



# Oklahoma Department of Transportation

Environmental Programs Division

Office 521-3050 Fax 522-5193

## Programmatic/Individual Categorical Exclusion

<b>X</b>	<b>PCE</b>		<b>ICE</b>
----------	------------	--	------------

Date	<b>24 March 2016</b>	Project Number	<b>J2-9849(004)</b>
County	<b>Kingfisher</b>	State Job Piece No:	<b>29849(04)</b>
NEPA Project Manager	<b>T. Vermillion</b>	Phone Number	<b>405-521-2676</b>
ODOT Field Division	<b>IV</b>	Bridge NBI No. (For County & State Projects) & Location No. (County Projects Only)	<b>Bridge A: 16167 Bridge B: 16159</b>
Project Description from JPINFO	<b>Bridge and Approaches: US 81: Northbound and southbound Bridges over the Union Pacific Railroad 5.3 miles north of SH 33.</b>		
<b>This project is included in: (Check all applicable ones)</b>	<b>X</b>	<b>State 8 Year Construction Program</b>	
		<b>County 5 Year Construction Program</b>	
		<b>State Transportation Improvement Program</b>	
<b>This project is in the Metropolitan Transportation Improvement Program (If applicable) (Check applicable one)</b>		<b>YES</b>	
	<b>X</b>	<b>NOT APPLICABLE</b>	

The Oklahoma Department of Transportation (ODOT) has completed the environmental analysis and review of the referenced project. ODOT has determined that this project does not individually or cumulatively have a significant impact of the environment as defined by the National Environmental Policy Act (NEPA) or involve unusual circumstances as defined in 23 CFR 771.117(b) and is therefore excluded from the requirements to prepare an Environmental Assessment or Environmental Impact Assessment.

<b>Existing Conditions</b> (Describe existing bridge width, approach roadway width, etc., traffic (current and projected), Existing Problems such as sufficiency rating):
<b>The existing southbound (Bridge A NBI #16167) and northbound (Bridge B NBI #16159) bridges on US 81 over the UP railroad are both 30 ft. wide with approach roadway widths of 38 ft. The current Average Annual Daily Traffic (AADT) is 7,200 vehicles per day (vpd) with a 20 year future AADT of 10,100 vpd. The sufficiency ratings of Bridge A and B are 72 and they are not deficient but are fracture critical.</b>
<b>Purpose &amp; Need</b> (Why the project is needed such as structural deficiency or bridge does not meet current state/federal standards for width or vertical clearance or the roadway has sharp horizontal curves or sight distance problems or narrow shoulders which do not meet current standards):
<b>The purpose and need is to correct two bridges that are at risk of becoming structurally deficient.</b>
<b>Alternatives considered &amp; Proposed Improvement</b> (Provide reason why an offset alignment to one side is

*selected vs the other side, Proposed construction such as roadway and bridge widths, AND mention whether the road will be open to traffic during construction.):*

**The proposed project consists of replacing both bridges on current alignment with 2 bridges that have a 38 ft. clear roadway width and approach roadways consisting of 2-12 ft. wide driving lanes with paved 10 ft. outside shoulders and 2 ft. inside shoulders. The bridges will be constructed while leaving the highway open by utilizing cross-overs. All work will be within the existing right of way.**

**Did the project have public involvement** *(Check the applicable items and include public involvement summary and supporting documents in the appendix)*

<b>X</b>	Property Owner Notification		Road Closure Letter		Public/Stakeholder Meeting
	Legal Notice/Website Posting		Small City Letter		None

**All documentation, analyses, and agency coordination regarding this Categorical Exclusion are attached to this document and maintained in the project file at the Oklahoma Department of Transportation, Environmental Programs Division.**

**Criteria Identified in Section III.b.3. of the 2011 FHWA/ODOT Programmatic Agreement for Processing Categorical Exclusions that would require Individual Review and Approval by FHWA:**

**Check Yes or No below. If the answer to any of the questions below is Yes, an Individual CE will be required.**

Description/Question	Yes	No
<b>Item(a)</b>		
1. Does the project involve residential or commercial relocation?		<b>X</b>
2. Does the project involve acquisition of right-of-way not adjacent to the existing facility?		<b>X</b>
3. Does the project involve property in which another Federal Agency or Federally Recognized Tribe has ownership, oversight or any other encumbrance?		<b>X</b>
<b>Item(b)</b>		
Does the project involve a determination of adverse effect by Oklahoma State Preservation Office (SHPO) or a designated Tribal Historic Preservation (THPO) in accordance with Section 106? An exception to this would apply if adverse effects are addressed programmatically as part of a previously executed general Section 106 Programmatic Agreement with SHPO, FHWA and others, and a project-specific MOA will not be required.		<b>X</b>
<b>Item (c)</b>		
Does the project involve a Programmatic Section 4(f) or <i>de minimis</i> finding which has not been previously approved by FHWA?		<b>X</b>
<b>Item (d)</b>		
Does the project involve a Section 6(f) property?		<b>X</b>
<b>Item (e)</b>		
Does the project involve any impact on Noise Abatement Criteria (NAC) Category A, B, C or D receptors?		<b>X</b>
<b>Item (f)</b>		
1. Does the project involve a finding of "may effect, likely to adversely affect" to a federally listed endangered or threatened species or its critical habitat determined during the Section 7 Informal Consultation Process? The exception to this is the American Burying Beetle or any other species which has been addressed under a separate formal programmatic agreement.		<b>X</b>
2. Does the project involve a Section 7 Formal Consultation Process?		
<b>Item (g)</b>		
Does the project require an Individual Section 404 Permit (This is for major River Crossings, waters or wetlands impact greater than 0.5 AC, Projects with Formal Consultation, or others as determined by USACE)?		<b>X</b>

Criteria Identified in Section III.b.3. of the 2011 FHWA/ODOT Programmatic Agreement for Processing Categorical Exclusions that would require Individual Review and Approval by FHWA:		
Check Yes or No below. If the answer to any of the questions below is Yes, an Individual CE will be required.		
Description/Question	Yes	No
Item (h)		
Does the project require a Coast Guard Permit?		X
Item (i)		
Does the project involve construction across or adjacent to a river designated as a component in the National System of Wild and Scenic Rivers?		X
Item (j)		
Does the project involve an adverse impact on prime farmland where Natural Resources Conservation Agency (NRCS) has required consideration of alternatives and measures to avoid and minimize impacts?		X
Item (k)		
Does the project involve increase to the base 100 Year floodplain in a regulatory floodway (Zone A-E in a FEMA Map) that will require a flood map revision as determined by the appropriate state or local authority?		X
Item (l)		
Does the project involve any known Superfund site?		X
Item (m)		
Does the project involve any permanent changes to the operation of an Interstate highway, associated interchanges or ramps?		X
Item (n)		
Does the project have potential for disproportionately high and adverse impact on minority or low income populations, based on known demographics in the project vicinity, extent of R/W, relocations, and other identified impacts?		X
Item (o)		
Does the project have any substantial or public controversy on environmental grounds?		X
Item (p)		
If the project involves road closure or ramp closure, do any of the following conditions apply? ( <i>Check the boxes ONLY if the project involves road closure</i> )		
i. No Access will be provided to local traffic or posted		
ii. Through traffic dependent businesses will be affected		
iii. The detour closure will interfere with special events or activities		
iv. The detour or closure will substantially alter the environmental consequences of the action, such as by creating unsafe conditions on the detour route or requiring additional work or expansion to detour routes to carry the additional traffic.		
v. There is a public controversy associated with the detour or closure		
<b>Explanation for Individual CE (If any of the answers above are YES):</b>		
Item for which the answer is YES		
Explanation that CE Classification is appropriate		
Item for which the answer is YES		

Explanation that CE Classification is appropriate	
<b>Commitments</b> ( <i>Check Applicable ones</i> )	
<input type="checkbox"/>	Plan notes requiring avoidance of cultural resources in off-project areas will be added to the final project plans under "Environmental Mitigation Notes" per policy Directive C-201-2D(2).
<input type="checkbox"/>	Properties eligible for the National Register of Historic Places (NRHP) have been identified within the project area. Plans need to be submitted to Environmental Programs Division by the Designer for further coordination with the State Historic Preservation Office (SHPO) prior to the bid solicitation process or construction.
<input type="checkbox"/>	Properties eligible for the National Register of Historic Places (NRHP) have been identified within the project area. The State Historic Preservation Office (SHPO)'s approval is based on the project as currently proposed. The following Plan notes will be added to the final project plans under "Environmental Mitigation Notes" per policy Directive C-201-2D(2). <b>Properties eligible for the National Register of Historic Places (NRHP) have been identified within the project area. The State Historic Preservation Office (SHPO)'s approval is based on the project as currently proposed. If there are any changes to the project plans, further coordination with the SHPO will be required through the Environmental Programs Division prior to the bid solicitation process or field changes during construction.</b>
<input type="checkbox"/>	(Only for Special Projects) Properties eligible for the National Register of Historic Places (NRHP) have been identified within the project area. Further coordination with the State Historic Preservation Office (SHPO) is required by the ODOT Project Management's Special Projects Branch prior to the bid solicitation process or construction. The SHPO letter which cites the information needed to proceed is included in the Appendix. The file number from the SHPO letter should be referenced in all correspondence with SHPO. Copies of such coordination should be provided to the Environmental Programs Division for the project record.
<input type="checkbox"/>	(Only for Special Projects) Properties eligible for the National Register of Historic Places (NRHP) have been identified within the project area. The State Historic Preservation Office (SHPO)'s approval is based on the project as currently proposed. The following Plan notes will be added to the final project plans under "Environmental Mitigation Notes" per policy Directive C-201-2D(2). <b>If there are any changes to the project plans, further coordination with the SHPO will be required by the ODOT Project Management's Special Projects Branch prior to the bid solicitation process or field changes during construction. Please reference the SHPO letter which cites the conditions of approval and reference the file number from SHPO letter in all correspondence. Copies of such coordination should be provided to the Environmental Programs Division for the project record.</b>
<input type="checkbox"/>	The project occurs in an area where the American burying beetle (ABB) occurs. Special Provision 656-4 for ABB will be added to the final project plans/contract per policy Directive C-201-2D(2).
<input type="checkbox"/>	Survey for the following species need to be completed prior to constructions and plan notes will be provided after the completion of the survey( <i>List species survey requirements below</i> )
<input type="checkbox"/>	Plan notes requiring construction season restrictions for the following species will be added to the final project plans under "Environmental Mitigation Notes" per policy Directive C-201-2D(2). ( <i>List species or notes below</i> )
<input type="checkbox"/>	Plan notes requiring avoidance and minimization of impacts for the following species will be added to the final project plans under "Environmental Mitigation Notes" per policy Directive C-201-2D(2). ( <i>List species below</i> )
<input type="checkbox"/>	



<b>Commitments</b> ( <i>Check Applicable ones</i> )	
	The following Plan notes requiring construction season restrictions for the migratory birds will be added to the final project plans under “Environmental Mitigation Notes” per policy Directive C-201-2D(2). ( <i>List notes below</i> )
X	<p><b>Swallows:</b>  <b>Cliff Swallows and Barn Swallows are small colonial nesting birds protected by the federal Migratory Bird Treaty Act. These species commonly use bridges and culverts for nesting. The nesting season for the swallows runs from April 1 to August 31. Swallow use of bridge NBI No. 16159 and 16167 has been observed during the initial surveys conducted as part of the biological studies in 2014. Swallow use of the remaining bridges and culverts was not observed during the initial survey. Swallows may occupy these structures in the future nesting seasons. Any activities which would destroy active nests or harm eggs or birds would violate the Migratory Bird Treaty Act. The Resident Engineer will evaluate the contractor's proposed work methods and conclude whether the proposed work would harm the nesting birds before work near the structure is authorized. If the proposed work will harm the nesting birds, the bridge may be netted prior to April 1 or the work delayed until the nesting season is complete. Methods other than netting must be pre-approved by the ODOT Biologist.</b></p>
	The action may involve work in potentially jurisdictional waters and potentially jurisdictional wetlands. For State Projects, the 404 permit application form needs to be submitted by the Designer through Project Management Division to Environmental Programs Division at the time of Right-of-Way submittal for evaluation and determination of the appropriate Clean Water Act Section 404 permit application for the project. For Local Government Projects or Special Projects, a copy of the 404 permit obtained by the County/City should be submitted by Local Government Division or Special Projects to Environmental Programs Division for the Project File.
	The action involves work in Critical Resource Waters and requires Pre Construction Notification (PCN) to USACE regardless of the area of impact. For Local Government Projects or Special Projects, a copy of the PCN by the County should be submitted by Local Government Division or Special Projects Branch to Environmental Programs Division for the Project File.
	The action will require a FEMA Map revision.
X	Plan notes requiring avoidance of potential hazardous materials remains areas will be added to the final project plans under “Environmental Mitigation Notes” per policy Directive C-201-2D(2).
	The Department’s Hazardous Coordinator has determined that a Preliminary Site Investigation (PSI) is required for this project. Construction Plans need to be submitted by the Designer to Environmental Programs Division at the time of Right-of-Way submittal for the PSI.
	The following plan note regarding Road Closure will be added to the plans ( <i>Add plan notes restricting road closure</i> ).
	( <i>Only for Local Government Projects</i> ) The roadway will be closed to traffic during construction. The County or City will be responsible for notifying all local residential and commercial property owners, schools, and emergency services providers prior to construction. The County or City will be responsible for posting the detour routes. The Contractor will provide access to local property owners at all times during construction.
	( <i>Only for Local Government Projects</i> ) The Local Government Project Manager shall coordinate any required species surveys with Environmental Programs Division prior to letting the project. Note the seasonal restrictions for surveys in the biological studies summary.
	The following Airport/Airfield located within 4 miles of this project. This action may require notifying the Federal Aviation Administration (FAA) of proposed construction via FAA Form 7460-1 prior to construction. ( <i>List the name of the Airport below</i> )
	Other ( <i>List Commitment below</i> )

<b>Commitments</b> <i>(Check Applicable ones)</i>	
	Other <i>(List Commitment below)</i>

The mitigation measures above should be discussed at all Pre-work conferences per Policy Directive C-201-2E(1). The Designer shall provide a **copy of the final plans with the mitigation notes** to Environmental Programs Division for the project Records.

Development of the project including coordination and assessment of potential social, economic and environmental impacts has been considered in accordance with DOT ORDER 5610.1C, and CEQ REGULATIONS 40 CFR 1500 -1508 as amended, 23 CFR 771.117 and the 2011 FHWA/ODOT Programmatic Agreement for processing of categorical exclusions. Implementation of this action as a "Categorical Exclusion" will satisfy the requirements of the National Environmental Policy Act.

# Preparer/Reviewer Signatures

Environmental Consultant Project Manager (If Applicable)	Date
Environmental Consultant Firm Name (If Applicable)	Date
County Commissioner or City Manager (For Local Government Projects)	Date
<i>Jim Veum</i>	24 MARCH 2016
ODOT Environmental Project Manager	Date
<i>[Signature]</i>	3/30/16
Assistant Environmental Programs Division Engineer	Date
<i>[Signature]</i>	3/30/16
Environmental Programs Division Engineer	Date
CONCLUSION:	
ODOT has reviewed the conditions identified in Section IIIb.3 of Federal Highway Administration (FHWA)/ODOT Programmatic Agreement for Processing Categorical Exclusions (CE) and determined that an Individual CE must be submitted to FHWA for approval.	
	YES
X	NO

## For Individual CEs requiring FHWA Approval:

Concurrence that this project qualifies for a Categorical Exclusion:

Environmental Programs Manager, FHWA	Date
--------------------------------------	------

### Attachments:

Location Map  
Memos with Plan Notes  
NEPA On Hold Memo if applicable

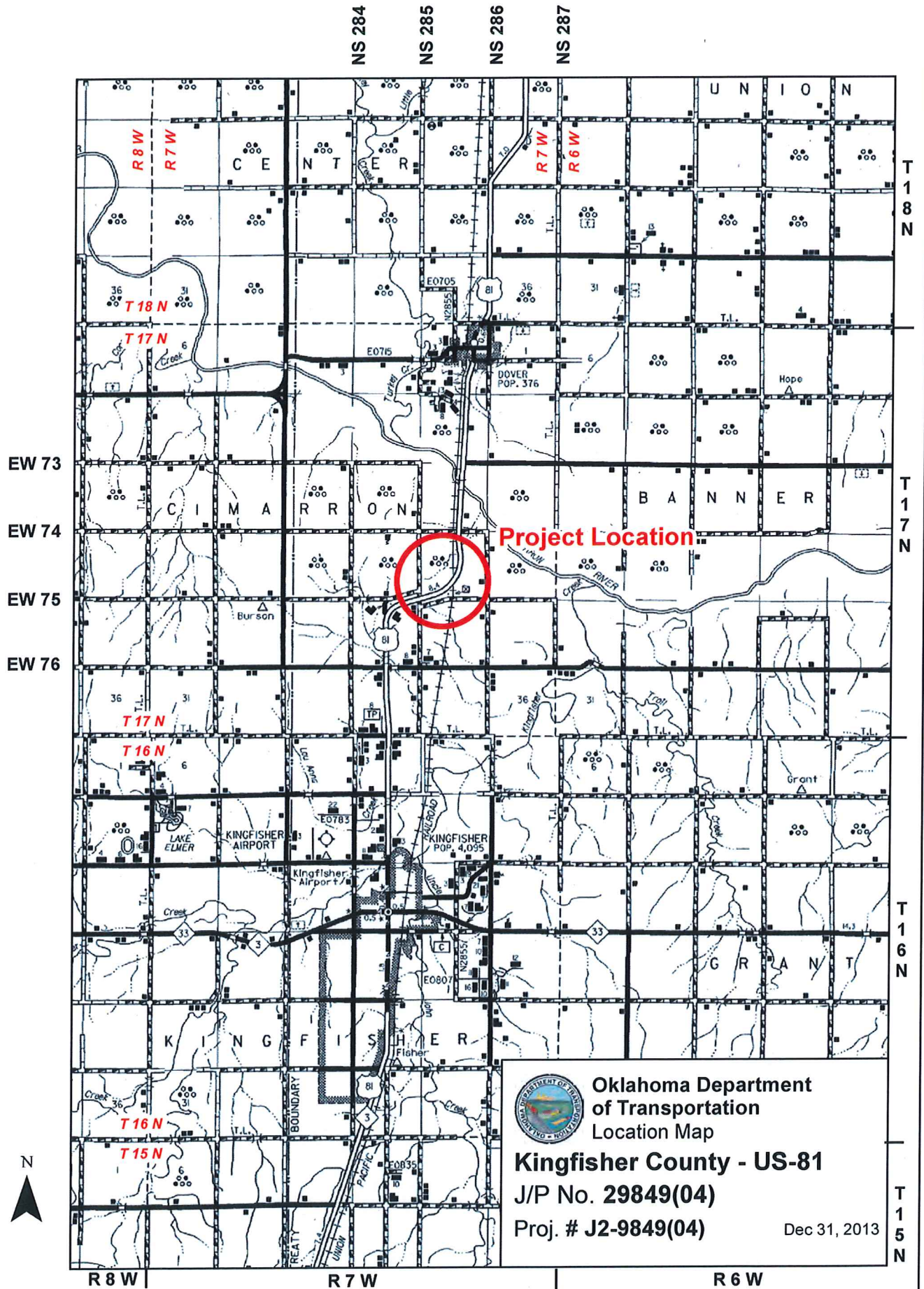
Plans and Footprint  
Studies  
NEPA Status Report

### Distribution List (Check Applicable Ones)

X	Project Management Division (All State Projects)
X	Roadway Design Division (All State projects with the exception of projects from Traffic Division and Special Projects)
X	Bridge Division (All State Bridge Projects)
	Traffic Division (For projects from Traffic Division)
	Local Government Division (County or City Projects)
	Special Projects (Special Projects Only)
	Safe Routes to School Coordinator (SRTS Projects Only)
X	Field Division Engineer (All Projects)
X	Right-of-Way Division (All Projects)
X	Office Engineer Division (All Projects)
X	FHWA (All Projects. Place Copy of Complete Document on FHWA's Directory)

Copy to: Reading File







# Oklahoma Department of Transportation

Environmental Programs Division

Office 521-3050 Fax 522-5193

DATE: March 30, 2016

DAE

TO: Roadway Design Division, Project Management Division, Bridge Division

FROM: Environmental Programs Division

SUBJECT: US-89 over UPRR, 5.3 miles north of SH-33, Kingfisher County. Project No. J2-9849(004); JP No. 29849(04).

A leaking underground storage tank (LUST) site is located on the southeast side of US-89, north of EW-75 Road and west of the railroad tracks. Please have the LUST site location added to the plan and profile sheets by placing a box in the appropriate location with the Oklahoma Corporation Commission (OCC) facility number, case number, and denoting it as a LUST site.

Please have the following added to the "Environmental Mitigation Notes" of the project plans per Policy Directive C-201-2D(2):

"Station	OCC Facility No./Case No.	Facility
122+50 to 124+50 Rt 25'	37-01865/064-0997	ODOT

Petroleum contamination may exist at or near the referenced Leaking Underground Storage Tank (LUST) site. Based on the available information, contamination is not expected to affect construction activities, but is still possible. In the event contaminated soil or groundwater is encountered, the contractor shall adhere to ODOT's Hazardous Materials Specification 107.15 and notify the Resident Engineer, who may then contact the Environmental Programs Division at (405) 521-3050 for assistance."

This mitigation measure should be discussed at all pre-work conferences per Policy Directive C-201-2-E(1). If you have any questions, please contact David Edwards at (405) 521-2673.

DAE

Xc: NEPA Project Manager  
Division 2 Engineer  
Right-of-Way & Utilities Division



# Oklahoma Department of Transportation

Environmental Programs Division

Office 521-3050 Fax 522-5193

**DATE:** January 4, 2016

**TO:** Daniel Nguyen, Project Management Division

**FROM:** Tim Vermillion, Environmental Programs Division

**SUBJECT:** Notification of NEPA on Hold

County	Kingfisher	State Job Piece No:	29849(04)
NEPA Project Manager	T. Vermillion	Phone Number	405-521-2676
ODOT Field Division	4	Bridge NBI No. (For County & State Projects) & Location No. (County Projects Only)	16167, 16159
Project Description from JPINFO (Type of Construction & Project Extent)	BRIDGE & APPROACHES: US 81: NB & SB BRIDGES OVER THE UP RAILROAD 5.3 MIS. N. OF SH 33		
Let Date	2023		

Preliminary environmental studies have been completed for the above referenced project with the exception of the studies which require 30% plans before they can be completed.

*Check applicable items*

☐ The NEPA process is on hold until the availability of 30% plans to complete some of the studies. Additional 2 to 6 months will be required to complete these studies.

☒ The NEPA process is on hold until the availability of 60% plans (R/W Submittal) showing proposed final right-of-way. NEPA Document will be completed within 60 days of receipt of plans if the plans fall within the study footprint. Otherwise, additional time will be required to update the studies. Also, additional 60 days will be required if the plans show any potential Relocations.

Copy to: Director of Engineering – Tim Tegeler  
Engineering Manager, Roadway Design  
Engineering Manager, Bridge Design  
Field Division Engineer  
Right-of-Way Division



## **PLANS OR FOOTPRINTS**

STATE OF OKLAHOMA  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED

U.S. HIGHWAY

FEDERAL AID PROJECT NO. XXX-XXXX(XXX)

BRIDGE & APPROACHES

U.S. HIGHWAY 81

KINGFISHER COUNTY

CONTROL SECTION NO. 81-37-04

STATE JOB NO. 29849(04)

BRIDGE "A" LOCATION NO. 3704-0543EX

BRIDGE "B" LOCATION NO. 3704-0543WX

EXISTING NBIS NO. 16159; NEW NBIS NO. XXXXX  
EXISTING SBIS NO. 16167; NEW SBIS NO. XXXXX

FOR SURVEY CONTROL DATA,  
SEE SURVEY DATA SHEETS.

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	TYPICAL SECTIONS (1-2)
4	GENERAL NOTES (BRIDGE)
5	UNION PACIFIC RAILROAD COMPANY NOTES
6	PLAN AND PROFILE (1-3)
7-11	TYPICAL GRADING ALONG RAILROAD (1-2)
12-13	TYPICAL GRADING ALONG RAILROAD TO RAILROAD
14-15	GENERAL PLAN AND ELEVATION - BRIDGE "A" (1-4)
16	TYPICAL CROSS SECTION - BRIDGE "A"
17-18	GENERAL PLAN AND ELEVATION - BRIDGE "B" (1-2)
19	TYPICAL CROSS SECTION - BRIDGE "B"
S-1 - S-3	SURVEY DATA SHEETS (1-13)
X-1 - X-27	CROSS SECTIONS (1-27)

DESIGN DATA

ADT 2015	= 7,200
ADT 2035	= 10,100
K (DHWADT)	= 10%
D	= 55%
T (% AADT)	= 18%
T (% CHV)	= 18%
T (% ADT)	= 13%
V	= 65MPH

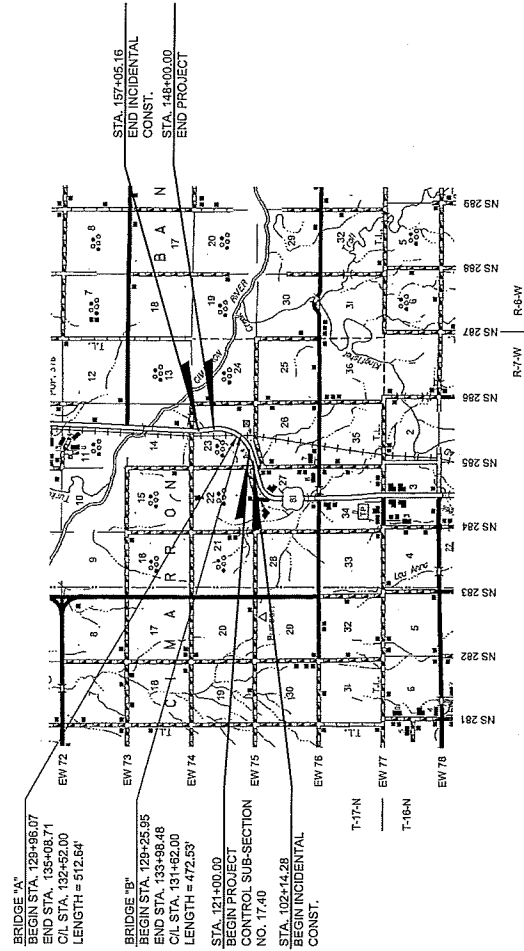
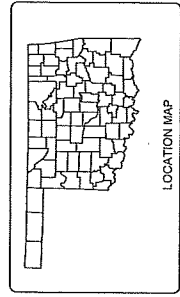
20 YR FLEX ESALS = 8.6 M

SCALES

PLAN	1" = 50'
PROFILE HOR.	1" = 50'
VER.	1" = 5'
LAYOUT MAP	1" = 5280'

CONVENTIONAL SYMBOLS

- ASPHALT CONCRETE - ROADWAY
- ASPHALT CONCRETE - SHOULDER
- PAVEMENT REMOVAL
- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP
- SECTION LINES
- QUARTER SECTION LINES
- SECTION LINES
- EXISTING ROAD
- BASE LINE
- GRADE LINE
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- CONCRETE STRUCTURES - IN PLACE
- CONCRETE STRUCTURES - NEW
- RIGHT-OF-WAY LINES - EXISTING
- RIGHT-OF-WAY LINES - NEW
- CONTROLLED ACCESS
- RIGHT-OF-WAY FENCE



PROPOSED  
RW  
3-4-2016

THIS DOCUMENT IS PRELIMINARY  
IN NATURE AND IS NOT A FINAL  
SIGNED AND SEALED DOCUMENT.

PROJECT LENGTH BASED ON C.R.L. STATIONING  
ROADWAY LENGTH \_\_\_\_\_ 2207.42 FT.  
BRIDGE LENGTH \_\_\_\_\_ 492.58 FT.  
PROJECT LENGTH \_\_\_\_\_ 2700.00 FT.

0.418 MI.  
0.093 MI.  
0.511 MI.

2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION - ENGLISH VERSION, APPROVED BY  
THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, JANUARY 04, 2010.

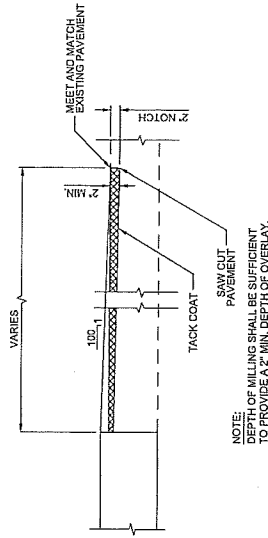
**MacArthur**  
Associated Consultants  
224 N. 4th Street, Suite 200  
Tulsa, Oklahoma 74103  
KENNETH R. GILLESPIE, P.E. OKLA. REG. NO. 20104  
ROADWAY  
DATE

**MacArthur**  
Associated Consultants  
224 N. 4th Street, Suite 200  
Tulsa, Oklahoma 74103  
GREGORY LYNN FITTER, P.E. OKLA. REG. NO. 15070  
BRIDGE "A" AND BRIDGE "B"  
DATE

OKLAHOMA  
DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
DATE APPROVED \_\_\_\_\_ BY \_\_\_\_\_  
DATE APPROVED \_\_\_\_\_ BY \_\_\_\_\_  
CHIEF ENGINEER  
DIVISION ADMINISTRATOR  
PROJECT NO. 29849(04)  
SHEET NO. 1

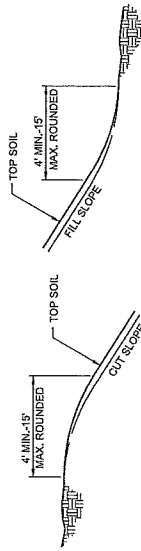




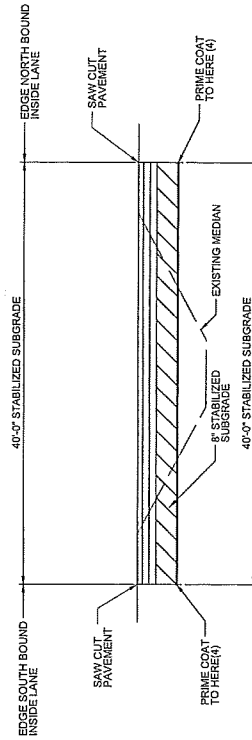


NOTE:  
DEPTH OF MILLING SHALL BE SUFFICIENT  
TO PROVIDE A 2" MIN. DEPTH OF OVERLAY.

PROFILE OF ASPHALT OVERLAY TRANSITION  
N.T.S.



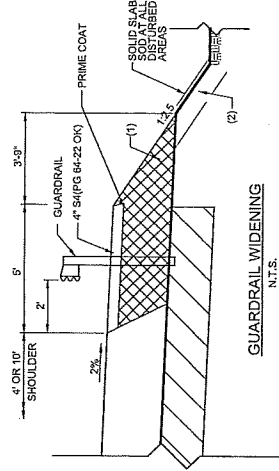
ROUNDING DETAIL  
ROUNDING SHALL BE 5" MIN. TO 15" MAX. AT THE  
CORNERS OF THE PAVEMENT SURFACE, OR AS  
DESIGNATED BY THE ENGINEER. COST OF  
OVERLAY SHALL BE INCLUDED IN THE PRICE BID FOR  
OVERLAY ITEMS OF WORK.



CROSSOVER SECTION  
N.T.S.

PAVEMENT REQUIREMENT	
PAYT. STRUCTURE	DRIVING LANES
SURFACE COURSE	2" SUPERPAVE TYPE S4 PG 76-28 OK
BASE COURSE	3" SUPERPAVE TYPE S3 PG 76-28 OK
	3" SUPERPAVE TYPE S3 PG 64-22 OK

ALONG CRL US-81  
STA. 102+13.41 TO STA. 108+75.12  
STA. 152+63.59 TO STA. 157+68.61



GUARDRAIL WIDENING  
N.T.S.

- (1) BACKFILL NOTE: BACKFILL SHALL BE LAYERED AND COMPACTED AS PART OF THE FINISHING OPERATIONS. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.
- (2) TOPSOIL NOTE: THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL FROM THE PROJECT AREA AND STOCKPILE IT IN ACCORDANCE WITH SECTION 206 OF THE STANDARD SPECIFICATION. RESERVED TOPSOIL SHALL BE SPREAD AFTER COMPLETION OF THE OVERLAY. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL TOPSOIL SHALL BE ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PM ITEM PER TYPE A-SALVAGED TOPSOIL LUMP SUM.
- (3) THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL EARTHWORK. QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS DIAGRAM.
- (4) DISTANCES ARE MEASURED VERTICALLY FROM THE EDGE OF THE FINISHED SHOULDER.
- (5) PRIME COAT AT A RATE OF 0.35 GAL/SY OVER SUBGRADE UPON COMPLETION OF MODIFICATION.
- (6) VARIES AT GUARDRAIL WIDENING LOCATIONS.



**NOTIFICATION OF WORK:**

THE CONTRACTOR IS REQUIRED TO GIVE THE UNION PACIFIC RAILROAD COMPANY AT LEAST 10 WORKING DAYS ADVANCE NOTICE, IN WRITING, BEFORE ANY WORK IS STARTED ON THE SITE. TO AVOID HAZARDS, THE UNION PACIFIC RAILROAD COMPANY MAY HAVE A REPRESENTATIVE PRESENT, IF DEEMED NECESSARY, FOR THE PURPOSE OF INSPECTION AND THE ISSUANCE OF ANY APPROPRIATE INSTRUCTIONS FOR RAILROAD OPERATIONS DURING THE US-81 BRIDGE REPLACEMENT OVER THE UNION PACIFIC RAILROAD IN KINGFISHER COUNTY. (AADOT 895 413M, MILEPOST 373.73)

**THE CONTRACTOR SHALL NOTIFY:**

MR. HANS WAMMEL  
MANAGER OF TRACK MAINTENANCE  
UNION PACIFIC RAILROAD COMPANY  
220 S. MILES  
EL RENO, OK. 73036  
PHONE: 405-274-4426

MR. CLAY A. MCWAMMAN  
MANAGER OF INDUSTRY & PUBLIC PROJECTS  
UNION PACIFIC RAILROAD COMPANY  
P.O. BOX 1337  
EL RENO, OKLAHOMA 73036  
PHONE: 507-373-2927  
CAMCWMAN@UP.COM

**FLAGGING AND INSURANCE:**

FLAGGING AND INSURANCE SHALL BE PROVIDED AS SPECIFIED IN SECTION 107 OF THE STANDARD SPECIFICATIONS AND IN THE SPECIAL PROVISIONS FOR RAILROAD FLAGGING (SEE PROPOSAL FOR SPECIAL PROVISIONS) AND WHAT IS STATED IN THE UNION PACIFIC RAILROAD COMPANY'S RIGHT OF ENTRY AGREEMENT. UNION PACIFIC RAILROAD COMPANY, AT THEIR DISCRETION, SHALL PROVIDE FLAGGING FOR THE RAILROAD DURING CONSTRUCTION OPERATIONS.

THE CONTRACTOR IS REQUIRED TO REIMBURSE UNION PACIFIC RAILROAD COMPANY FOR FLAGGING SERVICES PROVIDED.

THE CONTRACTOR SHALL ALSO FURNISH SATISFACTORY EVIDENCE TO THE STATE OF OKLAHOMA THAT THE CONTRACTOR HAS OBTAINED THE NECESSARY INSURANCE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR RAILROAD INSURANCE AND IN THE UNION PACIFIC COMPANY'S RIGHT OF ENTRY AGREEMENT.

THE CONTRACTOR WILL BE REQUIRED TO ENTER INTO A RIGHT OF ENTRY AGREEMENT WITH THE UNION PACIFIC RAILROAD COMPANY BEFORE THEY WILL BE ALLOWED ON THE RAILROAD'S RIGHT-OF-WAY.

**PRE-WORK MEETING:**

PRIOR TO WORKING ON THE UNION PACIFIC RAILROAD COMPANY'S RIGHT-OF-WAY OR IN THE VICINITY OF THE RAILROAD, THE CONTRACTOR SHALL MEET WITH THE TRACK MAINTENANCE FOR THE UNION PACIFIC RAILROAD COMPANY TO COORDINATE YOUR WORK. THE CONTRACTOR SHALL MAKE CONTACT WITH THE UNION PACIFIC RAILROAD COMPANY MANAGER OF TRACK MAINTENANCE PRIOR TO SETTING ON THE RAILROAD'S PROPERTY.

**COORDINATION WITH RAILROAD:**

THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS IN A MANNER WHICH WILL NOT DELAY OR INTERFERE WITH TRAIN OPERATIONS. CONSTRUCTION ACTIVITY WITHIN 25 (TWENTY-FIVE) FEET OF ACTIVE TRACKS WILL REQUIRE A FLAGMAN TO BE PROVIDED BY THE UNION PACIFIC RAILROAD COMPANY AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO THE UNION PACIFIC RAILROAD COMPANY MANAGER OF TRACK MAINTENANCE, A MINIMUM OF 30 (THIRTY) CALENDAR DAYS IN ADVANCE OF WHEN FLAGGING IS REQUIRED.

SPECIAL PERMISSION MUST BE OBTAINED FROM THE UNION PACIFIC RAILROAD COMPANY BEFORE MOVING ANY EQUIPMENT OR OTHER OBJECT WHICH COULD MAKE THE TRACK IMPASSABLE IF IT FELL WITHIN THE AREA SHOWN ON THE CONSTRUCTION CLEARANCE DIAGRAM.

RAILROAD FLAGGERS, PROTECTIVE SERVICES, AND PROTECTIVE DEVICES WILL BE REQUIRED, BUT NOT LIMITED TO, EVENTS WHEN:

- THE CONTRACTOR WORK ACTIVITIES ARE WITHIN 25 (TWENTY-FIVE) FEET OF THE TRACK, MEASURED FROM THE TRACK CENTERLINE.

- ACTIVITIES ARE OVER OR UNDER THE TRACK.

- CRANES OR SIMILAR EQUIPMENT WILL NOT BE POSITIONED WHERE THEY COULD FOUL THE TRACK IF THEY TIPPED OVER OR EXPERIENCED SOME OTHER CATASTROPHIC EVENT.

- IN THE OPINION OF THE UNION PACIFIC RAILROAD COMPANY REPRESENTATIVE:

- IT IS NECESSARY TO SAFEGUARD THE UNION PACIFIC RAILROAD COMPANY PROPERTY, EMPLOYEES, TRAINS, ENGINES, AND FACILITIES.

- WHEN ANY EXCAVATION IS PERFORMED BELOW THE BOTTOM OF THE ELEVATIONS AND TRACK OR OTHER UNION PACIFIC RAILROAD COMPANY FACILITIES MAY BE SUBJECT TO MOVEMENT OR SETTLEMENT.

- WHEN WORK IN ANY WAY INTERFERES WITH SAFE OPERATION OF TRAINS AND TIMETABLE SPEEDS.

- WHEN ANY HAZARD IS PRESENTED TO RAILROAD TRACK, SIGNALS, COMMUNICATIONS, ELECTRICAL OR OTHER FACILITIES EITHER DUE TO PERSON, MATERIAL, EQUIPMENT, OR BUSTING IN THE AREA.

**PROTECTION OF RAILROAD UNDER BRIDGE:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE RAILROAD TRACK BED DURING ALL CONSTRUCTION OPERATIONS. PRIOR TO PERFORMING ANY PROPOSED METHOD OF PROTECTING THE RAILROAD TRACK BED, THE CONTRACTOR SHALL SUBMIT A PROPOSED METHOD OF PREVENTING DEBRIS FROM FALLING ON THE RAILROAD TRACK BED SHALL BE SUBMITTED TO THE RAILROAD REPRESENTATIVE FOR HIS APPROVAL.

THE CONTRACTOR SHALL NOT BE PERMITTED TO LEAVE ANY WORKER SCAFFOLDING IN PLACE IN WORKING POSITION. AT THE END OF EACH WORKDAY, THE SCAFFOLDING SHALL BE REMOVED AND SET A SAFE DISTANCE FROM ANY OPERATING RAILROAD LINE. SCAFFOLDING SHALL AT ALL TIMES MAINTAIN THE MINIMUM CLEARANCE AS SHOWN ON THE "FALSEWORK DIAGRAM" ON THIS SHEET.

**DEMOLITION OF STRUCTURES OVER RAILROAD:**

ALL DEMOLITION PLANS FOR REMOVAL OF STRUCTURES OVER RAILROAD LINES SHALL BE REVIEWED AND APPROVED BY THE UNION PACIFIC RAILROAD COMPANY BEFORE ANY REMOVAL MAY BEGIN.

DEMOLITION OF STRUCTURES WILL BE PERFORMED IN ACCORDANCE WITH THE RAILROAD'S INSTRUCTIONS FOR PREPARATION OF DEMOLITION PLANS FOR STRUCTURES OVER THE UNION PACIFIC RAILROAD.

REV. NO.	DESCRIPTION	DATE

**UNION PACIFIC RAILROAD COMPANY STANDARD REQUIREMENTS:**

- 1) THE ELEVATION OF THE EXISTING TOP-OF-RAIL SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.
- 2) ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
- 3) ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES.
- 4) ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
- 5) RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHERE A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE.
- 6) ALL PERMANENT CLEARANCES SHALL BE VERIFIED PRIOR TO ANY CLOSING.
- 7) FALSEWORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.

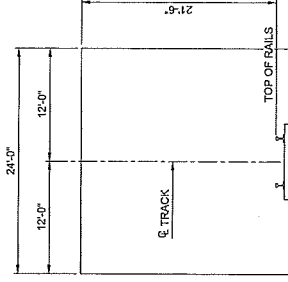
**EROSION CONTROL AND DRAINAGE:**

THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD. THE CONTRACTOR WILL INSTALL, MAINTAIN, AND REMOVE ALL EROSION CONTROL MEASURES DEEMED NECESSARY WITHIN THE RAILROAD RIGHT OF WAY.

THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES. THE CONTRACTOR WILL MAINTAIN THE RAILROAD DRAINAGE AT ALL TIMES WHEN WORKING WITHIN THE RAILROAD RIGHT OF WAY.

**RAIL TRAFFIC:**

THE UNION PACIFIC RAILROAD COMPANY HAS 12 TRAINS PER DAY AT 49 MPH. ON THE END SUBDIVISION, RAIL TRAFFIC IS FOR INFORMATION PURPOSES ONLY. ACTUAL RAIL TRAFFIC MAY VARY.



**UPRR FALSEWORK CLEARANCE DIAGRAM**

CLEARANCE OF FALSEWORK REQUIRED BY U. P. R. FOR OPERATION DURING CONSTRUCTION. HORIZONTAL DIMENSIONS SHOWN ARE MEASURED TO CENTERLINE OF R. R. TRACK. VERTICAL DIMENSION SHOWN IS PERPENDICULAR TO PLANE OF TOP OF RAILS.

**PRELIMINARY PLANS**  
THIS DOCUMENT IS PRELIMINARY  
IN NATURE AND IS NOT A FINAL  
SIGNED AND SEALED DOCUMENT.

DESIGN	DRAWN	CHECKED	APPROVED	SCALE	DATE

US 81 OVER UNION PACIFIC RAILROAD KINGFISHER COUNTY  
OKLAHOMA DEPARTMENT OF TRANSPORTATION  
UNION PACIFIC RAILROAD COMPANY NOTES  
STATE JOB NO. 29848(04) SHEET NO. 5

REV. NO.	DESCRIPTION	REVISIONS	DATE

SUMMARY OF PAY QUANTITIES - BRIDGE "A"				
ITEM NO.	DESCRIPTION	NOTES	UNIT	QUANTITY
501(B) 1307	SUBSTRUCTURE EXCAVATION COMMON	(BR-1)	CY	0
501(G) 6309	CLSM BACKFILL	(BR-1)	CY	0
504(A) 1304	APPROACH SLAB	(BR-1, BR-2)	SY	0
504(B) 1305	SAW-CUT GROOVING	(BR-1)	SY	0
504(C) 6250	SEALED EXPANSION JOINT	(BR-1)	LF	0
504(E) 6190	42" F-SHAPED PARAPET	(BR-1)	LF	0
506(A) 1322	STRUCTURAL STEEL	(BR-1)	LB	0
507(A) 6170	STAINLESS STEEL FIXED BEARING ASSEMBLY	(BR-1, BR-3)	EA	0
507(B) 6174	STAINLESS STEEL EXPANSION BEARING ASSEMBLY	(BR-1, BR-4)	EA	0
509(A) 1326	CLASS AA CONCRETE	(BR-1)	CY	0
509(B) 1328	CLASS AA CONCRETE	(BR-1)	CY	0
510(C) 6138	SLOPE WALL (5')	(BR-1)	SY	0
511(A) 1332	REINFORCING STEEL	(BR-1)	LB	0
511(B) 6010	EPOXY COATED REINFORCING STEEL	(BR-1)	LB	0
514(A) 6011	PILES, FURNISHED (HP 12X53)	(BR-1)	LF	0
501(B) 6294	PILES, DRIVER (HP 12X53)		LF	0
514(L) 6220	PILE SPLICE, H-PILE (NON-BIDDABLE)	(BR-5)	EA	0
515(A) 6013	WATER REPELLENT (VISUALLY INSPECTED)	(BR-1)	SY	0
516(A) 6098	DRILLED SHAFTS, 72" DIAMETER	(BR-6)	LF	0
516(C) 6000	CROSSHOLE SONIC LOGGING	(BR-4)	EA	0
523(A) 6550	SEALER CRACK PREPARATION	(BR-4)	LF	0
523(B) 6550	SEALER RESIN	(BR-1, BR-7)	GAL	0
613(H) 6204	6" PERFORATED PIPE UNDERDRAIN ROUND	(BR-1, BR-8)	LF	0
613(I) 6207	6" NON-PERF PIPE UNDERDRAIN RND.	(BR-9)	EA	0
619(D) 1397	REMOVAL OF EXISTING BRIDGE STRUCTURE	(BR-10)	LSUM	0

PAY QUANTITY NOTES

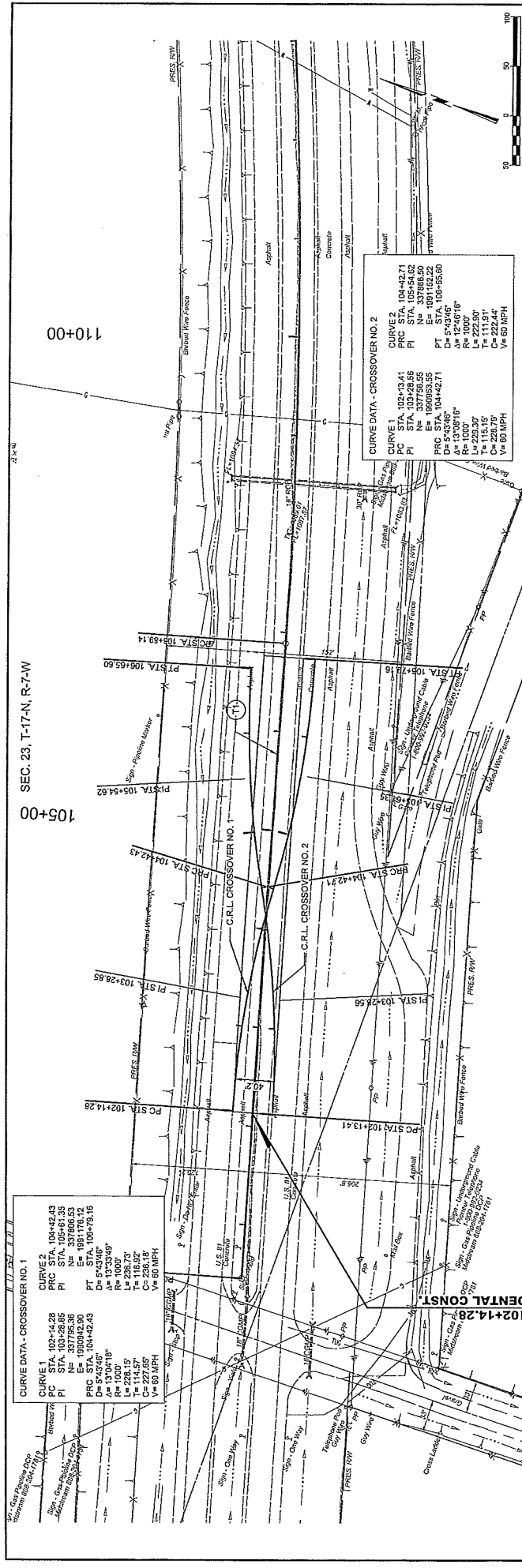
- (BR-1) PAYMENT FOR THESE ITEMS WILL BE BASED ON PLAN QUANTITY. SEE THE 2008 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (PLAN QUANTITIES 109.01(6)).
- (BR-2) THE APPROACH SLABS CONTAIN AN ESTIMATED TOTAL OF 0 CY OF CLASS AA CONCRETE AND 0 LBS OF EPOXY COATED REINFORCING STEEL FOR BRIDGE "A" AND AN ESTIMATED TOTAL OF 0 CY OF CLASS AA CONCRETE AND 0 LBS OF EPOXY COATED REINFORCING STEEL FOR BRIDGE "B". THE DEPARTMENT INCLUDES THE COST OF CONCRETE, REINFORCING STEEL (INCLUDING F52 BARS), BACKER ROD, POLYSTYRENE, AND RAPID CURE JOINT SEALANT IN THE CONTRACT UNIT PRICE OF APPROACH SLAB.
- (BR-3) THE FIXED BEARING ASSEMBLIES CONTAIN AN ESTIMATED TOTAL OF 0 LBS OF STAINLESS STEEL FOR EACH BRIDGE. THE DEPARTMENT INCLUDES THE COSTS OF ELASTOMERIC PADS, ANCHOR PLATES, BUILT-UP CONTACT ANGLES, AND ANCHOR BOLTS, NUTS AND WASHERS IN THE CONTRACT UNIT PRICE OF STAINLESS STEEL FIXED BEARING ASSEMBLY.
- (BR-4) THE EXPANSION BEARING ASSEMBLIES CONTAIN AN ESTIMATED TOTAL OF 0 LBS OF STAINLESS STEEL FOR EACH BRIDGE. THE DEPARTMENT INCLUDES THE COSTS OF ELASTOMERIC PADS, ANCHOR PLATES, BUILT-UP CONTACT ANGLES, AND ANCHOR BOLTS, NUTS AND WASHERS IN THE CONTRACT UNIT PRICE OF STAINLESS STEEL EXPANSION BEARING ASSEMBLY.
- (BR-5) THIS IS A NON-BIDDABLE PAY ITEM. PRICE FOR THIS ITEM SHALL BE ESTABLISHED IN THE PROPOSAL IN ACCORDANCE WITH SECTION 514.08 OF THE STANDARD SPECIFICATIONS.
- (BR-6) REFER ODOT SPECIAL PROVISION 516-3 OF THE ODOT STANDARD SPECIFICATIONS.
- (BR-7) QUANTITY SHOWN FOR SEALER RESIN IS ESTIMATED AT 0.011 GALLON PER FOOT OF CONSTRUCTION JOINT.

SUMMARY OF PAY QUANTITIES - BRIDGE "B"				
ITEM NO.	DESCRIPTION	NOTES	UNIT	QUANTITY
501(B) 1307	SUBSTRUCTURE EXCAVATION COMMON	(BR-1)	CY	0
501(G) 6309	CLSM BACKFILL	(BR-1)	CY	0
504(A) 1304	APPROACH SLAB	(BR-1, BR-2)	SY	0
504(B) 1305	SAW-CUT GROOVING	(BR-1)	SY	0
504(C) 6250	SEALED EXPANSION JOINT	(BR-1)	LF	0
504(E) 6190	42" F-SHAPED PARAPET	(BR-1)	LF	0
506(A) 1322	STRUCTURAL STEEL	(BR-1)	LB	0
507(A) 6170	STAINLESS STEEL FIXED BEARING ASSEMBLY	(BR-1, BR-3)	EA	0
507(B) 6174	STAINLESS STEEL EXPANSION BEARING ASSEMBLY	(BR-1, BR-4)	EA	0
509(A) 1326	CLASS AA CONCRETE	(BR-1)	CY	0
509(B) 1328	CLASS AA CONCRETE	(BR-1)	CY	0
510(C) 6138	SLOPE WALL (5')	(BR-1)	SY	0
511(A) 1332	REINFORCING STEEL	(BR-1)	LB	0
511(B) 6010	EPOXY COATED REINFORCING STEEL	(BR-1)	LB	0
514(A) 6011	PILES, FURNISHED (HP 12X53)	(BR-1)	LF	0
501(B) 6294	PILES, DRIVER (HP 12X53)		LF	0
514(L) 6220	PILE SPLICE, H-PILE (NON-BIDDABLE)	(BR-5)	EA	0
515(A) 6013	WATER REPELLENT (VISUALLY INSPECTED)	(BR-1)	SY	0
516(A) 6098	DRILLED SHAFTS, 72" DIAMETER	(BR-6)	LF	0
516(C) 6000	CROSSHOLE SONIC LOGGING	(BR-4)	EA	0
523(A) 6550	SEALER CRACK PREPARATION	(BR-1, BR-7)	GAL	0
523(B) 6550	SEALER RESIN	(BR-1, BR-8)	LF	0
613(H) 6204	6" PERFORATED PIPE UNDERDRAIN ROUND	(BR-1, BR-9)	LF	0
613(I) 6207	6" NON-PERF PIPE UNDERDRAIN RND.	(BR-9)	EA	0
619(D) 1397	REMOVAL OF EXISTING BRIDGE STRUCTURE	(BR-11)	LSUM	0

- (BR-8) ITEM INCLUDES PIPE UNDERDRAIN COVER MATERIAL IN THE QUANTITY OF 0 CY FOR BRIDGE "A". ALL COSTS OF PIPE UNDERDRAIN COVER MATERIAL, BOTH FINE AND COARSE, AND EQUIPMENT TO BE INCLUDED IN THE QUANTITY OF 0 CY FOR BRIDGE "A". THE PRICE BID PER LINEAR FOOT OF 6" PERFORATED PIPE UNDERDRAIN TUBE. INSTALLATION SHALL BE AS SHOWN ON THE PLANS AND ON STANDARD PUD-4.
- (BR-9) ITEM INCLUDES TRENCH EXCAVATION IN THE QUANTITY OF 0 CY FOR ABUTMENTS. ITEM ALSO INCLUDES STANDARD BEDDING MATERIAL IN THE QUANTITY OF 0 CY FOR ABUTMENTS. ALL COSTS OF TRENCH EXCAVATION, STANDARD BEDDING MATERIAL, AND EQUIPMENT TO BE INCLUDED IN THE QUANTITY OF 0 CY FOR BRIDGE "A". THE PRICE BID PER LINEAR FOOT OF 6" NON-PERF PIPE UNDERDRAIN TUBE. INSTALLATION SHALL BE AS SHOWN ON THE PLANS AND ON STANDARD PUD-4.
- (BR-10) ITEM REMOVAL OF EXISTING BRIDGE STRUCTURE CONSISTS OF THE REMOVAL AND DISPOSAL OF THE SUPERSTRUCTURE (B - STEEL BEAM SPANS WITH 30 FT CLEAR ROADWAY) AND SUBSTRUCTURE IN ACCORDANCE WITH SECTION 619.04.8(2).
- (BR-11) ITEM REMOVAL OF EXISTING BRIDGE STRUCTURE CONSISTS OF THE REMOVAL AND DISPOSAL OF THE SUPERSTRUCTURE (B - STEEL BEAM SPANS WITH 30 FT CLEAR ROADWAY) AND SUBSTRUCTURE IN ACCORDANCE WITH SECTION 619.04.8(2).

PRELIMINARY PLANS  
THIS DOCUMENT IS PRELIMINARY  
IN NATURE AND IS NOT A FINAL  
SIGNED AND SEALED DOCUMENT.

US 81 OVER UNION PACIFIC RAILROAD				KINGFISHER COUNTY			
DESIGN		CLF		OKLAHOMA DEPARTMENT OF TRANSPORTATION			
DRAWN		JLF					
CHECKED		CLF					
APPROVED							
SCUDAP		MacArthur					
SUMMARY OF PAY QUANTITIES (BRIDGE)							
STATE JOB NO. 29849(04)				SHEET NO. 8			



CURVE DATA - CROSSOVER NO. 1

CURVE 1	
PC STA	102+14.28
PT STA	103+28.85
PI STA	102+71.565
Ea	1891.17612
D	1033.36'
R	1000'
L	228.15'
C	221.55'
V	60 MPH

CURVE 2

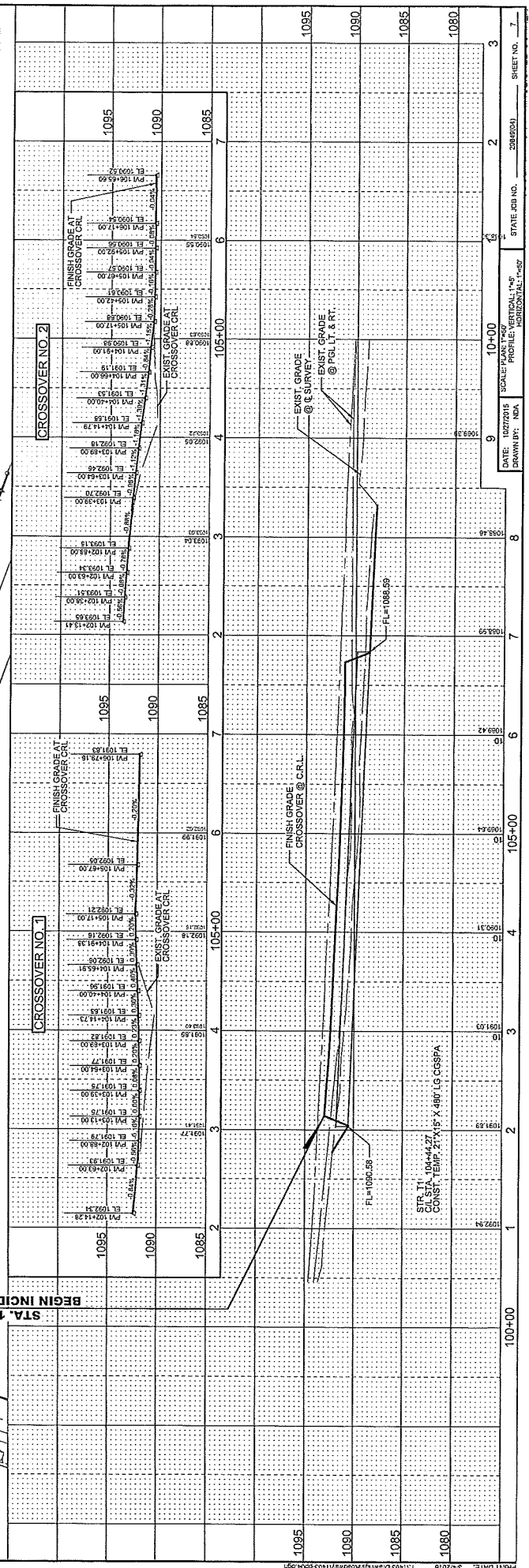
PC STA	104+42.43
PT STA	105+54.62
PI STA	105+48.525
Ea	1891.17612
D	1033.36'
R	1000'
L	228.15'
C	221.55'
V	60 MPH

CURVE DATA - CROSSOVER NO. 2

CURVE 1	
PC STA	103+28.85
PT STA	104+42.43
PI STA	103+85.64
Ea	1891.17612
D	1033.36'
R	1000'
L	228.15'
C	221.55'
V	60 MPH

CURVE 2

PC STA	104+42.43
PT STA	105+54.62
PI STA	105+48.525
Ea	1891.17612
D	1033.36'
R	1000'
L	228.15'
C	221.55'
V	60 MPH



**UTILITY OWNERSHIP**  
 CITY OF KINGFISHER (WATER)  
 405-375-3705  
 CIMARRON ELECTRIC COOPERATIVE  
 405-375-4121  
 PIONEER TELEPHONE  
 800-582-6234  
 DCP MIDSTREAM  
 800-440-1719  
 SOUTHWESTERN NATURAL GAS  
 405-557-5944  
 CONTINENTAL PIPELINE COMPANY  
 800-626-3234

**CELESTIAL CURVE No. 1**  
 P.C. STA. 138+14.81  
 P.T. STA. 140+00.00  
 E= 1694003.2410  
 Δ= 80°11'54" LL  
 D= 027'00.01"  
 L= 400.13'  
 R= 2854.45'  
 E= 675.70'

SEC. 23, T-17-N, R-7-W

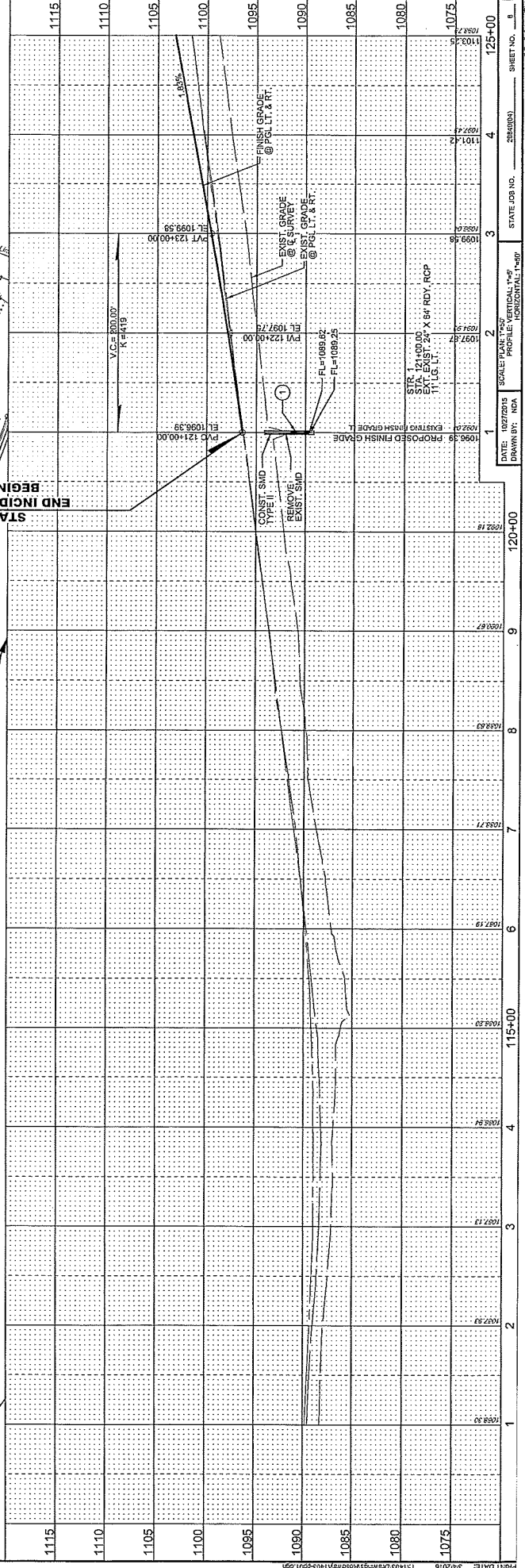
120+00

EXISTING LIMITS OF NO ACCESS

MATCH LINE - STA. 125+00

END INCIDENTAL CONST.  
 BEGIN PROJECT  
 STA. 121+00

EXISTING LIMITS OF NO ACCESS



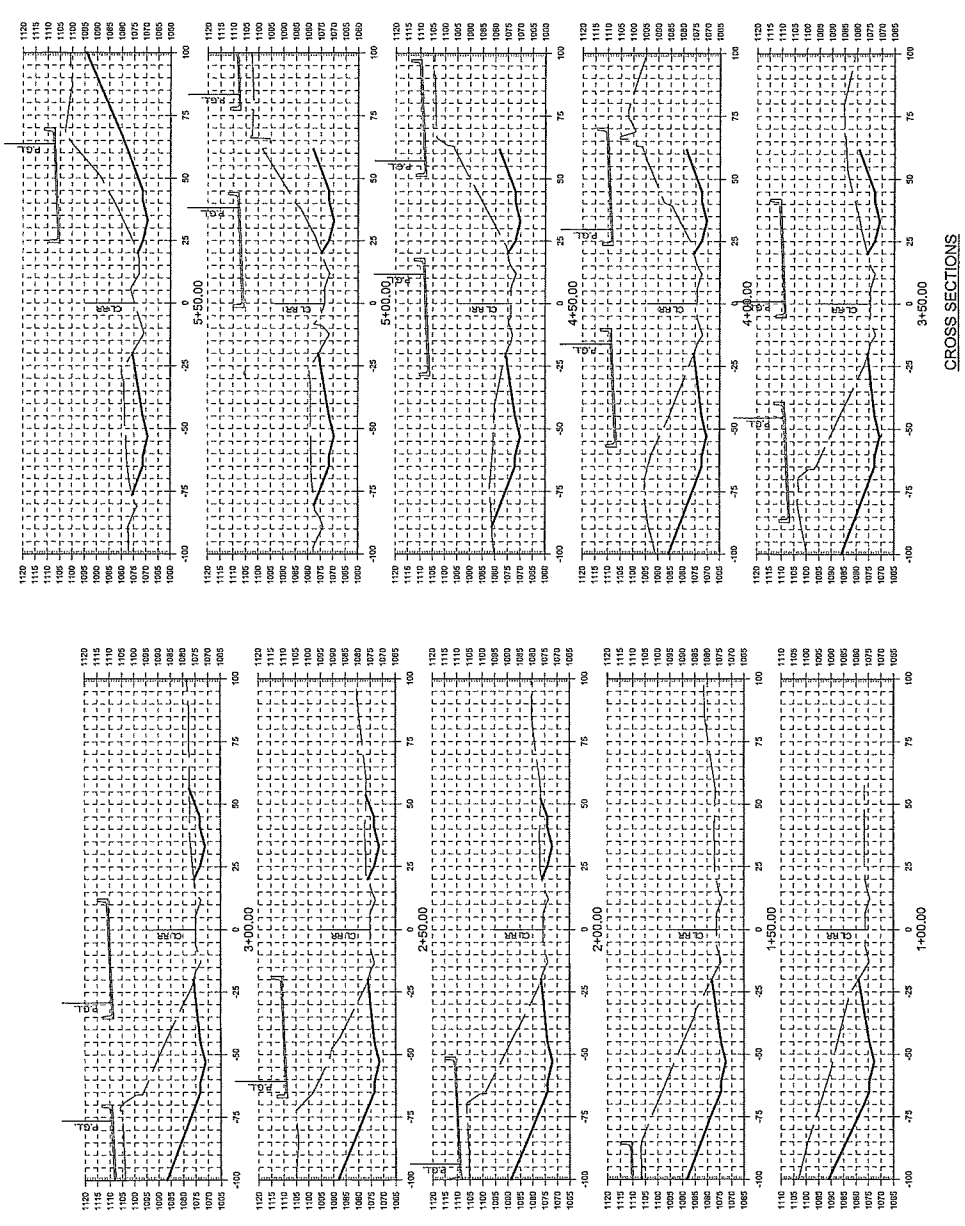












CROSS SECTIONS





REV. NO.	DESCRIPTION	DATE

# INDEX OF SHEETS - BRIDGE "A"

- GENERAL NOTES (BRIDGE)
- UNION PACIFIC RAILROAD COMPANY NOTES
- SUMMARY OF PAY QUANTITIES (BRIDGE)
- GENERAL PLAN AND ELEVATION - BRIDGE "A"
- GENERAL PLAN AND ELEVATION - BRIDGE "A"
- TYPICAL CROSS SECTION - BRIDGE "A"

## DESIGN DATA

**SPECIFICATION**  
AASHTO LEVER BRIDGE DESIGN SPECIFICATION,  
CUSTOMARY U.S. UNITS, SEVENTH EDITION.

**LOADING**  
14.00 OR OREGON OVERLOAD TRUCK  
OPERATING RATING: 100 KIPS  
DESIGN DEAD LOAD INCLUDES AN ALLOWANCE OF 20 PSF  
FOR A FUTURE WEARING SURFACE.

**UNIT STRESSES**  
CLASS A CONCRETE  
FC = 3,000 PSI  
CLASS AA CONCRETE  
FC = 4,000 PSI  
REINFORCING STEEL (GR. 60)  
FY = 60,000 PSI  
STRUCTURAL STEEL (GR. 50W)  
FY = 50,000 PSI  
STAINLESS STEEL A240 (TYPE 316)  
FY = 30,000 PSI

## FOUNDATION DATA

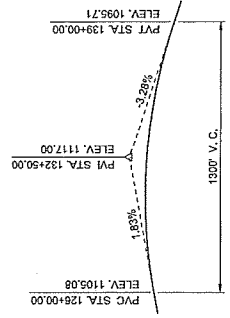
**ABUTMENTS**  
FACTORED PILE REACTION  
XX.X T/PILE

ALL ABUTMENT PILING SHALL BE DRIVEN THROUGH THE  
COMPACTED FILL. PILING SHALL BE DRIVEN TO POINT  
BEARING ON SOLID FOUNDATION MATERIAL AT THE  
MINIMUM ELEVATION SHOWN ON THE PLANS. IF  
THE AXIAL RESISTANCE IS NOT OBTAINED AT THIS  
ELEVATION, DRIVING SHALL CONTINUE UNTIL THE AXIAL  
LOAD RESISTANCE IS OBTAINED. THE LENGTH OF STEEL  
PILING SHOWN ON THE PLANS IS FOR ESTIMATING  
PURPOSES ONLY.

**PIER NO. 1, 10X" DIA. DRILLED SHAFTS**  
FACTORED REACTION  
XX.X T/SHAF  
UNIT BEARING RESISTANCE  
XX  
FACTORED BEARING RESISTANCE  
XX.X T/SHAF  
NOMINAL UNIT FRICTION RESISTANCE  
XX T/SHAF  
FACTORED FRICTION RESISTANCE  
XX.X T/SHAF  
DEPTH OF ROCK NEGLECTED FOR  
FRICTION  
XX FT  
MINIMUM EMBEDMENT INTO ROCK  
XX.X T/SHAF  
TOTAL FACTORED RESISTANCE  
XX.X T/SHAF

**PIER NO. 2, 10X" DIA. DRILLED SHAFTS**  
FACTORED REACTION  
XX.X T/SHAF  
UNIT BEARING RESISTANCE  
XX  
FACTORED BEARING RESISTANCE  
XX.X T/SHAF  
NOMINAL UNIT FRICTION RESISTANCE  
XX T/SHAF  
FACTORED FRICTION RESISTANCE  
XX.X T/SHAF  
DEPTH OF ROCK NEGLECTED FOR  
FRICTION  
XX FT  
MINIMUM EMBEDMENT INTO ROCK  
XX.X T/SHAF  
TOTAL FACTORED RESISTANCE  
XX.X T/SHAF

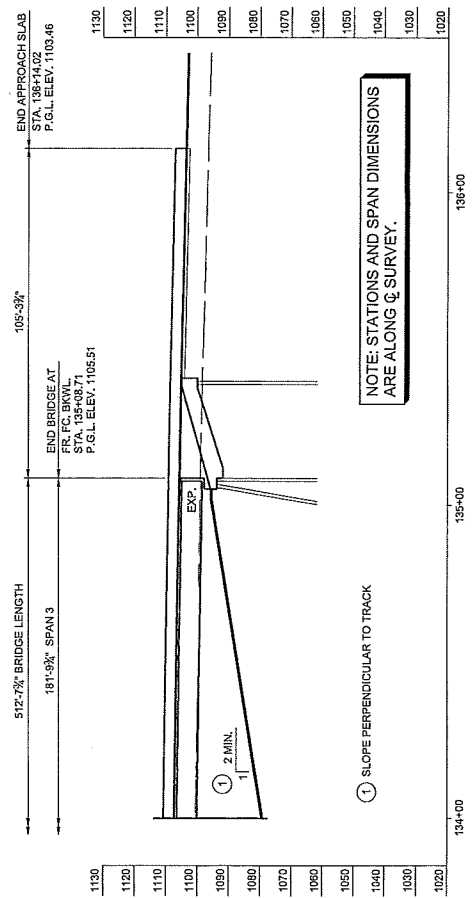
## VERTICAL CURVE DATA



**PRELIMINARY PLANS**  
THIS DOCUMENT IS PRELIMINARY  
IN NATURE AND IS NOT A FINAL  
SIGNED AND SEALED DOCUMENT.

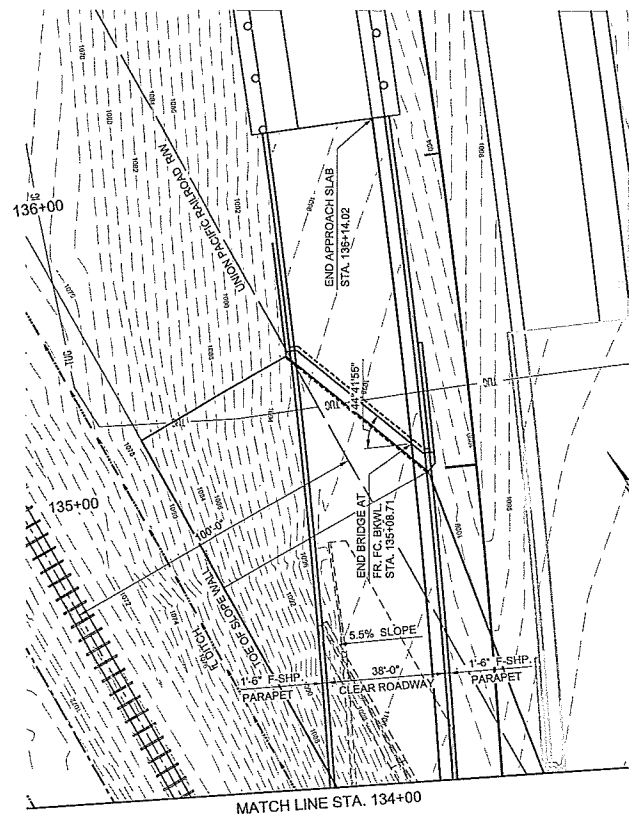
DESIGN	CLF	OKLAHOMA	DEPARTMENT OF TRANSPORTATION	US 81 OVER UNION PACIFIC RAILROAD	KINGFISHER COUNTY
DRAWN	JLF				
CHECKED	CLF				
APPROVED					
SQUAD	Mark/Thor				

## ELEVATION - BRIDGE "A"



**NOTE: STATIONS AND SPAN DIMENSIONS  
ARE ALONG C.S. SURVEY.**

① SLOPE PERPENDICULAR TO TRACK

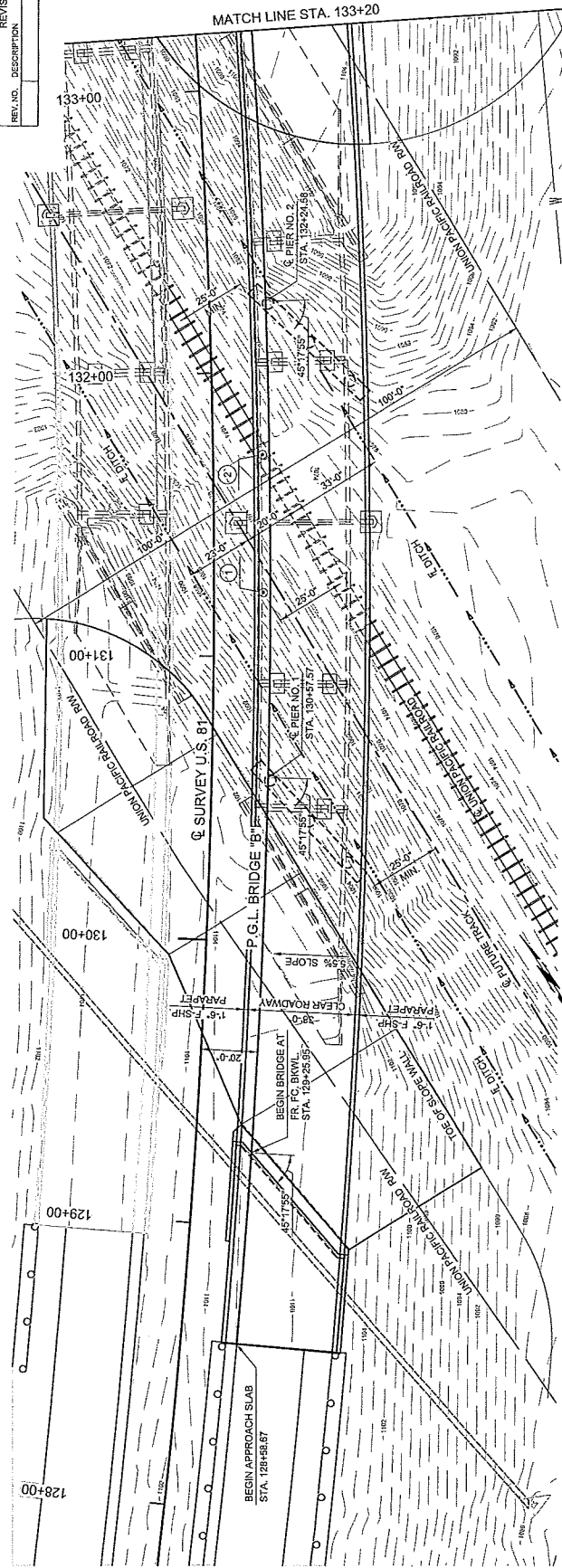


## PLAN - BRIDGE "A"

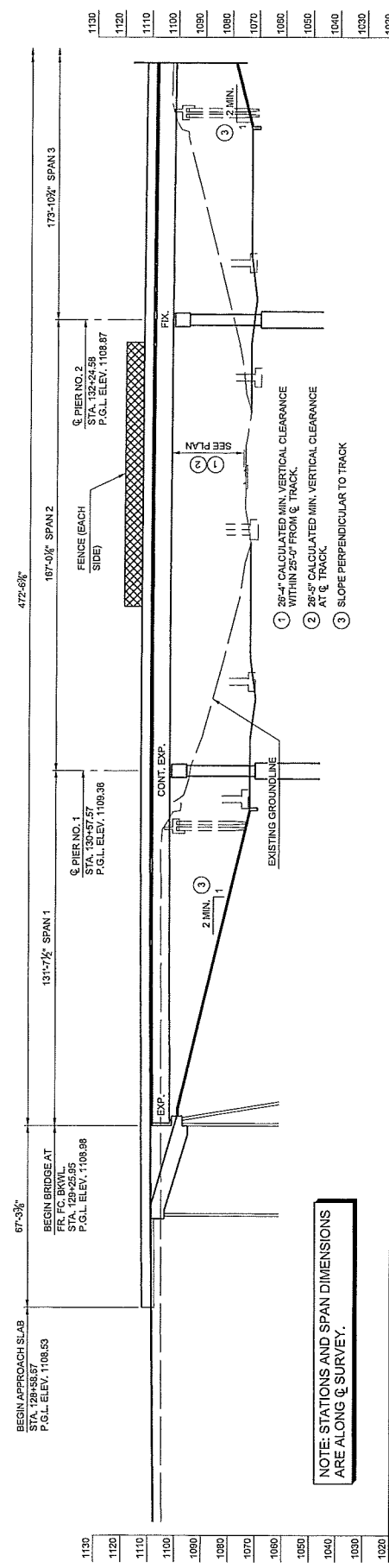




REV. NO.	DESCRIPTION	DATE



PLAN - BRIDGE "B"



NOTE: STATIONS AND SPAN DIMENSIONS ARE ALONG C.S. SURVEY.

US 81 OVER UNION PACIFIC RAILROAD

OKLAHOMA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION - BRIDGE "B"

STATION 131+62.50, 45' LF

38' CLEAR ROADWAY WITH F-SHAPED PARAPET

STATE JOB NO. 28859(04)

SHEET NO. 17

DESIGN: CLF

DRAWN: JLF

CHECKED: CLF

APPROVED: [Signature]

ECUO: [Signature]

PRELIMINARY PLANS

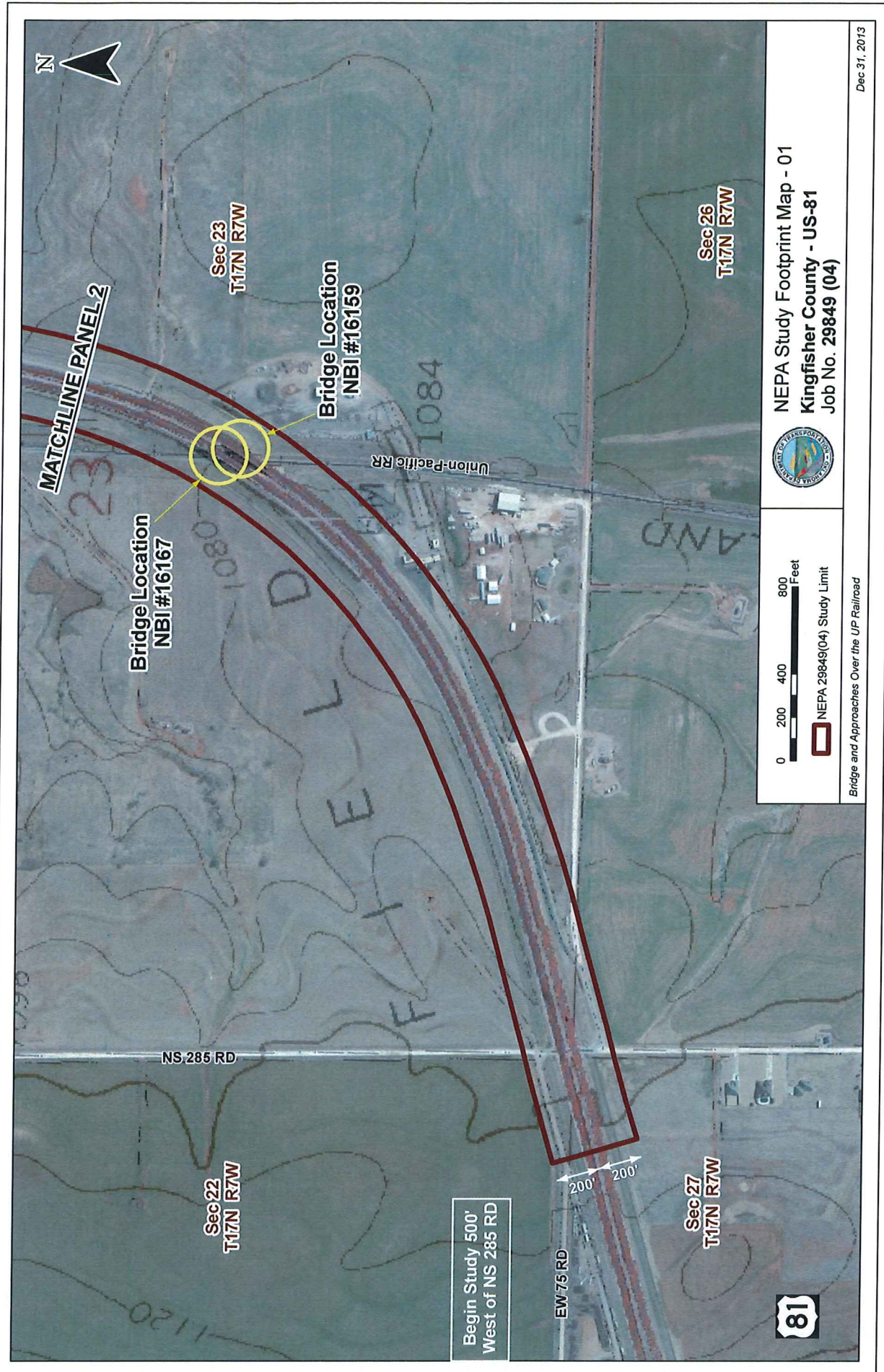
THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT.

128+00 129+00 130+00 131+00 132+00 133+00

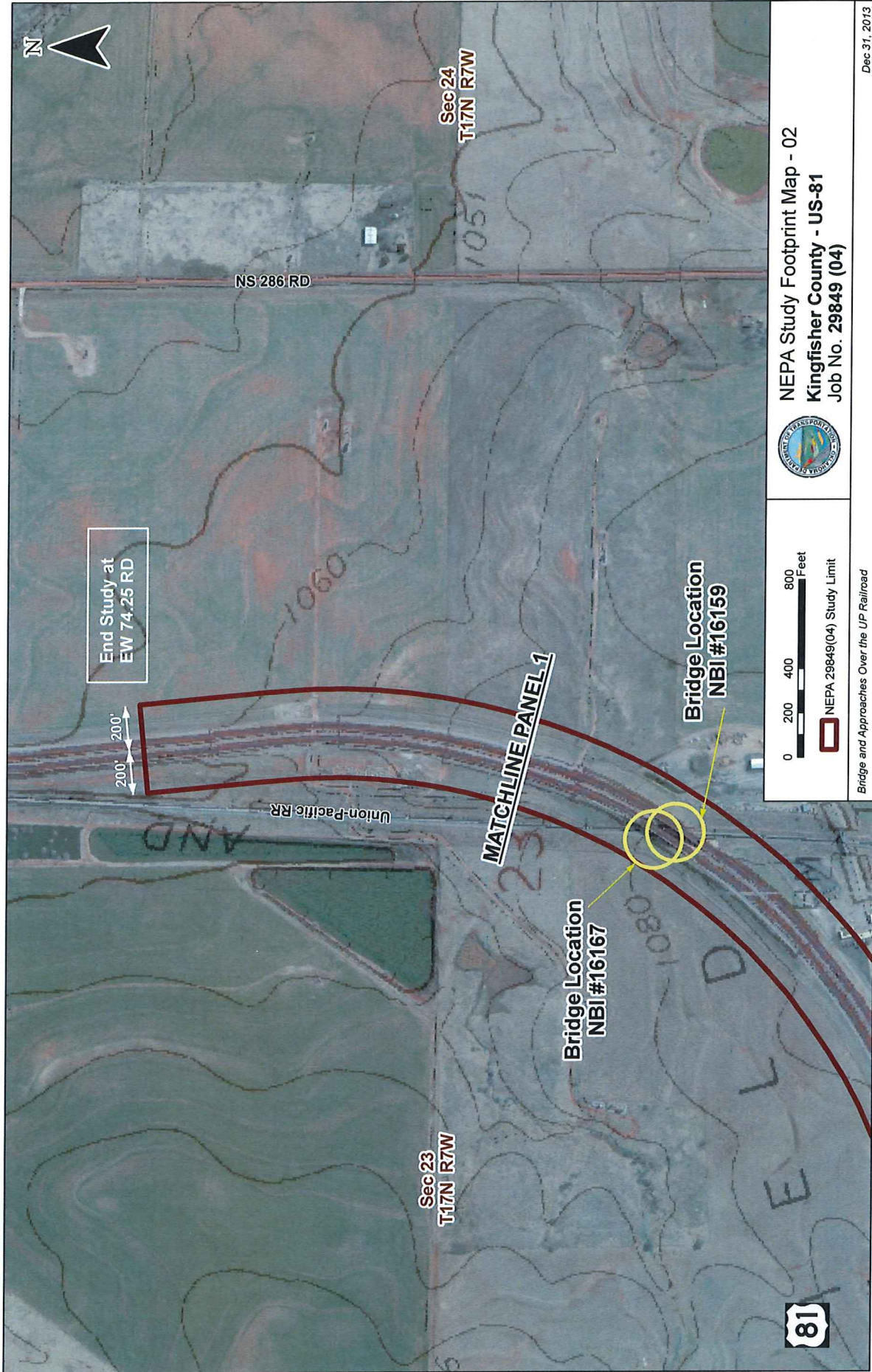
ELEVATION - BRIDGE "B"











NEPA Study Footprint Map - 02  
Kingfisher County - US-81  
Job No. 29849 (04)



0 200 400 800 Feet  
NEPA 29849(04) Study Limit

Bridge and Approaches Over the UP Railroad

Dec 31, 2013

# **CULTURAL RESOURCES STUDIES**



**Oklahoma Historical Society**  
**State Historic Preservation Office**

*Founded May 27, 1893*

Oklahoma History Center • 800 Nazih Zuhdi Drive • Oklahoma City, OK 73105-7917  
(405) 521-6249 • Fax (405) 522-0816 • [www.okhistory.org/shpo/shpom.htm](http://www.okhistory.org/shpo/shpom.htm)

September 17, 2014

Mr. Scott Sundermeyer, Director  
ODOT Cultural Resources Program  
111 East Chesapeake, Rm. 102, OU  
Norman, OK 73019

RE: File #1978-14; Union Pacific US-81 Northbound & Southbound Bridge Replacements:  
JP #29849(04)

Dear Mr. Sundermeyer:

We have received and reviewed the documentation submitted on the referenced project in Kingfisher County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no known historic properties affected within the referenced project's area of potential effect.

In addition to our review, you must contact the Oklahoma Archeological Survey (OAS), 111 E. Chesapeake, #102, Norman OK 73019-5111 (#405/325-7211, FAX #405/325-7604), to obtain a determination about the presence of prehistoric resources that may be eligible for the National Register of Historic Places. Should the OAS conclude that there are no prehistoric archaeological sites or other types of "historic properties," as defined in 36 CFR Part 800.16(l), which are eligible for inclusion in the National Register of Historic Places within the project area and that such sites are unlikely to occur, we concur with that opinion.

The OAS may conclude that an on-site investigation of all or part of the project impact area is necessary to determine the presence of archaeological resources. In the event that such an investigation reveals the presence of prehistoric archaeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process. If sites dating from the historic period are identified during the survey or are encountered during implementation of the project, additional assessments by the State Historic Preservation Office will be necessary.

Should further correspondence pertaining to this project be necessary, please reference the above underlined file number. If you have any questions, please contact Catharine M. Wood, Historical Archaeologist, at 405/521-6381. Thank you.

Sincerely,

Melvena Heisch  
Deputy State Historic  
Preservation Officer

MH:jr





## *Oklahoma Archeological Survey*

THE UNIVERSITY OF OKLAHOMA

September 2, 2014

Scott Sundermeyer  
Director, ODOT Cultural Resources Program  
Oklahoma Department of Transportation  
111 E. Chesapeake, Room 102  
University of Oklahoma  
Norman, OK 73019-5111

RE: Proposed bridge replacement on US-81 over the Union Pacific Railroad. Legal Description: Section 23, SE ¼ Section 22, NE ¼ Section 27, and NW ¼ Section 26T17N R7W, Kingfisher County, Oklahoma. J/P#29849(04).

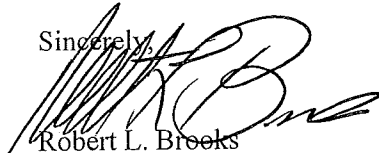
Dear Mr. Sundermeyer:

A cultural resources report of investigations has been received by this agency on the above referenced project. This agency confirms the recommendations contained in the report. The review was conducted in cooperation with the State Historic Preservation Office, Oklahoma Historical Society.

Please contact this office at (405) 325-7211 if buried archaeological materials such as chipped stone tools, pottery, bone, historic crockery, glass, metal items, or building materials are exposed during construction activities.

In addition to our comment on the cultural resource inventory conducted for this project, under 36CFR Part 800.3 you are reminded of your responsibility to consult with the appropriate Native American tribe/groups for any concerns they may have pertaining to this report.

Sincerely,



Robert L. Brooks  
State Archaeologist

:ls

Cc: SHPO







**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

August 29, 2014

Ms. Melvena Heisch  
Deputy State Historic Preservation Officer  
State Historic Preservation Office  
Oklahoma Historical Society  
800 Nazih Zuhdi Drive  
Oklahoma City, Oklahoma 73105-7917

Dear Ms. Heisch:

Re: Kingfisher County J/P 29849(04): Proposed replacement of the northbound and southbound US-81 bridges over the Union Pacific Railroad, 5.3 miles north of SH-33.

Attached is a cultural resources survey report for the referenced project prepared by the ODOT Cultural Resources Program. No archaeological sites or buildings were recorded or documented in the project study area, and the existing US-81 northbound and southbound bridges over the Union Pacific Railroad are of the type discussed in the Program Comment for post-1945 concrete and steel bridges and were therefore not documented.

Pursuant to 36 CFR 800.4(d)(1), and based upon the results of this study, it is our opinion that the project, as proposed, will have no effect on historic properties. We respectfully request your concurrence or comments to our opinion.

If you have any questions regarding this project, please contact me at 325-7201.

Sincerely,

Scott Sundermeyer  
Director, ODOT Cultural Resources Program

cc: State Archaeologist

# OKLAHOMA DEPARTMENT OF TRANSPORTATION CULTURAL RESOURCES SURVEY REPORT

## Prepared by: ODOT Cultural Resources Program

County: Kingfisher  
J/P Number: 29849(04)  
Surveyed By: Kristina Wyckoff  
Survey Date: August 25, 2014

Prepared By: Kristina Wyckoff  
Report Date: August 29, 2014

---

### 1. PROJECT DESCRIPTION:

This report documents a cultural resources survey for the proposed replacement of the US-81 northbound and southbound bridges over the Union Pacific Railroad, 5.3 miles north of SH-33. The replacement bridges will be constructed on the existing alignment. Crossovers will be utilized to maintain traffic during construction. The existing bridges each consist of two 12-foot lanes with four-foot inside shoulders and 10-foot outside shoulders, and the replacement bridges will be built according to the same dimensions, but the grade will be raised approximately three feet for necessary clearance over the railroad.

The project study area, as defined, extends 1.17 miles (approximately 6,177 feet) along a northeasterly curved section of US-81 north of Kingfisher. The study area begins 450 feet west of County Road N285 and extends north and east to a point 0.25 mile (approximately 1,312 feet) south of County Road E740. The study area stretches 200 feet east and west of the existing US-81 centerline. In total, the project study area encompasses approximately 56.76 acres.

The existing northbound and southbound bridges over Kingfisher Creek (Structures 3704 0543 EX & WX; NBIs 16159 and 16167) are both steel I-beam structures constructed in 1964. These bridges are of the type discussed in the Program Comment for post-1945 concrete and steel bridges and were therefore not documented.

Legal Location:	T17N R7W Sections 22-23 and 26-27
U.S.G.S. Quadrangle:	Dover (1972)

---

### 2. TOPOGRAPHY AND VEGETATION:

The study area is mapped along a transition between the Central Red-Bed Plains and the Western Sand-Dune Belts. The Central Red-Bed Plains geomorphic province, is comprised of Permian red shales and sandstones which form gently-rolling hills and broad, flat plains; and the Western Sand-Dune Belts geomorphic province is comprised of hummocky fields of grass-covered, stabilized sand dunes with some active dunes. Sands are from quaternary alluvium and terrace deposits. The geology of the study area as mapped is entirely comprised of Quaternary Alluvium deposits of gravel, sand, silt, clay, and local gravel.

The vegetation of the study, as mapped, is Tallgrass Prairie, which intergrades with mixedgrass eroded plains in western Oklahoma. Forest and woodland vegetation quickly replace tallgrass prairie vegetation following abandonment or fire-suppression. Little bluestem, big bluestem, Indiangrass, and switchgrass are prominent tallgrass prairie grasses.

At the time of survey the study area consisted of cultivated fields, mixed-grass pastures, one industrial lot and one residential lot. All cultivated fields in the study area were cleared and plowed at the time of survey.

#### Vegetation Coverage:

<u>XXX</u>	0-25%	Cultivated fields and scattered eroded areas in mixed-grass pasture.
<u>    </u>	25-50%	
<u>XXX</u>	50-75%	Mixed-grass pasture
<u>    </u>	75-100%	

**General Soils Observations:**

The study area, as mapped, is located in the Bethany-Norge soil association.

Soils observed in the field consisted, mostly, of dark-brown silt loam (approximately 0-10 centimeters below the surface [cmbs]) overlaying brown clay loam (0-30 cmbs) which overlay reddish-brown clay (30-50+ cmbs). In cultivated fields where the ground had been recently plowed, these soils were soft; however, mixed-grass pastures showed signs of bioturbation and soils were more compacted. Soils in the vicinity of the industrial and residential lots consisted of mottled medium-brown sandy clay and brownish-red clay intermixed with non-local gravels, asphalt, and chunks of consolidated sand.

---

**3. PROJECT METHODOLOGY:**

**A. Background Research:**

- XXX State Site Files at Oklahoma Archeological Survey (OAS)
- XXX SHPO NRHP and DOE Files
- XXX Native American Tribes and Nations Consulted by Procedures Established with FHWA and ODOT: Cheyenne and Arapaho Tribes, Osage Nation, United Keetoowah Band of Cherokees, Wichita and Affiliated Tribes
- XXX Other sources: 1873 General Land Office (GLO) Original Survey Map (T17N R7W)  
1892 Kingfisher 30' USGS Quadrangle  
1895 Kingfisher 30' USGS Quadrangle  
1936 Kingfisher County General Highway and Transportation Map  
1940 Kingfisher County General Highway and Transportation Map  
1951 Kingfisher County USDA aerial photograph (OH-7H-147)  
1957 Kingfisher County USDA aerial photograph (OH-6T-59)  
1963 Kingfisher County General Highway and Transportation Map  
1971 Kingfisher County General Highway and Transportation Map  
1972 Dover 7.5' USGS Quadrangle  
1972 (PR 1983) Kingfisher 7.5' USGS Quadrangle  
1972 Loyal 7.5' USGS Quadrangle  
1972 Loyal SE 7.5' USGS Quadrangle  
1983 Kingfisher County General Highway and Transportation Map
- Brooks, Robert L.  
1983 Resource Protection Planning Process Management Region 5. Report submitted to the State Historic Preservation Office Oklahoma Historical Society. Unpublished manuscript on file at the Oklahoma Archeological Survey, Norman.
- Brooks, Robert L.  
2005 Oklahoma Atlas of Archaeological Sites and Management Activities. <http://www.ou.edu/cas/archsur/Atlas/atlas.htm> accessed online May 12, 2014.
- 1959 *Soil Survey Kingfisher County, Oklahoma*. United States Department of Agriculture, Soil Conservation Service, and Oklahoma Experiment Station. U.S. Government Printing Office, Washington, D.C.

### ***RESULTS OF BACKGROUND RESEARCH:***

A review of the Oklahoma Archeological Survey (OAS) maps and site files indicates that no previously-recorded archaeological sites are located within the project study area or within the one-mile vicinity.

Beyond the one-mile vicinity of the study area, twenty-two previously-recorded prehistoric archaeological sites are located in the general area of the project, specifically on the OAS Kingfisher, Dover, Kingfisher NE, Kingfisher SE, Loyal, and Loyal SE quadrangles. These sites are generally located on terraces, low rises, and low ridges along major drainages and minor drainages near their confluence with major drainages, especially Uncle John's Creek, Indian Creek, Clear Creek, Campbell Creek, Walnut Creek, Kingfisher Creek, and Cooper Creek, and along small unnamed drainages which feed into the south bank of the Cimarron River. According to the Oklahoma Atlas of Archaeological Sites and Management Activities, in 2004, 37 sites had been recorded in Kingfisher County as a whole (Brooks 2005). At that time, the recorded sites included one Paleoindian site, two Archaic sites, two Woodland sites, 15 Village Farming sites, and eight historic sites (Brooks 2005). Currently 53 sites have been recorded in Kingfisher County. Brooks includes Kingfisher County in "Region 4" of his Resource Protection Planning Process Management manuscript. "Region 4" consists of Oklahoma's southern mixed-grass and tallgrass prairie and includes sites from Paleoindian, Archaic, Woodland, Village Farming, Protohistoric, and historic periods. Brooks notes this region has yielded evidence of the oldest-known human occupations in Oklahoma, specifically, excavations at the Cooperton site in Kiowa County and the Domebo Site in Caddo County are two Paleoindian mammoth kill sites dating between 11,200 and 20,000 years ago (Brooks 1983:5). In 1983, more Paleoindian sites and more Archaic sites had been recorded in region 4 than in any other region of the state (Brooks 1983:17, 28).

Nineteenth and 20<sup>th</sup> century archaeological sites are generally recorded where occupations are indicated on historic maps or aerial photographs. Though no buildings are indicated in the study area on the 1873 GLO, the "Fort Sill and Arkansas City Road" is indicated beyond the project study area boundary, but suggests activity in the general area during the latter half of the 19<sup>th</sup> century. One non-extant building is indicated in the project study area boundary on the 1895 Kingfisher quadrangle. This building is not indicated in the remaining historic maps or aerial photographs and the mapped location is bisected by an access road along the south side of the existing US-81 roadway in the SW ¼ of Section 23. This area could represent a late 19<sup>th</sup> century archaeological site and will be located in the field, inspected, and shovel tested for archaeological materials. No other non-extant structures are indicated in the project study area on historic maps or aerial photographs.

### **B. Field Investigation Methodology:**

- ☐ 100% Windshield Survey
- ☐ Windshield survey with sample pedestrian survey
- ☒ 100% pedestrian survey
- ☒ Subsurface Testing. Describe methodology of testing under comments, below:

### ***FIELD INVESTIGATION METHODOLOGY COMMENTS:***

The entire study area was subjected to pedestrian archaeological survey with shovel tests placed in areas of poor surface visibility. Based on the background research, the few prehistoric archaeological sites present in the general area of the project tend to be located on terraces, low rises, and low ridges overlooking major drainages and minor drainages near their confluence with major drainages. Because of the increased likelihood for prehistoric archaeological sites to occur in these locations in the general area of the project, all terraces and rises in the study area were be shovel tested for evidence of archaeological materials. The location of the building indicated on the 1895 Kingfisher quadrangle was identified in the field, inspected, and shovel tested for evidence of archaeological materials. Additionally, all creek banks, eroded areas, and road cuts were inspected for evidence of archaeological materials or buried soils.

---

#### 4. RESULTS OF INVESTIGATION:

XXX No archeological sites or buildings recorded in study area.

\_\_\_\_\_ Resources recorded in study area assessed as **not eligible** for the NRHP. Forms being submitted for agency review.

\_\_\_\_\_ Oklahoma Archeological Site Survey Form(s) for State Archeologist files.

\_\_\_\_\_ Historic Preservation Resource Identification Form(s) for SHPO files.

\_\_\_\_\_ Oklahoma Bridge Survey and Inventory Form.

\_\_\_\_\_ **NRHP-eligible properties** recorded in study area.

**Forms being submitted for agency review.**

\_\_\_\_\_ Oklahoma Archeological Site Survey Form(s) for State Archeologist files.

\_\_\_\_\_ Historic Preservation Resource Identification Form(s) for SHPO files.

\_\_\_\_\_ Oklahoma Bridge Survey and Inventory Form.

\_\_\_\_\_ Archeological sites requiring further assessment (i.e. evaluative testing)

#### ***COMMENTS AND DESCRIPTION OF FINDINGS:***

No archaeological sites were identified during this investigation. The area where a building was indicated on the 1895 Kingfisher quadrangle was identified in the field, inspected, and shovel tested; however, no evidence of archaeological materials or features was observed at this location.

Shovel testing indicted soils in the study area generally consisted of dark-brown silt loam (approximately 0-10 cmbs) overlaying brown clay loam (10-30 cmbs) which overlay reddish-brown clay (30-50+ cmbs). In mixed-grass pastures, which showed signs of heavy bioturbation, these soils were more compacted. In cultivated fields where the ground had been recently plowed, these soils were soft and consisted of brown silty clay loam (approximately 0-30 cmbs) overlying the reddish-brown clay (30-50+ cmbs). Soils in the vicinity of the industrial and residential lots consisted of mottled medium-brown sandy clay and brownish-red clay intermixed with non-local gravels, asphalt, and chunks of consolidated sand.

The study area is in an unfavorable setting for the presence and preservation of intact, buried archaeological deposits, and has been extensively disturbed by road construction, pipeline construction, utility emplacements, and agricultural and pastoral activities. Any archaeological sites that would be present within the project study area would lack sufficient integrity of location and association to be able to address important questions of prehistory or history (36 CFR 60.4).

---

#### 5. RECOMMENDATIONS:

\_\_\_\_\_ **Plan Notes** requiring avoidance of cultural resources in off-project areas

XXX **Approval to proceed** with the proposed project as planned with no additional research. If subsurface archaeological materials are exposed during construction, the Contractor and Resident Engineer shall notify the Department Archeologist in accordance with Section 202.04(a), Standard Specifications for Highway Construction.

\_\_\_\_\_ **Approval NOT Recommended**, until one or more of the following measures are completed.

\_\_\_\_\_ **Additional consultation with SHPO** regarding NRHP-eligible Properties

\_\_\_\_\_ **Revise design** to avoid/protect resources

\_\_\_\_\_ **NRHP Eligibility Archeological Test Excavations**

\_\_\_\_\_ **Implementation of MOA** with SHPO regarding Mitigation of Adverse Effects to Historic Properties

***COMMENTS REGARDING RECOMMENDATIONS:***

No significant properties will be affected through the proposed project as field investigations encountered no archaeological materials or features, and an archival review did not identify archaeological properties (36 CFR 800.16(1)).

In accordance with 36 CFR 800.16(1) ODOT finds that the study area does not contain historic properties. In the event that unanticipated archaeological deposits are encountered during construction, work in the immediate area will cease and the Department Archaeologist will be contacted to initiate post-review discoveries, in accordance with Section 107.09, Standard Specifications for Highway Construction.

In accordance with 36 CFR 800.4, an ODOT archaeologist made a reasonable and good faith effort to evaluate the potential for the proposed undertaking to affect archaeological historic properties.

Pursuant to 36 CFR 800.4(d)(1), it is our opinion there are no historic properties affected. We recommend that the project proceed as planned.

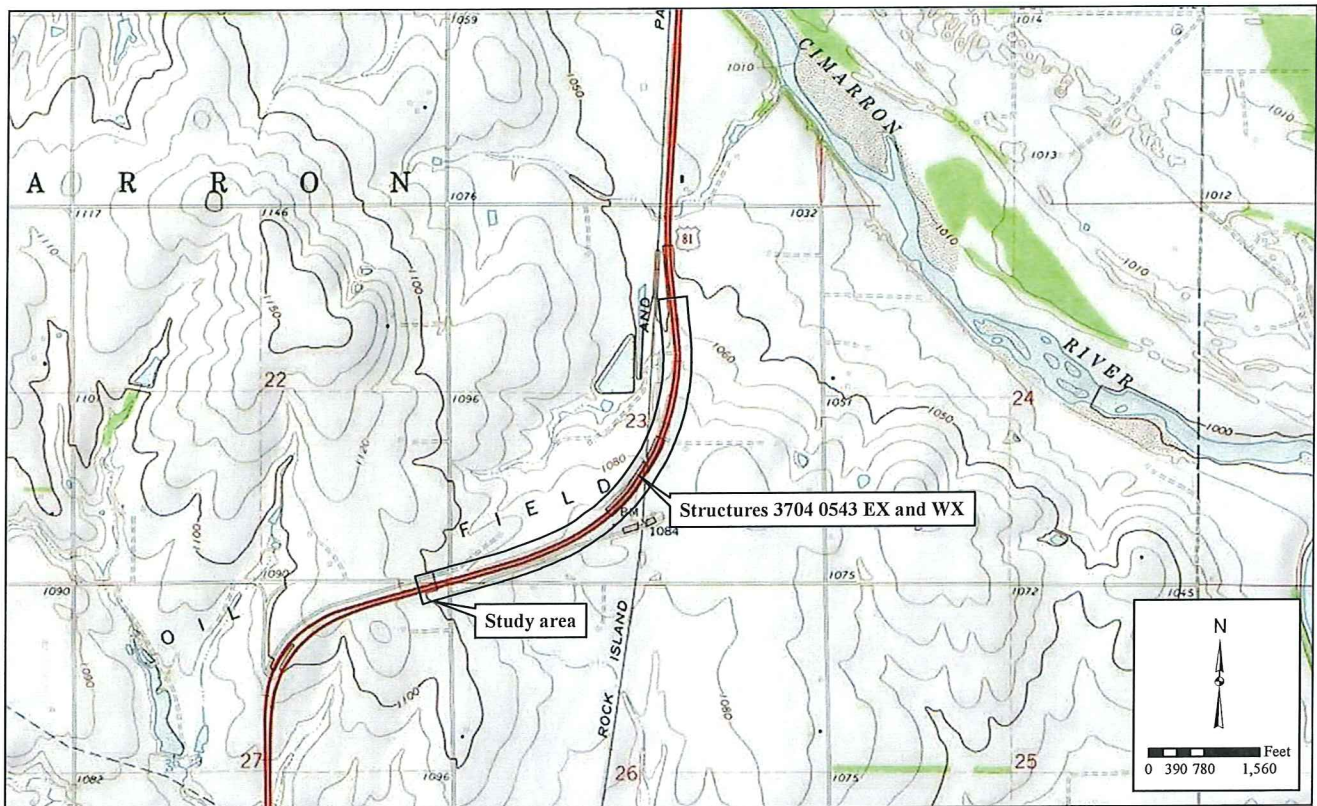
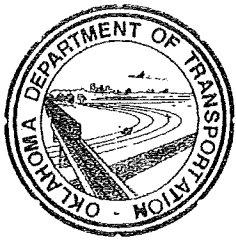


Figure 1. Kingfisher County JP 29849(04): Replacement of US-81 northbound and southbound bridges over the Union Pacific Railroad.

Basemap: Dover (1972) T17N R7W Sections 22-23 and 26-27.





**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

June 10, 2014

Cheyenne and Arapaho Tribes  
Attn: Governor  
P.O. Box 167  
Concho, OK 73022

Dear Governor:

Re: Kingfisher County proposed bridge replacement and approach improvements on U.S. 81 (northbound and southbound) over the Union Pacific Railroad (existing alignment); JP# 29849(04)

Pursuant to §800.2(c)(2) of the Rules and Regulations implementing Section 106 of the National Historic Preservation Act, the Oklahoma Department of Transportation is initiating consultation on behalf of the Federal Highway Administration regarding historic properties that may be affected by the above referenced Federal-Aid undertaking.

Enclosed, please find a map of the project location. If this undertaking is likely to affect properties of religious and cultural significance to your tribe, please notify me as soon as possible. In order to provide the most thorough consideration of properties in the planning process, we would greatly appreciate your response to this request within 30 days. When responding, please include the county in which the project is taking place and the Job Piece number (JP#) on all correspondence. If the information that you are providing is of a sensitive nature, please rest assured that we will respect your wishes regarding the confidentiality of information provided in response to this request.

The Oklahoma Department of Transportation's Cultural Resources Program, or an independent consulting firm working on our behalf, will conduct a cultural resources survey of the proposed project area. The goal of this survey is to make a reasonable and good faith effort to identify historic properties within the area of potential effect, in accordance with §800.4. The survey will be performed in consultation with the Oklahoma State Historic Preservation Office and other consulting parties as appropriate. You will be provided a copy of the cultural resources report to review upon its completion.

If you have any questions or would like to meet regarding this project, please contact me by telephone at 405.325.8665 or by email at [rsfair@ou.edu](mailto:rsfair@ou.edu).

Sincerely,

Rhonda S. Fair, Ph.D.  
Tribal Liaison  
ODOT Cultural Resources Program

cc: Margaret Anquoe, Acting THPO

*"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."*

AN EQUAL OPPORTUNITY EMPLOYER



**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

September 4, 2014

Cheyenne and Arapaho Tribes  
Attn: Governor Eddie Hamilton  
P.O. Box 167  
Concho, OK 73022

Dear Governor Hamilton:

Re: Kingfisher County proposed northbound and southbound bridge replacements and approach improvements on U.S. 81 over the Union Pacific railroad; JP# 29849(04)

Pursuant to §800.2(c)(2) of the Rules and Regulations implementing Section 106 of the National Historic Preservation Act, the Oklahoma Department of Transportation is continuing consultation on behalf of the Federal Highway Administration regarding historic properties that may be affected by the above referenced Federal-Aid undertaking.

The Oklahoma Department of Transportation's Cultural Resources Program, or an independent consulting firm working on our behalf, conducted a cultural resources survey of the proposed project area. A copy of this report is enclosed and describes our efforts to identify historic properties that may be affected by the proposed undertaking.

No archaeological sites or buildings were recorded or documented in the project's study area. Pursuant to 36 CFR 800.4(d)(1), and based upon the results of this study, our opinion is that the project, as proposed, will have no effect on historic properties.

If this undertaking is likely to affect properties of religious and cultural significance to your tribe, please notify me as soon as possible. In order to provide the most thorough consideration of properties in the planning process, we would greatly appreciate your response to this request within 30 days. When responding, please include the county in which the project is taking place and the Job Piece number (JP#) on all correspondence. If the information that you are providing is of a sensitive nature, please rest assured that we will respect your wishes regarding the confidentiality of information provided in response to this request.

If you have any questions or would like to meet regarding this project, please contact me by telephone at 405.325.8665 or by email at [rsfair@ou.edu](mailto:rsfair@ou.edu).

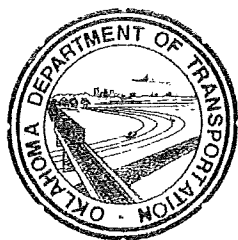
Sincerely,

Rhonda S. Fair, Ph.D.  
Tribal Liaison  
ODOT Cultural Resources Program

cc: Margaret Anquoe, Acting THPO

*"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."*

**AN EQUAL OPPORTUNITY EMPLOYER**



**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

June 10, 2014

Osage Nation  
Attn: Principal Chief Scott BigHorse  
627 Grandview  
Pawhuska, OK 74056

Dear Principal Chief BigHorse:

Re: Kingfisher County proposed bridge replacement and approach improvements on U.S. 81 (northbound and southbound) over the Union Pacific Railroad (existing alignment); JP# 29849(04)

Pursuant to §800.2(c)(2) of the Rules and Regulations implementing Section 106 of the National Historic Preservation Act, the Oklahoma Department of Transportation is initiating consultation on behalf of the Federal Highway Administration regarding historic properties that may be affected by the above referenced Federal-Aid undertaking.

Enclosed, please find a map of the project location. If this undertaking is likely to affect properties of religious and cultural significance to your tribe, please notify me as soon as possible. In order to provide the most thorough consideration of properties in the planning process, we would greatly appreciate your response to this request within 30 days. When responding, please include the county in which the project is taking place and the Job Piece number (JP#) on all correspondence. If the information that you are providing is of a sensitive nature, please rest assured that we will respect your wishes regarding the confidentiality of information provided in response to this request.

The Oklahoma Department of Transportation's Cultural Resources Program, or an independent consulting firm working on our behalf, will conduct a cultural resources survey of the proposed project area. The goal of this survey is to make a reasonable and good faith effort to identify historic properties within the area of potential effect, in accordance with §800.4. The survey will be performed in consultation with the Oklahoma State Historic Preservation Office and other consulting parties as appropriate. You will be provided a copy of the cultural resources report to review upon its completion.

If you have any questions or would like to meet regarding this project, please contact me by telephone at 405.325.8665 or by email at [rsfair@ou.edu](mailto:rsfair@ou.edu).

Sincerely,

Rhonda S. Fair, Ph.D.  
Tribal Liaison  
ODOT Cultural Resources Program

cc: Barker Farris

*"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."*

AN EQUAL OPPORTUNITY EMPLOYER



**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

September 4, 2014

Osage Nation  
Attn: Principal Chief Geoffrey Standing Bear  
627 Grandview  
Pawhuska, OK 74056

Dear Principal Chief Standing Bear:

Re: Kingfisher County proposed northbound and southbound bridge replacements and approach improvements on U.S. 81 over the Union Pacific railroad; JP# 29849(04)

Pursuant to §800.2(c)(2) of the Rules and Regulations implementing Section 106 of the National Historic Preservation Act, the Oklahoma Department of Transportation is continuing consultation on behalf of the Federal Highway Administration regarding historic properties that may be affected by the above referenced Federal-Aid undertaking.

The Oklahoma Department of Transportation's Cultural Resources Program, or an independent consulting firm working on our behalf, conducted a cultural resources survey of the proposed project area. A copy of this report is enclosed and describes our efforts to identify historic properties that may be affected by the proposed undertaking.

No archaeological sites or buildings were recorded or documented in the project's study area. Pursuant to 36 CFR 800.4(d)(1), and based upon the results of this study, our opinion is that the project, as proposed, will have no effect on historic properties.

If this undertaking is likely to affect properties of religious and cultural significance to your tribe, please notify me as soon as possible. In order to provide the most thorough consideration of properties in the planning process, we would greatly appreciate your response to this request within 30 days. When responding, please include the county in which the project is taking place and the Job Piece number (JP#) on all correspondence. If the information that you are providing is of a sensitive nature, please rest assured that we will respect your wishes regarding the confidentiality of information provided in response to this request.

If you have any questions or would like to meet regarding this project, please contact me by telephone at 405.325.8665 or by email at [rsfair@ou.edu](mailto:rsfair@ou.edu).

Sincerely,

Rhonda S. Fair, Ph.D.  
Tribal Liaison  
ODOT Cultural Resources Program

cc: Historic Preservation Office



**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

June 10, 2014

United Keetoowah Band of Cherokees  
Attn: Chief George Wickcliffe  
P.O. Box 746  
Tahlequah, OK 74465

Dear Chief Wickcliffe:

Re: Kingfisher County proposed bridge replacement and approach improvements on U.S. 81 (northbound and southbound) over the Union Pacific Railroad (existing alignment); JP# 29849(04)

Pursuant to §800.2(c)(2) of the Rules and Regulations implementing Section 106 of the National Historic Preservation Act, the Oklahoma Department of Transportation is initiating consultation on behalf of the Federal Highway Administration regarding historic properties that may be affected by the above referenced Federal-Aid undertaking.

Enclosed, please find a map of the project location. If this undertaking is likely to affect properties of religious and cultural significance to your tribe, please notify me as soon as possible. In order to provide the most thorough consideration of properties in the planning process, we would greatly appreciate your response to this request within 30 days. When responding, please include the county in which the project is taking place and the Job Piece number (JP#) on all correspondence. If the information that you are providing is of a sensitive nature, please rest assured that we will respect your wishes regarding the confidentiality of information provided in response to this request.

The Oklahoma Department of Transportation's Cultural Resources Program, or an independent consulting firm working on our behalf, will conduct a cultural resources survey of the proposed project area. The goal of this survey is to make a reasonable and good faith effort to identify historic properties within the area of potential effect, in accordance with §800.4. The survey will be performed in consultation with the Oklahoma State Historic Preservation Office and other consulting parties as appropriate. You will be provided a copy of the cultural resources report to review upon its completion.

If you have any questions or would like to meet regarding this project, please contact me by telephone at 405.325.8665 or by email at [rsfair@ou.edu](mailto:rsfair@ou.edu).

Sincerely,

Rhonda S. Fair, Ph.D.  
Tribal Liaison  
ODOT Cultural Resources Program

cc: Lisa C. Baker

*"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."*

AN EQUAL OPPORTUNITY EMPLOYER

**Fair, Rhonda S.**

---

**From:** Lisa LaRue-Baker - UKB THPO <ukbthpo-larue@yahoo.com>  
**Sent:** Thursday, June 12, 2014 7:14 AM  
**To:** Fair, Rhonda S.  
**Cc:** verna; Ernestine Berry  
**Subject:** Re: Kingfisher County JP# 29849(04) initial consultation

Hi Rhonda! Doing well! Hope you are, too!

The United Keetoowah Band of Cherokee Indians in Oklahoma has reviewed your project under Section 106 of the NHPA, and at this time, have no comments or objections. However, if any human remains are inadvertently discovered, please cease all work and contact us immediately.

Thank you,

**Lisa C. Baker**

Acting THPO  
United Keetoowah Band of Cherokee Indians in Oklahoma  
PO Box 746  
Tahlequah, OK 74465

c 918.822.1952  
[ukbthpo-larue@yahoo.com](mailto:ukbthpo-larue@yahoo.com)

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.

**Please FOLLOW our historic preservation page and LIKE us on FACEBOOK**

On Tuesday, June 10, 2014 10:35 AM, "Fair, Rhonda S." <[rsfair@ou.edu](mailto:rsfair@ou.edu)> wrote:

Dear Lisa,





**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

September 4, 2014

United Keetoowah Band of Cherokees  
Attn: Chief George Wickcliffe  
P.O. Box 746  
Tahlequah, OK 74465

Dear Chief Wickcliffe:

Re: Kingfisher County proposed northbound and southbound bridge replacements and approach improvements on U.S. 81 over the Union Pacific railroad; JP# 29849(04)

Pursuant to §800.2(c)(2) of the Rules and Regulations implementing Section 106 of the National Historic Preservation Act, the Oklahoma Department of Transportation is continuing consultation on behalf of the Federal Highway Administration regarding historic properties that may be affected by the above referenced Federal-Aid undertaking.

The Oklahoma Department of Transportation's Cultural Resources Program, or an independent consulting firm working on our behalf, conducted a cultural resources survey of the proposed project area. A copy of this report is enclosed and describes our efforts to identify historic properties that may be affected by the proposed undertaking.

No archaeological sites or buildings were recorded or documented in the project's study area. Pursuant to 36 CFR 800.4(d)(1), and based upon the results of this study, our opinion is that the project, as proposed, will have no effect on historic properties.

If this undertaking is likely to affect properties of religious and cultural significance to your tribe, please notify me as soon as possible. In order to provide the most thorough consideration of properties in the planning process, we would greatly appreciate your response to this request within 30 days. When responding, please include the county in which the project is taking place and the Job Piece number (JP#) on all correspondence. If the information that you are providing is of a sensitive nature, please rest assured that we will respect your wishes regarding the confidentiality of information provided in response to this request.

If you have any questions or would like to meet regarding this project, please contact me by telephone at 405.325.8665 or by email at [rsfair@ou.edu](mailto:rsfair@ou.edu).

Sincerely,

Rhonda S. Fair, Ph.D.  
Tribal Liaison  
ODOT Cultural Resources Program

cc: Lisa C. Baker

*"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."*

AN EQUAL OPPORTUNITY EMPLOYER

**Fair, Rhonda S.**

---

**From:** Lisa LaRue-Baker - UKB THPO <ukbthpo-larue@yahoo.com>  
**Sent:** Thursday, September 11, 2014 1:52 PM  
**To:** Fair, Rhonda S.  
**Cc:** verna; eberry@unitedkeetoowahband.org  
**Subject:** Re: Kingfisher County JP# 29849(04) CR report

The United Keetoowah Band of Cherokee Indians in Oklahoma has reviewed your project under Section 106 of the NHPA, and at this time, we have no objection or comments. However, if any inadvertent discoveries of human remains are made, please cease all work and contact us immediately.

Thank you,

**Lisa C. Baker**

Acting THPO  
United Keetoowah Band of Cherokee Indians in Oklahoma  
PO Box 746  
Tahlequah, OK 74465

c 918.822.1952  
[ukbthpo-larue@yahoo.com](mailto:ukbthpo-larue@yahoo.com)

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.

**Please FOLLOW our historic preservation page and LIKE us on FACEBOOK**

On Thursday, September 4, 2014 11:59 AM, "Fair, Rhonda S." <[rsfair@ou.edu](mailto:rsfair@ou.edu)> wrote:

Dear Lisa,

Last one for the day!



**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

June 10, 2014

Wichita and Affiliated Tribes  
Attn: President Terri Parton  
P.O. Box 729  
Anadarko, OK 73005

Dear President Parton:

Re: Kingfisher County proposed bridge replacement and approach improvements on U.S. 81 (northbound and southbound) over the Union Pacific Railroad (existing alignment); JP# 29849(04)

Pursuant to §800.2(c)(2) of the Rules and Regulations implementing Section 106 of the National Historic Preservation Act, the Oklahoma Department of Transportation is initiating consultation on behalf of the Federal Highway Administration regarding historic properties that may be affected by the above referenced Federal-Aid undertaking.

Enclosed, please find a map of the project location. If this undertaking is likely to affect properties of religious and cultural significance to your tribe, please notify me as soon as possible. In order to provide the most thorough consideration of properties in the planning process, we would greatly appreciate your response to this request within 30 days. When responding, please include the county in which the project is taking place and the Job Piece number (JP#) on all correspondence. If the information that you are providing is of a sensitive nature, please rest assured that we will respect your wishes regarding the confidentiality of information provided in response to this request.

The Oklahoma Department of Transportation's Cultural Resources Program, or an independent consulting firm working on our behalf, will conduct a cultural resources survey of the proposed project area. The goal of this survey is to make a reasonable and good faith effort to identify historic properties within the area of potential effect, in accordance with §800.4. The survey will be performed in consultation with the Oklahoma State Historic Preservation Office and other consulting parties as appropriate. You will be provided a copy of the cultural resources report to review upon its completion.

If you have any questions or would like to meet regarding this project, please contact me by telephone at 405.325.8665 or by email at [rsfair@ou.edu](mailto:rsfair@ou.edu).

Sincerely,

Rhonda S. Fair, Ph.D.  
Tribal Liaison  
ODOT Cultural Resources Program

cc: Historic Preservation Office

*"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."*

AN EQUAL OPPORTUNITY EMPLOYER



**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
CULTURAL RESOURCES PROGRAM**

111 E. Chesapeake, Room 102, University of Oklahoma  
Norman, OK 73019-5111  
Phone: 405-325-7201/325-8665; FAX: 405-325-7604

---

September 4, 2014

Wichita and Affiliated Tribes  
Attn: President Terri Parton  
P.O. Box 729  
Anadarko, OK 73005

Dear President Parton:

Re: Kingfisher County proposed northbound and southbound bridge replacements and approach improvements on U.S. 81 over the Union Pacific railroad; JP# 29849(04)

Pursuant to §800.2(c)(2) of the Rules and Regulations implementing Section 106 of the National Historic Preservation Act, the Oklahoma Department of Transportation is continuing consultation on behalf of the Federal Highway Administration regarding historic properties that may be affected by the above referenced Federal-Aid undertaking.

The Oklahoma Department of Transportation's Cultural Resources Program, or an independent consulting firm working on our behalf, conducted a cultural resources survey of the proposed project area. A copy of this report is enclosed and describes our efforts to identify historic properties that may be affected by the proposed undertaking.

No archaeological sites or buildings were recorded or documented in the project's study area. Pursuant to 36 CFR 800.4(d)(1), and based upon the results of this study, our opinion is that the project, as proposed, will have no effect on historic properties.

If this undertaking is likely to affect properties of religious and cultural significance to your tribe, please notify me as soon as possible. In order to provide the most thorough consideration of properties in the planning process, we would greatly appreciate your response to this request within 30 days. When responding, please include the county in which the project is taking place and the Job Piece number (JP#) on all correspondence. If the information that you are providing is of a sensitive nature, please rest assured that we will respect your wishes regarding the confidentiality of information provided in response to this request.

If you have any questions or would like to meet regarding this project, please contact me by telephone at 405.325.8665 or by email at [rsfair@ou.edu](mailto:rsfair@ou.edu).

Sincerely,

Rhonda S. Fair, Ph.D.  
Tribal Liaison  
ODOT Cultural Resources Program

cc: Historic Preservation Office

*"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."*

AN EQUAL OPPORTUNITY EMPLOYER

# **BIOLOGICAL STUDIES**

**Oklahoma Department of Transportation**  
**NEPA SUMMARY FORM**  
**Endangered Species Act Section 7 Biological Assessment**  
**Bald Eagle Assessment,**  
**Swallow Assessment**  
**and**  
**Jurisdictional Waters and Wetlands Evaluation**

County: Kingfisher  
J/P Number: 29849(04)  
Report Prepared by: James K. Teague  
USFWS Concurrence Date: none required  
Form Prepared by: James K. Teague

NEPA PM: Tim Vermillion  
Project Number: J2-9849(004)  
Report Submitted Date: June 25, 2014  
ROW or Let Date: FFY 2020  
Date: June 25, 2015

1. Project Description:
  - a. Project Name: US-81 UP Railroad
  - b. Work Description: Bridge and Approaches on the existing alignment
  - c. Footprint acreage: 65.233 acres

2. Federally Listed Species Effect Determinations: **USFWS #:** 02EKOK00-2014-SLI-1006  
**NOTE:** Within 90 days of construction, a current species list must be requested to determine if any changes to federally-listed species have occurred since the original ESA section 7 consultation. If changes have occurred, further consultation may be required.

<u>Species</u>	<u>Listing Status</u>	<u>Effect Determination &amp; Concurrence</u>	<u>USFWS Concurrence Requirements</u>
Interior Least Tern	Endangered	No Effect	None
Whooping Crane	Endangered	No Effect	None
Arkansas River shiner	Threatened	No Effect	None
Piping Plover	Threatened	No Effect	None
Red Knot	Proposed	No Effect	None

3. Bald Eagle Assessment:   x   not expected to impact *or*        may impact
4. Swallow Assessment:        may not impact *or*   x   will likely impact
5. Migratory Birds: species that are present during the breeding season will be addressed by implementing measures, designed in coordination with the USFWS, to avoid impacts to active nests. This will be done prior to project letting and any appropriate plan notes will be provided at that time.
6. NEPA Commitments:
  - a. Surveys: None Required



b. Habitat Conservation: None Required

c. Swallow and other migratory bird nesting on transportation structures

NBI/Station number/Coordinates	check if need to protect	check if need to re-survey
RCB culvert at (35.9282N, 97.9225W)	x	
(NBI#: 16159)	x	
US-81 S. Bound bridge	x	

**Swallow Plan Note:**

Cliff Swallows and Barn Swallows are small colonial nesting birds protected by the federal Migratory Bird Treaty Act. These species commonly use bridges and culverts for nesting. Swallow use of an RCB culvert at (35.9282N, 97.9225W) as well as the north and south bound US-81 bridges over the UP railroad (NBI#: 16159 and 16167) in this project has been observed. In order to avoid impacts to swallows, work on these structures must be completed between September 1, and March 31, when nests are not occupied. If work cannot be completed between September 1 and March 31, the structures must be protected from new nest establishment prior to April 1, by means that do not result in death or injury to these birds. Options include the exclusion of adult birds from suitable nest sites on or within a structure by the placement of netting prior to April 1. Methods other than netting must be pre-approved by the ODOT Biologist.

7. Waters and Wetlands Evaluation:

Wetlands and Ponds:

Number of Field Sites	Type of Wetland or Pond	Cowardin Classification	Potential Jurisdictional Status	Acres within Environmental Study Footprint
1	Palustrine, unconsolidated bottom	PUB3C- palustrine, unconsolidated bottom, mud bottom, seasonally flooded	Not Jurisdictional	0.174

Streams and Drainages:

Number of Field Sites	Stream Name	USGS Mapped Status	Potential Jurisdictional Status	Acres within Environmental Study Footprint	Linear Feet within Environmental Study Footprint
7	Unnamed tributaries	Unmapped, ephemeral	Not Jurisdictional	1.639	3,769

**ENDANGERED, THREATENED AND CANADATE SPECIES, DESIGNATED  
CRITICAL HABITAT, BALD EAGLE AND SWALLOW ASSESSMENT**

**For**

County	<b>Kingfisher</b>	JP Number	<b>29849(04)</b>	Project Number	<b>J2-9849(004)</b>
Road Number	<b>US-81</b>	Water Body Name	<b>None (UP Railroad)</b>		
ROW Date	<b>N/A</b>	Let Date	<b>FFY 2020</b>	Project Length	<b>1.25 miles</b>
Project General Location		<b>Approximately 5.3 miles north of SH-33</b>			
Project Statement		<b>Bridge and Approaches on the existing alignment</b>			

Prepared for:  
Oklahoma Department of Transportation  
Environmental Programs Division  
200 NE 21<sup>st</sup> Street  
Oklahoma City, OK 73105

Prepared by:

Biologist Name	<b>James K. Teague</b>
Company/Agency Name	<b>ODOT Biological Studies Program at OU</b>
Address	<b>111 E. Chesapeake St.</b>
City, State Zip	<b>Norman, OK 73019</b>
Report Date:	<b>June 25, 2014</b>
Field Survey Date	<b>June 24, 2014</b>
Field Survey Biologist(s)	<b>James K. Teague</b>

## 1. PROJECT OVERVIEW

### 1.1 Federal Nexus

This biological assessment, prepared by the above named Company/Agency for the Oklahoma Department of Transportation (ODOT), addresses the above named project in compliance with Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended. Section 7 of the ESA requires that, through consultation with the U.S. Fish and Wildlife Service (Service), federal actions do not jeopardize the continued existence of any threatened, endangered, or proposed species or result in the destruction or adverse modification of critical habitat. This assessment evaluates the potential effects of the proposed transportation project on species that are federally listed under the ESA. Specific project design elements are identified that avoid or minimize adverse effects of the proposed project on listed species and designated critical habitat.

### 1.2. Project Description

Project Type	Check <input checked="" type="checkbox"/>
Bridge and Approaches or bridge widening/structure extension	<input checked="" type="checkbox"/>
Grade, Drain, Surface and Bridge	<input type="checkbox"/>
Grade, Drain and Surface	<input type="checkbox"/>
Asphalt Overlay Resurfacing	<input type="checkbox"/>
Widen and Resurface existing lanes	<input type="checkbox"/>
Pavement Reconstruction or rehabilitation	<input type="checkbox"/>
Bridge Rehabilitation	<input type="checkbox"/>
Safety Improvements (Cable Barrier, Guardrail, signage)	<input type="checkbox"/>
Intersection Modifications	<input type="checkbox"/>
Safe Routes to School (Describe)	<input type="checkbox"/>
Enhancements (Describe)	<input type="checkbox"/>
Other (Describe)	<input type="checkbox"/>

Description of the **existing** bridge/roadway facility and reason for proposed project

The existing stretch of US-81 is a four lane, divided facility with 12ft lanes, 10ft outside shoulders, and 4ft inside shoulders. The median width is approximately 30ft. The project area occurs in a flat, rural section of Kingfisher County. Approximately 5,000 vehicles use the roadway each day. The Union Pacific railroad bridges (NBI#: 16159 and 16167) are not considered deficient but are at risk.

Description of **proposed** improvements

The ODOT proposes to replace the existing north and southbound bridges on the current alignment within the existing right-of-way. The new bridges will be steel girder spans built approximately 3ft higher than the existing bridges. Pier protection at the bridges will be needed. The roadway will remain open during construction operations using crossovers approximately 0.5 miles north and south of the bridges to divert traffic. The project is needed to prevent the bridges from becoming structurally deficient.

In-water Work Expected as part of the proposed action	YES	NO
	√	

**1.3. Project Area and Setting**

Project Location		Environmental Study Footprint		Ecoregion & Game Type	
Section Range & Township	Lat/Long (NAD 83)	Dimensions	Acreage	Level IV Ecoregion (Woods et al. 2005)	Game Type (Duck and Fletcher 1943)
Secs. 22, 23, 26, and 27 (T17N, R7W)	N. ext. (97.9150W, 35.9393N); S. ext. (97.9271W, 35.9272N)	1.25 miles long; 440 ft wide	65.2330	Prairie Tableland	Tallgrass Prairie

**Action Area:**

The action is equivalent to the NEPA environmental study footprint.

## 2. FEDERALLY LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

### Species Range and Occurrence Evaluation (Check ☒ all that apply)

Species	Action Area is within a watershed associated with occupied water bodies		Action Area includes an occupied water body		Project site within 5 miles of known records	
	YES	NO	YES	NO	YES	NO
Whooping Crane		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Interior Least Tern	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Piping Plover						<input checked="" type="checkbox"/>
Arkansas River Shiner	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Red Knot						<input checked="" type="checkbox"/>

Legally Designated Critical Habitat	Action Area includes Designated Critical Habitat (Check <input checked="" type="checkbox"/> )	
	YES	NO
Whooping Crane		<input checked="" type="checkbox"/>
Arkansas River Shiner		<input checked="" type="checkbox"/>

IPaC Special Conditions Identified – wind energy projects or cell towers				
Interior Least Tern	YES		NO	<input checked="" type="checkbox"/>
Piping Plover				<input checked="" type="checkbox"/>

For the Whooping Crane (Check <input checked="" type="checkbox"/> )						
Action area is in which percentage Whooping Crane migratory corridor						Action area is within 15 miles of Salt Plains National Wildlife Refuge, Hackberry Flat, or Foss Reservoir.
5%	10%	15%	20%	25%	75%	YES
			<input checked="" type="checkbox"/>			NO
						<input checked="" type="checkbox"/>

### 3. ENVIRONMENTAL BASELINE

#### 3.1. Ecological Processes and Conditions

Soils (Use Soil Map of Oklahoma by Carter and Gregory 2008)

Soil Class	Central Rolling Red Prairies
Soil Name	Port-Dale-Yahola-Gaddy-Gracemore-McClain-Reinach
Soil Type	Mollisols and Entisols
Soil Characteristics	Very deep soils on nearly level (1%) slopes
Soil Class	Central Rolling Red Prairies
Soil Name	Pond Creek-Norge-Minco-Lovedale-Bethany
Soil Type	Mollisols
Soil Characteristics	Very deep and humus-rich soils on gently (6%) slopes

Climate (Use Woods et al. 2005)

Precipitation	Mean annual inches	27-37
Growing Season	Number of days	190-215
Mean Temperatures	Summer min/max	70/95
	Winter min/max	20/50

River System

None
------

Land Use and Land Ownership

From Woods et al. 2005	Cropland and rangeland
From Field investigation	The project area is composed of: maintained roadway and railroad rights-of-way with broad medians; ODOT property and private residences; grazed and weedy fields; ephemeral streams and a palustrine wetland

Terrestrial and Aquatic Community Descriptions (based on field site visit)

The project area is composed of: maintained roadway and railroad rights-of-way with broad medians; ODOT property and private residences; grazed and weedy fields; ephemeral streams and a palustrine wetland (See Figure 5). The project area is primarily grassland dominated by wheat, Johnsons grass (*Sorghum halepense*), Bermuda grass (*Cynodon dactylon*), buffalo grass (*Bouteloua dactyloides*), curlydock (*Rumex crispus*), vetch (*Vicia* sp.), silverleaf nightshade (*Solanum elaeagnifolium*), Canadian horseweed (*Conyza canadensis*), thistle (*Cirsium* sp.), yellow salsify (*Tragopogon dubius*), sunflower (*Helianthus* sp.), panic grass (*Dichanthelium* sp.), witchgrass (*Panicum capillare*), pigweed (*Amaranthus* sp.), prickly lettuce (*Lactuca serriola*), field bindweed (*Convolvulus arvensis*), tall fescue (*Schedonorus arundinaceus*), mat sandbur (*Cenchrus longispinus*), wiregrass (*Aristida* sp.), side oats grama (*Bouteloua curtipendula*), golden tickseed (*Coreopsis tinctoria*), annual ragweed (*Ambrosia artemisiifolia*), Illinois bundleflower (*Desmanthus illinoensis*), field aster (*Symphyotrichum* sp.), Spanish gold (*Grindelia papposa*), long-flower bee-blossom (*Guara longiflora*), skunkbush (*Rhus trilobata*), Missouri gourd (*Cucurbita foetidissima*), and slippery elm (*Ulmus rubra*). The stream beds, banks, and wetland are composed of, in varying combinations, Bermuda grass, Johnsons grass, curlydock, sunflower, panic grass, pigweed, tall fescue, Illinois bundleflower, and field aster.



### 3.2 Species Habitat Analysis

Pedestrian survey of entire study footprint	YES	√	NO	
Bridge inspection for bat use and suitability as bat roosting habitat	YES		NO	√

SPECIES	HABITAT	YES	NO
Whooping Crane	Shallowly-submerged sandbars in large river channels are present within the action area.		√
	Emergent wetlands are present with the Environmental Study Footprint		√
	Acres of emergent wetlands within the Environmental Study Footprint	Acres	
	Croplands suitable for foraging occur within the action area and are within 15 miles of Salt Plains National Wildlife Refuge, Hackberry Flat, or Foss Reservoir		√
Interior Least Tern	Sparsely vegetated islands or sandbars along large rivers, with nearby areas of shallow water, are present within the action area.		√
Piping Plover	Sparsely vegetated sandy or gravelly shorelines and islands associated with the major river systems are present within the action area.		√
	Salt flats and mudflats associated with reservoirs are present within the action area.		√
Arkansas River Shiner	Sandy-bottomed main channel rivers, with slow moving shallow water, are present within the action area.		√
Red Knot	Mudflats associated with reservoirs are present within the action area.		√

#### **4. ANALYSIS OF EFFECTS**

##### **4.1 Direct Effects**

No Direct Effects expected to federally listed species.

##### **4.2 Indirect Effects**

No Indirect Effects expected to federally listed species.

##### **4.3 Interrelated and Interdependent Actions and Activities**

None expected
---------------

Oklahoma Department of Transportation  
Kingfisher CO JP 29849(04)

Biological Assessment Report  
Bridge and Approaches over UP Railroad

Species Conclusion Table (Check √ which apply)

SPECIES / DESIGNATED CRITICAL HABIT	CONCLUSION				ESA SECTION 7		NOTES AND DOCUMENTATION Check √ all that apply			
	Species Habitat present within the action area		Project Activities expected to impact habitat		No Effect	May affect, unlikely to adversely affect	Field Studies	ONHI rare species / ABB database review	USFWS occupied water bodies and associate watershed maps	Whooping Crane Migration Corridor Map; LPC Habitat Model
	YES	NO	YES	NO						
Interior Least Tern		√		√	√		√	√	√	
Whooping Crane		√		√	√		√	√	√	√
Arkansas River shiner		√		√	√		√	√	√	
Piping Plover		√		√	√		√	√		
Red Knot		√		√	√		√	√		

## CONCLUSIONS

The proposed action will have no effect on the Interior Least Tern, Whooping Crane, Arkansas River shiner, Piping Plover, and Red Knot.

## RECOMMENDED CONSERVATION MEASURES

none

## 5. BALD EAGLE AND SWALLOW ASSESSMENT

### 5.1. Bald Eagle Assessment

The Bald Eagle (*Haliaeetus leucocephalus*) is a large predatory bird protected by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Activities that would disturb eagles are prohibited under the Bald and Golden Eagle Protection Act. "Disturb" means to agitate an eagle to the degree that causes or is likely to (1) cause injury, (2) interfere with breeding, feeding or sheltering behavior, or (3) nest abandonment.

Bald Eagle Habitat Present	No
Bald Eagle Nests Observed	No
Bald Eagles Observed	No

### 5.2 Swallow Assessment

Cliff Swallows (*Petrochelidon pyrrhonota*) and Barn Swallows (*Hirundo rustica*) are small colonial and semi-colonial nesting birds protected by the federal Migratory Bird Treaty Act. Barn Swallows use man-made structures for nesting and live in close association with humans. Both species commonly use bridges and culverts in Oklahoma for nesting.

for nesting.

Swallow Nests Observed		YES	x	NO	
		Approximate Number of Cliff Swallow Nests		Approximate Number of Barn Swallow Nests	
RCB culvert at (35.9282N, 97.9225W)				3	
US-81 N. Bound bridge (NBI#: 16159)		100s			
US-81 S. Bound bridge (NBI#:		100s			
Other MB Nests Observed on Transportation Structures		None			
In order to avoid impacts to swallows, any activities that may destroy active nests, eggs or birds shall be completed between September 1, and March 31, when nests are not occupied. If seasonal avoidance cannot be accomplished, structures shall be protected from new nest establishment prior to April 1, by means that do not result in death or injury to these birds					

**6. REFERENCES:**

Carter, B. J. and M. S. Gregory. 2002. General soil map of Oklahoma. In: Geology and Earth Resources of Oklahoma. K.S. Johnson et al. (eds.) Educational Publication No. 1. Oklahoma Geological Survey. Norman, OK.

Duck, L. G., and J. B. Fletcher. 1945. A survey of the game and furbearing animals of Oklahoma; Chapter 2, The Game Types of Oklahoma. Oklahoma Game and Fish Commission, Division of Wildlife Restoration and Research. Oklahoma City.

Oklahoma Natural Heritage Inventory. 2014. Element Database. Oklahoma Natural Heritage Inventory, Oklahoma Biological Survey, Norman, OK.

U.S. Fish and Wildlife Service, 2014, Federally Listed Threatened and Endangered Species in Oklahoma. Accessed from <http://www.fws.gov/southwest/es/oklahoma/> accessed on January 20, 2014.

Woods, A.J., Omernik, J.M., Butler, D.R., Ford, J.G., Henley, J.E., Hoagland, B.W., Arndt, D.S., and Moran, B.C., 2005, Ecoregions of Oklahoma (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,250,000).

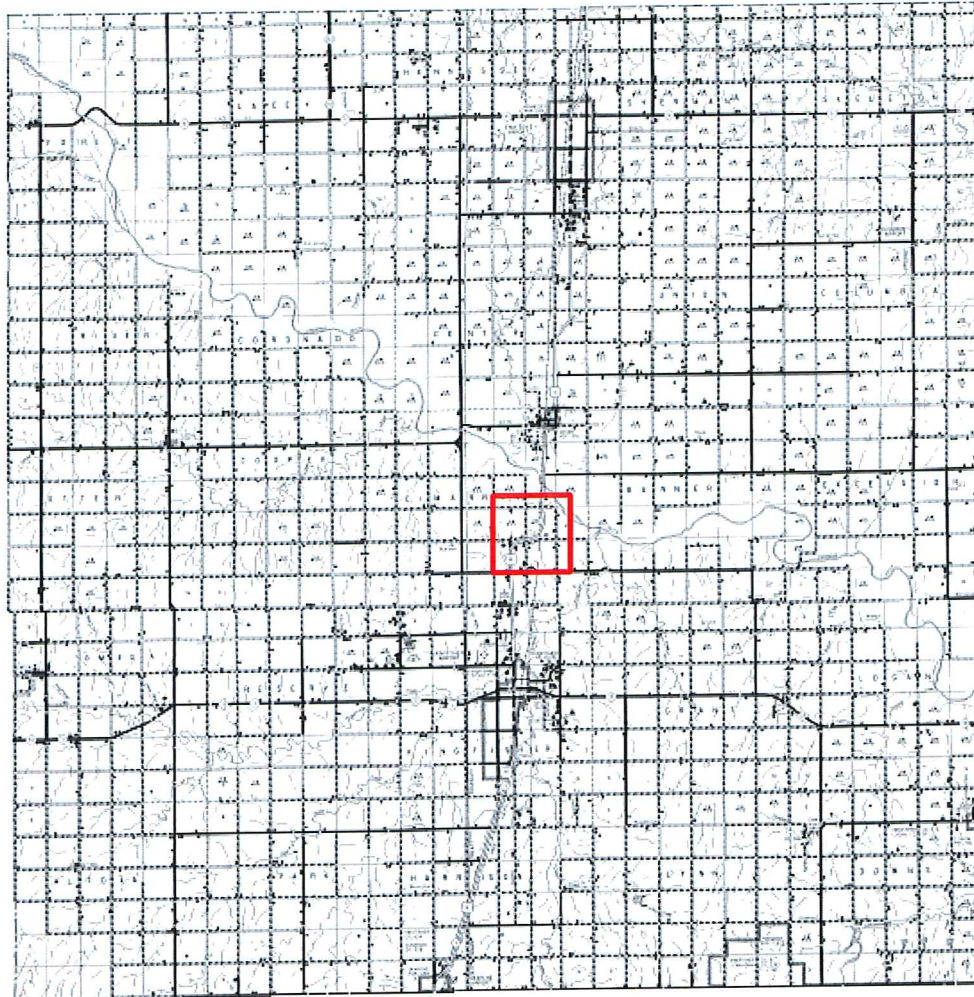


Figure 1. County Wide Section Line Map



Project Location



Kingfisher County

J/P 29849(04)

Project #: J2-9849(004)





Figure 2. Action Area Map



Action Area



Kingfisher County

J/P 29849(04)

Project #: J2-9849(004)



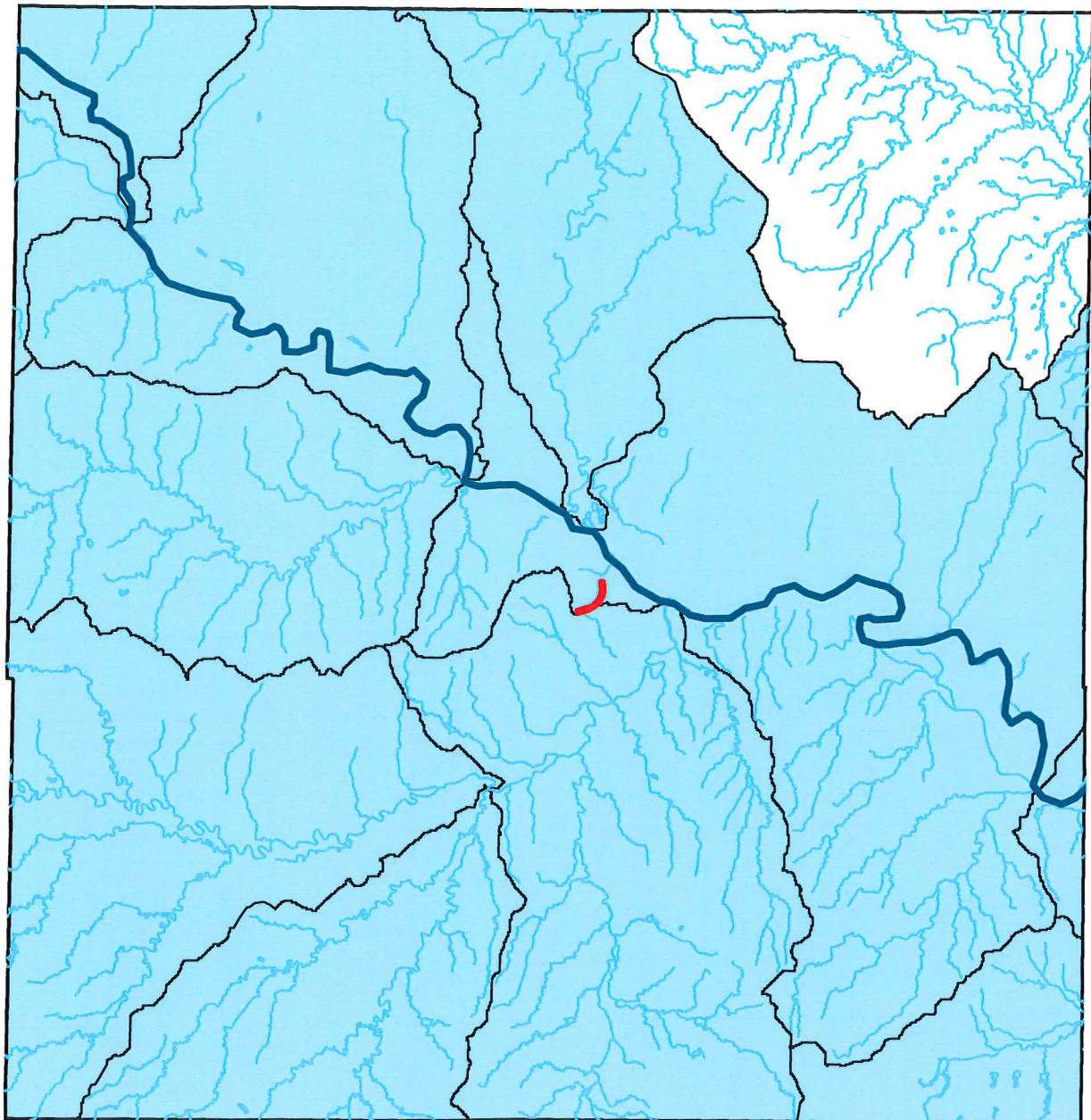


Figure 3. Critical Habitat, Occupied Waterbodies and Watersheds

- OK streams
- Interior Least Tern occupied waterbody  
Arkansas River shiner critical habitat
- Interior Least Tern and Arkansas River shiner  
Aquatic Dependent Species and Aquatic Species Watersheds
- Project Location



Kingfisher County

J/P 29849(04)

Project #: J2-9849(004)

Source: USFWS, Oklahoma Ecological Services Field Office, December 2007 (11 digit HUC watersheds)

0 2.5 5 10 Miles



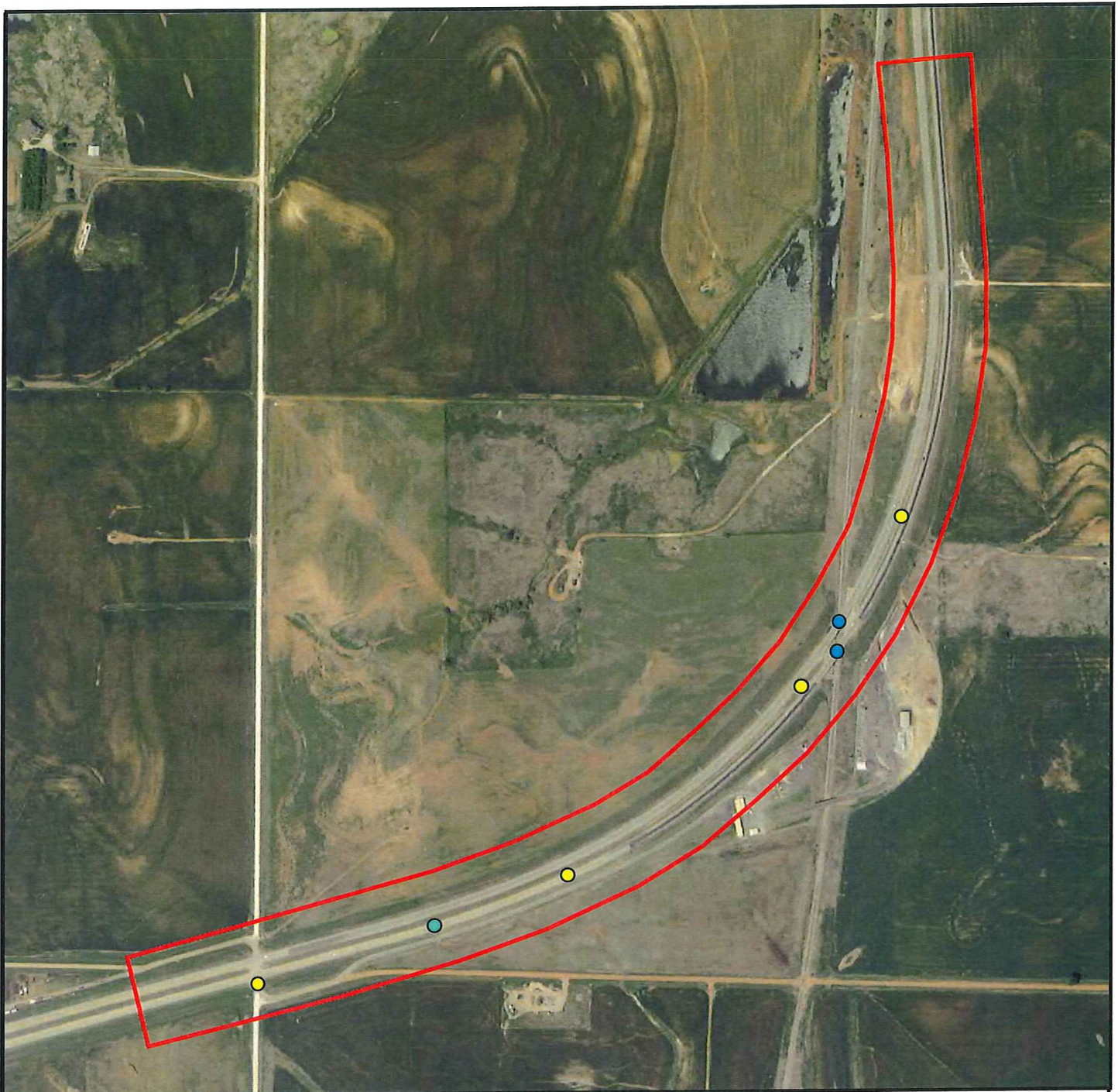


Figure 4. Swallow Survey Map



Study Area



None Suitable Structures



Barn Swallow activity (nests and adults)



Cliff Swallow activity (nests and adults)



Kingfisher County

J/P 29849(04)

Project #: J2-9849(004)



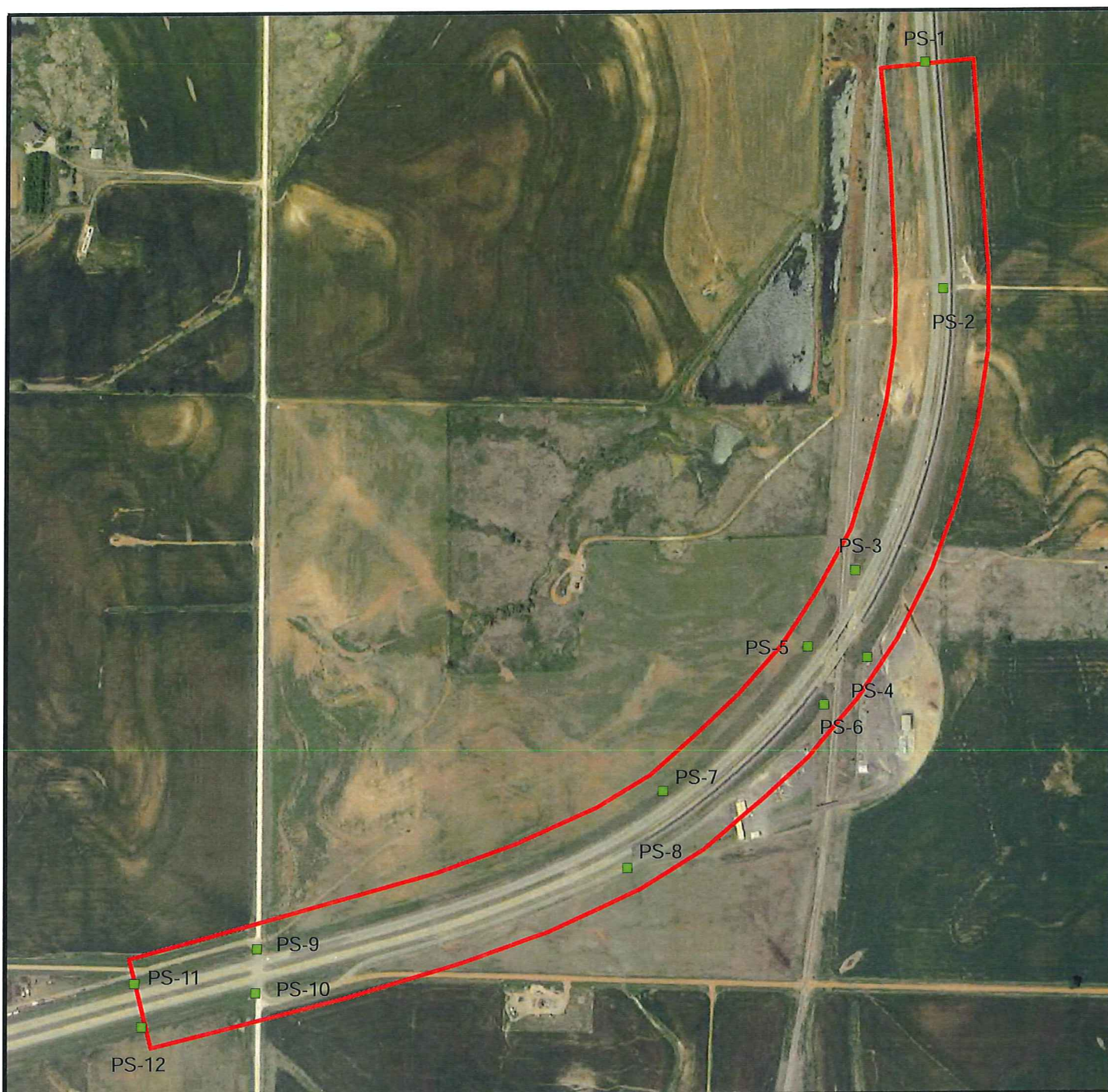


Figure 5. Photo Site Map

- Study Area
- Photo Sites



Kingfisher County

J/P 29849(04)

Project #: J2-9849(004)

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 1 (PS 1): looking NE from the northern extent of the study area.



Image 2 (PS 1): looking SE from the northern extent of the study area.



Image 3 (PS 1): looking NW from the northern extent of the study area.



Image 4 (PS 1): looking SW from the northern extent of the study area.



Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 5 (PS 2): looking NW from the roadway.



Image 6 (PS 2): looking SW from the roadway.



Image 7 (PS 2): looking SE from the roadway.



Image 8 (PS 2): looking NE from the roadway.

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 9 (PS 3): looking W at the railroad crossing.



Image 10 (PS 3): looking NW from the railroad crossing.



Image 11 (PS 4): looking SW at the railroad crossing.



Image 12 (PS 4): looking NE from the railroad crossing.

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 13 (PS 5): looking NE at the railroad crossing.



Image 14 (PS 6): looking NE at the railroad crossing.



Image 15 (PS 7): looking NE from the roadway.



Image 16 (PS 7): looking NW from the roadway.



Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 17 (PS 8): looking E from the roadway.



Image 18 (PS 8): looking S from the roadway.



Image 19 (PS 9): looking NE from CR NS-285.



Image 20 (PS 9): looking NW from CR NS-285.

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 21 (PS 10): looking SW from CR NS-285.



Image 22 (PS 10): looking SE from CR NS-285.



Image 23 (PS 11): looking NE from the western extent of the study area.



Image 24 (PS 11): looking NW from the western extent of the study area.

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 25 (PS 12): looking SW from the western extent of the study area.



Image 26 (PS 12): looking SE from the western extent.





## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Oklahoma Ecological Services Field Office  
9014 EAST 21ST STREET  
TULSA, OK 74129  
PHONE: (918)581-7458 FAX: (918)581-7467  
URL: [www.fws.gov/southwest/es/Oklahoma/](http://www.fws.gov/southwest/es/Oklahoma/)



Consultation Tracking Number: 02EKOK00-2014-SLI-1006

June 10, 2014

Project Name: Kingfisher CO JP 29849(04)

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Non-federal entities conducting activities that may result in take of listed species should consider seeking coverage under section 10 of the ESA, either through development of a Habitat Conservation Plan (HCP) or, by becoming a signatory to the General Conservation Plan (GCP) currently under development for the American burying beetle. Each of these mechanisms provides the means for obtaining a permit and coverage for incidental take of listed species during otherwise lawful activities.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit through our Project Review step-wise process  
<http://www.fws.gov/southwest/es/oklahoma/OKESFO%20Permit%20Home.htm>.

If your species list does not contain the American burying beetle and your projects falls within Marshall, Love, Carter, Murray, Garvin, McClain, Cleveland, Pottawatomie or Adair counties,

the Service recommends that you consider the American burying beetle in your project planning process. There is evidence to suggest (Crawford and Hoagland 2010), that the American burying beetle may occur in these counties.

Attachment



United States Department of Interior  
Fish and Wildlife Service

Project name: Kingfisher CO JP 29849(04)

## Official Species List

**Provided by:**

Oklahoma Ecological Services Field Office  
9014 EAST 21ST STREET  
TULSA, OK 74129  
(918) 581-7458  
<http://www.fws.gov/southwest/es/Oklahoma/>

**Consultation Tracking Number:** 02EKOK00-2014-SLI-1006

**Project Type:** Bridge Construction / Maintenance

**Project Description:** Bridge and Approaches on US-81 (NB, SB) over the UP RR app. 5.3 miles north of SH-33

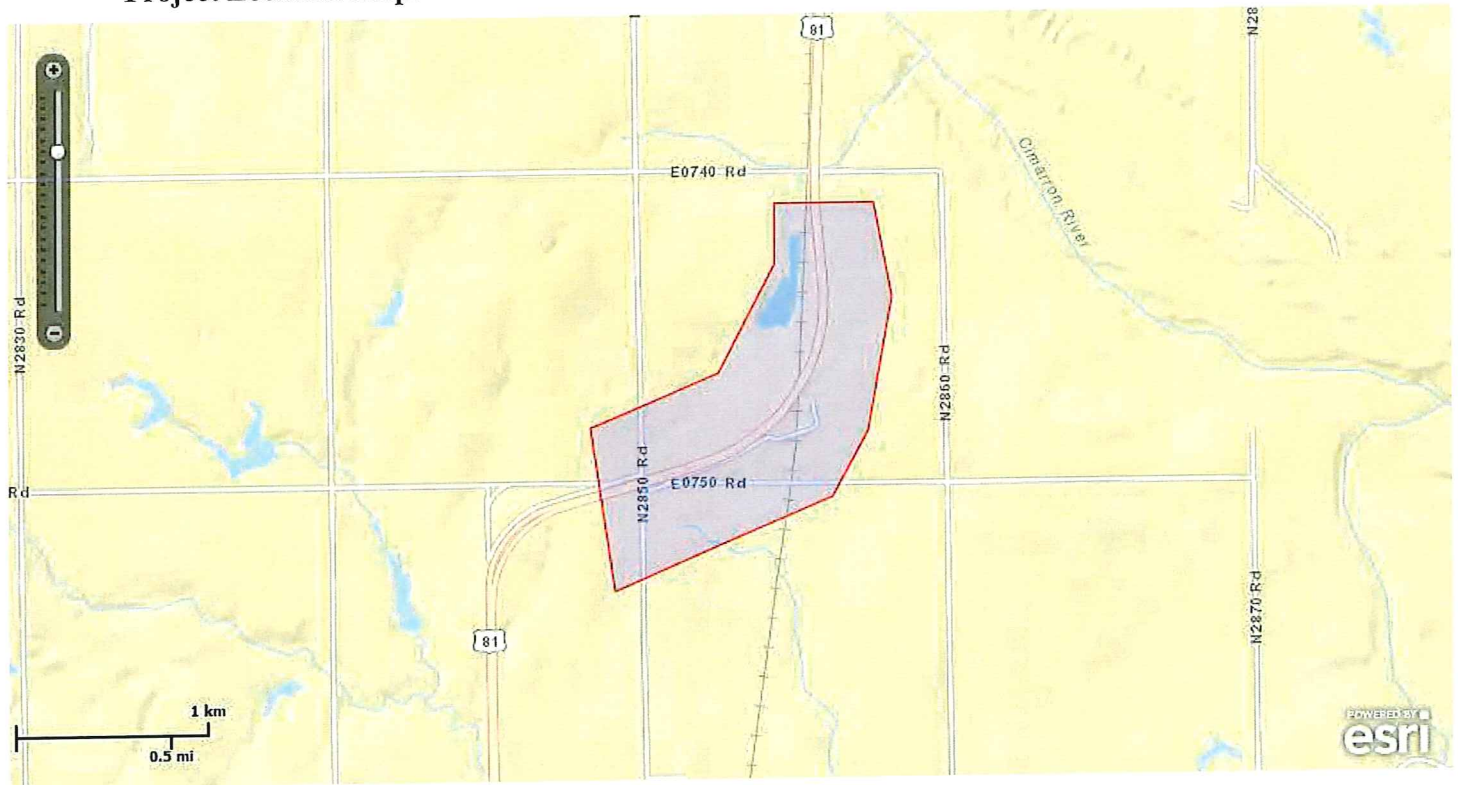




United States Department of Interior  
Fish and Wildlife Service

Project name: Kingfisher CO JP 29849(04)

### Project Location Map:



**Project Coordinates:** MULTIPOLYGON (((-97.9281473 35.9301705, -97.9207744 35.9326724, -97.9175128 35.9376692, -97.9175128 35.9405878, -97.9116763 35.9405878, -97.9106464 35.9361403, -97.9120111 35.9298925, -97.9140796 35.9268275, -97.9207744 35.9246033, -97.926774 35.9225251, -97.9281473 35.9301705)))

**Project Counties:** Kingfisher, OK



United States Department of Interior  
Fish and Wildlife Service

Project name: Kingfisher CO JP 29849(04)

## Endangered Species Act Species List

There are a total of 5 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed on the **Has Critical Habitat** lines may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

### Arkansas River shiner (*Notropis girardi*)

Population: Arkansas R. Basin

Listing Status: Threatened

Has Critical Habitat: Final designated

### Least tern (*Sterna antillarum*)

Population: interior pop.

Listing Status: Endangered

### Piping Plover (*Charadrius melodus*)

Population: except Great Lakes watershed

Listing Status: Threatened

Has Critical Habitat: Final designated

### Red Knot (*Calidris canutus rufa*)

Listing Status: Proposed Threatened

### Whooping crane (*Grus americana*)

Population: except where EXPN

Listing Status: Endangered

Has Critical Habitat: Final designated



United States Department of Interior  
Fish and Wildlife Service

Project name: Kingfisher CO JP 29849(04)

## **Critical habitats that lie within your project area**

There are no critical habitats within your project area.

## WATERS AND WETLANDS EVALUATION REPORT

For

County	<b>Kingfisher</b>	JP Number	<b>29849(04)</b>	Project Number	<b>J2-9849(004)</b>
Road Number	<b>US-81</b>	Water Body Name	<b>None (Union Pacific Railroad)</b>		
ROW Date	<b>N/A</b>	Let Date	<b>FFY 2020</b>	Project Length	<b>1.25 miles</b>
Project General Location		<b>Approximately 5.3 miles north of SH-33</b>			
Project Statement		<b>Bridge and Approaches on the existing alignment</b>			

Prepared for:  
Oklahoma Department of Transportation  
Environmental Programs Division  
200 NE 21<sup>st</sup> Street  
Oklahoma City, OK 73105

Prepared by:

Biologist Name	<b>James K. Teague</b>
Company/Agency Name	<b>ODOT Biological Studies Program at OU</b>
Address	<b>111 E. Chesapeake St.</b>
City, State Zip	<b>Norman, OK 73019</b>

Date:	<b>June 25, 2014</b>
-------	----------------------

## PROJECT OVERVIEW

Project Type	Check <input checked="" type="checkbox"/>
Bridge and Approaches or bridge widening/structure extension	<input checked="" type="checkbox"/>
Grade, Drain, Surface and Bridge	<input type="checkbox"/>
Grade, Drain and Surface	<input type="checkbox"/>
Asphalt Overlay Resurfacing	<input type="checkbox"/>
Widen and Resurface existing lanes	<input type="checkbox"/>
Pavement Reconstruction or rehabilitation	<input type="checkbox"/>
Bridge Rehabilitation	<input type="checkbox"/>
Safety Improvements (Cable Barrier, Guardrail, signage)	<input type="checkbox"/>
Intersection Modifications	<input type="checkbox"/>
Safe Routes to School (Describe)	<input type="checkbox"/>
Enhancements (Describe)	<input type="checkbox"/>
Other (Describe)	<input type="checkbox"/>

### Description of the **existing** bridge/roadway

The existing stretch of US-81 is a four lane, divided facility with 12ft lanes, 10ft outside shoulders, and 4ft inside shoulders. The median width is approximately 30ft. The project area occurs in a flat, rural section of Kingfisher County. Approximately 5,000 vehicles use the roadway each day. The Union Pacific railroad bridges (NBI#s: 16159 and 16167) are not considered deficient but are at risk.

### Description of **proposed** improvements **SPECIFIC TO THIS PROJECT**

The ODOT proposes to replace the existing north and southbound bridges on the current alignment within the existing right-of-way. The new bridges will be steel girder spans built approximately 3ft higher than the existing bridges. Pier protection at the bridges will be needed. The roadway will remain open during construction operations using crossovers approximately 0.5 miles north and south of the bridges to divert traffic. The project is needed to prevent the bridges from becoming structurally deficient.

### Project Environmental Study Footprint

Project Location		Environmental Study Footprint	
<u>Section Range &amp; Township</u>	<u>Lat/Long (NAD 83)</u>	<u>Dimensions</u>	<u>Acreage</u>
Secs. 22, 23, 26, and 27 (T17N, R7W)	N. ext. (97.9150W, 35.9393N); S. ext. (97.9271W, 35.9272N)	1.25 miles long; 440 ft wide	65.2330

### Environmental Study Footprint Soils (NRCS Soil Survey Map)

Map Unit Name	Percent Slope	Drainage Class	Hydric Rating		Description
			YES	NO	
Ab	0-8	W	x		Grainola-Ashport complex, 0 to 8 percent slopes
KrA	0-1	W		x	Kirkland silt loam
NoB	1-3	W		x	Milan fine sandy loam
NsB	1-3	W-MW		x	Milan-Pawhuska complex
RcB	1-3	W		x	Renthin clay loam
ShC	3-5	W		x	Lovedale fine sandy loam
VcB	1-3	W		x	Grainola clay loam
VcC3	3-5	W		x	Grainola-Masham complex, eroded

### Environmental Study Footprint General Description and Vegetation Present

The project area is composed of: maintained roadway and railroad rights-of-way with broad medians; ODOT property and private residences; grazed and weedy fields; ephemeral streams and a palustrine wetland (See Figure 5). The project area is primarily grassland dominated by wheat, Johnsons grass (*Sorghum halepense*), Bermuda grass (*Cynodon dactylon*), buffalo grass (*Bouteloua dactyloides*), curlydock (*Rumex crispus*), vetch (*Vicia* sp.), silverleaf nightshade (*Solanum elaeagnifolium*), Canadian horseweed (*Conyza canadensis*), thistle (*Cirsium* sp.), yellow salsify (*Tragopogon dubius*), sunflower (*Helianthus* sp.), panic grass (*Dichanthelium* sp.), witchgrass (*Panicum capillare*), pigweed (*Amaranthus* sp.), prickly lettuce (*Lactuca serriola*), field bindweed (*Convolvulus arvensis*), tall fescue (*Schedonorus arundinaceus*), mat sandbur (*Cenchrus longispinus*), wiregrass (*Aristida* sp.), side oats grama (*Bouteloua curtipendula*), golden tickseed (*Coreopsis tinctoria*), annual ragweed (*Ambrosia artemisiifolia*), Illinois bundleflower (*Desmanthus illinoensis*), field aster (*Symphyotrichum* sp.), Spanish gold (*Grindelia papposa*), long-flower bee-blossom (*Guara longiflora*), skunkbush (*Rhus trilobata*), Missouri gourd (*Cucurbita foetidissima*), and slippery elm (*Ulmus rubra*). The stream beds, banks, and wetland are composed of, in varying combinations, Bermuda grass, Johnsons grass, curlydock, sunflower, panic grass, pigweed, tall fescue, Illinois bundleflower, and field aster.

### WATERS AND WETLANDS EVALUATION

#### Data Sources Reviewed (list)

USGS 7.5 minute Quad	NWI Map	USACE Wetland Regional Supplement	Additional Resources Reviewed
35097(H8)	USFWS, September, 2009 wet data file	Great Plains Region	Cowardin, 1979

#### Wetlands and Ponds Summary Table

Number of Field Sites	Type of Wetland or Pond	Cowardin Classification	Potential Jurisdictional Status	Acres within Environmental Study Footprint
1	Palustrine, unconsolidated bottom	PUB3C- palustrine, unconsolidated bottom, mud bottom, seasonally flooded	Not Jurisdictional	0.174

#### Streams and Drainages Summary Table

Number of Field Sites	Stream Name	USGS Mapped Status	Potential Jurisdictional Status	Acres within Environmental Study Footprint	Linear Feet within Environmental Study Footprint
7	Unnamed tributaries	Unmapped, ephemeral	Not Jurisdictional	1.639	3,769



### Streams and other linear aquatic features

Field Site 1 can best be considered an unmapped, ephemeral stream that occupies approximately 0.892 acres (~ 1,370 linear feet) of the study area. This stream flows north through the west side of the study area into the west roadside ditch. The stream has a mud bed and was inundated during field investigations. It is not jurisdictional.

Field Site 2 can best be considered an unmapped, ephemeral stream that occupies approximately 0.062 acres (~ 292 linear feet) of the study area. This stream originates from a culvert under US-81 and flows north into the east side ditch of the Union Pacific Railroad. The stream was saturated and partially vegetated during field investigations. It is not jurisdictional.

Field Site 3 can best be considered an unmapped, ephemeral stream that occupies approximately 0.035 acres (~ 173 linear feet) of the study area. This stream originates from a ponded wetland area and flows north towards the culvert associated Field Site 2. The stream was saturated and partially vegetated during field investigations. It is not jurisdictional.

Field Site 5 can best be characterized as an unmapped, ephemeral stream that occupies approximately 0.079 acres (426 linear feet) of the study area. This stream originates from the north roadside ditch and flows north and east into a large pond on the west side of the Union Pacific Railroad. The stream was saturated and partially vegetated during field investigations. It is not jurisdictional.

Field Site 6 can best be characterized as an unmapped, ephemeral stream that occupies approximately 0.007 acres (~ 35 linear feet) of the study area. This portion of stream occurs within an inundated depression within the east roadside ditch that flows north under the roadway. It is not jurisdictional.

Field Site 7 can best be characterized as an unmapped, ephemeral stream that occupies approximately 0.318 acres (~ 828 linear feet) of the study area. This stream originates from the south roadside ditch and flows south out of the study area. This stream was saturated and partially vegetated during field investigations.

Field Site 8 can best be characterized as an unmapped, ephemeral stream that occupies approximately 0.247 acres (~ 645 linear feet) of the study area. This stream originates from the fence line ditch and field and flows east and south through the study area. The stream was saturated and partially vegetated during field investigations. It is not jurisdictional.

### Wetlands and ponds

Field Site 4 can best be characterized as an unmapped, seasonally flooded, palustrine, unconsolidated (PUB3C) wetland with a mud bottom that occupies approximately 0.174 acres of the study area. This feature occurs as two stagnant pools that combine to drain into the south roadside ditch. The wetland was inundated during field investigations. It is not jurisdictional.

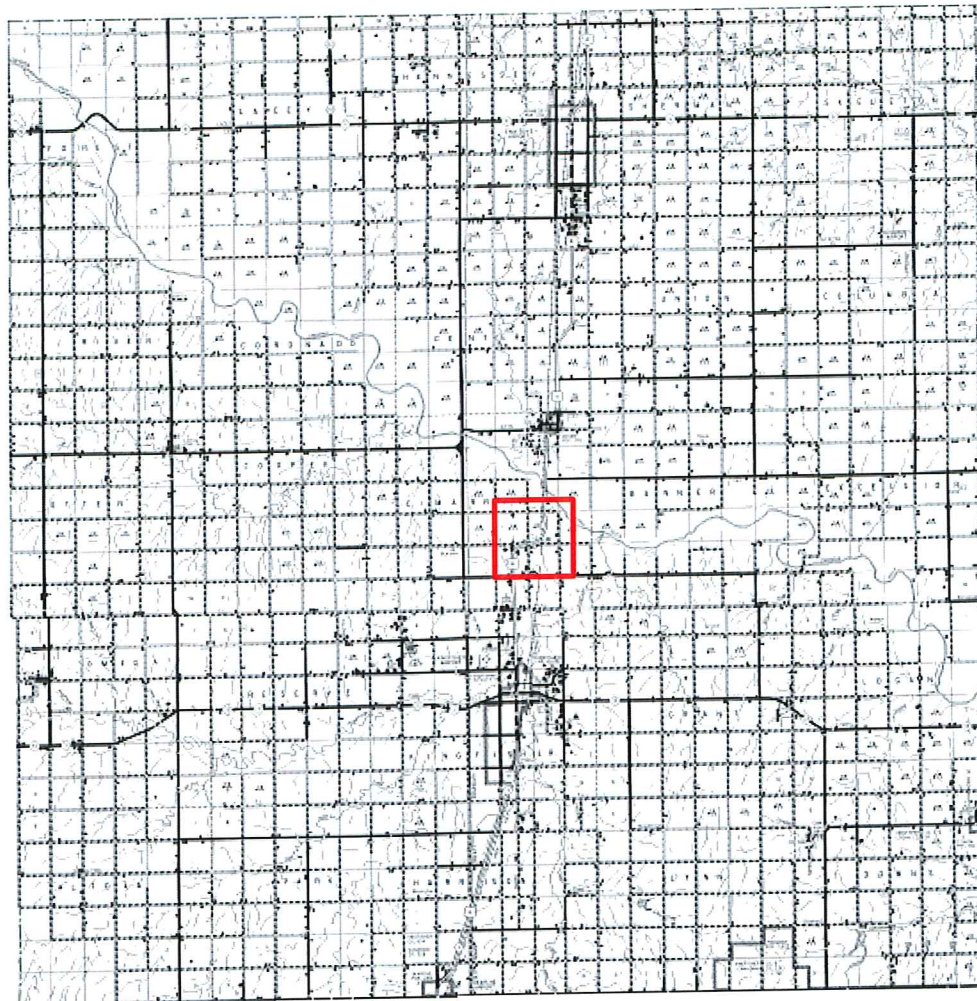


Figure 1. County Wide Section Line Map



Project Location



Kingfisher County

J/P 29849(04)

Project #: J2-9849(004)

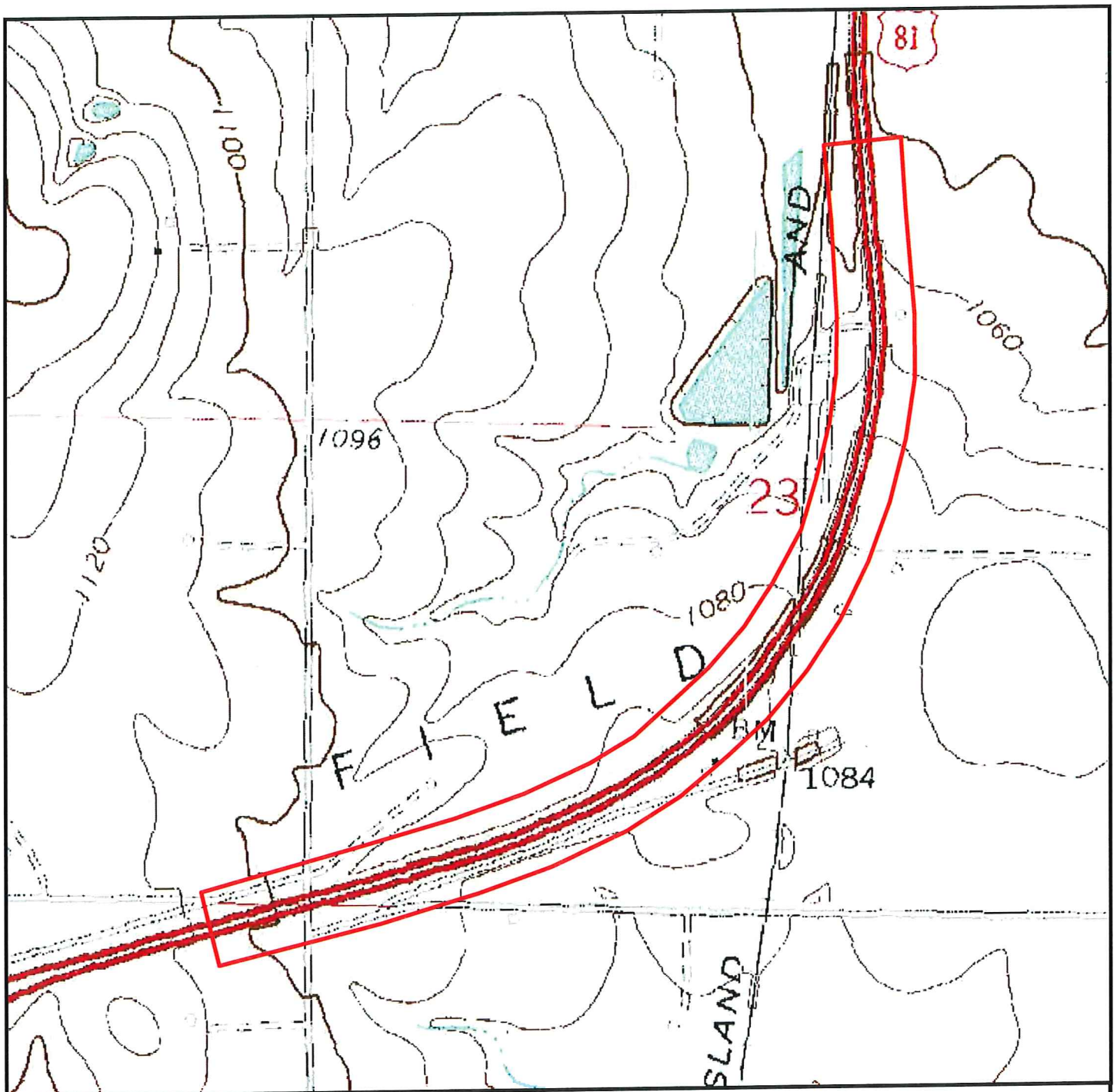


Figure 2. Topographic Map

 Study Area



Kingfisher County

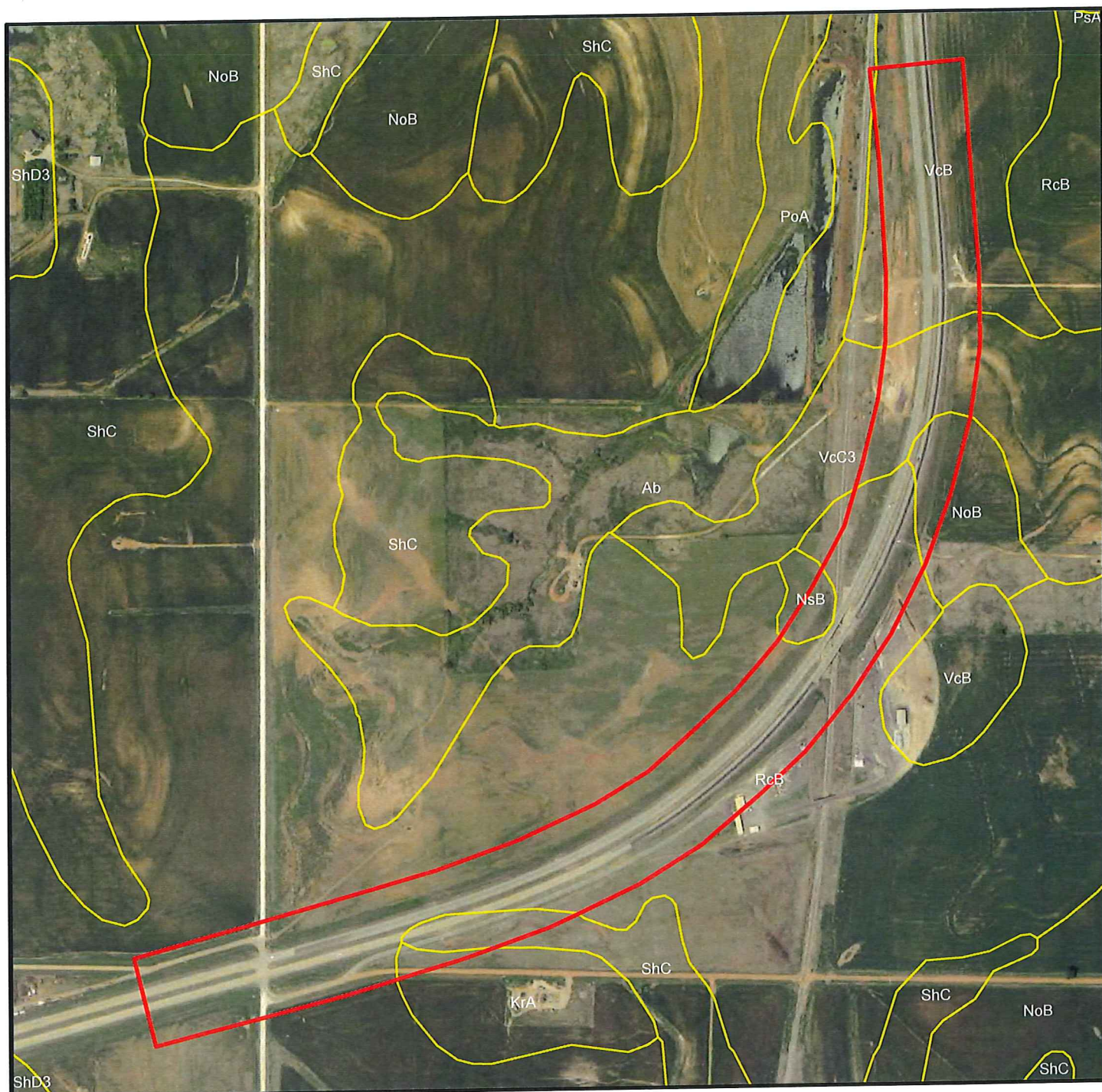
J/P 29849(04)

Project #: J2-9849(004)

USGS 7.5 minute quadrangle at 1:24,000 scale

0 600 1,200  
Feet





**Figure 3. Soil Map**

  Project Area   Soil Boundaries

**Soil Abbreviations**

See Text for Soil Descriptions



**Kingfisher County**

**J/P 29849(04)**

**Project #: J2-9849(004)**



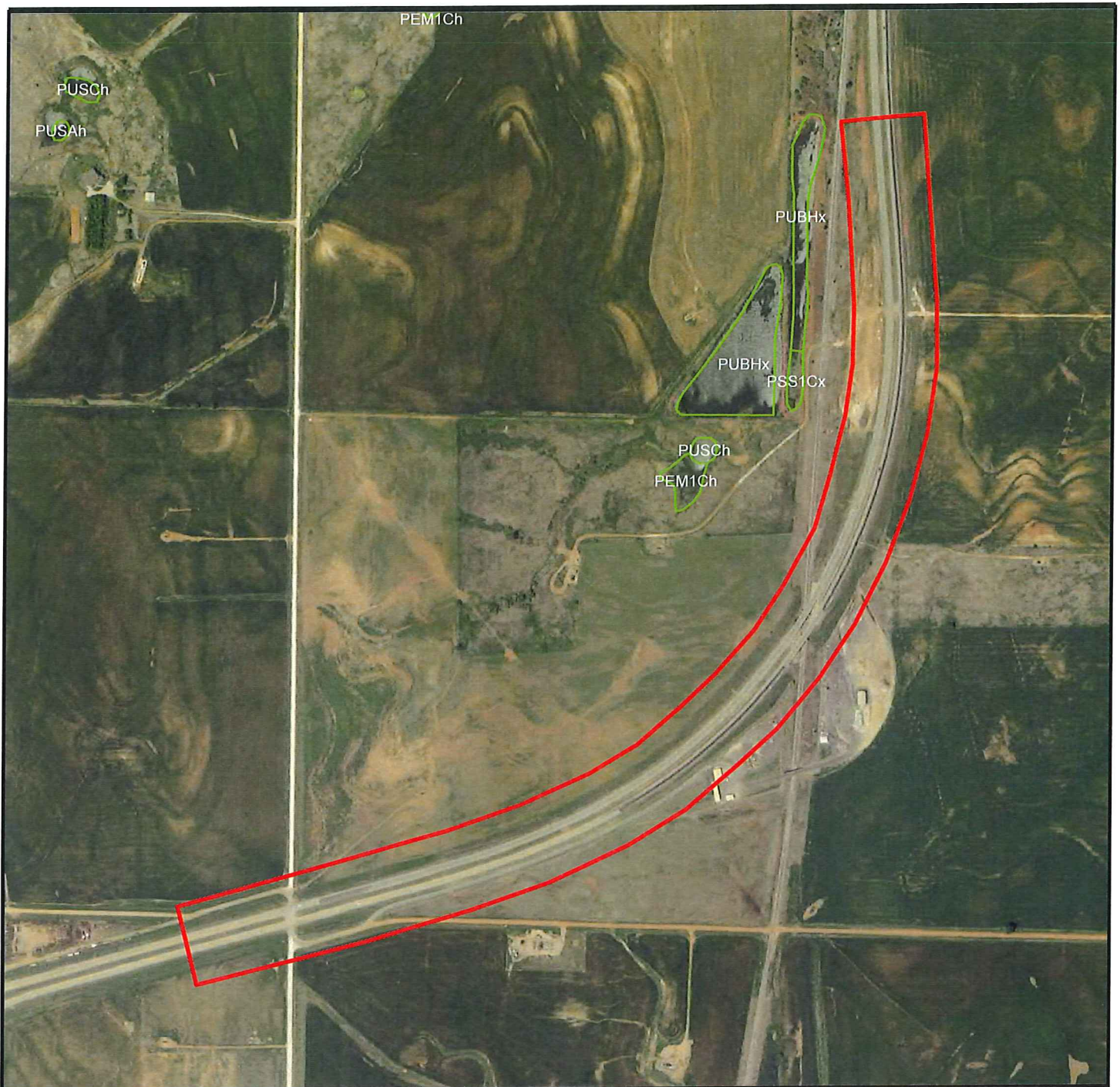




Figure 4. NWI Map

-  Project Area
-  NWI



Kingfisher County

J/P 29849(04)

Project #: J2-9849(004)

NWI Source: US Fish and Wildlife Service 2009

0 300 600 1,200  
Feet



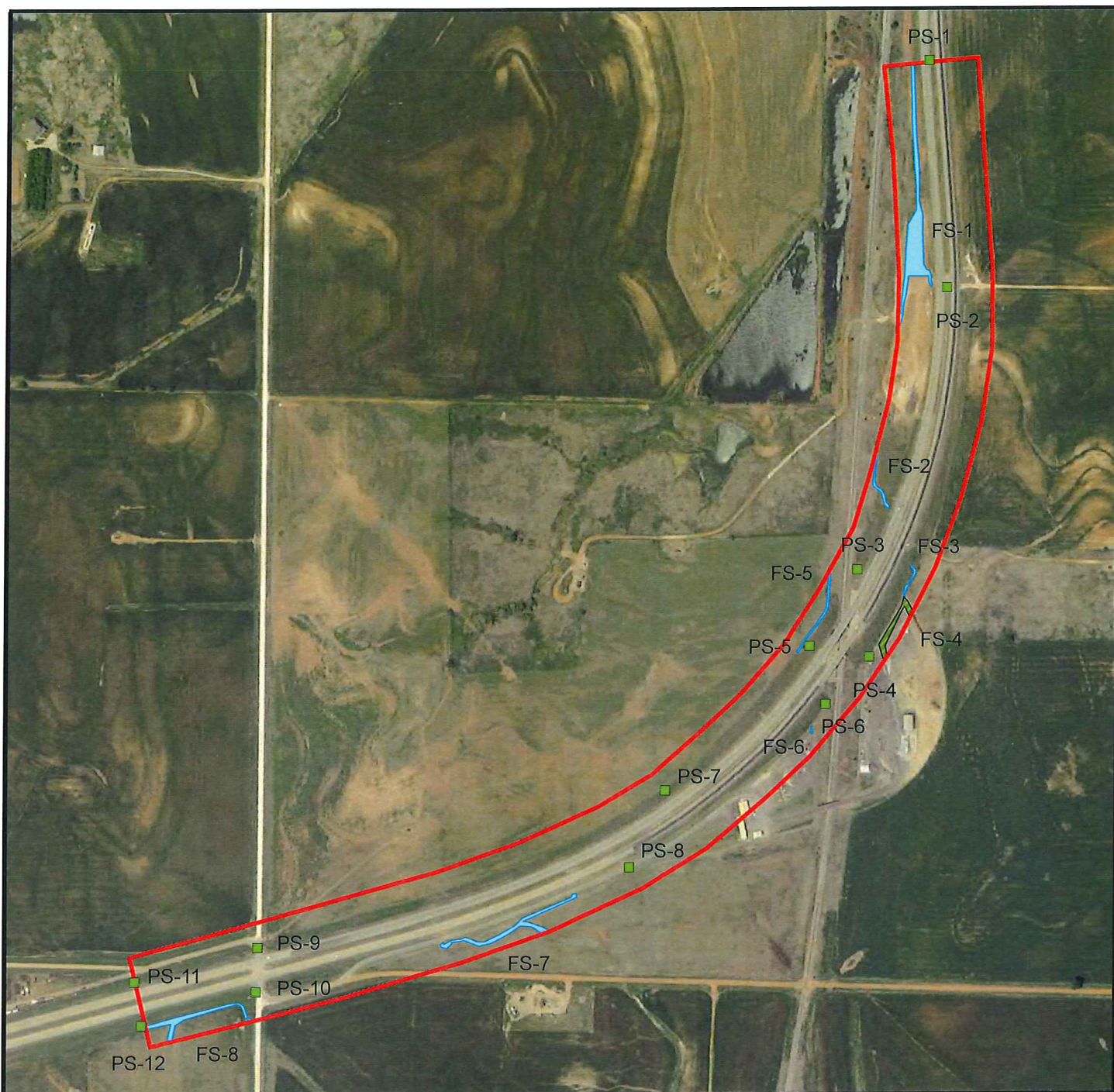


Figure 5. Site Map

- Study Area
- Stream
- Wetlands
- Photo Sites



Kingfisher County

J/P 29849(04)

Project #: J2-9849(004)



Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 1 (PS 1): looking NE from the northern extent of the study area.



Image 2 (PS 1): looking SE from the northern extent of the study area.



Image 3 (PS 1): looking NW from the northern extent of the study area.



Image 4 (PS 1): looking SW from the northern extent of the study area.

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 5 (PS 2): looking NW from the roadway.



Image 6 (PS 2): looking SW from the roadway.



Image 7 (PS 2): looking SE from the roadway.



Image 8 (PS 2): looking NE from the roadway.

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 9 (PS 3): looking W at the railroad crossing.



Image 10 (PS 3): looking NW from the railroad crossing.



Image 11 (PS 4): looking SW at the railroad crossing.



Image 12 (PS 4): looking NE from the railroad crossing.



Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 13 (PS 5): looking NE at the railroad crossing.



Image 14 (PS 6): looking NE at the railroad crossing.



Image 15 (PS 7): looking NE from the roadway.



Image 16 (PS 7): looking NW from the roadway.

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 17 (PS 8): looking E from the roadway.



Image 18 (PS 8): looking S from the roadway.



Image 19 (PS 9): looking NE from CR NS-285.



Image 20 (PS 9): looking NW from CR NS-285.

Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 21 (PS 10): looking SW from CR NS-285.



Image 22 (PS 10): looking SE from CR NS-285.



Image 23 (PS 11): looking NE from the western extent of the study area.



Image 24 (PS 11): looking NW from the western extent of the study area.



Photo Images for ODOT J/P 29849(04) Bridge and Approaches in Kingfisher County, Oklahoma



Image 25 (PS 12): looking SW from the western extent of the study area.



Image 26 (PS 12): looking SE from the western extent.

# **FLOOD PLAIN INFORMATION**



## MAP INDEX

# FIRM

**FLOOD INSURANCE RATE MAP  
KINGFISHER COUNTY,  
OKLAHOMA  
AND INCORPORATED AREAS**

# MAP INDEX

**PANELS PRINTED:** 15, 20, 50, 75,  
100, 125, 135, 145, 150, 165, 170, 175,  
180, 185, 190, 195, 225, 250, 260, 275,  
280, 285, 300, 305, 310, 315, 320, 330,  
335, 340, 345, 355, 375, 380, 385, 400,  
405, 425, 430, 435, 450, 475, 480, 485,  
500, 525, 550, 575, 600, 625

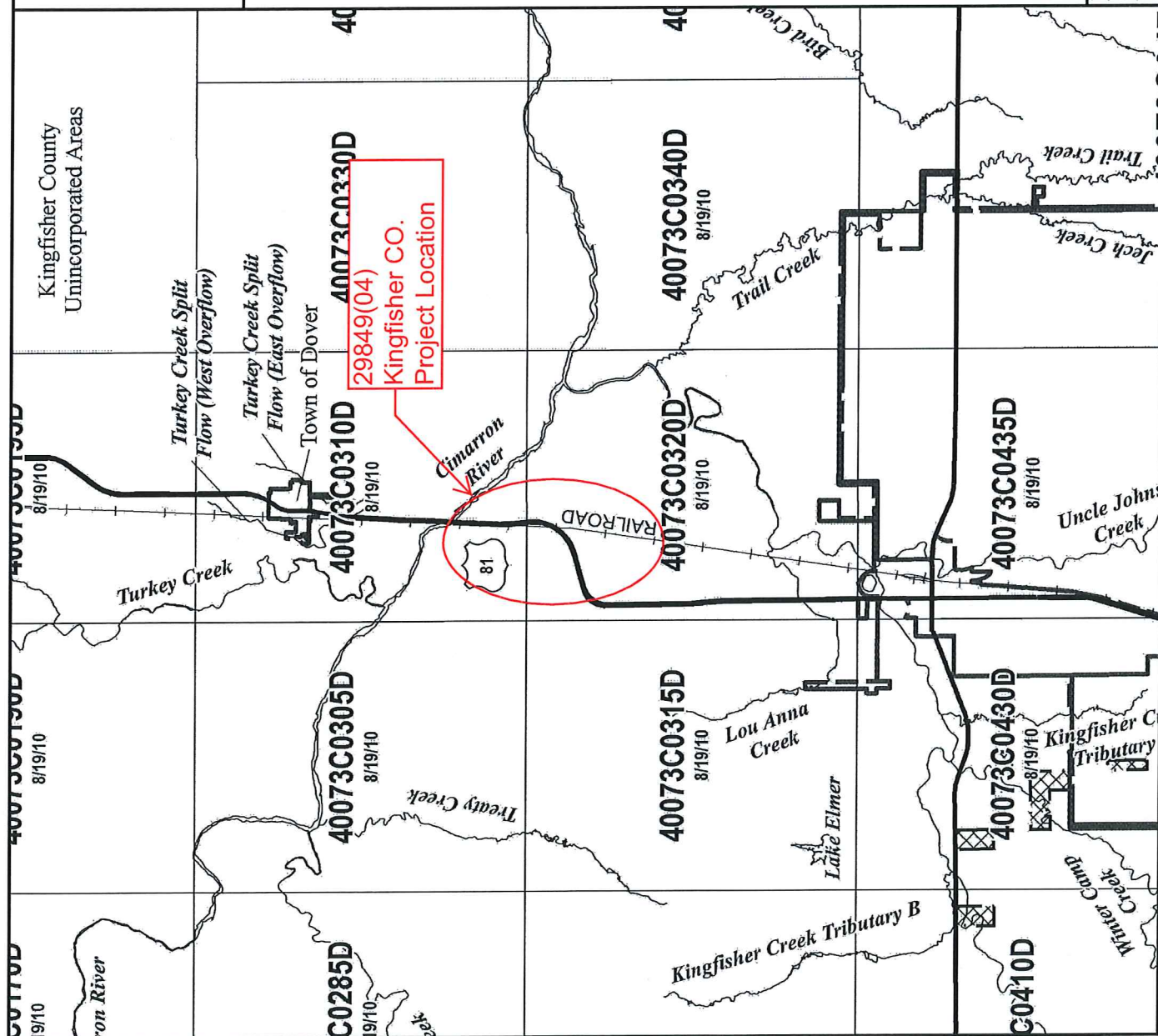


MAP NUMBER  
40073CIND0B

MAP REVISED  
AUGUST 19, 2010

**Federal Emergency Management Agency**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



# **HAZARDOUS WASTE STUDIES**





# Oklahoma Department of Transportation

Environmental Programs Division

Office 521-3050 Fax 522-5193

DATE: March 30, 2016

TO: Roadway Design Division, Project Management Division, Bridge Division

FROM: Environmental Programs Division

SUBJECT: US-89 over UPRR, 5.3 miles north of SH-33, Kingfisher County. Project No. J2-9849(004); JP No. 29849(04).

A leaking underground storage tank (LUST) site is located on the southeast side of US-89, north of EW-75 Road and west of the railroad tracks. Please have the LUST site location added to the plan and profile sheets by placing a box in the appropriate location with the Oklahoma Corporation Commission (OCC) facility number, case number, and denoting it as a LUST site.

Please have the following added to the "Environmental Mitigation Notes" of the project plans per Policy Directive C-201-2D(2):

"Station	OCC Facility No./Case No.	Facility
122+50 to 124+50 Rt 25'	37-01865/064-0997	ODOT

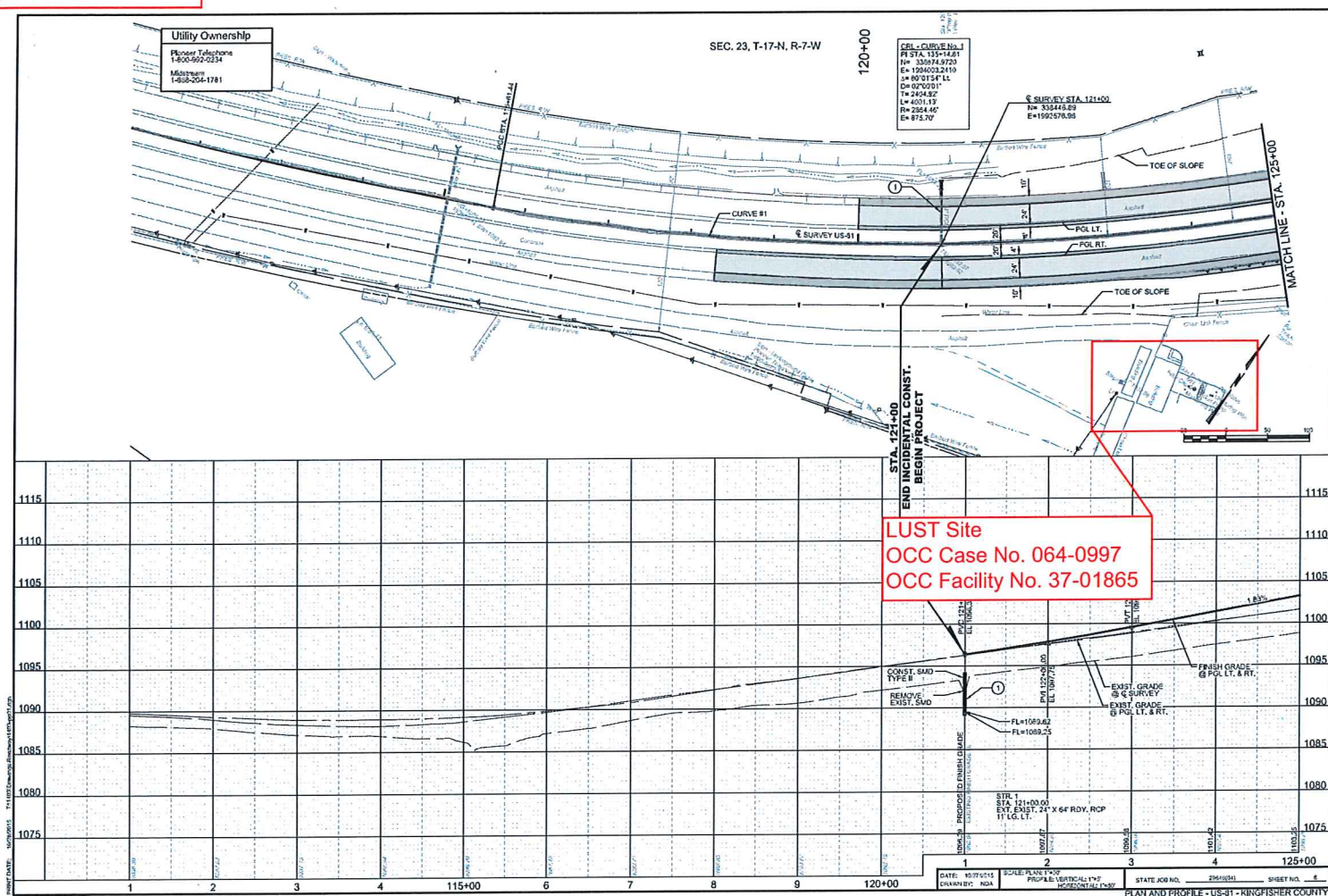
Petroleum contamination may exist at or near the referenced Leaking Underground Storage Tank (LUST) site. Based on the available information, contamination is not expected to affect construction activities, but is still possible. In the event contaminated soil or groundwater is encountered, the contractor shall adhere to ODOT's Hazardous Materials Specification 107.15 and notify the Resident Engineer, who may then contact the Environmental Programs Division at (405) 521-3050 for assistance."

This mitigation measure should be discussed at all pre-work conferences per Policy Directive C-201-2-E(1). If you have any questions, please contact David Edwards at (405) 521-2673.

DAE

Xc: NEPA Project Manager  
Division 2 Engineer  
Right-of-Way & Utilities Division

2984904  
Plan Sheet 8 with  
LUST Site





**OKLAHOMA DEPARTMENT OF TRANSPORTATION  
INITIAL SITE SCREENING REPORT – HAZARDOUS WASTE**

**Prepared By:** Kris Mutz  
**Report Date:** June 20, 2014

**Project No.:** J2-9849(004)  
**J/P Number:** 29849(04)

**County:** Kingfisher

**1. PROJECT DESCRIPTION:** US-81 over UPRR, 5.3 miles north of SH-33.

**2. LAND USE AND CHARACTERISTICS:** Pastureland with maintenance yards near the railroad.

**3. PROJECT METHODOLOGY:**

**A. Records Search:**

- ☐ Electronic database search (vendor: ; report date: )
- ☒ Manual database search (LUST, CERCLA, VCP, Landfill), plus:
  - ☐ Sanborn Fire Insurance Maps
  - ☒ Aerial photos
  - ☒ RCRA CORRACTS
  - ☒ UST
  - ☐ Oil and Gas Wells
  - ☐ Agency files:
  - ☒ Google Streetview
  - ☐ Other:

**B. Interviews/Contacts:**

**C. Field Investigation:** ☐ Visit (date: ) ☒ No Visit

**4. RESULTS OF INVESTIGATION:**

**A. Physical Features in Immediate Project Area (USTs, AST, Others):** ODOT maintenance yard that is a former LUST site.

**B. Evidence of Contamination (Vegetation Damage, Staining, Sheen):** None noted.

**C. Summary:** ☐ No concerns identified in project area.  
☐ Potential sources of contamination identified in project area.  
☒ Known sources of contamination identified in project area.

**5. RECOMMENDATIONS:**

- ☐ Approval to Proceed (No Further Action)
- ☒ Approval to Proceed, Pending:
  - ☐ Avoidance of described site(s)
  - ☒ Plan Notes regarding described site(s) (See Section 6)
  - ☐ Additional investigation by ODOT
- ☐ Approval NOT Recommended

**6. PLAN NOTES:** A plan note will be developed to address the LUST site.

**7. GENERAL COMMENTS:** US-81 is elevated related to adjacent properties, thereby reducing the potential to be impacted by nearby sources of contamination.

This report is based solely upon the interpretation of the available information and documents reviewed, and when indicated, visual observations of the proposed project and its vicinity. This report is intended for the sole use of ODOT. It should be recognized that this report was not intended to be a definitive investigation of contamination on any proposed project. Given the scope of the limited services undertaken, it is possible that currently unrecognized contamination may exist at any property and that the levels of this potential contamination may vary. Opinions and recommendations presented therein apply to existing conditions and those reasonably foreseeable.

**OTHER**



## OKLAHOMA DEPARTMENT OF TRANSPORTATION

## PROJECT STATUS SYSTEM

[Logout](#) [Project](#)
[Home](#) > [List Projects](#) > [Edit Project](#) > [Edit Environmental Data](#) > [Edit NEPA Document](#)

Edit Original NEPA Document		Cancel		Save NEPA Document	
Job Piece : 2984904					
<div>Initial</div> <div>Initiation Report from PMD</div> <div>Footprint Review Prior to Start of Studies</div> <div>Consultant Notice To Proceed</div> <div>Property Owner Notification</div> <div>BLM Notification</div> <div>BIA Notification</div> <div>Consultant CR/Tribal Initiation</div>					
<div>Studies</div> <div>Farmland NRCS Requested</div> <div>Farmland NRCS Complete</div> <div>CR Studies Requested</div> <div>CR Studies Due</div> <div>CR Studies Recd</div> <div>Biological Studies Requested</div> <div>Biological Studies Due</div> <div>Biological Studies Recd</div> <div>Meeting with 404 Permit Coordinator for Delineation</div> <div>Haz Waste Studies Requested</div> <div>Haz Waste Studies Due</div> <div>Haz Waste Studies Recd</div> <div>Noise Studies Requested</div> <div>Noise Studies Due</div> <div>Noise Studies Recd</div> <div>Relo Studies Requested</div>					
<div>NEPA Document Preparation</div> <div>NEPA On Hold Memo Sent Date</div> <div>R/W Submittal Plans Recd</div> <div>Draft Document Target Date</div> <div>Draft Document Actual Date</div>					
<div>CE Review</div> <div>Draft CE Review by ODOT</div> <div>Comments To Consultant</div> <div>Revised CE from Consultant</div> <div>CE to FHWA ( if applicable )</div> <div>Date of FHWA / ODOT Approval of CE</div> <div>CE Distribution</div>					
<div>EA Review</div> <div>Draft EA Review by ODOT</div> <div>Draft EA Review by FHWA</div> <div>Comments to Consultant</div> <div>Revised EA from Consultant</div> <div>Draft EA to FHWA</div> <div>Draft EA Approval by FHWA</div> <div>Final EA from Consultant</div> <div>Final EA Reviewed</div> <div>Final EA to FHWA</div> <div>FONSI from FHWA</div> <div>FONSI Distribution</div>					

NEPA Document Navigation

- Recon
- Section 4F
- Public Involvement
- Re-Evaluation



## OKLAHOMA DEPARTMENT OF TRANSPORTATION

200 N. E. 21st Street

Oklahoma City, OK 73105-3204

February 13, 2014

Subject: Bridge and approaches on US-81 over the UP Railroad, located 5.3 miles north of junction of SH-33 in Kingfisher County, JP # 29849(04), Project Number J2-9849(004).

Dear Property Owner:

We are pleased to inform you the Oklahoma Department of Transportation (ODOT) is considering improvements to the north and south bound Union Pacific (UP) Railroad Bridges on US-81. The exact project scope and requirements will be clarified through the planning, environmental review, and design process. In accordance with the National Environmental Policy Act, the National Historic Preservation Act, and Federal Highway Administration policy, the Department is requesting any information or specific concerns you may have regarding this project's potential impact on the human environment, the natural environment, and historic properties.

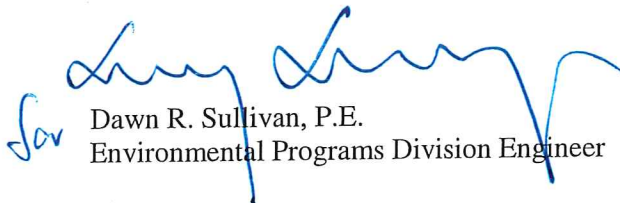
Additionally, in the near future, employees or authorized agents of ODOT may be entering your property for the purpose of surveying environmental considerations, such as cultural resources, biological resources, noise, and hazardous materials. Results from these studies will be incorporated into the environmental document being prepared for this project. It may be necessary to do minor hand digging in your property as part of the survey. Any test holes will be filled in and cleaned up afterwards.

Oklahoma Statute 69-702 provides for the Department of Transportation, through its agents and employees, to enter the property and make the necessary surveys and other examinations related to the proposed highway project. A copy of Oklahoma Statute 69-702 is provided with this letter.

If you are currently leasing this property, please notify your lessee of our planned work.

Should you have any information or specific concerns, please contact Tim Vermillion, ODOT Environmental Project Manager at 405-521-2676 or [TVermillion@ODOT.ORG](mailto:TVermillion@ODOT.ORG). As always, your cooperation is greatly appreciated.

Respectfully,

  
Dawn R. Sullivan, P.E.  
Environmental Programs Division Engineer

DRS/TV

Enclosures: Location Map, Copy of Statute 69-702

Copy to: Project Management  
Field Division Engineer  
Survey Division  
Materials Division  
Right-of-Way Division  
ODOT Cultural Resources Specialist  
Specialists

*"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."*

AN EQUAL OPPORTUNITY EMPLOYER

Kingfisher County  
US -81 over UP RR  
JP 29849(04)

5 labels

Dorsey and Joyce Brown  
PO Box 418  
Kingfisher, OK 73750

Jack Stuteville  
1009 Park Plaza  
Kingfisher, OK 73750

Michael Frey  
15736 N 2850 Road  
Kingfisher, OK 73750

Paul Compton  
16407 East 750 Road  
Kingfisher, OK 73750

Glen Perdue  
26789 East 740 Road  
Dover, OK 73734

One property was unable to be  
identified on Section 27. Not  
listed on assessor site/shaded





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Oklahoma Field Office  
7906 E. 33<sup>rd</sup> Street, Suite 101  
Tulsa, Oklahoma 74145  
[www.blm.gov/nm](http://www.blm.gov/nm)



In Reply Refer To:

ODOT Project Response 042314  
1785 (040)

RECEIVED  
APR 23 2014  
ENVIRONMENTAL  
PROGRAMS DIV.

April 23, 2014

Ms. Dawn Sullivan  
Environmental Programs Division Engineer  
Oklahoma Department of Transportation  
200 N. E. 21<sup>st</sup> Street  
Oklahoma City, OK 73105-3204

Tim - Div 4

Dear Ms. Sullivan:

We wish to thank you for extending the opportunity to the Bureau of Land Management (BLM) Oklahoma Field Office in Tulsa, Oklahoma, to provide comments on the following proposed projects:

1. Beaver County
  - a. Bridge on US-270 over Aurora Creek (JP 27007(04), J2-7007(004))
2. Craig County
  - a. Bridge/Approaches on SH-10 over Big Cabin Creek (JP 29068(04), J2-9068(004))
3. Garfield County
  - a. Bridge/Approaches on SH-132 over Unnamed Creek (JP 29482(04), J2-9482(004))
  - b. Bridge/Approaches on US-60 over BNSF Railroad (JP 24637(04), J2-4637(004))
  - c. Bridge/Approaches on US-64 over Black Bear Creek (JP 27965(04), J2-7965(004))
4. Kay County
  - a. Bridge/Approaches on SH-11 over Deer Creek (JP 29839(04), J2-9839(004))
  - b. Bridge/Approaches on SH-11 over Thompson Creek (JP 29840(04), J2-9840(004))
5. Kingfisher County
  - a. Bridge/Approaches on US-81 over UP Railroad (JP 29849(04), J2-9849(004))
  - b. Bridge/Approaches on SH-33 over Foreman Creek (JP 29490(04), J2-9490(004))
  - c. Bridge/Approaches on SH-51 over Skeleton Creek (JP 21858(04), J2-1858(004))
6. Logan County
  - a. Bridge/Approaches on SH-33 over Gar Creek (JP 29841(04), J2-9841(004))
  - b. Bridge/Approaches on SH-74D over Rock Creek (JP 28312(04), J2-8312(004))

cc:  
NM (441, Central File)  
NM (044, L. Levesque)



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Oklahoma Field Office  
7906 E. 33<sup>rd</sup> Street, Suite 101  
Tulsa, Oklahoma 74145  
[www.blm.gov/nm](http://www.blm.gov/nm)



In Reply Refer To:

Our office has reviewed the information provided in your letters and has no concerns or objections to these proposals. A search of our files shows no impact to Federal or Indian minerals in the project areas, nor any Federal land managed by the BLM.

Sincerely,

Janine Book  
Resource Program Manager  
Oklahoma Field Office

cc:  
NM (441, Central File)  
NM (044, L. Levesque)



# Oklahoma Department of Transportation

Project Management Division

(405)522-7601

Fax (405) 522-7612

Room 3C9

SEC. 23 T17N R7W

DATE: **October 2, 2013**

TO: **Distribution List**

FROM: **Project Management Division**

SUBJECT: **Project Initiation**

16159  
16167

J/P Number: 29849(04) County: Kingfisher Highway: US-81 Division: 4

PS&E Date: 2020 R/W Date : 2016

Drive-out Date: 10/2/2013

Programmed Estimate: \$ 4,000,000

Project Description: Bridge and Approaches over the UP Railroad

## FUNCTIONAL CLASSIFICATION

Area Type: ☐ Urban ☐ Suburban ☒ Rural  
Terrain Type: ☒ Flat ☐ Rolling ☐ Mountainous  
Access Control: ☐ Full ☐ Partial ☒ None  
Highway Type: ☐ Freeway ☒ Principal Arterial ☐ Minor Arterial ☐ Collector  
☒ NHS ☐ Non-NHS ☐ STRAHNET ☐ Scenic Hwy

## EXISTING INFORMATION

Current ADT: 5,000 % Trucks: 18% Number of Lanes: 4 Lane Width: 12'

Outside Shoulder Width: 10' Inside Shoulder Width: 4'

☒ Open Section ☐ Curb & Gutter ☒ Divided, median width: 30'

☐ Other (describe):

Pavement Type: Asphalt Concrete

Pavement Condition: ☐ Good ☐ Fair ☐ Poor

Shoulder Type: Paved

Shoulder Condition: ☐ Good ☐ Fair ☐ Poor

Storm Sewer ☐ No ☐ Yes

Storm Sewer Condition: ☐ Good ☐ Fair ☐ Poor

Sidewalks ☒ No ☐ Yes

Sidewalk Width:

Bridges Within Project Extents: SEE ATTACHED INSPECTION REPORT(S)

Bridge One 16159

Bridge Two 16167

Bridge Three 00000

## ENVIRONMENTAL CONSIDERATIONS

☐ Historic Properties, list:

☐ Archeological Sites, list:

☐ Cemeteries, list:

☐ Hazardous Waste / LUST Sites, list:

☒ Endangered Species, list: Whooping Crane, Interior Least Tern, Piping Plover, Ark River Shiner

☐ Section 4F or 6F Properties, list:

☐ Farmland ☐ Wetlands ☐ Scenic and Protected Aquifers ☐ 100 Year Flood Plain

## ALTERNATIVE IMPACTS

- ☐ Other Agencies      List:  
☐ Turnpike Involvement  
☐ Metropolitan Planning Organizations      List:
- 

## PERMIT INFORMATION

Design Exception Anticipated:   ☐ No    ☐ As required by design   ☐ Yes, type:  
Maintenance Agreements (Lighting, Signals, etc.):   ☐ No    ☐ Yes, type:  
Permits required: ☐ FAA        ☐ USACE        ☐ OWRB        ☐ Railroad        ☐ Other, type:  
Additional:

## PROPOSED IMPROVEMENT

Project Intent: Replace at-risk bridge over Union Pacific Railroad. Alleviate Fracture Critical Member

Special Considerations: Will not be able to purchase ROW from UP.  
Need 23' 10" of clearance over railroad (check with Rail Programs)

### Description of Proposed Improvements:

- Replace both bridges using crossovers for construction traffic control.
  - Raise grade for necessary clearance over the railroad (~3')
  - Have crossovers 0.5 miles north and south of bridges (at drainage structures if possible.)
  - The bridge will be at about a 60 degree skew (possibly (3)-100' steel girder spans, steel due to skew).
  - We will need pier protection by the railroad.
- Overbuild the piers to get rid of the fracture critical members.

Design Speed: 65 mph or match existing

Potential to transfer steel bridge beams to County ( Oklahoma Statute Title 69 subsection 1001)

Yes      ☒  
No       ☐      Fully document specific reasons preventing transfer:  
NA       ☐

### Project Termini

Beginning of Project: At Crossovers (~0.5 miles north and south)

End of Project:

Limits of Survey: **From 500 feet West of the NS 285 Section Line, the survey will extend Northeasterly, along the existing US 81, to the EW 74.25 Sixteenth Section Line. Survey length approximately 1.2 miles. Survey width will be 200 feet Right and Left, widening to 500 feet Right**

and Left, from 1000 feet before the bridge, to 1000 feet after the bridge. Tops of rails will be profiled 300 feet Right and Left.

Limits of NEPA Survey Area: Existing R/W- Same as length of survey to include crossovers.

#### Typical Section

- ☒ Open Section                      ☐ Curb & Gutter                      ☐ Divided, median width:  
☐ Other (describe):  
Number of Lanes: 2              Lane Width: 12'  
Outside Shoulder Width: 10 ' Inside Shoulder Width: 4 '  
Storm Sewer              ☒ No              ☐ Yes  
Sidewalks              ☒ No              ☐ Yes, width: '  
Overlay              ☒ No              ☐ Yes, thickness:  
Coldmill              ☒ No              ☐ Yes, thickness:  
Add Shoulders              ☐ No              ☒ Yes, width: 10' outside, 4' inside  
Bridge Width 38'

#### Alignment

- ☒ Existing  
☐ New, located              ☐ North or              ☐ South or              ☐ East or              ☐ West of existing  
☐ Parallel Lanes, located              ☐ North or              ☐ South or              ☐ East or              ☐ West of existing  
☐ Spot Improvements  
☐ Horizontal, Description:  
☒ Vertical, Description: Raise to clear RR

#### Detour

- ☐ Shoo-fly, located              ☐ North or              ☐ South or              ☐ East or              ☐ West of existing  
☐ Widening, located              ☐ North or              ☐ South or              ☐ East or              ☐ West of existing  
☒ Crossovers              ☐ Close Road  
☐ Signed Detour, Route Description:  
☐ Phased Construction, Description:

#### Traffic Items

- Traffic Management Plan              ☒ No              ☐ Yes  
Median Barrier              ☒ No              ☐ Yes  
New Guardrail              ☐ No              ☒ Yes  
End Treatment              ☐ No              ☒ Type: GET  
Highway Lighting              ☒ No              ☐ Outside or              ☐ Median  
Traffic Signals              ☒ No              ☐ Location(s):

#### Right-of-Way

- Additional RW Required              ☒ No              ☐ Yes, describe:  
Utility Conflicts              ☒ No              ☐ Yes, describe: Terry Shreve researching

#### Miscellaneous

- Channel Re-Alignment              ☒ No              ☐ Yes, describe:

### INITIATION ESTIMATE



Roadway: \$ 1,034,000  
 Bridge: \$ 2,650,000  
 Traffic Control: \$  
 Signing and Striping: \$  
 Highway Lighting: \$  
 Traffic Signals: \$  
 Mobilization: \$ 209,200  
 Staking: \$ 77,864  
 E & C: \$ 233,592

Total Construction: \$ 4,204,656  
 Right-of-Way: \$ 5,000  
 Utility: \$ 64,482  
 Total Estimate: \$ 4,274,138

#### PROGRAM REVISIONS

Estimate: \$

Letting Date:

Project Length:

Work Type:

Description:

Attendee Name	Representing
Brian Taylor	Field Division Four
Joseph Echelle	Field Division Four
Bob Rusch	Bridge Division
Justin Hernandez	Bridge Division
Eduardo Elder	Roadway Design Division
Steven Bowen	Roadway Design Division
Tim Vermillion	Environmental Programs Division
Teresa Jones	Right-of-way Division
Leroy Tackett	Survey Division
Daniel Nguyen	Project Management Division
Chris Harlin	Field Division Four
Terry Shreve	Field Division Four
Roy Counts	Field Division Four
Brantley Hendrex	Field Division Four

Attachments (Aerial with Preliminary RW & County Map)

#### Distribution List:

Director of Engineering  
 Director of Capital Projects and Information Management  
 Bridge Division  
 Environmental Programs Division  
 FHWA  
 Field Division Four  
 Project Management Division  
 Right-of-Way Division  
 Roadway Design Division  
 Survey Division  
 Planning and Research Division  
 Traffic Engineering Division

# OKLAHOMA DEPARTMENT OF TRANSPORTATION -

## Bridge Inspection Report

Suff. Rating: 72.0

Health Index : 64.6

NBI No.: 16167

Structure No.: 3704 0543WX

Local ID: 024A

ND

64.6

IDENTIFICATION				INSPECTION			
Description: 32'49", 2-57'49", 39' 1-BM. SPANS WITH 2-1.5' SAFETY CURBS SKEW VARIES				Type	Insp Req.	Insp Done	Freq:
1. State: Oklahoma 2. SHD District: Division 4				NBI:		N	24
3. County Code: KINGFISHER 4. Place Code: Unknown				FC Freq.:	Y	N	24
Admin. Area: Unknown				UW Freq.:	N	N	NA
5. Inventory Route (Route On Structure): 1 - 2 - 1 - 00081 - 0				OS Freq.:	Y	Y	24
6. Feature Intersected: UP R.R. UNDER				Insp. Date:			6/23/2014
7. Facility Carried: U.S. 81 U.S. 81				Next Insp.:			6/23/2016
9. Location: 5.3 MI N JCT SH 33 11. Mile Post: 5.429 mi							
13. LRS Inv. Route./ Subroute.: 3704 W0093 02							
16. Latitude: 35 55 54.00 17. Longitude: 097 54 58.00							
98. Border Br. Code: Jnkown (P) % Resp.: 0 99. Border Br. #: Unknown							
STRUCTURE TYPE AND MATERIALS				CLASSIFICATION			
43. Main Span Material and Design Type Steel Stringer/Girder				12. Base Hwy Network: On Base Network 20. Toll Facility: 3 On free road			
44. Approach Span Material and Design Type Unknown (NBI) Unknown (P)				21. Custodian: 01 State Highway Agency 22. Owner: 01 State Highway Agency			
45. No. of Spans Main Unit: 6 46. No. of Approach Spans: 0				26. Functional Class: 02 Rural Other Princ 37. Historical Sig.: 5 Not eligible for NRHP			
107. Deck Type: 1 Concrete-Cast-in-Place				100. Defense Highway: 3 On STRAHNET Con 101. Parallel Structure: Left of    bridge			
108A. Wearing Surface: 6 Bituminous				102. Dir. of Traffic: 1 1-way traffic 103. Temp. Structure: Not Applicable (P)			
108B. Membrane: 8 Unknown				104. Highway System: 1 On the NHS 105. Fed. Land Hwy 0 N/A (NBI)			
108C. Deck Protection: 8 Unknown				110. National Truck Network: 0 Not part of na 112. NBIS Length: Long Enough			
AGE AND SERVICE				CONDITION			
27. Year Built: 1964 106. Year Reconstructed: -4				58. Deck: 5 Fair 59. Super.: 6 Satisfactory 60. Sub.: 5 Fair			
28A. Lanes on: 2 28B. Lanes Under: 0 19. Detour Length: 0.1 mi				62. Culvert: N N/A (NBI) 61. Channel/Channel Protection: N N/A (NBI)			
29. ADT: 2500 30. Year of ADT: 2013 109. Truck ADT %: 25				Flowline Notes:			
42A. Type of Service on: 1 Highway				N/A			
42B. Type of Service under: 2 Railroad							
GEOMETRIC DATA				LOAD RATING AND POSTING			
10. Inv. Rte. Min. Vert. Clr.: 328.1 ft				31. Design Load: 5 MS 18 (HS 20) 41. Posting status: A Open, no restriction			
32. Approach Roadway Width (W/ Shoulders): 38.0 ft				63. Op. Rating Method: 1 LF Load Factor-Ton Alt. Op. Rating Meth.: 1 LF Load Factor-To			
Deck Area: 9,375.4 sq. ft 33. Median: 0 No median				64. Operating Rating (H / HS / 3-3): 32.3 58.1 70.9			
34. Skew: 99 35. Structure Flared: 0 No flare				66. Inventory Rating (H / HS / 3-3): 19.4 34.8 42.5			
47. Inv. Rte. Total Horiz. Clr.: 30.0 ft				65. Inv. Rating Method: 1 LF Load Factor-Ton Alt. Inv. Rating Meth.: 1 LF Load Factor-To			
48. Length Maximum Span: 57.1 ft 49. Structure Length: 284.1 ft				70. Posting: 5 At/Above Legal Loads Date Rated: 11/9/2011			
50A. Curb/Sdwk Width L: 1.5 ft 50B. Curb/Sidewalk Width R: 1.5 ft							
51. Width Curb to Curb: 30.0 ft 52. Width Out to Out: 33.0 ft							
53. Minimum Vertical Clearance Over Bridge: 328.1 ft							
54A/54B. Min. Vert. Underclearance: R Railroad beneath struc 23.1 ft							
N/E S/W							
Meas. -1 -1 R2302 -1 -1 -1							
Post. DO NOT U DO NOT U DO NOT U DO NOT U DO NOT U DO NOT U							
55A/55B. Minimum Lateral Underclearance R: R Railroad beneath struc 16.0 ft							
56. Minimum Lateral Underclearance L: 0.0 ft							
PROPOSED IMPROVEMENTS				NAVIGATION DATA			
94. Bridge Cost: \$868,618 75. Type of Work: 31 Repl-Load Capacity				38. Navigation Control: NA-no waterway			
95. Roadway Cost: \$1,433,220 76. Lgth. of Improvment: 360.9 ft				39. Vertical Clearance: 0.0 ft 40. Horizontal Clearance: 0.0 ft			
96. Total Cost: \$2,432,131 114. Future ADT: 4000				111. Pier Protection: Not Applicable (P) 116. Lift Bridge Vert. Clear.: 0.0 ft			
97. Year of Cost Est.: 2009 115. Year of Future ADT: 2033							
APPRAISAL							
36A. Bridge Rail: 0 Substandard 36C. Approach Rail: 0 Substandard							
36B. Transition: 0 Substandard 36D. Approach Rail Ends: 0 Substandard							
67. Str. Evaluation: 5 Above Min Tolerable 68. Deck Geometry: 4 Tolerable							
69. Underclearance, Vertical and Horizontal: 6 Equal Minimum							
71. Waterway Adequacy: N Not applicable							
72. Approach Alignment: 8 Equal Desirable Crit							
113. Scour Critical: N Not Over Waterway							
200c. Temperature: 94				214a. Posted Weight Limit: NR			
200d. Weather: CLEAR				b. Posted Speed Limit: N			
201. Structural Steel ASTM Desig.: A36 20				c. Narrow/One Lane Bridge sign: N			
202. Waterproof Membrane: -1				d. Vertical Clearance Sign: NO			
Date Installed: 1/1/1901				Advanced Warning Sign: NO			
203. Type Exp. Dev.: Open Joint - No Device				Min. Measured Clearance: 2302			
				Max. Measured Clearance: 2306			
				e. Navigation Lights: NO			
				Working/Not Working: NO			
204. Type of Handrail: Steel Post and Rail				215. Overpass: C - US Highway			
205. Material and Quantity: 1123.0				221. Substructure Cond. (U/W): -			
208. Type of Abutment: Skeleton				222. Fill over RCB: -1			
Type of Foundation: Concrete Piling				223. Appr. Slab/Rdwy Cond.: Satisfactory			
209. Type of Pier / Found.: 2 Piers No				224. Critical Feature Type: 477			
No Piling or Drilled Shaft				Red Lead Ready			
210. Foundation Elev. -3.0 -3.0				225. Paint Type: 0			
-3.0 -3.0 -1.0				Overcoat: 6401			
211. Wear. Surf. Prot. System: None				226. Date Painted: Silver			
Date Installed: 1/1/1901				227. Paint Coloring: -			
213. Utilities Attached: -1				233. Deck Forming: -			
-1 -1 -1				236. Deck Cleaning: -1			
-1 -1 -1				238. School Bus Rte: Current and Desired Route			
				240. Appr. Roadway Type: Asphalt/Bituminous			
				243. Girder Spacing/Number: -1.0 / -1			
				244. Span Lengths:			
				-1 -1 -1			
				-1 -1 -1			
				-1 -1			
				245. Girder Depth: -1.000			
				246. Type of Overlay: AC Over			
				246. Overlay Thickness: 4.0			
				246. Overlay Date: 3/4/2008			
				246. Overlay Depth Changed > 1"? _			
				247. Protective Systems: 1: _			
				2: _ 3: _			
				4: _ 5: _			
				248. No. of Field Splices w/ Corrosion: -1			
				249. Scour Crit. POA exists?: _			
				250. Culvert Headwall Dist.: -1.0			
				254. Thru Truss Type: _			
				256. Chan. Profile Up/Down Stream?: _			
				257a. OkiePROS Auto. Truck Routing Yes			
				258. Plans w/ found. are in file at ODOT			
				259. Scour Eval. is in file at ODOT			
				263. Interchange at Intersection P			
				264. Interstate Milepoint -1.00			

**OKLAHOMA DEPARTMENT OF TRANSPORTATION -****Bridge Inspection Report**

Suff. Rating: 72.0

Health Index :

ND

64.6

NBI No.: 16167

Structure No.: 3704 0543WX

Local ID: 024A

Inspection Date: 6/25/2015

Reported By: ECINADR

Invoice No.: -1

Inspected With: -1

Agency :

**Structure / Inspection Notes**

The bridge is a 6-span structure numbered from south-to-north: Span 1 - 32 ft steel multi beam; span 2 - 49 ft steel mutli beam; spans 3 & 4 - 57 ft steel multi beam; span 5 - 49 ft steel multi beam; span 6 - 39 ft steel multi beam. OS Inspection Items Include: FC pier beam; floating bearings at piers 1 & 5.

PX - Replace or retrofit the bridge rails, guardrails, transitions and end treatments; repair/replace leaking deck joint seals; restore contact between the beam ends and the bearings at Piers 1 and 5; remove pigeon debris from the pier beam bottom flange.

FX - Monitor: pier beam section loss; cracking, spalling and delaminations in the substructure; floating bearings at piers 1 & 5.

Additional  
Elements

# OKLAHOMA DEPARTMENT OF TRANSPORTATION -

## Bridge Inspection Report

Suff. Rating: 72.0  
ND

Health Index :  
63.7

NBI No.: 16159

Structure No.: 3704 0543EX

Local ID: 024

**IDENTIFICATION**  
Description:  
30' 44' 2-57' 42' 35' I-BM. SPANS WITH 2-1.5' SAFETY CURBS SKEW. VARIES  
1. State: Oklahoma 2. SHD District: Division 4  
3. County Code: KINGFISHER 4. Place Code: Unknown  
Admin. Area: Unknown  
5. Inventory Route (Route On Structure): 1 - 2 - 1 - 00081 - 0  
6. Feature Intersected: UP R.R. UNDER  
7. Facility Carried: U.S. 81 U.S. 81  
9. Location: 5.3 MI N JCT SH 33 11. Mile Post: 5.429 mi  
13. LRS Inv. Route./Subroute.: 3704 0000 02  
16. Latitude: 35 55 52.94 17. Longitude: 097 54 58.00  
98. Border Br. Code: Jkknown (P) % Resp.: 0 99. Border Br. #: Unknown

**STRUCTURE TYPE AND MATERIALS**  
43. Main Span Material and Design Type  
Steel Stringer/Girder  
44. Approach Span Material and Design Type  
Unknown (NBI) Unknown (P)  
45. No. of Spans Main Unit: 6 46. No. of Approach Spans: 0  
107. Deck Type: 1 Concrete-Cast-in-Place  
108A. Wearing Surface: 6 Bituminous  
108B. Membrane: 8 Unknown  
108C. Deck Protection: 8 Unknown

**AGE AND SERVICE**  
27. Year Built: 1964 106. Year Reconstructed: -4  
28A. Lanes on: 2 28B. Lanes Under: 0 19. Detour Length: 0.1 mi  
29. ADT: 2500 30. Year of ADT: 2013 109. Truck ADT %: 25  
42A. Type of Service on: 1 Highway  
42B. Type of Service under: 2 Railroad

**GEOMETRIC DATA**  
10. Inv. Rte. Min. Vert. Clr.: 328.1 ft  
32. Approach Roadway Width (W/ Shoulders): 38.0 ft  
Deck Area: 8,751.1 sq. ft 33. Median: 0 No median  
34. Skew: 99 35. Structure Flared: 0 No flare  
47. Inv. Rte. Total Horiz. Clr.: 30.0 ft  
48. Length Maximum Span: 57.1 ft 49. Structure Length: 265.1 ft  
50A. Curb/Sdwk Width L: 1.5 ft 50B. Curb/Sidewalk Width R: 1.5 ft  
51. Width Curb to Curb: 30.0 ft 52. Width Out to Out: 33.0 ft  
53. Minimum Vertical Clearance Over Bridge: 328.1 ft  
54A/54B. Min. Vert. Underclearance: R Railroad beneath struc 24.5 ft  
N/E S/W  
Meas. -1 -1 R2409 -1 -1 -1  
Post. DO NOT U DO NOT U DO NOT U DO NOT U DO NOT U DO NOT U  
55A/55B. Minimum Lateral Underclearance R: R Railroad beneath struc 16.0 ft  
56. Minimum Lateral Underclearance L: 0.0 ft

**INSPECTION**  

Type	Insp Req.	Insp Done	Freq.	Insp. Date:	Next Insp.:
NBI:		N	24	6/23/2014	6/23/2016
FC Freq.:	Y	N	24	6/23/2014	6/23/2016
UW Freq.:	N	N	NA	NA	NA
OS Freq.:	Y	Y	24	6/26/2015	6/23/2017

**CLASSIFICATION**  
12. Base Hwy Network: On Base Network 20. Toll Facility: 3 On free road  
21. Custodian: 01 State Highway Agency 22. Owner: 01 State Highway Agency  
26. Functional Class: 02 Rural Other Princ 37. Historical Sig.: 5 Not eligible for NRHP  
100. Defense Highway: 3 On STRAHNET Con 101. Parallel Structure: Right of bridge  
102. Dir. of Traffic: 1 1-way traffic 103. Temp. Structure: Not Applicable (P)  
104. Highway System: 1 On the NHS 105. Fed. Land Hwy 0 N/A (NBI)  
110. National Truck Network: 0 Not part of na 112. NBIS Length: Long Enough

**CONDITION**  
58. Deck: 5 Fair 59. Super.: 5 Fair 60. Sub.: 5 Fair  
62. Culvert: N N/A (NBI) 61. Channel/Channel Protection: N N/A (NBI)  
Flowline Notes:  
N/A

**LOAD RATING AND POSTING**  
31. Design Load: 5 MS 18 (HS 20) 41. Posting status: A Open, no restriction  
63. Op. Rating Method: 1 LF Load Factor-Ton Alt. Op. Rating Meth.: 1 LF Load Factor-To  
64. Operating Rating (H / HS / 3-3): 32.3 58.1 70.9  
66. Inventory Rating (H / HS / 3-3): 19.4 34.8 42.5  
65. Inv. Rating Method: 1 LF Load Factor-Ton Alt. Inv. Rating Meth.: 1 LF Load Factor-To  
70. Posting: 5 At/Above Legal Loads Date Rated: 11/9/2011

**PROPOSED IMPROVEMENTS**  
94. Bridge Cost: \$818,346 75. Type of Work: 31 Repl-Load Capacit  
95. Roadway Cost: \$1,350,271 76. Lgth. of Improvment: 336.7 ft  
96. Total Cost: \$2,291,369 114. Future ADT: 4000  
97. Year of Cost Est.: 2009 115. Year of Future ADT: 2033

**NAVIGATION DATA**  
38. Navigation Control: NA-no waterway  
39. Vertical Clearance: 0.0 ft 40. Horizontal Clearance: 0.0 ft  
111. Pier Protection: Not Applicable (P) 116. Lift Bridge Vert. Clear.: 0.0 ft

**APPRAISAL**  
36A. Bridge Rail: 0 Substandard 36C. Approach Rail: 0 Substandard  
36B. Transition: 0 Substandard 36D. Approach Rail Ends: 0 Substandard  
67. Str. Evaluation: 5 Above Min Tolerable 68. Deck Geometry: 4 Tolerable  
69. Underclearance, Vertical and Horizontal: 6 Equal Minimum  
71. Waterway Adequacy: N Not applicable  
72. Approach Alignment: 8 Equal Desirable Crit  
113. Scour Critical: N Not Over Waterway

200c. Temperature: 80  
200d. Weather: CLOUDY  
201. Structural Steel ASTM Desig.: A36 20  
202. Waterproof Membrane: -1  
Date Installed: 1/1/1901  
203. Type Exp. Dev.: Open Joint - No Device  
204. Type of Handrail: Steel Post and Rail  
205. Material and Quantity: 1050.0  
208. Type of Abutment: Skeleton  
Type of Foundation: Concrete Piling  
209. Type of Pier / Found.: 2 Piers No  
No Piling or Drilled Shaft  
210. Foundation Elev. -3.0 -3.0  
-3.0 -3.0 -1.0  
211. Wear. Surf. Prot. System: None  
Date Installed: 1/1/1901  
213. Utilities Attached: -1  
-1 -1 -1  
-1 -1 -1

214a. Posted Weight Limit: NR  
b. Posted Speed Limit: N  
c. Narrow/One Lane Bridge sign: N  
d. Vertical Clearance Sign: NO  
Advanced Warning Sign: NO  
Min. Measured Clearance: 2409  
Max. Measured Clearance: 2409  
e. Navigation Lights: NO  
Working/Not Working: NO  
215. Overpass: C - US Highway  
221. Substructure Cond. (U/W): -  
222. Fill over RCB: -1  
223. Appr. Slab/Rdwy Cond.: Satisfactory  
224. Critical Feature Type: 477  
Red Lead Ready  
225. Paint Type: 0  
Overcoat: 6401  
226. Date Painted: Silver  
227. Paint Coloring: Silver  
233. Deck Forming: -  
236. Deck Cleaning: -1  
238. School Bus Rte: Current and Desired Route  
240. Appr. Roadway Type: Asphalt/Bituminous

243. Girder Spacing/Number: -1.0 / -1  
244. Span Lengths:  
-1 -1 -1  
-1 -1 -1  
-1 -1  
245. Girder Depth: -1.000  
246. Type of Overlay: AC Over  
246. Overlay Thickness: 4.0  
246. Overlay Date: 4/26/2004  
246. Overlay Depth Changed > 1" ?  
247. Protective Systems: 1: -  
2: - 3: -  
4: - 5: -  
248. No. of Field Splices w/ Corrosion: -1  
249. Scour Crit. POA exists?: -  
250. Culvert Headwall Dist.: -1.0  
254. Thru Truss Type: -  
256. Chan. Profile Up/Down Stream?: -  
257a. OkiePROS Auto. Truck Routing: Yes  
258. Plans w/ found. are in file at ODOT  
259. Scour Eval. is in file at ODOT  
263. Interchange at Intersection P  
264. Interstate Milepoint -1.00

**OKLAHOMA DEPARTMENT OF TRANSPORTATION -****Bridge Inspection Report**NBI No.: **16159**Structure No.: **3704 0543EX**Local ID: **024**Suff. Rating: **72.0**  
NDHealth Index :  
**63.7**Inspection Date: **6/26/2015**Reported By: **ECINADR**Invoice No.: **FBS1**Inspected With: **-1**

Agency :

**Structure / Inspection Notes**

The bridge is a 6-span structure numbered south-to-north: span 1 - 30 ft long steel multi beam; span 2 - 44 ft long multi beam; spans 3 & 4 - 57 ft long steel multi beam; span 5 - 42 ft long steel multi beam; span 6 - 35 ft long steel multi beam. OS inspection items include: inspection of FC pier beam; erosion at NE wingwall; bearings not in contact with sole plates at pier 1 and excessive tilt of beam 4, pier 2, span 2 bearing.

PX – Replace the bridge rails, guardrails, transitions and end treatments; restore contact between the sole plates & bearings in span 1 at pier 1 (beams 1-3) and consider replacing stacked shim plates at beam 2 and resetting beam 2 bearing; repair/replace leaking deck joints; repair active erosion at NE wingwall; consider clean & spot paint portions of beams and pier beam with active corrosion and pitting; consider sealing substructure cracks and patching spalled/delaminated areas; regularly remove pigeon debris from the pier beam bottom flange.

FX – Monitor bearing at pier 2, beam 4, span 2 for excessive rotation; monitor spalling and delaminations in the substructure; erosion at NE wingwall; bearings not in contact with sole plates at pier 1 for distress.

Additional  
Elements





**OKLAHOMA DEPARTMENT OF TRANSPORTATION**  
**PROJECT STATUS SYSTEM**

Logout  
Project

Home > List Projects > [Edit Project](#)

Environmental / [Proposed Bridge](#) / [Related Projects](#) / [Project Cost](#) / [Project Revision](#) / [Commitments](#) / [Right-of-Way](#) / [DOCUMENT VAULT](#) / [Local Government](#) / [FHWA Project Status Justification](#)

**Edit PROJECT**

Job Piece: 2984904	Planned Finish	Actual Finish	Proj_Status	Condition	Percent	Cancel
<b>PRODUCTION TARGETS</b>						
Reconnaissance Data	09/17/2013		<input type="button" value="v"/>	<input type="radio"/>	<input type="radio"/>	
Project Initiation	01/16/2014		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
EC Solicitation	06/09/2014			<input type="radio"/>	<input type="radio"/>	
EC Contract	01/09/2015 EC No			<input type="radio"/>	<input type="radio"/>	
Survey	03/18/2015		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
Hydraulics	06/18/2015		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
Preliminary Plan in Hand	10/16/2015		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
RW & Utility Meeting	04/16/2016		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
NEPA Document	05/17/2016		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
Plans Submitted to RW	06/16/2016		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
RW Phase		- Please Select - v	N/A	<input type="radio"/>	<input type="radio"/>	
Legal Entry	07/06/2017		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
Status of Demolition			N/A	<input type="radio"/>	<input type="radio"/>	
Utility Out	11/09/2017		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
Prepare Traffic Div. Request	03/02/2017		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
Final Field Review	09/28/2017		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
404 Permit	11/09/2017		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
Plans Complete				<input type="radio"/>	<input type="radio"/>	
Ready to Let	11/16/2017		- Please Select - v	<input type="radio"/>	<input type="radio"/>	
						Edit Resource and Comments

**Utility Information**

Latest Utility Out Date

**Project Information**

JP No.	Proj. ID	County	Div.	Maint.	HWY	Work Desc
2984904	J2-9849(004)	37 KINGFISHER	4	4	US081	11 BRIDGE & APPROACHES

**Project Location & Legislative Districts**

Ctrl.	Start	Lgth	End	Cong	Senate	House	Location
004	5.380	0.100	5.480	3	20	059	US 81: NB & SB BRIDGES OVER THE UP RAILROAD 5.3 MIS. N. OF SH 33

**Project Status**

Status	8Year CWP	NHS Sys.	FHWA Oversight	Comm Appr.	Fhwa Auth	FFY	Let Date	FFY	Award Date	RW JP No.	RW Let
Programmed	Yes			09/2012	-	-	NoDate	2023	NoDate	-	-

**STIP & NEPA Information**

STIP FY	STIP Page	Pub Date	ODOT Appr.	TIP FY	TIP Page	MPO Appr.	NEPA Type	NEPA Re-Eval
-	-	-	-	-	-	-	-	//

**Project Budget & Plan Resource**

Advanced	Federal	State	Other	Total	Design Consultant	NEPA Consultant
\$0	\$5,600,000	\$1,400,000	\$0	\$7,000,000	-	000000000

**ODOT/FHWA Resources Assigned**

PMD	Field	FHWA	NEPA	Survey	Materials	Roadway	Bridge	Traffic	RW	Rail
-	GREEN	BAHAVAR	Vermillion	Larry Reser	-	-	-	-	-	-

**Comments**

COMMENTS
-

**Bridge Information**

NBI#	Status	Co	Ctl	Milept	Sd
16167	State Bridge	37	004	05430	
16159	State Bridge	37	004	05430	
					1-2

**Consultant Resources**

### CE Document Checklist (Updated 8/25/14)

Should be included in the Other Section of all projects

JP No:	29849 (04)	Prepared by	T. Vermillion
County:	KIMBERLY	Checked by	Gary Worrell
Date Checked:	3-24-16		
No	Description		Checked?
<b>1</b>	<b>Project Information</b>		
1.1	Correct Project No? (Check against Oracle info)		✓
1.2	Correct NBI No.? - Check against initiation report, Oracle, and plans		✓
1.3	Location No. for County projects only?		—
1.4	Correct Field Division?		✓
1.5	Correct Project Description? (Check against Oracle info and make sure it matches project extent on the plans. If it doesn't match, get the PM to fix the Oracle )		✓
1.6	Construction Program/STIP/TIP Checked?		✓
<b>2</b>	<b>Existing Conditions</b>		
2.1	If it is a roadway project, is the roadway described first, then mention any bridges mentioned within the project extent		✓
2.2	Are the existing bridge type (span or box), width for span bridges (or length for box) and structural conditions for each bridge correct? Check against GRIP info		✓
2.3	Correct approach roadway width?		a 40' bridge seg 38 ft. wide
2.4	Any roadway geometric deficiencies?		—
2.5	Traffic data from plans - existing and projected?		✓
<b>3</b>	<b>Purpose &amp; Need</b>		
3.1	Why is the project needed (NEVER what is proposed – REPLACE BRIDGE or WIDEN ROADWAY or ADD SHOULDERS is NOT the Purpose & Need)		

5.10	Is a noise study needed (offset alignments, capacity increase, or major vertical grade change)? If yes, is it included in the Noise Section and any commitments listed in the CE	—
5.11	Is the biological studies included and any notes for species included in the commitments & at the end of the CE (Exception is swallows where we include the note itself in the CE under commitments)?	✓
5.12	Was there a 404 permit type determination done by the 404 permit coordinator for any projects which had > 0.5 AC o wetlands in the initial study? Is the 404 permit box checked (should be yes for all projects involving a bridge crossing a blue line)	—
5.13	Does the project involve navigable waters (check USACE Section 10 waters and then verify with Coastguard) and requires Coastguard coordination? If so, is it listed in the Commitment?	—
5.14	Does the project involve one of the scenic rivers or streams (Check Oklahoma Scenic Rivers website)? If so, include coordination with Scenic Rivers in the "Other Section"	—
5.15	Was there coordination done with NRCS for projects involving new R/W and not in an urban area? Letter to NRCS, AD-1066 Form completed partially (if no response from NRCS) or completely (if NRCS completed their portion), and statement of no response from NRCS if applicable	—
5.16	Is the project location circled on the FEMA map or printout from FEMA site saying no map is available included? If the project is in zone A-E, is the coordination with the Designer to determine the need for map revision included?	✓
5.17	Is the haz waste note mentioned and included at the end of the CE if applicable? If the haz waste specialist required plans to complete studies, were the plans provided and a revised memo obtained?	note before ISS
5.18	Were the plans checked for road closure? Include sheets which say road will not be closed for bridge joint, paint, etc. projects. If there is road closure, were letters sent out and all the comments addressed by Field Division?	—
5.19	Does the "Other Section" include (1) initiation report for state projects or NEPA Checklist for Local Govt. projects, (2) property owner letter with list of property owners or letter from County Commissioner with list of property owners, (3) Any additional project coordination, (4), Oracle information sheet with federal funding info for County projects (4) bridge info from GRIP (5) BLM Letter and responses for state projects (6) BIA Letters and responses	✓