



Ames Construction

*ALONE we can do SOME things.
TOGETHER we can do ANYTHING!*

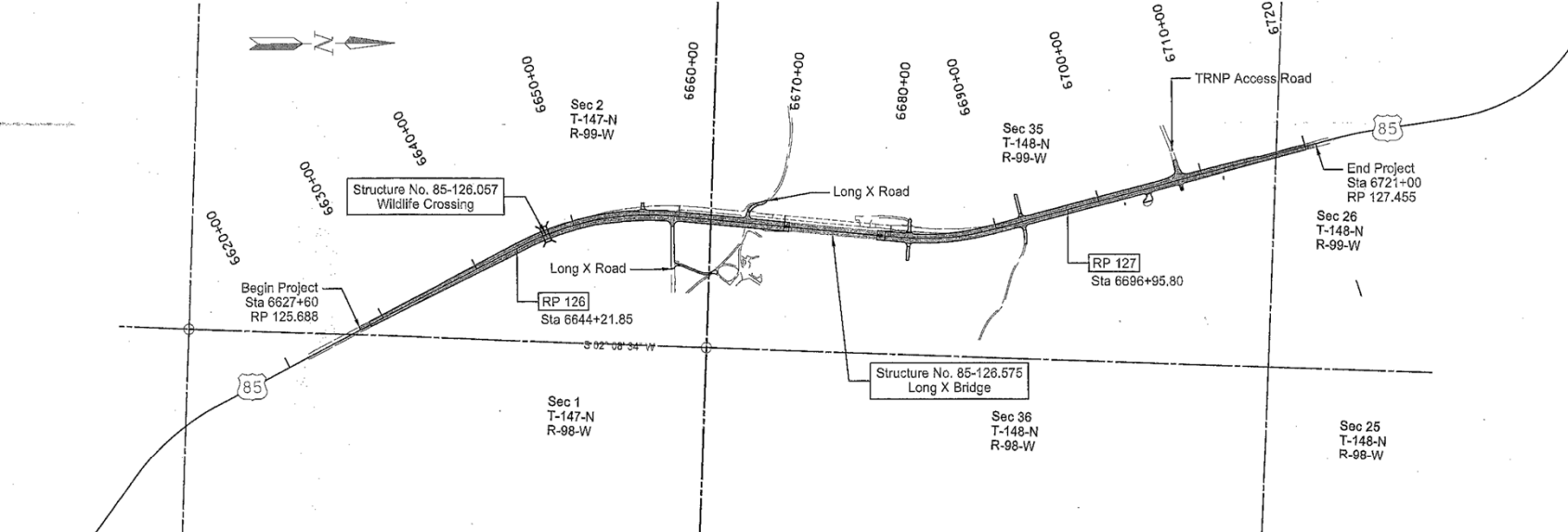


INSTILLING TRUE CONFIDENCE. DELIVERING SUCCESS.



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Long X Overview

DESIGN DATA				JOB # 32 NORTH DAKOTA DEPARTMENT OF TRANSPORTATION		STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
Traffic	Average Daily					ND	AC-NH-SOIB-7-085(109)125	22041	1	1
Current 2017	Pass: 2,955	Trucks: 1,725	Total: 4,680							
Forecast 2037	Pass: 3,725	Trucks: 2,175	Total: 5,900							
Clear Zone Distance: 34' (8:1)		Design Speed: 65 mph								
Minimum Sight Dist. for Stopping: 645'		Bridges: HL-93 Design Loading								
Limited Access Control										
Pavement Design Life 20 (years)										
Design Accumulated One-way Flexible ESALs: 5,388,407										
				SOIB-7-085(109)125 McKenzie County US Hwy 85 at Long X Bridge Structure Replacement, Construct Wildlife Crossing Structure Grading, Aggregate Base, HMA, Guardrail & Incidentals		GOVERNING SPECIFICATIONS: 2014 Standard Specifications adopted by the North Dakota Department of Transportation and the Supplemental Specifications effective on the date the project is advertised.				
						PROJECT NUMBER \ DESCRIPTION NET MILES GROSS MILES SOIB-7-085(109)125 1.77 1.77				
										
RP 126 Sta 6591+29.22				STATE COUNTY MAP		UNITED STATES FOREST SERVICE Nancy Veres /s/ 11/29/18 MCKENZIE RANGER DISTRICT Curtis Grudniewski /s/ 11/29/18 GRASSLANDS ENGINEER APPROVED DATE 12/04/18 Roger Weigel /s/ OFFICE OF PROJECT DEVELOPMENT ND DEPARTMENT OF TRANSPORTATION		I hereby certify that the attached plans were prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the state of ND. APPROVED DATE 12/04/18 James Douglas Rath /s/ NDDOT DIV-DIST OR CONSULTANT FIRM		This document was originally issued and sealed by James Douglas Rath, Registration Number PE- 4288, on 12/04/18 and the original document is stored at the North Dakota Department of Transportation



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New Long X Bridge Alignment





- Width - 85 ft
- Total Length – 790 ft
- Foundation
 - South Abutment – 8ft diameter drilled shafts
 - Intermediate piers – Driven H-Pile
 - North Abutment – Driven H-Pile
- Superstructure – Concrete girders
 - Spans – 5 spans at 157 ft/ea (60 ea)





- New roadway approaches and widening
 - ~ 250,000 CY Earthwork
 - ~ 81,000 TON Aggregate Base
 - ~ 30,000 TON Asphalt Pavement
- Foundation
 - H-Pile - 104 ea., ~ 15,000 lf Total
 - Drilled Shafts – 7 ea., depth ~ 150 lf/ea

**Open Design reduces/eliminates
height and width restrictions**



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Wildlife Crossing Bypass





Example wildlife crossing; designed to accommodate specific local wildlife



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South Abutment Foundation





**Shaft placed 10/16*



**Scheduled for Thursday 10/17*



- Project Value ~ \$34,000,000
- Bordered by National Park, USFS land, Private land owner
- Crews and manpower
 - Currently have 35 employees; Peak ~ 55; many are local hires



- Malcom Drilling – Shaft Foundations
- Knife River – Asphalt Paving
- Horizontal Boring – jack and bore
- Nehemiah – Structural reinforcement steel
- Strata – Ready-mix concrete supplier
- Fortera – Precast concrete bridge girders and precast arch structure
- Viet - Demolition



- Scope planned for completion – end of 2019
 - Complete all 6 bridge substructures (Piers and foundations)
 - Set girders for spans 3, 4, 5 over water from temporary causeway
 - 50% earthwork completed
 - South bound widening north of river paved
 - South side “detour” paved and ready for next season to facilitate wildlife crossing construction





- Scope planned for completion – end of 2020
 - Complete the bridge
 - Complete wildlife crossing
 - Complete earthwork
 - Complete paving
 - OPEN TO TRAFFIC
 - Begin demolition of old bridge
- Scope planned for 2021
 - Complete demolition
 - Planned final completion – July 2021



Thank you