

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF LANCASTER COUNTY, NEBRASKA

RESOLUTION IN THE MATTER OF)
ADOPTING THE HIGHWAY)
SUPERINTENDENT’S REQUEST FOR A)
RELAXATION OF STANDARDS OF DESIGN) RESOLUTION NO. R-17-0001
FROM THE BOARD OF PUBLIC ROADS)
CLASSIFICATIONS FOR COUNTY BRIDGE)
N-19 (STATE STRUCTURE NO. C005504005))

WHEREAS, pursuant to Neb. Rev. Stat. § 39-1402, general supervision and control of the public roads of Lancaster County is vested in the Lancaster County Board of County Commissioners (“Board”);

WHEREAS, pursuant to Neb. Rev. Stat. §§ 39-1506 and 39-1507, the Lancaster County Engineer serves as the Lancaster County Highway Superintendent (“Highway Superintendent”);

WHEREAS, pursuant to Neb. Rev. Stat. § 39-2113, the Board of Public Roads Classifications and Standards shall develop minimum standards of design for County Roads;

WHEREAS, pursuant to Neb. Rev. Stat. § 39-2113, the Board of Public Roads Classifications and Standards may relax those minimum standards of design in those instances in which their application is not feasible because of peculiar, special, or unique local situation;

WHEREAS, pursuant to 428 Neb. Admin. Code § 2-004.01, a county may request that, due to special hardship, the Board of Public Roads Classifications and Standards relax standards applied to the design of any segment of highway, road, or street;

WHEREAS, 428 Neb. Admin. Code § 2-004.01A, all county requests for relaxation of standards must be made by the Lancaster County Engineer (“Engineer”);

WHEREAS, pursuant to 428 Neb. Admin. Code 004.01A1, any such request shall include a copy of the Resolution of Adoption signed by the Board;

WHEREAS, for the detailed reasons presented by the Engineer in Attachment A to this Resolution, which Attachment is hereby incorporated herein by this reference, the Engineer has recommended that the Board adopt the Engineer's request for a relaxation of standards due to special hardship with respect to the design of Lancaster County Bridge N-19 (State Structure No. C005504005), located on W Pioneers Boulevard, ¼ mile west of SW 98th Street, in the SE ¼ of Section 4, Township 9 North, Range 5 East of the 6th P.M.; and

WHEREAS, the Board wishes to adopt the Engineer's request;

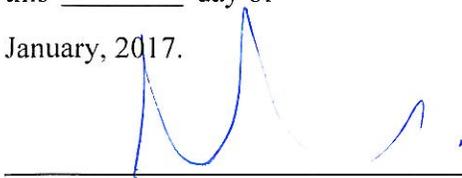
NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of Lancaster County, Nebraska, that the Board hereby adopts the request of the Lancaster County Engineer to the Board of Public Roads Classifications and Standards for a relaxation of standards due to special hardship for the design of Bridge N-19 (State Structure No. C005504005).

DATED this 3 day of January, 2017, at the County-City Building, Lincoln, Lancaster County, Nebraska.

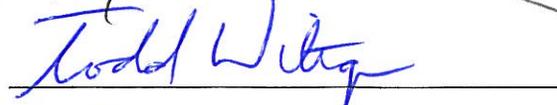
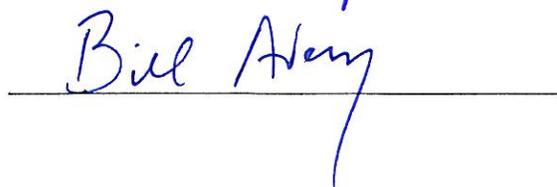
BY THE BOARD OF COUNTY
COMMISSIONERS OF LANCASTER
COUNTY, NEBRASKA

APPROVED AS TO FORM

this 3 day of
January, 2017.


for JOE KELLY
Lancaster County Attorney



LANCASTER
COUNTY

Pamela L. Dingman, P.E.
County Engineer

ENGINEERING

Kenneth D. Schroeder, R.L.S.
Deputy County Surveyor

DEPARTMENT

December 29, 2016

LeMoyne Schulz
Board of Classifications and Standards
1500 Nebraska Highway 2
P.O. Box 94759
Lincoln, Nebraska 68509-4759

RE: Lancaster County Bridge C-55-N-19
State Structure No. C005504005

Dear Mr. Schulz:

Lancaster County would like the Board of Classifications and Standards to consider our request for a relaxation of standards for the above-referenced structure replacement project. Please find the following material enclosed for the Board's use in considering our request:

1. Resolution from the Lancaster County Board authorizing relaxation request
2. Location Map (1 page)
3. National and State Functional Classification Maps (2 pages)
4. Aerial Photos (3 pages)
5. Sketches showing existing alignment and curve data (2 pages)
6. NBCS Form 7 Highway Improvement Project (1 page)
7. Existing and Proposed Typical Cross-sections (1 page)
8. DR 320 Critical Finding Report by Chad Packard, Bridge Engineer, Inspector CP1504 (1 page)
9. Existing Topography Plan and Profile sheets for the project (3 pages)
10. Supporting documentation from Title 428, Table 001.03J and the AASHTO Policy on Geometric Design of Highways and Streets 2011 (the Green Book) (7 pages)
11. Crash data including summary for 2006 through 2016 (4 events, 10 pages).

Located in the SE ¼ of Section 4, Township 9 North, Range 5 East of the 6th P.M., Lancaster County Bridge N-19 (State structure No. C005504005) is a 27' wide by 31' long single span concrete precast channel beam superstructure and deck, with timber piling, caps and backwalls making up the substructure. Built in 1964, the structure carries West Pioneers Blvd over the North edge of Conestoga Lake, ¼ mile west of SW 98th Street. The most recent traffic count for this section of West Pioneers Blvd was in 2011, showing an ADT of 167 VPD. The bridge is classified as Structurally Deficient with a Sufficiency Rating of 34.3.

The State and National Functional Classifications of the roadway are "Local", and the roadway is in a "Rural" area. Due to the necessity for replacement of the deteriorated bridge, the project would be considered a Reconstruction project according to Title 428. West Pioneers Blvd at the bridge is in a horizontal curve with a radius of 716 feet. Roughly ½ mile to the east of the structure, the alignment of West Pioneers makes another double curve, with a much tighter radius of 477 feet (see hand-drawn 2-page foldout). Both bridge approaches and the roadway in the vicinity of the structure are gravel surfacing. The roadway surface changes to asphalt at SW 98th Street, about ¼ mile east of the bridge.

The roadway width leading up to the structure is 26' wide, with 2-10' lanes and 2-3' shoulders. The grade coming into the structure from the west is a significant downgrade with a maximum slope of 6.0%. The roadway slope is generally level to the east of the structure.

The bridge structure was closed on October 12, 2015 due to extensive scouring of approach fill from underneath/behind the timber backwalls, and due to the presence of failing timber piling in the substructure. Prior inspections had shown small amounts of undermining of the backwalls for several years, with the flood event of 2015 scouring out the approaches significantly and making the bridge unsafe to leave in service.

The West Pioneers Blvd right-of-way at the bridge is completely surrounded by United States of America park property adjacent to Conestoga Lake. Re-alignment of the roadway and bridge would be very difficult to accomplish due to the sensitive nature of the surrounding land and the intensive preservation of the park ground by the U.S. Fish & Wildlife Service.

The New and Reconstructed Standard for a 50-mph Local roadway, using a maximum superelevation rate of 8%, is a curve with minimum radius of 758 feet. The existing curves west of the structure have radii of 716 feet and 713 feet. East of the structure, the 2 roadway curves both have a radius of 477 feet. Since realignment is not feasible due to right-of-way and environmental issues as described above, holding to the minimum radius of 444 feet would correspond to a 40-mph design speed, super-elevated at a rate of 8.0% (see attached Green Book pages 3-37 and 3-47).

Another item of concern is the 26-foot approach roadway width leading up to both sides of the bridge structure. We believe we will be able to widen the existing roadway adjacent to the bridge to the standard width of 28', with 2-10' lanes and 2-4' shoulders. Widening at the base of the foreslopes (due to change from 3:1 to 4:1 slopes) will be required, which can be done within the existing 150' right-of-way. We anticipate very little if any impact to wetland resources from this minor widening of the roadway.

Required Stopping Sight Distance for a 40-mph design speed on a 6% downgrade is 333 feet, and on level ground is 305 feet (see pages 3-4 and 3-5 from the AASHTO Green Book). In the area of the bridge and the curve to the west, several small to medium sized trees in the right-of-way and close to the roadway may have to be removed/trimmed to achieve the required stopping sight distance. This will be done in conjunction with the project, outside of the migratory bird nesting season.

The Green Book page 3-155 shows a minimum K value of 44 for a 40-mph design speed. The vertical curve to the west of the bridge, where the roadway turns slightly to the northeast, is a 350' vertical

curve with a K value of 65, meeting the requirements for crest vertical curve K values. Therefore, no relaxation of this standard is necessary.

Lancaster County is hereby requesting a relaxation of the 50-mph design speed for this section of West Pioneers Blvd. We propose a 40-mph design and posted speed thru the 4 curves in this mile of W Pioneers Blvd, constructed with an 8.0% super-elevation rate through both curves west of SW 98th Street. "Double Curve" signs and "Speed Limit 40" signs will be placed in advance of the horizontal curves west and east of the bridge, and new chevrons will be placed on the curves from both directions for delineating the curves in the roadway (signs and chevrons are currently in place).

Thank you for your consideration of this request for relaxation of minimum design standards for the replacement of bridge N-19.

Sincerely,

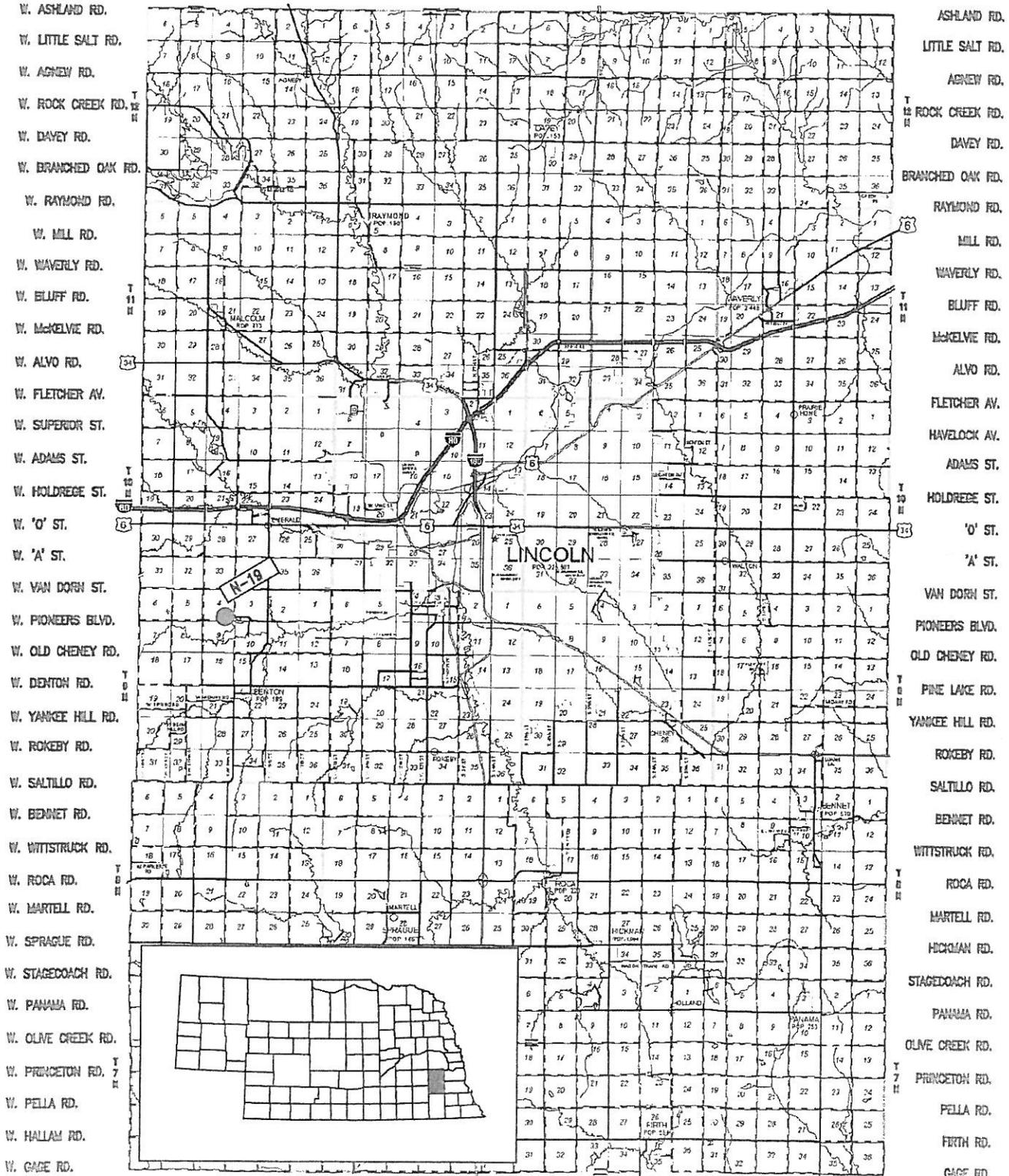
Pamela L. Dingman, P.E.
Lancaster County Engineer

PLD/bcl

LANCASTER COUNTY, NEBRASKA

NO SCALE

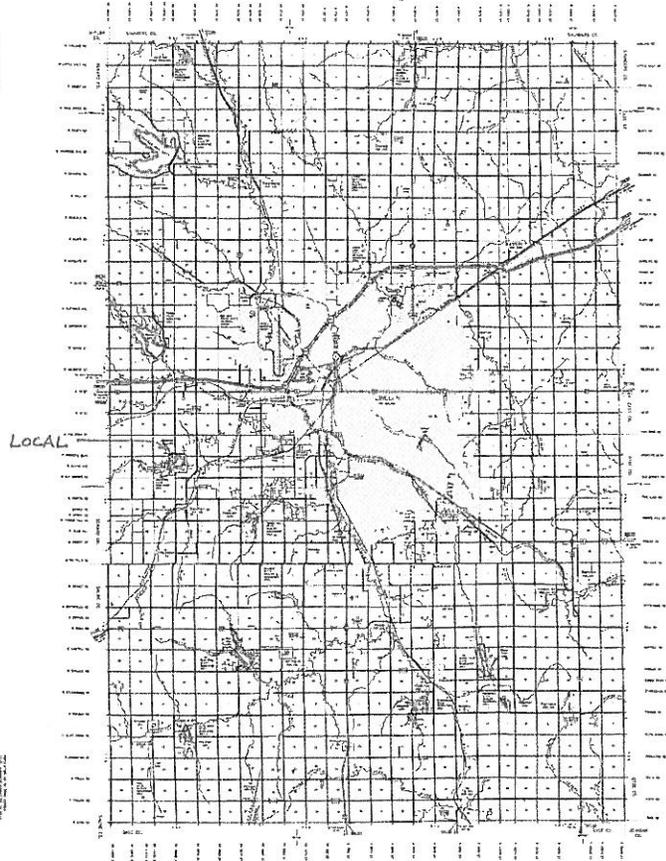
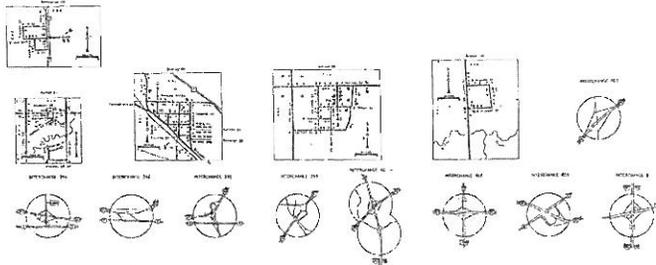
NW 140TH ST. NW 128TH ST. NW 120TH ST. NW 108TH ST. NW 96TH ST. NW 84TH ST. NW 72TH ST. NW 60TH ST. NW 48TH ST. NW 36TH ST. NW 24TH ST. NW 12TH ST. N. 1ST ST. N. 14TH ST. N. 27TH ST. N. 40TH ST. N. 53TH ST. N. 66TH ST. N. 79TH ST. N. 92TH ST. N. 105TH ST. N. 118TH ST. N. 131TH ST. N. 144TH ST. N. 157TH ST. N. 170TH ST. N. 183TH ST.



W. ASHLAND RD.
 W. LITTLE SALT RD.
 W. AGNEW RD.
 W. ROCK CREEK RD.
 W. DAVEY RD.
 W. BRANCHED OAK RD.
 W. RAYMOND RD.
 W. MILL RD.
 W. WAVERLY RD.
 W. BLUFF RD.
 W. MCKELVIE RD.
 W. ALVO RD.
 W. FLETCHER AV.
 W. SUPERIOR ST.
 W. ADAMS ST.
 W. HOLDREGE ST.
 W. 'O' ST.
 W. 'A' ST.
 W. VAN DORN ST.
 W. PIONEERS BLVD.
 W. OLD CHENEY RD.
 W. DENTON RD.
 W. YANKEE HILL RD.
 W. ROKEBY RD.
 W. SALTILLO RD.
 W. BENNET RD.
 W. WITSTRUCK RD.
 W. ROCA RD.
 W. MARTELL RD.
 W. SPRAGUE RD.
 W. STAGEDOACH RD.
 W. PANAMA RD.
 W. OLIVE CREEK RD.
 W. PRINCETON RD.
 W. PELLA RD.
 W. HALLAM RD.
 W. GAGE RD.

ASHLAND RD.
 LITTLE SALT RD.
 AGNEW RD.
 ROCK CREEK RD.
 DAVEY RD.
 BRANCHED OAK RD.
 RAYMOND RD.
 MILL RD.
 WAVERLY RD.
 BLUFF RD.
 MCKELVIE RD.
 ALVO RD.
 FLETCHER AV.
 HAVELOCK AV.
 ADAMS ST.
 HOLDREGE ST.
 'O' ST.
 'A' ST.
 VAN DORN ST.
 PIONEERS BLVD.
 OLD CHENEY RD.
 PINE LAKE RD.
 YANKEE HILL RD.
 ROKEBY RD.
 SALTILLO RD.
 BENNET RD.
 WITSTRUCK RD.
 ROCA RD.
 MARTELL RD.
 HICKMAN RD.
 STAGEDOACH RD.
 PANAMA RD.
 OLIVE CREEK RD.
 PRINCETON RD.
 PELLA RD.
 FIRTH RD.
 GAGE RD.

SW 142ND ST. SW 128TH ST. SW 114TH ST. SW 100TH ST. SW 86TH ST. SW 72ND ST. SW 58TH ST. SW 44ND ST. SW 30TH ST. SW 16TH ST. S. 12TH ST. S. 25TH ST. S. 38TH ST. S. 51TH ST. S. 64TH ST. S. 77TH ST. S. 90TH ST. S. 103TH ST. S. 116TH ST. S. 129TH ST. S. 142TH ST. S. 155TH ST. S. 168ND ST. S. 180TH ST.



GENERAL HIGHWAY MAP
LANCASTER COUNTY
NEBRASKA
 DEPARTMENT OF ROADS
 SURVEYING SECTION
 U.S. DEPARTMENT OF TRANSPORTATION
 LEGAL HIGHWAY COMMISSION
 1928

STATE OF NEBRASKA
 DEPARTMENT OF ROADS
 SURVEYING SECTION
 U.S. DEPARTMENT OF TRANSPORTATION
 LEGAL HIGHWAY COMMISSION
 1928

LEGEND
 (Detailed list of symbols and their corresponding road types, including various line styles and symbols for different road classes, bridges, and landmarks.)

SCALE
 (Graphic scale bar)

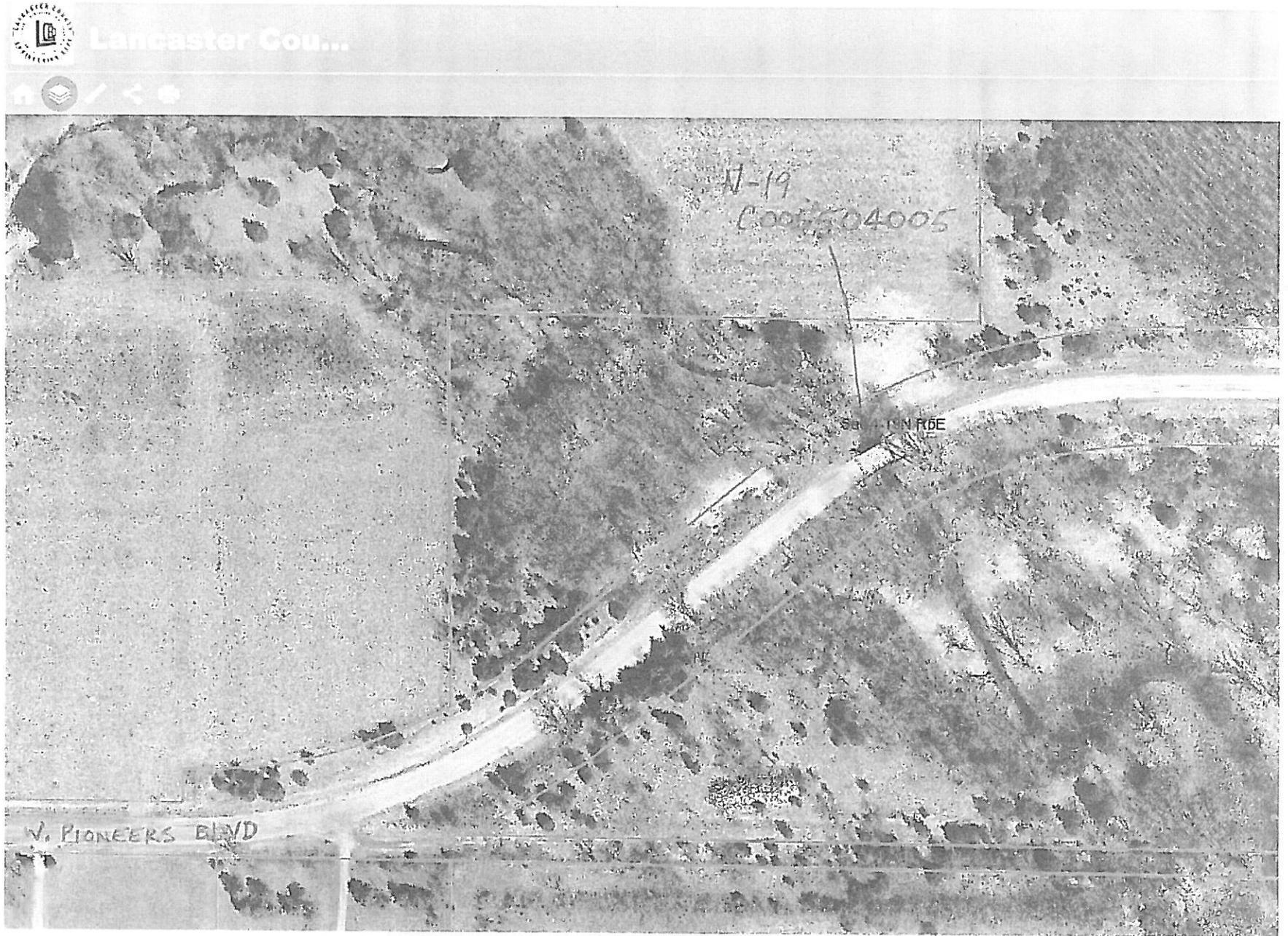
INDEX
 (Small map of Nebraska with Lancaster County highlighted)

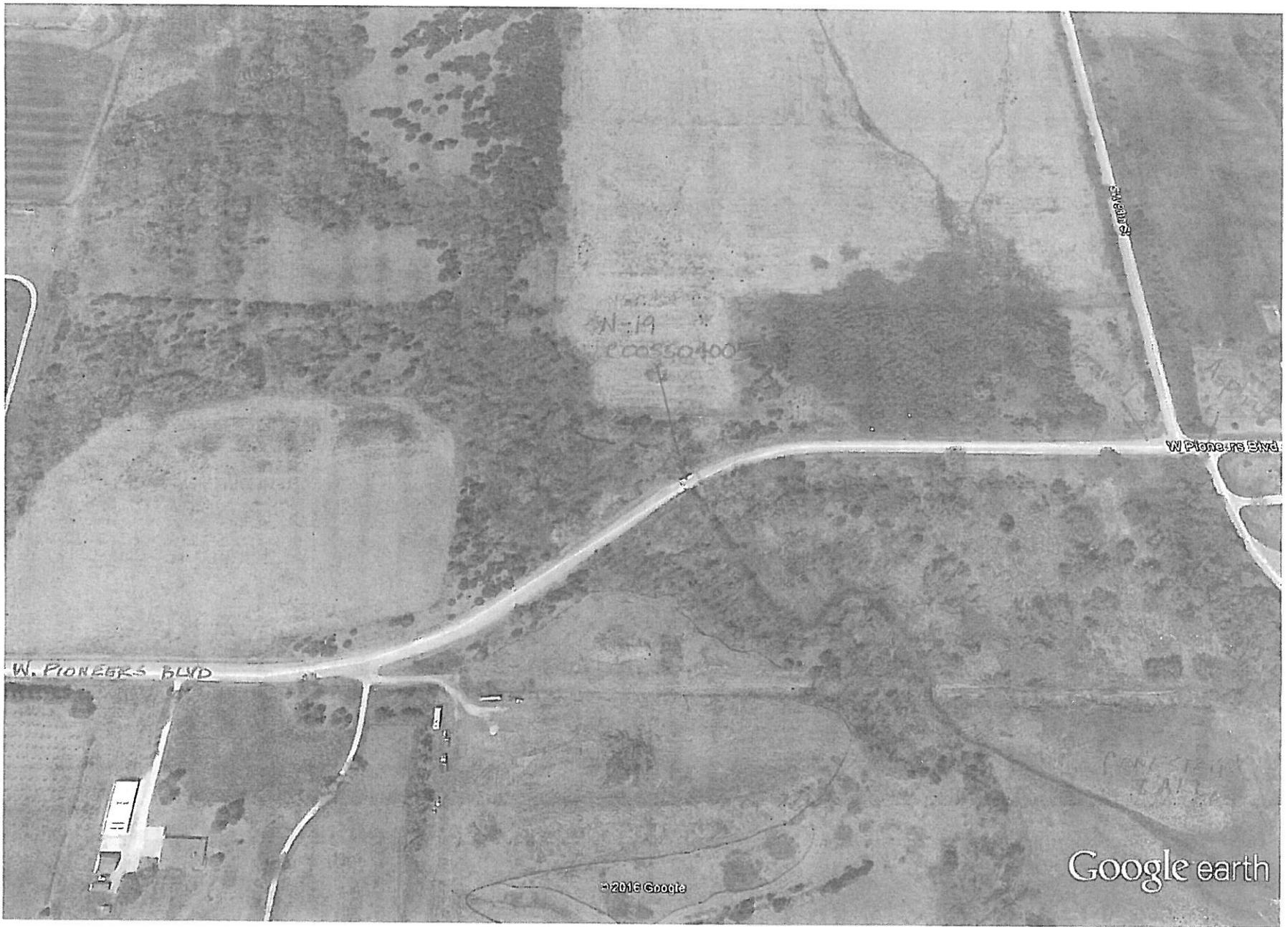
NIXON
 (Logo for the surveying firm)



Google earth



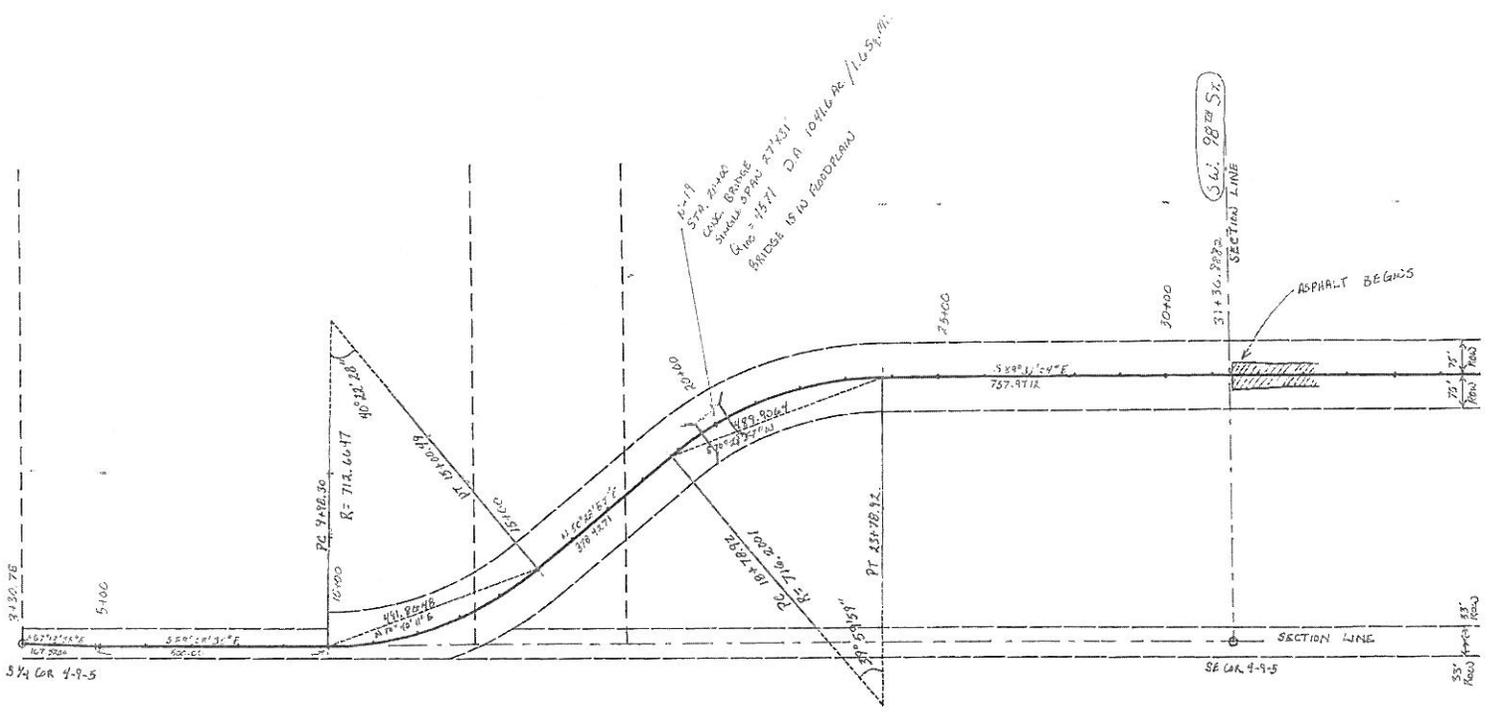




Google earth

Google earth





5 1/2 COR. 4-9-5

SECTION LINE
S.W. 98TH ST.

ASPHALT BEGINS

SECTION LINE

SE COR. 4-9-5

55' Road Right

75' Road

29+00

30+00

31+30

PC 4+86.30
R=714.66'7"
10'00'

OPPOSITE

459.50' 50"

100'00' 00' 12"

PT. 451+78.32

5886.1' ± 4" E
757.9712

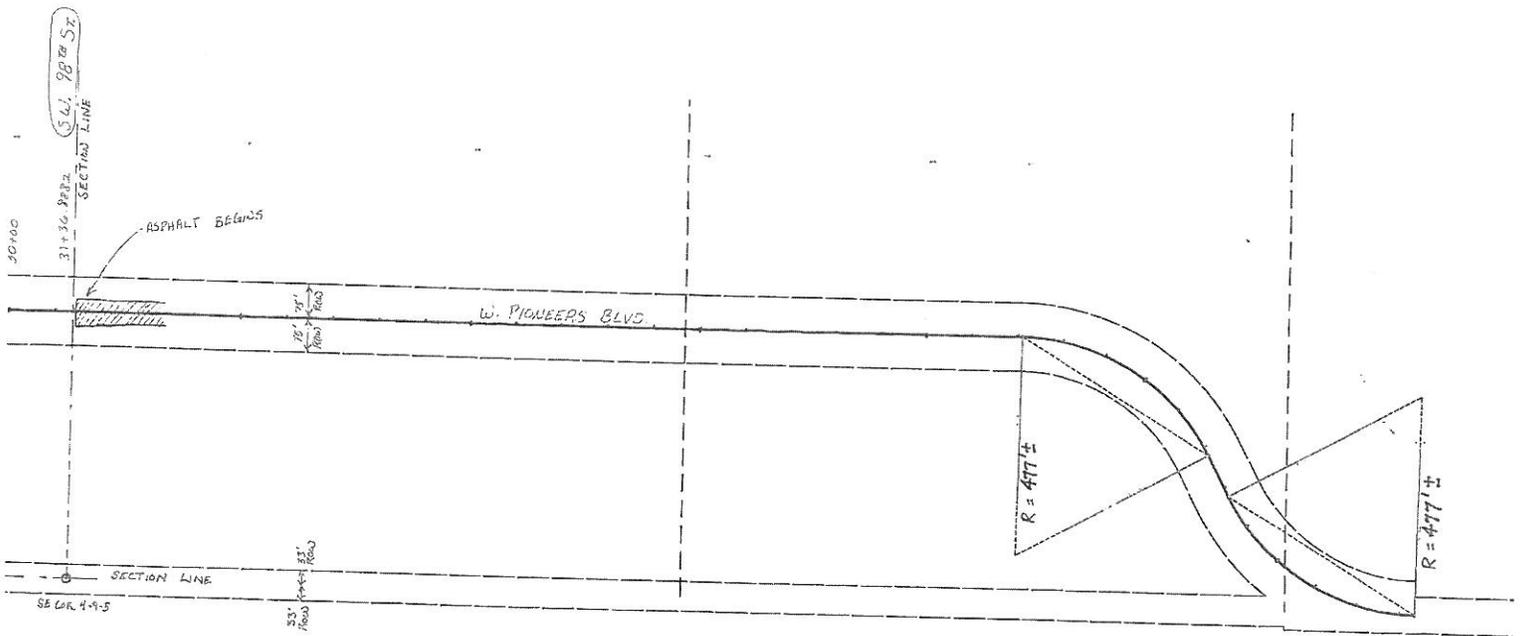
29+00
57'00' 20'40"
CONCL. BEARING
S 104°16'20' W
DIST. = 165.94'
D.M. 104'16'20' 1/165.94'
RADIUS IS IN ROAD PLANS

3+30.75

5+00

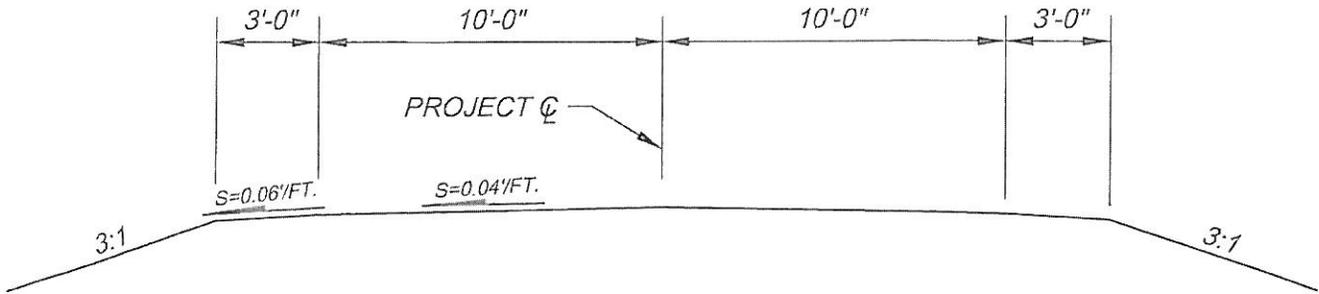
50'00' ± 1/2" E
62'00'

75' Road

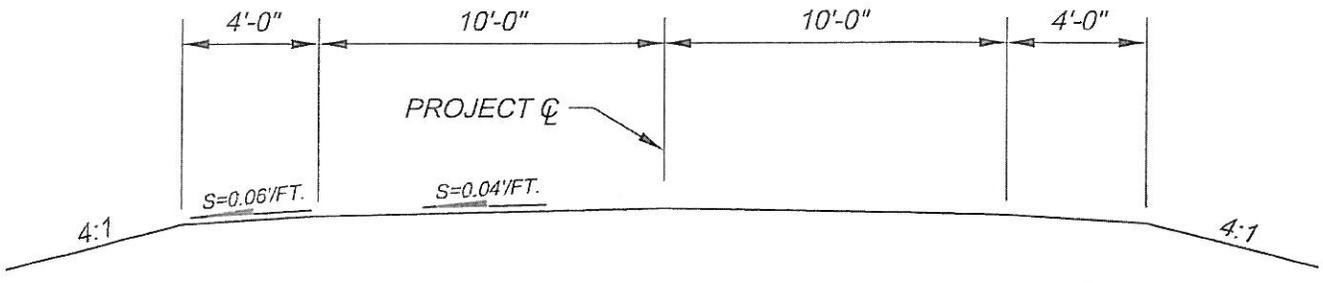


Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Lancaster	City:	Village:
Location Description: W. Pioneers Boulevard (Standby Project)		
Existing Surface Type and Structures: <i>(Such as dirt, gravel, asphalt, concrete, culvert, or bridge)</i> Gravel		
Average Daily Traffic: 2011 = 167		Classification Type: <i>(As shown on Functional Classification Map)</i> Local
PROPOSED IMPROVEMENT		
Design Standard Number:	Surfacing	Thickness: Width:
<input type="checkbox"/> Grading <input type="checkbox"/> Aggregate <input type="checkbox"/> Armor Coat <input type="checkbox"/> Asphalt	<input type="checkbox"/> Concrete <input type="checkbox"/> Curb & Gutter <input type="checkbox"/> Drainage Structures <input type="checkbox"/> Erosion Control	<input type="checkbox"/> Right of Way <input type="checkbox"/> Utility Adjustments <input type="checkbox"/> Fencing <input type="checkbox"/> Sidewalks
		<input type="checkbox"/> Lighting <input type="checkbox"/> Engineering <input type="checkbox"/>
Bridge to Remain in Place	Roadway Width:	Length: Type:
New Bridge	Roadway Width: 30'	Length: 75' Type: Bridge
Box Culvert	Span:	Rise: Length: Type:
Culvert	Diameter:	Length: Type:
Bridges and Culverts Sized	<input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> Hydraulic Analysis Pending	
Other Construction Features:		
ESTIMATED COST <i>(in Thousands)</i> ★ OPTIONAL	★ County 377	★ City
	★ State	★ Federal
	★ Other	Total 377
Project Length: <i>(Nearest Tenth, State Unit of Measure)</i> 0.1 Miles		Project No.: C55-N-19
Signature: 	Title: County Engineer	Date: 2/25/16



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

Nebraska Department of Roads
Critical Finding Report

Part I (To be completed by inspector within 48 hours)

NBI Structure No. C005504005	County: N-19	Structure Type: Concrete Bridge	Roadway Carried: W Pioneers BV	Feature Intersected: Stream
Date Finding Discovered: 10/12/15	Finding Inspected By: (Print Name) Chad Packard		Inspector's ID Number: CP1504	Inspector's Employer: Lancaster County
Finding Discovered During: <input checked="" type="checkbox"/> Scheduled Inspection <input type="checkbox"/> Load Rating <input type="checkbox"/> Other _____				
Description of Critical Finding: (Attach Photos) Undermining of timber backwall abutment resulting in large voids under bridge approach due to loss of fill material as detected by probing. Approach failure had occurred earlier this year due to the same occurrence. Mitigation efforts were unsuccessful and the undermining has reoccurred. Bridge was already posted at 3 tons due to heavily deteriorated timber piling. Due to the coalescence of these defects the bridge was closed immediately and indefinitely.				
Immediate Action Recommended: <input checked="" type="checkbox"/> Close Bridge <input type="checkbox"/> Close Lane(s) <input type="checkbox"/> Other _____				
Copy of Part I sent to: <input checked="" type="checkbox"/> NDOR - Bridge <input type="checkbox"/> District Engineer <input type="checkbox"/> Hwy. Supt. <input type="checkbox"/> Other _____				

Part II (Initial Report to be completed by Bridge Owner within five days)

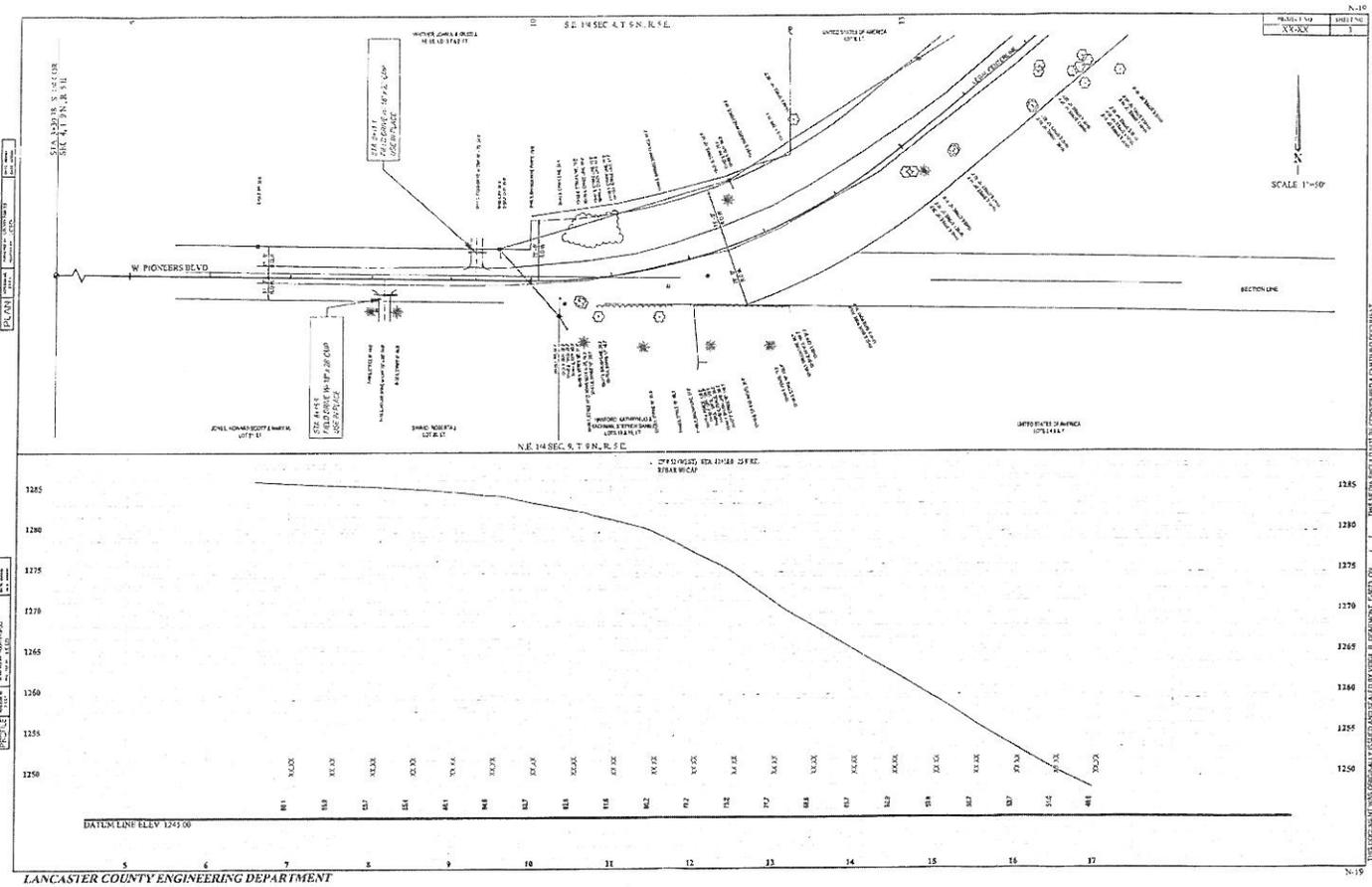
Part II Submitted By: (Print Name) Chad Packard	Job Title: Bridge Engineer	Date Part II Submitted: 10/15/15
Immediate Action Taken: <input checked="" type="checkbox"/> Close Bridge <input type="checkbox"/> Close Lane(s) <input type="checkbox"/> Other _____		
Owner's Anticipated Plan for the Bridge: (Repair, Replace, Remove, Permanently Close, Load Post, etc.) Replace		
Copy of Part II sent to: <input checked="" type="checkbox"/> NDOR - Bridge <input type="checkbox"/> District Engineer <input type="checkbox"/> Hwy. Supt. <input type="checkbox"/> Other _____		

Part III (Final action taken, or status update every 12 months by bridge owner.)

Part III Submitted By: (Print Name) Chad Packard	Job Title: Bridge Engineer	Date Part III Submitted: 10/15/15
Note: Before a closed bridge may be reopened to traffic, if the repairs are NOT in-kind, a licensed engineer must approve any structural repairs, the bridge must be load rated and the bridge must be re-inspected. In-Kind repair: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Description of Final Action Taken: (Attach Photos, Plans, etc.) Close indefinitely until bridge can be replaced		
Copy of Part III sent to: <input checked="" type="checkbox"/> NDOR - Bridge <input type="checkbox"/> District Engineer <input type="checkbox"/> Hwy. Supt. <input type="checkbox"/> Other _____		

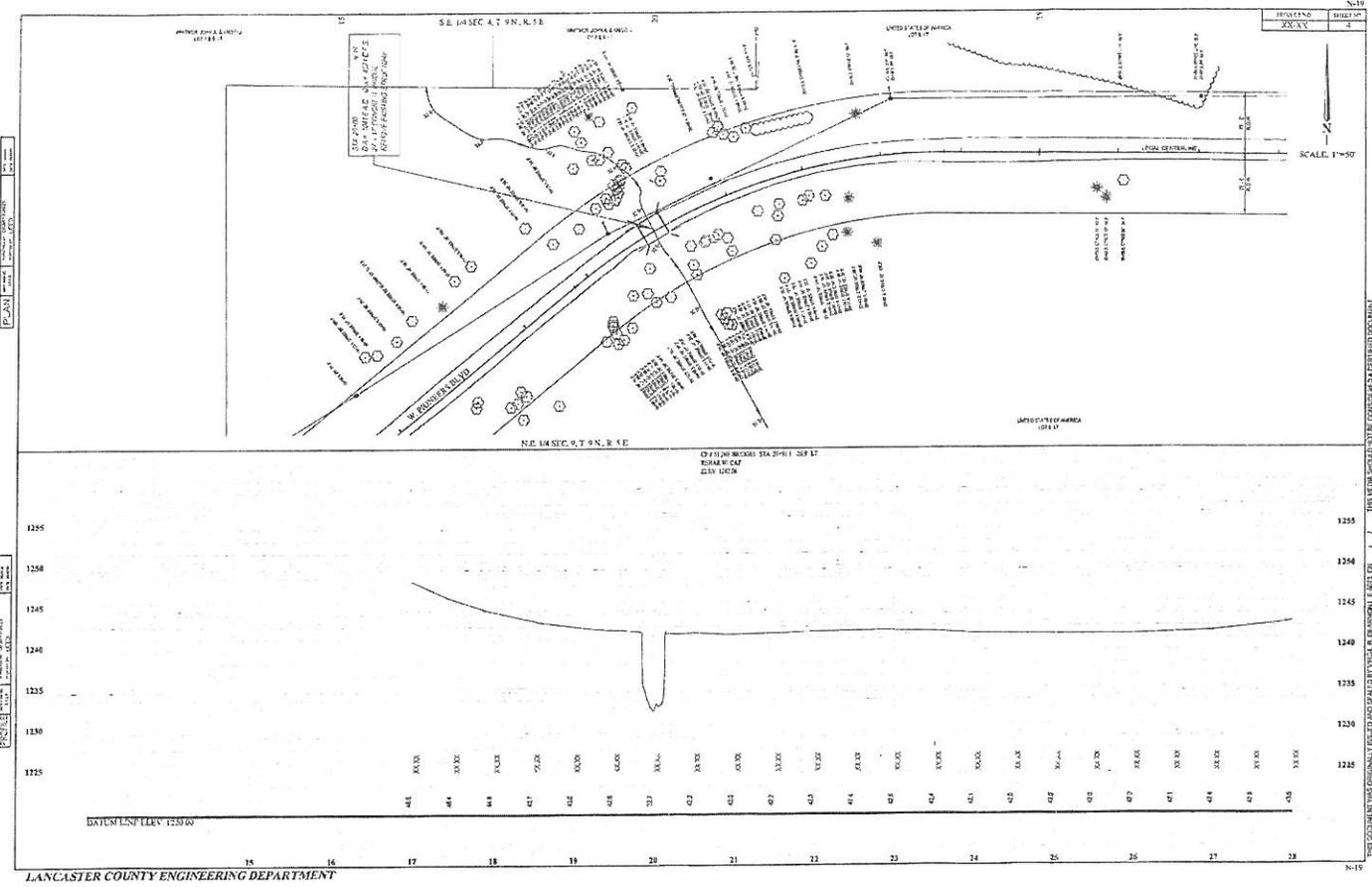
Part IV (To be completed by bridge owner – If structural repairs were made to correct the critical finding)

Repair Plans Approved By: (Print Licensed Engineer's Name and Company)		Load Rated By: (Print Licensed Engineer's Name and Company)		
Date Repairs Completed:	Follow-up Inspection Date:	Follow-up Inspection By: (Print Name)	Inspector's ID No.:	Inspector's Employer:
Copy of Part IV sent to: <input type="checkbox"/> NDOR - Bridge <input type="checkbox"/> District Engineer <input type="checkbox"/> Hwy. Supt. <input type="checkbox"/> Other _____				

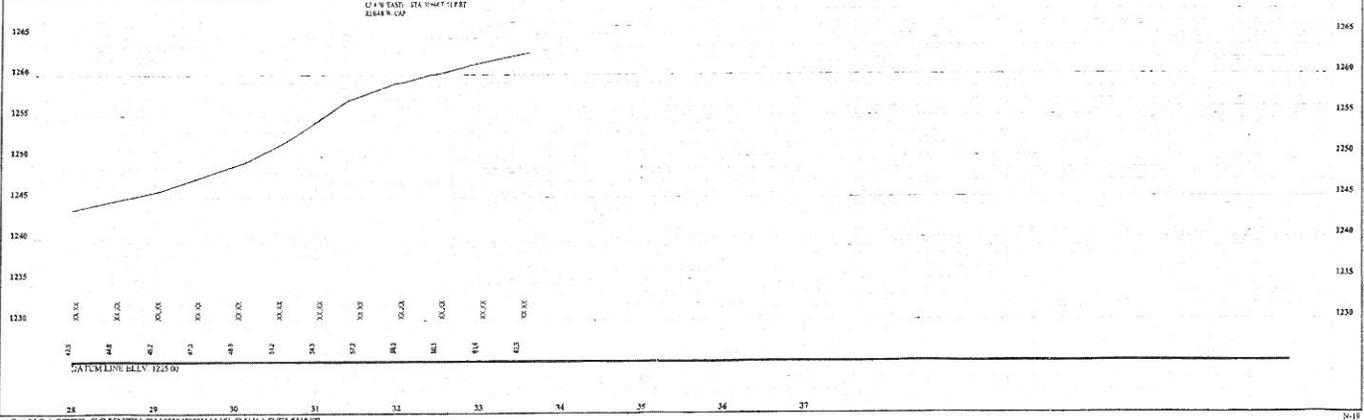
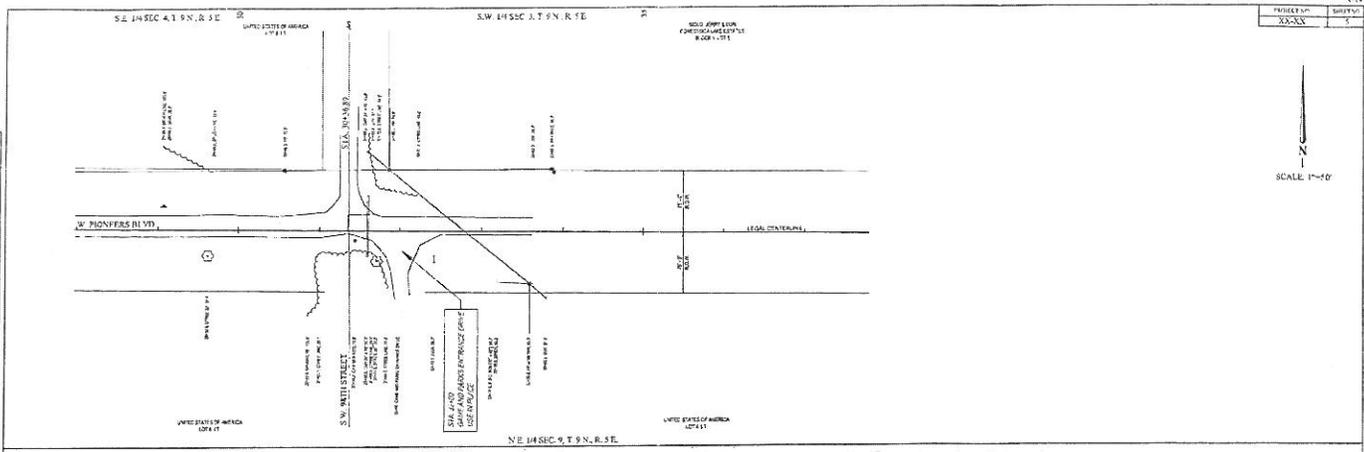


LANCASTER COUNTY ENGINEERING DEPARTMENT

N-10
 PROJECT NO. 19812-01
 SHEET NO. 1
 SCALE 1"=50'
 SECTION LINE
 THIS DOCUMENT HAS ORIGINALLY BEING SEALED BY VINYL FILM AND IS NOT TO BE CONSIDERED VALID UNLESS THE SEAL IS UNBROKEN



PROJECT NO.	55333
SHEET NO.	5



THIS DOCUMENT AND ANY INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE

Title 428 – BOARD OF PUBLIC ROADS CLASSIFICATIONS AND STANDARDS

Chapter 2 – Procedures for Standards (Continued)

001.03J NEW AND RECONSTRUCTED / RESURFACING, RESTORATION AND REHABILITATION (3R) IN RURAL AREAS – COUNTY ROAD AND MUNICIPAL STREET SYSTEMS

**National Functional Classification: Local
State Functional Classification: Local, Collector or Other Arterial**

Rural Areas (Notes 1, 2, 3, 4, 7)																										
Functional Classification (Note 5)																										
Design Criteria	New and Reconstructed (Notes 10, 22)	3R (Note 6)																								
Design Speed (DS) (Notes 8, 12, 13)	50 MPH (55 MPH)	Posted Speed Limit																								
Lane Width (Note 9)	ADT ≥ 2,000 VPD: 12 ft. ADT 400 - 1,999 VPD: 11 ft. ADT < 400 VPD: 10 ft.	<table border="1"> <thead> <tr> <th>ADT (VPD), %HT</th> <th>Paved</th> <th>Unpaved</th> </tr> </thead> <tbody> <tr> <td>≥ 4,000</td> <td>12 ft.</td> <td>11 ft.</td> </tr> <tr> <td>2,000 - 3,999, ≥ 10%</td> <td>12 ft.</td> <td>11 ft.</td> </tr> <tr> <td>2,000 - 3,999, < 10%</td> <td>11 ft.</td> <td>11 ft.</td> </tr> <tr> <td>750 - 1,999</td> <td>11 ft.</td> <td>11 ft.</td> </tr> <tr> <td>400 - 749, ≥ 10%</td> <td>11 ft.</td> <td>11 ft.</td> </tr> <tr> <td>400 - 749, < 10%</td> <td>10 ft.</td> <td>10 ft.</td> </tr> <tr> <td>< 400</td> <td>10 ft.</td> <td>10 ft.</td> </tr> </tbody> </table>	ADT (VPD), %HT	Paved	Unpaved	≥ 4,000	12 ft.	11 ft.	2,000 - 3,999, ≥ 10%	12 ft.	11 ft.	2,000 - 3,999, < 10%	11 ft.	11 ft.	750 - 1,999	11 ft.	11 ft.	400 - 749, ≥ 10%	11 ft.	11 ft.	400 - 749, < 10%	10 ft.	10 ft.	< 400	10 ft.	10 ft.
		ADT (VPD), %HT	Paved	Unpaved																						
		≥ 4,000	12 ft.	11 ft.																						
		2,000 - 3,999, ≥ 10%	12 ft.	11 ft.																						
		2,000 - 3,999, < 10%	11 ft.	11 ft.																						
		750 - 1,999	11 ft.	11 ft.																						
400 - 749, ≥ 10%	11 ft.	11 ft.																								
400 - 749, < 10%	10 ft.	10 ft.																								
< 400	10 ft.	10 ft.																								
Shoulder Width (Note 11)	ADT ≥ 2,000 VPD: 8 ft. ADT 1,500 - 1,999 VPD: 6 ft. ADT 50 - 1,499 VPD: 4 ft. ADT < 50 VPD: 3 ft.	Paved Traveled Way: ADT ≥ 2,000 VPD: 6 ft. ADT 750 - 1,999 VPD: 3 ft. ADT < 750 VPD: 2 ft.																								
		Unpaved Traveled Way: Existing																								
		Horizontal Alignment	(Note 12)																							
		Superelevation (maximum)	$e_{max} = 8\%$																							
Radius (based on e_{max})	DS 50 MPH: 758 ft. DS 55 MPH: 960 ft.	Existing																								
Vertical Alignment	(Note 13)	(Note 13)																								
Crest K Value	DS 50 MPH: 84 DS 55 MPH: 114	Existing																								
Sag K Value	DS 50 MPH: 96 DS 55 MPH: 115	Existing																								
Grade (maximum) (Note 14)	DS 50 MPH: 6% Level, 8% Rolling DS 55 MPH: 6% Level, 7% Rolling	Existing																								
Stopping Sight Distance (Notes 12, 13)	DS 50 MPH: 425 ft. DS 55 MPH: 495 ft.	Existing																								

Title 428 – BOARD OF PUBLIC ROADS CLASSIFICATIONS AND STANDARDS

Chapter 2 – Procedures for Standards (Continued)

001.03J (Continued) NEW AND RECONSTRUCTED / RESURFACING, RESTORATION AND REHABILITATION (3R) IN RURAL AREAS – COUNTY ROAD AND MUNICIPAL STREET SYSTEMS

**National Functional Classification: Local
State Functional Classification: Local, Collector or Other Arterial**

Rural Areas (Notes 1, 2, 3, 4, 7)																				
Functional Classification (Note 5)																				
Design Criteria	New and Reconstructed (Notes 10, 22)	3R (Note 6)																		
Cross Slope (Note 15)																				
Lane	Paved: 1.5% to 2% Unpaved: 2% to 6%	Existing																		
Shoulder	Paved: 2% to 6% Aggregate: 4% to 6% Turf: 6% to 8%	Existing																		
Horizontal Clear Zone (Note 16)	<p style="text-align: center;">Width, ft. DS 50/55 MPH</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">ADT (VPD)</th> <th style="text-align: center;">1V:6H</th> <th style="text-align: center;">1V:4H</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">≥ 6,000</td> <td style="text-align: center;">20/22</td> <td style="text-align: center;">24/26</td> </tr> <tr> <td style="text-align: center;">1,500 - 5,999</td> <td style="text-align: center;">16/20</td> <td style="text-align: center;">20/24</td> </tr> <tr> <td style="text-align: center;">750 - 1,499</td> <td style="text-align: center;">14/16</td> <td style="text-align: center;">16/20</td> </tr> <tr> <td style="text-align: center;">400 - 749</td> <td style="text-align: center;">10/12</td> <td style="text-align: center;">12/14</td> </tr> <tr> <td style="text-align: center;">< 400</td> <td colspan="2" style="text-align: center;">Nominal Shoulder Width</td> </tr> </tbody> </table>	ADT (VPD)	1V:6H	1V:4H	≥ 6,000	20/22	24/26	1,500 - 5,999	16/20	20/24	750 - 1,499	14/16	16/20	400 - 749	10/12	12/14	< 400	Nominal Shoulder Width		Existing
ADT (VPD)	1V:6H	1V:4H																		
≥ 6,000	20/22	24/26																		
1,500 - 5,999	16/20	20/24																		
750 - 1,499	14/16	16/20																		
400 - 749	10/12	12/14																		
< 400	Nominal Shoulder Width																			
Vertical Clearance	14.5 ft. (Note 17)	Existing																		
Bridges (Notes 18, 20, 21)	(letters within parentheses refer to formulas in Note 18)																			
Clear Bridge Width	ADT ≥ 2,000 VPD: 40 ft. (A) ADT 400 - 1,999 VPD: 38 ft. (C) ADT < 400 VPD: 24 ft. (D)	ADT ≥ 4,000 VPD: 30 ft. (C) ADT 2,000 - 3,999 VPD: 28 ft. (D) ADT 750 - 1,999 VPD: 24 ft. (F) ADT 400 - 749 VPD: 22 ft. (H) ADT < 400 VPD: 20 ft. (H)																		
Structural Capacity	HL93 (Note 19)	(Note 19)																		

Table 3-1. Stopping Sight Distance on Level Roadways

Metric					U.S. Customary				
Design Speed (km/h)	Brake Reaction Distance (m)	Braking Distance on Level (m)	Stopping Sight Distance		Design Speed (mph)	Brake Reaction Distance (ft)	Braking Distance on Level (ft)	Stopping Sight Distance	
			Calculated (m)	Design (m)				Calculated (ft)	Design (ft)
20	13.9	4.6	18.5	20	15	55.1	21.6	76.7	80
30	20.9	10.3	31.2	35	20	73.5	38.4	111.9	115
40	27.8	18.4	46.2	50	25	91.9	60.0	151.9	155
50	34.8	28.7	63.5	65	30	110.3	86.4	196.7	200
60	41.7	41.3	83.0	85	35	128.6	117.6	246.2	250
70	48.7	56.2	104.9	105	40	147.0	153.6	300.6	305
80	55.6	73.4	129.0	130	45	165.4	194.4	359.8	360
90	62.6	92.9	155.5	160	50	183.8	240.0	423.8	425
100	69.5	114.7	184.2	185	55	202.1	290.3	492.4	495
110	76.5	138.8	215.3	220	60	220.5	345.5	566.0	570
120	83.4	165.2	248.6	250	65	238.9	405.5	644.4	645
130	90.4	193.8	284.2	285	70	257.3	470.3	727.6	730
					75	275.6	539.9	815.5	820
					80	294.0	614.3	908.3	910

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 3.4 m/s² [11.2 ft/s²] used to determine calculated sight distance.

Design Values

The stopping sight distance is the sum of the distance traversed during the brake reaction time and the distance to brake the vehicle to a stop. The computed distances for various speeds at the assumed conditions on level roadways are shown in Table 3-1 and were developed from the following equation:

Metric	U.S. Customary
$SSD = 0.278Vt + 0.039 \frac{V^2}{a}$	$SSD = 1.47Vt + 1.075 \frac{V^2}{a} \tag{3-2}$
where: SSD = stopping sight distance, m V = design speed, km/h t = brake reaction time, 2.5 s a = deceleration rate, m/s ²	where: SSD = stopping sight distance, ft V = design speed, mph t = brake reaction time, 2.5 s a = deceleration rate, ft/s ²

Stopping sight distances exceeding those shown in Table 3-1 should be used as the basis for design wherever practical. Use of longer stopping sight distances increases the margin for error for all drivers and, in particular, for those who operate at or near the design speed during wet pavement conditions. New pavements should have initially, and should retain, friction coefficients consistent with the deceleration rates used to develop Table 3-1.

Effect of Grade on Stopping

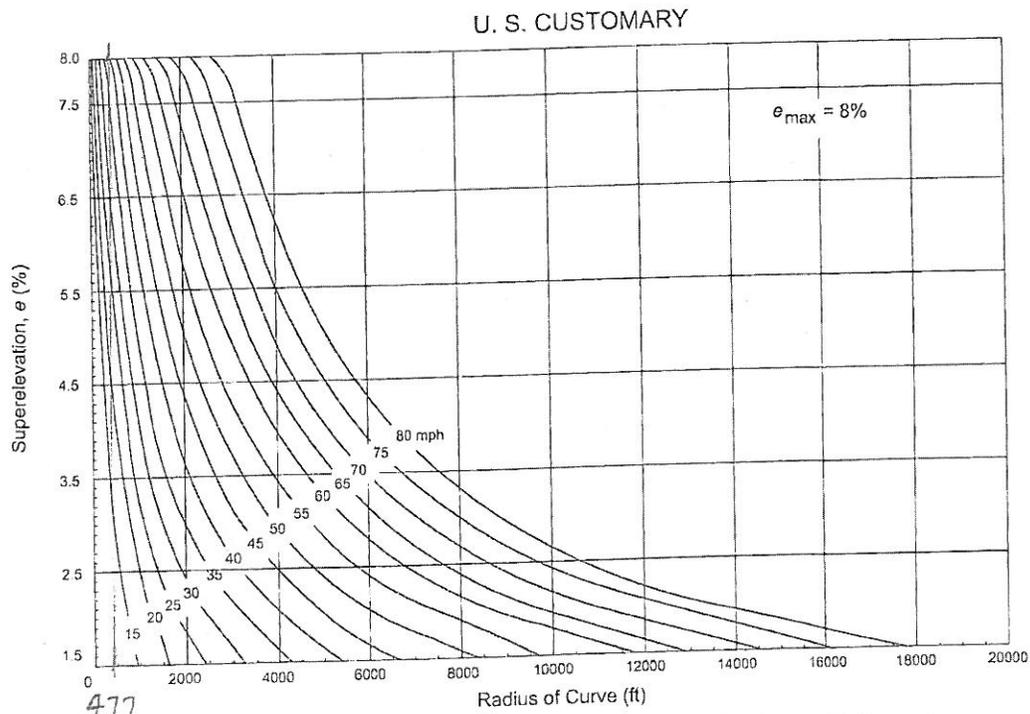
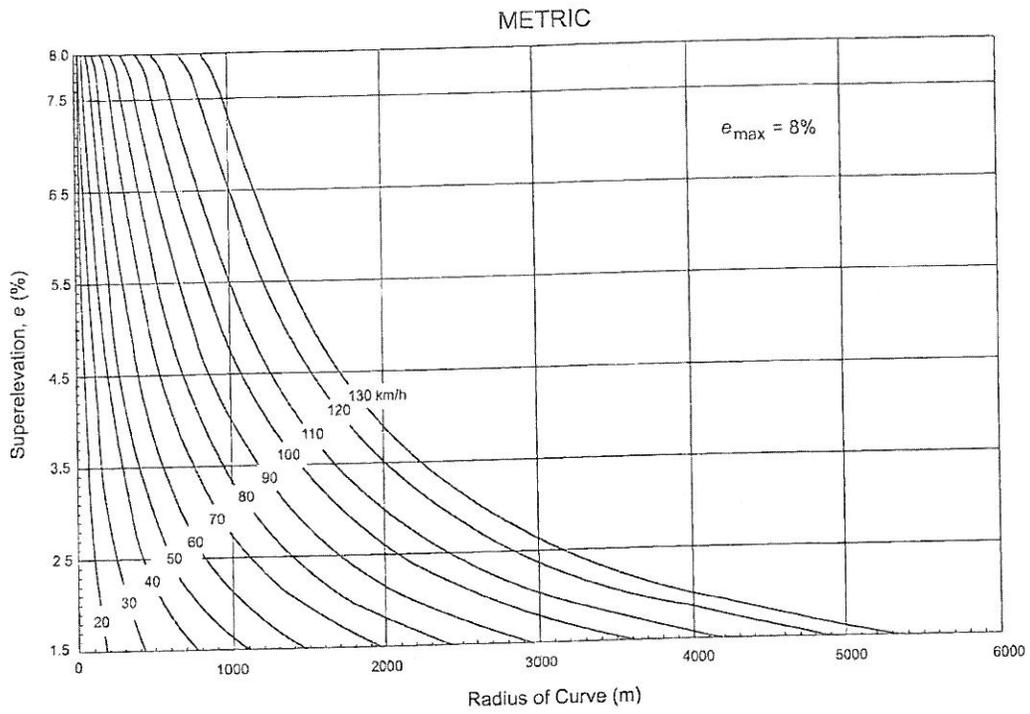
When a highway is on a grade, Equation 3-1 for braking distance is modified as follows:

Metric	U.S. Customary
$d_B = \frac{V^2}{254 \left[\left(\frac{a}{9.81} \right) \pm G \right]}$	$d_B = \frac{V^2}{30 \left[\left(\frac{a}{32.2} \right) \pm G \right]} \tag{3-3}$
<p>where:</p> <p>d_B = braking distance on grade, m</p> <p>V = design speed, km/h</p> <p>a = deceleration, m/s²</p> <p>G = grade, rise/run, m/m</p>	<p>where:</p> <p>d_B = braking distance on grade, ft</p> <p>V = design speed, mph</p> <p>a = deceleration, ft/s²</p> <p>G = grade, rise/run, ft/ft</p>

In this equation, G is the rise in elevation divided by the distance of the run and the percent of grade divided by 100, and the other terms are as previously stated. The stopping distances needed on upgrades are shorter than on level roadways; those on downgrades are longer. The stopping sight distances for various grades shown in Table 3-2 are the values determined by using Equation 3-3 in place of the second term in Equation 3-2. These adjusted sight distance values are computed for wet-pavement conditions using the same design speeds and brake reaction times used for level roadways in Table 3-1.

Table 3-2. Stopping Sight Distance on Grades

Design Speed (km/h)	Metric						Design Speed (mph)	U.S. Customary					
	Stopping Sight Distance (m)							Stopping Sight Distance (ft)					
	Downgrades			Upgrades				Downgrades			Upgrades		
	3 %	6 %	9 %	3 %	6 %	9 %		3 %	6 %	9 %	3 %	6 %	9 %
20	20	20	20	19	18	18	15	80	82	85	75	74	73
30	32	35	35	31	30	29	20	116	120	126	109	107	104
40	50	50	53	45	44	43	25	158	165	173	147	143	140
50	66	70	74	61	59	58	30	205	215	227	200	184	179
60	87	92	97	80	77	75	35	257	271	287	237	229	222
70	110	116	124	100	97	93	40	315	333	354	289	278	269
80	136	144	154	123	118	114	45	378	400	427	344	331	320
90	164	174	187	148	141	136	50	446	474	507	405	388	375
100	194	207	223	174	167	160	55	520	553	593	469	450	433
110	227	243	262	203	194	186	60	598	638	686	538	515	495
120	263	281	304	234	223	214	65	682	728	785	612	584	561
130	302	323	350	267	254	243	70	771	825	891	690	658	631
							75	866	927	1003	772	736	704
							80	965	1035	1121	859	817	782



477
 Figure 3-11. Design Superelevation Rates for Maximum Superelevation Rate of 8 Percent

Table 3-10b. Minimum Radii for Design Superelevation Rates, Design Speeds, and $e_{max} = 8\%$

		U.S. Customary													
e (%)	$V_d = 15$	$V_d = 20$	$V_d = 25$	$V_d = 30$	$V_d = 35$	$V_d = 40$	$V_d = 45$	$V_d = 50$	$V_d = 55$	$V_d = 60$	$V_d = 65$	$V_d = 70$	$V_d = 75$	$V_d = 80$	
	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	
NC	932	1640	2370	3240	4260	5410	6710	8150	9720	11500	12900	14500	16100	17800	
RC	676	1190	1720	2370	3120	3970	4930	5990	7150	8440	9510	10700	12000	13300	
2.2	605	1070	1550	2130	2800	3570	4440	5400	6450	7620	8600	9660	10800	12000	
2.4	546	959	1400	1930	2540	3240	4030	4910	5870	6930	7830	8810	9850	11000	
2.6	496	872	1280	1760	2320	2960	3690	4490	5370	6350	7180	8090	9050	10100	
2.8	453	796	1170	1610	2130	2720	3390	4130	4950	5850	6630	7470	8370	9340	
3.0	415	730	1070	1480	1960	2510	3130	3820	4580	5420	6140	6930	7780	8700	
3.2	382	672	985	1370	1820	2330	2900	3550	4250	5040	5720	6460	7260	8130	
3.4	352	620	911	1270	1690	2170	2700	3300	3970	4700	5350	6050	6800	7620	
3.6	324	572	845	1180	1570	2020	2520	3090	3710	4400	5010	5680	6400	7180	
3.8	300	530	784	1100	1470	1890	2360	2890	3480	4140	4710	5350	6030	6780	
4.0	277	490	729	1030	1370	1770	2220	2720	3270	3890	4450	5050	5710	6420	
4.2	255	453	678	955	1280	1660	2080	2560	3080	3670	4200	4780	5410	6090	
4.4	235	418	630	893	1200	1560	1960	2410	2910	3470	3980	4540	5140	5800	
4.6	215	384	585	834	1130	1470	1850	2280	2750	3290	3770	4310	4890	5530	
4.8	193	349	542	779	1060	1390	1750	2160	2610	3120	3590	4100	4670	5280	
5.0	172	314	499	727	991	1310	1650	2040	2470	2960	3410	3910	4460	5050	
5.2	154	284	457	676	929	1230	1560	1930	2350	2820	3250	3740	4260	4840	
5.4	139	258	420	627	870	1160	1480	1830	2230	2680	3110	3570	4090	4640	
5.6	126	236	387	582	813	1090	1390	1740	2120	2550	2970	3420	3920	4460	
5.8	115	216	358	542	761	1030	1320	1650	2010	2430	2840	3280	3760	4290	
6.0	105	199	332	506	713	965	1250	1560	1920	2320	2710	3150	3620	4140	
6.2	97	184	308	472	669	909	1180	1480	1820	2210	2600	3020	3480	3990	
6.4	89	170	287	442	628	857	1110	1400	1730	2110	2490	2910	3360	3850	
6.6	82	157	267	413	590	808	1050	1330	1650	2010	2380	2790	3240	3720	
6.8	76	146	248	386	553	761	990	1260	1560	1910	2280	2690	3120	3600	
7.0	70	135	231	360	518	716	933	1190	1480	1820	2180	2580	3010	3480	
7.2	64	125	214	336	485	672	878	1120	1400	1720	2070	2470	2900	3370	
7.4	59	115	198	312	451	628	822	1060	1320	1630	1970	2350	2780	3250	
7.6	54	105	182	287	417	583	765	980	1230	1530	1850	2230	2650	3120	
7.8	48	94	164	261	380	533	701	901	1140	1410	1720	2090	2500	2970	
8.0	38	76	134	214	314	444	587	758	960	1200	1480	1810	2210	2670	

Table 3-34. Design Controls for Crest Vertical Curves Based on Stopping Sight Distance

Metric				U.S. Customary			
Design Speed (km/h)	Stopping Sight Distance (m)	Rate of Vertical Curvature, K^a		Design Speed (mph)	Stopping Sight Distance (ft)	Rate of Vertical Curvature, K^a	
		Calculated	Design			Calculated	Design
20	20	0.6	1	15	80	3.0	3
30	35	1.9	2	20	115	6.1	7
40	50	3.8	4	25	155	11.1	12
50	65	6.4	7	30	200	18.5	19
60	85	11.0	11	35	250	29.0	29
70	105	16.8	17	40	305	43.1	44
80	130	25.7	26	45	360	60.1	61
90	160	38.9	39	50	425	83.7	84
100	185	52.0	52	55	495	113.5	114
110	220	73.6	74	60	570	150.6	151
120	250	95.0	95	65	645	192.8	193
130	285	123.4	124	70	730	246.9	247
				75	820	311.6	312
				80	910	383.7	384

^a Rate of vertical curvature, K , is the length of curve per percent algebraic difference in intersecting grades (A), $K = L/A$.

The values of K derived above when S is less than L also can be used without significant error where S is greater than L . As shown in Figure 3-42, extension of the diagonal lines to meet the vertical lines for minimum lengths of vertical curves results in appreciable differences from the theoretical only where A is small and little or no additional cost is involved in obtaining longer vertical curves.

For night driving on highways without lighting, the length of visible roadway is that roadway that is directly illuminated by the headlights of the vehicle. For certain conditions, the minimum stopping sight distance values used for design exceed the length of visible roadway. First, vehicle headlights have limitations on the distance over which they can project the light intensity levels that are needed for visibility. When headlights are operated on low beams, the reduced candlepower at the source plus the downward projection angle significantly restrict the length of visible roadway surface. Thus, particularly for high-speed conditions, stopping sight distance values exceed road-surface visibility distances afforded by the low-beam headlights regardless of whether the roadway profile is level or curving vertically. Second, for crest vertical curves, the area forward of the headlight beam's point of tangency with the roadway surface is shadowed and receives only indirect illumination.

Since the headlight mounting height (typically about 0.60 m [2.00 ft]) is lower than the driver eye height used for design (1.08 m [3.50 ft]), the sight distance to an illuminated object is controlled by the height of the vehicle headlights rather than by the direct line of sight. Any object within the shadow zone must be high enough to extend into the headlight beam to be directly illuminated. On the basis of Equation 3-41, the bottom of the headlight beam is about 0.40 m [1.30 ft] above the roadway at a distance ahead of the vehicle equal to the stopping sight distance. Although the vehicle headlight system does limit roadway

All data

12/29/2016

1/1/2007 through 12/16/16

Case_Numk	Road ID	Road Name	Accident Cause	Date	Fatality	Veh	Injury	Travel Direction	Event
B2005791	N- 4S	W Pioneers Bv	Lost Control	Saturday, July 28, 2012	<input type="checkbox"/>	1	<input type="checkbox"/>	EB	ROR
B0000921	N- 4S	W Pioneers Blvd	crossed Center/evade car	Saturday, February 06, 2010	<input type="checkbox"/>	2	<input type="checkbox"/>	EB/WB	ROR
A9005731	N- 4S	W Pioneers Blvd	Lost Control	Thursday, July 23, 2009	<input type="checkbox"/>	1	<input checked="" type="checkbox"/>	WB	ROR
A7005840	N- 4S	W Pioneers Blvd	Deer	Monday, July 02, 2007	<input type="checkbox"/>	1	<input type="checkbox"/>	WB	

*Crash Data
P. 1 of 10*

THE FOLLOWING INFORMATION IS REQUIRED FOR ALL ACCIDENTS



Indicate North by Arrow

Investigation made at scene?

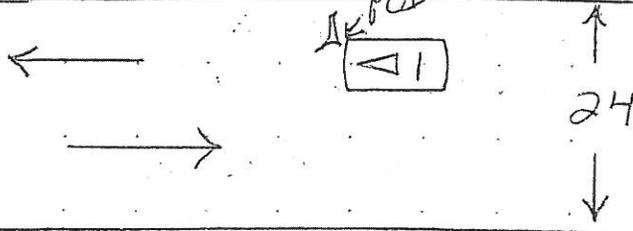
YES
 NO

INDICATE BY DIAGRAM WHAT HAPPENED

AGENCY CASE NO.

A7005840

10700 W. Pioneers Private Drive



W. Pioneers

POL 6' south of the north curb line of W. Pioneers.

1/4 mile East of [10700] Private Drive W. Pioneers

NOT to Scale

DESCRIPTION OF ACCIDENT BASED ON OFFICER'S INVESTIGATION

As DRU-1 was west bound on W. Pioneers she collided into a deer that ran onto the roadway. DRU-1 was traveling 35-40 mph prior to the accident.

PROPERTY	OBJECT DAMAGED	OWNER NAME	ADDRESS	PHONE	APPROX. COST OF DAMAGE
				() -	\$
PROPERTY	OBJECT DAMAGED	OWNER NAME	ADDRESS	PHONE	APPROX. COST OF DAMAGE
				() -	\$

WITNESSES	NAME	ADDRESS	PHONE
			() -
WITNESSES	NAME	ADDRESS	PHONE
			() -

VEHICLE MOVEMENT BEFORE COLLISION				POINT OF IMPACT AND MOST DAMAGED AREA				AIRBAG DEPLOYED		RESTRAINT USE		TOTAL OCCUPANTS				
VEH NO.	N	S	E	W	ROAD OR HIGHWAY NAME				VEHICLE 1		VEHICLE 1		VEH 1	VEH 2		
1				X	W. Pioneers				4				2			
2									4							
1	011	06 Turning left		VEHICLE 1		VEHICLE 2		1 Deployed - front		1 None used - vehicle occupant		ALCOHOL TESTING		Driver No. 1	Driver No. 2	Pedestrian
2		07 Making U-turn		POINT OF IMPACT	012	POINT OF IMPACT		2 Deployed - side		2 Lap & shoulder belt used		ALCOHOL LEVEL TESTED		Y	Y	Y
		08 Entering traffic lane		MOST DAMAGED AREA	012	MOST DAMAGED AREA		3 Deployed - both front/side		3 Shoulder belt only used		BAC LEVEL		N	N	N
		09 Leaving traffic lane		00 None		02	03	4 Not deployed		4 Lap belt only used		ALCOHOL/DRUGS SUSPECTED				
		10 Parked		09 Top & windows		04		5 Not applicable/ No airbag available		5 Child safety seat used		Driver No. 1				
		11 Slowing or stopped in traffic		10 Undercarriage		05		6 Unknown		6 Restraint use unknown		Driver No. 2				
		12 Other		11 Total (all areas)		06						1 Neither alcohol nor drugs suspected				
		13 Unknown		12 Other		08	07					2 Yes - alcohol suspected				

OFFICER NO. 902105 TROOP/TEAM/BEAT DEPARTMENT Lenoir County Sheriff's Office

INVESTIGATOR NAME (Print or Type) DATE OF REPORT 07/02/2007

5/16
2/14

209033481

State of Nebraska Investigator's Motor Vehicle Accident Report

Sheet 1 of 1

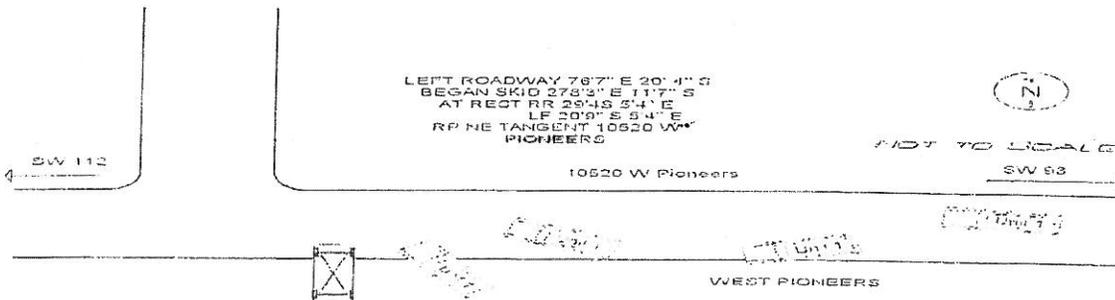
001	Total Number of Vehicles	Local No./ District	Agency Case No. A9005731	HIT & RUN? <input type="radio"/> YES <input checked="" type="radio"/> NO	INVESTIGATION MADE AT SCENE? <input checked="" type="radio"/> YES <input type="radio"/> NO	L	1			
A1	DATE OF ACCIDENT	07-23-2009		TIME OF ACCIDENT (In Military Time) 1345	STATE USE ONLY N-45 G Lost Control W.P. 1					
A2	PLACE OF ACCIDENT	COUNTY	Lancaster	POLICE NOTIFIED	1348	LATITUDE ROR				
B	ROAD ON WHICH ACCIDENT OCCURRED	STREET/ HIGHWAY NO. West Pioneers		PRIVATE PROPERTY? <input type="radio"/> YES <input checked="" type="radio"/> NO	LONGITUDE					
C	DISTANCE FROM MILEPOST	FEET	N S E W OF MILEPOST	HIGHWAY NO.	SHOULD LOCATION HAVE ENGINEERING STUDY? <input type="radio"/> YES <input checked="" type="radio"/> NO					
D	IF AT INTERSECTION		IF NOT AT INTERSECTION							
1	NAME OF INTERSECTING ROADWAY		FEET	X MILES	N S E W	OF NEAREST STREET, BRIDGE, RAILROAD CROSSING				
			.2	X		SW 98TH STREET				
V1/M	IF ACCIDENT WAS OUTSIDE CITY LIMITS, INDICATE DISTANCE FROM NEAREST TOWN									
12	MILES	N S E W	AND MILES	N S E W	OF NEAREST CITY OR TOWN					
	8.2	X	3		Lincoln - 1425					
E	R. WORK ZONE CODES	R1 R2 R3 R4	S. PEDESTRIAN CLASSIFICATION CODES	S1 S2 S3 S4 S5-a S5-b S6-a S6-b	DOES ACCIDENT INVOLVE DAMAGE TO STATE DEPT. OF ROADS' PROPERTY? <input type="radio"/> YES <input checked="" type="radio"/> NO					
4	1									
VEHICLE NO. 1										
F	DRIVER LICENSE NO.	H12513295		STATE (Of License)	NE	SEX	<input checked="" type="radio"/> FEMALE <input type="radio"/> MALE			
V1/N	DRIVER	KOURTNIE K LAHRS		PHONE	(970) 417-1604	LOCAL NO.				
01	DRIVER ADDRESS	4875 sw 112, , Denton, NE, 68339		DATE OF BIRTH (MM/DD/YYYY)	08-14-1981					
V2/N	OWNER	Powell S Andrew		PHONE	(970) 417-1604	LOCAL NO.				
G	OWNER ADDRESS	4875 sw 112, , Denton, NE, 68339		CITATION	<input type="radio"/> YES <input checked="" type="radio"/> NO	CITATION NO.				
2	LICENSE PLATE	PA NO.	511RAL	YEAR (Plate Expires)	2010	STATE (Of Plate)	CO			
H	VEHICLE	YEAR	MAKE	MODEL	BODY STYLE	COLOR	ESTIMATED DAMAGE <input checked="" type="radio"/> TOTALED \$ 3000			
V1/O	2001	2001	Willys-Jeep	Cherokee	Compact Utility	YEL				
V1/O	VEHICLE ID NO. (VIN)	1J4FF48S91L583572		INSURANCE COMPANY Progressive						
V2/O	TOWED TO	Home		TOWED BY	Mike's 66					
V2/O	POLICY NO.	307735270								
VEHICLE NO. 2										
I	DRIVER LICENSE NO.			STATE (Of License)		SEX	<input type="radio"/> FEMALE <input type="radio"/> MALE			
V1/P	DRIVER			PHONE						
1	DRIVER ADDRESS			DATE OF BIRTH (MM/DD/YYYY)						
V2/P	OWNER			PHONE						
J	OWNER ADDRESS			CITATION	<input type="radio"/> YES <input type="radio"/> NO	CITATION NO.				
04	LICENSE PLATE	NO.		YEAR (Plate Expires)		STATE (Of Plate)				
V1/O	VEHICLE	YEAR	MAKE	MODEL	BODY STYLE	COLOR	ESTIMATED DAMAGE <input type="radio"/> TOTALED \$			
V2/O	VEHICLE ID NO. (VIN)			INSURANCE COMPANY						
K	TOWED TO			TOWED BY	POLICY NO.					
01										
Complete this section for all injured persons (Complete a continuation report, if more than three were injured)										
VEH. #	NAME	ADDRESS		DATE OF BIRTH (MM/DD/YYYY)	1	2	3	4	5	SEX
1	Kourtnie K Lahrs	4875 Sw 112, , Denton, Ne, 68339		08-14-1981	01	1	07	3	2	F
VEH. #	LOCAL NO.	MEDICAL FACILITY NAME	EMS SERVICE NAME	EMS RUN REPORT NO.						
1		Lancaster	Other	11723						
VEH. #	NAME	ADDRESS		DATE OF BIRTH (MM/DD/YYYY)	1	2	3	4	5	SEX
VEH. #	LOCAL NO.	MEDICAL FACILITY NAME	EMS SERVICE NAME	EMS RUN REPORT NO.						

THE FOLLOWING INFORMATION IS REQUIRED FOR ALL ACCIDENTS

INDICATE BY DIAGRAM WHAT HAPPENED

AGENCY CASE NO.
A9005731

Indicate North by Arrow



DESCRIPTION OF ACCIDENT BASED ON OFFICER'S INVESTIGATION

PROPERTY	OBJECT DAMAGED	OWNER NAME	ADDRESS	PHONE	APPROX. COST OF DAMAGE
	Mailbox Post	Arlyn D Copley	10520 West Pioneers, , Denton, NE, 68339	() 797-8909	\$ 25
PROPERTY	OBJECT DAMAGED	OWNER NAME	ADDRESS	PHONE	APPROX. COST OF DAMAGE
				()	\$

WITNESSES	NAME	ADDRESS	PHONE
	()		()
WITNESSES	NAME	ADDRESS	PHONE
	()		()

VEHICLE MOVEMENT BEFORE COLLISION				POINT OF IMPACT AND MOST DAMAGED AREA				AIRBAG DEPLOYED VEHICLE 1		RESTRAINT USE VEHICLE 1		TOTAL OCCUPANTS							
VEH NO.	N	S	E	W	ROAD OR HIGHWAY NAME				VEH 1		VEH 2		Pedestrian						
1				X	West Pioneers				4		1		ALCOHOL TESTING						
2													ALCOHOL LEVEL TESTED						
1	01	05 Turning left		06		07 Making U-turn		08		09		10		ALCOHOL/ DRUGS SUSPECTED					
2		08 Entering traffic lane		11		09 Leaving traffic lane		12		13		14		BAC LEVEL					
01 Essentially straight ahead				02 Backing				03 Changing lanes				04 Overtaking/ Passing				05 Turning right			
06 Turning left				07 Making U-turn				08 Entering traffic lane				09 Leaving traffic lane				10 Parked			
11 Slowing or stopped in traffic				12 Other				13 Unknown											

OFFICER I/O 902131	TROOP/ TEAM/ REAT	DEPARTMENT 5500 Lancaster County Sheriff Department	Photographs taken? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
INVESTIGATOR NAME (Print or type) A. Drew Bolzer		INVESTIGATOR SIGNATURE Digital Certificate with Nebraska Crime Commission	DATE OF REPORT 07/23/2009

State of Nebraska
Investigator's Motor Vehicle Accident Report

Sheet 1 of 1

2	Total Number of Vehicles	Local No./ District	Agency Case No. B0000921	HIT & RUN? YES NO	INVESTIGATION MADE AT SCENE? YES NO				
A1	DATE OF ACCIDENT	M M / D D / Y Y Y Y	S M T W T H F S	TIME OF ACCIDENT	STATE USE ONLY				
A2	PLACE OF ACCIDENT	COUNTY	CITY	POLICE NOTIFIED	LATITUDE				
B	ROAD ON WHICH ACCIDENT OCCURRED	STREET/ HIGHWAY NO.	ONE-WAY STREET?	LONGITUDE					
C	DISTANCE FROM MILEPOST	FEET	N S E W OF MILEPOST	HIGHWAY NO.	SHOULD LOCATION HAVE ENGINEERING STUDY?				
D	IF AT INTERSECTION		IF NOT AT INTERSECTION						
V1/M	IF ACCIDENT WAS OUTSIDE CITY LIMITS, INDICATE DISTANCE FROM NEAREST TOWN								
V2/M	MILES	N S E W	AND MILES	N S E W	OF NEAREST CITY OR TOWN				
E	R. WORK ZONE CODES	R1 R2 R3 R4	S. PEDESTRIAN CLASSIFICATION CODES	S1 S2 S3 S4 S5-a S5-b S6-a S6-b	DOES ACCIDENT INVOLVE DAMAGE TO STATE DEPT. OF ROADS' PROPERTY?				
F	VEHICLE NO. 1								
V1/N	DRIVER LICENSE NO.	H13332829		STATE (Of License)	NE				
V2/N	DRIVER	Kathleen A. Kean		PHONE	(402) 560-7544				
V3/N	DRIVER ADDRESS	4601 SW 112th Denton, NE 68339		DATE OF BIRTH (MM/DD/YYYY)	11/11/1992				
V4/N	OWNER	Patrick & Shawn Kean		PHONE	(402) 560-7544				
V5/N	OWNER ADDRESS	4601 SW 112th Denton, NE 68339		CITATION	YES NO				
V6/N	LICENSE PLATE NO.	R6X668		YEAR (Plate Expires)	2010				
V7/N	VEHICLE	YEAR	MAKE	MODEL	BODY STYLE				
V8/N	VEHICLE ID NO. (VIN)	1N4BU31E7PC106154	1993	Nissan	Altima 4dr				
V9/N	TOWED TO	TOWED BY	INSURANCE COMPANY	POLICY NO.	ESTIMATED DAMAGE				
V10/N			Geico	93172592	TOTALED \$1500				
V11/N	VEHICLE NO. 2								
V12/N	DRIVER LICENSE NO.	602151917		STATE (Of License)	NE				
V13/N	DRIVER	Stephanie A. Spearman		PHONE	(402) 416-8010				
V14/N	DRIVER ADDRESS	1916 Pioneers Rd Pleasant Dale, NE 68423		DATE OF BIRTH (MM/DD/YYYY)	11/19/1967				
V15/N	OWNER	Stephanie A. Spearman		PHONE	(402) 416-8010				
V16/N	OWNER ADDRESS	1916 Pioneers Rd Pleasant Dale, NE 68423		CITATION	YES NO				
V17/N	LICENSE PLATE NO.	LV2BIKE		YEAR (Plate Expires)	2010				
V18/N	VEHICLE	YEAR	MAKE	MODEL	BODY STYLE				
V19/N	VEHICLE ID NO. (VIN)	JTEBT17R278039271	2007	Toyota	Yrumer 1111				
V20/N	TOWED TO	TOWED BY	INSURANCE COMPANY	POLICY NO.	ESTIMATED DAMAGE				
V21/N			Geico	4091-48-81-99	TOTALED \$2000				
Complete this section for all injured persons (Complete a continuation report, if more than three were injured)									
VEH. #	NAME	ADDRESS	DATE OF BIRTH (MM/DD/YYYY)	1	2	3	4	5	SEX
				Seat Position	Eject	Body Region	Injury Sev.	Trans.	M F
	LOCAL NO.	MEDICAL FACILITY NAME	EMS SERVICE NAME	EMS RUN REPORT NO.					
VEH. #	NAME	ADDRESS	DATE OF BIRTH (MM/DD/YYYY)	1	2	3	4	5	SEX
				Seat Position	Eject	Body Region	Injury Sev.	Trans.	M F
	LOCAL NO.	MEDICAL FACILITY NAME	EMS SERVICE NAME	EMS RUN REPORT NO.					
VEH. #	NAME	ADDRESS	DATE OF BIRTH (MM/DD/YYYY)	1	2	3	4	5	SEX
				Seat Position	Eject	Body Region	Injury Sev.	Trans.	M F
	LOCAL NO.	MEDICAL FACILITY NAME	EMS SERVICE NAME	EMS RUN REPORT NO.					

THE FOLLOWING INFORMATION IS REQUIRED FOR ALL ACCIDENTS

INDICATE BY DIAGRAM WHAT HAPPENED

AGENCY CASE NO.

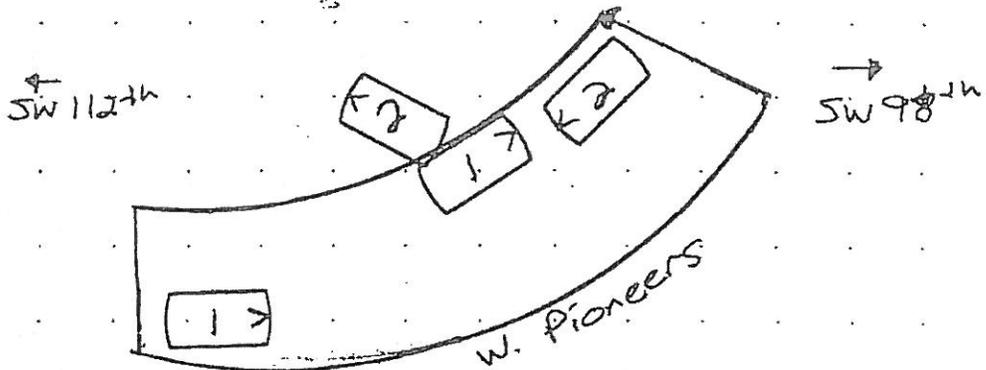
BC0000921



Indicate North by Arrow

not drawn to scale

No measurements taken due to inclement weather



veh #1 came to rest in w/b lane & on edge of roadway

DESCRIPTION OF ACCIDENT BASED ON OFFICER'S INVESTIGATION

Driver #1 reports she was on W. Pioneers at approximately 10 mph going around the bend. Driver #1 reports her vehicle began sliding on the ice/snow and she couldn't get it corrected. Driver #1 stated her vehicle slid into the westbound lane and collided with vehicle #2. Driver #2 reports she was w/b on W. Pioneers at approx. 30 mph and observed vehicle #1 eastbound sliding into her lane. Driver #2 stated she swerved right to take the ditch and avoid the collision, but was unable to do so. Vehicle #2 struck an embankment in the ditch.

PROPERTY	OBJECT DAMAGED	OWNER NAME	ADDRESS	PHONE	APPROX. COST OF DAMAGE
				() -	\$
WITNESSES	NAME	ADDRESS	PHONE		
			() -		

VEHICLE MOVEMENT BEFORE COLLISION				POINT OF IMPACT AND MOST DAMAGED AREA				AIRBAG DEPLOYED VEHICLE 1		RESTRAINT USE VEHICLE 1		TOTAL OCCUPANTS			
VEH NO.	N	S	E/W	VEHICLE 1		VEHICLE 2						Driver No. 1	Driver No. 2	Pedestrian	
1		X	W. Pioneers	POINT OF IMPACT 016	POINT OF IMPACT 016	4		2		Y	Y	Y	1	1	1
2		X	W. Pioneers	MOST DAMAGED AREA 016	MOST DAMAGED AREA 016	4		2		NX	NX	N			
1	011		06 Turning left	00 None	02 Top & windows	01		05		1 None used - vehicle occupant		ALCOHOL/DRUGS SUSPECTED			
2	011		08 Entering traffic lane	09 Top & windows	10 Undercarriage	08		06		2 Lap & shoulder belt used		1 Neither alcohol nor drugs suspected			
			01 Essentially straight ahead	11 Total (all areas)	12 Other					3 Shoulder belt only used		2 Yes - alcohol suspected			
			02 Backing							4 Lap belt only used		3 Yes - drugs suspected			
			03 Changing lanes							5 Child safety seat used		4 Yes - alcohol & drugs suspected			
			04 Overtaking/Passing							6 Child booster seat used		5 Unknown			
			05 Turning right							7 DOT approved helmet used					
			13 Unknown							8 Costume helmet used					
										9 Restraint use unknown					

OFFICER NO. 902109 DEPARTMENT Lancaster Co. Sheriff

INVESTIGATOR NAME (Print or Type) Jeff Moeller INVESTIGATOR SIGNATURE [Signature]

Photographs taken? YES NO

DATE OF REPORT 2/6/2010

212033953

State of Nebraska Investigator's Motor Vehicle Accident Report

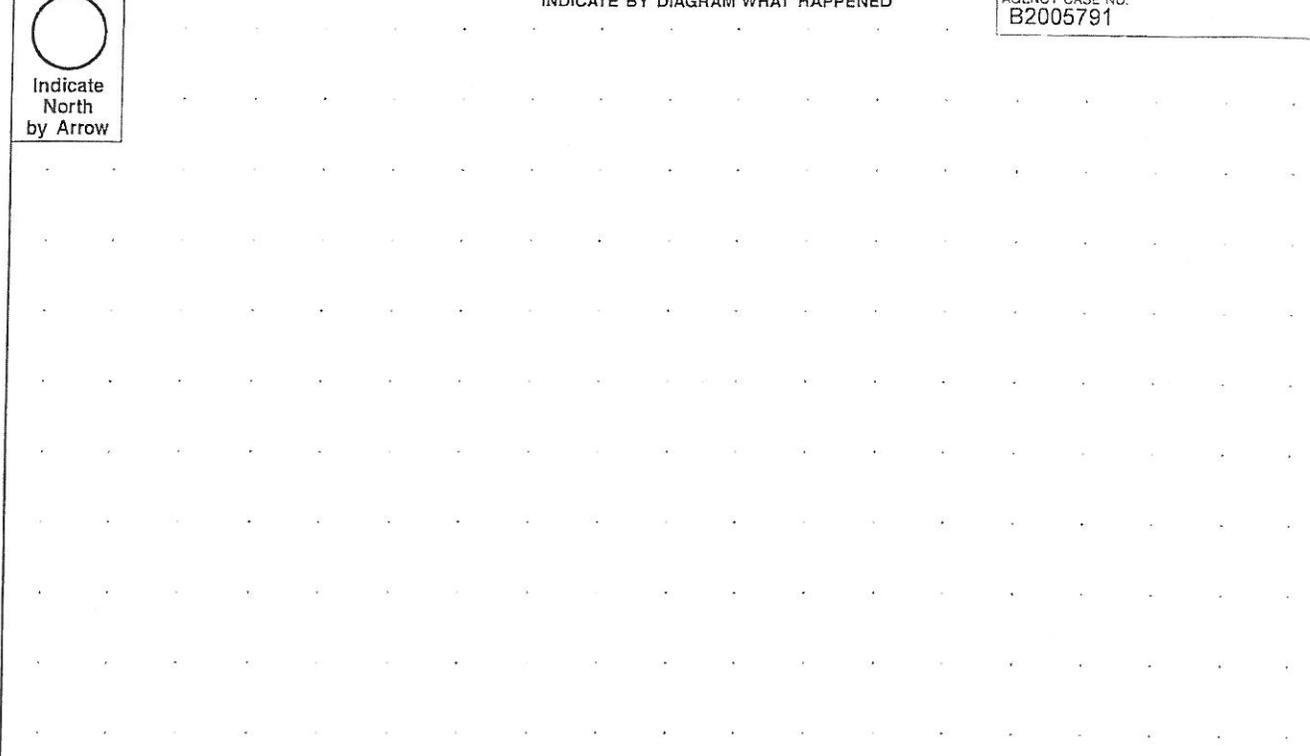
Sheet 1 of 1

001	Total Number of Vehicles	Local No./ District	Agency Case No. B2005791	HIT & RUN? <input type="radio"/> YES <input checked="" type="radio"/> NO	INVESTIGATION MADE AT SCENE? <input checked="" type="radio"/> YES <input type="radio"/> NO	L	1			
A1	DATE OF ACCIDENT	M M / D D / Y Y Y Y 07-28-2012		TIME OF ACCIDENT (In Military Time) 1230	STATE USE ONLY					
A2	PLACE OF ACCIDENT	COUNTY Lancaster	POLICE NOTIFIED 1506	LATITUDE						
B	CITY			PRIVATE PROPERTY? <input type="radio"/> YES <input checked="" type="radio"/> NO	LONGITUDE					
91	ROAD ON WHICH ACCIDENT OCCURRED	STREET/ HIGHWAY NO	WEST PIONEERS BLVD		ONE-WAY STREET? <input type="radio"/> YES <input checked="" type="radio"/> NO	SHOULD LOCATION HAVE ENGINEERING STUDY? <input type="radio"/> YES <input checked="" type="radio"/> NO				
C	DISTANCE FROM MILEPOST	FEET	N S E W	OF M/LEPOST	HIGHWAY NO.					
D	IF AT INTERSECTION		IF NOT AT INTERSECTION		NAME OF INTERSECTING ROADWAY					
5					.2 X SOUTHWEST 98TH STREET					
V1/M	IF ACCIDENT WAS OUTSIDE CITY LIMITS, INDICATE DISTANCE FROM NEAREST TOWN									
V2/M	MILES	N S E W	AND MILES	N S E W	OF NEAREST CITY OR TOWN	Lincoln - 1425				
10	3	X	8	X						
E	R. WORK ZONE CODES	R1 R2 R3 R4	S. PEDESTRIAN CLASSIFICATION CODES	S1 S2 S3 S4 S5-a S5-b S6-a S6-b	DOES ACCIDENT INVOLVE DAMAGE TO STATE DEPT. OF ROADS' PROPERTY? <input type="radio"/> YES <input checked="" type="radio"/> NO					
4	1									
VEHICLE NO. 1										
F	DRIVER LICENSE NO.	H13498767		STATE (Of License)	NE	SEX	<input type="radio"/> FEMALE <input checked="" type="radio"/> MALE			
V1/N	DRIVER	MATTHEW J KEAN		PHONE	(402) 450-7401		LOCAL NO.			
V2/N	DRIVER ADDRESS	4601 SW 112TH, DENTON, NE, 68339		DATE OF BIRTH (MM / DD / YYYY)	02-26-1995		V1/1			
01	OWNER	PATRICK J KEAN		PHONE	(402) 314-2375		08			
G	OWNER ADDRESS	4601 SW 112, DENTON, NE, 68339		CITATION	<input checked="" type="radio"/> YES <input type="radio"/> NO	CITATION NO.	38			
2	LICENSE PLATE	PA	NO.	SEC848	YEAR (Plate Expires)	2013	STATE (Of Plate)			
H	VEHICLE	YEAR	MAKE	MODEL	BODY STYLE	COLOR	ESTIMATED DAMAGE			
5	2001	Dodge	GSP	Mini van	BLU	<input checked="" type="radio"/> TOTALED \$	01			
V1/O	VEHICLE ID NO. (VIN)	1B4GP443X1B152540		INSURANCE COMPANY	ALLSTATE					
V2/O	TOWED TO	TOWED BY		POLICY NO.	92191246302/20					
4	VEHICLE NO. 2									
I	DRIVER LICENSE NO.			STATE (Of License)		SEX	<input type="radio"/> FEMALE <input type="radio"/> MALE			
V1/P	DRIVER			PHONE	()		LOCAL NO.			
V2/P	DRIVER ADDRESS			DATE OF BIRTH (MM / DD / YYYY)						
01	OWNER			PHONE	()		LOCAL NO.			
J	OWNER ADDRESS			CITATION	<input type="radio"/> YES <input type="radio"/> NO	CITATION NO.				
01	LICENSE PLATE	NO.		YEAR (Plate Expires)		STATE (Of Plate)				
V1/O	VEHICLE	YEAR	MAKE	MODEL	BODY STYLE	COLOR	ESTIMATED DAMAGE			
V2/O	3						<input type="radio"/> TOTALED \$			
01	VEHICLE ID NO. (VIN)			INSURANCE COMPANY						
K	TOWED TO	TOWED BY		POLICY NO.						
01	Complete this section for all injured persons (Complete a continuation report, if more than three were injured)									
VEH. #	NAME	ADDRESS		DATE OF BIRTH (MM / DD / YYYY)	1	2	3	4	5	SEX
					Seat Position	Eject	Body Region	Injury Sev.	Trans.	M F
	LOCAL NO.	MEDICAL FACILITY NAME		EMS SERVICE NAME	EMS RUN REPORT NO.					
VEH. #	NAME	ADDRESS		DATE OF BIRTH (MM / DD / YYYY)	1	2	3	4	5	SEX
					Seat Position	Eject	Body Region	Injury Sev.	Trans.	M F
	LOCAL NO.	MEDICAL FACILITY NAME		EMS SERVICE NAME	EMS RUN REPORT NO.					
VEH. #	NAME	ADDRESS		DATE OF BIRTH (MM / DD / YYYY)	1	2	3	4	5	SEX
					Seat Position	Eject	Body Region	Injury Sev.	Trans.	M F
	LOCAL NO.	MEDICAL FACILITY NAME		EMS SERVICE NAME	EMS RUN REPORT NO.					

THE FOLLOWING INFORMATION IS REQUIRED FOR ALL ACCIDENTS

INDICATE BY DIAGRAM WHAT HAPPENED

AGENCY CASE NO.
B2005791



DESCRIPTION OF ACCIDENT BASED ON OFFICER'S INVESTIGATION

Vehicle 1 was Eastbound on West Pioneers about .2 miles West of SW 98th street. Driver of vehicle 1 stated that while he was driving he realized he was on the wrong side of the road. Driver 1 swerved to avoid a head-on collision with another vehicle, but over corrected and ended up in the South ditch where Vehicle 1 rolled completely over, landing right-side up. Vehicle 1 landed on a turn post causing \$75 damage. Driver of vehicle 1 also stated that he may have been going too fast for the turn. No injuries.

PROPERTY	OBJECT DAMAGED TURN SIGN POST	OWNER NAME LANCASTER COUNTY ENGINEERING . 444 CHERRY CREEK BLDG C., LINCOLN, NE, 68528	ADDRESS	PHONE (402) 441-7661	APPROX. COST OF DAMAGE \$ 75
	OBJECT DAMAGED	OWNER NAME	ADDRESS	PHONE ()	APPROX. COST OF DAMAGE \$
WITNESSES	NAME	ADDRESS	PHONE ()		
	NAME	ADDRESS	PHONE ()		

VEHICLE MOVEMENT BEFORE COLLISION				POINT OF IMPACT AND MOST DAMAGED AREA				AIRBAG DEPLOYED VEHICLE 1		RESTRAINT USE VEHICLE 1		TOTAL OCCUPANTS			
VEH NO.	N	S	E	W	ROAD OR HIGHWAY NAME				VEH 1		001	VEH 2	ALCOHOL TESTING		
1			X		WEST PIONEER				4		2		Driver No. 1	Driver No. 2	Pedestrian
2													Y	Y	Y
1	06	06 Turning left			VEHICLE 1		VEHICLE 2		1 Deployed - front		1 None used - vehicle occupant		N	X	N
2		07 Making U-turn			POINT OF IMPACT	02	POINT OF IMPACT		2 Deployed - side		2 Lap & shoulder belt used				
		08 Entering traffic lane			MOST DAMAGED AREA	02	MOST DAMAGED AREA		3 Deployed - both front/side		3 Shoulder belt only used				
		09 Leaving traffic lane			00 None		02	03	4 Not deployed		4 Lap belt only used				
		10 Parked			09 Top & windows		04	05	5 Not applicable/ No airbag available		5 Child safety seat used				
		11 Slowing or stopped in traffic			10 Undercarriage		06	07	6 Unknown		6 Child booster seat used				
		12 Other			11 Total (all areas)		08	09	7 DOT approved helmet used		7 Costume helmet used				
		13 Unknown			12 Other		01	02	8 Restraint use unknown		8 Restraint use unknown				

OFFICER NO. 902148	THOOP/TEAM/BEAT	DEPARTMENT 5500 Lancaster County Sheriff Department	Photographs taken? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
INVESTIGATOR NAME (Print or Type) Deputy Eric Schilmoeller	INVESTIGATOR SIGNATURE Digital Certificate with Nebraska Crime Commission	DATE OF REPORT 08/03/2012	

