Project. This Park utilized 6(f) funds.



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NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

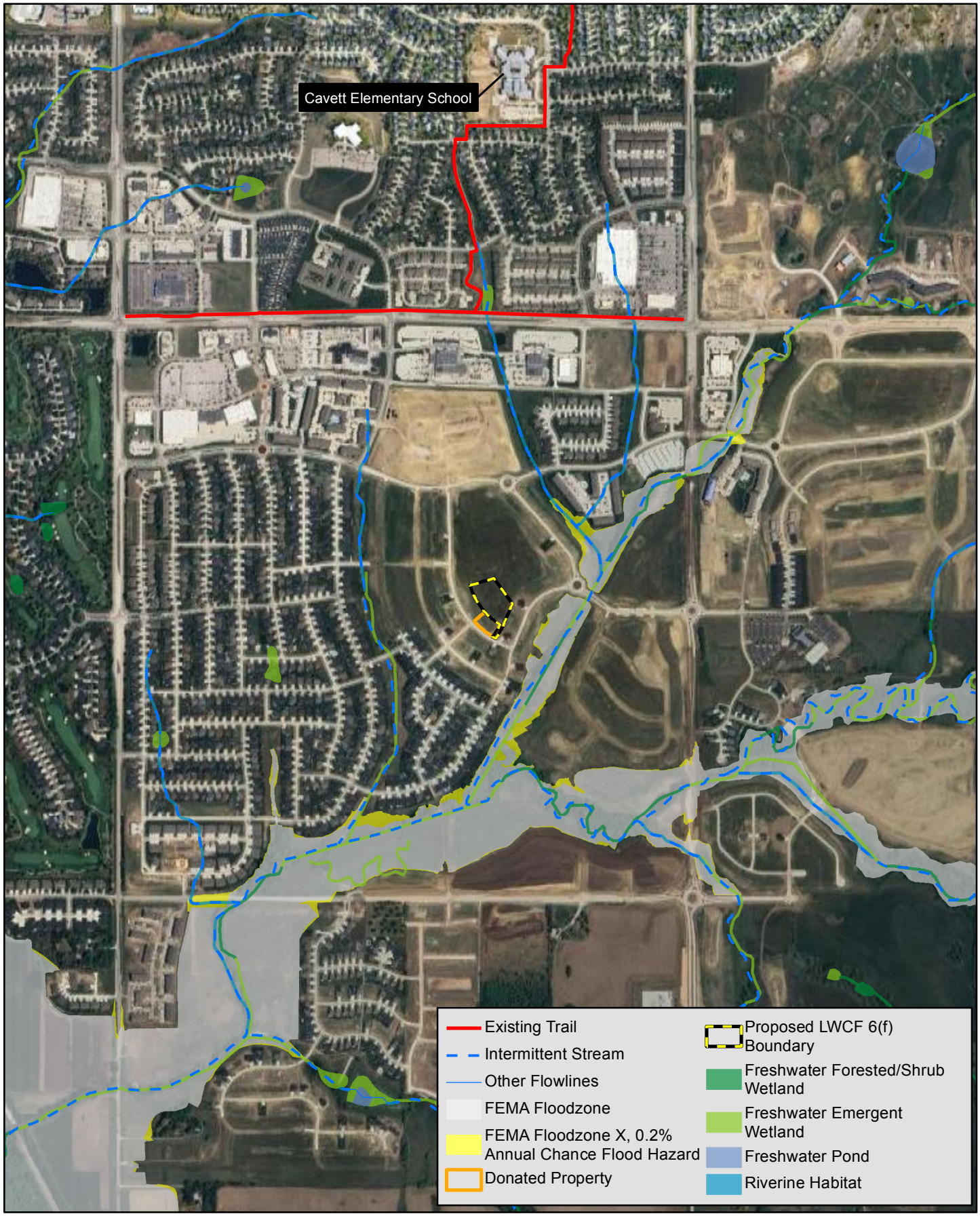
N

Original Published Resolution
WGS 1984 ARC System Zone 11

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Section 4(f) Resource

FIGURE
15a

Project No. 702614, RTSD BU 5919, CN 13294



F:\2017\3501-40000\17-3604-A\40-Design\GIS\19-03-20_NRPL_General Project Maps\19-03-20_NRPL_General Project Maps.aprx PUBLISHED BY: mczerwinski DATE: February 14, 2024

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DEPARTMENT OF TRANSPORTATION

N

Original Published
Resolution
WGS 1984
ARC System Zone 11

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Section 4(f) Replacement Property
Environmental Resources Map

FIGURE
15b

Project No. 702614, RTSD BU 5919, CN 13294

4.8.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would have no adverse impacts on Section 4(f) properties because no construction activities would occur. The addition of new trails as proposed under the Preferred Alternative would also not occur.

4.8.3 Environmental Impacts of the Preferred Alternative

The following properties would not result in a use, as defined in 23 CFR 774.17:

- UPCO Park
- Dietrich Connector Trail
- Theresa Trail

Additional Section 4(f) documentation will be prepared for the following Section 4(f) properties with uses:

- **Fleming Fields Recreation Sports Park -** Impacts to Fleming Fields Recreational Sports Park would consist of storm sewer work that would require temporary and permanent easements at the northeast corner of the property. Fleming Fields Recreational Sports Park is approximately 30.82 acres in size and would require approximately 0.05 acre (2,233 square feet) of permanent easement and approximately 0.02 acre (716 square feet) of temporary easement for the storm sewer work. The area proposed for easements consists of open space and does not extend into any of the ballfields or other park amenities. A sidewalk and maintenance access drive would be temporarily unavailable for the duration of construction of the storm sewer (approximately 2 weeks), but access to the ballfields and other park amenities would be maintained throughout construction via other paths within the property.

  Additional impacts to Fleming Fields property would be associated with the construction of the multi-use path along the north side of Leighton Avenue that will serve as a detour route for the John Dietrich Trail during construction of the 33rd Street and Huntington Avenue areas of the project. The project would construct approximately 670 feet of 8-foot-wide multi-use path along the northside ROW of Leighton Avenue and would require temporary easements from Fleming Fields (approximately 3,500 square feet/0.08 acre). Construction of this multi-use path would require the removal of trees located in the ROW. The multi-use path along the north side of Leighton Avenue would remain in place upon completion of the project. Impacts to the Fleming Fields property would not include relocation of park features. Access to the ballfields and other park amenities would remain available at all times.

. Final concurrence with the Official with Jurisdiction (OWJ) will be sought after the Public Hearing regarding the impacts to Fleming Fields Recreation and Sports Park. Prior disclosure to the public is required to complete the 4(f) review.

- **34th and Madison Park** - Impacts to 34th and Madison Park would consist of construction of the new road (preliminary name 33rd Avenue) that would require right-of-way (ROW) and permanent easements along the western and northwestern edges of the property. 34th and Madison Park is approximately 1.77 acres in total size and would require approximately 0.10 acre (4,421 square feet) of permanent ROW and approximately 0.11 acre (4,755 square feet) of permanent easement to accommodate the new 33rd Avenue. The permanent easements are required as part of the Preferred Alternative to accommodate for underground utility infrastructure (water mains) and would not impact the aboveground, open space areas of the park. Approximately 0.01 acre (600 square feet) of the permanent easements are from the John Dietrich Trail, which passes through the property. An additional 0.09 acre (3,969 square feet) of temporary easement would be required from the northwest, southwest, and northeast corners of the property. The area proposed for easements consists of open space and does not extend into the basketball court or gazebo amenities. Access to the western and northwestern portions of the property would be limited during construction, but access to the basketball court and other park amenities would be maintained throughout construction via the east side of the property via Madison Avenue. The Dietrich Trail would remain open to just west of the basketball court. These impacts are not anticipated to adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

  Final concurrence with the OWJ will be sought after the Public Hearing regarding the impacts to 34th and Madison Park. Prior disclosure to the public is required to complete the 4(f) review.

  34th and Madison Park is federally protected by LWCF Section 6(f) and will require an area of greater than or equal value to serve as a replacement property for the permanent impacts associated with the proposed Project. Wilderness Hills Park, located in Southwest Lincoln, Nebraska has been identified as a potential replacement property for the impacts at 34th and Madison Park. The Draft EA for the Section 6(f) replacement property at Wilderness Hills Park is under review for approval. Final coordination efforts between the City of Lincoln, NGPC, and NPS for the approval of the replacement property at Wilderness Hills Park are ongoing.

- **Section 6(f) Replacement Property** – Wilderness Hills Park is identified as a Section 6(f) replacement property for this Project. A separate draft EA was completed by the City of Lincoln, in cooperation with the Nebraska Game and Parks Commission (NGPC) and the National Parks Service (NPS), to evaluate the potential for adverse environmental

impacts associated with the construction of a new park in southwest Lincoln, Nebraska and designating the park as a Section 6(f) resource.

A desktop review of the proposed replacement site depicts the property as being a lot slated for future use as a neighborhood park and is situated near the center of a new residential development that encompasses nearly one square mile. The City of Lincoln will purchase the property from Lincoln Public Schools at 9200 Castle Pine Drive, for a total of 2.25 acres, and would be referred to as Wilderness Hills Park. Additional background information on Wilderness Hills Park is included in Appendix E, specifically in the letter dated May 9, 2023, from the Lincoln Parks and Recreation Department Director. The area of the proposed replacement site is heavily disturbed, and the topography of the landscape has been altered for the purpose of future private development. The desktop review did not identify potential impacts to wetlands, waters of the U.S, floodplains, potential threatened or endangered habitat, Section 4(f) resources, or protected populations in the immediate vicinity of the replacement property. The Nebraska Department of Environment and Energy (NDEE) interactive map was reviewed for past records of hazardous material storage or release near the replacement property. The NDEE interactive map did not depict hazardous material concerns on or near the immediate vicinity of the replacement property. See Figure 15b for the replacement property environmental resource map.

The Section 106 evaluation and the threatened and endangered species review have been completed by NDOT as part of their respective programmatic agreements with SHPO, NGPC, USFWS, and FHWA and found no historic properties and no effect to threatened or endangered species for the replacement property. The replacement property was evaluated for potential Section 106 impacts as part of expanded APE review of the Preferred Alternative. The cultural review determined that no historical properties are present within the area of the replacement property. Additional details pertaining to the review of cultural resources completed in 2022 – 2023 is include in Section 4.15 below. A review of threatened and endangered species was completed by NDOT and confirmed that the scope of work included for the replacement property would have no impact to state or federally listed threatened or endangered species. The email confirmation of the findings from the threatened and endangered species re-evaluation is included in Appendix E. Additional information for threatened and endangered species and the re-evaluation can be found in Section 4.13 below.

As of April 2024, the construction of the proposed replacement site at Wilderness Hills Park is not anticipated to result in adverse impacts to the surrounding environment or environmentally sensitive resources in this area. The Draft EA for the Section 6(f) replacement property at Wilderness Hills Park is under review for approval. Coordination efforts between the City of Lincoln, NGPC, and NPS for the approval of the replacement property at Wilderness Hills Park are ongoing. Upon approval from the NPS for the Section 6(f) replacement property at Wilderness Hills Park, the City of Lincoln will develop

the park features within the timeline set forth by the NPS to provide an adequate replacement for the converted property. Prior disclosure to the public is required to complete the 4(f)/6(f) review.

- **Dietrich Trail** – The John Dietrich Trail would be impacted from construction of a roundabout at the intersection of North 33rd Street and Huntington Avenue, the construction of Griffith Street, the 33rd Street bridge over Deadmans Run, and the construction of 33rd Avenue between Baldwin and Madison Avenues. The existing John Dietrich Trail is approximately 19,331 feet (3.55 acres) in total length. Approximately 1,010 feet (0.19 acre) of the existing trail would be permanently removed near the intersection of North 33rd Street and Huntington Avenue. The trail would be realigned along Griffith Street and Baldwin Avenue, resulting in the construction of approximately 1,145 feet (0.21 acre) of realigned trail.

  The realignment of the John Dietrich Trail would result in a net increase of approximately 135 feet of total trail length, as well as more direct connection to the wider trail network via the adjacent 33rd Street and Huntington Avenue Trails. The realigned trail would be routed under the proposed viaduct, reducing delay to trail users and improving safety by eliminating up to two at-grade street crossings.

  Trail continuity would be maintained at all times during construction via detour. During the construction of North 33rd Street, the John Dietrich Trail would be detoured around the project area beginning at Leighton Avenue west of North 33rd Street and extending to the east across North 33rd Street. A multi-use path would be constructed on the north side of Leighton Avenue and extend east to a temporary crossing of North 33rd Street at Leighton Avenue. The detour would continue north to the intersection of North 33rd Street and Huntington Avenue and proceed along the south side of Huntington Avenue to North 35th Street. A temporary crossing of Huntington Avenue would be provided at North 35th Street, and users would proceed along a new 8-foot-wide multi-use path along the west side of North 35th Street to the intersection of North 35th and Madison Avenue where it connects to the existing John Dietrich Trail.

  Permanent impacts to the John Dietrich Trail would result in a minor take of park property; however, these impacts are not anticipated to adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

  Final concurrence with the OWJ will be sought after the Public Hearing regarding the impacts to Dietrich Trail. Prior disclosure to the public is required to complete the 4(f) review.

- **Huntington Trail** - Construction of a roundabout at the intersection of North 33rd Street and Huntington Avenue would result in permanent impacts to Huntington Trail. The

existing Huntington Trail is approximately 5,449 feet (1.0 acres) in total length. Approximately 165 feet (0.03 acre) of existing trail would be permanently removed to accommodate the new roundabout. The trail would be realigned to the south to connect to the existing 33rd Street Trail, resulting in the construction of approximately 183 feet (0.03 acre) of realigned trail. Therefore, construction of the project would result in a net gain of approximately 18 feet of length to Huntington Trail, and more direct connection to the wider trail network via connecting to the existing John Dietrich Trail.

Trail continuity would be maintained at all times during construction via detour. A temporary surface would be constructed southeast of the intersection of North 33rd Street and Huntington Avenue to allow Huntington Trail users to bypass the construction area and continue south along the existing 33rd Street Trail.

Permanent impacts to Huntington Trail would result in a minor take of park property; however, these impacts are not anticipated to adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

Final concurrence with the OWJ will be sought after the Public Hearing regarding the impacts to Huntington Trail. Prior disclosure to the public is required to complete the 4(f) review.

- **33rd Street Trail** - Construction of the roundabout at the intersection of North 33rd Street and Huntington Avenue would result in permanent impacts to 33rd Street Trail. The existing 33rd Street Trail is approximately 3,290 feet (0.60 acres) in total length. Approximately 215 feet (0.04 acre) of existing trail would be permanently removed to accommodate the new roundabout. The trail would be realigned to the southern approach of the roundabout, resulting in the construction of approximately 154 feet (0.03 acre) of realigned trail. In addition, approximately 316 feet (0.06 acre) of new trail would be constructed to extend the 33rd Street Trail across North 33rd Street to the west and then across Huntington Avenue to the north, connecting to the existing John Dietrich Trail.

  The realignment and extension of the 33rd Street Trail would result in a net increase of approximately 255 feet of trail, and more direct connection to the wider trail network via the adjacent John Dietrich Trail located northwest of the intersection of North 33rd Street and Huntington Avenue.

  Trail continuity would be maintained at all times during construction via detour. A temporary surface would be constructed southeast of North 33rd Street and Huntington Avenue to allow 33rd Street Trail users to bypass the construction area and connect to the adjacent Huntington Trail or John Dietrich Trail detour.

  Permanent impacts to the 33rd Street Trail would result in a minor use (215 linear feet) of the trail to accommodate the new roundabout; however, these impacts are not

anticipated to adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

Final concurrence with the OWJ will be sought after the Public Hearing regarding the impacts to 33rd Street Trail. Prior disclosure to the public is required to complete the 4(f) review.

- **45th and Gladstone Park** Temporary occupancy of 45th and Gladstone Park would be related to construction of the multi-use path on the western edge of 45th and Gladstone Park. The park outside of the area associated with construction of the multi-use path would not be closed to users and construction activities would not restrict users. Construction workers would create a space to complete their work safely. The space would likely be created using snow fencing, silt fencing, or a similar material. Construction of the multi-use path would not take longer than one month with restoration of the area to follow immediately after construction is completed. There would be no change in ownership of the 45th and Gladstone Park and it would continue to be owned by the City of Lincoln upon project completion.

  Construction workers would construct a multi-use trail along an alignment currently associated with a sidewalk located along the west side of 45th and Gladstone Park. Construction activities would include approximately 165 feet by 12 feet of minor grading, subgrade preparation, and pouring of concrete.

  There would be no permanent impacts to 45th and Gladstone Park. The main feature of the Section 4(f) property is the playground area and the John Dietrich Trail which crosses east to west through the park. Access to the John Dietrich Trail and playground area would be maintained and uninterrupted by activities associated with the construction of the multi-use path. Construction of the multi-use path along the west side of 45th and Gladstone Park are not anticipated to result in permanent adverse physical impacts or interference with the protected activities, features, or attributes of the property.

  The area to be disturbed currently includes areas with turf grasses and a tree line with dense, non-native trees and shrubs. Areas disturbed from construction would be restored and seeded with a mix of turf grasses that will be used throughout the project.

  Coordination with the OWJ, Director of Lincoln Parks and Recreation, has occurred throughout the NEPA process. Through preliminary OWJ coordination, the temporary impacts at 45th and Gladstone Park would be considered a Section 4(f) Temporary Occupancy. 45th and Gladstone Parks is protected by LWCF Section 6(f). No replacement property would be required due to the lack of permanent impacts at this location. Final concurrence with the OWJ will be sought after the Public Hearing regarding the impacts to 45th and Gladstone Park. Prior disclosure to the public is required to complete the 4(f) review.

4.8.4 Parks and Trails / Section 4(f) / Section 6(f) Mitigation

Access to the following Section 4(f) properties shall be maintained during construction via temporary traffic control such as signing, striping, and/or barricading: **Fleming Fields Recreation Sports Park, 34th and Madison Park, and 45th and Gladstone Park**. (Contractor)

The contractor shall not complete work, stage, stockpile or store materials within the boundaries of the following Section 4(f) properties and access shall be maintained at all times: **UPCO Park, Dietrich Trail Connector, and Theresa Trail.** (Contractor)

Trail continuity would be maintained at all times during construction via detour. A temporary surface would be constructed to provide a trail detour for the following locations: **Dietric Trail, Hunting Trail, and 33rd Street Trail.** (Contractor)

The Contractor shall not complete work, stage, stockpile or store materials beyond the boundaries of easements for the following locations: **45th and Gladstone Park, Fleming Fields, and 34th and Madison Park.** (Contractor)

Following construction, the areas of temporary easements shall be restored to pre-existing condition or better; **45th and Gladstone Park, Fleming Fields, and 34th and Madison Park.** (Contractor)

The following properties shall be marked on the project plans as sensitive areas (excepting areas of new ROW and easements): **33rd Street Trail, 45th and Gladstone Park, Fleming Fields, and 34th and Madison Park.** (Project Sponsor)

NDOT and the City of Lincoln will ensure that the conversion of use for **34th and Madison Street** Park is approved by the NPS and NGPC in writing prior to beginning construction at the park site. Upon approval from the NPS for the Section 6(f) replacement property at Wilderness Hills Park, the City of Lincoln will develop the park features within the timeline set forth by the NPS to provide an adequate replacement for the converted property. (Project Sponsor, NDOT Environmental)

During final design, if it is determined that access to the Section 4(f) properties cannot be maintained, then this Section 4(f) review shall be reevaluated, and the appropriate review process followed to determine if mitigation is required. (Project Sponsor, NDOT Environmental)

4.9 Utilities

NDOT has the authority and responsibility to regulate utility occupancy on all state highway ROWs. In exercising this responsibility, NDOT may enter into agreements with political subdivisions regarding state highways located within their geographical boundaries. All other public roads and streets not designated as state highways are under the jurisdiction of the local political subdivisions in accordance with state statutes and local ordinances.

4.9.1 Affected Environment

Numerous public and private utilities are located within the Project ESA. Some of these are within the existing ROW, and others are within separate utility easements that may run adjacent to or within the ROW. Utility companies that typically operate utilities in the area include, but are not limited to:

Public Utilities:

- Lincoln Water System (Water Main Pipes)
- Lincoln Wastewater System (Sanitary Sewer Pipes)
- Lincoln Transportation and Utilities – Traffic Engineering Division (Conduit)

Known Private Utilities Within the Project Corridor:

- Electric: Lincoln Electric System
- Natural Gas: Black Hills Energy
- Telecommunications:
    - ALLO Communications
    - Charter Communications (branded as Spectrum, Time Warner Cable)
    - Lumen (previously known as CenturyLink, Level 3 Communications)
    - Unite Private Networks
    - Verizon
    - Windstream

4.9.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would result in no change to the existing utilities within the Project ESA; therefore, there would be no impact.

4.9.3 Environmental Impacts of the Preferred Alternative

Under the Preferred Alternative, there would be a need to relocate certain utilities. All required utility adjustments would be coordinated through NDOT and the Contractor as per NDOT's Standard Specifications for Highway Construction. All utilities in the area have been notified of the Project. Environmental impacts are not anticipated as a result of utility adjustments. The adjustment of these utilities would take place in the appropriate phase of construction. Private utility companies are responsible for relocating their own facilities.

4.9.4 Minimizing Disruptions or Outages

Each utility company has their own process and procedure to minimize disruption or outages for customers, by either providing redundant service, providing sufficient notification through the U.S. Mail or other means, or having the outage occur at a low-demand time in the week, such as overnights or weekends.

For the impacted utilities, typical practice is to build their new facilities, pipe, or conduit in their final design location, switch the customers over, and then remove the existing facilities that are in conflict within the project limits.

4.9.5 Permitting

The utility owners are responsible for obtaining any environmental permits and approvals, and ROW access permits from the City of Lincoln required for utility relocation. The utility owners, their designers, installers, and subcontractors must abide by any conditions within those permits.

4.9.6 Areas of Relocation within Project Limits

There are numerous areas of utility relocation that will be required as part of the project, including:

- **ALLO Communications -** Presently found in city conduit on Cornhusker Highway (owned by Lincoln Transportation and Utilities – Traffic Engineering Division), and some buried lines behind the businesses with frontage to Cornhusker Highway.
- **Black Hills Energy -** Found on Cornhusker Highway, N. 31st Street Circle, N. 33rd Street, Adams Street, Madison Avenue, and Baldwin Avenue.
- **Charter Communications -** Presently found attached to electrical poles on N. 33rd Street and attached to electrical poles behind the buildings just south of Cornhusker Highway.
- **Lincoln Electric System -** Found underground and overhead adjacent to Cornhusker Highway, overhead adjacent to N. 33rd Street, overhead just west of N. 31st Street Circle, overhead behind the buildings just south of Cornhusker Highway, along the north ROW of the BNSF Railroad, overhead on Adams Street, overhead behind the buildings just

north of Madison Avenue, overhead behind the residences just north and south of St. Paul Avenue, overhead adjacent to Baldwin Avenue, overhead adjacent to Huntington Avenue.

- **Lincoln Transportation and Utilities -** Traffic Engineering: Found underground adjacent to Cornhusker Highway.
- **Lincoln Wastewater System -** Found underground throughout most of the project limits, serving each of the businesses and residences in the area.
- **Lincoln Water System -** Found underground throughout most of the project limits, serving each of the businesses and residences in the area.
- **Lumen -** Found underground on the north side of Cornhusker Highway, and found on the north side of the BNSF Railroad tracks (within BNSF ROW)
- **Unite Private Networks -** Found underground adjacent to Cornhusker Highway and N. 33rd Street
- **Verizon -** Found underground on the south side of Cornhusker Highway, and on the north side of Adams Street.
- **Windstream -** Found underground and above ground throughout the project footprint (including both fiber and copper installations). They have backbone fiber located along N. 33rd Street, Huntington Avenue, and Cornhusker Highway. As the incumbent telephone operator in the City of Lincoln, they allow every residence and business the option to their service, so they are found on many electrical utility poles.

The adjustment for these utilities would take place before or within the appropriate phase of construction (i.e., before any major grading).

4.9.7 Cost of Relocations

For private utility relocations for which a utility is present within the City of Lincoln ROW, the relocation cost must be covered by the utility owner.

For utility relocations on public roadway projects for which a utility is within their own private utility easement, the relocation cost *may* be considered as a project expense but must be discussed with the RTSD and the City of Lincoln prior to any relocations occurring.

Any utility relocations that utilize public funds must follow the Federal Transit Administration's "Buy America" guidelines **(**49 U.S.C. 5323 (j) (2) (C))**.**

4.9.8 Utilities Mitigation

The Contractor shall follow the guidelines of NDOT's Policy for Accommodating Utilities on State Highway ROW (NDOT, 2001). It is the Project Sponsor's responsibility to notify utility companies

of the need for relocation during the design stage of the Project. The Project Sponsor would coordinate utility agreements with the utility companies before construction. It is the Contractor's responsibility to notify utility companies of relocation needs during the construction phase of the Project for utilities that were not relocated before construction. If utility relocations using federal funds are located outside the Project ESA, those locations would be evaluated before construction. (Project Sponsor, Contractor, Utility Provider(s))

Any utility relocations that utilize public funds shall follow "Buy America" guidelines. (Project Sponsor, Contractor, Utility Provider(s))

4.10 Wetlands and Waters of the United States

Wetlands and other Waters of the United States (WOUS) are regulated by USACE under Section 404 of the Clean Water Act and are also protected under EO 11990 - Protection of Wetlands, which requires federal agencies (including FHWA) to implement "no net loss" measures for jurisdictional wetlands (42 FR 26961). These no net loss measures include a phased approach of wetland impact avoidance, then minimization of impacts if wetlands cannot be avoided, and finally mitigation.

Wetlands are areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated-soil conditions. Other WOUS include features such as rivers, streams, and lakes that are not classified as wetlands. Wetlands and other WOUS provide ecological benefits, such as supporting commercial fisheries and performing water filtration; they provide habitat for many plant and animal species, including economically valuable waterfowl and one-third of the nation's endangered species.

Wetlands and other WOUS that are subject to federal control are referred to as "jurisdictional" because they are within the regulatory jurisdiction of federal law (Pre-2015 regulatory definition of WOUS - 40CFR 230.3(s)). The division of authority between the USEPA and the USACE under the Clean Water Act is implicated in the issue of deciding which waters and WOUS are subject to Section 404; thus, only the USACE can determine whether wetlands and WOUS are jurisdictional. Wetlands and WOUS are also afforded protection under Title 117 of the Nebraska Administrative Code (NDEE 2019).

4.10.1 Affected Environment

A wetland delineation for the Project ESA was completed by qualified wetland scientists on October 24, 2019, and October 14, 2020. A total of nine wetlands and two stream channels were identified within the Project ESA (Figure 16). The two stream channels include Deadmans Run and an unnamed tributary to Deadmans Run. Deadmans Run is a perennial stream channel that flows northwest through the Project ESA until it drains into Salt Creek. Salt Creek is a known jurisdictional WOUS. Because any stream channel that flows directly into a jurisdictional water

is also considered jurisdictional, Deadmans Run and the unnamed tributary are likely to be considered jurisdictional.

One of the nine wetlands is likely to be considered jurisdictional as it abuts an unnamed tributary to Deadmans Run. The remaining eight wetlands are located in small depressions and are not adjacent to or abutting other jurisdictional WOUS; therefore, these wetlands are likely not jurisdictional. The location and extent of wetlands and WOUS is depicted on Figure 16. Copies of the wetland delineation report and NDOT wetland review are included as Appendix F.

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NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

N

Original Published Resolution
WGS 1984 ARC System Zone 11

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Wetlands and Waters

FIGURE
16

Project No. 702614, RTSD BU 5919, CN 13294

4.10.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would have no direct impacts on wetlands or stream channels because no construction or ground disturbance activities would occur.

4.10.3 Environmental Impacts of the Preferred Alternative

Preliminary design indicates the Preferred Alternative would have no permanent impacts to channels. Temporary impacts of less than 536 linear feet (0.3150 acre) to Deadmans Run are anticipated due to proposed contractor access crossings or work platforms for the 33rd Street bridge construction and the construction of new storm sewer pipes in the area. The outlets to the storm sewer pipes would be constructed by the USACE project. The removal of the culvert at 33rd Street is part of the USACE Deadmans Run project and the replacement of a bridge on 33rd Street would be part of the Preferred Alternative. Although removing the culvert and adding the bridge over Deadmans Run would be considered an impact, the culvert removal is associated with the USACE project and is considered an overall improvement to Deadmans Run.

The Preferred Alternative is anticipated to result in permanent wetland impacts of approximately 0.047 acre to two likely non-jurisdictional wetlands (Wetland 9 and Wetland 12) due to ground disturbance and fill activities associated with the construction of the new N. 33rd Street bridge piers. Temporary wetland impacts of approximately 0.1240 acre are anticipated due to contractor access needs around the new N. 33rd Street bridge piers.

At this time, only preliminary impacts are known due to the level of design that has been completed. The final wetland impacts would be determined during final design and Section 404 permitting stages. Preliminary impacts indicate the Preferred Alternative would not likely impact over 1/10 of an acre of jurisdictional WOUS and would only have temporary channel impacts. These impacts are anticipated to be authorized by a Nationwide Permit (NWP), which would contain general and special conditions for their use. The remaining wetlands are likely to be considered non-jurisdictional and if impacted would require coordination with NDEE for Title 117 considerations.

Based on the above considerations, it has been determined that there is no practicable alternative to the proposed construction in wetlands, and that the Preferred Alternative has included all practicable measures to minimize harm to wetlands which may result from such use.

4.10.4 Wetlands and Waters of the United States Mitigation

All wetlands and other WOUS within the Project ESA that are not permitted for impacts shall be marked on the 2W aerial sheets within the construction plan set for the Contractor as avoidance areas. (NDOT Design, NDOT Environmental)

Before any construction work, The Project Sponsor shall obtain a Letter of Opinion of Non-Degradation from NDEE for Impacts to Waters of the State. (NDOT Environmental)

The Project is anticipated to qualify under a Notifying Nationwide Permit #14 – Linear Transportation Projects. The contractor shall adhere to the permit conditions, including regional and general conditions, during construction. All wetlands and other WOUS 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 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. (NDOT Design, NDOT Environmental, Contractor)

4.11 Surface Water Quality (Impaired/Unique Waters)

The Clean Water Act of 1972, the Safe Drinking Water Act of 1974, and several other laws provide protection for water quality and public water systems. Therefore, potential impacts to water resources were considered with respect to groundwater and surface water resources, quantity and quality of runoff, and regulatory requirements. Numerous agencies, including the Nebraska Department of Natural Resources (NDNR), NDEE, the City of Lincoln, and USACE have primary responsibilities for these resources.

Impaired Water

Section 303(d) of the Clean Water Act, which Congress enacted in 1972, requires states, territories, and authorized tribes to identify and establish a priority ranking for all water bodies where technology-based effluent limitations required by Section 301 are not stringent enough to attain and maintain applicable water quality standards (33 CFR 1251 et seq.). Once identified, states are to establish total maximum daily loads (TMDLs) for the pollutants causing impairment in those water bodies and to submit, bi-annually, the (revised) list of impaired water bodies and TMDLs to the USEPA. The requirements to identify and establish TMDLs apply to all water bodies regardless of whether a water body is impaired by point sources, nonpoint sources, or a combination of both.

The 303(d) List of Waters reports on streams and lakes identified as impaired for one or more pollutants and do not meet one or more water quality standards. Impaired waters are identified through assessment and monitoring programs administered by NDEE personnel and other local, state, and federal agencies, and published in the bi-annual Water Quality Integrated Report (NDEE 2021).

Groundwater

Groundwater is defined as “water occurring beneath the surface of the ground that fills available openings in rock or soil materials such that they may be considered saturated” (NDEE 2006). Nebraska Administrative Code Title 118, Ground Water Quality Standards and Use Classification is the foundation for groundwater regulatory programs in Nebraska that protect groundwater quality and prevent contamination in designated areas. It is administered by the NDEE, provides numerical standards for many parameters, and requires that any substance introduced to groundwater, directly or indirectly, should not cause the groundwater to exceed those standards (NDEE 2006).

NDNR is responsible for permitting and maintaining records related to wells throughout the State. Current Nebraska law requires that all water wells must be registered with the State. Exceptions to the law include test holes in existence for ten days or less, dewatering wells with intended use of ninety days or less, and domestic or livestock wells completed prior to September 9, 1993. In addition to private groundwater wells, municipalities maintain groundwater wells for public drinking water supplies.

Drainage and National Pollutant Discharge Elimination System (NPDES) Considerations

The goals of NPDES and the stormwater minimum controls are to minimize water quality impacts to the maximum extent practicable as a result of the Project. Under Section 402 of the Clean Water Act, in 1990, the USEPA published final regulations in 40 CFR 122 that identified construction as an industrial activity requiring a NPDES permit (incorporated by NDEE in Nebraska Administrative Code Title 119, Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System [16 May 2005]) (40 CFR 122).

The NPDES stormwater program requires municipal separate storm sewer systems (MS4s) in urbanized areas to obtain NPDES coverage and implement six minimum control measures. An urbanized area is defined as a central place or places and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 people and an overall population density of at least 500 people per square mile. The six minimum control measures include: Public Education and Public Outreach, Participation/Involvement, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Runoff Control, and Pollution Prevention/Good Housekeeping.

Construction projects that disturb more than one acre of land are required to comply with the NPDES General Permit for Construction Stormwater and must prepare a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP identifies measures, including BMPs, to control runoff from areas disturbed during construction.

4.11.1 Affected Environment

Impaired Waters

According to NDEE's 2022 *Water Quality Integrated Report*, Deadmans Run is impaired for Recreation (*E. coli*), Aquatic Life - Dissolved Oxygen (Unknown), pH (Naturally Elevated) and Salt Creek is impaired for Recreation (*E. coli*), Aquatic Life – Dissolved Oxygen (Unknown), and potential of hydrogen (pH). A TMDL was approved for *E. coli* for Deadmans Run and Salt Creek in 2007 (NDEE 2021).

Groundwater

There are approximately 15 registered active groundwater wells within the Project ESA (NDNR 2021). Approximately eleven of the wells are groundwater quality monitoring wells; three are observation wells, and one is an irrigation well adjacent to Fleming Fields (NDNR 2021). Wells in place before 1993 are not required by law to be registered with NDNR (NDNR 2021); therefore, an unknown number of unregistered wells may be located within the Project ESA.

NPDES

The City of Lincoln participates in the MS4 program. Lincoln's MS4 permit, effective through October 31, 2028, covers all areas within the corporate limits of the City served by or otherwise contributing to discharge into the MS4, including the Project ESA. A Local Public Agency (LPA) permitted as a MS4 operates under its own National Pollutant Discharge Elimination System (NPDES) permit; therefore, the requirement to establish stormwater treatment controls is guided by that specific permit. The NDOT's stormwater treatment program does not supersede a LPA's stormwater treatment program or act as a minimum standard, except when an LPA project is being constructed on a State and Federal Highway located within a MS4 community. In those instances, the LPA may utilize its own program as long as it meets the minimum requirements established in Chapter 3 of NDOT's Drainage Design and Erosion Control Manual.

4.11.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would have no impacts on impaired waters, groundwater, or NPDES because no construction activities would occur.

4.11.3 Environmental Impacts of the Preferred Alternative

Impaired Waters

The Preferred Alternative, including the temporary detours, would not affect the water quality of Deadmans Run or Salt Creek because, as a roadway project, it would not result in the release of bacteria directly to either waterbody, therefore; it would not contribute to additional impairment.

Groundwater

Any registered or unregistered wells within the acquired ROW would be properly decommissioned. A licensed water well contractor would decommission the groundwater well(s) as specified in the Nebraska Department of Health and Human Services (NDHHS) regulations under Nebraska Administrative Code Title 178, Water Well Standards, Chapter 12, Water Well Construction, Pump Installation, and Water Well Decommissioning Standards (NDHHS 2005). Proper decommissioning of affected wells would not have a considerable impact on groundwater quality.

NPDES

The NDOT's stormwater treatment program does not supersede a LPA's stormwater treatment program or act as a minimum standard, except when an LPA project is being constructed on a State and Federal Highway located within a MS4 community. In those instances, the LPA may utilize its own program as long as it meets the minimum requirements established in Chapter 3 of NDOT's Drainage Design and Erosion Control Manual. Construction activities for the Preferred Alternative would disturb more than one acre; therefore, the RTSD Contractor would need to develop and implement a SWPPP for the Project. The SWPPP would identify stormwater treatment measures and BMPs that would be implemented according to the *Drainage Design and Erosion Control Manual.* Upon completion of the Project, the City of Lincoln would be responsible for maintaining the stormwater treatment BMPs.

4.11.4 Surface Water Quality Mitigation

This project requires a Construction Stormwater Permit and a Storm Water Pollution Prevention Plan (SWPPP) be maintained for the project. The Contractor shall understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with activity from the construction site. For reference, the general permit is posted on the Department’s website. (Contractor)

The Project Sponsor shall coordinate with the owners of wells that would be directly impacted by the proposed Project. If the well is actively used, the Project Sponsor shall get estimates to have the property owner hire their own contractor to replace and relocate the well. The Project Sponsor shall then have an independent contractor decommission the well after ROW negotiations and acquisitions are complete. If the well is not in use, the Contractor shall decommission the well after negotiations with the owner. (Project Sponsor, Contractor)

A licensed water well contractor shall decommission any wells in accordance with the NDHHS regulations under Nebraska Administrative Code Title 178, Water Well Standards, Chapter 12, Water Well Construction Pump Installation, and Water Well Decommissioning Standards. (Project Sponsor)

There are Category 5 impaired waters in the project study area; BMPs shall be reviewed and developed as necessary during the erosion control review process. If mitigation is required for impaired waters, it shall be captured in the project's erosion control plan sheets and special provisions. (Project Sponsor)

If manure is specified for the project, a restricted area will be established around identified impaired waters and streams. (Project Sponsor, Contractor)

4.12 Vegetation and Invasive Species

Invasive species are defined as non-native species that negatively affect the economy, the environment, or human health where they establish. Noxious weeds are invasive plant species that are monitored because of their tendency to degrade natural ecosystems and native plant communities. Heavy equipment usage and soil disturbance associated with construction activities have the potential to introduce noxious weeds and other invasive plant species into a project area.

Executive Order (EO) 13112 Invasive Species (64 FR 6183) prevents the introduction of invasive species and provides for their control and the minimization of economic, ecological, and human health impacts that invasive species cause. Under the purview of EO 13112, the State of Nebraska regulates noxious weeds through regulations and guidelines set forth in the Nebraska Noxious Weed Control Act (Nebraska Revised Statute 2-945.01 to 2-970), and Nebraska Noxious Weeds Regulations (NDA 2019).

Ecoregions describe areas of general similarity in vegetation, wildlife, and soils, serving as a framework for local, state, and federal agencies to assess the biological condition of an area. The Nebraska Invasive Species Council (2017) has developed a watch list specific to ecoregions in Nebraska. The Project ESA is located within the tallgrass prairie ecoregion, which includes 16 priority invasive plant species. The list of invasive species and noxious weeds of the tallgrass prairie ecoregion is available at http://neinvasives.com/ecoregions/tallgrass-prairie.

In addition to these species, the *NDOT Plan for the Roadside Environment* lists several invasive species that are likely to establish in roadsides in this region (Region B). These species include smooth brome (*Bromus inermis*), leafy spurge (*Euphorbia esula*), eastern redcedar, (*Juniperus virginiana*), phragmites (*Phragmites australis*), saltcedar (*Tamarix spp.*), and reed canarygrass (*Phalaris arundinacea*) (NDOT 2008).

4.12.1 Affected Environment

The majority of the Project ESA is an urban environment that has been either hardscaped by infrastructure or landscaped by private landowners. Areas that are undisturbed include some agricultural areas in production as row-crop and open green spaces associated with parks or infrastructure ROW.

Invasive species that occur within the Project ESA include smooth brome *(Bromus inermis)*, eastern red cedar *(Juinperus virginiana)*, and reed canary grass *(Phalaris arundinacea)*. It is possible that other common invasive species and/or noxious weeds may occur within the Project ESA including garlic mustard (*Alliaria petiolata*), Canada thistle (*Cirsium arvense*), and musk thistle (*Carduus nutans*).

4.12.2 Environmental Impacts of the No-Action Alternative

The No-action Alternative would have no impacts to vegetation composition or the spread of invasive species because no construction activities would occur.

4.12.3 Environmental Impacts of the Preferred Alternative

The Preferred Alternative would require the conversion of some agricultural areas or maintained lawns into pavement and ROW; the project may also require tree removals and clearing and grubbing in certain areas. Due to the amount of disturbance that has already occurred in the project area, these actions are unlikely to lower the overall quality of the area's vegetation. The creation of new roadways may improve the area's vegetation composition if planted with species native to the project area's ecoregion, as required by the conservation condition (S-3) outlined in Section 4.12.4. Vehicles and construction equipment brought into the area could facilitate the spread and establishment of invasive species and cleared land with bare soil may be more susceptible to colonization by early successional plants that may be invasive or noxious. According to the conservation conditions outlined in Section 4.12.4, erosion control measures would be implemented requiring the project area to be re-seeded with a native seed mix. This would minimize or prevent invasive species from re-establishing in the Project ESA.

4.12.4 Vegetation and Invasive Species Mitigation

The Contractor shall prevent the transfer of invasive plant and animal species. The Contractor shall wash equipment at the Contractor's storage facility before entering the construction site. The Contractor shall inspect all construction equipment and remove all attached vegetation and animals before leaving the construction site. (Contractor)

Appropriate mulching materials shall be applied and shall not include brome hay. If sod is required to be applied, then it shall be free from all weeds, including noxious weeds. (Contractor)

All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the Project vicinity as shown in the *NDOT Plan for the Roadside Environment.* (Project Sponsor, NDOT Environmental, Contractor)

As stated in the conservation conditions for threatened and endangered species (Section 4.13.4, S-3), all permanent seeding and plantings (excluding managed landscaped areas) shall use

species and composition native to the Project vicinity as shown in the *NDOT Plan for the Roadside Environment*. (Project Sponsor, NDOT Environmental, Contractor)

4.13 Threatened, Endangered, and Special Status Species

Endangered and Threatened Species

Federally listed threatened and endangered species are protected under the Endangered Species Act of 1973 as amended (16 USC 1531 et seq.). Adverse effects on a federally listed species or their habitats would require consultation with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act. Section 7 of the Endangered Species Act of 1973, as amended, requires federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of proposed, endangered, threatened species or result in the destruction or adverse modification of their critical habitat. State-listed threatened and endangered species are protected under the Nebraska Nongame and Endangered Species Conservation Act (NESCA) (Nebraska Revised Statute 37-806 et seq. 2008). The NGPC administers the NESCA.

Bald and Golden Eagle Protection Act (BGEPA)

Bald and golden eagles have specific protection under the BGEPA (16 USC 668-668c), which is administered by the USFWS. Protections under this act prohibit "take" of bald and golden eagles.

Migratory Bird Treaty Act (MBTA)

Under the MBTA (16 USC 703-712: Ch. 128 *as amended*), construction activities in grassland, wetland, stream, and woodland habitats, and those that occur on bridges (for example, which may affect swallow nests on bridge girders) that would otherwise result in "taking' of migratory birds, eggs, young, and/or active nests should be avoided. NDOT developed an Avian Protection Plan (APP) (NDOT 2018a) to provide guidelines on the MBTA and the reduction of avian conflicts in NDOT projects. According to the Avian Protection Plan, although the provisions of the MBTA are applicable year-round, most migratory bird nesting activity in Nebraska occurs during the period of April 1 to September 1. However, some birds are known to nest outside of the aforementioned primary nesting season period. For example, raptors can be expected to nest in woodland habitats from February 1 through July 15, whereas sedge wrens, which occur in some wetland habitats, normally nest from July 15 to September 10.

According to the APP, an active nest is defined as "a nest with an adult and eggs or young present. Nests are active primarily during the primary breeding season (April 1 – September 1). Raptors may nest earlier, and swallows may nest later than some of the other migratory bird species that move into Nebraska during the breeding season."

4.13.1 Affected Environment

Threatened and Endangered Species

There is no critical habitat present in or adjacent to the Project Action Area.

A Threatened and Endangered Species Biological Assessment (Appendix G) was completed according to the Programmatic Biological Assessment for the Nebraska Biological Evaluation Process (FHWA et al., 2023). The Project ESA is located in the Level IV Loess and Glacial Drift Hills ecoregion as defined by the USEPA and various state and local agencies (Chapman et al. 2001); however, species and plant communities indicative of this ecoregion are no longer present due to human development. Table 4.6 identifies the federal and state-listed threatened and endangered species that may occur within the Project Action Area.

Table 4.6 Federal & State-Listed Species that May Occur Within the Project Action Area

Common Name	Scientific Name	Status*	Effect Determination
Black Footed Ferret	*Mustela nigripes*	FE, SE	No Effect
Eastern Black Rail	*Laterallus jamicensis*	FT, ST	NLAA
Eskimo Curlew	*Numenius borealis*	FE, SE	No Effect
Grey Wolf	*Canis lupus*	FE, SE	No Effect
Northern Long-eared Bat	*Myotis septentrionalis*	FE, SE	No Effect
Rufa Red Knot	*Calidris canutus rufa*	ST, FT	No Effect
Western Prairie-fringed Orchid	*Platanthera praeclara*	FT, ST	No Effect

* Key: FE = Federal Endangered; SE = State Endangered; FT = Federal Threatened; ST = State Threatened

** NLAA – May Affect Not Likely to Adversely Affect

Bald and Golden Eagles

The Project was reviewed for potential impacts to bald and golden eagles. Golden eagles require large expanses of open land for hunting and scavenging and prefer to nest on canyon outcrops or buttes. The Project was reviewed for potential impacts to these species. Bald eagles use trees for roosting and nesting, and they use nearby open water for foraging; golden eagles use

shortgrass and mixed-grass prairie for foraging, and they use rocky cliffs, tall trees, and other high places for nesting. There is no golden eagle nesting or roosting habitat within the vicinity of the Project. However, a bald eagle nest is known to occur approximately 2.5 miles northeast of the Project Action Area in a wooded corridor along Salt Creek (Jorgenson and Dinan 2017, 2018).

Migratory Birds

The Project ESA is located within commercial, residential, and recreational areas. There are planted trees along streets and in residential yards; however, these are minimal. These trees may provide nesting habitat for migratory bird species. Other trees and grass areas occur in roadside ditches throughout the Project ESA. These habitats, although not ideal, may be sufficient for ground-nesting grassland bird species. In addition, bridges within the Project Action Area may be suitable for ledge-nesting migratory birds (i.e., cliff and barn swallows).

4.13.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would have no impact on threatened and endangered species or migratory birds because there would be no new disturbances within the Project Action Area other than general maintenance and repair of the existing roadways. This type of activity generally occurs within the existing footprint of the roadway; therefore, threatened and endangered species and migratory birds would not be expected to be adversely affected by the No-Action Alternative.

4.13.3 Environmental Impacts of the Preferred Alternative

Threatened and Endangered Species

The Biological assessment was reviewed by the NGPC and the USFWS; both agencies concurred with the findings that the project would result in a “May Affect, Not Likely to Adversely Affect” determination for the eastern black rail. The project would have no effect to all other state and federally listed species. NGPC concurrence was received on October 3, 2022, and USFWS concurrence
was received on October 19, 2022. The Biological Assessment was re-evaluated on December 21, 2023, due to changes in the NDOT programmatic agreement threatened and endangered species with FHWA, NGPC, and USFWS. The Biological Assessment PQS Memo and re-evaluation is included in Appendix G.

Migratory Birds

Migratory birds likely to be present within the Project ESA include urban tree nesting, grassland ground nesting, and urban ledge nesting species. Construction activity along the Preferred Alternative would likely remove trees, grassland, and wetland vegetation in ditches; however, this loss of habitat would likely be temporary. In addition, the construction of a bridge would result in nesting habitat for some ledge nesting birds (such as cliff swallows). Direct impacts to

migratory birds from construction activities associated with the Preferred Alternative are not likely to be adverse with the implementation of the conservation conditions in the NDOT APP and the MTBA.

Bald and Golden Eagles

There is no suitable habitat in the vicinity of the Project ESA due to ongoing industrial, commercial, and residential development and a lack of suitable trees. The Preferred Alternative and associated construction activities are thus unlikely to affect bald or golden eagles.

4.13.4 Threatened, Endangered, and Special Status Species Mitigation

Threatened and Endangered Species

A-1 Changes in Project Scope: If there is a change in the project scope, the project limits, or environmental commitments, the Highway Project Manager shall coordinate with NDOT Environmental Section to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the NDOT Environmental Section. (District Construction)

A-2 Conservation Conditions: Conservation conditions are to be fully implemented within the project limits as shown on the plans. (District Construction, Contractor)

A-3 Early Construction Starts: Early Construction Starts. Contractor requests for early construction starts must be coordinated by the Project Construction Engineer with the NDOT Environmental Section for approval to ensure avoidance of listed species sensitive lifecycle timeframes. Early start requests may require consultation with the USFWS and NGPC. Agency coordination time will vary depending on species and project location. (District Construction, Contractor)

A-4 T&E Species: If federal or state listed species are observed during construction, the Highway Project Manager will contact NDOT Environmental Section to determine if additional species conservation conditions would be required prior to continuing project construction activities. Contact NDOT Environmental for a reference of federal and state listed species. Coordination with the USFWS and NGPC may be required depending on the species identified and construction activities. (NDOT Environmental, District Construction, Contractor)

A-5 Refueling: Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. (Contractor)

A-6 Restricted Areas: The following project activities shall, to the extent possible, be restricted to between the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the project, within the right-of-way designated on the project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites.

For activities outside the project limits, the contractor should refer to the Nebraska Game and Park Commission website to determine which species ranges occur within the off-site area. The contractor should plan accordingly for any species surveys that may be required to approve the use of a borrow site, or other off-site activities. The contractor should review the T&E Matrix agreement (on NDOT's website), where species survey protocols can be found, to estimate the level of effort and timing requirements for surveys.

Any project related activities that occur outside of the project limits must be environmentally cleared/permitted with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed project activities. The contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plan-sheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different ground photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The contractor must receive notice of acceptance from NDOT environmental, prior to starting the above listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat. (NDOT Environmental, District Construction, Contractor).

A-7 Waste/Debris: Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)

A-8 Post Construction Erosion Control: Erosion control activities carried out by NDOT Maintenance or others after construction is complete, but prior to project close-out, shall adhere to any standard conservation conditions for species designated for the project limits during construction. (NDOT Maintenance, District Construction, Contractor)

S-1 Fencing: When project-related fence construction/relocation work is required to be done prior to the start of construction, and if the fence work occurs outside urban or cropland areas that are not within swift fox or mountain plover range, then fencing can be installed/relocated at any time using the following criteria:

a. The fencing is temporary in nature and/or consists of only hand-driven posts
b. The work does not compact the soils (ex. through the use of heavy equipment) or cause soil disturbance beyond the driving of posts)
c. Within the whooping crane migration corridor, work occurring within a half of a mile of wetlands or perennial waters will occur between the hours of 10:00 am to 4:00pm when the work is between March 6 – April 29 or October 9 – November 15

If the fencing work cannot meet these criteria, the NDOT Right-of-Way Division shall coordinate with NDOT Environmental prior to the completion of Right-of-way negotiations.

S-2 Platte River Depletions: To the maximum extent practical, efforts will be made to design the project and select borrow sites to prevent depletions to the Platte River. If there is any potential to create a depletion, NDOT (during design) and the Contractor (for borrow sites) shall follow the current Platte River depletion protocols for coordination, minimization, and mitigation. In general, the following are considered de minimis depletions, but may still require agency coordination; a project which: a) creates an annual depletion less than 0.1 acre feet, b) creates a detention basin that detains water for less than 72 hours, c) diverted water that will be returned to its natural basin within 30 days, or d) creates a one-time depletion of less than 10 acre feet. (NDOT Roadway Design, Contractor)

S-3 Revegetation: All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder or within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed plants were identified, any seed mix requirements identified during resource agency consultations shall be used for the project. (NDOT Environmental)

S-6 Permanent LED Lighting (NDOT Design Commitment): Only LED roadway luminaries listed on the NDOT "Nebraska Qualified Material Vendors List" will be considered for use on Nebraska highway lighting projects. Proposed changes to the following LED lighting requirements would require resource agency (USFWS and/or NGPC) coordination and approval prior to installation:

- Nominal CCT – 3000 +/- 300 K
- BUG Ratings – Maximum nominal Backlight (N/A), Uplight (0), Glare (N/A)
- Lumen Output – N/A

Any proposed changes to the listed requirement(s) must be presented to the NDOT Environmental Section for Agency Coordination and approval. (NDOT Design)

Migratory Birds

The NDOT APP was developed to reduce conflicts between construction of NDOT projects and the laws governing migratory birds. This procedure is designed to protect and conserve avian populations and reduce avian conflicts thorough changes in project scheduling (that is, tree clearing outside primary nesting season), increased migratory bird surveys, and changes in project construction timelines. NDOT would use its APP to reduce conflicts with migratory birds. (NDOT Environmental, Contractor)

Additional commitments pertaining to migratory birds would be covered by NDOT Standards and Specifications 107.01(3).

Bald and Golden Eagles

No mitigation would be required.

4.13.5 Special Provision

- Special Provision – Environmental Commitment Document (B-3-0509) establishes the required documentation included in the Environmental Commitment Document and Project Erosion and Sediment Control Inspection

4.14 Floodplains

EO 11988, Floodplain Management, May 24, 1977, outlines the responsibility of federal agencies in the role of floodplain management (42 FR 26951). Each agency is required to evaluate potential effects of actions on floodplains and avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development. Among other directives, federal agencies are required to reduce the risk of flood loss; to minimize the impact of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains. FHWA has also adopted regulations for compliance with EO 11988, including policies and procedures for the locations and hydraulic design of highway encroachments on floodplains (23 CFR 650A).

The Federal Emergency Management Agency (FEMA) is the primary agency responsible for evaluating impacts to the floodway and the 100-year floodplain; however, FEMA has given the NDNR authority to administer their program. The 100-year floodplain is the land area covered by the floodwaters of the 100-year flood. This area is referred to as a Special Flood Hazard Area on FEMA Insurance Rate Maps.

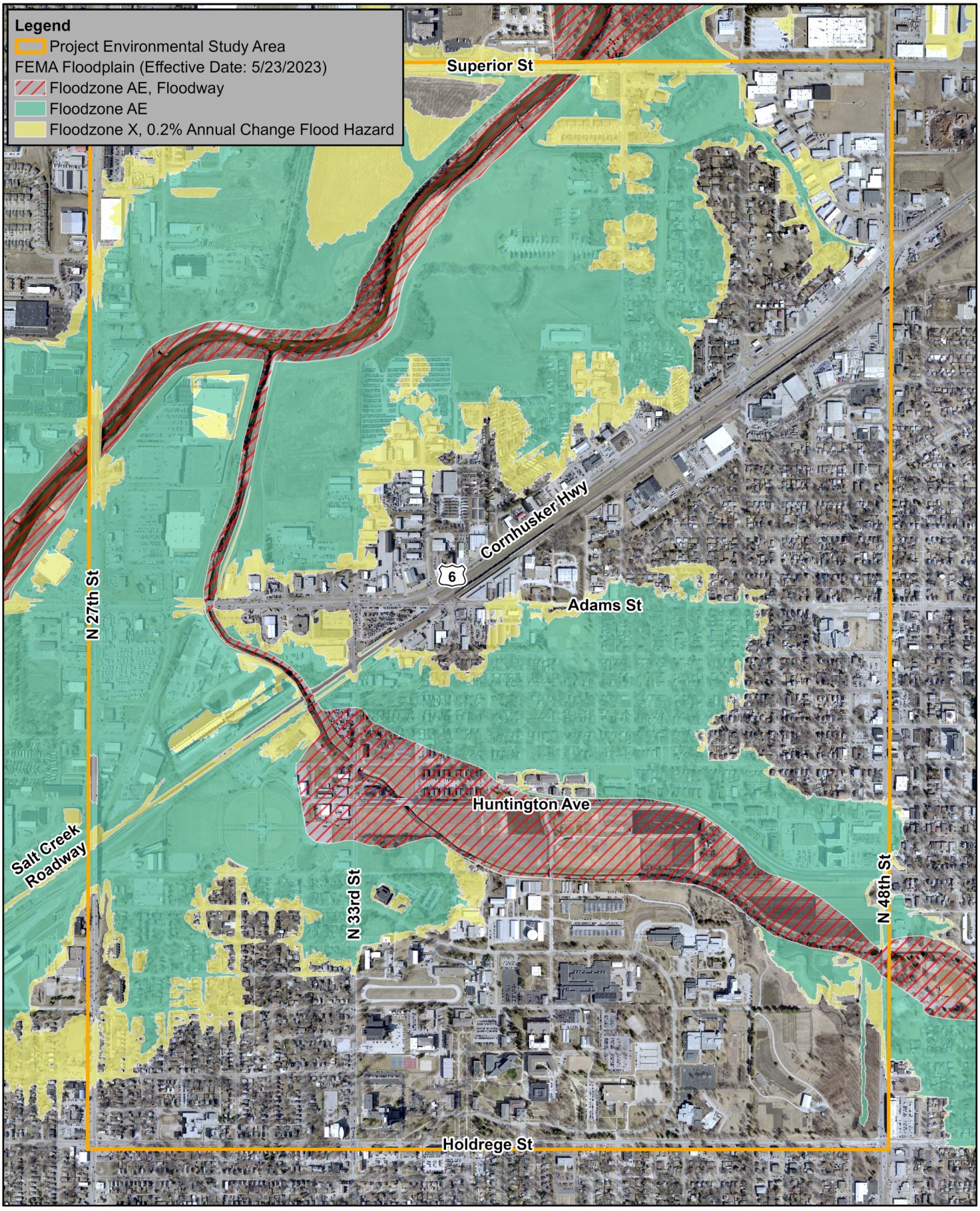
4.14.1 Affected Environment

The Flood Insurance Rate Map for Lancaster County Panel Number (No.) 31109C0310F, effective date February 18, 2011, indicates that Deadmans Run, which is located east of N. 27th Street and runs under Cornhusker Highway, is within a special flood hazard area (100-year floodplain) and a regulatory floodway. The Deadmans Run floodplain extends north until it joins with the Salt Creek floodplain, north of Cornhusker Highway. Figure 17 shows the floodplain and floodway for Salt Creek and Deadmans Run within the Project ESA.

The City of Lincoln is responsible for administering floodplain development permits for projects within the city. The Flood Insurance Study (FEMA 2013) completed for Lancaster County and Incorporated Areas identified the maximum allowable fill within the Salt Creek Floodway Fringe, which includes the Salt Creek floodplain. This requirement is codified in Chapter 27 of City of

Lincoln Municipal Code (27.52.035 – Standards for Salt Creek Flood Storage Area). Within this stretch of Salt Creek, between N. 33rd Street and Superior Street, approximately 35 percent of the right overbank may be filled within the Salt Creek Floodway Fringe. (FEMA, Flood Insurance Study, Lancaster County, Nebraska and Incorporated Areas, Revised April 16).

The USACE Deadmans Run project, currently in the detailed study and design phase, is a joint effort by the City of Lincoln, the Lower Platte South NRD, and the USACE. The USACE Deadmans Run project would result in improvements to the Deadmans Run channel and bridges that would lower the Deadmans Run flood elevations and reduce the floodplain extents. At N. 33rd Street, backwater from Salt Creek still causes flooding in the overbanks of Deadmans Run. Upstream of N. 33rd Street, at the limits of the Salt Creek backwater, the regulatory floodplain would be confined to Deadmans Run in most locations. Construction of the proposed USACE Deadmans Run Project is anticipated in 2025 and would remove a significant portion of floodplain associated with Deadmans Run from the Project ESA.



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NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

N

Original Published Resolution
WGS 1984 ARC System Zone 11

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Location of Floodplains

FIGURE
17

Project No. 702614, RTSD BU 5919, CN 13294

4.14.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would have no FEMA designated floodplain impacts because no construction activities would occur.

4.14.3 Environmental Impacts of the Preferred Alternative

The Preferred Alternative would be certified to meet floodplain regulations. It is not anticipated to cause greater than 1 foot of rise in the Base Flood Elevation of any of the floodplains it crosses, nor increase the potential for property loss and hazard to life. Per 23 CFR 650.111, the Preferred Alternative would result in a non-functionally dependent floodplain as much of the work parallels the streams and is not associated with bridges or culverts conveying the base flood elevation. The USACE Deadmans Run Project reduces the floodplain extents and flood elevations in the 33rd and Cornhusker Viaduct Project Area.

The USACE Deadmans Run project would remove the majority of the current Deadmans Run floodplain from the Project ESA. Remaining Deadmans Run floodplain southeast of the BNSF railroad crossing would be contained within the banks of Deadmans Run. The proposed N. 33rd Street bridge over Deadmans Run would be designed to accommodate the required flows and not result in impacts to the floodplain. The USACE Deadmans Run project modeled the required capacity of this bridge and was used as the design standard for the bridge.

The backwater floodplain of the Salt Creek, downstream of Deadmans Run, influences the area north and west of the BNSF railroad crossing of Deadmans Run. The Preferred Alternative would impact portions of the Salt Creek floodplain with the construction of the proposed overpass, as well as the widening of Cornhusker Highway and the Cornhusker Highway bridge across Deadmans Run. The Salt Creek floodplain has been divided by the City of Lincoln into subareas; each subarea has an allowable fill limit, which are applicable per the City of Lincoln Municipal Code 27.52.035. The Preferred Alternative would be constructed within the Salt Creek Flood Storage Area 18 which has an allowable fill limit of no greater than 40% fill. The Preferred Alternative would place approximately 2,550 CY (2.8 acre-feet) of fill within the portion of the Project that overlaps this Salt Creek Flood Storage Area. The total floodplain storage volume within the overlap area, prior to the project, is 17,190 CY or 10.7 acre-feet. The proposed fill represents approximately 26 percent of the total flood storage area within Salt Creek Flood Storage Area 18, under the allowable limit of 40 percent.

The Preferred Alternative would not result in a significant encroachment into a base floodplain. As noted in 23 CFR 650.111 (a)-(c), the USACE Deadmans Run Project would reduce the flood elevations and flood extents of the Deadmans Run floodplain so that it is mostly contained within the Deadmans Run channel. As noted in 23 CFR 650.111 (b), the 33rd/Cornhusker Viaduct, Lincoln project would have no impact on Deadmans Run flooding conditions following the completion of the USACE Deadmans Run Project. These Projects do not result in a significant risk or potential for loss of life or property due to the base flood. This Preferred Alternative would

not result in a substantial adverse impact on natural and beneficial floodplain values. An alternatives analysis related to the significance of encroachment into a base floodplain is not warranted.

The proposed improvements from the Preferred Alternative would maintain local access to existing development in the project area. No new accesses would be constructed to properties within the floodplains of Salt Creek or Deadmans Run. The Preferred Alternative includes acquisition of several commercial properties and removal of the buildings on those properties to facilitate the new overpass and roadway connection from North 33rd Street to Adams Street, thereby reducing the number and extent of developed properties in the floodplain. Therefore, the Preferred Alternative would not support probable incompatible floodplain development.

The floodplain that exists within the project area is largely an urban business and industrial district, with some residential areas. The Proposed Alternative does not further degrade the function of the floodplain. Additionally, the floodplain of Deadmans Run would be mostly contained within the banks after the USACE Deadmans Run project. Thus, the Preferred Alternative have little to no impact on Deadmans Run flood flows. There are encroachments associated with the Preferred Alternative; however, the project would not have an impact on the natural and beneficial floodplain values. Floodplain Statement, 23 CFR Section 650.111 review, and NDOT floodplain PQS are included in Appendix H.

4.14.4 Floodplain Mitigation

The Project construction would have a floodplain encroachment. A Floodplain Development Permit shall be obtained from the City of Lincoln prior to construction to certify that the proposed Project shall not raise the base flood elevation more than one foot and there would be no rise in the floodway. (Project Sponsor)

4.15 Cultural Resources

Cultural resources include a broad pattern of material and non-material sites or objects that represent contemporary, historic, and pre-historic human life, ways, or practices. This type of resource generally includes archaeological sites, prehistoric properties, traditional cultural sites, and other places where significant historic activities have taken place. These sites are often considered valuable to the human environment and measures must be taken to ensure that they are treated appropriately. Projects that involve federal land, funds, or permitting are subject to compliance with the National Historic Preservation Act of 1966 (NHPA).

Section 106 of the NHPA, as amended, and implementing regulations found in 16 U.S.C 470, require that federal agencies consider any effect a proposed action may have on historic properties. This is generally accomplished through the Section 106 compliance process, as follows:

- Identify consulting parties.
- Identify and evaluate historic properties located within the Area of Potential Effect (APE) established for an undertaking.
    - The APE encompasses an irregular area that includes a corridor beginning at approximately North 33rd Street and Merrill/East Campus Loop. It then continues north to Cornhusker Highway where it follows the Cornhusker corridor from North 27th Street to approximately North 48th Street. Here the APE crosses the highway and returns south/southwest toward North 27th street. An additional APE for visual effects for the viaduct at the railway crossing has been identified as an area bounded approximately between North 27th Street to just west of North 39th Street on the east, and Leighton Street to the south, to approximately Fremont Street to the north (Figure 18a). A supplemental APE for the 6(f)-conversion property encompasses Wilderness Hills Park located near Castle Pine Drive and Tree Line Drive, Lincoln, Lancaster County, Nebraska (Figure 18b).
- Assess adverse effects on properties listed, or eligible for listing, on the National Register of Historic Places (NRHP).
- Consult with the Nebraska State Historic Preservation Officer (NeSHPO) and, as appropriate, the Advisory Council on Historic Preservation, and other interested parties to resolve adverse effects.

In addition to the federal regulations, the Nebraska Archaeological Resources Preservation Act (Nebraska Revised Statute 82-501) was enacted to protect archaeological resources and sites by authorizing the head of state agencies to assess and mitigate potential affects to NRHP eligible sites prior to the use of state funds for the undertaking. However, NDOT is exempt from this law due to a cooperative agreement with the Nebraska State Historical Society, which ensures that all highway construction projects meet federal historic preservation regulations. The Act also makes it a misdemeanor to knowingly disturb archaeological resources on public lands without written permission from the State Archaeology Office. Further, the Unmarked Human Burial Sites and Skeletal Remains Protection Act (Nebraska Revised Statute 28-1301) makes it a felony to knowingly disturb human burials.

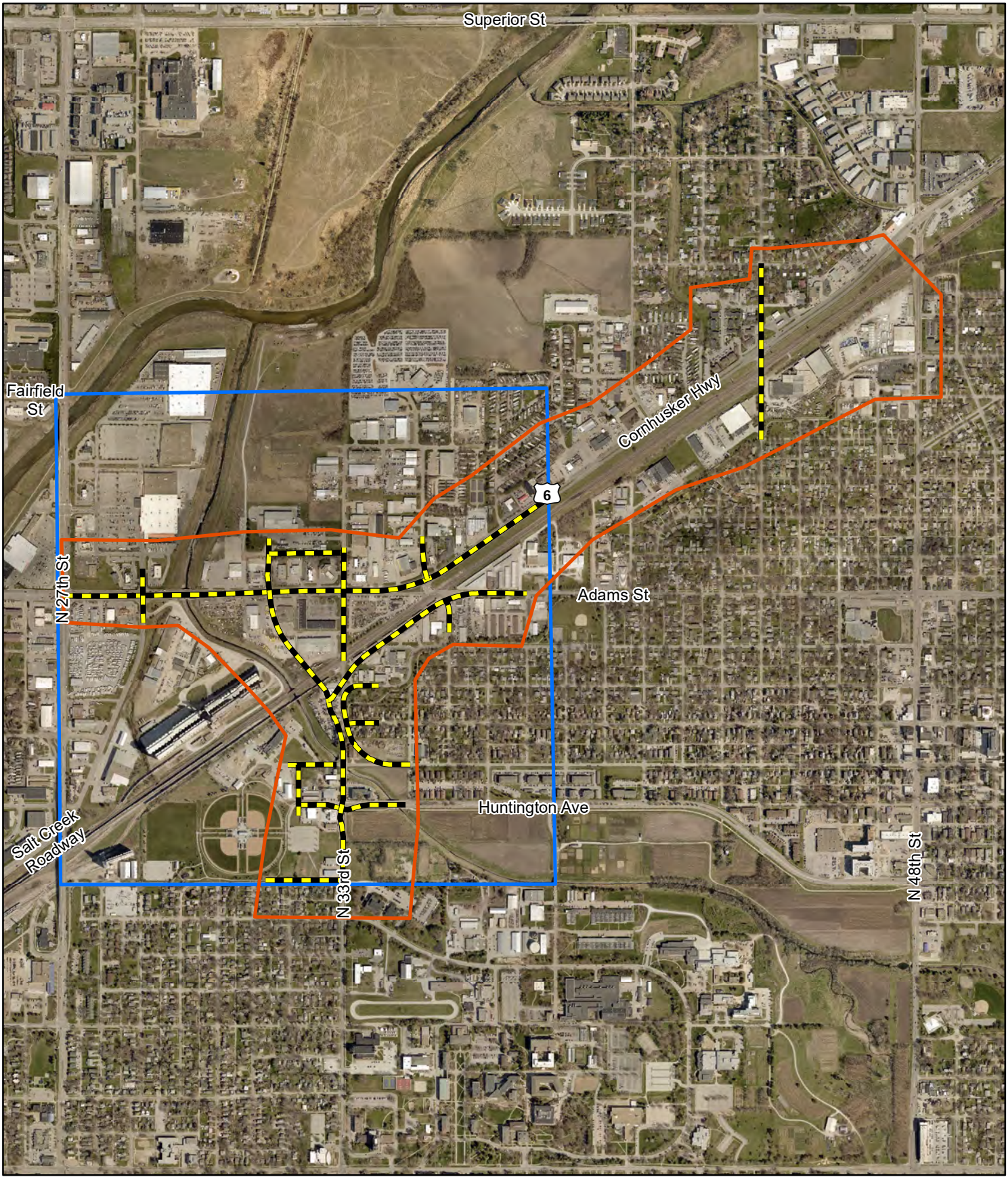
4.15.1 Affected Environment

Identification and evaluation of cultural resources completed in 2022 - 2023 by Historic Resources Group along with consultation with the NeSHPO and the City of Lincoln Historic Preservation Planner did not identify NRHP eligible or listed properties within the APE for the Preferred Alternative. In order to evaluate potential indirect effects caused by construction of an elevated roadway, a visual APE was defined. This visual APE considered the height of the proposed new elements on the landscape and the effect they may have on the viewshed to and from historic properties. No historic properties were identified within the visual APE for the proposed elevated roadway. The location of the APE and Visual APE are shown on Figure 18a.

Tribal consultation was initiated with 13 tribal historic preservation officials on February 7, 2023, with a letter was sent to each tribe requesting review and comment regarding historic property identification and evaluation within the APE. To date, of the 13 tribes contacted, only two tribes have responded to the consultation letter. The Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, MT responded on March 10, 2023, and requested additional information from the Historic Resources Group file search. NDOT sent the Historic Resources Group file search report and noted that there were not archaeological findings within the APE of the project. To date, there has been no response from the Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation. The second Tribe to respond to the initial coordination was the Winnebago Tribe of Nebraska. The Winnebago Tribe of Nebraska indicated that they are within the area of interest (AOI) and requested they be contacted immediately in the event of an unanticipated discovery. Documentation of tribal coordination is included in Appendix I.

Consultation with the Lincoln Certified Local Government (CLG) was initiated on February 7, 2023. The CGL responded on February 10, 2023, and concurred with the NDOT findings that the project would result in *no historic properties affected*. Documentation with the Lincoln CGL is included in Appendix I.

Other consulting parties that were contacted for review and comment regarding historic property identification and evaluation include; City of Lincoln Parks and Recreation, National Park Service, and NGPC. Consultation letters to each of the respective parties above were sent out on February 7, 2023. The City of Lincoln concurred with the findings of *no historic properties affected* on February 10, 2023. The National Park Service indicated on February 23, 2023, that the agency does not hold any land interest In the APE areas and therefore has no comment or concern. To date, NGPC has not responded to the initial consultation letter, but has been involved with the Section 4(f) aspect and is aware of the project. NDOT recommended a project effects determination of *no historic properties affected* and FHWA concurred upon this determination on November 16, 2022. In order to consider effects to historic properties as a result of the development of a Section 6(f) mitigation site, which is located at Wilderness Hills Park, near Castle Pine Drive and Tree Line Drive in Lincoln, Lancaster County, Nebraska, a Section 106 Supplemental Evaluation was completed in February 2023. During this supplemental evaluation, the APE was expanded, and identification and evaluation of historic properties was completed. No historic properties were identified within the supplemental APE and NDOT recommended to FHWA that the project effects determination of *no historic properties affected* remained appropriate. FHWA concurred with this determination on February 3, 2023. Documentation with the other consulting agencies is included in Appendix I. The location of the supplemental APE is shown on Figure 18b.



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N

0 600 1,200

1 inch = 1,200 feet

Preferred Alternative
APE Boundary
Visual APE Boundary

33rd & Cornhusker
Lincoln, Nebraska
Project No. 017-3604-A

Section 106 APE Boundary Map

Figure 18a

NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

Data Source: 2020 Lancaster County Aerial

Project No. 702614, RTSD BU 5919, CN 13294

Development Viewer
CITY OF LINCOLN - LANCASTER COUNTY, NE

Wilderness Hills Park

Expanded Area of Potential Effects

33rd and Cornhusker
CN 13294 LCLC-5233(4)

Legend

- Address Labels
- Parcels_Street
- Expanded Area of Potential Effects

33rd and Cornhusker
Lincoln, Nebraska
Project No. 017-3604-A
Supplemental Section 106 APE Boundary Map
Figure 18b

4.15.2 Environmental Impacts of the No-Action Alternative

The No-action Alternative would have no impacts because no construction activities would occur.

4.15.3 Environmental Impacts of the Preferred Alternative

The Preferred Alternative would have no effect to cultural, historic, or archaeological resources in the APE, as no historic properties were identified. NDOT recommended a project effects determination of *no historic properties affected* and FHWA concurred upon this determination on November 16, 2022, and February 3, 2023 (Appendix I).

4.15.4 Cultural Resources Mitigation

Archaeological and paleontological mitigation commitments pertaining to unexpected discoveries would be covered by NDOT Standard Specifications 107.10.

4.16 Hazardous Materials

The American Society for Testing and Materials Standard E1527-05 (ASTM 2005) defines a recognized environmental condition as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.”

Hazardous materials are defined as substances that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may present a substantial danger to public health or the environment if released. Solid wastes are designated as hazardous if they are corrosive, ignitable, explosive, chemically reactive, or toxic, as defined in 40 CFR 261 Subpart C. Hazardous wastes are regulated by the USEPA and other federal and state agencies under the Toxic Substances Control Act (15 USC §2601 et seq.); the Comprehensive Environmental Response, Compensation, and Liability Act (CERLCA; 42 USC 9601 et seq.); the Resource Conservation and Recovery Act (RCRA; 42 USC §6901 et seq.); the Superfund Amendments and Reauthorization Act (P.L. 99-499); and the Emergency Planning and Community Right-to-Know Act (42 USC §11001 et seq.). RCRA gives USEPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of nonhazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. Hazardous wastes are also regulated under Nebraska Administrative Code Title 128, Nebraska Hazardous Waste Regulations (NDEE 2007).

A Hazardous Materials Review (HMR) was prepared for the Project in accordance with NDOT HMR Guidance, to identify and assess the potential for encountering hazardous materials within a buffer of 1/10 of a mile around the Project. The HMR report is included in Appendix J.

4.16.1 Affected Environment

The HMR included a search of the 1/10-mile buffer for federal, state, and local environmental database records and a review of readily available aerial photographs was completed. Forty-seven sites were identified as having hazardous substance and/or petroleum product use, storage, or transfers within the HMR search radius based on the NDEE facility program listings.

Because the Project's construction activities are anticipated to encounter groundwater, a detailed records review was completed to identify sites that may be impacted by the Project. Sites without the potential for groundwater impact were not reviewed in additional detail and were considered to be low potential to impact Project activities.

A visual reconnaissance was also completed on November 19, 2019, to assess the 1/10-mile buffer for potential hazardous materials concerns associated with current land uses and observable site activities. The visual reconnaissance assessed the Project alignment for obvious evidence of potential contamination sources, such as current hazardous materials storage or use; unusually stained soils, concrete slabs, or pavements; sumps, dumps, drums, tanks, and electrical transformers; stressed vegetation; and discarded containers. The visual reconnaissance was limited by the fact that it was restricted to existing public roads and the public ROW. Private property was not available for inspection.

4.16.2 Environmental Impacts of the No-Action Alternative

The No-action Alternative would have no impacts because no construction or ground disturbing activities would occur.

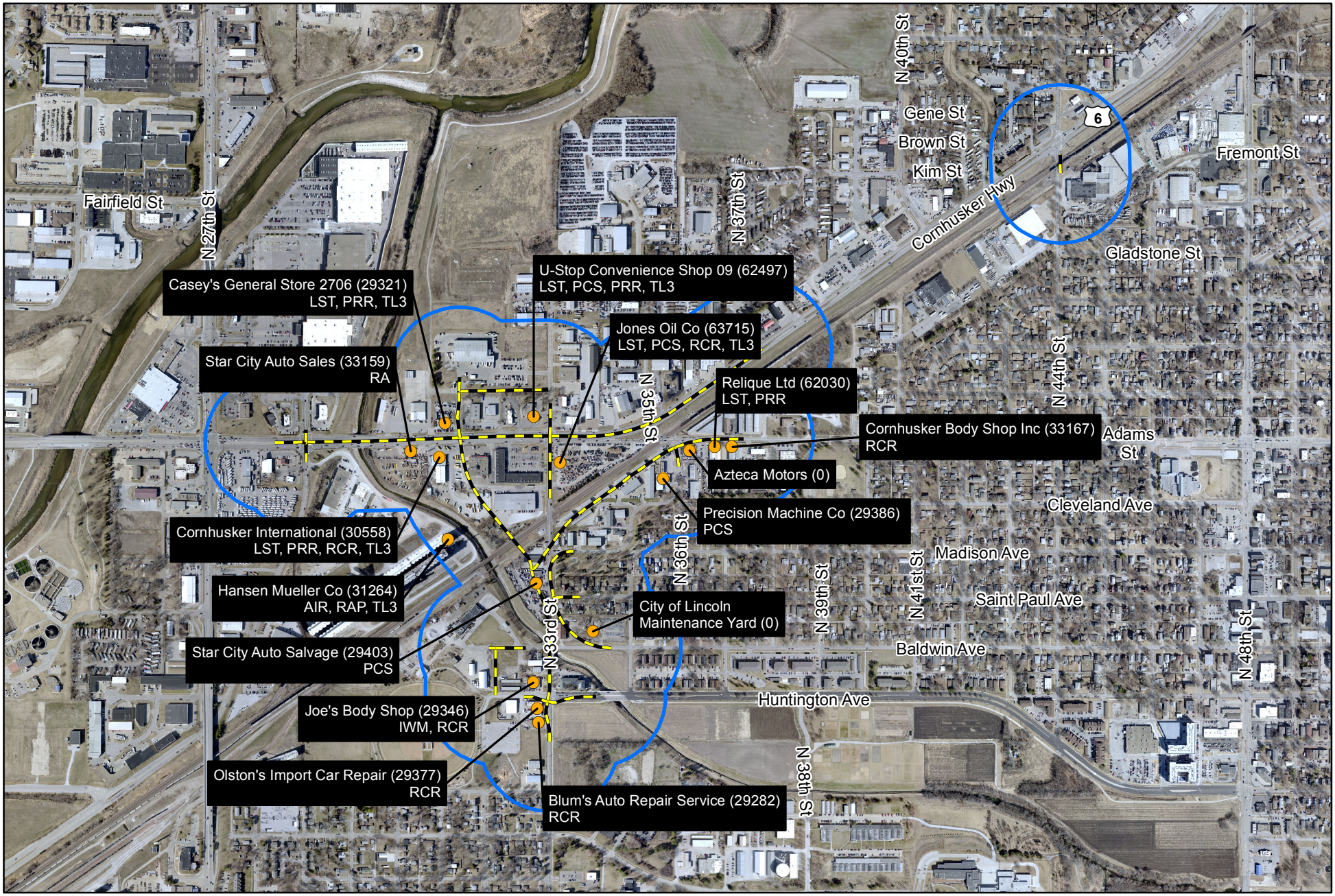
4.16.3 Environmental Impacts of the Preferred Alternative

Based on the database review, the visual reconnaissance, historical review, and regulatory file review it is considered medium potential for contamination in soil and/or groundwater to be encountered during construction of the Preferred Alternative. There are fifteen identified sites that have potential to impact construction of the Project or cause a materials management and/or worker health and safety concerns related to Project construction. Table 4.7 provides a summary of these sites. The locations of these sites are shown on Figure 19.

Table 4.7 Summary Medium Potential Category Sites

Site*	Media of Potential Concern
Relique Ltd – 3645 Adams Street	Groundwater
U-Stop Convenience Shop 09 – 3244 Cornhusker Highway	Soil and Groundwater
Casey's General Store 2706 – 3010 Cornhusker Highway	Soil and Groundwater
Joe's Body Shop – 2505 N 33rd Street	Soil and Groundwater
Olston's Import Car Repair – 2435 N 33rd Street	Soil and Groundwater
Precision Machine Company – 2933 N 36th Street	Groundwater
Star City Auto Salvage – 2705 N 33rd Street	Soil and Groundwater
Cornhusker International – 3131 Cornhusker Highway	Soil and Groundwater
Star City Auto Sales – 3101 Cornhusker Highway	Soil and Groundwater
Cornhusker Body Shop Inc. – 3701 Adams Street	Groundwater
Jones Oil Co – 2930 N 33rd Street	Soil and Groundwater
Hansen Mueller Company – 3001 Cornhusker Highway	Groundwater
Blum's Auto Repair Service – 2415 N 33rd Street	Soil and Groundwater
Azteca Motors – 3625 Adams Street	Soil and Groundwater
City of Lincoln Maintenance Yard – N 33rd & Baldwin Avenue	Soil and Groundwater

* Additional review of construction plans is warranted to re-evaluate these sites for potential impacts to soil and groundwater before completing a subsurface investigation.



NEBRASKA
Good Life. Great Journey.
DEPARTMENT OF TRANSPORTATION

N

Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery
0 250 500 1,000 ft
1" = 1,000'

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Hazardous Materials Sites
with Medium Potential

FIGURE
19

Project No. 702614, RTSD BU 5919, CN 13294

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4.16.4 Hazardous Materials Mitigation

If contaminated soils/water or unexpected wastes are discovered, the Contractor shall stop all work within the immediate area. The Contractor shall secure the area of the discovery and notify the RTSD representative. The contractor shall not re-enter the discovery area until allowed to do so by the RTSD representative. At the time of discovery, the RTSD representative and contractor shall coordinate appropriate actions. The actions to be carried out by the RTSD representative are (but not limited to): verification that the contractor has suspended construction activities in the area of the discovery, contact the RTSD representative and then utilize the NDOT Unexpected Waste Action Plan to properly document the extent and type of waste. The RTSD representative shall ensure that proper disposal of the waste and any required health and safety mitigation is implemented by the Contractor. (Project Sponsor, NDOT Environmental, Contractor)

Demolition work on any structures will require the contractor to submit a written NESHAP (National Emission Standards for Hazardous Air Pollutants) notification to the NDEE. In addition, the Department of Health and Human Services shall also be notified by the contractor, using DHHS Form 5, at least 10 working days prior to commencement of bridge demolition or renovation activities where ACM was found. The 10-day clock starts with the day the Notification is postmarked, hand delivered, or picked up by a commercial delivery service, such as UPS, FedEx, etc. Faxing documents is prohibited. (Contractor)

There is potential for lead or toxic metal-based paint to be found on the structures to be demolished or repaired. The Contractor shall test these structures for the presence of lead/toxic metal paint. If lead-based paint/toxic metals within the paint are discovered, extreme caution shall be taken to minimize the amount of painted material or debris from causing or threatening to cause pollution of the air, land and waters of the State. If the method of removal of the components generates paint debris, the Contractor shall create an implementation plan to dispose of waste in accordance with NDOT's Standard Specification for Highway Construction Section 732 (Lead-based Paint Removal) and Title 128 Nebraska Hazardous Waste Regulations. The Contractor's implementation plan efforts shall be documented in OnBase. (Project Sponsor, NDOT Environmental, Contractor)

There is a medium potential for petroleum contamination to be present in the soils/groundwater at project N 33rd & Cornhusker. The following sites are identified as having a medium potential for petroleum contamination.

Name:	Address:	Station Number:
Relique Ltd	3645 Adams St.	1010 + 720 to 1010 + 800
U-Stop convenience shop 09	3244 Cornhusker	520 + 400 to 520 + 600
Casey's General Store 2706	3010 Cornhusker	510 + 700 to 510 + 810
Joe's Body Shop	2505 N. 33rd St.	100 + 800 to 100 + 900
Olston's Import Car Repair	243 N. 33rd St.	100 + 575 to 100 + 700
Precision Machine Company	2933 N. 36th St.	1500 + 0 to 1500 + 100
Star City Auto Salvage	2705 N. 33rd St	1200 + 900 to 1300 + 50
Cornhusker International	3131 Cornhusker	510 + 650 to 510 + 900
Star City Auto Sales	3101 Cornhusker	510 + 400 to 510 + 650
Cornhusker Body Shop	3701 Adams St.	1010 + 850 to 1020 + 0
Jones Oil Company	2930 N. 33rd St.	1100 + 300 to 1100 + 600
Hansen Mueller Company	3001 Cornhusker	510 + 0 to 510 + 200
Blum's Auto Repair	2415 N. 33rd St	100 + 500 to 100 to 575
Azteca Motors	3625 Adams St.	1010 + 520 to 1010 + 720
City of Lincoln Maintenance Yard	33rd & Baldwin	1200 + 150 to 1200 + 650

If contaminated soils/groundwater or unexpected wastes are discovered, The Contractor shall stop all work within the immediate area. The Contractor shall secure the area of the discovery and notify the RSTD Representative. The Contractor shall not re-enter the discovery area until notified by the RTSD Representative. At the time of discovery, the RTSD Representative and Contractor shall utilize the Unexpected Waste Action Plan (UWAP) to coordinate appropriate actions. The actions to be carried out by the RTSD Representative are (but not limited to): verification that the Contractor has suspended construction activities in the area of the discovery, contact the RTSD Representative and shall then utilize the UWAP Notification Form (NDOT Form 691) to properly document the extent and type of waste. The RTSD Representative will ensure that proper disposal of the waste and any required health and safety mitigation is implemented by the Contractor. The Contractor is required by NDOT's Standard Specification section 107.11 (Hazardous Material Discoveries) to handle and dispose of regulated material in accordance with applicable laws. (Project Sponsor, NDOT Environmental, Contractor)

The Contractor shall submit a written National Emissions Standards for Hazardous Air Pollutants (NESHAP) notification to the Nebraska Department of Environment and Energy (NDEE) and a Nebraska Department of Health and Human Services (DHHS) Form 5 at least 10 days prior to demolition/renovation. The 10-day clock starts when the NESHAP and Form 5 notifications are post marked, hand delivered, or picked up by a commercial delivery service. Faxing documents is prohibited. The Contractor shall provide the RTSD Representative copies of the notifications and the submittal date prior to demolition/renovation activities. (Contractor)

The RTSD Representative will upload NDEE NESHAP and DHHS Form 5 documentation to OnBase. (Project Sponsor)

The Contractor shall survey structures(s) on buildings to be demolished for the presence of asbestos containing materials (ACM). The inspector must be certified in accordance with the Nebraska Department of Health and Human Services (DHHS) Nebraska Asbestos Control Program Regulations, Title 178. A list of Licensed Asbestos Inspectors can be found at http://dhhs.me/gov/Pages/Asbestos.aspx. Documentation of the survey shall be provided to the RTSD Representative by the contractor prior to structure demolition. (Contractor)

The RTSD Representative will record survey documentation to OnBase. (Project Sponsor)

Removal and disposal of ACM shall be in accordance with the Nebraska Department of Health and Human Services (DHHS) Nebraska Asbestos Control Program Regulations, Title 178. The Contractor shall develop a removal and disposal plan in coordination with a licensed asbestos removal contractor and NDOT. The Contractor shall contact DHHS no later than 10 business days prior to removal of the ACM for guidelines on disposal. If the asbestos cannot be kept in a non-friable condition upon removal, the Contractor shall use a licensed asbestos removal contractor. A list of licensed asbestos removal contractors can be found at: http://dhhs.me/gov/Pages/Asbestos.aspx. ACM shall be disposed of at a landfill approved for handling asbestos. The Contractor shall provide landfill receipts to the RTSD Representative within 10 working days of disposal. (Contractor, Project Sponsor)

The RTSD Representative will upload disposal documentation (i.e., landfill receipts or other documentation provided by the Contractor to OnBase. (Project Sponsor)

Phase I Environmental Site Assessments may be conducted for each property to be purchased. Phase I assessments allow RTSD to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability. Under CERCLA, entities may be held strictly liable for cleaning up hazardous substances at properties that they either currently own or operate or owned or operated in the past. Strict liability under CERCLA means that liability for environmental contamination may be assigned based solely on property ownership. (Project Sponsor)

Performance of the utility work set forth in the Project plans and specifications shall be conducted in accordance with any easement agreement among the utility companies, RTSD, or private landowners. If polychlorinated biphenyls (PCBs)-containing transformers or other equipment are identified, NDOT required that they be managed and disposed of according to the Toxic Substance Control Act (TSCA) regulations. Releases of PCBs to the environment at levels requiring actions under TSCA are to be managed or remediated according to TSCA regulations. Any transformer with no label is assumed to be “PCB contaminated equipment” per EPA regulations. The Contractor shall notify the utility for remediation for PCB contaminated soils or transformer repair. (Project Sponsor, Contractor)

Additional site reconnaissance, investigation, or additional review of design impacts will be done during the ROW acquisition process. Based on this work green sheets will be updated during

subsequent EA updates and revisions. The medium potential sites identified are not anticipated to have a major impact to the project. Minimal impacts to schedule and cost are anticipated. Additional mitigation measures may be required due to the presence of wells and any additional environmental concerns identified. (Project Sponsor, Contractor)

4.17 Temporary Construction Impacts

Project construction activities may lead to temporary short-term impacts. These impacts would typically include construction noise, dust, traffic accommodations during construction activities, access to adjoining properties, and construction accommodations needed to build the Project.

4.17.1 Affected Environment

The Project is in an area with mixed urban fringe and agricultural land uses. Commercial and industrial businesses are present along N. 33rd Street and Cornhusker Highway, and some residences are present on the east side of the Project.

4.17.2 Environmental Impacts of the No-Action Alternative

The No-Action Alternative would require continued maintenance activities such as pavement overlays to the existing pavement. Maintenance activities would have temporary construction impacts relative to the No-Action Alternative. These impacts would include lane closures and increased travel times.

4.17.3 Environmental Impacts of the Preferred Alternative

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, close two at-grade railroad crossings, construct a bridge over Deadmans Run, construct new trail and multi-use paths, and improve an existing at-grade crossing at 44th Street. The Preferred Alternative would likely be built in three distinct sections with phases, described below. Figures 19a-19i show the proposed construction phasing of the Preferred Alternative. The preliminary phasing within this document is primarily based on maintaining traffic. The 44th Street pedestrian improvements can occur at any time and aren't tied to a specific Phase based on critical path elements. Recommend not explicitly defining each project element during preliminary design. More detailed phasing will occur during Final Design.

N. 33rd Street and Huntington Avenue Intersection

This segment of construction includes the reconstruction of the N. 33rd Street and Huntington Avenue intersection along with associated work to pave Griffith Street and to reconstruct Baldwin Avenue to the west of N. 33rd Street. Construction on this section would require closures and detours during each phase, with Phase 2 requiring total closure of the intersection.

Phase 1: This would include the work to pave Griffith Street and a portion of Baldwin Avenue to the west of the driveway into the City of Lincoln maintenance facility. This would require construction of the new storm sewer outlet for Griffith and Baldwin Avenue. Access to the city's maintenance facility would be maintained throughout construction. Access routes to the maintenance facility would be determined during Final Design. See Figure 20a.

Phase 2: This would include construction of the new roundabout at the intersection of N. 33rd Street and Huntington Avenue. During this phase, the intersection would be closed to traffic with a detour to either N. 27th Street or N 48th Street. Traffic on Huntington Avenue would be detoured on N. 48th Street north to Cornhusker Highway/US-6 or south to Holdrege Street. Access to Fleming Fields would be maintained at all times utilizing Baldwin Avenue and the newly paved Griffith Street or staggered construction of the roundabout. Temporary surfacing would be constructed, as necessary, for the tie-in between new and existing pavement at Baldwin Avenue.

Construction of the east and north legs of the roundabout would be staggered to maintain access to the apartment complex at the northeast corner of the intersection. Northbound traffic on N. 33rd Street from the newly constructed roundabout would potentially be detoured until the completion of N. 33rd Street, assuming the existing box culvert and roadway has been removed as part of the USACE Deadmans Run project. If the USACE Deadmans Run project has not removed the existing box culvert at this point, temporary pavement could be constructed to allow north/south traffic on N. 33rd Street. Further coordination would be needed between the RTSD project and the USACE to determine when the existing box culvert under N. 33rd Street would be removed. See Figure 20b.

Phase 3: This phase includes construction of the cul-de-sac on Baldwin Avenue to the west of N. 33rd Street. Pedestrian access to businesses and the trail network will be accommodated through the use of temporary connections or designated detour routes. See Figure 20c.

Cornhusker Highway

This would involve the reconstruction of Cornhusker Highway/US-6 between State Fair Park Drive and N. 37th Street. The work would also include reconstruction on N 31st Street Circle, N. 33rd Street, N. 35th Street and the construction of a new paved roadway at Greenwood Street between N. 31st Street Circle and N. 33rd Street. This would be completed under traffic with lanes reduced on Cornhusker Highway to one lane in each direction during construction.

Phase 1: This phase includes the reconstruction of N. 31st Street Circle to the north of Cornhusker Highway/US-6, Greenwood Street and bridge widening work at the Deadmans Run bridge that can be completed outside the existing travelled way. Work completed as part of this phase would be performed under traffic, no detours or full closures would be required. This would also include reconstruction of the storm sewer outlets at the north side of the Deadmans Run bridge on Cornhusker Highway, storm sewer construction along the north side of Cornhusker Highway/US-6 and geometric improvements at the State Fair Park Drive intersection. During

completion of work on this phase, access to existing businesses would be maintained using the existing drives off Cornhusker Highway/US-6 and access to United Parcel Service (UPS) would be provided at N. 33rd Street. See Figure 20d.

Phase 2A and 2B: This phase includes reconstruction of the north half of Cornhusker Highway/US-6 between State Fair Park Drive and N. 37th Street along with bridge widening and deck replacement at the north side of the Deadmans Run bridge. Reconstruction of the existing water main along the north side of Cornhusker Highway/US-6 would also be completed at this time. Prior to the start of this phase, westbound traffic would be shifted to the south side of Cornhusker Highway/US-6 and head-to-head traffic would be maintained on the existing pavement. There are three existing eastbound lanes between State Fair Park Drive and Adams Street that can be used to provide a through lane in each direction as well as left turn lanes at intersections.

Temporary pavement would be constructed in a phased manner to improve temporary intersections at N. 31st Street, N. 33rd Street, and N. 35th Street and as necessary to maintain access to properties on the north side of Cornhusker Highway/US-6.

The work at the N. 33rd Street intersection and the N. 35th Street intersection would be phased as shown for the Phase 2B work. The work at these intersections could be completed at the start of Phase 2A or concurrently with the Phase 2A work. The bidding documents would include a provision that requires the Contractor to maintain at least two of the three intersections (N. 31st Street, N. 33rd Street and N. 35th Street) open for full access during construction of the project. There would also be a maximum number of days that these intersections can be closed to minimize disruptions to access. See Figure 20e.

Phase 3A and 3B: This work would include reconstruction of the south half of Cornhusker Highway/US-6 between State Fair Park Drive and N. 37th Street along with bridge widening and deck replacement at the south side of the Deadmans Run bridge. Prior to the start of this phase, eastbound traffic would be shifted to the north side of Cornhusker and single lane traffic in each direction would be maintained on the new pavement constructed during Phase 2. Temporary pavement constructed in the previous phase for crossovers at the east end of the construction zone would facilitate eastbound traffic to transition back to the southern side of Cornhusker Highway/US-6. At the west end of the construction zone, shifting of the eastbound traffic back to the northern side of the roadway would occur west of the N. 29th Street intersection. The existing tack on median would be removed to facilitate this movement.

Additional temporary pavement would be constructed as necessary to accommodate temporary access and turning movements at intersections. Temporary drives would be constructed on N. 31st Street and N 35th Street/Adams intersections to maintain access and to connect the existing pavement to the newly constructed Cornhusker Highway/US-6.

The work at the N. 33rd Street intersection and the N. 35th Street/Adams intersection would be phased as shown for Phase 3B work. The work at these intersections could be completed at the start of Phase 3A or concurrently with the Phase 3A work. The bidding documents would include a provision that requires the Contractor to maintain at least one of these two intersections (N. 33rd Street or N. 35th/Adams Street) open for access. There would also be a maximum number of days that these intersections could be closed to minimize disruptions to access.

Temporary pavement and connections would be constructed, as necessary, within the ROW and easements to facilitate and maintain movement and access to property and businesses in this area. Pedestrian access to businesses and the trail network would be accommodated through the use of temporary connections or designated detour routes. See Figure 20f.

N. 33rd Street Viaduct and Adams Street Connector

This work would involve the reconstruction of N. 33rd Street on new alignment between Huntington Avenue and Cornhusker Highway/US-6. This work would include a new viaduct across the BNSF railroad tracks and a new connection on Adams Street between the new N. 33rd Street Viaduct roadway and N. 36th Street. The work also includes construction of a new roadway between Baldwin Avenue and Madison Avenue (preliminary name 33rd Avenue) to accommodate local traffic circulation.

This work would be completed under total closure of N. 33rd Street beginning at Huntington Avenue and extending to the north side of the BNSF railroad corridor. To maintain access to local businesses, N. 33rd Street to the south of Cornhusker Highway/US-6 would remain open. In addition, a short-term closure on Adams Street would be necessary to make the final connection between the new connector roadway and the existing Adams Street alignment to the east.

Phase 1: This would include the construction of the new local road (33rd Avenue) between Baldwin Avenue and Madison Avenue. Constructing this roadway would help maintain local access and traffic circulation during construction of the new roadway approaches and viaduct. It may also be utilized for delivery of construction materials so consideration should be given to using a heavier pavement section to accommodate construction loads. The trunk storm sewer that connects at Madison Avenue would also be reconstructed during this phase. During this phase Adams Street would remain open across the BNSF tracks. The existing at-grade crossing of N. 33rd Street over the BNSF tracks would remain in place for construction access only and would not be open to the general public. Surcharging for the Adams Street embankment as well as the N. 33rd Street embankment would also occur during this phase and would remain in place for approximately two months once completed. See Figure 20g.

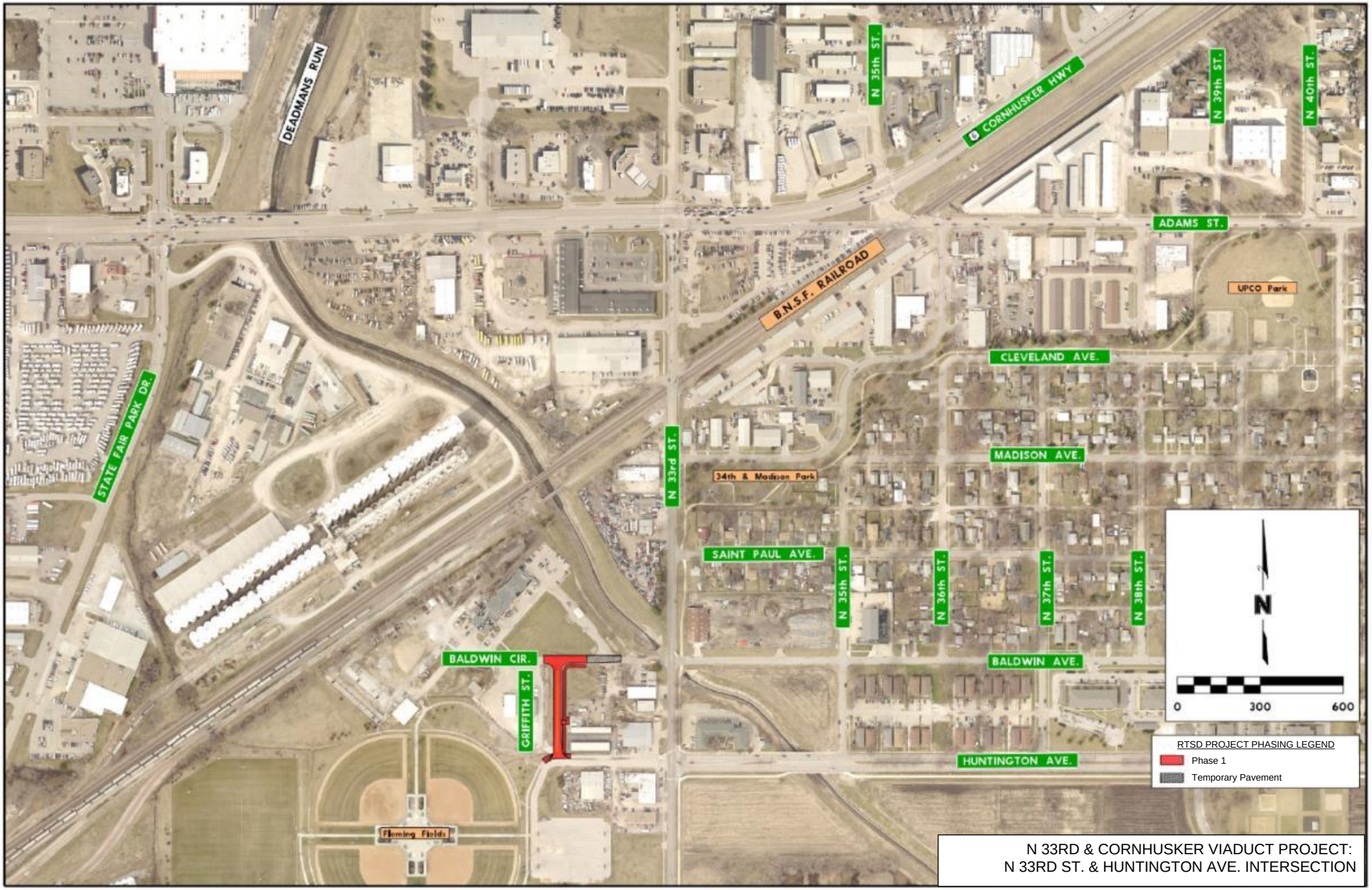
Phase 2: This would include construction of the new elevated approach roadways on N. 33rd Street and Adams Street as well as the new viaduct across the BNSF tracks. During this phase, Adams Street would remain open across the BNSF tracks and the existing at-grade crossing on N. 33rd Street and crossing signals would remain in place for construction access See Figure 20h.

Phase 3: During work on this phase, Adams Street would be closed to traffic between N. 33rd Street and approximately N. 38th Street. The existing at-grade crossings at N. 33rd Street and N. 35th/Adams Street with the BNSF railroad would be removed. The new N. 33rd Street alignment and viaduct between Huntington Avenue and Cornhusker Highway would be opened to traffic for this phase. Work on this phase includes completion of the closure segment on Adams Street; the construction of a cul-de-sac at existing N. 33rd Street to the north of the BNSF tracks; final construction of the raised median at N. 33rd and Cornhusker Highway; removal of the temporary connection at N. 35th/Cornhusker/Adams; and removal of the at-grade railroad crossings at N. 33rd Street and Adams Street. Pedestrian access to businesses and the trail network would be accommodated through the use of temporary connections or designated detour routes.

As noted in the Noise Study completed for the project (Appendix D), the Preferred Alternative would not result in post construction increased traffic noise levels. Noise levels would temporarily increase in the vicinity of the Project site because of construction activities and associated equipment noises. BMPs would be used in accordance with state regulations to mitigate construction-related noise impacts and would generally limit construction activities to daylight hours.

Visibility of construction equipment would create adverse, but minor, visual impacts. This impact would be expected to last until construction is completed.

Short-term air quality impacts during construction of the Preferred Alternative would occur from disruption of ground cover by grading activities that would generate dust. Short-term air quality impacts would also include exhaust emissions from construction vehicles and related equipment. BMPs, such as wetting the ground surface and temporarily seeding, would minimize much of the impact from fugitive dust. Construction contractors would be required to comply with statutory regulations for state air pollution control and to receive permits, as needed. Dust from construction activities would be minor and temporary. See Figure 20i.



N 33RD & CORNHUSKER VIADUCT PROJECT:
N 33RD ST. & HUNTINGTON AVE. INTERSECTION

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N

Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20a

Project No. 702614, RTSD BU 5919, CN 13294

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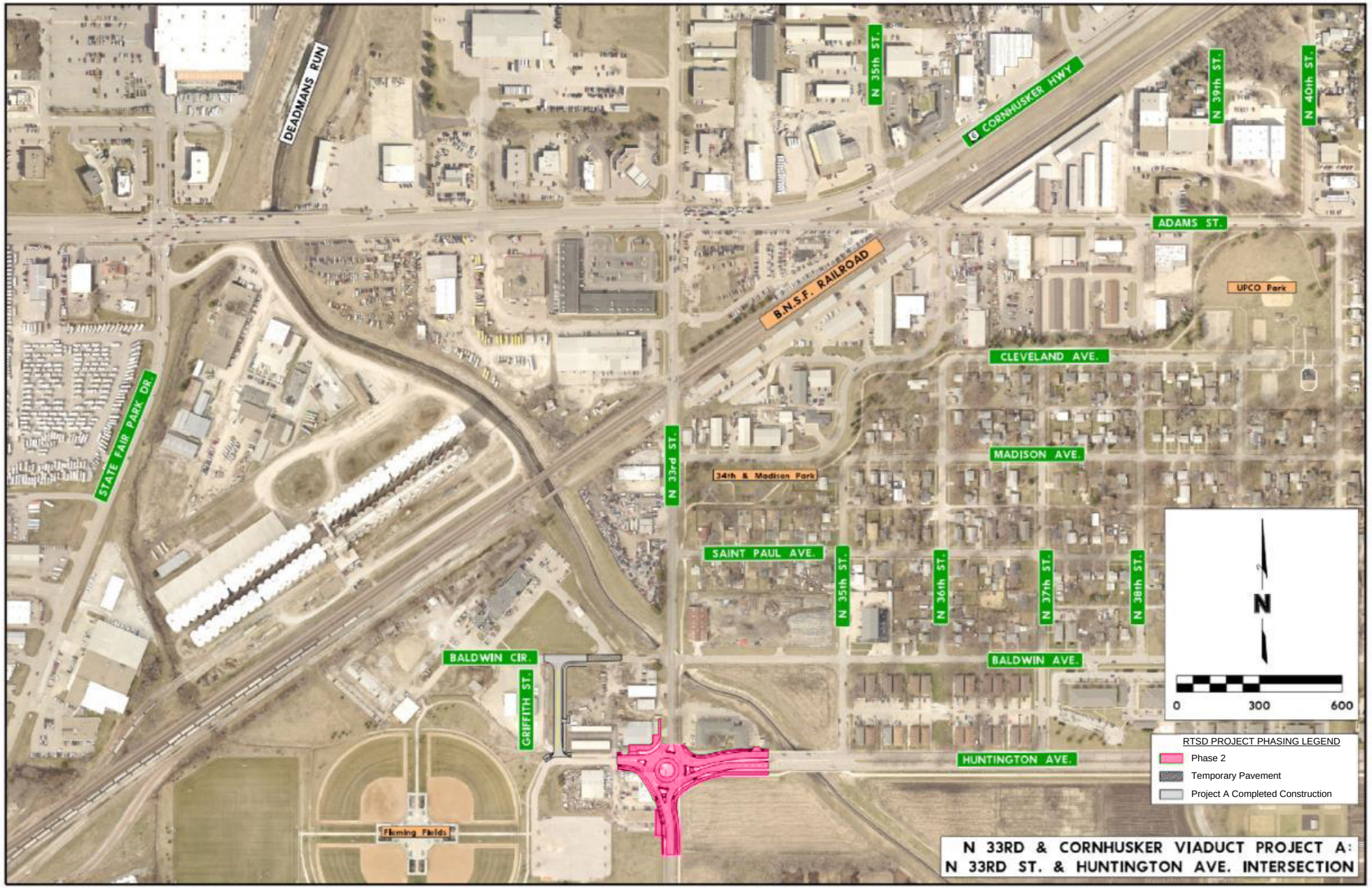

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DEPARTMENT OF TRANSPORTATION

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Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20b

Project No. 702614, RTSD BU 5919, CN 13294

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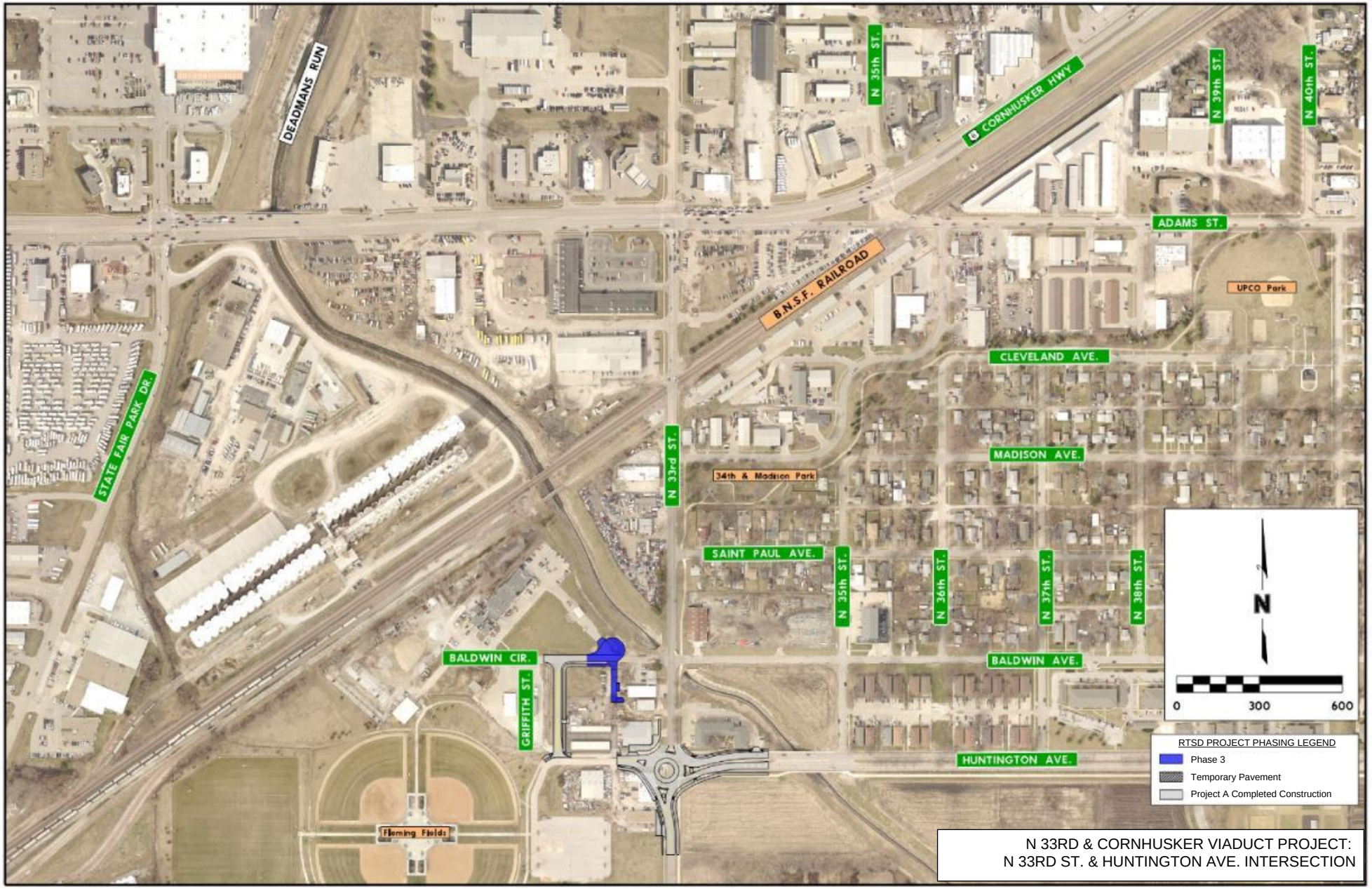

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Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20c

Project No. 702614, RTSD BU 5919, CN 13294

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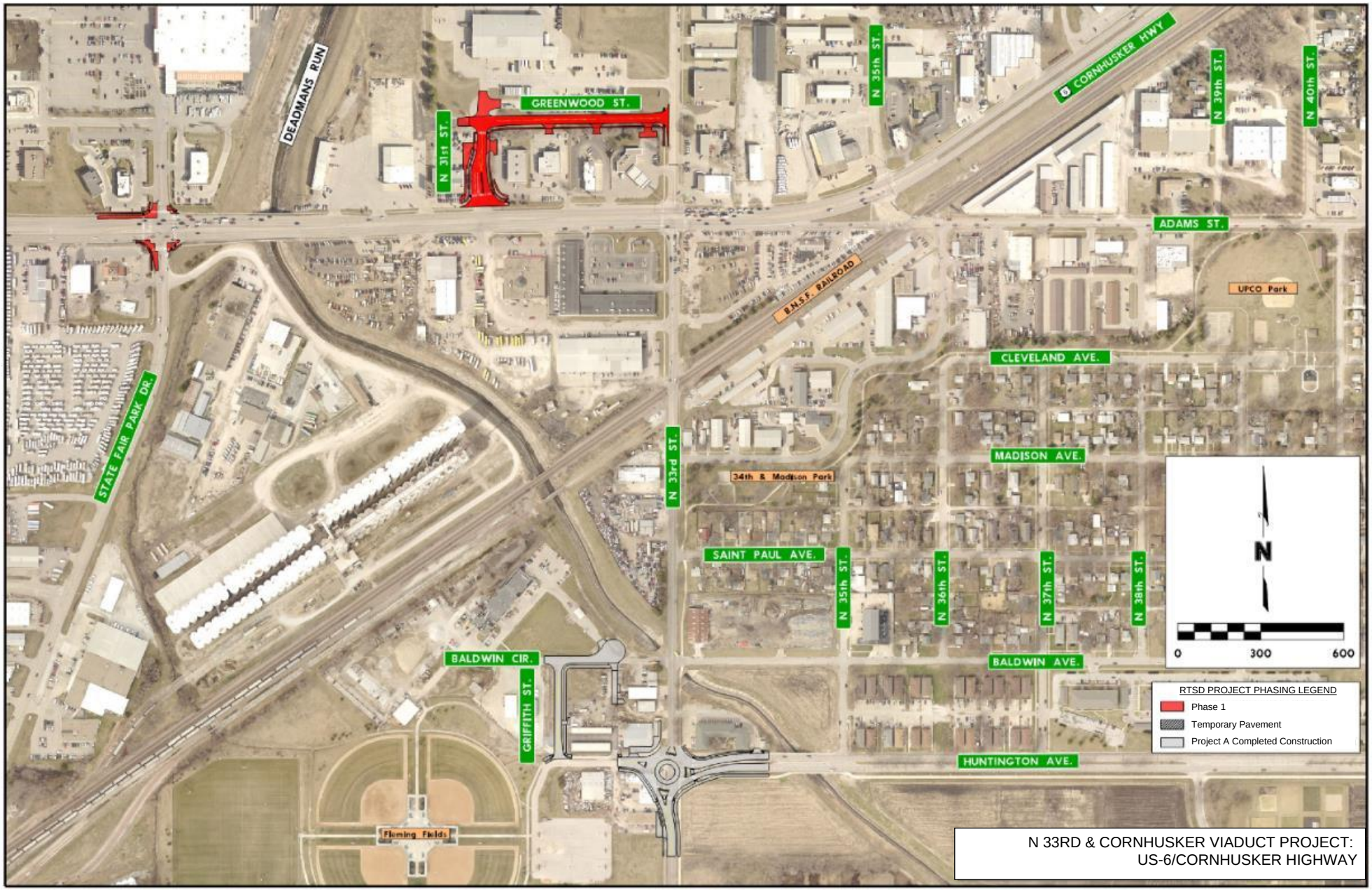

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Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20d

Project No. 702614, RTSD BU 5919, CN 13294

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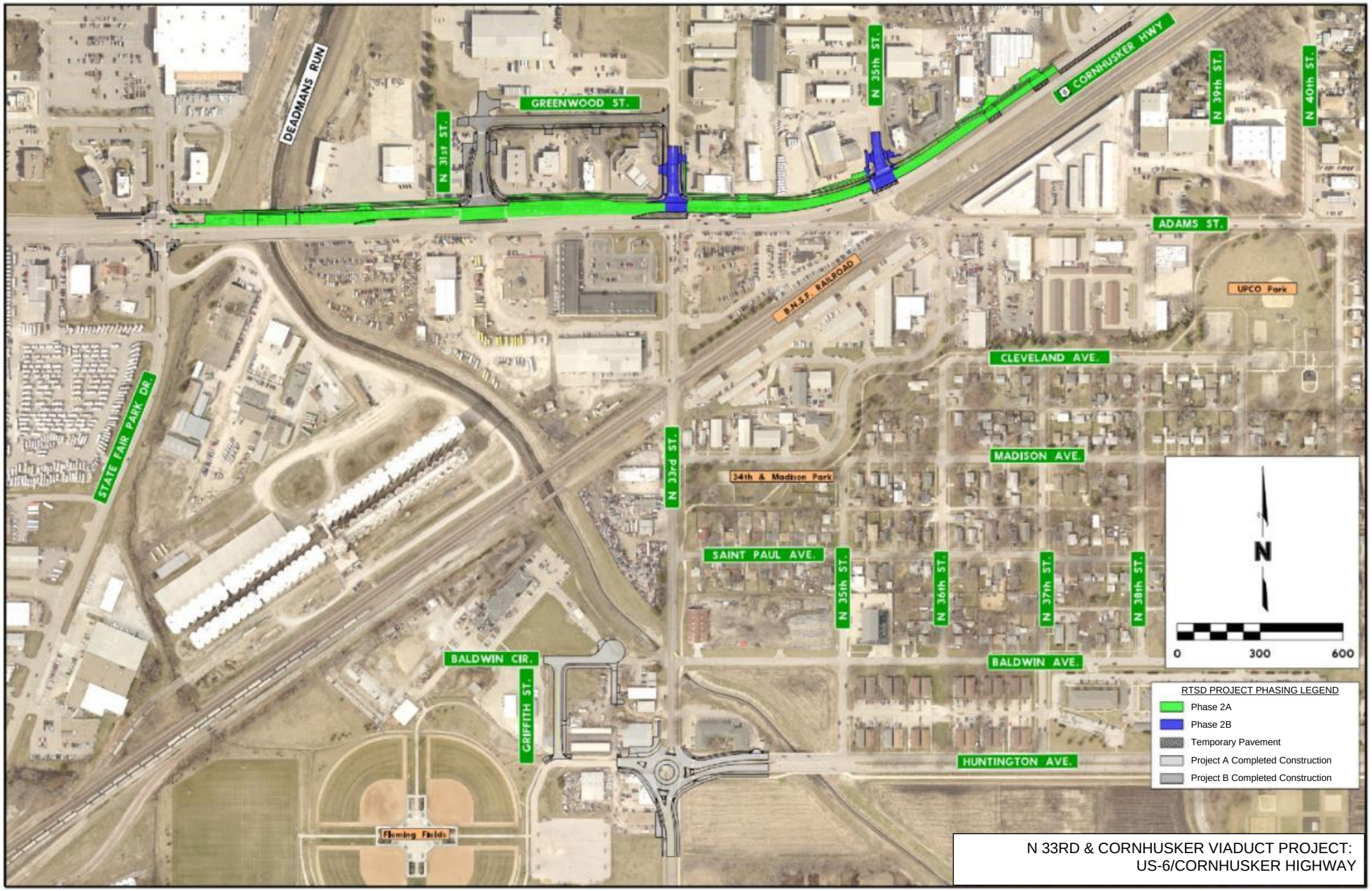

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Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20e

Project No. 702614, RTSD BU 5919, CN 13294

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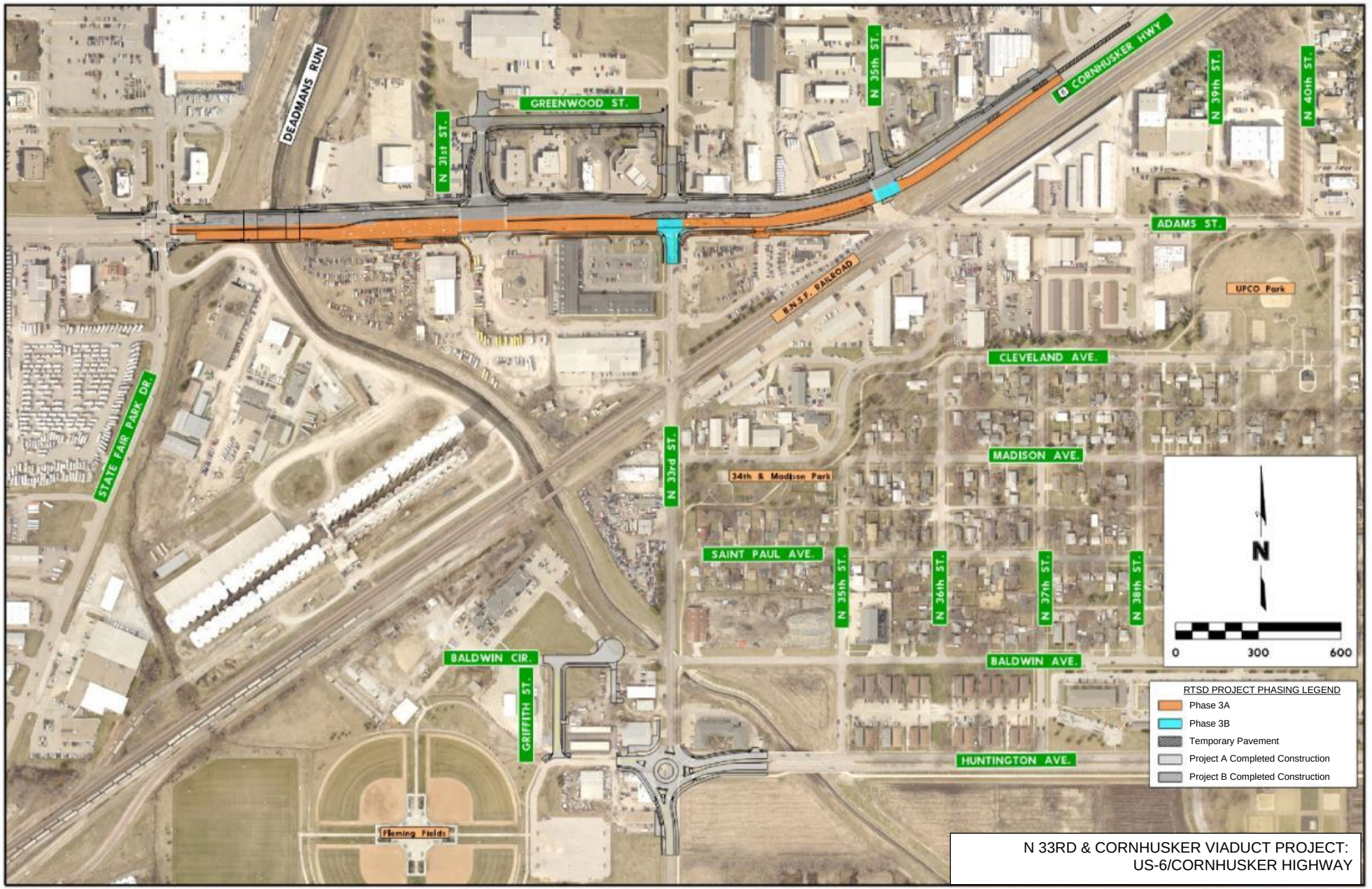

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Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20f

Project No. 702614, RTSD BU 5919, CN 13294

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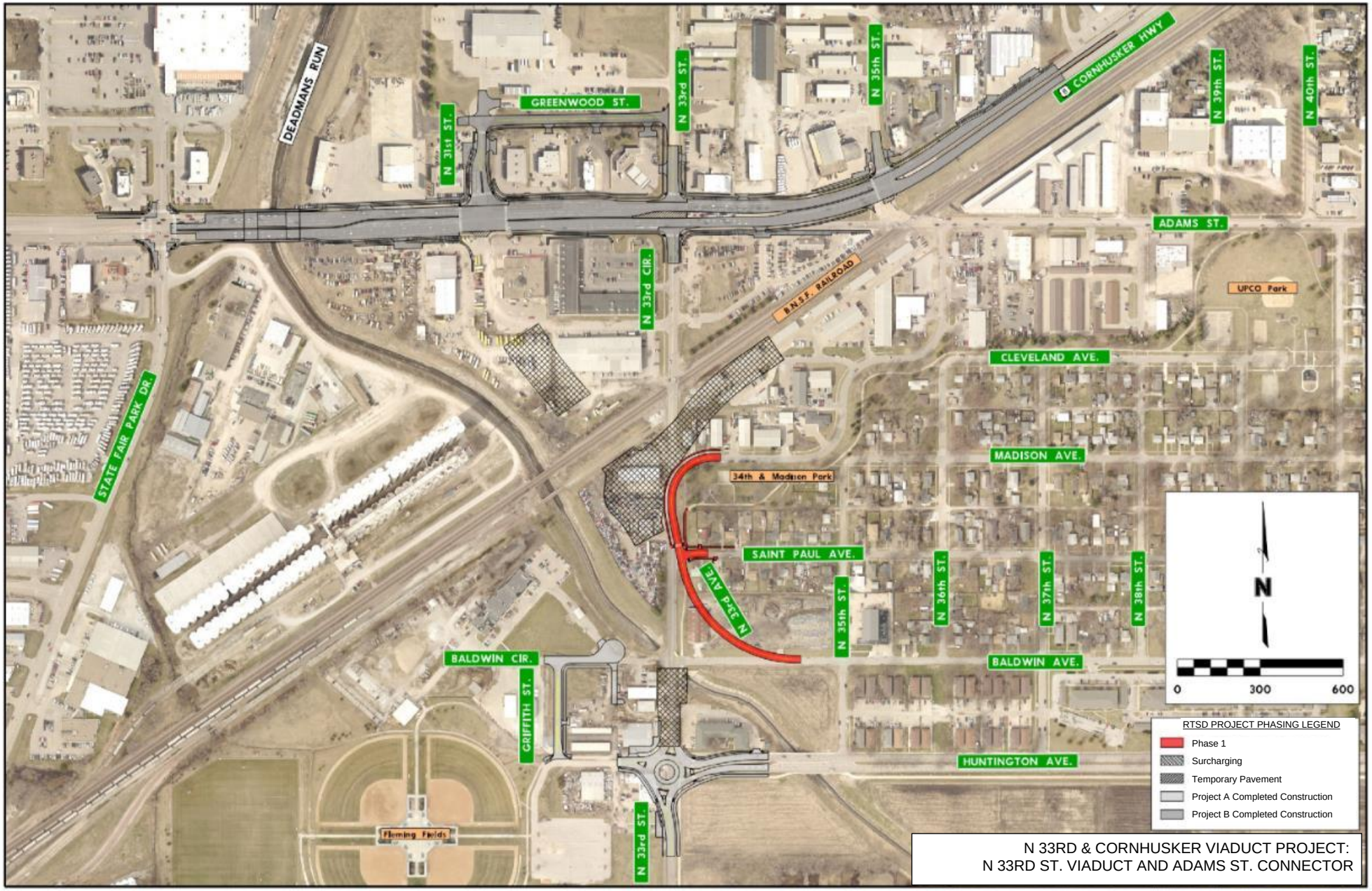

N 33RD & CORNHUSKER VIADUCT PROJECT:
N 33RD ST. VIADUCT AND ADAMS ST. CONNECTOR

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Original Published Resolution
WGS 1984 ARC System Zone 11
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North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20g

Project No. 702614, RTSD BU 5919, CN 13294

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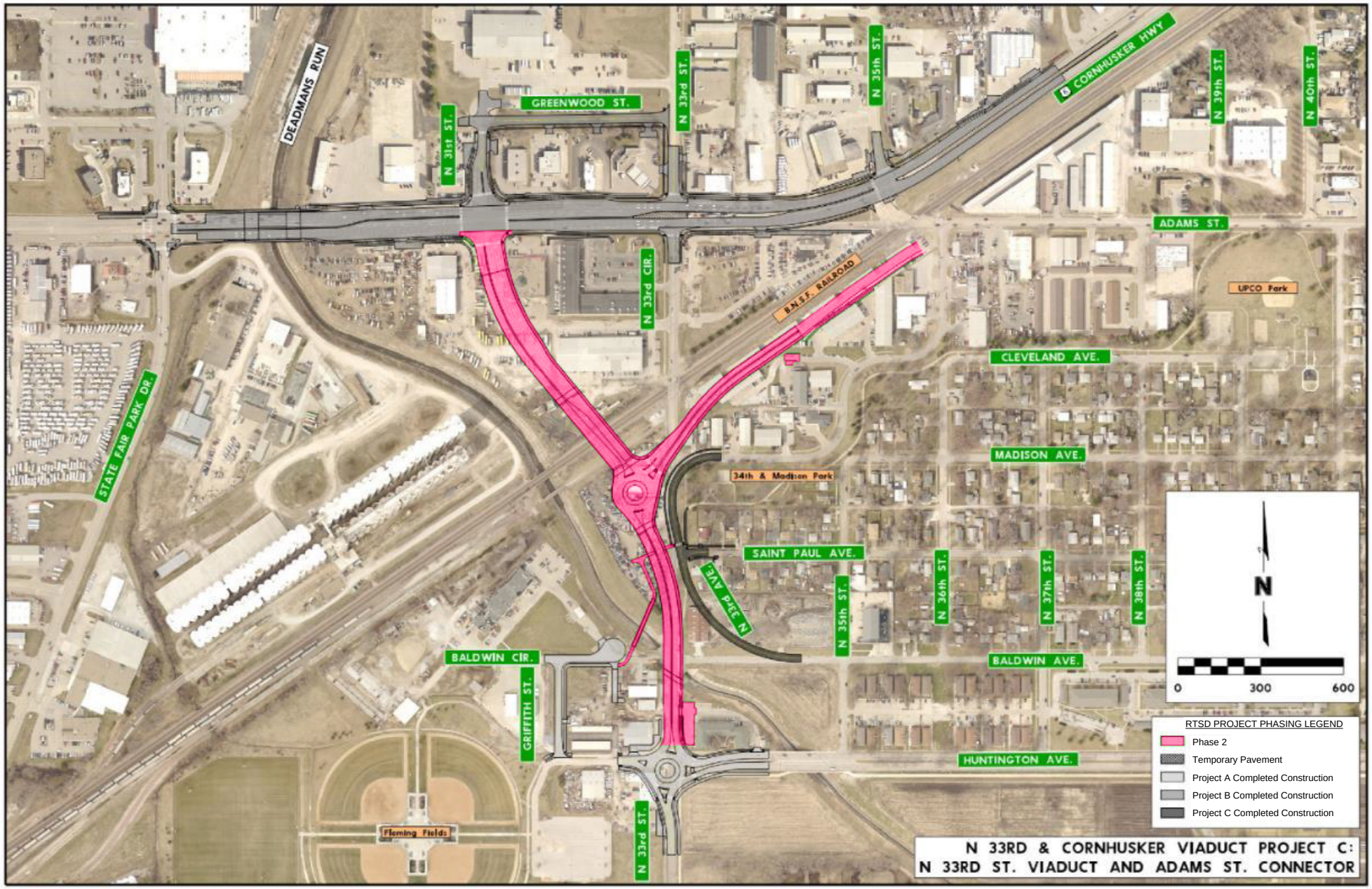

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Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20h

Project No. 702614, RTSD BU 5919, CN 13294

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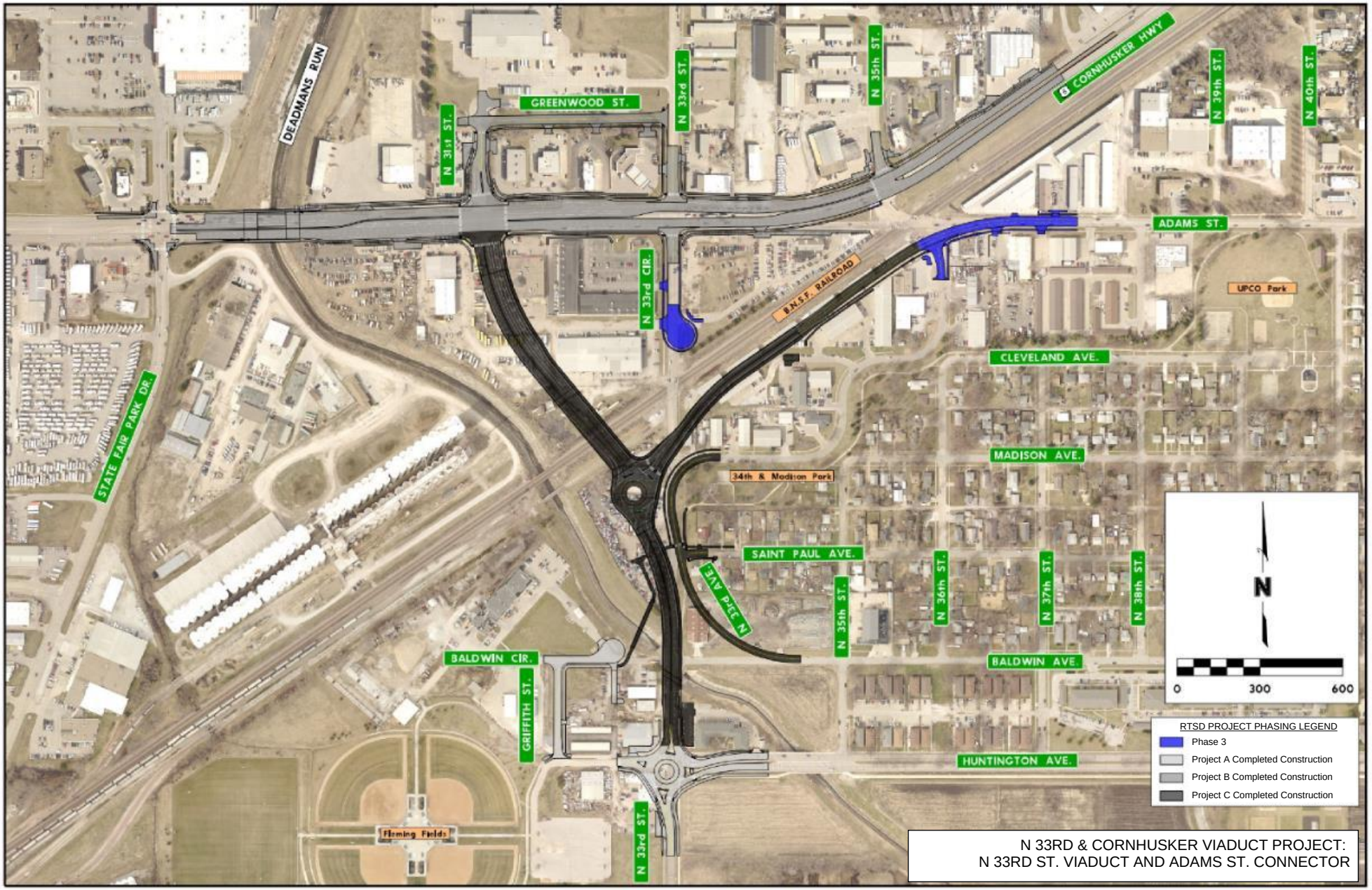

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N

Original Published Resolution
WGS 1984 ARC System Zone 11
ESRI World Imagery

North 33rd and Cornhusker
City of Lincoln
Lancaster County, Nebraska
Construction Phasing of the
Preferred Alternative

FIGURE
20i

Project No. 702614, RTSD BU 5919, CN 13294

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4.17.4 Temporary Construction Mitigation

A Traffic Control Plan (TCP) shall be created specific to the Project prior to construction. Once developed, the Project Sponsor would be responsible to review the TCP and assess the impacts of the TCP within the framework of NEPA. If the TCP could result in impacts that were not previously reviewed under NEPA, the Project Sponsor would review the impacts prior to implementing the TCP or construction of the Project. (Project Sponsor, NDOT Environmental, Contractor).

Project bidding documents shall include a provision that requires the Contractor to maintain access at either N. 33rd Street or N. 35th Street/Adams Street and Cornhusker Highway intersections. There shall be a maximum number of days that these intersections can be closed to minimize disruptions to access. The RTSD shall identify the number of days of closure during the final design process. (Project Sponsor, Contractor).

Temporary drives shall be constructed on N. 31st Street and N. 35th Street/Adams Street intersections to maintain access and to connect the existing pavement to the newly constructed Cornhusker Highway during construction of the south half of Cornhusker Highway between State Fair Park Drive and N. 37th Street. (Project Sponsor, Contractor)

Project bidding documents shall include a provision that requires the Contractor to maintain at least two of the three intersections with Cornhusker Highway (N. 31st Street, N. 33rd Street and N. 35th Street) open for access during construction of the Project. There shall be a maximum number of days that these intersections can be closed to minimize disruptions to access. The RTSD shall identify the number of days of closure during the final design process. (Project Sponsor, Contractor)

Additional temporary pavement shall be constructed as necessary to improve temporary intersections at N. 31st Street, N. 33rd Street, and N. 35th Street and as necessary to maintain access to properties on the north side of Cornhusker Highway. The drives at Tract 31, Tract 36, and Tract 37 shall be built in a separate pour to allow access to the properties. (Project Sponsor, Contractor)

ROW acquisition would be completed in conformance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended (42 USC 4601-4655 et seq.), and the Nebraska Relocation Assistance Act (Nebraska Revised Statute Section 76-1214 et seq.) (Project Sponsor).

Per standard practice, the RTSD would notify the public at the start of construction by placing notices in the newspaper 14 calendar days before construction begins, and electronic message boards may be used before construction activities begin. The RTSD would also notify the local schools and emergency services such as police and fire departments before construction activities begin, as well as maintain continued coordination throughout construction. Emergency

services providers would be invited to the pre-construction meeting for this Project. In addition to these standard practices of notification before the start of construction, these entities would be provided an opportunity to review the proposed concept and provide input regarding their needs during construction and during long-term operation of the Project. (Project Sponsor)

According to NDOT's Standard Specifications, the Contractor would, at all times, to the extent practicable, provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street (NDOT, 2017). Accommodations would be made to ensure that local traffic passing within the Project limits has access to all private dwellings, commercial properties, businesses, and public facilities. During those periods when a road is closed, even for a short duration, limited access must be maintained for authorized local traffic. If access is to be closed longer than one day, the Contractor would coordinate with the RTSD's Project Manager and affected property owners. (Project Sponsor, Contractor)

Dust emissions shall be minimized by including techniques to control fugitive dust into the air during construction. These minimizations shall be included in the construction plans and specifications with implementation during construction. (Project Sponsor, Contractor)

Additional coordination would be needed between the RTSD project and the USACE to determine when the existing box culvert under N. 33rd Street would be removed. (Project Sponsor, Contractor)

4.18 Secondary and Cumulative Effects

In compliance with the NEPA and CEQ regulations, potential secondary and cumulative impacts on the environment were assessed for the Preferred Alternative. This analysis was performed using existing, readily available data.

According to NEPA, secondary (indirect) impacts are those that are "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable" (40 CFR 1508.1(g)(2)). Generally, these impacts are induced by the initial action.

Cumulative impacts result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions, regardless of which agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a given timeframe. (40 CFR 1508.1(g)(3))

A Reasonably Foreseeable Future Action (RFFA) is a potential future action used to help predict impacts. The RFFAs are not actual allocations or decisions and are not speculative, but they are likely to occur based on reliable sources.

Cumulative impacts include the direct and indirect impacts of a project, together with the impacts from reasonably foreseeable future actions of other projects. For an action to be reasonably foreseeable, it must have advanced far enough in the planning process that its implementation is likely. The impacts of reasonably foreseeable future actions not associated with the project include the impacts of other federal, state, and private actions. Reasonably foreseeable future actions are not speculative, are likely to occur based on reliable sources, and are typically characterized in planning documents. (40 CFR 1508.1; CEQ, JApril 20, 2022)

Secondary and cumulative impacts are identified and described for resources that would be adversely affected by direct impacts from the Preferred Alternative. Resources that would not be directly impacted by the Preferred Alternative were not evaluated for secondary and cumulative impacts.

4.18.1 Past Actions

Commercial and retail development has occurred along Cornhusker Highway and N. 33rd Street over the last 40 years. However, based on aerial photography reviews, development within the Project ESA has been minimal since 1985 with only minor changes noted and no major noticeable developments except for Fleming Fields. Development has likely slowed due the undeveloped areas adjacent to and within the floodplain of Deadmans Run and Salt Creek.

4.18.2 Present Actions

The following projects are listed within the City of Lincoln's One- and Six-Year Streets and Highways Improvement Program (City of Lincoln 2020). The Plan includes the following projects:

- Federal-aid project on Adams Street from N. 36th Street to N. 49th Street to widen the street to meet minimum design standard. ROW acquisition will begin in 2024.

- The USACE Deadmans Run project is set to be in the 95 percent design phase by September 5, 2023, and ROW acquisition will begin in 2024. The project consists of two phases: Phase 1 downstream of the BNSF bridge to be constructed in 2025 and Phase 2 upstream of the BNSF bridge to be constructed in 2026.

4.18.3 Future Actions

For this analysis, RFFAs included projects that have advanced through most of the planning process, regardless of whether they have obtained final federal, state, or local approval and/or funding. The following future actions, proposed by the City of Lincoln, RTSD, and other entities, appear to be reasonably foreseeable within the geographic extent and time period for this assessment.

City of Lincoln Comprehensive Plan Projects

- Cornhusker Highway, N. 20th Street to N. 33rd Street – This project will consist of intersection improvements. Fiscal Year 2027
- N. 33rd Street, Cornhusker Highway to Superior Street – This project will consist of four lanes, intersection improvements, and bridge. This project is included in the unfunded portion of the comprehensive plan, therefore meaning that it is not programmed and there is no date set for the work. The unfunded projects may extend beyond 15 years before there is any activity.

The following Lincoln/Lancaster County Transportation Improvement Program projects are also scheduled within the next five years:

- Adams Street, 36th to 49th (CN13440) – This project will improve approximately one mile of Adams Street. Work will consist of pavement rehabilitation, curb ramp reconstruction, and upgrades to existing pedestrian ramps. Construction is planned to be completed by the end of 2025.
- Cornhusker Highway, 39th to L-55X (CN 13497) – This project will improve approximately 1.6 miles of Cornhusker Highway. Work will consist of pavement rehabilitation, curb repairs, upgrades to existing pedestrian ramps, and intersection improvements at Havelock and Superior. Fiscal year 2026
- Lincoln Area Bridges (CN 13491). Preventative Maintenance Bridge Package – This project may include maintenance activities on the 27th St viaduct. Fiscal Year 2027

Resources Considered for Impacts Analysis.

Based on impacts evaluated throughout this EA, the following resources would be impacted by the Preferred Alternative: Section 4(f) resources, wetlands and waters, traffic, and construction impacts. Impacts to these resources when combined with the RFFAs described above are discussed below.

4.18.4 Environmental Impacts of the No-Action Alternative

There would be no secondary or cumulative impacts on the city and county roadway network, BNSF railway network, or neighborhood cohesiveness from the No-action Alternative because construction activities would not occur.

Under the No-action Alternative, the continued delays of the transportation network in east Lincoln would perpetuate due to increased traffic volumes. This condition would result in traffic finding alternate routes to the nearest grade separation from the BNSF corridor (N. 27th Street or N. 48th Street). Traffic volume increases on the alternate routes would be a secondary impact from the increased delay and traffic due to road closures during train crossings. The increased driving time

and associated traffic delays would negatively impact community cohesiveness and access to employment centers in the area. Transportation access to the businesses and economic development would not improve under the No-Action Alternative.

4.18.5 Environmental Impacts of the Preferred Alternative

No reasonably foreseeable secondary effects are anticipated to be caused by better connectivity as a result of improvements to the roadway corridor. Improvements to N. 33rd Street and Cornhusker Highway would provide increased vehicular volume resulting from new industrial and/or commercial development. However, it is also likely to result in an expansion of economic development within the industrial and commercial areas located within the Project ESA. When the improvements to the roadway and the construction of the overpass are completed, the land north of the Cornhusker Highway corridor is likely to attract new and rising industry due to the improved connection, traffic flow, and traffic reliability in the area.

The impacts from increased development due to increased access to the industrial and commercial areas from this project are most likely to occur within the immediate surroundings. The City's comprehensive plan, the SAP (City of Lincoln, 2016; RTSD 2018), and zoning maps would help guide new development within the City of Lincoln. Nonetheless, the timeframe for further economic development is not known at this time but is considered ongoing and beyond 10 years in the future.

Impacts to the Section 4(f) and park resources (Fleming Fields Recreation Sports Park, 34th and Madison Park, Dietrich Trail, Huntington Trail, 45th and Gladstone Park, and 33rd Street Trail) by the Preferred Alternative are not expected to result in additional cumulative impacts by any of the RFFAs. RFFAs identified do not occur in the areas of the Section 4(f) and park resources impacted by the Preferred Alternative. No cumulative impacts to Section 4(f) and park resources are expected.

Cumulative impacts to wetlands and channels in the study area could be impacted by RFFAs. Specific impacts to this resource are unknown based on limited project information available for RFFAs in the ESA. Impacts to wetlands and channels in the ESA from RFFAs would be mitigated by regulatory controls and compensation.

Cumulative construction impacts are not anticipated from the Preferred Alternative in combination with RFFAs. Most of the projects are minor in scale and would be localized to specific project locations. No cumulative construction impacts are anticipated as a result of this Project.

None of the resources evaluated are considered to have strong or lasting negative cumulative effects, and all are expected to benefit in the long term from construction of the project due to better connectivity as a result of improvements to the roadway corridor.

Completion of the Preferred Alternative along the BNSF corridor would ultimately improve the overall access and circulation issues with the City of Lincoln and northeast Lincoln in particular; however, temporary short-term impacts affecting access and circulation may result from construction of the Preferred Alternative and other future projects. Construction of the Preferred Alternative is expected to begin in 2027. Cumulative traffic impacts are not anticipated from the Preferred Alternative in combination with RFFAs.

The 33rd Street, Cornhusker Highway to Superior Project would begin after the N. 33rd Street Improvements project has been completed. Traffic flows along N. 33rd Street, Adams Street, and Cornhusker Highway would improve upon completion of the Preferred Alternative when combined with completion of potential future work within northeast Lincoln. No adverse cumulative traffic impacts are anticipated.

The CEQ definition states secondary impacts "may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems" (40 CFR § 1508.1(g)(2)). Induced growth impacts are changes in the location, magnitude, or pace of future development that results from changes in accessibility caused by the project (AASHTO 2011).

The key consideration is whether the proposed Project would encourage growth in the context of the City's plans, natural setting, and growth patterns. With respect to indirect growth-inducing impacts, the proposed Project – closing two at-grade railroad crossings, elevating N. 33rd Street over the BNSF corridor, and improvements to Cornhusker Highway to accommodate present and future traffic volumes and alleviate congestion – would not create the need for any new community service or facilities.

As stated in the SAP (RTSD 2018) and City of Lincoln Comprehensive Plan (2016), the potential growth in the area is already planned to occur. The proposed road improvements would not increase the projected amount of growth within the Project ESA.

The proposed Project is not creating new access; rather, it is creating capacity to accommodate current and future traffic volumes. This additional capacity would primarily serve residents who live within the Project ESA and travel to destinations located directly along the N. 33rd Street corridor or to the north and south of the Cornhusker Highway corridor. In the 20-year horizon, it is anticipated that the Cornhusker Highway corridors and available land would develop to the capacity and limitation of the infrastructure within the area.

4.19 Summary of Environmental Impacts

Table 4.8 Summary of Environmental Impacts

Environmental Consideration	No-Action Alternative	Preferred Alternative
Land Use and Planning	Negative impact - continued safety concerns at at-grade crossings, not compatible with SAP, LRTP, or comprehensive plan.	Beneficial impact due to improved safety and elimination of at-grade crossings. The preferred alternative would be compatible with planned land uses outlined in the LRTP, SAP, and comprehensive plan.
Socioeconomic Resources	Negative impact - existing condition would continue. Area would remain inaccessible for public transportation and delay risk for emergency services providers.	Beneficial impact due to potential for public transportation accessibility across the tracks, reduced delay risk for emergency services via the railroad viaduct.
Environmental Justice	Negative impact - populations within the Project ESA would continue to experience delays and safety concerns associated with at-grade crossings.	None – With the implementation of mitigation measures there would be no disproportionate impacts to protected populations.
Visual Resources and Aesthetics	None – no change to the existing condition.	Neutral - Elevated viaduct structure would be visible from residences, businesses, and recreational areas. New viewshed would be consistent with other transportation features within the Project ESA.
Air	Negative impact - existing condition is perpetuated with vehicles stopped by passing trains resulting in longer idling and increased potential for GHG emissions.	Beneficial impact due to improved traffic patterns and reduced delay. The Preferred Alternative would be considered a Category 2 project with low potential Mobile Source Air Toxic Analysis effects in accordance with the 2023 FHWA Interim Guidance.
Noise	None – no change to the existing condition.	None - No receivers approach or exceed the NAC, and no future noise levels substantially exceed existing noise levels.

Environmental Consideration	No-Action Alternative	Preferred Alternative
Parks/Trails/Section 4(f)/Section 6(f)	None – no change to the existing condition.	Project is proposed to result in *De Minimis* impacts to Fleming Fields Recreation Sports Park, 34th and Madison Park, Huntington Trail, Dietrich Trail, and 33rd Street Trail. 45th and Gladstone Park would require a temporary occupancy exception. 34th and Madison Park also required a LWCF/6(f) conversion for impacts.
Utilities	None – no change to the existing condition.	Minor impacts due to relocations of certain utilities. Private utility companies are responsible for relocating their own facilities.
Wetlands	None – no change to the existing condition.	Minor negative impact - permanent impacts to approximately 0.047 acre of wetlands.
Surface Water Quality (Impaired/Unique Waters)	None – no change to the existing condition.	Minor beneficial impact - Project would require SWPPP. Mitigation measures if wells in the Project area would be impacted, any registered or unregistered wells in the impacted project area would be properly decommissioned.
Vegetation and Invasive Species	None – no change to the existing condition.	Low beneficial impact with the implementation of conservation conditions to prevent the spread of non-native or invasive species while utilizing native seedings and plantings using proposed standard specifications for revegetation.
Threatened, Endangered, and Special Status Species	None – no change to the existing condition.	No Effect for most T&E species. “May affect, but is not likely to adversely affect” eastern black rail. Not likely to adversely affect eagles or migratory birds with proposed mitigation following the Avian Protection Plan.
Floodplains	None – no change to the existing condition.	Neutral – Project would have a floodplain encroachment but would comply with all floodplain regulations. Project would not place fill above allowable limits.
Cultural Resources	None	None – no resources identified in the APE.

Environmental Consideration	No-Action Alternative	Preferred Alternative
Hazardous Materials and Wastes	Neutral - known regulated sites are in the area.	Neutral - known regulated sites are in the area. Proposed mitigation measures if impacted soil or groundwater is encountered during construction.
Material Sources and Waste Materials	None	None - with proposed environmental commitments regarding borrow sites; and, Low negative, disposal of excess material would require the Contractor to follow mitigation measures for disposal.
Temporary Construction Impacts	None	Minor negative impact - some disruption to the traveling public during construction with proposed temporary access plan, detours, and phasing. Construction noise would be minor and temporary. Standard provisions address dust suppression
Secondary and Cumulative Impacts	Negative impact - traffic condition, delay, and safety concerns would be perpetuated.	Moderate positive impact - would provide more reliable transportation facility and access to the area, improve transportation movement through the area, and encourage development/economic growth to the area.

5.0 Public Involvement

Opportunities were provided for the public and other stakeholders to be involved in the identification of potential social, economic, and environmental concerns throughout the NEPA process, beginning with the PEL study and the SAP and extending through the development of the EA.

5.1 What Public Involvement Efforts Occurred During the PEL?

Public involvement efforts associated with the PEL study were completed with the objectives to identify potentially affected interests, identify public and stakeholder concerns, and generate alternative solutions. Two public open house meetings occurred during the PEL study. Surrounding neighborhoods and businesses received notification of open house meetings and Project updates via mail. Announcements for the open house meetings were also included in the *Lincoln Journal Star.* A website (www.33rdcornhusker.com) was developed to distribute Project information, newsletters, and updates. Additional outreach activities included numerous one-on-one small group meetings with property owners, business owners, and other stakeholders.

A Civil Rights Analysis was completed as part of the PEL Study. The data indicated the presence of a Spanish-speaking population meeting the NDOT's threshold for LEP outreach activities. Census data indicate that racial minorities and persons of Hispanic or Latino origin live in the seven BGs. Five of the seven BGs contain total minority population percentages that are meaningfully greater (more than six percent above) than the City of Lincoln. Therefore, public outreach materials were made available in both English and Spanish, and an interpreter was present at open house meetings.

The PEL study and associated public involvement efforts indicated to the RTSD and the City the need to move forward with a subarea plan.

5.2 What Public Involvement Efforts Occurred During the SAP?

Public involvement efforts during the development of the SAP were completed to help identify public and stakeholder concerns and recommendations. Three public open houses and one public visioning session occurred during the development of the SAP. Project information and updates were distributed through social media accounts on Facebook and Twitter, as well as the website previously established during the PEL study. Additional outreach included a three-day charette and a public survey. Information from the charette and public survey was carried forward in the development of the project alternatives and helped establish the framework for future public involvement efforts during the EA process.

A 21-member advisory committee composed of community, business, and technical leaders was developed as part of the SAP process to provide transparency and encourage input and collaboration. The membership was broad-based with representatives from education, business, neighborhood, and civic groups. The Advisory Committee members from the SAP were also utilized in the EA. Additional information from the Advisory Committee is included in Section 5.3.2 below.

Public information meetings were announced via mail distribution of 3,200 invitation postcards to stakeholders and nearby residents. Information boxes were set up on nearby bike trails and near UPCO Park. Information was also shared with neighborhood associations, public schools, and the Advisory Committee.

Due to the LEP persons identified during the PEL, all public outreach materials associated with the SAP were made available in both English and Spanish, and an interpreter was present at public information meetings.

5.3 What Public Involvement Efforts Occurred During the EA?

The objectives of the communications and public involvement efforts for the proposed Project during the EA were to:

- Efficiently and effectively inform, engage, and collaboratively work with stakeholders and concerned public with clear and accessible information about the proposed Project.
- Provide ample time and opportunity for the public to review Project information.
- Provide an opportunity for the public to comment on the proposed Project.

Public involvement efforts were undertaken in accordance with NDOT Public Involvement Procedures (NDOT 2020) and other applicable requirements including 23 USC 128 and 139, 23 CFR 771.111(h), and 40 CFR 1506.6.

5.3.1 Public Information Meetings

Public Scoping Meeting #1

The first public information meeting for the NEPA process was held June 27, 2019, from 5:00-7:00 p.m. at the Center for People in Need at 3901 N. 27th Street, Lincoln, NE. The facility is ADA-accessible and located just north of the Project. The purpose of the meeting was to provide updated information about the Project since the previous public meeting as part of the PEL study, including the Project's purpose and need, the Project's remaining alternatives, and to provide the opportunity for public input. Public notification included:

- A targeted postcard mailer with information in both English and Spanish sent to the Project's distribution list of nearly 3,700 addresses as well as hand delivered to select properties and businesses/organizations within the Project area and/or with a potential interest in the proposed Project. A complete list of the locations where the postcard mailers were hand delivered or mailed is included on page 9 of the Public Involvement Plan in Appendix K.
- Legal notices published in English in the *Lincoln Journal Star*, a Nebraska Press Association recognized newspaper, on June 11, 2019, and in Spanish in *El Perico* on June 13, 2019
- Media release distributed to local media contacts through the City of Lincoln Mayor's Citizen Information Center
- Project website update
- Email notification to Project email list subscribers
- Social media updates on Facebook and Twitter

Meeting sign in sheets indicated around 180 members of the public signed into the public meeting. The meeting format was open house style with separate stations for each topic of information presented, and Project team members were available at each station to answer questions. Participants were invited to tour each of the stations, ask questions and record their comments. These stations included:

- Sign-in - At the sign-in station, a fact sheet and comment form were provided in English and Spanish for attendees, and a Spanish interpreter was also available.
- NEPA – At the NEPA station, information about what NEPA is, the Project's purpose and need, ESA, and the environmental considerations was presented.
- History – The Project history station provided information about the community goals developed during the SAP project, a timeline of past events within or adjacent to the Project area, and the Project schedule in both bar chart and illustrated form.
- Considered & Dismissed Alternatives – This station included the Project's Tier O and Tier 1 screening criteria, as well as a map of each of the alternatives that had been considered and dismissed with the criteria noted on each that was used to dismiss the alternative.
- Remaining Alternatives – This station shared the Tier 2 screening criteria and features each of the alternatives still under consideration had in common and what was different between them. Separate posters of each of the remaining alternatives with features unique to those alternatives were also shared to help the public better understand the alternatives. Another poster provided information about the potential for property impacts of each of the remaining alternatives.

- Traffic – The traffic station provided an explanation of what intersection level of service is, and the current and future level of service for each of the remaining alternatives.

  Public Input – This station provided a place where attendees could submit their comments on the Project and/or ask additional questions.

The Project team received 163 comments (see Appendix K) during the 30-day comment period. Comments were submitted in person, electronically via email or on the Project website, and via mail. The primary concern referenced in the comments received were commercial property impacts, most of which were related to the potential impact of Alternative 1D on Virginia's Café. The owners of the business compiled and submitted a document with over 100 pages of support from local customers. Comments related to traffic, residential property impacts, environmental impacts, project cost, access, and schedule were also received. Of the remaining alternatives displayed at the Remaining Alternatives station, the public showed a preference towards Alternative Modified PEL C. Responses from the Project team were provided to each person who submitted a comment with a mailing or email address.

The meeting materials for Public Meeting #1 are provided in Appendix K.

NEPA Preferred Alternative Meeting

The second public meeting was anticipated to be held in June 2020. However, due to COVID-19 Directed Health Measures for Lancaster County prohibiting large, in-person gatherings, this meeting – the Alternatives Meeting – was not held. Instead, updated Project information was posted to the Project website. The public was notified of this change and was given the location to find current Project information via a targeted postcard mailer sent to over 3,700 addresses, an email to Project email list subscribers, and social media posts. Information posted to the website included the RTSD's Preliminary Preferred Alternative (Modified PEL C), Project status, and next steps. The public was encouraged to submit comments and questions to the Project team. The meeting materials for Public Meeting #2 are provided in Appendix K.

The Project team received eight comments from the public via email. One comment was related to trail connections in the area of N. 33rd Street and Huntington Avenue, and north of Deadmans Run extending north of Cornhusker Highway. A second comment asked the Project team to consider trail connections and blight throughout the Project ESA. The remaining comments requested a change in mailing address or email contact information.

NEPA Public Meeting

The third public information meeting was held December 16, 2021, from 5:00-7:00 p.m. at the Center for People in Need at 3901 N. 27th Street, Lincoln, NE. The facility is ADA-accessible and located just north of the Project. The purpose of the meeting was to solicit public feedback and comments on the project's purpose and need, and the RTSD's adjusted preliminary preferred alternative. The meeting specifically focused on feedback related to whether the preliminary

preferred alternative would meet a project purpose of improving connectivity. Public notification included:

- A targeted postcard mailer with information in both English and Spanish sent to the Project's distribution list of over 3,000 addresses. A complete list of the locations where the postcard mailers were hand delivered or mailed is included on page 13 of the Public Involvement Plan in Appendix K.
- Legal notices published in English in the *Lincoln Journal Star*, a Nebraska Press Association recognized newspaper, on November 29, 2021
- Temporary highway signs advertising the meeting were placed near the project location
- Project website update
- Email notification to Project email list subscribers
- Social media updates on Facebook and Twitter

Meeting sign in sheets indicated around 88 members of the public signed into the public meeting. The meeting format was open house style with separate stations for each topic of information presented, and Project team members were available at each station to answer questions. Participants were invited to tour each of the stations, ask questions and record their comments. These stations included:

- Sign-in - At the sign-in station, a fact sheet and comment form were provided in English and Spanish for attendees, and a Spanish interpreter was also available.
- NEPA – At the NEPA station, the Project's purpose and need was presented.
- Changes in the Project – This station shared the primary changes in the current alternative from the previous version that was shared in Meeting #2. The changes in design are a result from the environmental analysis, which includes public feedback, technical considerations, and environmental impacts which resulted in changes to the project features.
- Preliminary Preferred Alternative – This station shared detailed plans and visual depictions of the Preliminary Preferred Alternative. Separate posters of the overall project and features unique to the Preliminary Preferred Alternative were also shared to help the public better understand the alternatives. Three posters displaying renderings of the preliminary preferred alternative were also presented.
- Public Input – This station provided a place where attendees could submit their comments on the Project and/or ask additional questions.
- Project Schedule – The Project schedule in bar chart form was presented.

The Project team received 33 comments (see Appendix K) during the 30-day comment period in both English and Spanish. Comments were submitted in person, electronically via email or on the Project website, and via mail. The public comments included 48 statements that indicated support

for the project, ten neutral comments, and four negative statements. Supportive comments indicated support for the additional multi-use path and trail infrastructure and support for keeping the 44th Street at-grade crossing open. One comment was received indicating support for the pedestrian overpass structure as well as one comment stating that leaving 44th Street open to traffic would not help pedestrian or bicyclists trying to cross north/south across the tracks. Neutral comments inquired about lighting for the pedestrian infrastructure, comments related to the roundabout for the project, and comments recommending pedestrian gates at the 44th Street at-grade crossing. Responses from the Project team were provided to each person who submitted a comment with a mailing or email address and were properly translated if necessary. The full comment/responses are included in Appendix K.

A sign in sheet was requested for all meetings to document the attendees. Table 4.9 depicts the attendance summary of the meetings based on the addresses listed from the sign in sheet. The addresses from the attendees at the meeting were widespread and dispersed across the City of Lincoln with a total of 283 addresses recorded from all of the meetings. From the total addresses listed in meeting attendance, 113 addresses were located within the ESA of the Project. Of the 113 addresses inside the ESA, more than one-half of the addresses are located in areas with greater than 25% minority populations, as identified by the census data and depicted in Figure 14a.

Table 4.9 Summary of Public Attendance from NEPA Meeting #3

Census Tract	Block Group	Percent of Minority Populations Based on Census Data	Percent of Low-Income Populations Based on Census Date	Attendees Present at Meeting based on Address
29	3	25.1-30%	18.4%	50
3	2	Less than 20%	28.9%	52
3	3	30.1 – 35%	17.1%	2
4	1	25.1-30%	36.0%	6
9	1	20.1-25%	26.3%	1
4	2	30.1 – 35%	22.5%	2
Total of Addresses Recorded at the Meeting				**283**
Addresses within the ESA				**113**
Addresses outside of the ESA				**170**

Summary of Substantive Comments Collected from the Public Meetings

During the NEPA process public comments were solicited for public input on the alternatives development and selection process. Many of the comments received pertained to pedestrian safety or pedestrian access in the Project area. Below are a few of the public comments themes summarized:

Public Comment:

Does the RTSD's preliminary preferred alternative appear to enhance the current conditions for bicyclists and pedestrians, including reducing delays for bicyclists and pedestrians, improving connectivity within the study area for bicyclists and pedestrians, and improving the ability for bicyclists and pedestrians to safely move across the railroad corridor within the study area?:

Response: The N. 44th Street at-grade railroad crossing was proposed as being closed with the project and would now remain open, eliminating the need for the pedestrian overpass along N. 44th Street as shown in previous alternatives. Instead, the existing at-grade crossing at N. 44th Street would be improved for pedestrians and bicyclists to cross the BNSF tracks. Do you have concerns or comments?: "No"

Public Comment:

Does the preliminary preferred alternative accurately reflect the purpose and need given the RTSD's proposed removal of the pedestrian bridge and improve the existing at-grade crossing?:

Response: Yes

Public Comment:

Does the RTSD's preliminary preferred alternative appear to enhance the current conditions for bicyclists and pedestrians, including reducing delays for bicyclists and pedestrians, improving connectivity within the study area for bicyclists and pedestrians, and improving the ability for bicyclists and pedestrians to safely move across the railroad corridor within the study area?:

Response: Yes. Absolutely.

Reply: I especially like the routing that minimizes the at-grade crossings of pedestrians that exposes them to hazards of traffic and trains.

Public Comment:

Though I am an active runner and cyclist on the Dietrich Trail and in the area, I only rarely had the need/desire to cross at the tracks and Cornhusker at 44th. But, I definitely like the idea of improving the safety of a pedestrian crossing at 44th Street. The overpass proposal, while nice, seemed excessive and extremely costly for the use I foresee for it.

Response: The N. 44th Street at-grade railroad crossing was proposed as being closed with the project and would now remain open, eliminating the need for the pedestrian overpass along N. 44th Street as shown in previous alternatives. Instead, the existing at-grade crossing at N. 44th Street would be improved for pedestrians and bicyclists to cross the BNSF tracks. Do you have concerns or comments?:

A full list of substantive public comments and responses used to select the Preferred Alternative are included in Appendix K.

5.3.2 Advisory Committee

The Advisory Committee developed during the SAP was retained throughout the development of the EA. Advisory Committee members reflected a broad range of northeast Lincoln interests. Members of the Advisory Committee included, but were not limited to, homeowners associations, public servants, businesses, services, elected officials or representatives, and non-profit groups within the Project Study Area, the City of Lincoln, and the surrounding area. The Advisory Committee's role was to participate fully in the Advisory Committee meetings and provide input and advice to the Administrative and Client teams. The members were encouraged to communicate with their constituencies to increase understanding of the Project. They served as an important link to the community, reflecting a broad range of concerns and issues of various stakeholders and the general public, and provided the perspective of the people who live, work and travel in the ESA.

Advisory Committee meetings were held prior to all public information meetings and when otherwise appropriate to discuss the status of changes to the Project and important next steps and gain feedback on any information or materials to be presented to the public. The Advisory Committee met three times during NEPA and preliminary engineering phases.

To ensure that EJ, LEP, and low-income communities were represented in the Advisory Committee, specific individuals or organizations were selected from census areas containing EJ, LEP, or low-income individuals within the Study Area, such as, Malone Community Center, Center for People in Need, El Centro De Las Américas, Salvation Army, and Civic Nebraska. A list of Advisory Committee members and minutes from Advisory Committee meetings are included in Appendix K.

5.3.3 Media Relations

The RTSD collaborated with the Mayor's Citizen Information Center to disseminate media releases for review by NDOT and FHWA prior to all public information meetings. Media releases for Public Information Meetings #1 and #3 and website updates are included in Appendix K.

Project Website

The Project website developed during the PEL study was maintained by the Project team throughout the development of the EA. The website includes a mode for gaining public comment through a "Contact Us" page. Website comments received outside of an official comment period were reviewed on an on-going basis, and replies were sent when the RTSD deemed appropriate or at the request of the commenter.

Updates were made to the Project website on the dates below. The website updates are included in Appendix K.

- 9/11/2018
- 1/9/2019
- 1/28/2019
- 3/1/2019
- 7/10/2019
- 9/10/2019
- 12/2/2019
- 6/11/2020
- 12/11/2020
- 5/21/2021

Email

Media releases from the Mayor's Citizen Information Center were delivered to subscribers via an email system hosted by the City of Lincoln. Members of the public who subscribed to the emails were notified of significant changes or updates to the website.

Email notifications were sent on the following dates to coincide with public information meetings and pertinent website updates:

- 1/9/2019
- 3/1/2019
- 6/27/2019
- 6/11/2020
- 12/11/2020
- 5/24/2021

Social Media

Project-specific social media accounts on Facebook and Twitter platforms were developed and maintained throughout the development of the EA. Social media accounts served as an additional outreach method to notify the public of open house meetings, comment periods, and website updates. All posts on social media linked users to the Project website for additional information and opportunities to make comments. "Comments" made by the public were enabled on the social media platforms; however, comments received via posts on these platforms were not considered an official comment method for the NEPA process. Only comments received via official comment methods (i.e. mailers, emails, comments submitted through the project website, and official

comment forms) were considered official comments on the proposed Project and provided with comment responses from the RTSD.

Updates to social media accounts were made in conjunction with all website and email updates. Social media platforms directed people to leave comments at the project website. Pinned to the top of each social media page included the following language: "To make an official comment to be included as part of the project, please visit the "Contact" page of the project website: https://www.33rdcornhusker.com/contact". One substantive comment was received via the website on June 16, 2020:

> Comment: *"I think this project would be much better if the City took a serious look at the blight that's been apart of this area. I think a green space and a connection to the northern bike trails from 33rd Street would benefit the less privilege communities that live in this area, and also the students and others who need access to more green spaces."*
>
> Response (6/19/2020): "*Gus, Thank you for your comment and interest in the RTSD's N. 33rd & Cornhusker project. You've touched base on a few of the Project's primary objectives: improving multi-modal connectivity and ensuring the transportation improvements meet future land use needs. The project is also committed to improving safety and reducing*
> *vehicular congestion in the area due to the at-grade railroad crossings at 33rd Street, Adams Street, and 44th Street.*
>
> *In regards to future land use needs such as green spaces, the RTSD has been working with the City of Lincoln's Planning Department who is leading the effort to develop a Subarea Plan in the project vicinity. A draft version of this Subarea Plan is located on the project's web page www.33rdCornhusker.com/planning under the "Section 5 Subarea Plan" link. Please note, the Subarea Plan is currently being modified to include the current RTSD preliminary preferred roadway alternative and is expected to be revised this Fall. The entire Subarea Plan document has a lot of detailed information you may find beneficial, but I'd like to specifically call your attention to Figure 5.2 showing the proposed future land use plan. I've included a small image of this figure below which shows proposed future green space (in green) for potential future parks, recreation, open space, and flood storage along Deadmans Run and Salt Creek. This is similar to the green space areas you showed in your previously submitted schematic.*
>
> *Figure 5.10 in the Subarea Plan identifies the proposed Connectivity Plan of the future transportation system (roadways, sidewalks, and trails) in the project vicinity. This figure will be updated to show the current RTSD proposed alignment, but it also shows future roadways and trails which are included in the City's Long Range Transportation Plan (LRTP) (found at https://www.lincoln.ne.gov/city/plan/lrtpupdate/final/lrtp.pdf) The trail you identify in your schematic which would run along the east side of Deadmans Run and connect to the Salt Creek Levee Trail are shown in both the Subarea Plan and the City's LRTP in generally the same area. The RTSD's N. 33rd and Cornhusker project would*

construct some of these identified trail and sidewalk improvements, but the longer term needs beyond the scope of the N. 33rd & Cornhusker project would be constructed at a later date by the City when funding is available. The proposed trails and sidewalks which would be constructed as part of the RTSD project can be seen on the preliminary figure recently updated on the project's website https://static1.squarespace.com/static/5a302e8f12abd927a53eedfb/t/5edffe3ba5610236d2cbbc23/1591737926021/Alternative+Modified+PEL+C+20-06-09.pdf You can zoom in to see trails shown in purple and sidewalks shown in yellow.

As this is a large project with a vast history, please let me know if you have any additional questions after looking through these documents. I can be reached directly at (402) 326-1176 or khumphrey@lincoln.ne.gov. I appreciate your time reaching out to us and as mentioned on the phone, the next public hearing is scheduled to be in Spring of 2021 when the draft environmental document is complete. However, the project team is always available to discuss the project and can meet virtually or in person to hear any concerns or answer any questions you may have. All comments and discussions are formally recorded for project records. Also, I've included David Cary, Director of City Planning and Paul Barnes, Long Range Planning Manager, on this e-mail response in case you have specific comments on the Subarea Plan.

Thanks,
Kristen Humphrey"

5.3.4 Additional Public and Stakeholder Involvement

Stakeholder meetings were held throughout the NEPA process and the development of the EA. Representatives from RTSD, NDOT and/or FHWA, were in attendance when available. Additional meetings were held to inform agencies, community groups, and individuals on the Project's progress and to gather feedback. These meetings included individual and small group stakeholder meetings, one-on-one meetings, and community and agency presentations. These meetings occurred as requested by the community group or member. Meeting notes and presentations of all additional meetings and presentations are located in Appendix K.

The RTSD has briefed City and County elected bodies on the Project at key Project milestones, and as requested.

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6.0 Mitigation Measures

To comply with all applicable federal, state, and local legislation, as well as any general or special conditions required by pending permits, the following mitigation measures/environmental commitments have been incorporated into the Preferred Alternative. These commitments would be implemented during the appropriate Project phase(s). The mitigation measures are presented in association with the resource for which they most directly act to avoid or minimize impacts to the maximum extent practicable.

Although some of the listed measures apply to multiple resources, they are listed only once in this section, under the resource that they most directly benefit. In addition to the mitigation measures, NDOT Standard Specifications and Special Provisions would be applied to the Preferred Alternative to provide specific methodology.

If there are changes in the project scope, project limits, existing conditions, pertinent regulations, or environmental commitments, the Project Sponsor, through NDOT and FHWA must re-evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the Federal Highway Administration.

Land Use and Planning

The end of the nearest runway at Lincoln Municipal Airport (Runway 35) is approximately 3.75 miles to the closest point of the Project. Due to the proximity to the Lincoln Municipal Airport to the Project, the height of any equipment used in the construction of the project (or any antennae installed on the equipment) shall not exceed the local airport's Height Restriction Zoning. Any Contractor involved in the project shall use the Notice Criteria Tool available at https://oeaaa.faa.gov/oeaaa/external/portal.jsp. (Contractor)

If required, the Contractor shall file a 7460-1 Form with the Federal Aviation Administration (FAA). The form shall be required if the Contractor uses any equipment over 200' tall, or the equipment breaks a 100:1 slope from a public-use airport. This includes any trucks or equipment used during the construction of the project. (Contractor)

Socioeconomic, Community Continuity, Cohesion, and Pedestrian Considerations

The Project Sponsor (RTSD) shall notify the public at the start of construction by placing notices in the newspapers with local circulation including, the Lincoln Journal Star and El-Perico, 14 calendar days prior to construction. Websites and social media (Facebook, "X" formerly Twitter) will also be used as public notification mechanisms prior to the beginning of construction activities. The Project Sponsor shall also notify emergency services such as police and fire departments before construction activities begin, as well as maintain continued coordination throughout construction. Emergency services providers shall be invited to the pre-construction meeting for

this Project in order to provide input on accessibility during construction activities as well as future accessibility upon Project completion. (Project Sponsor)

The Contractor shall; at all times, to the extent practicable, provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street. Accommodations shall be made to ensure local traffic passing within the limits of the Project has access to all private dwellings, commercial properties, businesses, and public facilities. During those periods when a road is closed, even for a short duration, limited access must be maintained for authorized local traffic. If access is to be closed longer than one day, the Contractor shall coordinate with the affected property owners to address temporary access issues. Access details shall be coordinated among the Project Sponsor's Project Manager, the Contractor, and property owners. (Contractor, Project Sponsor)

Coordination with USACE would be completed prior to ROW acquisitions to avoid conflicts with the USACE Deadmans Run project. (Project Sponsor)

Environmental Justice

The Contractor shall provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street. Accommodations shall be made to ensure local traffic passing within the limits of the Project has access to private dwellings, commercial properties, businesses, and public facilities. During those periods when a road is closed, even for a short duration, limited access shall be maintained for authorized local traffic. If access is to be closed longer than one day, the Contractor shall coordinate with the affected property owners. (Contractor, Project Sponsor)

During construction, access to neighborhoods and community facilities shall be maintained through controlled construction scheduling and/or provisions for alternate routes of entry. Any access changes shall be indicated by providing adequate signage and, where necessary, by working with the facility and/or property owner throughout the construction period to provide advanced notification of the changes. (Contractor, Project Sponsor)

The RTSD shall notify the public, school districts within the Project ESA, and civic organizations serving LEP residents and emergency services providers, such as police and fire departments, before construction activities begin, as well as maintain continued coordination throughout construction. Notifications shall include in-person as well as virtual methods. Civic organizations and school districts serving LEP residents and emergency service providers shall be invited to the pre-construction open house meeting for the Project. (Project Sponsor)

The RTSD would continue to engage the owner of the property located at 3223 Cornhusker Highway regarding acquisition of their property and impacts to the tenants and patrons that serve environmental justice populations located at this address (La Cabaña restaurant, Taquiera Limon food truck, and La Mexicana grocery store) as well as potential future relocation options. This coordination would be documented through the NEPA Re-Evaluation Process (Project Sponsor).

All written information that is dispersed to the public about this Project shall be translated into Spanish. Dispersed information does not include highway signs or electronic messaging boards, but does include, for example, public meeting invitations, mailers and postcards, legal notices, news releases, and project map/information handouts. Project information that is placed on websites of the NDOT, the city of Lincoln, or RTSD regarding this project must be translated into Spanish. Legal notices and news releases do not need to be translated if they are only to be placed in an English-language media source. Information that is distributed to businesses, public agencies, or to departments/representatives of public agencies, does not need to be translated (Project Sponsor, Contractor).

For the public hearing, Spanish language interpreters shall be present. The written documents prepared for public dispersal (for example, project map/information handouts) at the hearing must be translated into Spanish. There must be a Spanish interpreter present. There must also be clear notices posted in Spanish at the hearing that interpreters are available. "I Speak" cards will be placed on the front table during any Public Meeting, in the event that an LEP person of an unanticipated language is in attendance. If a person who primarily speaks an unanticipated language is in attendance, their language will be recorded as part of the LEP data collection process and the Nebraska Language Line will be used to communicate. (Project Sponsor)

Visual Resources and Aesthetics

No mitigation would be required.

Air

No mitigation would be required.

Noise

Construction shall be completed during normal working hours, typically between 6 a.m. and 6 p.m., 6 to 7 days a week. Standard construction noise mitigation best management practices (BMPs) such as mufflers shall be utilized on construction equipment. (Contractor)

Parks/Trails/Section 4(f)/Section 6(f)

Access to the following Section 4(f) properties shall be maintained during construction via temporary traffic control such as signing, striping, and/or barricading: **Fleming Fields Recreation Sports Park, 34th and Madison Park, and 45th and Gladstone Park**. (Contractor)

The contractor shall not complete work, stage, stockpile or store materials within the boundaries of the following Section 4(f) properties and access shall be maintained at all times: **UPCO Park, Dietrich Trail Connector, and Theresa Trail.** (Contractor)

Trail continuity would be maintained at all times during construction via detour. A temporary surface would be constructed to provide a trail detour for the following locations: **Dietric Trail, Hunting Trail, and 33rd Street Trail.** (Contractor)

The Contractor shall not complete work, stage, stockpile or store materials beyond the boundaries of easements for the following locations: **45th and Gladstone Park, Fleming Fields, and 34th and Madison Park.** (Contractor)

Following construction, the areas of temporary easements shall be restored to pre-existing condition or better; **45th and Gladstone Park, Fleming Fields, and 34th and Madison Park.** (Contractor)

The following properties shall be marked on the project plans as sensitive areas (excepting areas of new ROW and easements): **33rd Street Trail, 45th and Gladstone Park, Fleming Fields, and 34th and Madison Park.** (Project Sponsor)

NDOT and the City of Lincoln will ensure that the conversion of use for **34th and Madison Street** Park is approved by the NPS and NGPC in writing prior to beginning construction at the park site. Upon approval from the NPS for the Section 6(f) replacement property at Wilderness Hills Park, the City of Lincoln will develop the park features within the timeline set forth by the NPS to provide an adequate replacement for the converted property. (Project Sponsor, NDOT Environmental)

During final design, if it is determined that access to the Section 4(f) properties cannot be maintained, then this Section 4(f) review shall be reevaluated, and the appropriate review process followed to determine if mitigation is required. (Project Sponsor, NDOT Environmental)

Utilities

The Contractor shall follow the guidelines of NDOT's Policy for Accommodating Utilities on State Highway ROW (NDOT, 2001). It is the Project Sponsor's responsibility to notify utility companies of the need for relocation during the design stage of the Project. The Project Sponsor would coordinate utility agreements with the utility companies before construction. It is the Contractor's responsibility to notify utility companies of relocation needs during the construction phase of the Project for utilities that were not relocated before construction. If utility relocations using federal funds are located outside the Project ESA, those locations would be evaluated before construction. (Project Sponsor, Contractor, Utility Provider(s))

Any utility relocations that utilize public funds shall follow "Buy America" guidelines. (Project Sponsor, Contractor, Utility Provider(s))

Wetlands

All wetlands and other WOUS within the Project ESA that are not permitted for impacts shall be marked on the 2W aerial sheets within the construction plan set for the Contractor as avoidance areas. (NDOT Design, NDOT Environmental)

Before any construction work, The Project Sponsor shall obtain a Letter of Opinion of Non-Degradation from NDEE for Impacts to Waters of the State. (NDOT Environmental)

The Project is anticipated to qualify under a Notifying Nationwide Permit #14 – Linear Transportation Projects. The contractor shall adhere to the permit conditions, including regional and general conditions, during construction. All wetlands and other WOUS 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 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. (NDOT Design, NDOT Environmental, Contractor)

Surface Water Quality (Impaired/Unique Waters)

This project requires a Construction Stormwater Permit and a Storm Water Pollution Prevention Plan (SWPPP) be maintained for the project. The Contractor shall understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with activity from the construction site. For reference, the general permit is posted on the Department’s website. (Contractor)

The Project Sponsor shall coordinate with the owners of wells that would be directly impacted by the proposed Project. If the well is actively used, the Project Sponsor shall get estimates to have the property owner hire their own contractor to replace and relocate the well. The Project Sponsor shall then have an independent contractor decommission the well after ROW negotiations and acquisitions are complete. If the well is not in use, the Contractor shall decommission the well after negotiations with the owner. (Project Sponsor, Contractor)

A licensed water well contractor shall decommission any wells in accordance with the NDHHS regulations under Nebraska Administrative Code Title 178, Water Well Standards, Chapter 12, Water Well Construction Pump Installation, and Water Well Decommissioning Standards. (Project Sponsor)

There are Category 5 impaired waters in the project study area; BMPs shall be reviewed and developed as necessary during the erosion control review process. If mitigation is required for

impaired waters, it shall be captured in the project's erosion control plan sheets and special provisions. (Project Sponsor)

If manure is specified for the project, a restricted area will be established around identified impaired waters and streams. (Project Sponsor, Contractor)

Vegetation and Invasive Species

The Contractor shall prevent the transfer of invasive plant and animal species. The Contractor shall wash equipment at the Contractor's storage facility before entering the construction site. The Contractor shall inspect all construction equipment and remove all attached vegetation and animals before leaving the construction site. (Contractor)

Appropriate mulching materials shall be applied and shall not include brome hay. If sod is required to be applied, then it shall be free from all weeds, including noxious weeds. (Contractor)

All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the Project vicinity as shown in the *NDOT Plan for the Roadside Environment.* (Project Sponsor, NDOT Environmental, Contractor)

As stated in the conservation conditions for threatened and endangered species (Section 4.13.4, S-3), all permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the Project vicinity as shown in the *NDOT Plan for the Roadside Environment*. (Project Sponsor, NDOT Environmental, Contractor)

This project requires a Construction Stormwater Permit and a Storm Water Pollution Prevention Plan (SWPPP) be maintained for the project. The Contractor shall understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with activity from the construction site. For reference, the general permit is posted on the Department's website. (Contractor)

Threatened, Endangered, and Special Status Species

A-1 Changes in Project Scope: If there is a change in the project scope, the project limits, or environmental commitments, the Highway Project Manager shall coordinate with NDOT Environmental Section to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the NDOT Environmental Section. (District Construction)

A-2 Conservation Conditions: Conservation conditions are to be fully implemented within the project limits as shown on the plans. (District Construction, Contractor)

A-3 Early Construction Starts: Early Construction Starts. Contractor requests for early construction starts must be coordinated by the Project Construction Engineer with the NDOT Environmental Section for approval to ensure avoidance of listed species sensitive lifecycle timeframes. Early start requests may require consultation with the USFWS and NGPC. Agency coordination time will vary depending on species and project location. (District Construction, Contractor)

A-4 T&E Species: If federal or state listed species are observed during construction, the Highway Project Manager will contact NDOT Environmental Section to determine if additional species conservation conditions would be required prior to continuing project construction activities. Contact NDOT Environmental for a reference of federal and state listed species. Coordination with the USFWS and NGPC may be required depending on the species identified and construction activities. (NDOT Environmental, District Construction, Contractor)

A-5 Refueling: Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. (Contractor)

A-6 Restricted Areas: The following project activities shall, to the extent possible, be restricted to between the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the project, within the right-of-way designated on the project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites.

For activities outside the project limits, the contractor should refer to the Nebraska Game and Park Commission website to determine which species ranges occur within the off-site area. The contractor should plan accordingly for any species surveys that may be required to approve the use of a borrow site, or other off-site activities. The contractor should review the T&E Matrix agreement (on NDOT's website), where species survey protocols can be found, to estimate the level of effort and timing requirements for surveys.

Any project related activities that occur outside of the project limits must be environmentally cleared/permitted with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed project activities. The contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plan-sheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different ground photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The contractor must receive notice of acceptance from NDOT environmental, prior to starting the above listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat. (NDOT Environmental, District Construction, Contractor).

A-7 Waste/Debris: Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)

A-8 Post Construction Erosion Control: Erosion control activities carried out by NDOT Maintenance or others after construction is complete, but prior to project close-out, shall adhere to any standard conservation conditions for species designated for the project limits during construction. (NDOT Maintenance, District Construction, Contractor)

S-1 Fencing: When project-related fence construction/relocation work is required to be done prior to the start of construction, and if the fence work occurs outside urban or cropland areas that are not within swift fox or mountain plover range, then fencing can be installed/relocated at any time using the following criteria:

d. The fencing is temporary in nature and/or consists of only hand-driven posts
e. The work does not compact the soils (ex. through the use of heavy equipment) or cause soil disturbance beyond the driving of posts)
f. Within the whooping crane migration corridor, work occurring within a half of a mile of wetlands or perennial waters will occur between the hours of 10:00 am to 4:00pm when the work is between March 6 – April 29 or October 9 – November 15

If the fencing work cannot meet these criteria, the NDOT Right-of-Way Division shall coordinate with NDOT Environmental prior to the completion of Right-of-way negotiations.

S-2 Platte River Depletions: To the maximum extent practical, efforts will be made to design the project and select borrow sites to prevent depletions to the Platte River. If there is any potential to create a depletion, NDOT (during design) and the Contractor (for borrow sites) shall follow the current Platte River depletion protocols for coordination, minimization, and mitigation. In general, the following are considered de minimis depletions, but may still require agency coordination; a project which: a) creates an annual depletion less than 0.1 acre feet, b) creates a detention basin that detains water for less than 72 hours, c) diverted water that will be returned to its natural basin within 30 days, or d) creates a one-time depletion of less than 10 acre feet. (NDOT Roadway Design, Contractor)

S-3 Revegetation: All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder or within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed plants were identified, any seed mix requirements identified during resource agency consultations shall be used for the project. (NDOT Environmental)

S-6 Permanent LED Lighting (NDOT Design Commitment): Only LED roadway luminaries listed on the NDOT "Nebraska Qualified Material Vendors List" will be considered for use on Nebraska highway lighting projects. Proposed changes to the following LED lighting requirements would require resource agency (USFWS and/or NGPC) coordination and approval prior to installation:

- Nominal CCT – 3000 +/- 300 K
- BUG Ratings – Maximum nominal Backlight (N/A), Uplight (0), Glare (N/A)
- Lumen Output – N/A

Any proposed changes to the listed requirement(s) must be presented to the NDOT Environmental Section for Agency Coordination and approval. (NDOT Design)

Migratory Birds

The NDOT APP was developed to reduce conflicts between construction of NDOT projects and the laws governing migratory birds. This procedure is designed to protect and conserve avian populations and reduce avian conflicts thorough changes in project scheduling (that is, tree clearing outside primary nesting season), increased migratory bird surveys, and changes in project construction timelines. NDOT would use its APP to reduce conflicts with migratory birds. (NDOT Environmental, Contractor)

During the project's construction within the primary nesting season April 1 – September 1, if unforeseen work on migratory bird habitat is to take place, a nesting survey shall be completed prior to starting work. The contractor will contact the PM, who will contact the Environmental Section to schedule a survey. Surveys will be conducted through September 1 for work that may require general clearing or grubbing, large tree removal, or work that may impact or disturb eagles or threatened or endangered species. Surveys will be conducted through September 30 for bridge/culvert work. Surveys conducted from April 1 through September 1 will be accomplished by qualified biologists or WS. Efforts will be made to conduct surveys in the morning to capture the most bird breeding activity. During the heat of the day, birds may be less active; therefore, breeding behaviors may not be apparent. NDOT understands the time constraints placed on construction project activity; however, nesting surveys might not be as accurate during adverse weather conditions. Periods of precipitation or high winds should be avoided as birds would likely avoid detection. Trees, brush and surrounding vegetation that are surveyed during the primary nesting season, and found to be devoid of active nests, will be removed within three (3) days. Culverts, bridges and surrounding vegetation that are surveyed during the primary nesting season and found to be devoid of active nests, will be protected, such as with netting, within three (3) days. Vegetation surrounding the bridge/culvert will either be removed, or otherwise made unattractive to potential nesting birds, also within three (3) days. If vegetation is not removed, or the culvert/bridge is not protected, within three (3) days, an additional survey shall be conducted prior to the start of work. (NDOT Environmental, Contractor)

Bald and Golden Eagles

No mitigation would be required.

Floodplains

The Project construction would have a floodplain encroachment. A Floodplain Development Permit shall be obtained from the City of Lincoln prior to construction to certify that the proposed Project shall not raise the base flood elevation more than one foot and there would be no rise in the floodway. (Project Sponsor)

Cultural Resources

The contractor shall comply with the Nebraska Unmarked Human Burial Sites and Skeletal Remains Protection Act, Sections 12-1201 – 12-1212. If human skeletal remains or burial goods associated with an unmarked human burial in the ground or on the ground are discovered, then all work in the immediate area of the discovery shall stop and the contractor shall contact the NDOT District Environmental Coordinator. The NDOT District Environmental Coordinator will then comply with Section 12-1205, notification of local law enforcement in the county in which the remains or burial goods are found. The NDOT District Environmental Coordinator will promptly consult with the appropriate federal, state, and tribal agencies to determine if further field investigations are required before maintenance operations may resume. Pertinent legal authorities covering such discoveries include: the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act, the Archeological Resources Protection Act, the Nebraska Unmarked Burial Sites and Skeletal Remains Protection Act, and the Nebraska Archeological Resources Protection Act. (Project Sponsor, NDOT Environmental, Contractor)

Any discovered archeological or paleontological objects or deposits are not the property of the Contractor. The NDOT Environmental Coordinator will consult with appropriate federal, state, or tribal agencies to determine the proper disposition of such remains. (NDOT Environmental, Contractor)

Hazardous Materials and Wastes

If contaminated soils/water or unexpected wastes are discovered, the Contractor shall stop all work within the immediate area. The Contractor shall secure the area of the discovery and notify the RTSD representative. The contractor shall not re-enter the discovery area until allowed to do so by the RTSD representative. At the time of discovery, the RTSD representative and contractor shall coordinate appropriate actions. The actions to be carried out by the RTSD representative are (but not limited to): verification that the contractor has suspended construction activities in the area of the discovery, contact the RTSD representative and then utilize the NDOT Unexpected Waste Action Plan to properly document the extent and type of waste. The RTSD representative shall ensure that proper disposal of the waste and any required health and safety mitigation is implemented by the Contractor. (Project Sponsor, NDOT Environmental, Contractor)

Demolition work on any structures will require the contractor to submit a written NESHAP (National Emission Standards for Hazardous Air Pollutants) notification to the Nebraska Department of Environment & Energy (NDEE). In addition, the Department of Health and Human Services shall also be notified by the contractor, using DHHS Form 5, at least 10 working days prior to commencement of bridge demolition or renovation activities where ACM was found. The

10-day clock starts with the day the Notification is postmarked, hand delivered, or picked up by a commercial delivery service, such as UPS, FedEx, etc. Faxing documents is prohibited. (Contractor)

There is potential for lead or toxic metal-based paint to be found on the structures to be demolished or repaired. The Contractor shall test these structures for the presence of lead/toxic metal paint. If lead-based paint/toxic metals within the paint are discovered, extreme caution shall be taken to minimize the amount of painted material or debris from causing or threatening to cause pollution of the air, land and waters of the State. If the method of removal of the components generates paint debris, the Contractor shall create an implementation plan to dispose of waste in accordance with NDOT's Standard Specification for Highway Construction Section 732 (Lead-based Paint Removal) and Title 128 Nebraska Hazardous Waste Regulations. The Contractor's implementation plan efforts shall be documented in OnBase. (Project Sponsor, NDOT Environmental, Contractor)

There is a medium potential for petroleum contamination to be present in the soils/groundwater at project N 33rd & Cornhusker. The following sites are identified as having a medium potential for petroleum contamination.

Name:	**Address:**	**Station Number:**
Relique Ltd	3645 Adams St.	1010 + 720 to 1010 + 800
U-Stop convenience shop 09	3244 Cornhusker	520 + 400 to 520 + 600
Casey's General Store 2706	3010 Cornhusker	510 + 700 to 510 + 810
Joe's Body Shop	2505 N. 33rd St.	100 + 800 to 100 + 900
Olston's Import Car Repair	243 N. 33rd St.	100 + 575 to 100 + 700
Precision Machine Company	2933 N. 36th St.	1500 + 0 to 1500 + 100
Star City Auto Salvage	2705 N. 33rd St	1200 + 900 to 1300 + 50
Cornhusker International	3131 Cornhusker	510 + 650 to 510 + 900
Star City Auto Sales	3101 Cornhusker	510 + 400 to 510 + 650
Cornhusker Body Shop	3701 Adams St.	1010 + 850 to 1020 + 0
Jones Oil Company	2930 N. 33rd St.	1100 + 300 to 1100 + 600
Hansen Mueller Company	3001 Cornhusker	510 + 0 to 510 + 200
Blum's Auto Repair	2415 N. 33rd St	100 + 500 to 100 to 575
Azteca Motors	3625 Adams St.	1010 + 520 to 1010 + 720
City of Lincoln Maintenance Yard	33rd & Baldwin	1200 + 150 to 1200 + 650

If contaminated soils/groundwater or unexpected wastes are discovered, The Contractor shall stop all work within the immediate area. The Contractor shall secure the area of the discovery and notify the RSTD Representative. The Contractor shall not re-enter the discovery area until notified by the RTSD Representative. At the time of discovery, the RTSD Representative and Contractor shall utilize the Unexpected Waste Action Plan (UWAP) to coordinate appropriate actions. The actions to be carried out by the RTSD Representative are (but not limited to): verification that the Contractor has suspended construction activities in the area of the discovery, contact the RTSD Representative and shall then utilize the UWAP Notification Form (NDOT Form

691) to properly document the extent and type of waste. The RTSD Representative will ensure that proper disposal of the waste and any required health and safety mitigation is implemented by the Contractor. The Contractor is required by NDOT's Standard Specification section 107.11 (Hazardous Material Discoveries) to handle and dispose of regulated material in accordance with applicable laws. (Project Sponsor, NDOT Environmental, Contractor)

The Contractor shall submit a written National Emissions Standards for Hazardous Air Pollutants (NESHAP) notification to the Nebraska Department of Environment and Energy (NDEE) and a Nebraska Department of Health and Human Services (DHHS) Form 5 at least 10 days prior to demolition/renovation. The 10-day clock starts when the NESHAP and Form 5 notifications are post marked, hand delivered, or picked up by a commercial delivery service. Faxing documents is prohibited. The Contractor shall provide the RTSD Representative copies of the notifications and the submittal date prior to demolition/renovation activities. (Contractor)

The RTSD Representative will upload NDEE NESHAP and DHHS Form 5 documentation to OnBase. (Project Sponsor)

The Contractor shall survey structures(s) on buildings to be demolished for the presence of asbestos containing materials (ACM). The inspector must be certified in accordance with the Nebraska Department of Health and Human Services (DHHS) Nebraska Asbestos Control Program Regulations, Title 178. A list of Licensed Asbestos Inspectors can be found at http://dhhs.me/gov/Pages/Asbestos.aspx. Documentation of the survey shall be provided to the RTSD Representative by the contractor prior to structure demolition. (Contractor)

The RTSD Representative will record survey documentation to OnBase. (Project Sponsor)

Removal and disposal of ACM shall be in accordance with the Nebraska Department of Health and Human Services (DHHS) Nebraska Asbestos Control Program Regulations, Title 178. The Contractor shall develop a removal and disposal plan in coordination with a licensed asbestos removal contractor and NDOT. The Contractor shall contact DHHS no later than 10 business days prior to removal of the ACM for guidelines on disposal. If the asbestos cannot be kept in a non-friable condition upon removal, the Contractor shall use a licensed asbestos removal contractor. A list of licensed asbestos removal contractors can be found at: http://dhhs.me/gov/Pages/Asbestos.aspx. ACM shall be disposed of at a landfill approved for handling asbestos. The Contractor shall provide landfill receipts to the RTSD Representative within 10 working days of disposal. (Contractor, Project Sponsor)

The RTSD Representative will upload disposal documentation (i.e., landfill receipts or other documentation provided by the Contractor to OnBase. (Project Sponsor)

Phase I Environmental Site Assessments may be conducted for each property to be purchased. Phase I assessments allow RTSD to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on

CERCLA liability. Under CERCLA, entities may be held strictly liable for cleaning up hazardous substances at properties that they either currently own or operate or owned or operated in the past. Strict liability under CERCLA means that liability for environmental contamination may be assigned based solely on property ownership. (Project Sponsor)

Performance of the utility work set forth in the Project plans and specifications shall be conducted in accordance with any easement agreement among the utility companies, RTSD, or private landowners. If polychlorinated biphenyls (PCBs)-containing transformers or other equipment are identified, NDOT required that they be managed and disposed of according to the Toxic Substance Control Act (TSCA) regulations. Releases of PCBs to the environment at levels requiring actions under TSCA are to be managed or remediated according to TSCA regulations. Any transformer with no label is assumed to be “PCB contaminated equipment” per EPA regulations. The Contractor shall notify the utility for remediation for PCB contaminated soils or transformer repair. (Project Sponsor, Contractor)

Additional site reconnaissance, investigation, or additional review of design impacts will be done during the ROW acquisition process. Based on this work green sheets will be updated during subsequent EA updates and revisions. The medium potential sites identified are not anticipated to have a major impact to the project. Minimal impacts to schedule and cost are anticipated. Additional mitigation measures may be required due to the presence of wells and any additional environmental concerns identified. (Project Sponsor, Contractor)

Temporary Construction Impacts

A Traffic Control Plan (TCP) shall be created specific to the Project prior to construction. Once developed, the Project Sponsor would be responsible to review the TCP and assess the impacts of the TCP within the framework of NEPA. If the TCP could result in impacts that were not previously reviewed under NEPA, the Project Sponsor would review the impacts prior to implementing the TCP or construction of the Project. (Project Sponsor, NDOT Environmental, Contractor).

Project bidding documents shall include a provision that requires the Contractor to maintain access at either N. 33rd Street or N. 35th Street/Adams Street and Cornhusker Highway intersections. There shall be a maximum number of days that these intersections can be closed to minimize disruptions to access. The RTSD shall identify the number of days of closure during the final design process. (Project Sponsor, Contractor).

Temporary drives shall be constructed on N. 31st Street and N. 35th Street/Adams Street intersections to maintain access and to connect the existing pavement to the newly constructed Cornhusker Highway during construction of the south half of Cornhusker Highway between State Fair Park Drive and N. 37th Street. (Project Sponsor, Contractor)

Project bidding documents shall include a provision that requires the Contractor to maintain at least two of the three intersections with Cornhusker Highway (N. 31st Street, N. 33rd Street and

N. 35th Street) open for access during construction of the Project. There shall be a maximum number of days that these intersections can be closed to minimize disruptions to access. The RTSD shall identify the number of days of closure during the final design process. (Project Sponsor, Contractor)

Additional temporary pavement shall be constructed as necessary to improve temporary intersections at N. 31st Street, N. 33rd Street, and N. 35th Street and as necessary to maintain access to properties on the north side of Cornhusker Highway. The drives at Tract 31, Tract 36, and Tract 37 shall be built in a separate pour to allow access to the properties. (Project Sponsor, Contractor)

ROW acquisition would be completed in conformance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended (42 USC 4601-4655 et seq.), and the Nebraska Relocation Assistance Act (Nebraska Revised Statute Section 76-1214 et seq.) (Project Sponsor).

Per standard practice, the RTSD would notify the public at the start of construction by placing notices in the newspaper 14 calendar days before construction begins, and electronic message boards may be used before construction activities begin. The RTSD would also notify the local schools and emergency services such as police and fire departments before construction activities begin, as well as maintain continued coordination throughout construction. Emergency services providers would be invited to the pre-construction meeting for this Project. In addition to these standard practices of notification before the start of construction, these entities would be provided an opportunity to review the proposed concept and provide input regarding their needs during construction and during long-term operation of the Project. (Project Sponsor)

According to NDOT's Standard Specifications, the Contractor would, at all times, to the extent practicable, provide private dwellings, commercial properties, businesses, and public facilities access to and from the nearest intersecting public road or street (NDOT, 2017). Accommodations would be made to ensure that local traffic passing within the Project limits has access to all private dwellings, commercial properties, businesses, and public facilities. During those periods when a road is closed, even for a short duration, limited access must be maintained for authorized local traffic. If access is to be closed longer than one day, the Contractor would coordinate with the RTSD's Project Manager and affected property owners. (Project Sponsor, Contractor)

Dust emissions shall be minimized by including techniques to control fugitive dust into the air during construction. These minimizations shall be included in the construction plans and specifications with implementation during construction. (Project Sponsor, Contractor)

Additional coordination would be needed between the RTSD project and the USACE to determine when the existing box culvert under N. 33rd Street would be removed. (Project Sponsor, Contractor)

7.0 References

15 United States Code (USC) §2601 et seq.

16 USC 668-668c. Protection of Bald and Golden Eagles, as amended.

16 USC 703-712: Ch. 128. Migratory Bird Treaty Act, as amended.

16 USC 1531 et seq. Endangered Species Act of 1973, as amended.

23 Code of Federal Regulations (CFR) 650(a). Location and Hydraulic Design of Encroachments on Flood Plains.

23 CFR 771.111(h). Early Coordination, Public Involvement, and Project Development.

23 USC 128. Public Hearings.

23 USC 139. Efficient Environmental Reviews for Project Decisionmaking.

33 CFR 328. Definition of Waters of the United States.

33 CFR 1251 et seq. Congressional Declaration of Goals and Policy.

36 CFR 1190. Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way.

40 CFR 122. EPA Administered Permit Programs: The National Pollutant Discharge Elimination System.

40 CFR 261 Subpart C. Characteristics of Hazardous Waste.

40 CFR 1502.14. Alternatives Including the Proposed Action.

40 CFR 1506.6. Public Involvement.

40 CFR 1508.1(g). Effects.

40 CFR 1508.1(g)(2) Indirect Effects

40 CFR 1508.1(g)(3). Cumulative Impact.

42 CFR 26951. Executive Order 11990, Floodplain Management.

42 FR 26961. Executive Order 11990, Protection of Wetlands.

42 USC 12101 et seq. Americans with Disabilities Act of 1990, as amended.

42 USC 2000d et seq. Prohibition against exclusion from participation in, denial of benefits of, and discrimination under federally assisted programs on ground of race, color, or national origin.

42 USC 4331 et. seq. Congressional Declaration of National Environmental Policy.

42 USC 4601-4655 et seq. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

42 USC §6901 et seq. Congressional Findings.

42 USC 9601 et seq. CERCLA.

42 USC §11001 et seq. Emergency Planning and Community Right-to-Know Act.

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APPENDIX A

List of Preparers

APPENDIX B

Alternatives Screening, Floodplain Summary, and Environmental Red Flag Review

APPENDIX C

Traffic Analysis

APPENDIX D

Noise Analysis

APPENDIX E

Section 4(f) and 6(f) Documentation

APPENDIX F

Wetland and Waters Documentation

APPENDIX G

Threatened and Endangered Species Documentation

APPENDIX H

Floodplain Documentation

APPENDIX I

Cultural Resources Documentation

APPENDIX J

Hazardous Materials Documentation

APPENDIX K

Public Involvement Documentation