



WELCOME

**Public Meeting For
SH-20 Keetonville
(209 E. Ave to Franklin Rd.)
In Rogers County**

May 12, 2015

TEAM INTRODUCTIONS

■ ODOT

- Randle White - Division 8 Engineer
- Mark Zishka - Division 8 Construction Engineer
- Jennifer Tyler - Claremore Residency
- Siv Sundaram - Environmental Programs
- Ben Mazloompour - Roadway
- Mohammed Elyazgi - Bridge
- Diana Barlow - Right-of-Way & Utilities
- Frank Roesler III - Public Involvement Officer



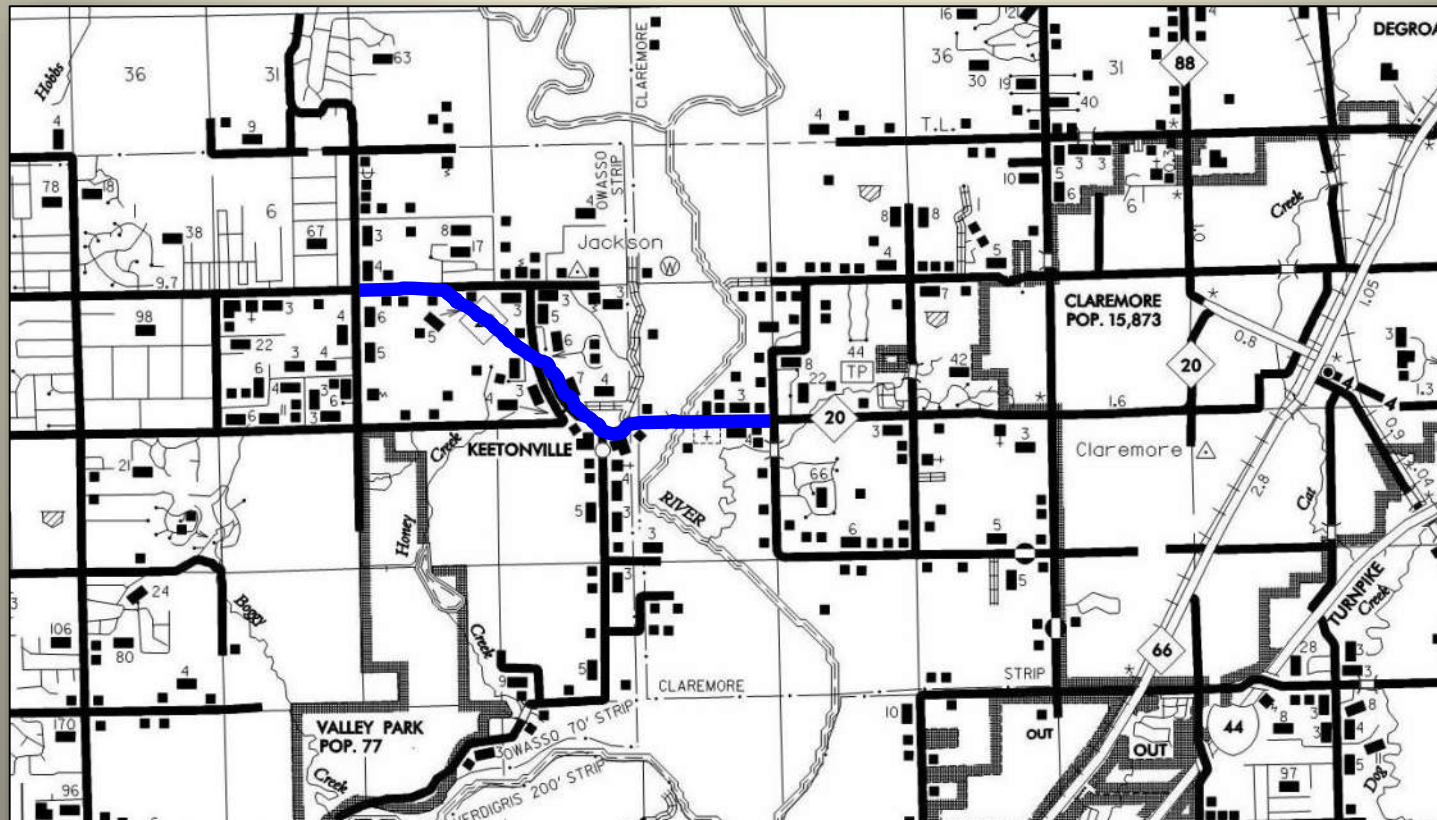
■ GARVER

- Brent Schniers - Project Manager
- Kirsten McCullough - Environmental Lead
- Kevin Moore - Roadway Lead
- Matthew Youngblood - Bridge Lead
- Nick Braddy - Roadway Engineer
- Lacey Stanley - Environmental Specialist



PURPOSE OF THIS MEETING

...is to Present Information and Obtain Public Input on the Reevaluation of SH-20 From NS-408 (209 E. Ave.) to NS-411 (Franklin Rd.) in Rogers County



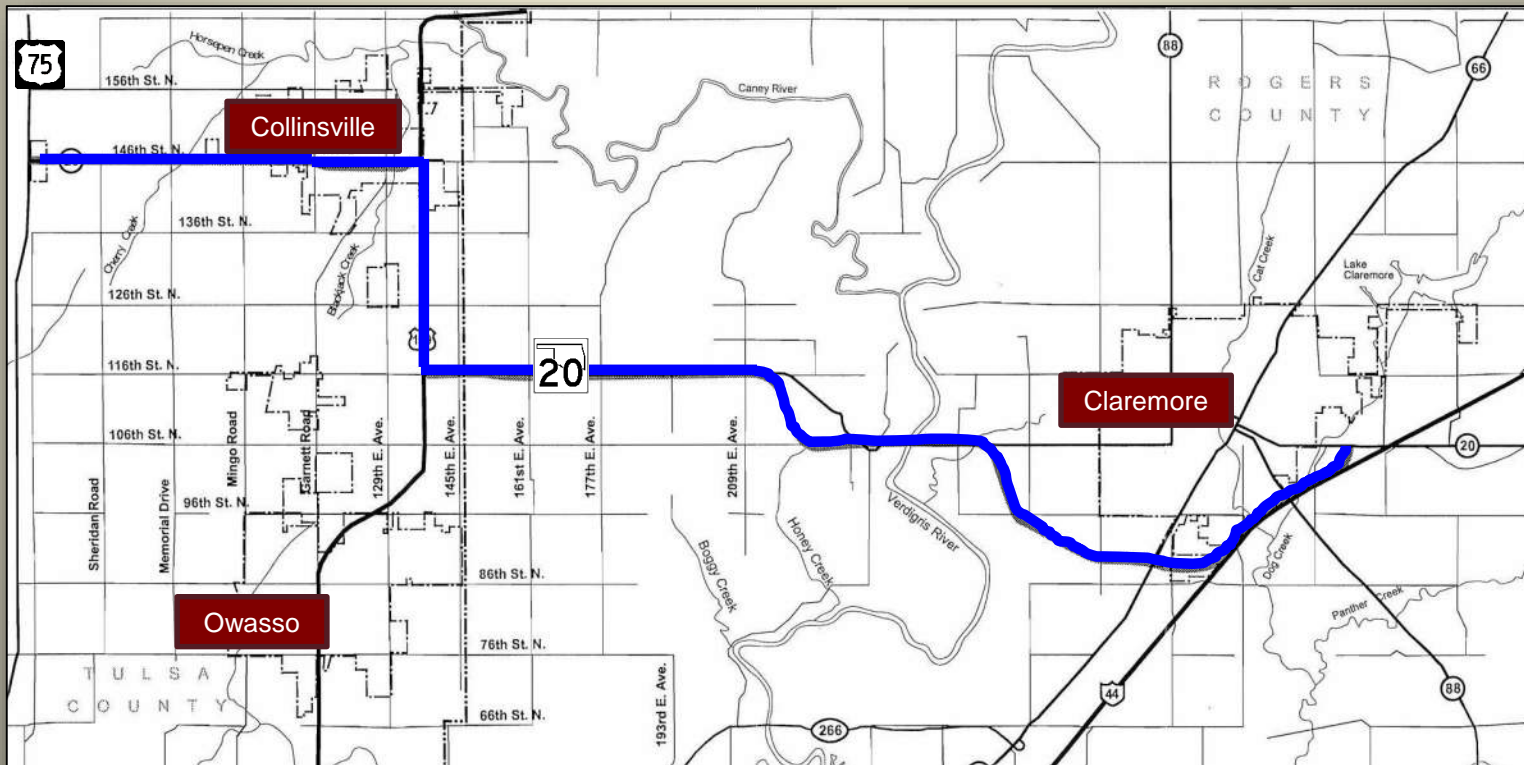
PURPOSE OF THE PROJECT

...is to Improve Safety and Traffic Mobility on SH-20



PROJECT HISTORY

- A Corridor Study and Environmental Assessment (EA) for SH-20 from US-75 to Claremore was Completed in 2000 With a Finding of No Significant Impact (FONSI) Issued by the Federal Highway Administration (FHWA).

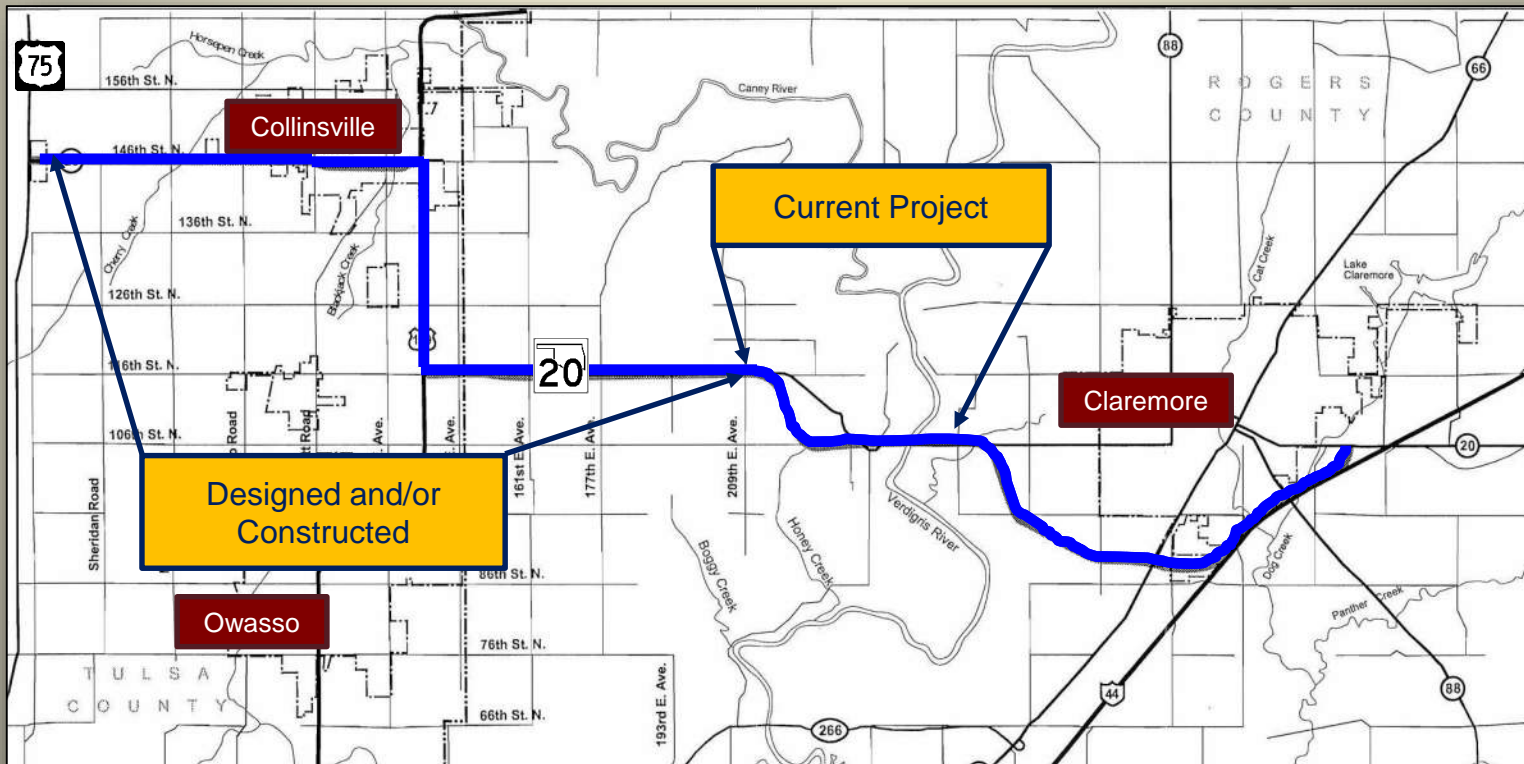


Source: 2000 Environmental Assessment

PROJECT HISTORY

- **EA Approved a 4-Lane Section**

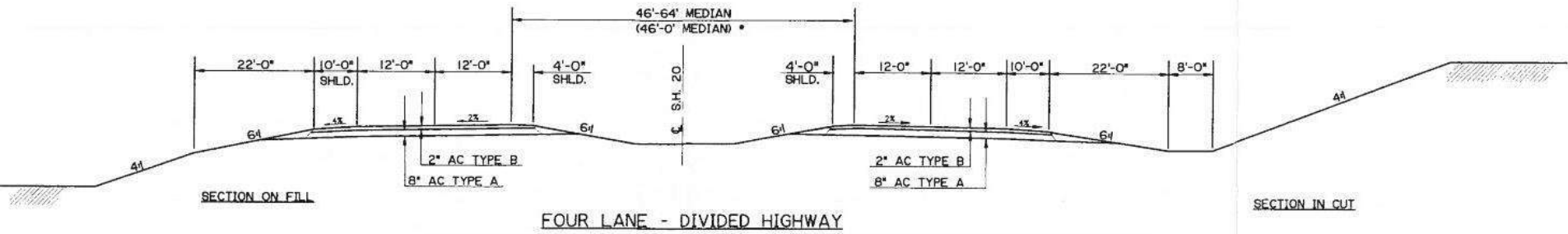
- On Existing Alignment From US-75 to 209th E. Ave.
- New Alignment at Keetonville Hill and Across Verdigris River



Source: 2000 Environmental Assessment

PROJECT HISTORY

- The EA Approved a 4-Lane Divided Roadway With Shoulders
- SH-20 is on a New Alignment Southwest of Existing SH-20 for the Keetonville Hill Project



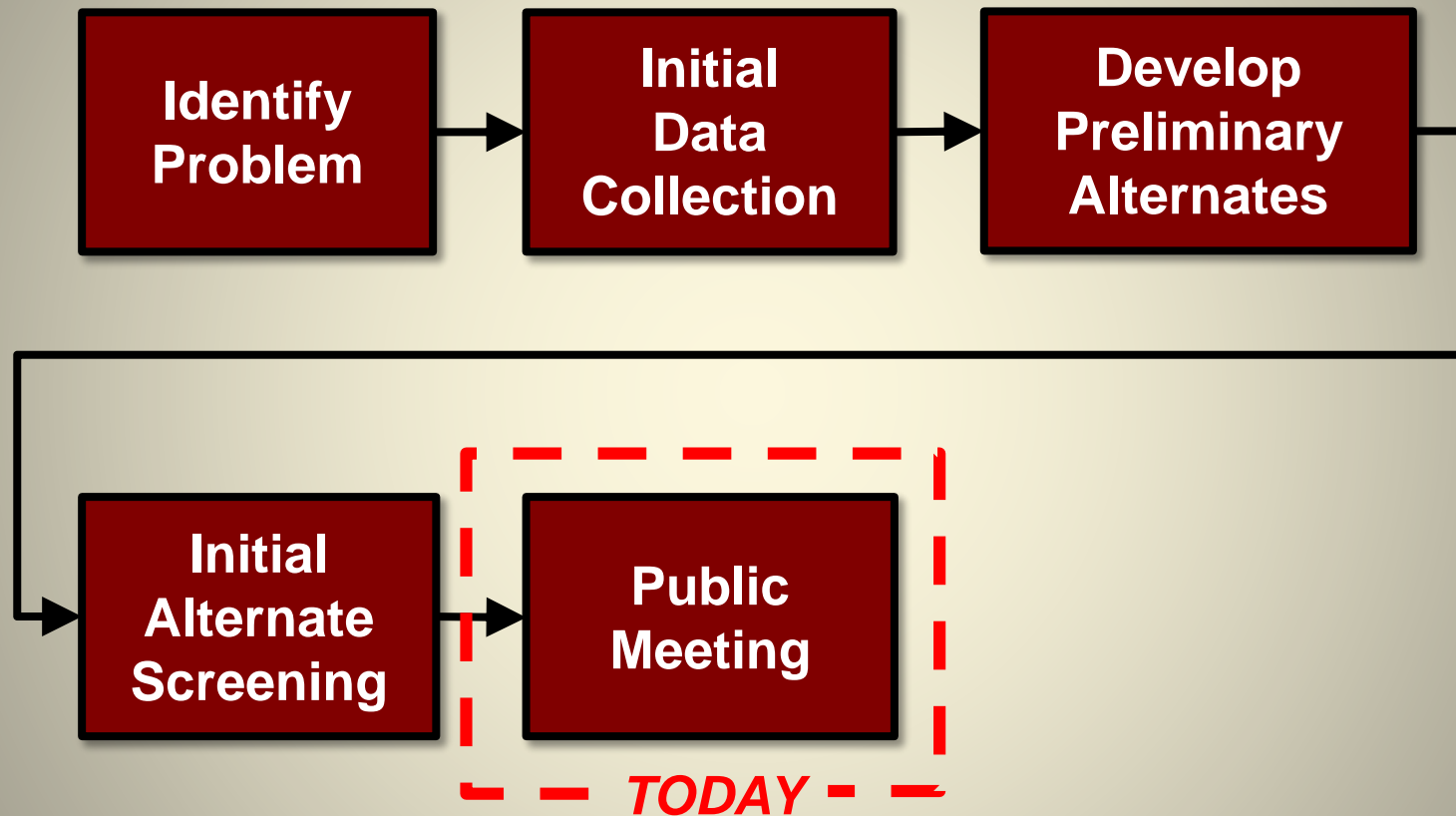
Source: 2000 Environmental Assessment

PROJECT HISTORY

- **Modifications to the Realignment and Typical Section are Incorporated into the Project Because of New Developments**
 - Change to a 5-Lane Curb and Gutter Roadway With Center Turn Lane
 - Slight Modification to the Horizontal Alignment to Avoid New Homes
 - More Investigation Into Vertical Profile



PROJECT DEVELOPMENT PROCESS



- These Steps Were all Followed as Part of Development of the EA
- ODOT is Revisiting These Steps in More Detail for the Reevaluation of this Segment of SH-20

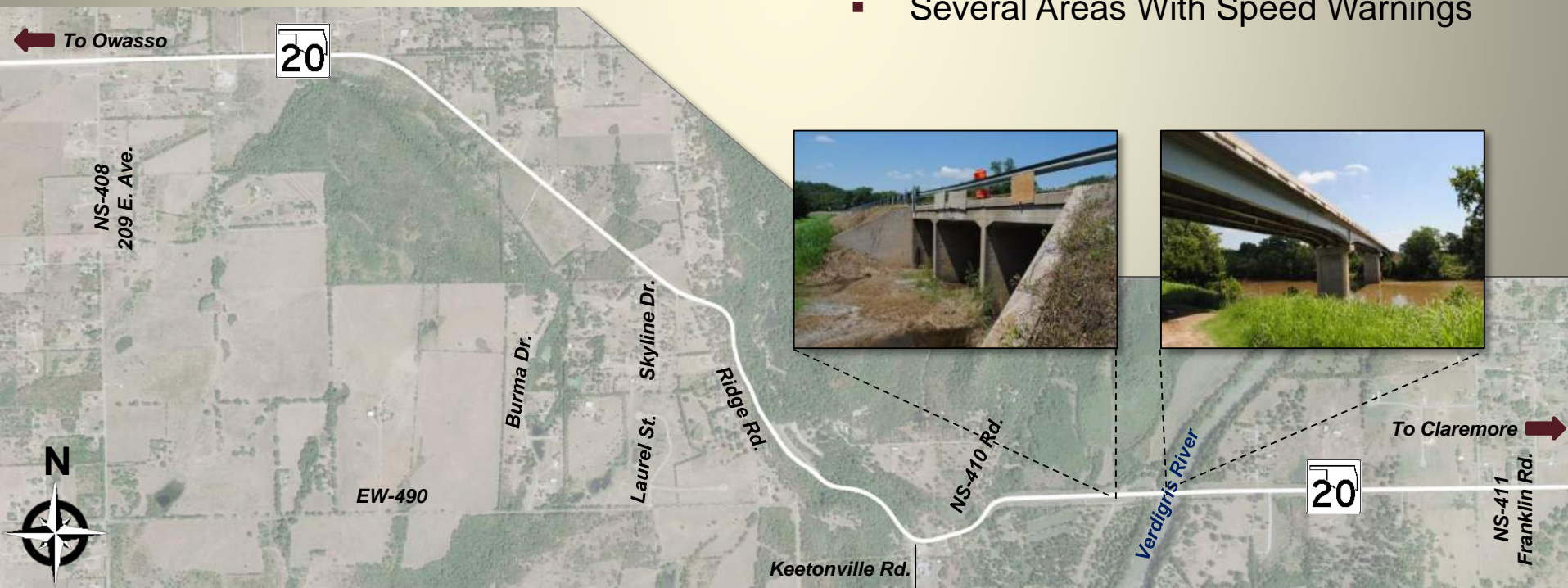


What are the Issues With Existing SH-20?

PROJECT CORRIDOR INFORMATION

■ General Data

- Two-Lane Roadway - Minor Arterial
- Local Intersecting Roads
 - NS-408 (209th E. Ave.)
 - NS-410 (Keetonville Rd.)
 - NS-411 (Franklin Rd.)
- Two Existing Bridge Structures
 - Verdigris River Overflow
 - Verdigris River
- Traffic
 - Current (2014) 12,500 Vehicles/Day
 - Future (2037) 18,600 Vehicles/Day
- Existing Speed
 - Posted at 55 mph
 - Several Areas With Speed Warnings



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EXISTING CONDITIONS WARRANT IMPROVEMENT

- Hill Slides
- Roadway Deficiencies
 - Sharp Horizontal Curves
 - Limited Sight Distance
 - Narrow Shoulders
 - Restricted Traffic Flow/Capacity



**Identify
Problem**

**Initial Data
Collection**

**Preliminary
Alternates**

**Alternate
Screening**

EXISTING CONDITIONS

WARRANT IMPROVEMENT *cont'd....*

- Existing Bridge Conditions
 - Age of Structures vs. Design Life
 - SH-20 Over Tributary to Verdigris River
 - Narrow Width (31'-0" Clear Roadway)
 - SH-20 Over Verdigris River
 - Narrow Width (31'-0" Clear Roadway)
 - Considered "At-Risk" – Near Structurally Deficient



**Identify
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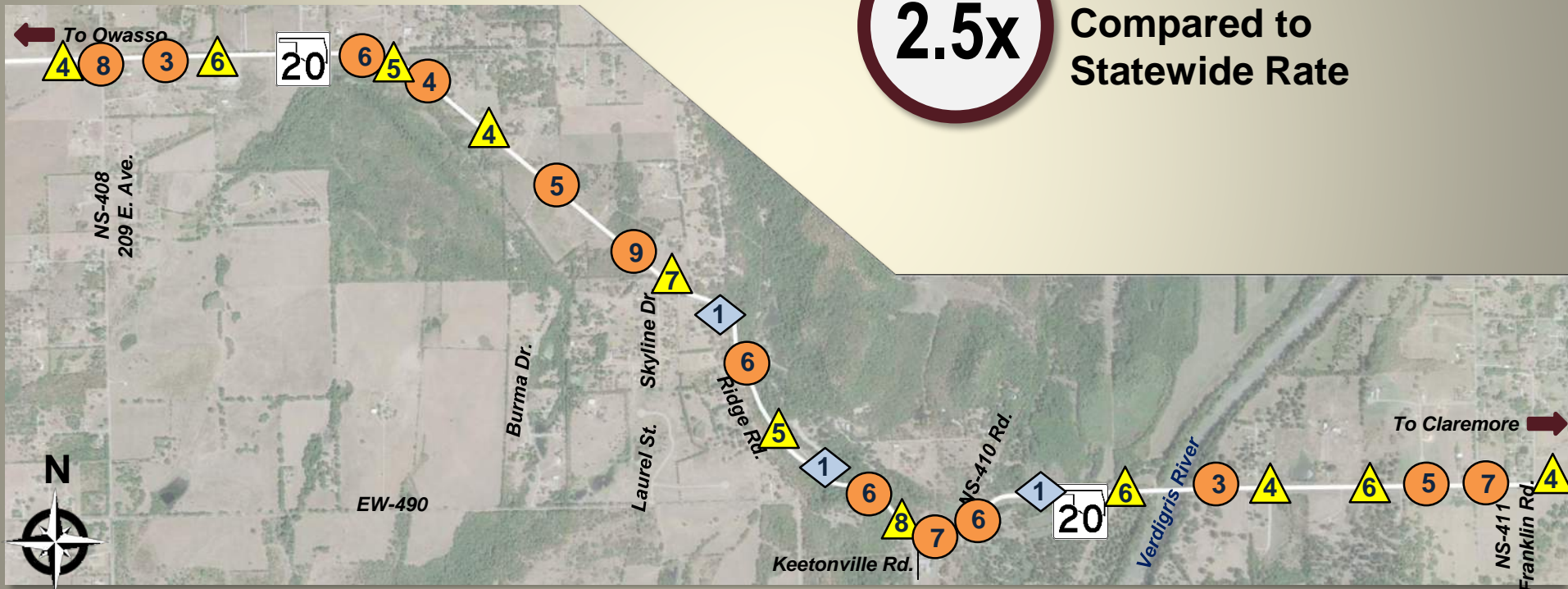
EXISTING DEFICIENCIES LEAD TO HIGH ACCIDENT RATE

Accident Data

- 138 Total Over Previous 7 Years (2009-2015)
- ▲ 59 Property Damage
- 76 Injury
- ◆ 3 Fatal

2.5x

**More Injury Collisions
Compared to
Statewide Rate**



**Identify
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**What are the Project
Area Constraints?**

PROJECT AREA CONSTRAINTS

■ Identified Key Project Features/Constraints and Collected Data

- Developments
 - Homes
 - Businesses
- Traffic Data
- Right-of-Way
- Utilities
- Geological
- Environmental



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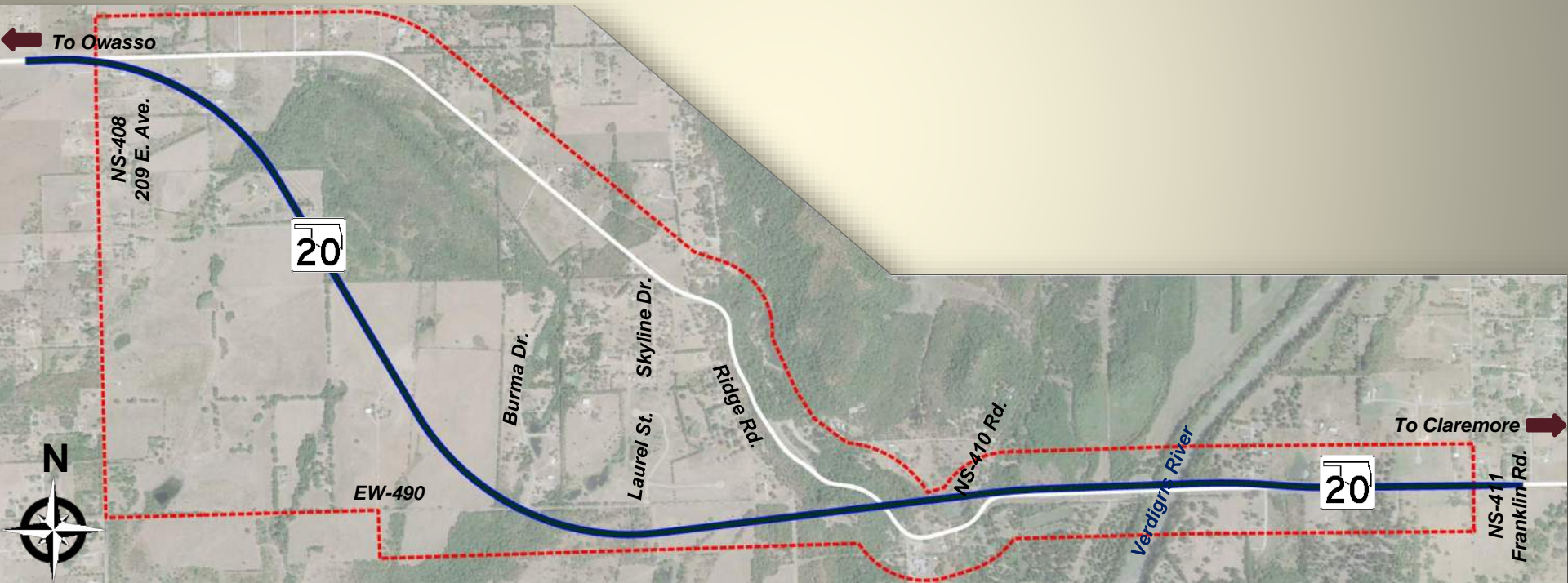
Alternate
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PROJECT AREA CONSTRAINTS

cont'd....

Study Area

- Area of Data Collection
- Investigate Changed Conditions Since 2000 EA
- Compare the Impacts of the Different Vertical Options
- Database Research and Field Reconnaissance



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PROJECT AREA CONSTRAINTS

cont'd....

Homes and Businesses

- Numerous Homes and Businesses
- Primary Avoidance Constraint
- Noise Also a Consideration



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PROJECT AREA CONSTRAINTS

cont'd....

Community Facilities

- Limestone Fire Department
- Hilldale Baptist Church
- Lone Elm Cemetery
- All Will Be Avoided



Identify
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PROJECT AREA CONSTRAINTS

cont'd....

Streams and Wetlands

- Numerous Streams and Wetlands
- Verdigris River
 - Critical Habitat for Rabbitsfoot (Mussel)



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PROJECT AREA CONSTRAINTS

cont'd....

Oil/Gas Wells

- Locations From OK Corporation Commission Info
- Some Were Field Identified



Source: Oklahoma Corporation Commission



Identify
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**What Alternates
Did We Consider?**



DEVELOPMENT OF ALTERNATES

- **Consistent With Approved Alignment From EA**
- **Proposed Improvements for all Alternates**
 - 5-Lane Roadway Section
 - Four 12-Foot Driving Lanes (Two Each Direction)
 - 14-Foot Center Turn Lane
 - Curb and Gutter With 2-Foot Shoulder
 - 45 mph Design Speed
 - Reconstruct Bridges
- **Improvements Lead to Increased Capacity and Safety**



Identify
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DEVELOPMENT OF ALTERNATES *cont'd....*

- **Improvements to Existing Facility not Feasible**
 - Difficult to Keep Existing Roadway Open During Construction
 - Existing Sharp Horizontal Curves
 - Hill Slides



Identify
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DEVELOPMENT OF ALTERNATES *cont'd....*

- **SH-20 Horizontal Alignment**
 - Same for all Alternatives Considered
 - Follows 2000 EA Alignment
- **Vertical Alignment**
 - 3 Alternatives Considered
 - Elevation Change at Keetonville
 - Cut/Fill/Bridge
 - County Roads



Identify
Problem

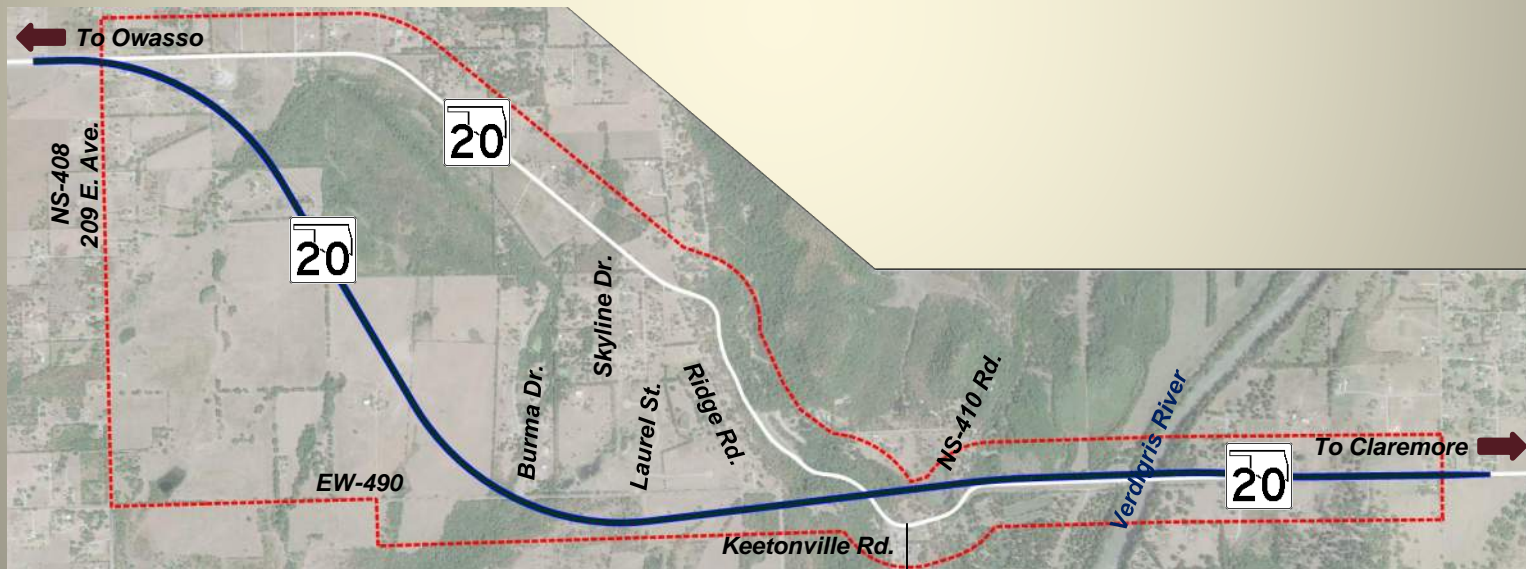
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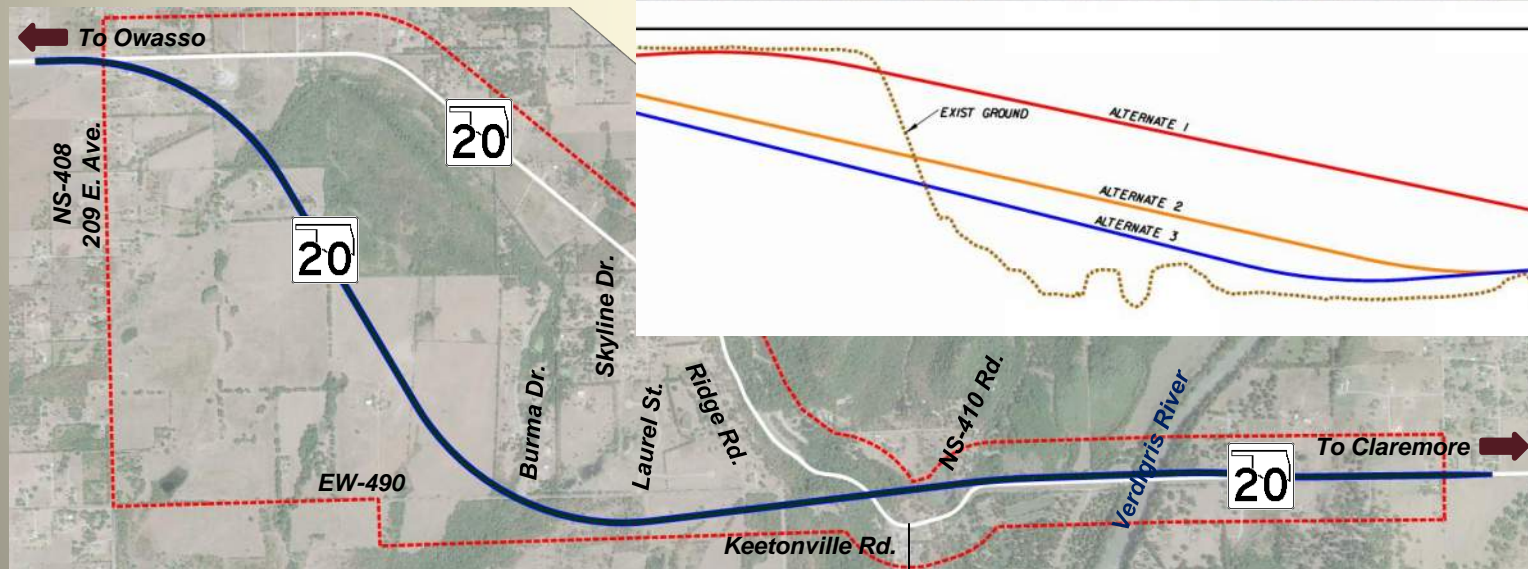
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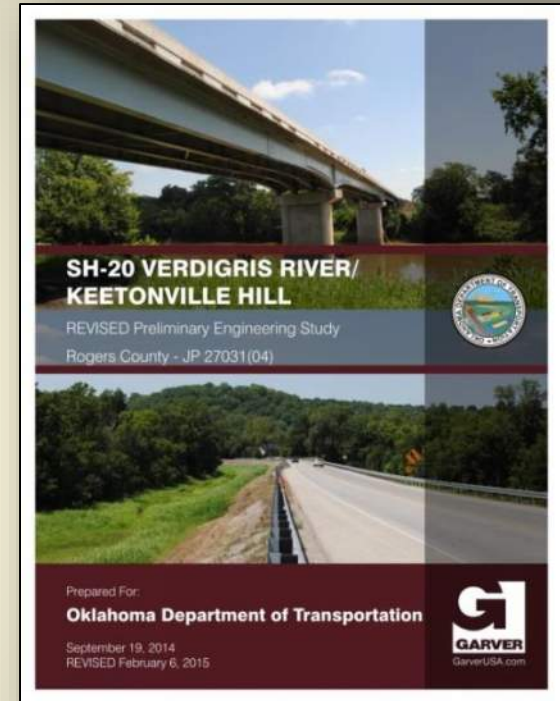
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ALTERNATE EVALUATION/SCREENING

- 3 Vertical Alternatives Considered
- Evaluation Criteria
 - Impacts to Property
 - Construction Methods
 - Impacts to Environmental Features
 - Costs – Construction, Right-of-Way, Utilities
- Comparison Matrix
- Design Report
- Review Meetings



Identify
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**Alternate
Screening**

ALTERNATE EVALUATION/SCREENING

ALTERNATE	COST	GRADING		BRIDGE	RELOCATIONS			ENVIRONMENTAL	
		TOTAL COST (MILLIONS)	MAX. CUT (FEET)		MAX. FILL (FEET)	BRIDGE LENGTH (FEET)	RESIDENTIAL	COMMERCIAL	POTENTIAL NOISE IMPACTS
1	\$61.1	15	N/A	4,961	7	1	5	2.6	1
2A	\$57.6	87	100	2,019	11	1	3	6.7	2
2B	\$58.7	87	28	3,224	7	1	5	2.2	1
3A	\$53.8	110	65	804	10	1	3	5.8	2
3B	\$59.4	110	30	1,964	8	1	3	1.3	1

Identify Problem

Initial Data Collection

Preliminary Alternates

Alternate Screening

ALTERNATE EVALUATION/SCREENING

cont'd....

- **Resulted in the Proposed Alternate**
 - Balanced Excavation Profile
 - Lower Fill Heights at Intersections
 - Lower Cost

ALTERNATE	COST	GRADING		BRIDGE	RELOCATIONS			ENVIRONMENTAL	
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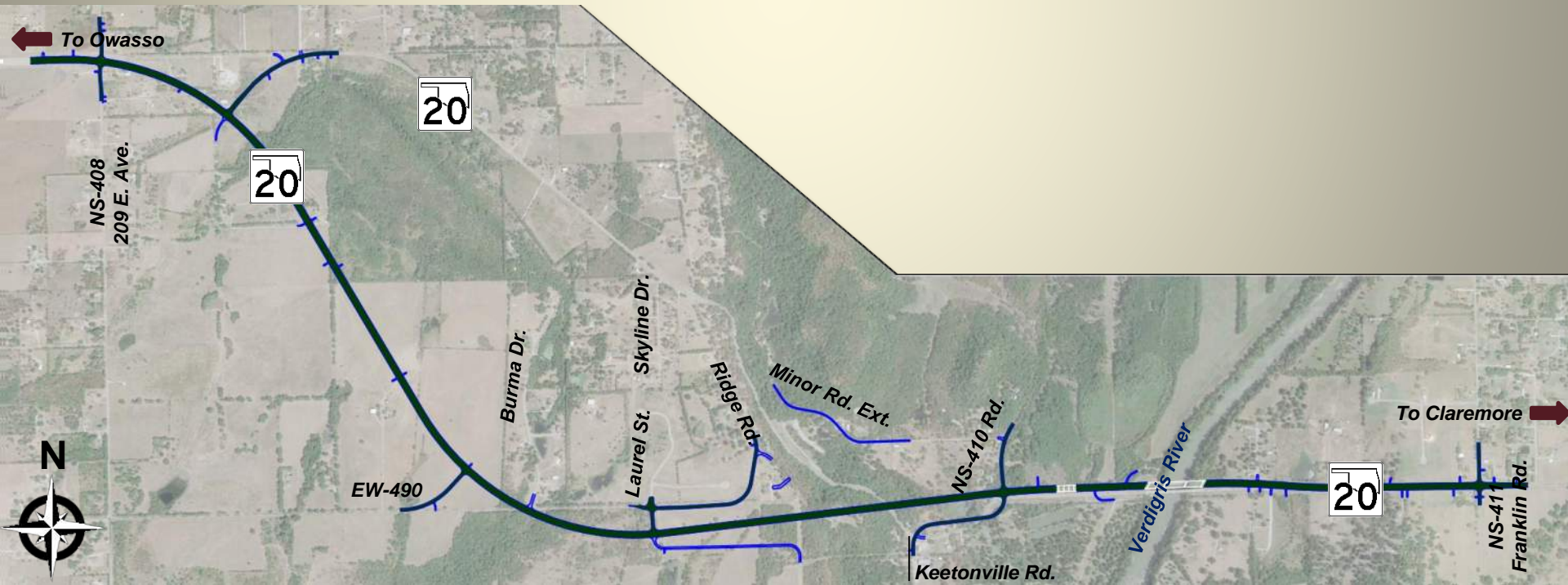


**What Are the Features of
the Proposed Alternate?**

PROPOSED ALTERNATE

Proposed Alternate

- 5-Lane Section (Curb/Gutter)
- New Horizontal and Vertical Alignment
- Removes Portions Existing SH-20
- Realigned County Rd. Connections
- Reconstructs Bridges
- Total Project Cost \$53.8M



PROPOSED ALTERNATE *cont'd....*



PROPOSED ALTERNATE *cont'd....*



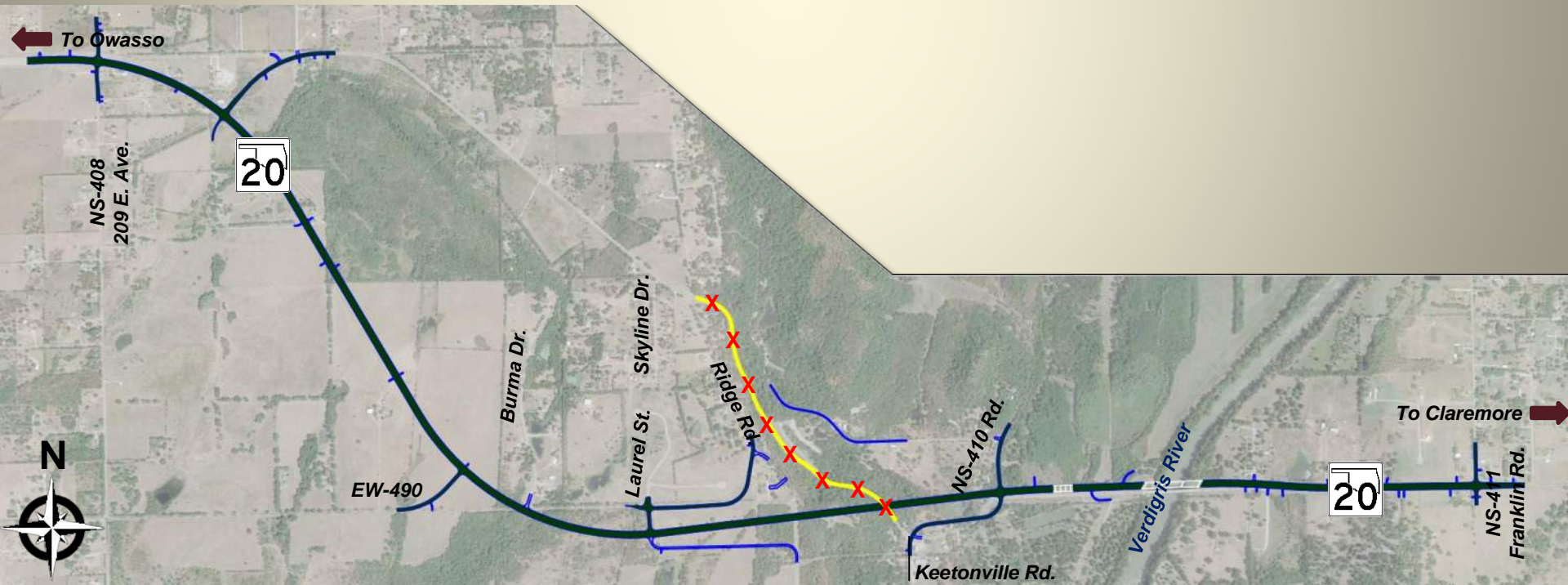
PROPOSED ALTERNATE *cont'd....*



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Proposed Alternate

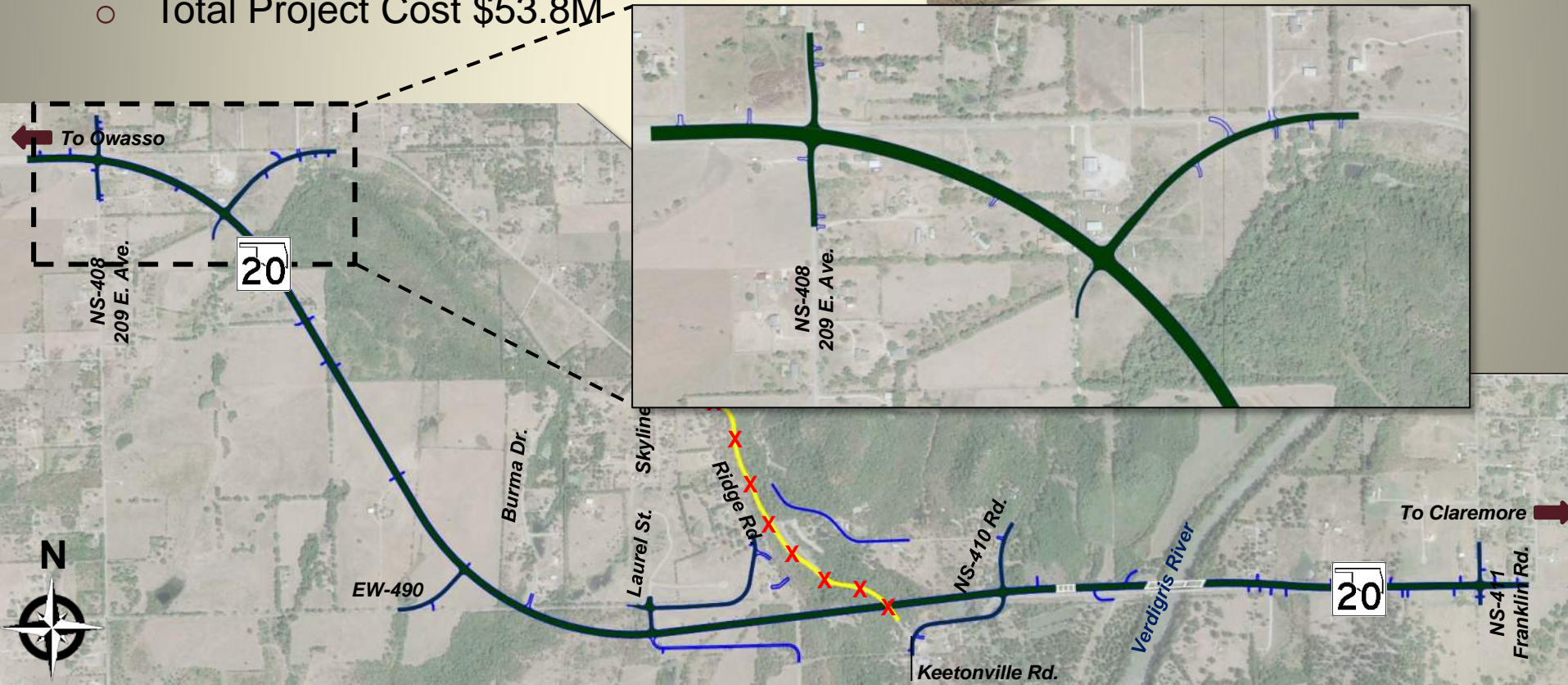
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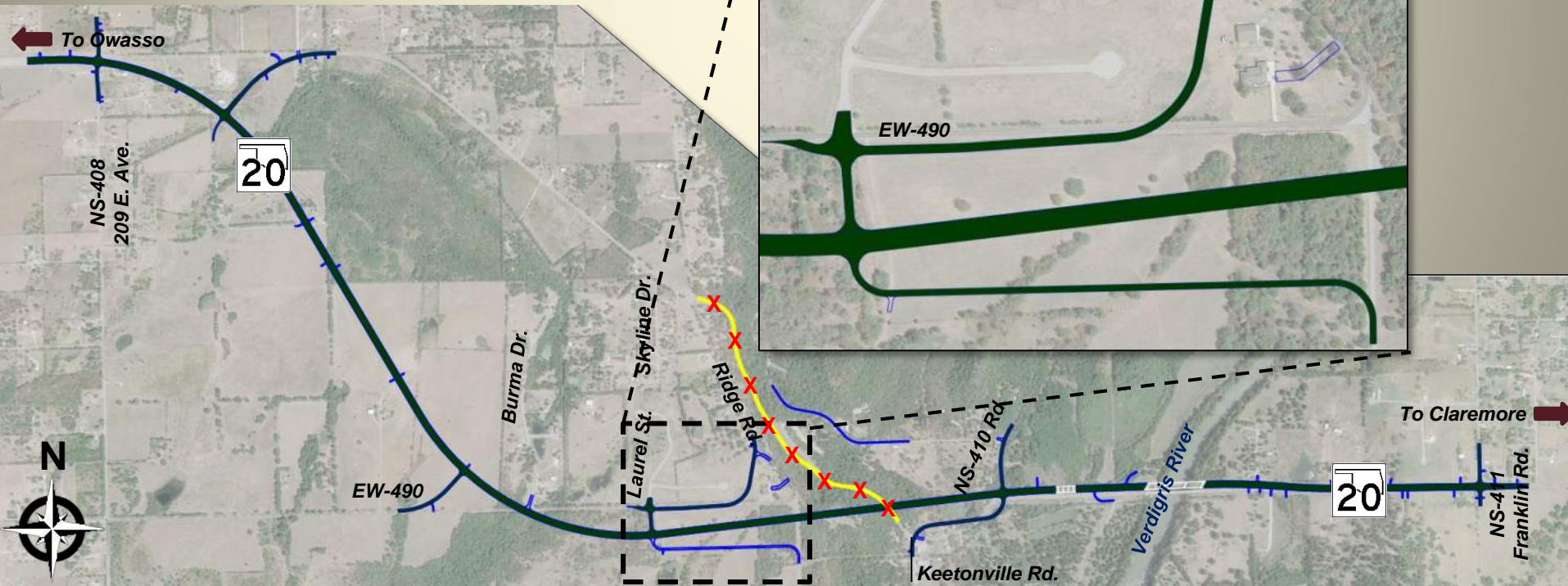
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Proposed Alternate

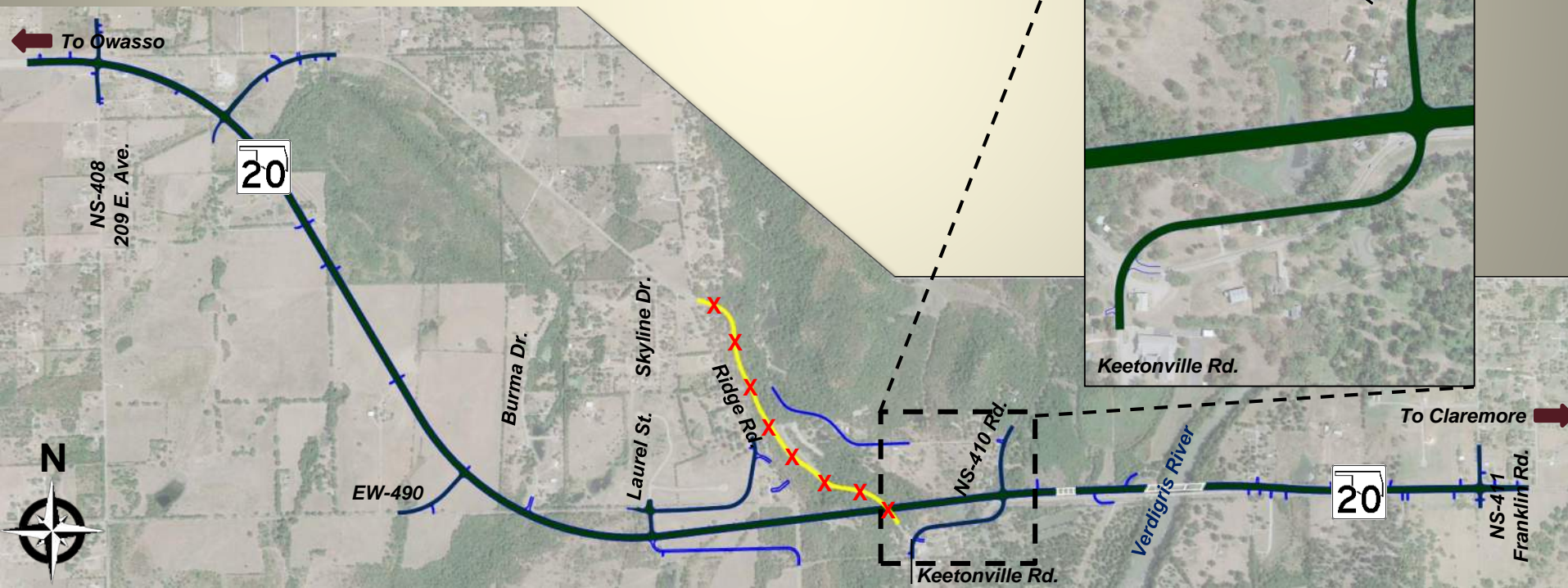
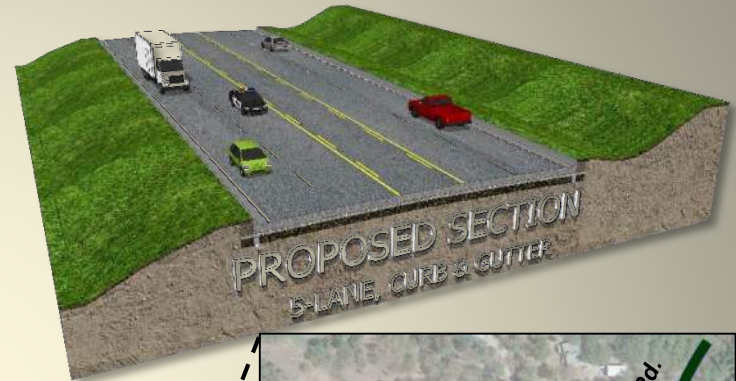
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PROPOSED ALTERNATE *cont'd....*

Proposed Alternate

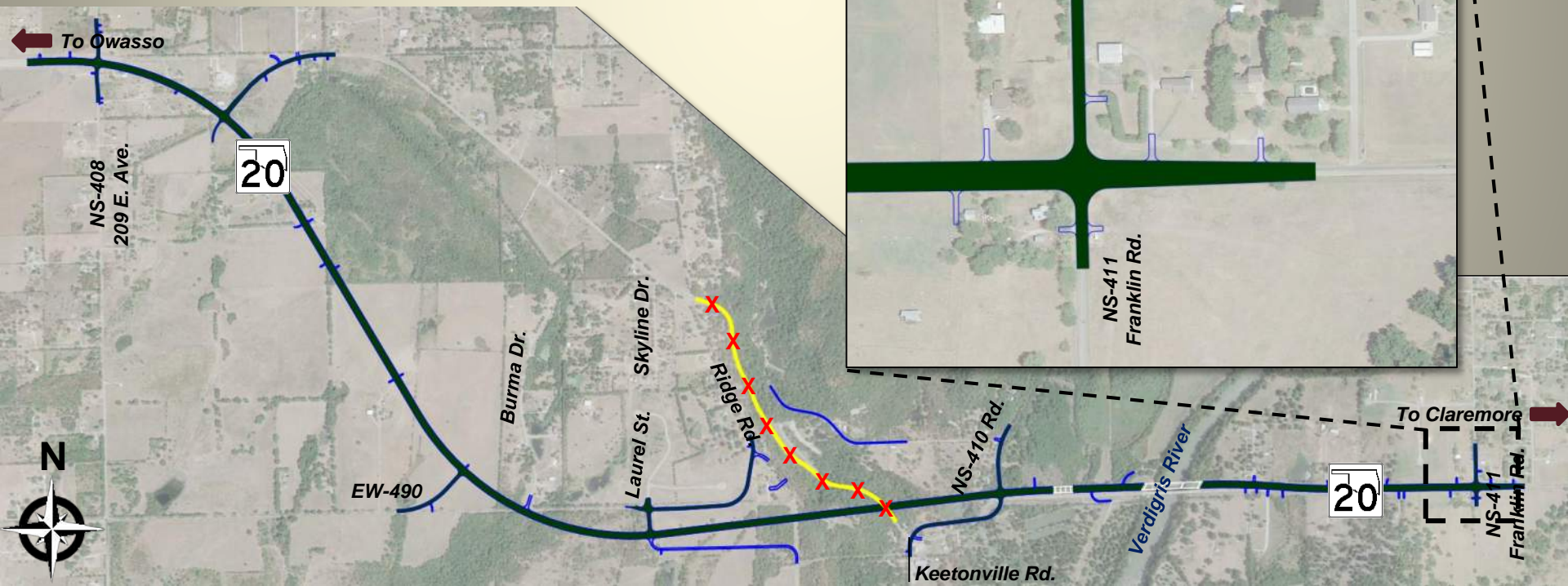
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PROPOSED ALTERNATE *cont'd....*

Proposed Alternate

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A photograph of a two-lane asphalt road curving to the right. The road is flanked by metal guardrails and yellow-and-black striped warning signs. In the distance, a silver car is driving away. The background is a dense forest of green trees under a clear blue sky. The text "What Are the Impacts of the Proposed Alternate?" is overlaid in large, white, bold letters with a black outline.

**What Are the Impacts of
the Proposed Alternate?**

POTENTIAL IMPACTS

- **Potential Impacts – Based on Reconnaissance Data:**
 - Acquisition of Private Property and Relocation of Residents
 - No Impacts to Community Facilities
 - Some Noise Impacts – Subject to Further Study
 - Changes to Local Road Access and Driveways
 - Channelization of Streams and Filling of Wetlands
 - Bridge Designed to Minimize Impacts to Verdigris River and Rabbitsfoot Critical Habitat
 - Impacts to Oil and Gas Wells
 - Visual Changes – Large Cuts and Fills on Keetonville Hill

Proposed Alternate Impact Summary

COST	GRADING		BRIDGE	RELOCATIONS			ENVIRONMENTAL	
	TOTAL COST (MILLIONS)	MAX. CUT (FEET)		MAX. FILL (FEET)	BRIDGE LENGTH (FEET)	RESIDENTIAL	COMMERCIAL	POTENTIAL NOISE IMPACTS
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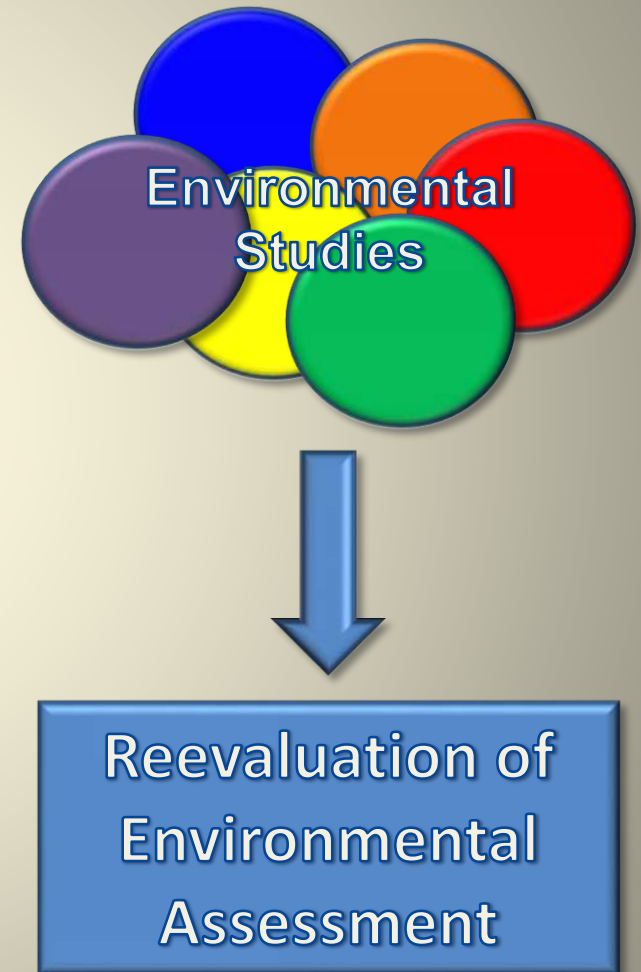
- **Impacts Will be Minimized as Much as Possible During Design**

A concrete bridge is under construction in a lush, green, hilly area. The bridge structure is visible, showing several concrete piers and a long, low-profile deck. The surrounding landscape is filled with dense green trees and tall grass. The sky is clear and blue. The text "What Are the Next Steps?" is overlaid in large, white, bold letters with a black outline across the center of the image.

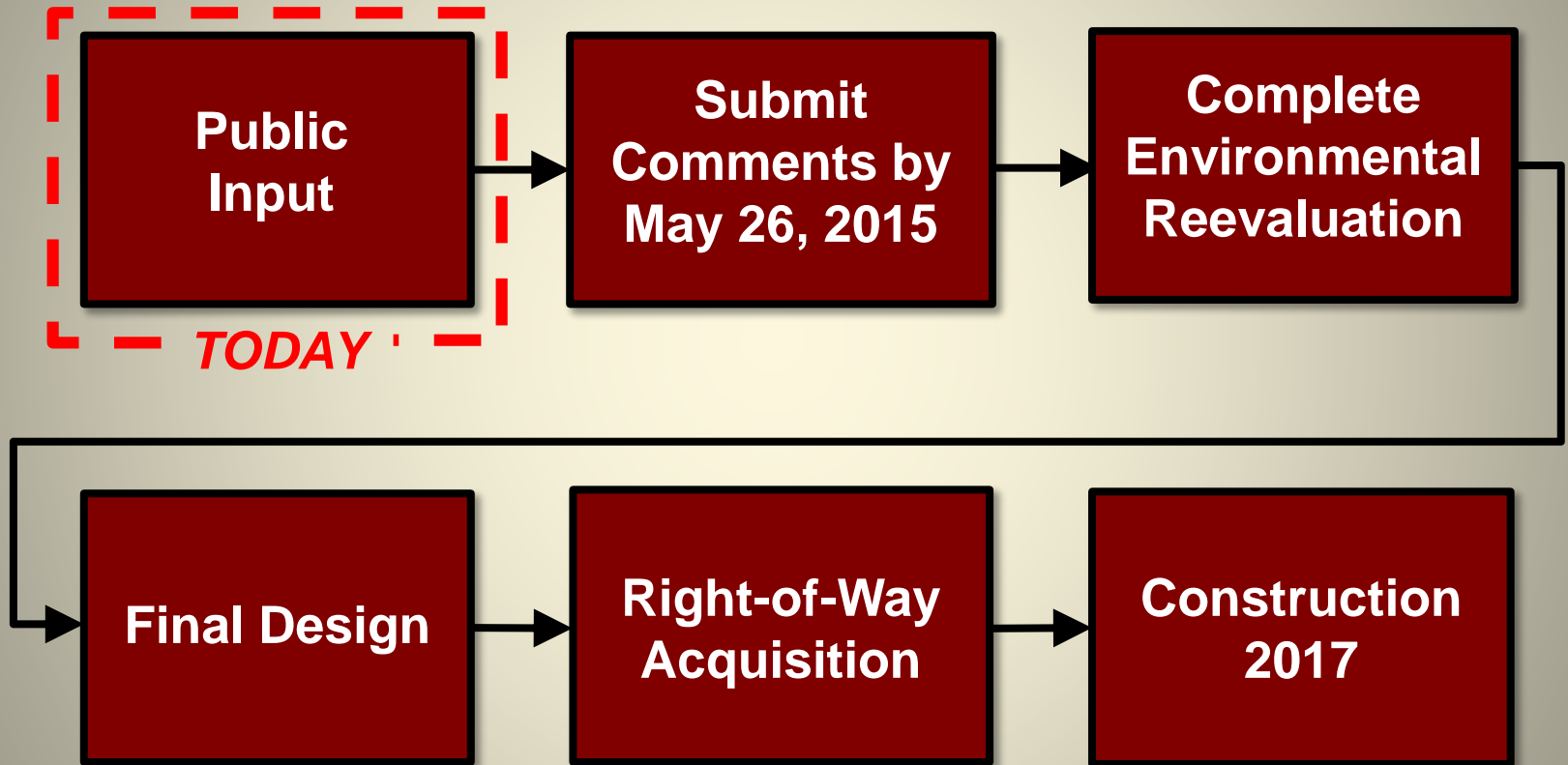
What Are the Next Steps?

ENVIRONMENTAL PROCESS

- **Detailed Environmental Studies Will be Performed**
 - Archaeological and Historic Survey
 - Wetland Delineations
 - Biological Assessment – USFWS Consultation
 - Hazardous Waste Investigation
 - Noise Study
- **Re-Solicit Input from Resource Agencies and Local Officials**
- **Proposed Design and Environmental Impacts Will be Compared With the Original Environmental Assessment**
- **An Environmental Reevaluation Will Determine if the Findings of the Original EA Still Apply**



NEXT PROJECT STEPS



THANK YOU!

**Please Submit Your Comments by
May 26, 2015**

- ✓ **Leave Your Comment Form Here Tonight**
- ✓ **Mail the Comment Form Back to ODOT:
Environmental Programs Division
Oklahoma Department of Transportation
200 NE 21st Street
Oklahoma City, OK 73105**
- ✓ **Email Your Comments to ENVIRONMENT@ODOT.ORG**

QUESTIONS?