

POTENTIAL IMPACTS

No wetland and/or other water resource impacts are anticipated. Red Cloud City Park is within the project area; impacts are anticipated due to sidewalk and curb work.

Effects to historic properties are being evaluated and the proposed project is seeking ways to avoid adversely affecting historic properties.

TRAFFIC VOLUMES

Average traffic forecast volumes for US-281 and US-136 in Red Cloud.

US-281 (1st Ave to 11th Ave)			
Year	2025	2035	2045
Vehicles Per Day (ADT)	1880	1890	1900
Design Hourly Volume	280	280	280
% Heavy Trucks	8	8	8

US-136 (Cedar St. to Elm St.)			
Year	2025	2035	2045
Vehicles Per Day (ADT)	1525	1540	1555
Design Hourly Volume	250	250	250
% Heavy Trucks	10	10	10

CONSTRUCTION SCHEDULE

Construction could begin as early as spring 2026 and be completed in spring 2027.

ACCOMMODATION OF TRAFFIC

The proposed project would not be constructed under traffic and would require detouring traffic for the duration of the project to accommodate the proposed work. A designated detour for US-136 would utilize Nebraska Highway 10 (N-10),

Nebraska Highway 4 (N-4), and Nebraska Highway 78 (N-78). A designated detour for US-281 would utilize N-4, N-78/ Kansas Highway 128 (K-128) and US Highway 36 (US-36). A designated detour for local traffic on US-136 would utilize Elm Street, 3rd Avenue, and Seward Street. A designated detour for local traffic on southbound US-281 would utilize W 11th Avenue, Seward Street, and 1st Avenue. Northbound local traffic on US-281 would be maintained, but phased half at a time.

On-street parking would be restricted at times due to construction phasing.

ESTIMATED COST

The estimated cost of the proposed project is approximately \$8.9 million, and would derive from federal and state funding sources.

Local funds would also be required if brick pavers are used beyond the boundaries of the historic district and for any construction of streetscape enhancements and utility betterments.

FEEDBACK

Comments will be collected through August 4, 2024. Send Comments or Questions to:

Sarah Fisher, NDOT Public Involvement
 1500 Nebraska Parkway
 PO Box 94759
 Lincoln, NE 68509-4759
 402.479.3832
 sarah.fisher@nebraska.gov

i For More Information:

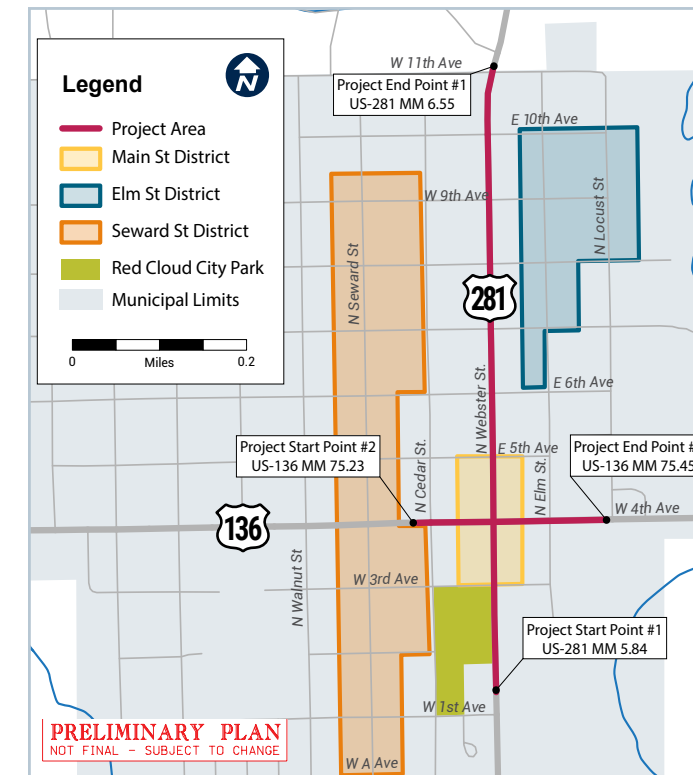
Wes Wahlgren, NDOT District 4 Engineer
 211 N. Tilden Street
 Grand Island, NE 68802
 308.385.6265
 wes.wahlgren@nebraska.gov

STP-281-1(117); C.N. 42619

In Red Cloud

PROJECT INFORMATION SHEET

The purpose of this meeting is to present the preferred alternative and proposed improvements to U.S. Highway 281 (US-281) & U.S. Highway 136 (US-136).



PROJECT LOCATION

Identified as *In Red Cloud*, the proposed project would reconstruct approximately 0.71 miles of US-281 starting near 1st Avenue, at approximately mile marker (MM) 5.84, and extending to just north of 11th Avenue, at approximately MM 6.55. It would also reconstruct approximately 0.22 miles of US-136, starting west of Cedar Street, at approximately MM 75.23, and extending to just west of Locust Street, at approximately MM 75.45. Construction

may begin and/or end approximately 500 feet ahead of or beyond the actual project limits to accommodate transitioning the pavement.

PURPOSE & NEED

The purpose of this proposed project is to preserve the transportation asset, improve the reliability of the transportation system, and perpetuate the mobility of the traveling public. The need for this proposed project is based on the current condition of the roadway.

SCOPE OF WORK

Proposed improvements would consist of pavement reconstruction. Additional work would include replacement or installation of storm sewer, underdrains, sidewalks, curb ramps, lighting, utilities, and permanent pavement markings.

RIGHT-OF-WAY

The proposed project would require the acquisition of additional property rights, which could include new right-of-way (ROW), control of access (CA), permanent easements (PE), and/or temporary easements (TE). If your property is impacted by this project, you will be contacted by a representative once the design footprint has been established. Access to adjacent properties would be maintained during construction but may be limited at times due to phasing requirements.

Public Information Open House Meeting

Thursday, July 18, 2024
4:00 - 6:00 p.m. CST

Community Center, 142 W 3rd Avenue,
Red Cloud, NE 68970

Existing Brick Surface:

- 3" thick bricks on 1" of sand bedding on 5" concrete base
- Constructed in 1917
- An estimated 750,000 bricks within project limits

2015 Condition Assessment:

- Majority of bricks exhibit corner breaks and/or rounded edges from years of traffic and weather
- Areas of significant deterioration are present
- Areas of vertical and horizontal displacement present
- Many bricks have subsurface damage
- Reasonably whole bricks passed structural testing, though bricks with visible deterioration were not tested



Significant deterioration Horizontal/vertical displacement



Damage on underside of bricks, not visible from surface

Can the Existing Bricks be Reused?

The existing bricks cannot be reused based on the findings of the 2015 condition assessment. Brick pavements rely on the interlock between bricks to distribute loads. Bricks must have 2-5/8" thickness to achieve appropriate interlock, which is critical to avoid shifting and displacement. The 2015 condition assessment showed that approximately 65-75% of the bricks do not meet the required thickness needed. Additionally, the years of wear and tear have created a wide variance in individual brick dimensions, decreasing likelihood of achieving appropriate interlock.

What will Happen to the Existing Brick?

The existing bricks would be removed and become property of the contractor.

PROPOSED PROJECT BRICK ALTERNATIVE

In downtown Red Cloud, the existing asphalt, brick, and concrete would be removed and replaced. The existing pavement outside of the downtown area would be removed and replaced with concrete pavement. Within the historic district, the preferred alternative would remove and replace the existing pavement with brick pavers in the roadway only and concrete pavement in all other areas. Every effort would be made to replace the existing brick with new brick pavers that are similar in size, shape and color.

