

# ALLEN ROAD BRIDGE PROJECT – OVERCOMING CHALLENGES AND CONNECTING COMMUNITIES

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#### **INTRODUCTIONS**



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**AGENDA TODAY** 

About Acrow and Kozeny Wagner

The Challenge

- The Solution
- The Result
- Q&A



#### **ABOUT ACROW**

- Established in 1951
- World leader in design, engineering and manufacture of prefabricated modular steel bridges
- Headquartered in Parsippany, NJ
- Offices across USA, Canada, Italy and UK
- Manufacturing Facilities in Milton, PA, and Lydney, Gloucestershire, UK
- Staging yards- Lafayette, NJ, Eden NC, Memphis, TN & Centralia, WA
- Proprietary steel technology derived from the Bailey Bridge
- 300+ employees





#### THE CHALLENGE

- Keeping the road open to traffic 24/7
- Constructing a new bridge over two railroad lines that carry 24 trains per day
- Safety of workforce and traveling public at all times
- Steep slopes on each end
- Extremely limited overhead space
- Live powerlines!









PROJECT SITE OVERVIEW
St Louis County, Eureka, Missouri, near Aberdeen Golf Course on Allen Rd.





### ORIGINAL BRIDGE



FAILING INFRASTRUCTURE



REPLACEMENT REQUIRED



OLD BRIDGE DEMOLITION

#### **ACROW SOLUTION**

Speed of assembly and installation

Versatility - Efficient launch over railway

Transportability – Steep slope

 Logistics - Minimal on-site equipment

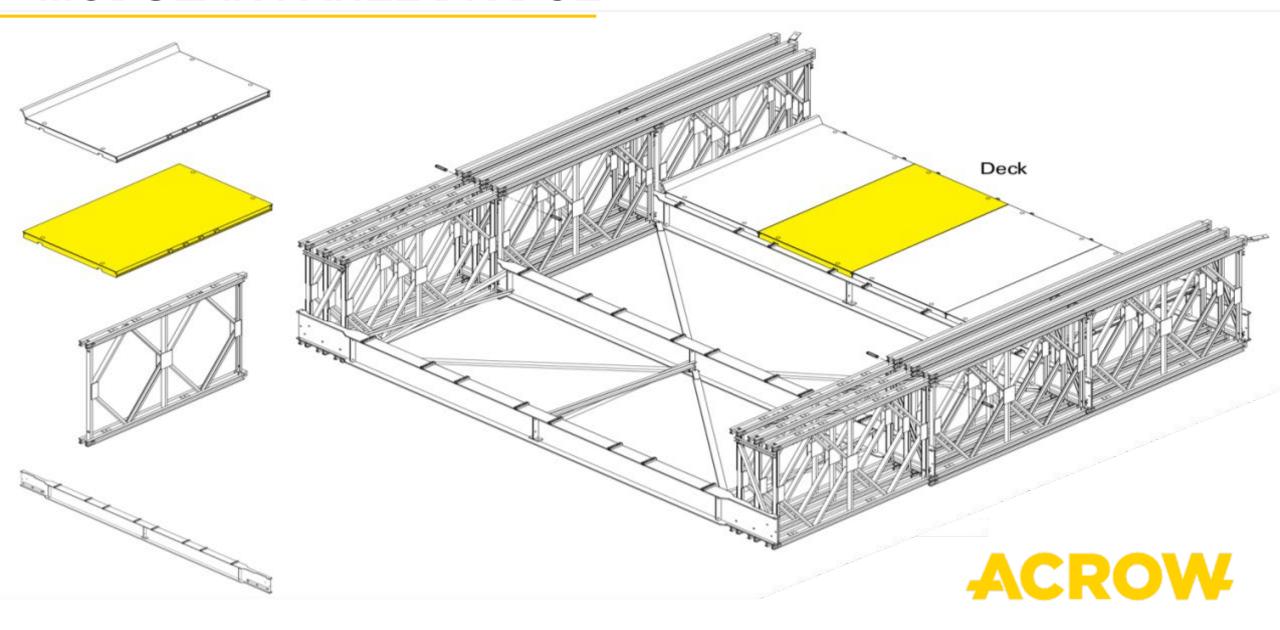
 Technical compliance with St. Louis County requirements

Safety over live railroad

On-site technical assistance



#### MODULAR PANEL BRIDGE







# TEMPORARY BRIDGE SPECIFICATIONS

Temporary detour structure

Provided safety for workforce during construction

October 2022 – July 2024

- Bridge: 2L24 x 133-ft
- Components: Use of existing stock
- Decking: Epoxy deck for ease of installation and rapid deployment



#### **INSTALLATION**

- Cantilevered
- Crane-Assisted
- Crane Lift-in



## CANTILEVERED









BRIDGE ABUTMENTS



## **BRIDGE ASSEMBLY**



BRIDGE LAUNCH





## **BRIDGE LAUNCH**







## COMPLETED STRUCTURE



BRIDGE APPROACHES





# THE RESULT = CONNECTIVITY

Navigating Railroad Work – Overcoming complexities and ensuring seamless coordination

Maintaining Traffic Flow – Keeping roads open and minimizing disruptions

Enhancing Worker Safety – Utilizing a temporary bridge to create a safer work environment







# ACCELERATED BRIDGE CONSTRUCTION WITH ACROW



- Solution Efficiency Allowed us to maintain traffic as required at a cost-effective price with a relatively easy installation and removal process.
- Service & Support Acrow sent technical support personnel during the installation and removal processes that assisted during the fit up, launch, delaunch, and tear down phases.
- Speed & Cost-Efficiency Reduced downtime and optimized costs and allowed for a temporary bridge to be launched and usable in about a 2-month time frame.
- Safety Measures Ensuring compliance and best practice.





## **QUESTIONS?**

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