ODOT

WELCOME

Meeting For
SH-9 From East of Stinking Creek Through SH-58 in Carnegie, Kiowa & Caddo Counties

December 18, 2014

TEAM INTRODUCTIONS

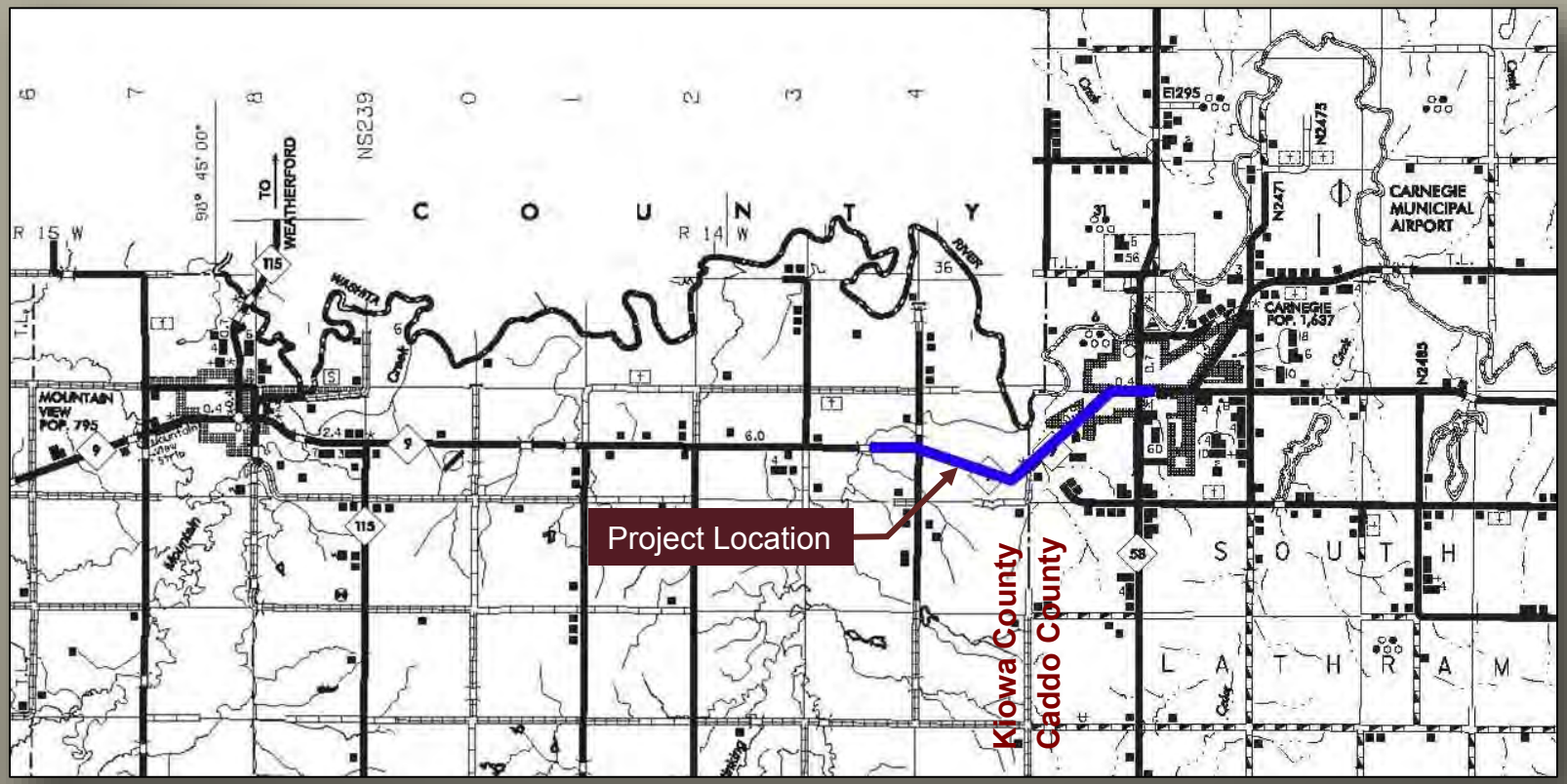
- **Federal Highway Administration**
  - John Hartley - Environmental Program Manager

- **ODOT**
  - Bob Rose – Division 7 Engineer
  - Brent Almquist – Division 5 Engineer
  - Siv Sundaram – Environmental Programs Division
  - Greg Worrell – Division 7 NEPA Project Manager
  - Rhonda Fair – Tribal Liaison for Cultural Resources
  - Scott Sundermeyer – Cultural Resources
  - Jay Herbert – Right-of-Way

- **GARVER**
  - Jenny Sallee – Roadway Support
  - Kirsten McCullough – Environmental Lead

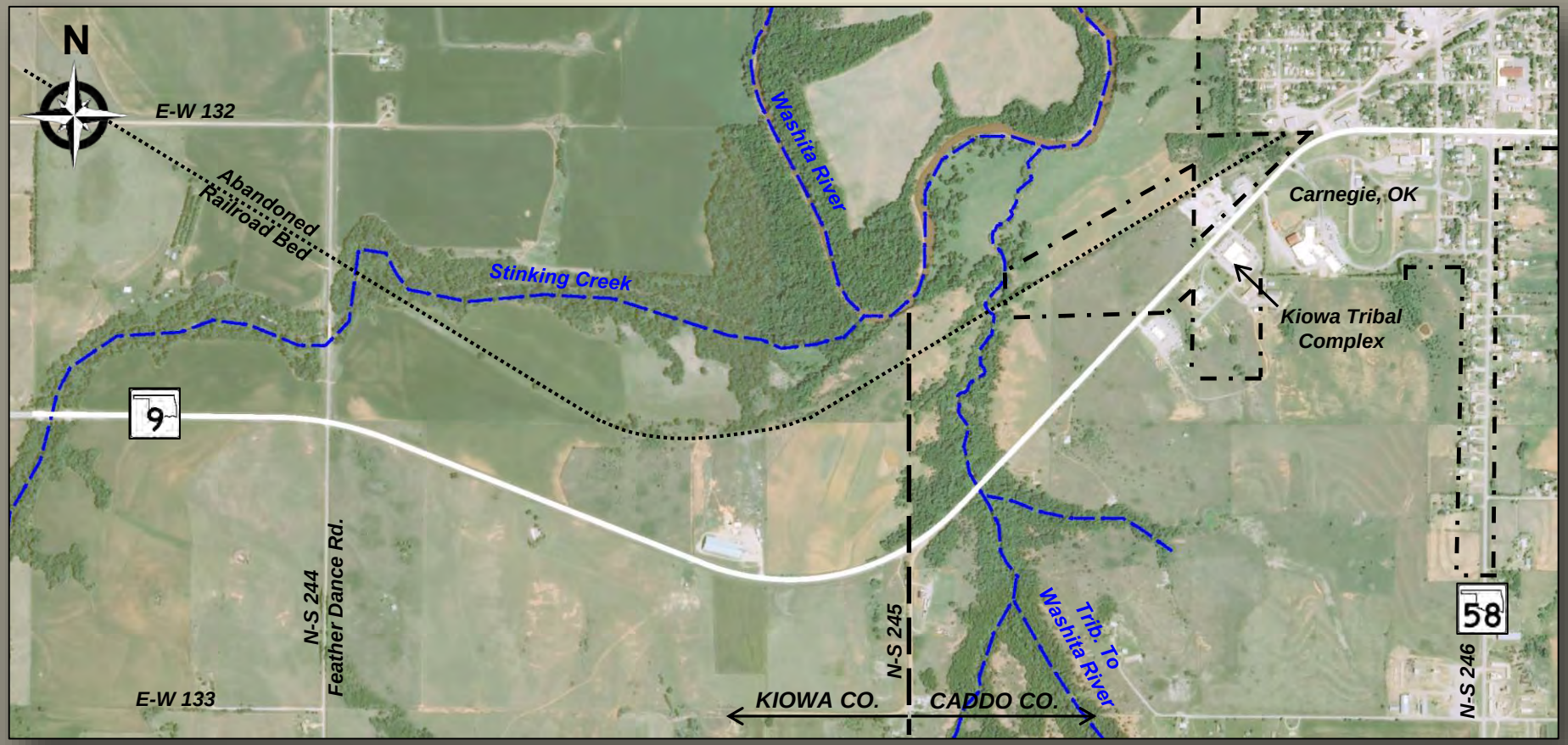
PURPOSE OF THIS MEETING

…is to Discuss the Proposed Improvements to SH-9 From Stinking Creek Through SH-58 in Carnegie Located in Kiowa & Caddo Counties

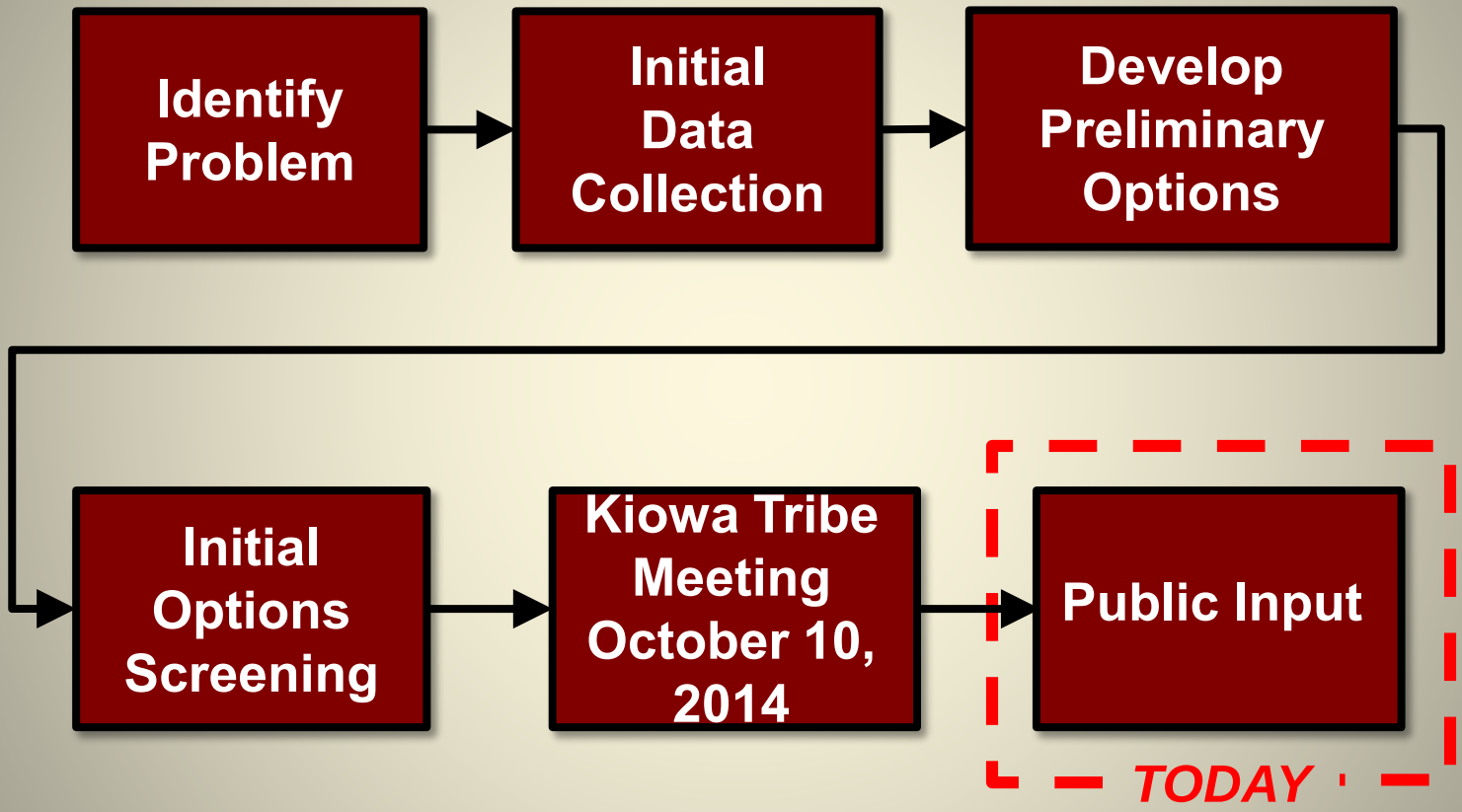


PURPOSE OF THE PROJECT

…is to Correct the Deficient Curves on SH-9 and Improve the Safety of the Roadway



PROJECT DEVELOPMENT PROCESS



PROJECT AREA INFORMATION

- **General Data**
  - 2-Lane Roadway With 3-ft Shoulders
  - Speed Limit – Posted 45, 55 and 65 mph
  - 1 Bridge Structure (Trib. to Washita River)
  - Existing (2014) Traffic: 1,700 Vehicles/Day
  - Projected Traffic (2035): 2,400 Vehicles/Day (11% Trucks)

Identify Problem → Initial Data Collection → Preliminary Options → Option Screening

PROJECT AREA INFORMATION *cont'd....*

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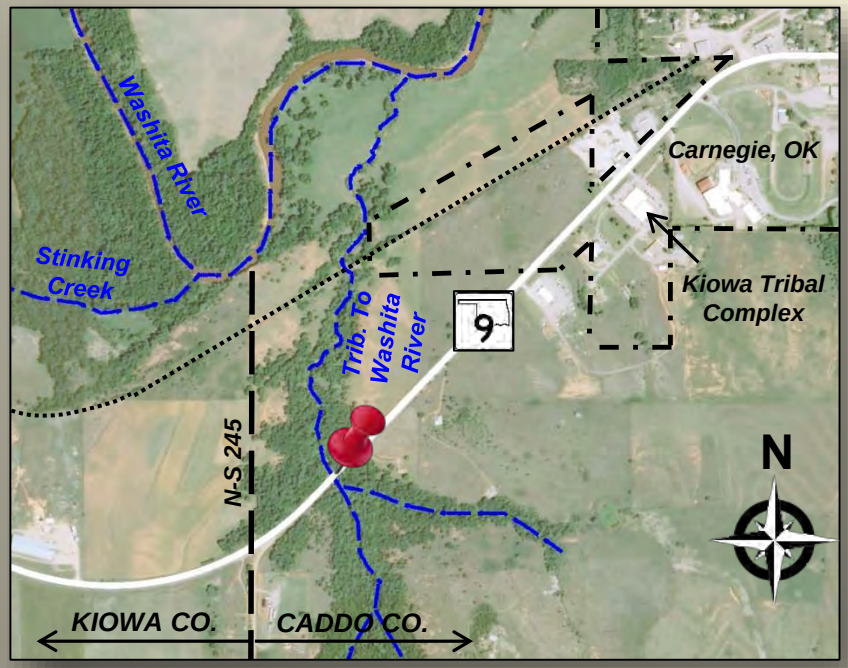

Identify Problem | Initial Data Collection | Preliminary Options | Option Screening

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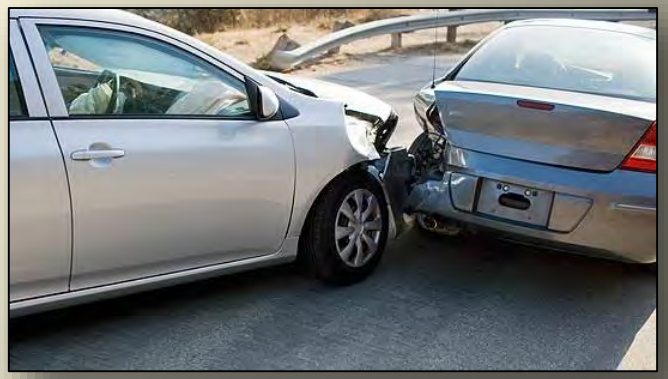
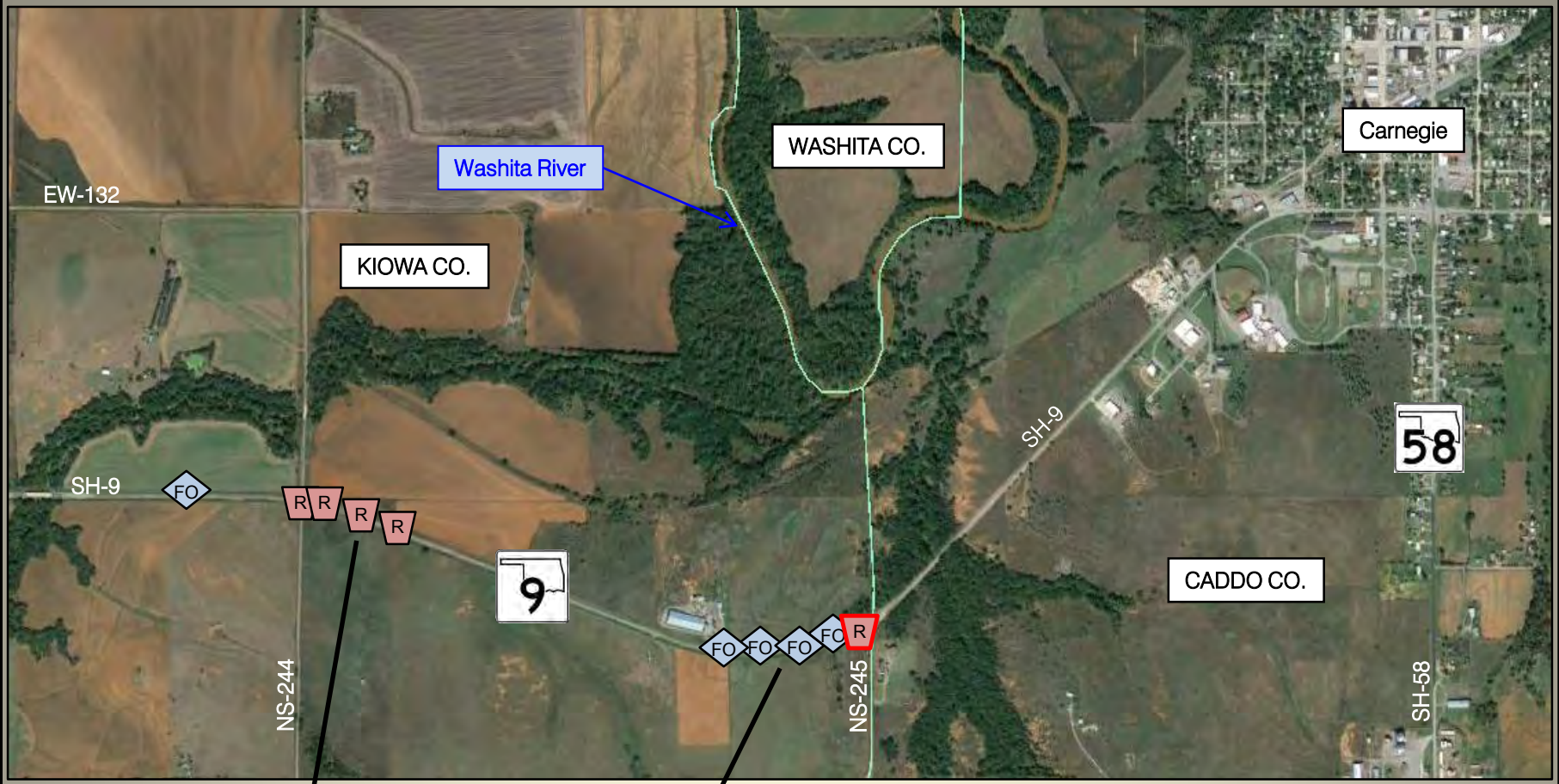
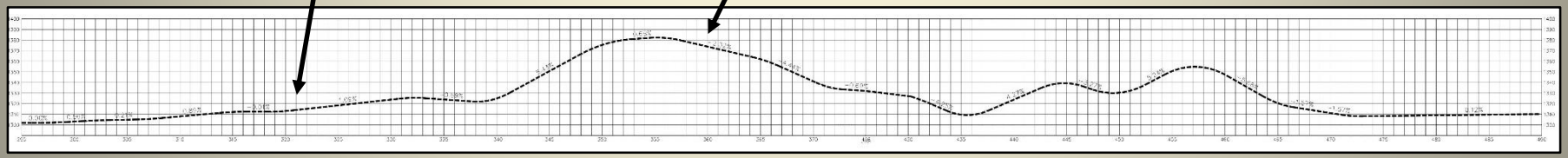
- **Collision Data**
  - Total: 10 Documented Accidents (2009-2014)
    - 4 Personal Property Damage
    - 5 Injury
    - 1 Fatal
  - Slightly Higher Than the State Average for Collisions



Identify Problem → Initial Data Collection → Preliminary Options → Option Screening





Collision History: 1/1/2009 - 5/28/2014

- FO — Fixed Object
- R — Rollover
- R — Rollover with Fatality

N

SH-9 Kiowa Co. and Caddo Co.
Carnegie, OK
ODOT Collision History

EXISTING CONDITIONS WARRANT IMPROVEMENT

- **Roadway Deficiencies**
  - Narrow Shoulders
  - Horizontal Curves (Curvature and Superelevation)
  - Vertical Curves – 16 total, 1 Meets Current Standards
  - Limited Sight Distance
- **Bridge Deficiencies**
  - Bridge Box – Built in 1929
  - Safety Slopes are Inadequate

Identify Problem → Initial Data Collection → Preliminary Options → Option Screening

EXISTING CONDITIONS WARRANT IMPROVEMENT *cont'd....*

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Identify Problem → Initial Data Collection → Preliminary Options → Option Screening

GATHER PROJECT INFORMATION

- **Identified Project Constraints**
  - Kiowa Tribal Complex
  - SH-58 Intersection
  - Residences/Businesses
    - Driveways
    - Local Access
  - Carnegie School & Ball Fields
  - Public Shelter
  - Washita River & Tributary
  - Utilities
  - Wichita Mountains State Scenic Byway
  - Environmental Considerations

Identify Problem → **Initial Data Collection** → Preliminary Options → Option Screening

GATHER PROJECT INFORMATION *cont'd....*

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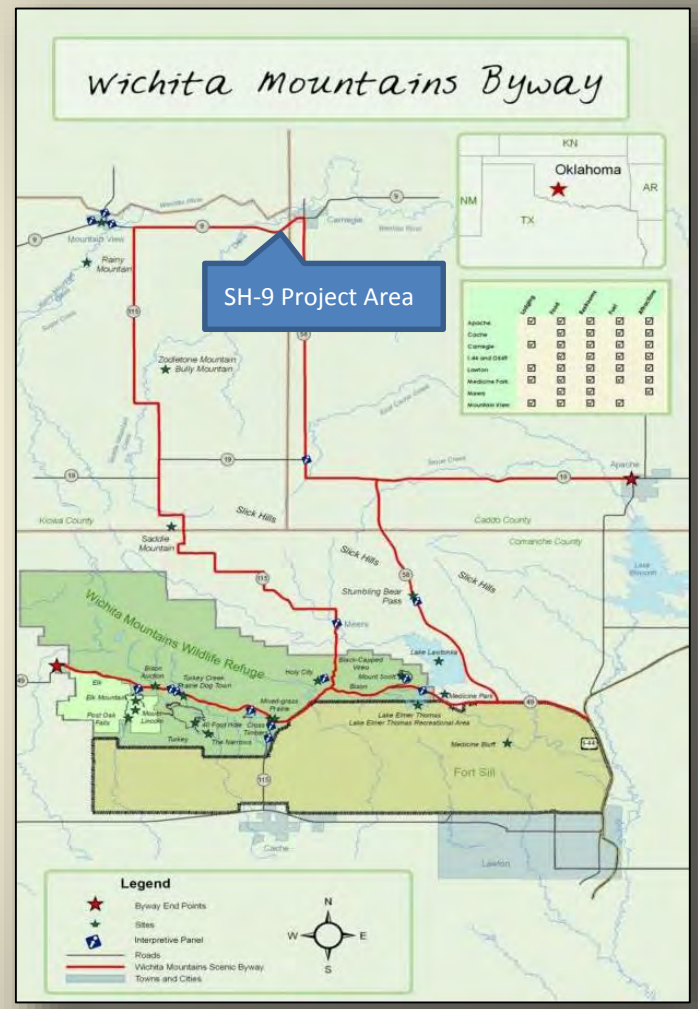
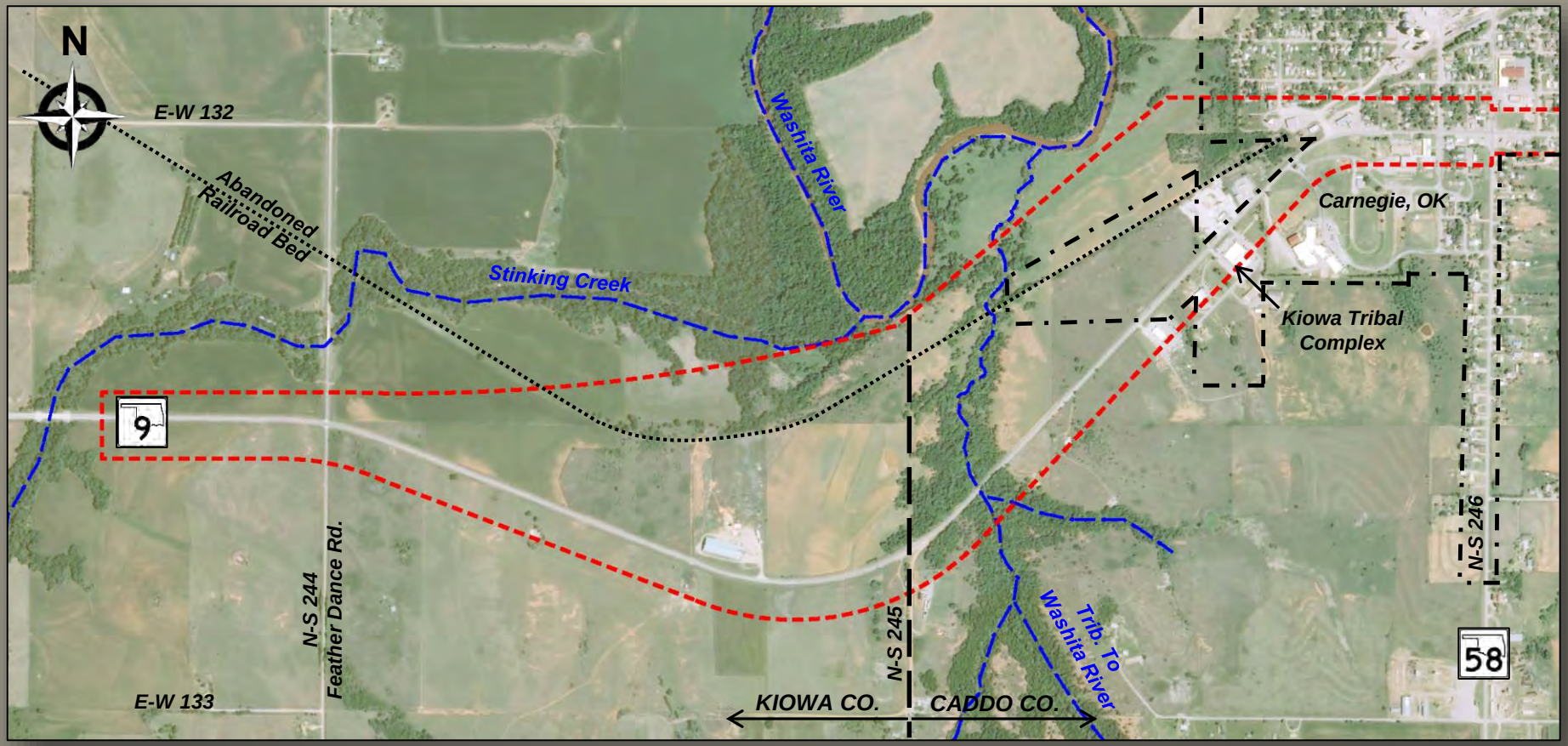


Identify Problem → **Initial Data Collection** → Preliminary Options → Option Screening


ENVIRONMENTAL

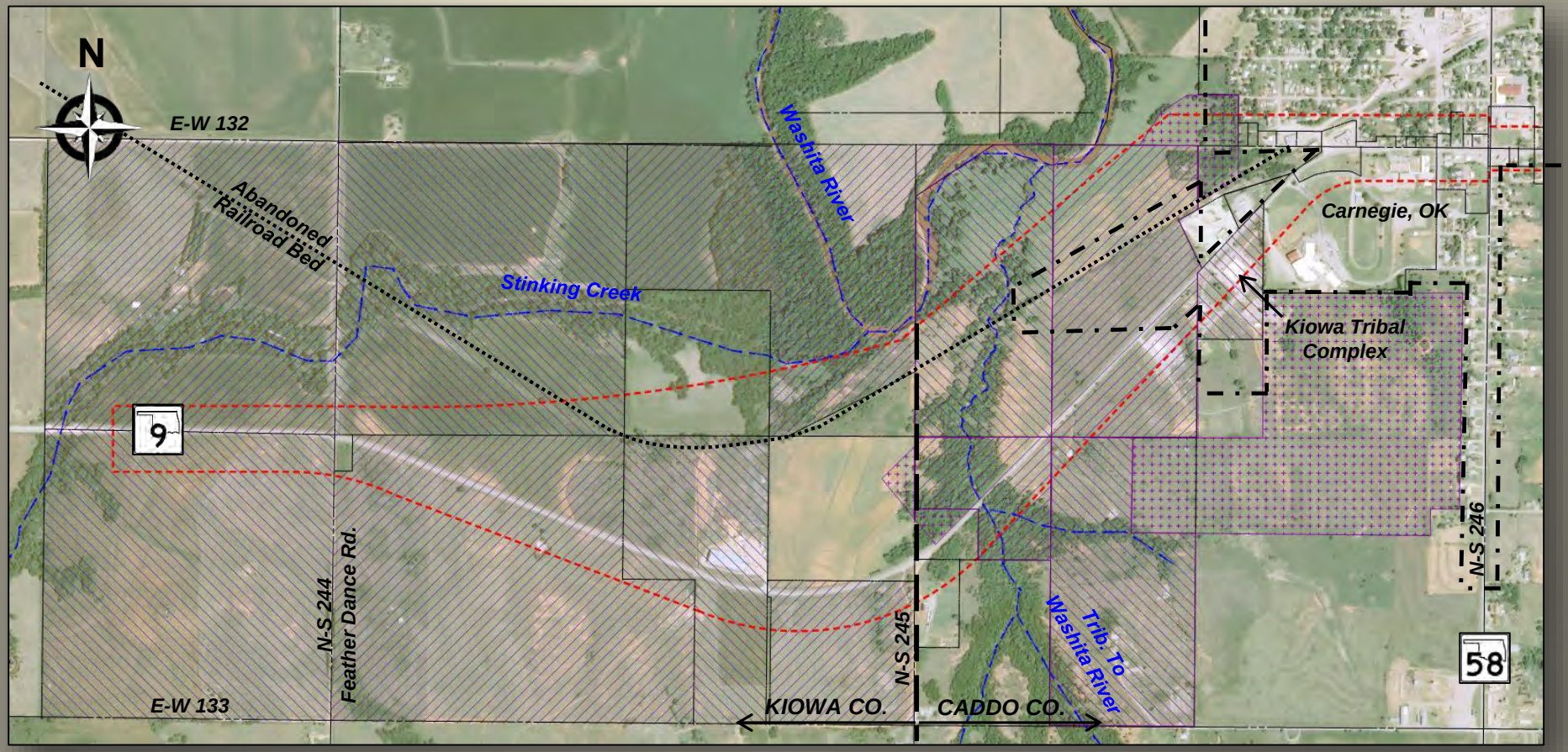
ENVIRONMENTAL CONDITIONS

- **Study Area**
  - Area of Data Collection
  - Encompassed all Options
  - Database Research and Field Reconnaissance



ENVIRONMENTAL CONDITIONS *cont'd....*

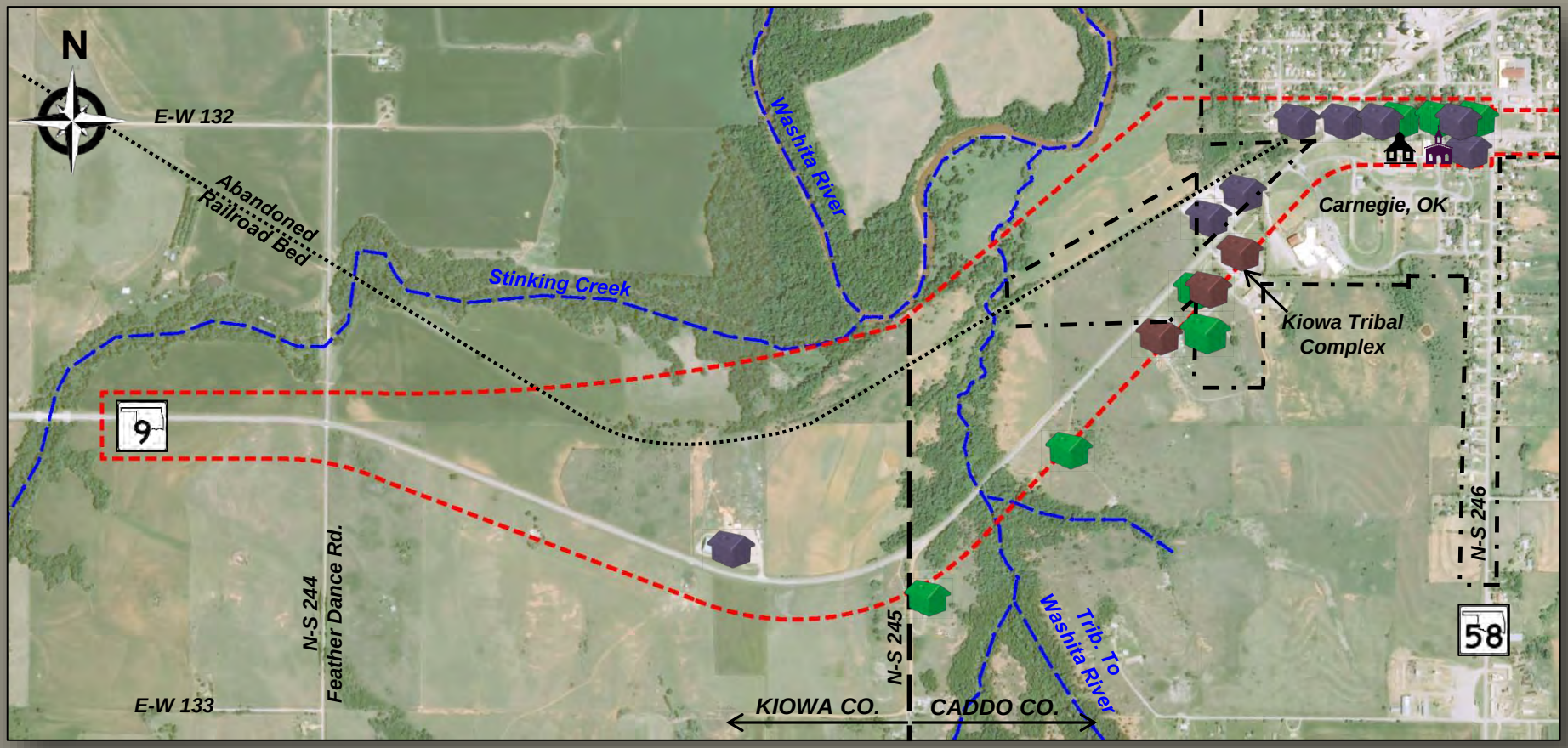
- **Tribal Properties**
  - Tribal Trust Lands (Hatched)
  - Additional Tribal Lands (Stippled)



ENVIRONMENTAL CONDITIONS *cont'd....*

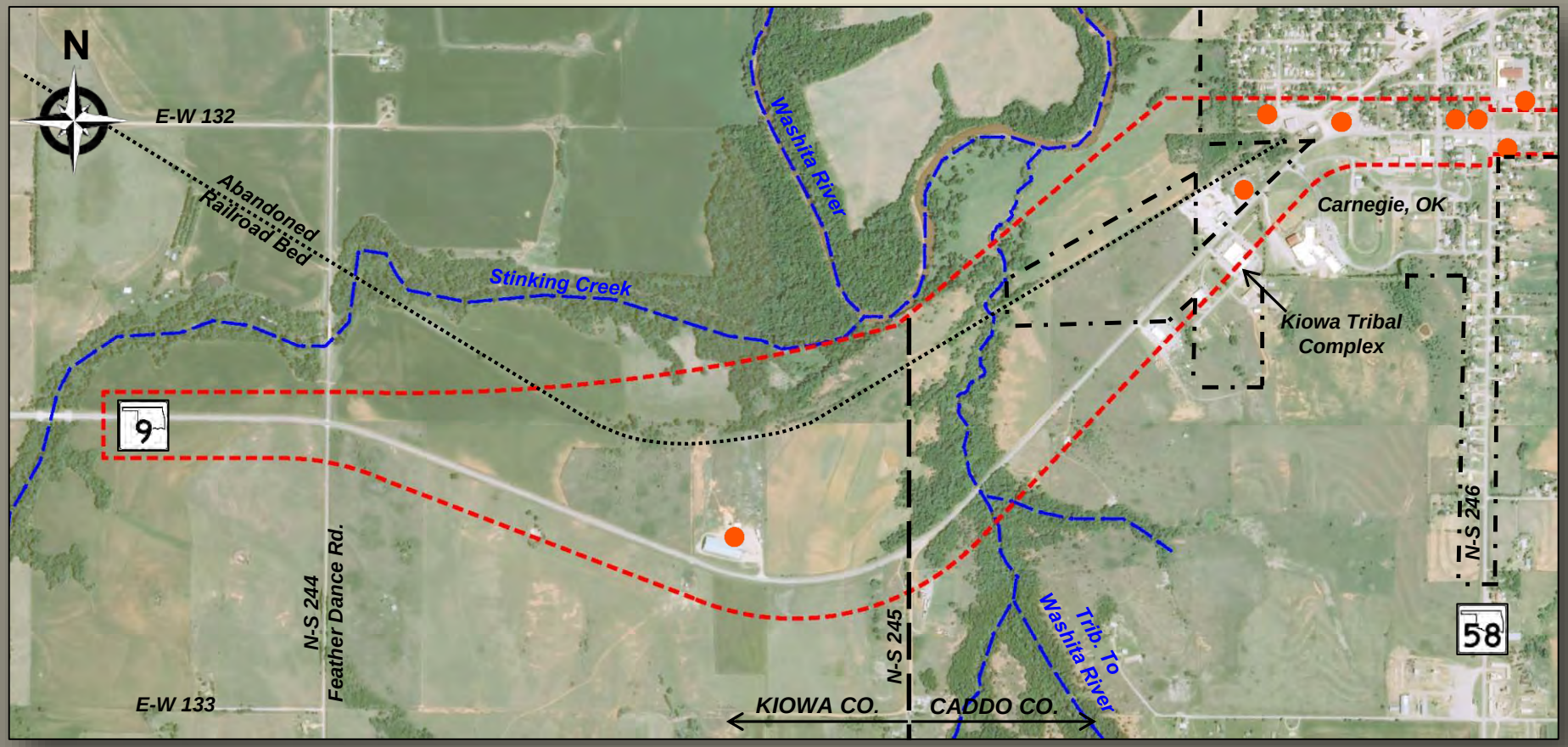
- **Homes and Businesses**
  - Primarily within Carnegie
  - Also a Church and School
  - Kiowa Tribal Complex

Home
Business
Church
School
Kiowa Tribal Complex



ENVIRONMENTAL CONDITIONS *cont'd....*

- **Storage Tanks**
  - Petroleum & Propane
  - Above Ground and Underground
  - Some Have Been Reported as Leaking



ENVIRONMENTAL CONDITIONS *cont'd....*

- **Cultural Resources and Parks**
  - Carnegie School Ball Fields
  - 1930s Underpass and Buildings

Carnegie School Ball Fields

1930s Underpass & Buildings

ENVIRONMENTAL CONDITIONS *cont'd....*

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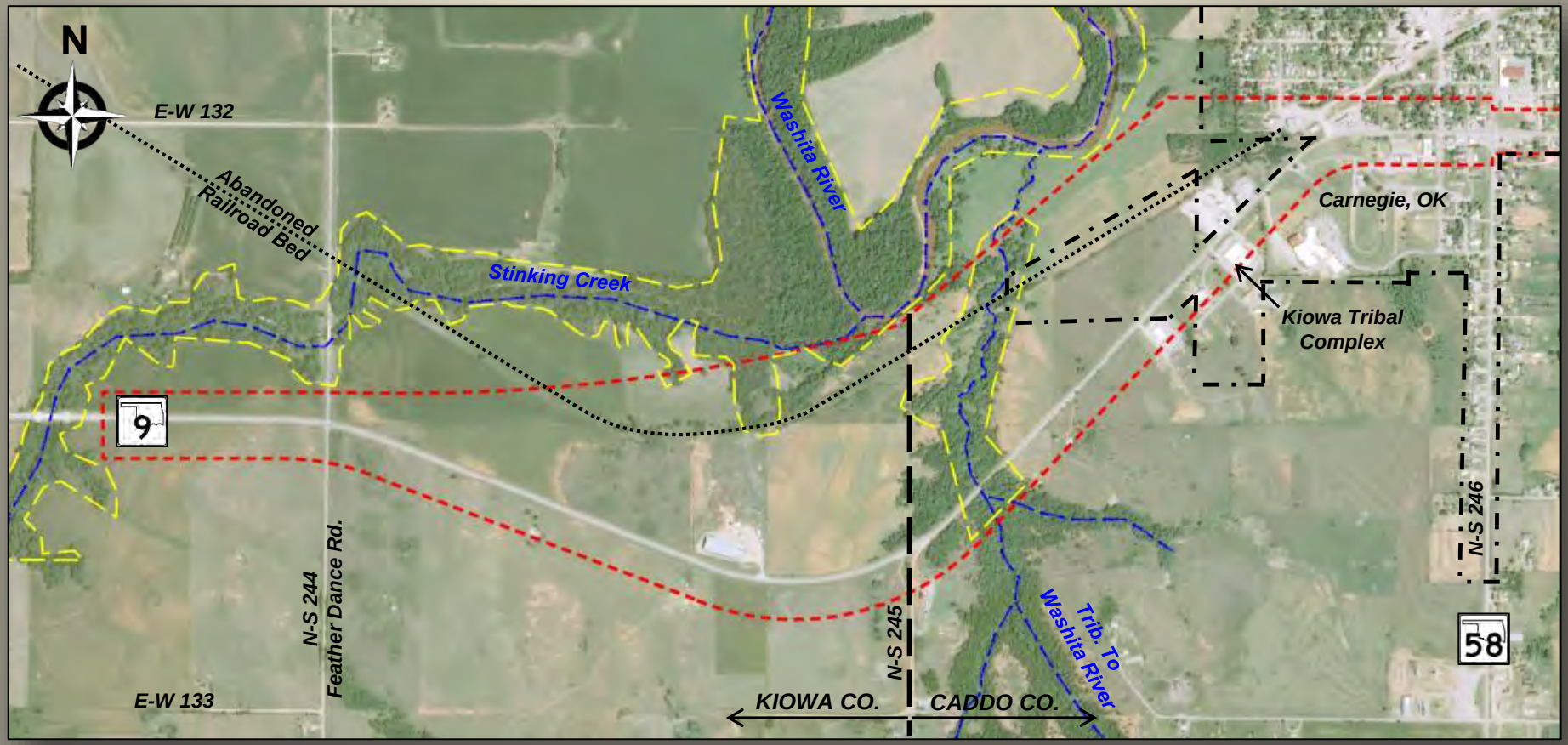
  - Carnegie School Ball Fields
  - 1930s Underpass and Buildings

Carnegie School Ball Fields

1930s Underpass & Buildings

ENVIRONMENTAL CONDITIONS *cont'd....*

- **Wetlands and Streams**
  - Stream - Tributary to Washita River
  - Wetlands – Associated With the Tributary and Stinking Creek




DEVELOPMENT
OF
OPTIONS
CADDO CO.

DEVELOPMENT OF OPTIONS

- **Proposed Design Criteria**
  - Roadway Section for Rural Area
    - Two 12-ft Lanes
    - 8-ft Shoulders
  - Roadway Section for Carnegie
    - Two Lanes
    - Curb & Gutter
    - Sidewalks
    - Variable Width to Minimize Impacts
    - Turn Lane at Access Points
  - Design Speeds
    - 65 mph (Rural)
    - 45 mph (Carnegie)
  - Improvements at SH-58 Intersection to be Determined

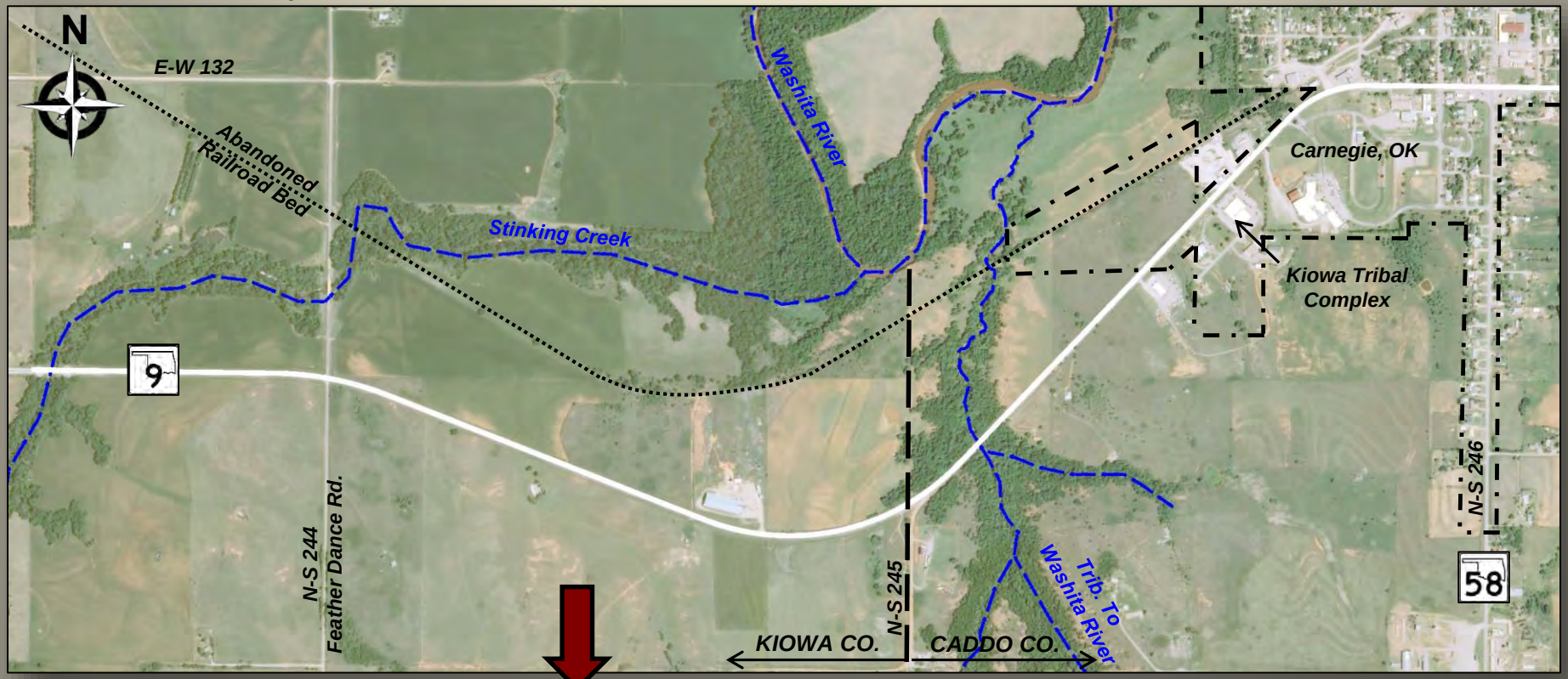
Roadway Section for Rural Area

Roadway Section for Carnegie

Identify Problem → Initial Data Collection → **Preliminary Options** → Option Screening

DEVELOPMENT OF OPTIONS *cont'd....*

- **Improve Existing**
  - Reconstruct Majority of Existing
  - Not Feasible Without Significant Impacts and Road Closure or Extensive Temporary Pavement



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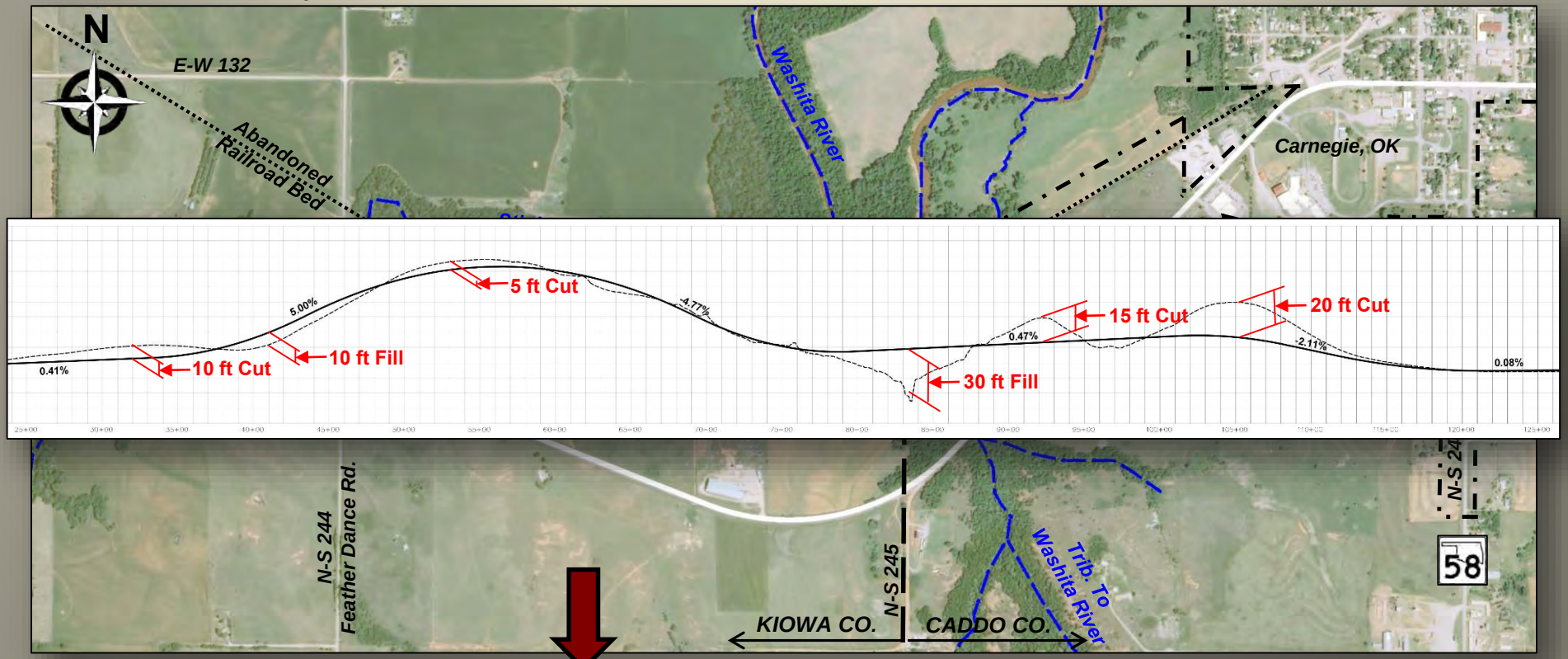
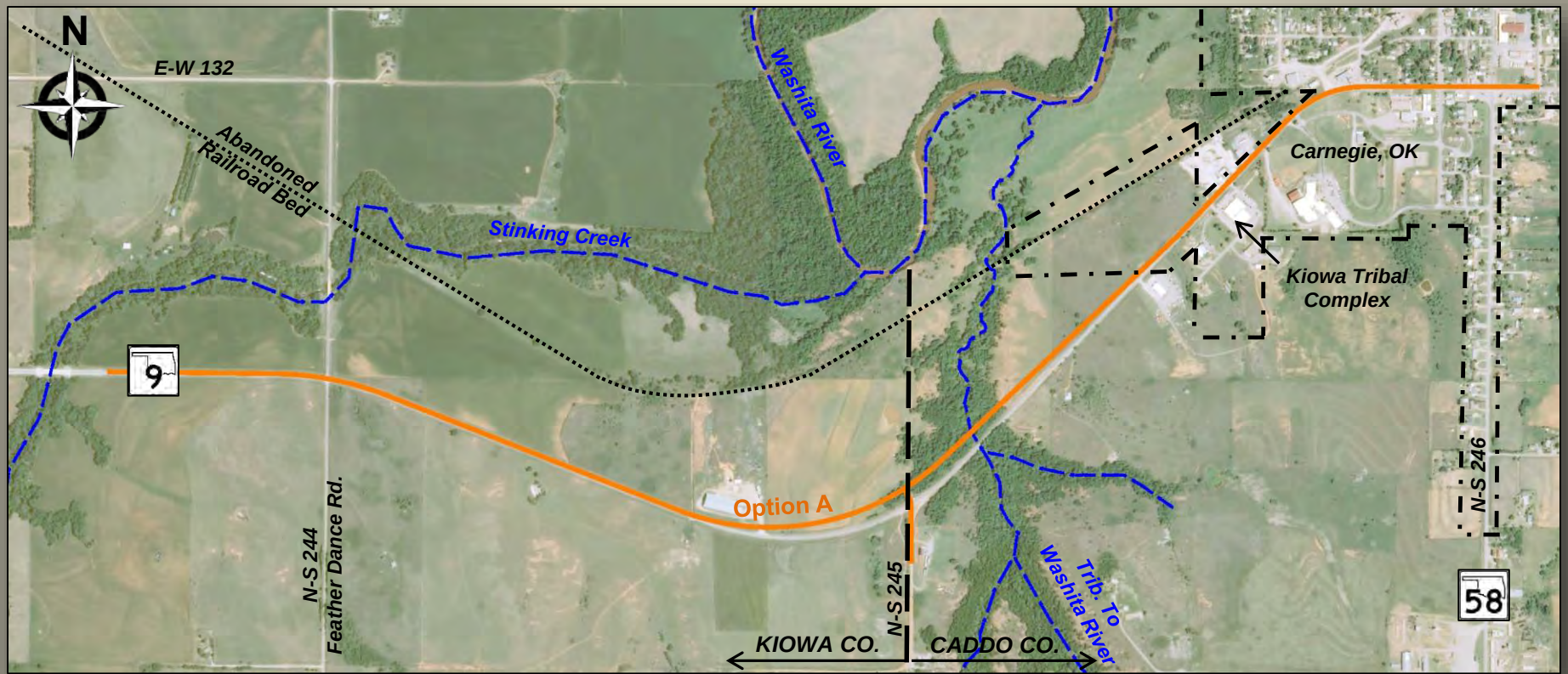


Identify Problem → Initial Data Collection → **Preliminary Options** → Option Screening

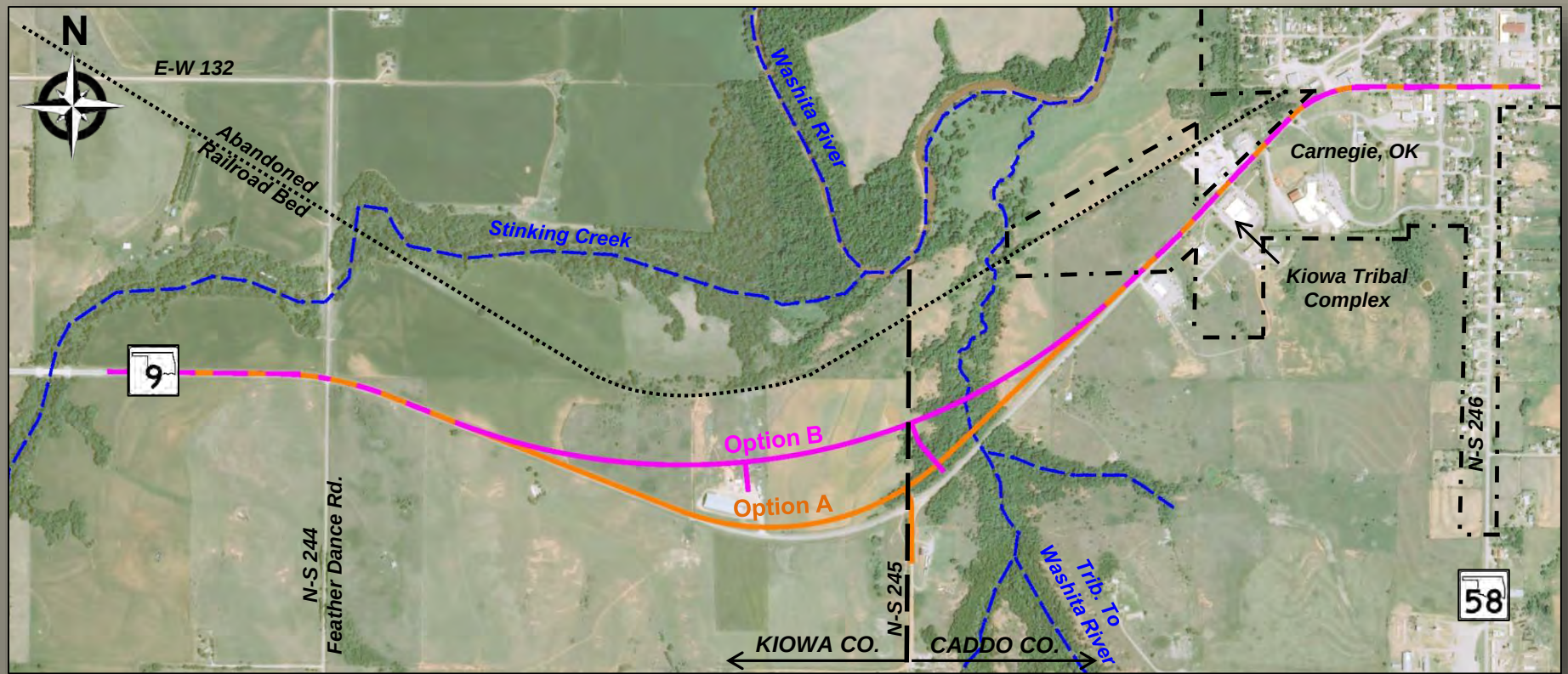
OPTION A

- **Overview**
  - Closest to Existing Alignment While Still Allowing SH-9 to Remain Open
  - Impacts to Several Homes & Businesses
  - Impacts to Kiowa Complex (Frontage, Parking)
  - Impacts to Carnegie School Grounds and Ball Fields



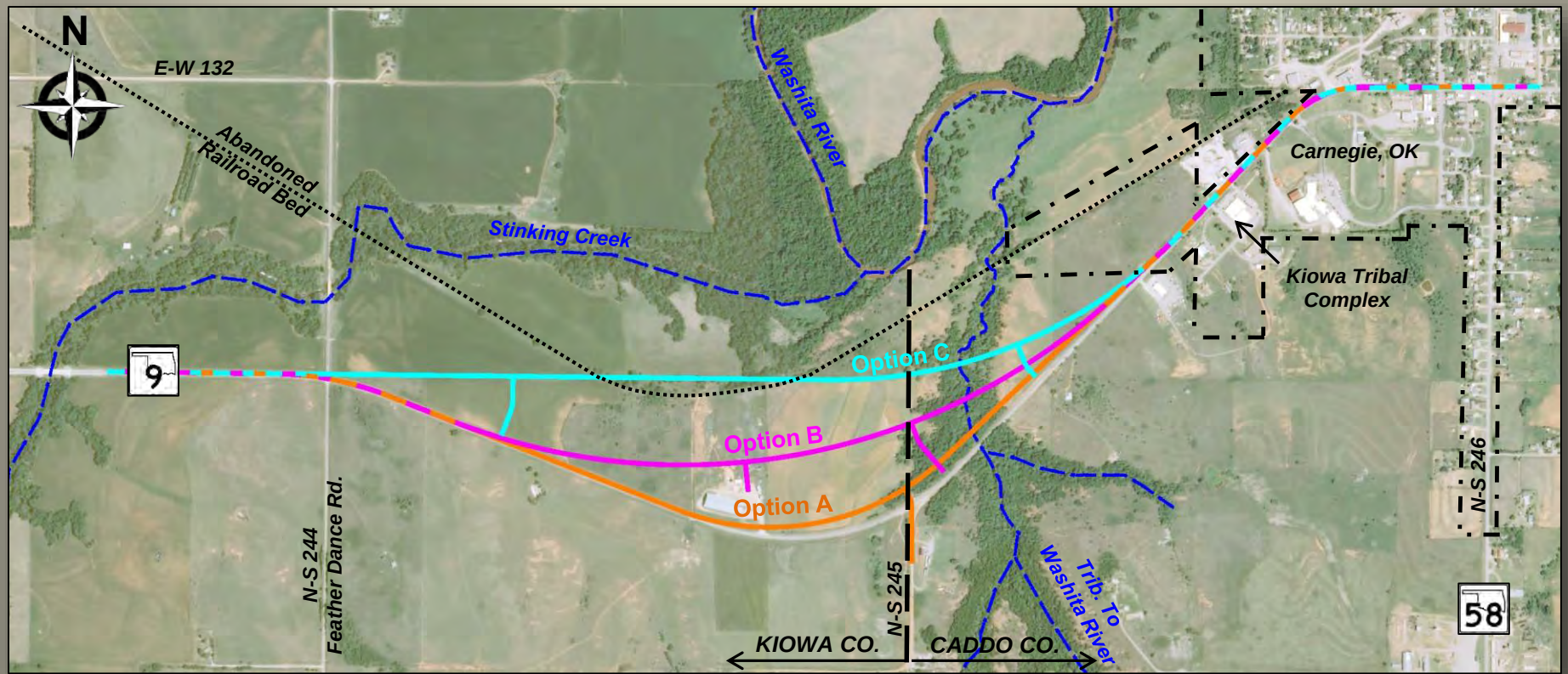
OPTION B

- **Overview**
  - Shifted North of Option A to Avoid Business Impacts
  - Impacts to Other Homes & Businesses Remain
  - Impacts to Kiowa Complex (Frontage, Parking)
  - Impacts to Carnegie School Grounds and Ball Fields



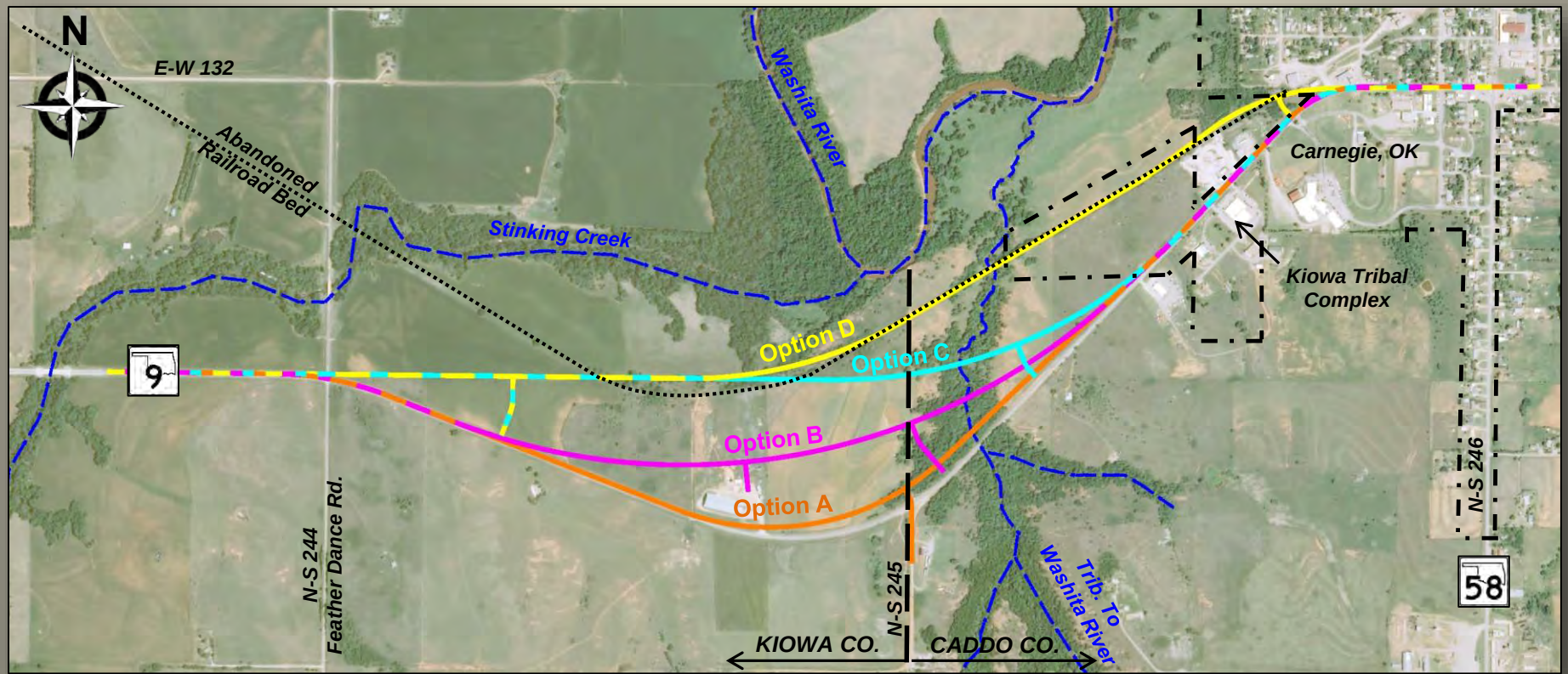
OPTION C

- **Overview**
  - Shifted North of Option B to Follow Section Line
  - Impacts to Homes & Businesses Remain
  - Impacts to Kiowa Complex (Frontage, Parking)
  - Impacts to Carnegie School Grounds and Ball Fields



OPTION D

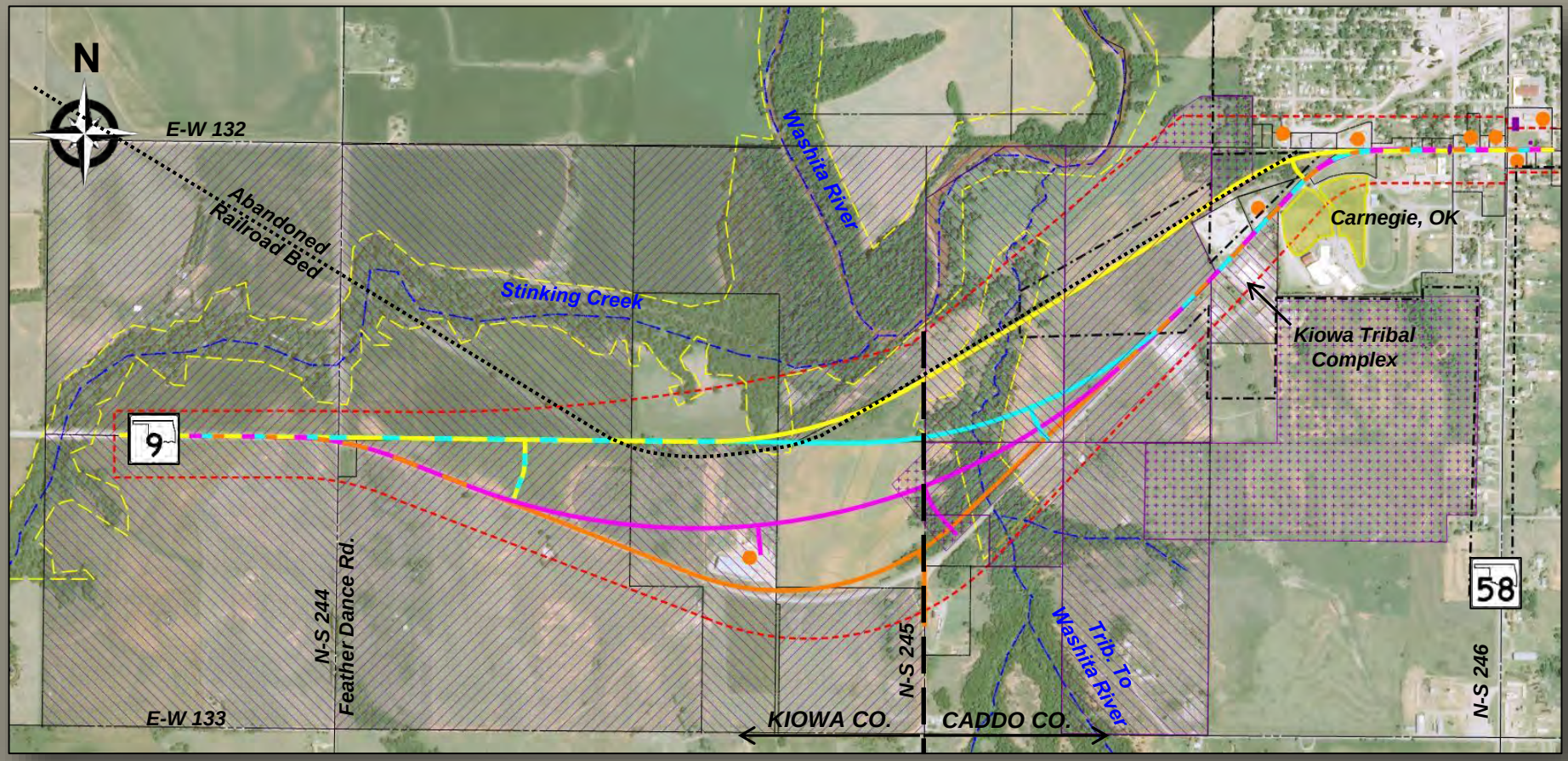
- **Overview**
  - Offset Alignment Following Old Railroad Bed (More Desirable Grades)
  - Impacts to Homes & Businesses Minimized
  - Avoids School Ball Fields
  - Does not Impact Kiowa Complex Directly
  - More Potential to Impact Wetlands
  - Existing Road to Remain for Local Access




COMPARISON OF
OPTIONS

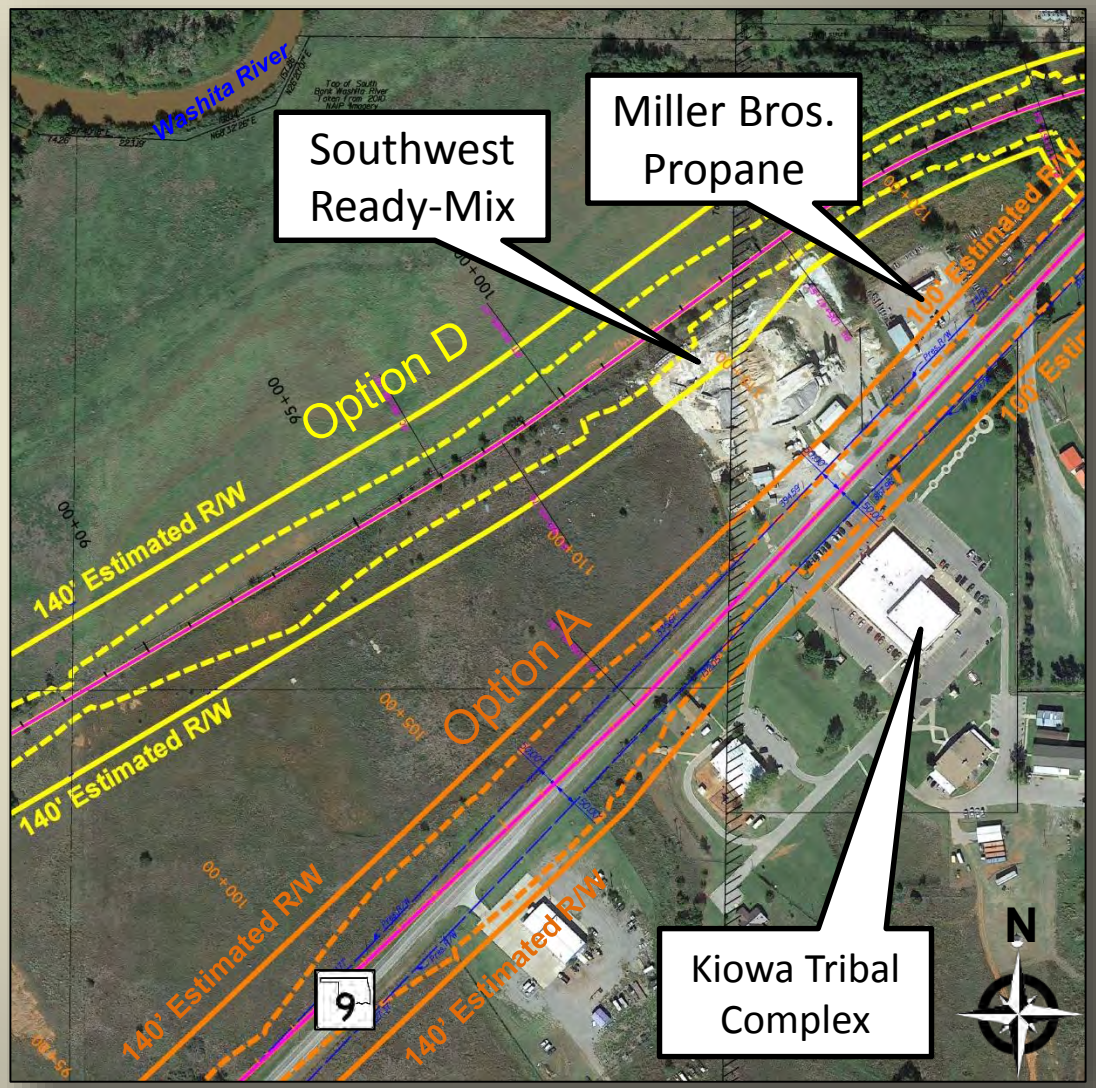
ENVIRONMENTAL IMPACTS

- **Compare the Impacts of the Various Options**
  - Overlay Each Option and Tabulate Impacts
  - Develop a Relative Means of Comparison

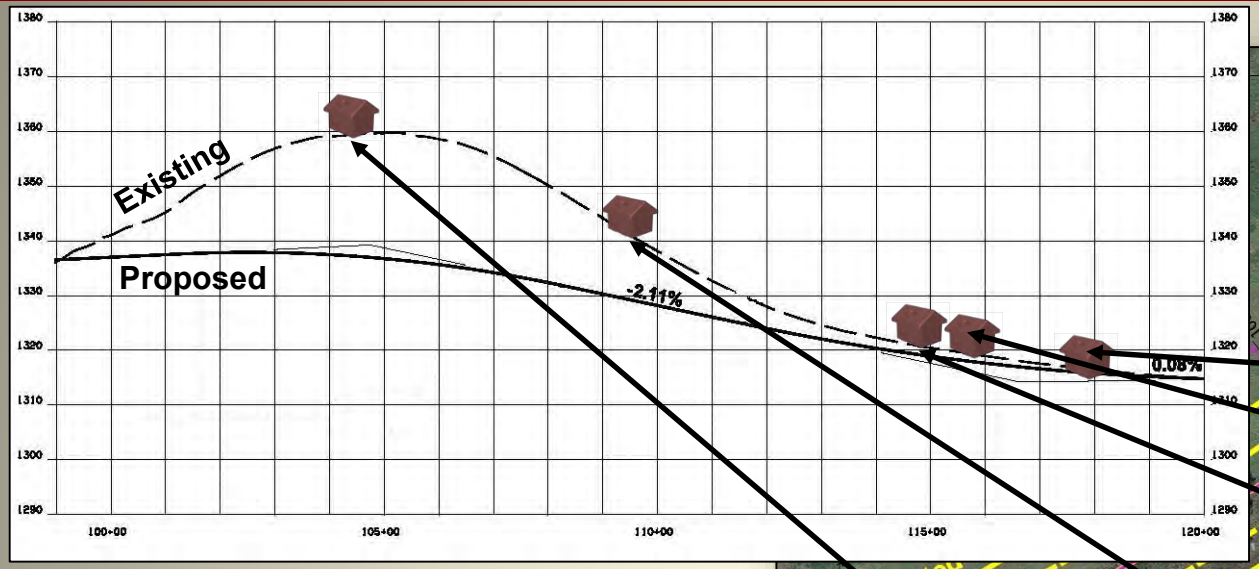


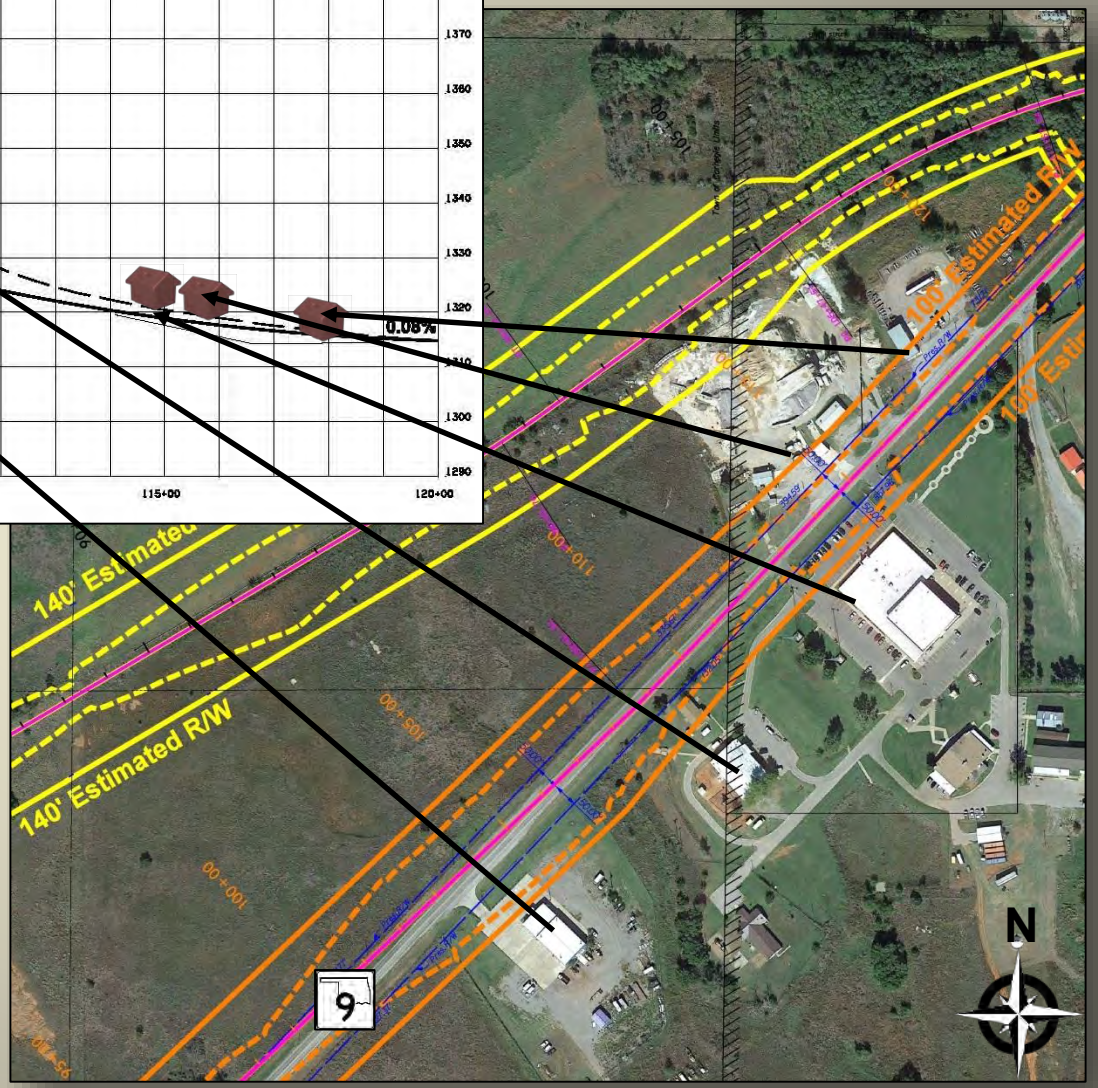
KIOWA TRIBAL COMPLEX & BUSINESSES

- Options A, B, and C Will Impact Property, Parking and a Residence at the Kiowa Complex
- Options A, B, & C Will Also Impact the Concrete Ready-Mix and Propane Businesses
- Option D Will Not Require Property from the Kiowa Complex or Propane Business
- Option D May Require Property from the Ready-Mix Concrete Plant
- Alignments are Preliminary and Impacts will be Minimized Wherever Possible



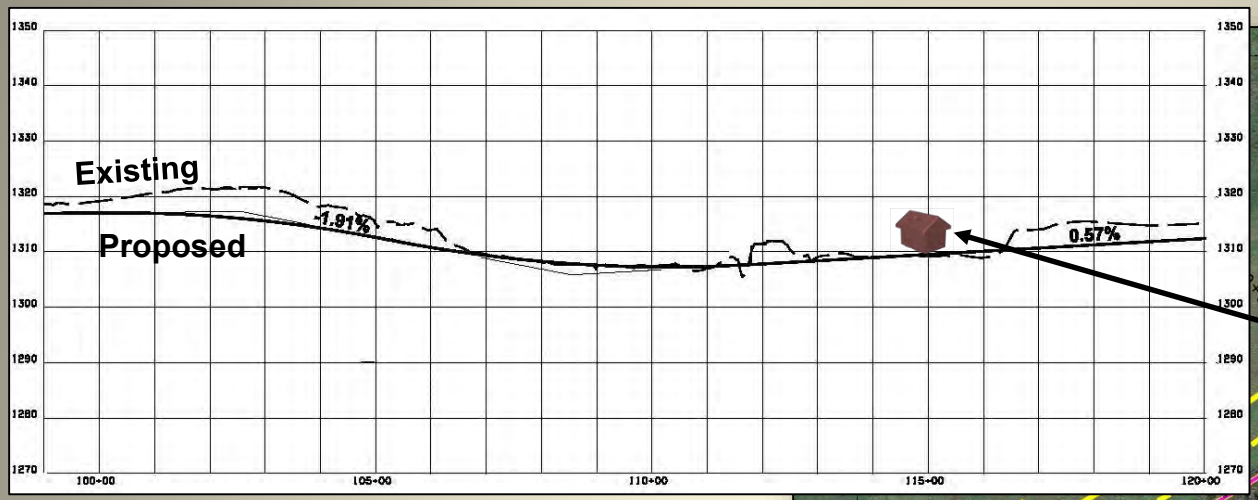
OPTIONS A, B, AND C PROFILE

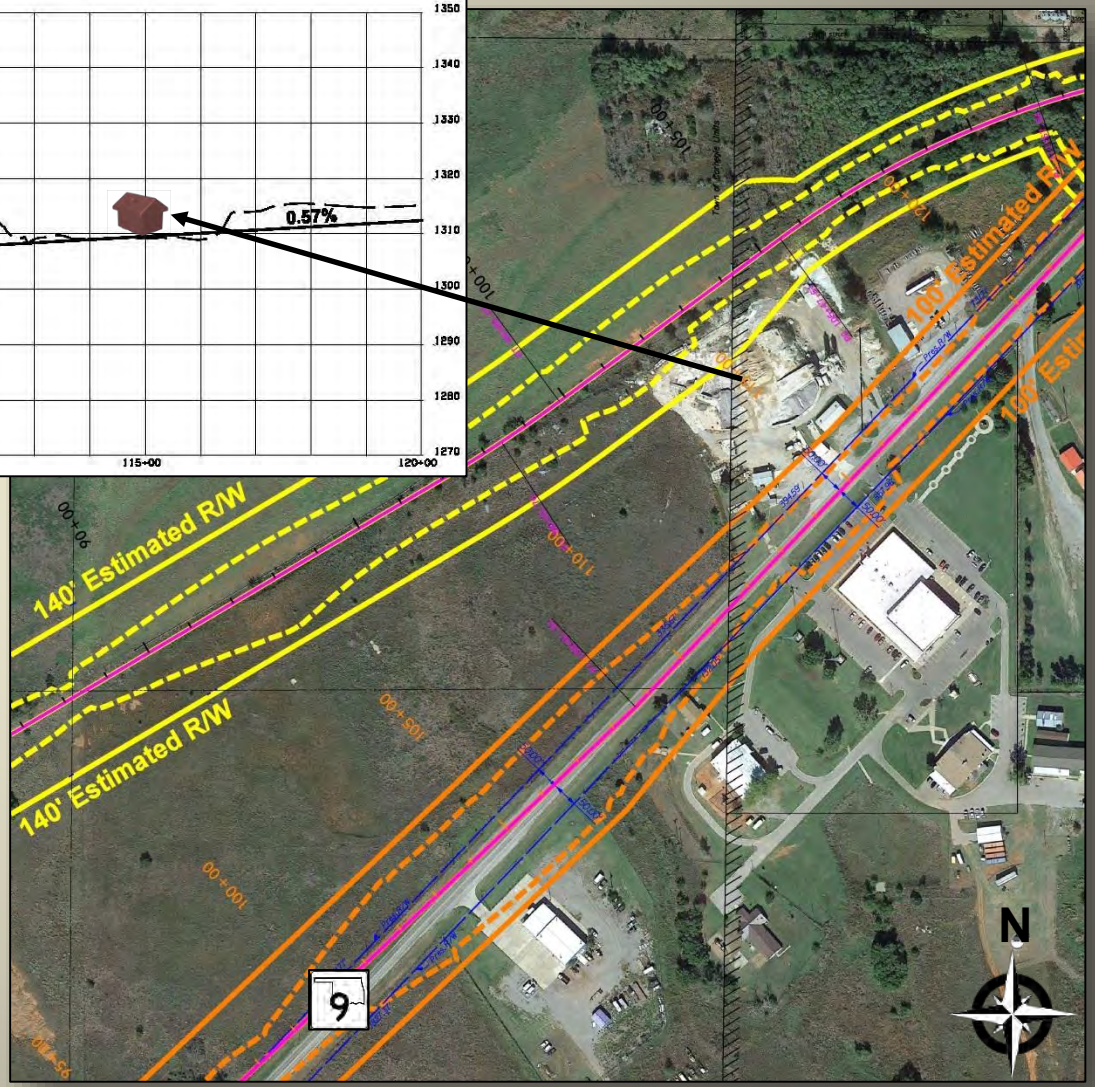




- **Options A, B, and C Require a Large Cut to Reduce the Hill**

OPTION D PROFILE

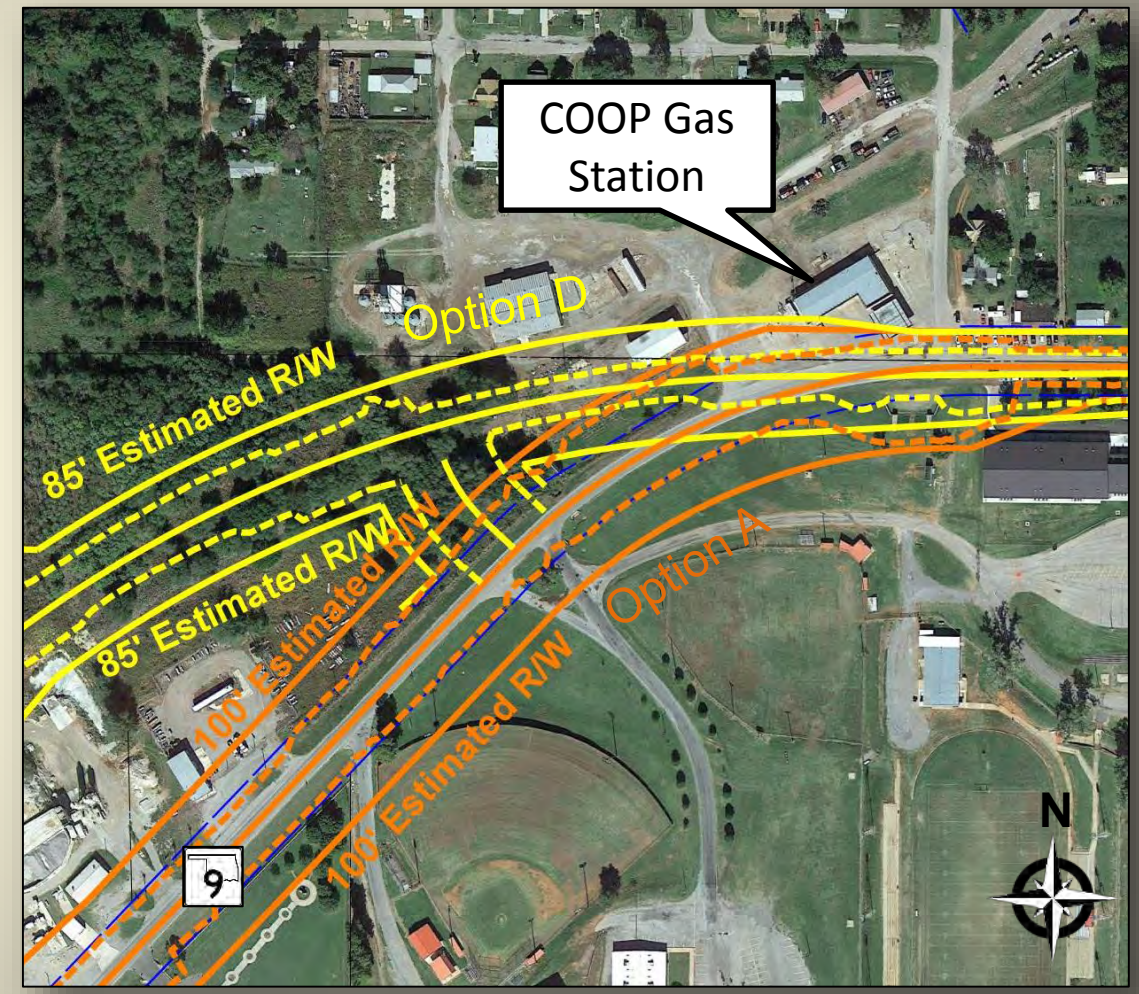




- **Option D is at More Gentle Grade Requiring Less Vertical Adjustment**

COOP GAS STATION

- **Currently All of the Proposed Options will Affect the COOP Gas Station**
- **Impacts will be Minimized Wherever Possible During Final Design**

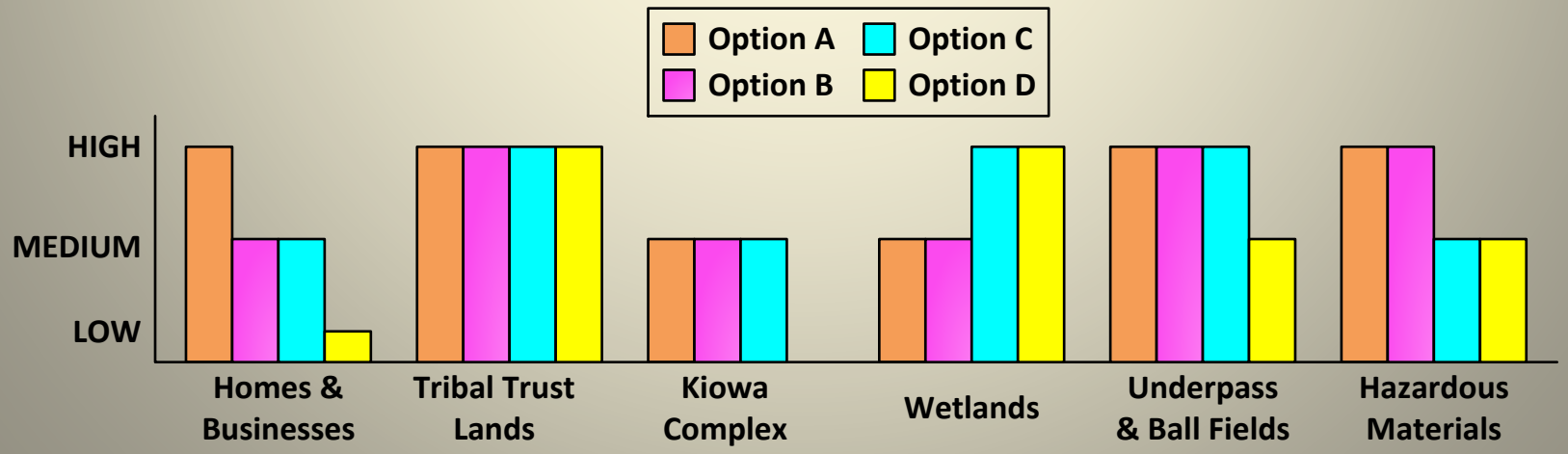


PEDESTRIAN UNDERPASS

- All of the Options Tie Back to the Existing SH-9 at This Location
- Built in the 1930s and May Have Historical Significance
- Is it Used? By Whom and How Often?
- It is Significant to the Community? For What Reasons?

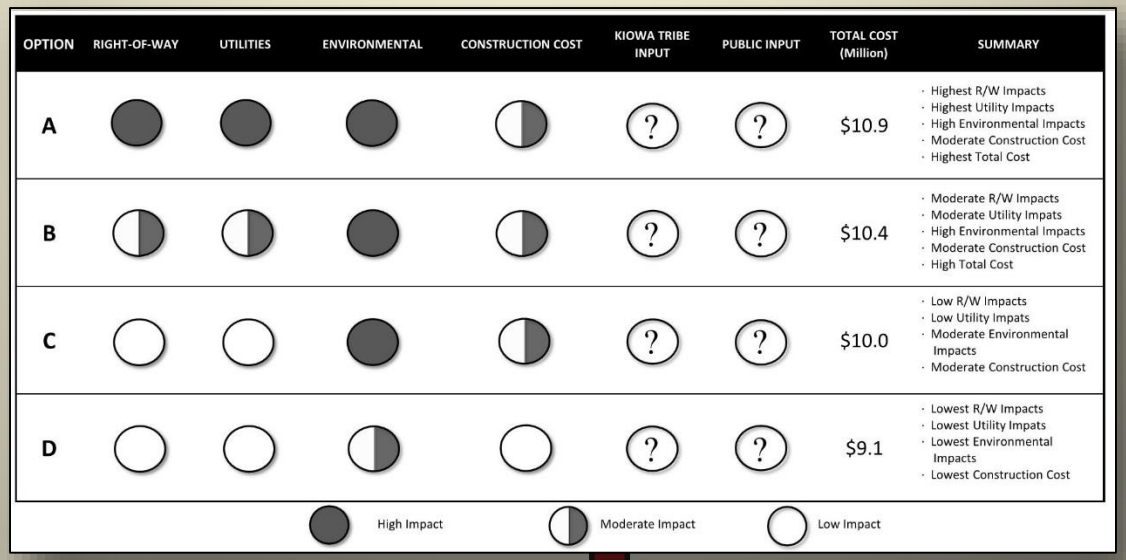
ENVIRONMENTAL IMPACTS

- **Impacts are Highest Under Options A and B**
  - Greatest Impacts to Homes & Businesses
  - Greatest Impacts to School & Ball Fields
  - Requires Property from Kiowa Tribal Complex
  - Most Potential to Encounter Contaminated Properties
- **Impacts are Lowest Under Option D**
  - Fewest Impacts to Homes and Businesses
  - Avoids Impacts to Ball Fields
  - Lowest Potential to Encounter Contaminated Properties
  - More Potential to Impact Wetlands



COMPARISON OF OPTIONS

- **Evaluation Criteria**
  - Impacts to Private & Tribal Property
  - Impacts to Businesses & Kiowa Complex
  - Impacts to Environmental Resources
  - Constructability and Maintenance of Traffic During Construction
  - Cost – Construction, Right-of-Way, Utilities
  - Tribal and Public Input

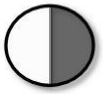
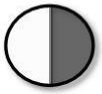


OPTION	RIGHT-OF-WAY	UTILITIES	ENVIRONMENTAL	CONSTRUCTION COST	KIOWA TRIBE INPUT	PUBLIC INPUT	TOTAL COST (Million)	SUMMARY
A	●	●	●	◑	?	?	$10.9	· Highest R/W Impacts · Highest Utility Impacts · High Environmental Impacts · Moderate Construction Cost · Highest Total Cost
B	◑	◑	●	◑	?	?	$10.4	· Moderate R/W Impacts · Moderate Utility Impats · High Environmental Impacts · Moderate Construction Cost · High Total Cost
C	○	○	●	◑	?	?	$10.0	· Low R/W Impacts · Low Utility Impats · Moderate Environmental Impacts · Moderate Construction Cost
D	○	○	◑	○	?	?	$9.1	· Lowest R/W Impacts · Lowest Utility Impats · Lowest Environmental Impacts · Lowest Construction Cost

● High Impact ◑ Moderate Impact ○ Low Impact

Identify Problem → Initial Data Collection → Preliminary Options → **Option Screening**

COMPARISON OF OPTIONS *cont'd....*

OPTION	RIGHT-OF-WAY	UTILITIES	ENVIRONMENTAL	CONSTRUCTION COST	KIOWA TRIBE INPUT	PUBLIC INPUT	TOTAL COST (Million)	SUMMARY
A							$10.9	· Highest R/W Impacts · Highest Utility Impacts · High Environmental Impacts · Moderate Construction Cost · Highest Total Cost
B							$10.4	· Moderate R/W Impacts · Moderate Utility Impats · High Environmental Impacts · Moderate Construction Cost · High Total Cost
C							$10.0	· Low R/W Impacts · Low Utility Impats · Moderate Environmental Impacts · Moderate Construction Cost
D							$9.1	· Lowest R/W Impacts · Lowest Utility Impats · Lowest Environmental Impacts · Lowest Construction Cost

 High Impact

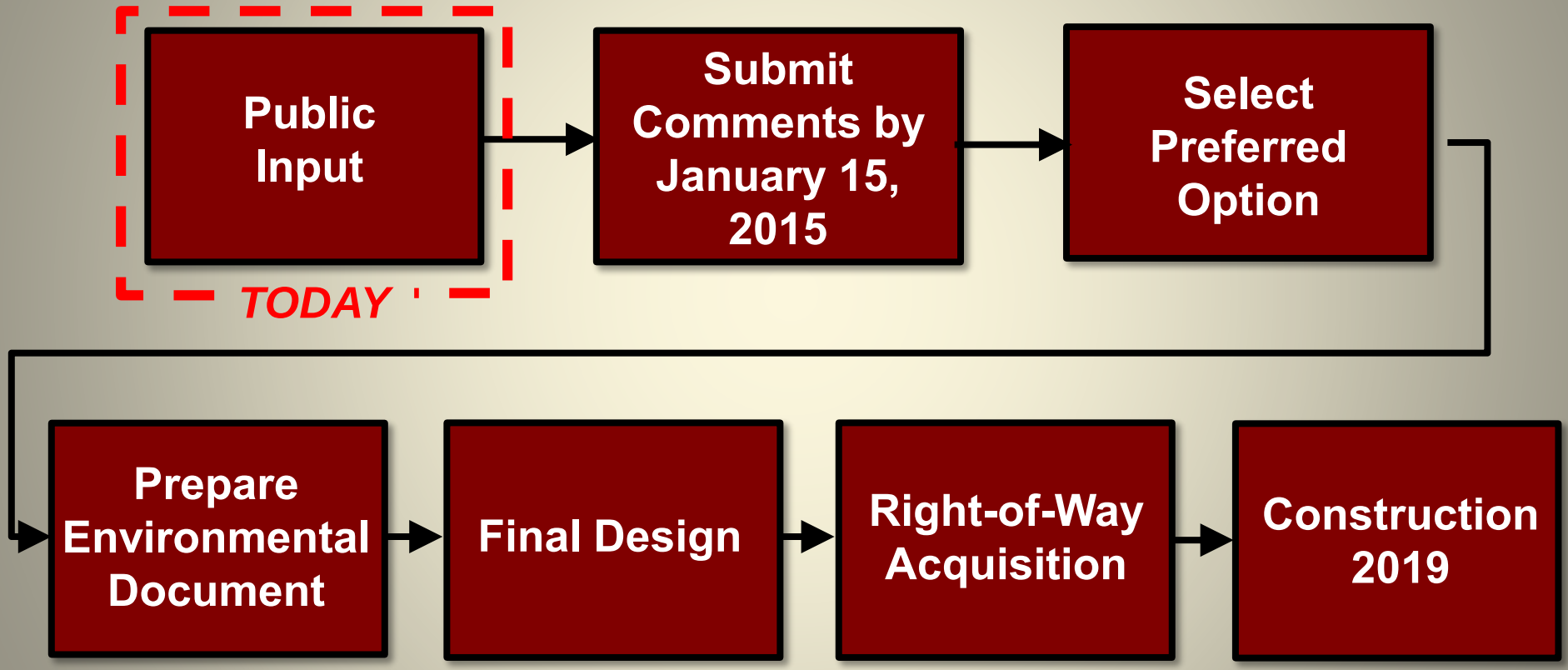
 Moderate Impact

 Low Impact

Identify Problem → Initial Data Collection → Preliminary Options → **Option Screening**


NEXT STEPS

NEXT PROJECT STEPS



THANK YOU!

Please Submit Your Comments by:
January 15, 2015

- ✓ Leave Your Comment Form Here Tonight
- ✓ Mail the Comment Form Back to ODOT:
  Environmental Programs Division
  200 NE 21st Street
  Oklahoma City, OK 73105
- ✓ Email Your Comments to: ENVIRONMENT@ODOT.ORG
- ✓ Information is Available at:
  http://www.okladot.state.ok.us/meetings/other.php