

Building Bridges. Connecting People.

Division Street Bridge
Replacement and Temp Bridge
use/ I-5 recovery

2/4/15





Existing Bridge

- Original build 1900-1903
- Trunnion Bascule (Chicago Style) Bridge found throughout the City
- Designed by City of Chicago Engineer and Chief Bridge Engineer
- 1932 Rehab Reinforced Leaf Trusses and rebuilt counterweights/trusses/floor
- 1953 Rehab Grid deck installed
- 1969 Rehab Similar to '32
- 1983 Rehab Extensive rehab of structural steel in trusses
- Current ADT 25,000
- Flagged for emergency replacement after inspection March 14 unfavorable
- Removed from Service 29 June 14

Modular Bridging



Modular Bridging



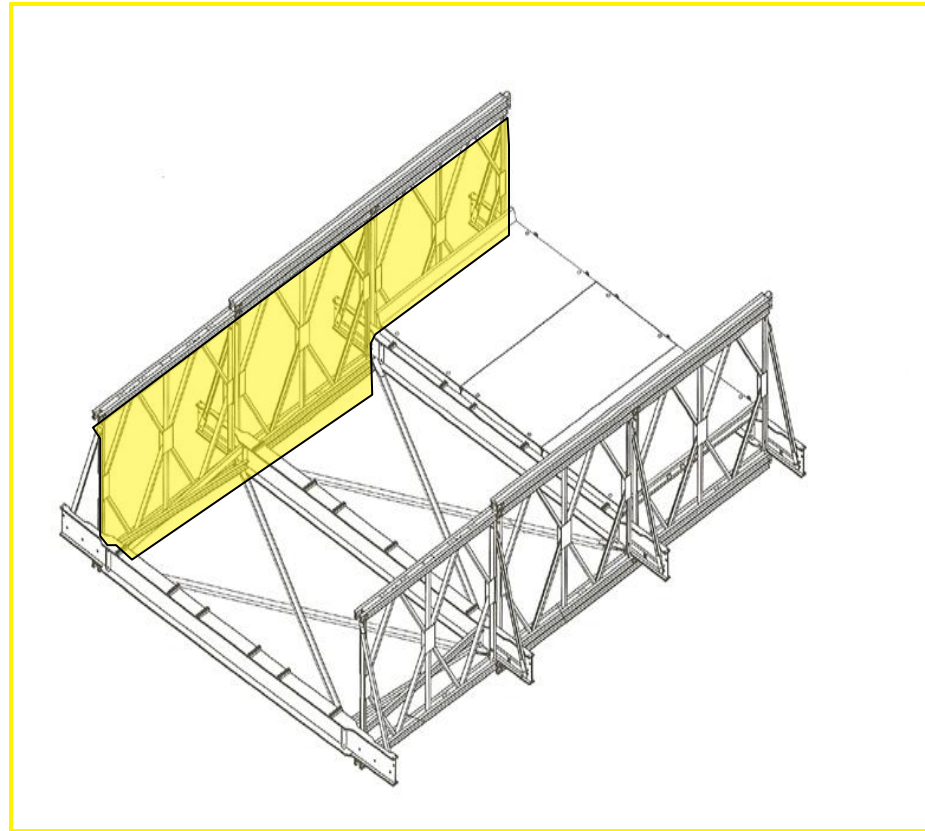
- 2500 BAILEY BRIDGES WERE BUILT BETWEEN 1943-1945 IN THE ITALIAN CAMPAIGN
- 1500 BAILEY BRIDGES CONSTRUCTED DURING THE ADVANCE INTO EUROPE FOR A TOTAL OF 29 MILES OF BRIDGING!
- THE FREEMAN BRIDGE IN DUSSELDORF WAS 2,390 FEET IN LENGTH

MODULAR BRIDGES

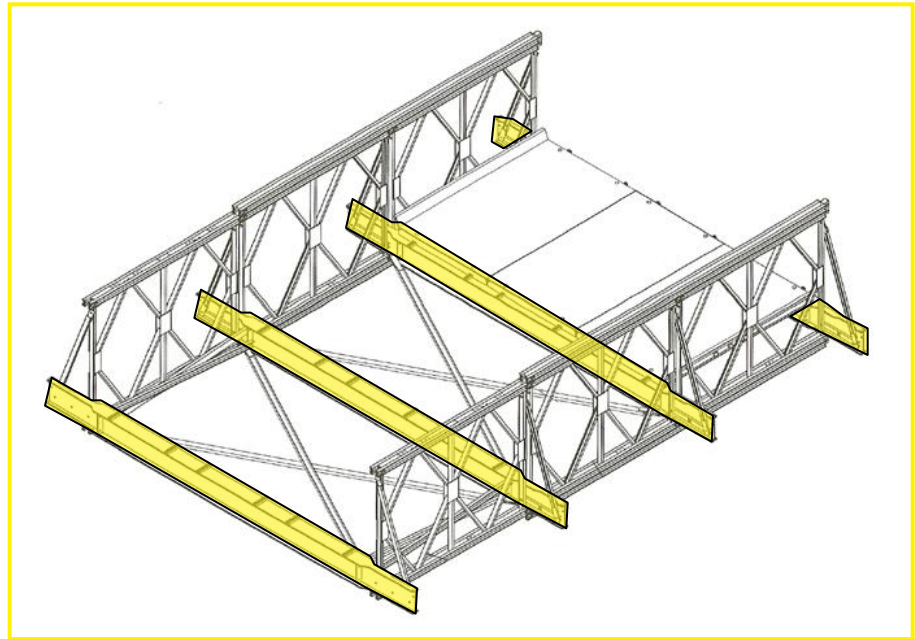
Three Basic Parts

1. **Truss panels**
2. **Floorbeams**
3. **Steel decking**

- TRUSS PANELS



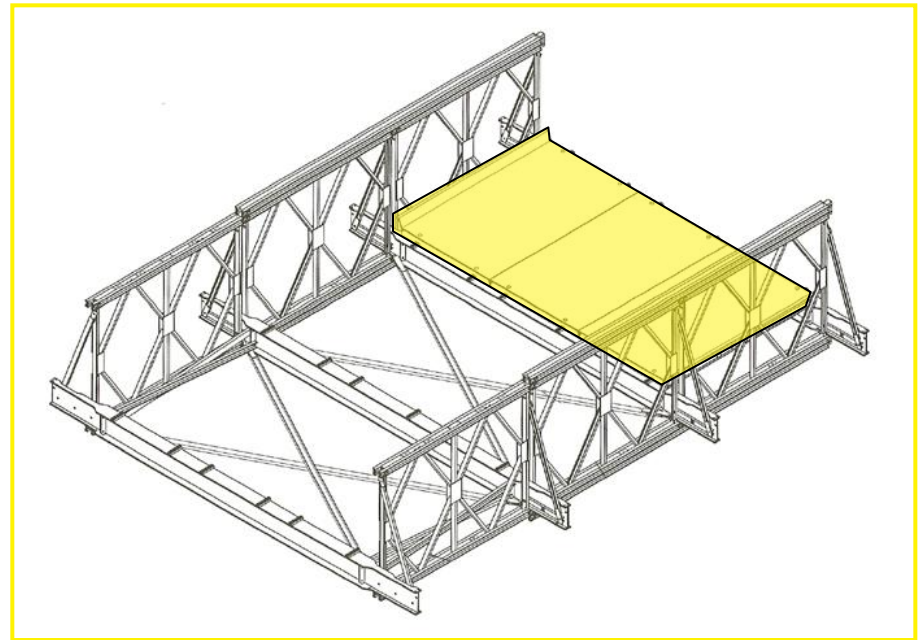
- FLOORBEAMS



- OROTHOTROPIC STEEL DECK

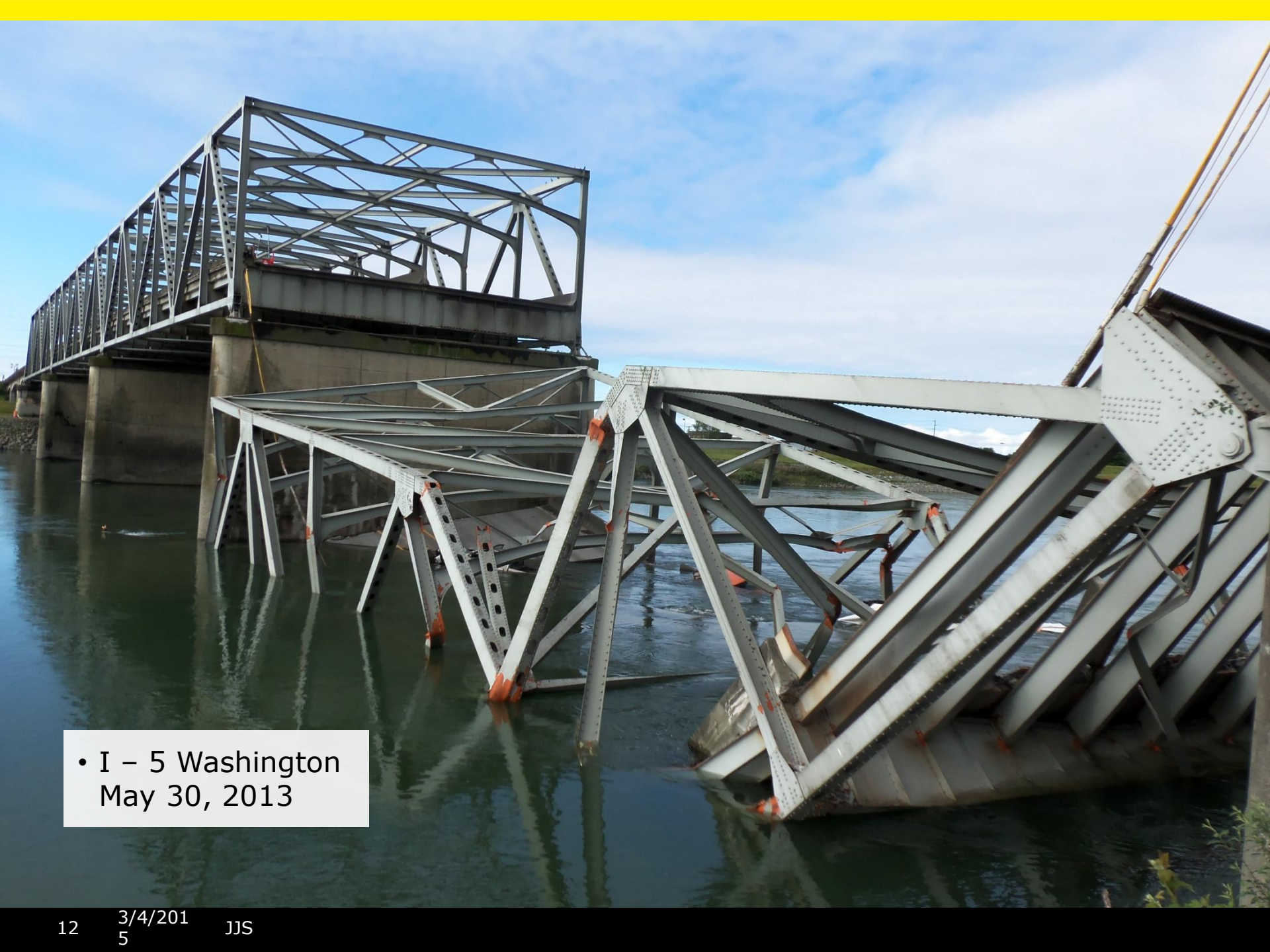


- HL-93 Highway loading Design Compliant (Bi-Directional)



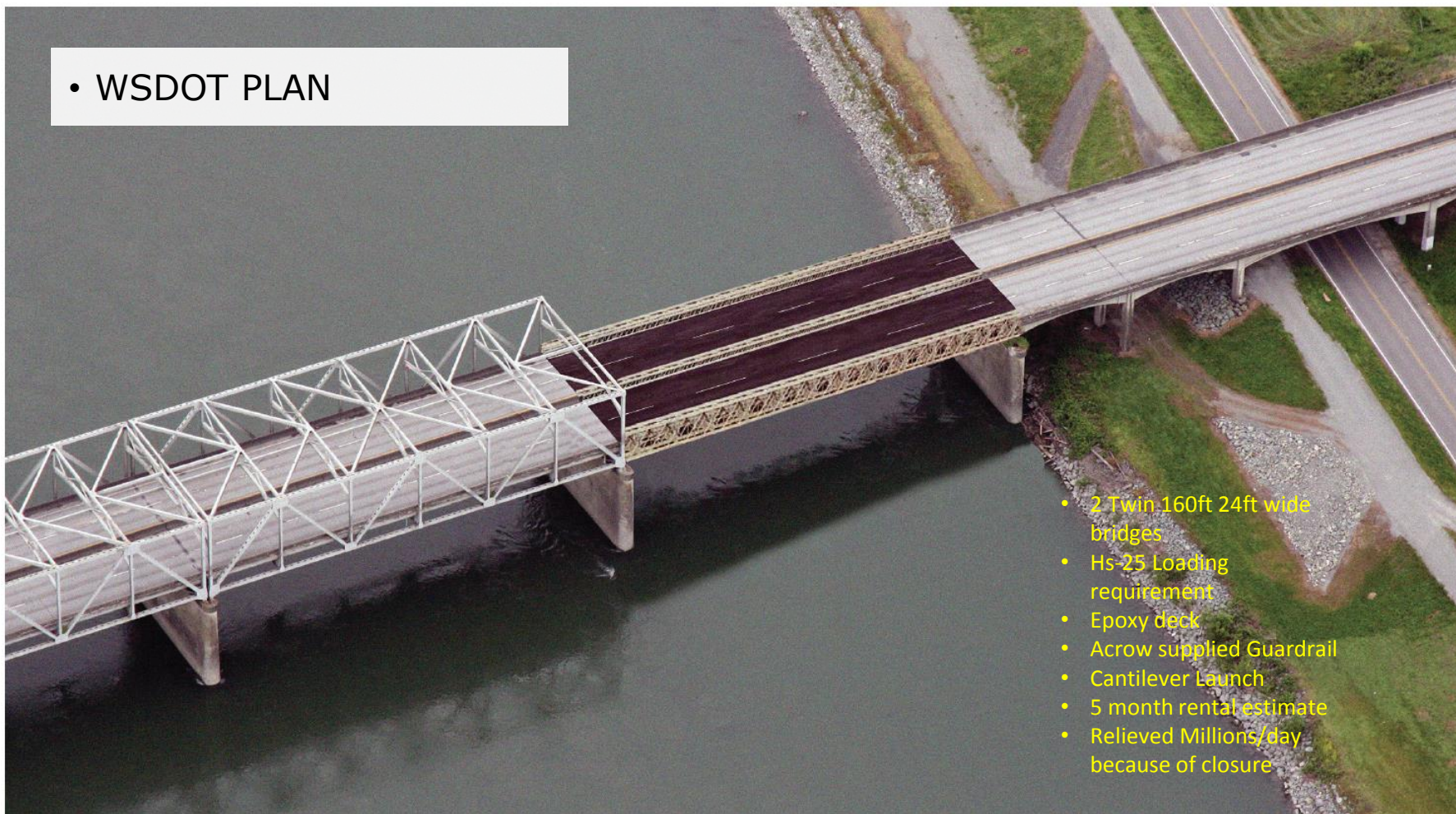
Temp Bridge 3 Veins of work

- Emergency Recovery Works
- Planned Temporary Applications/Interim Bridges
- Permanent Structures



- I - 5 Washington
May 30, 2013

- WSDOT PLAN

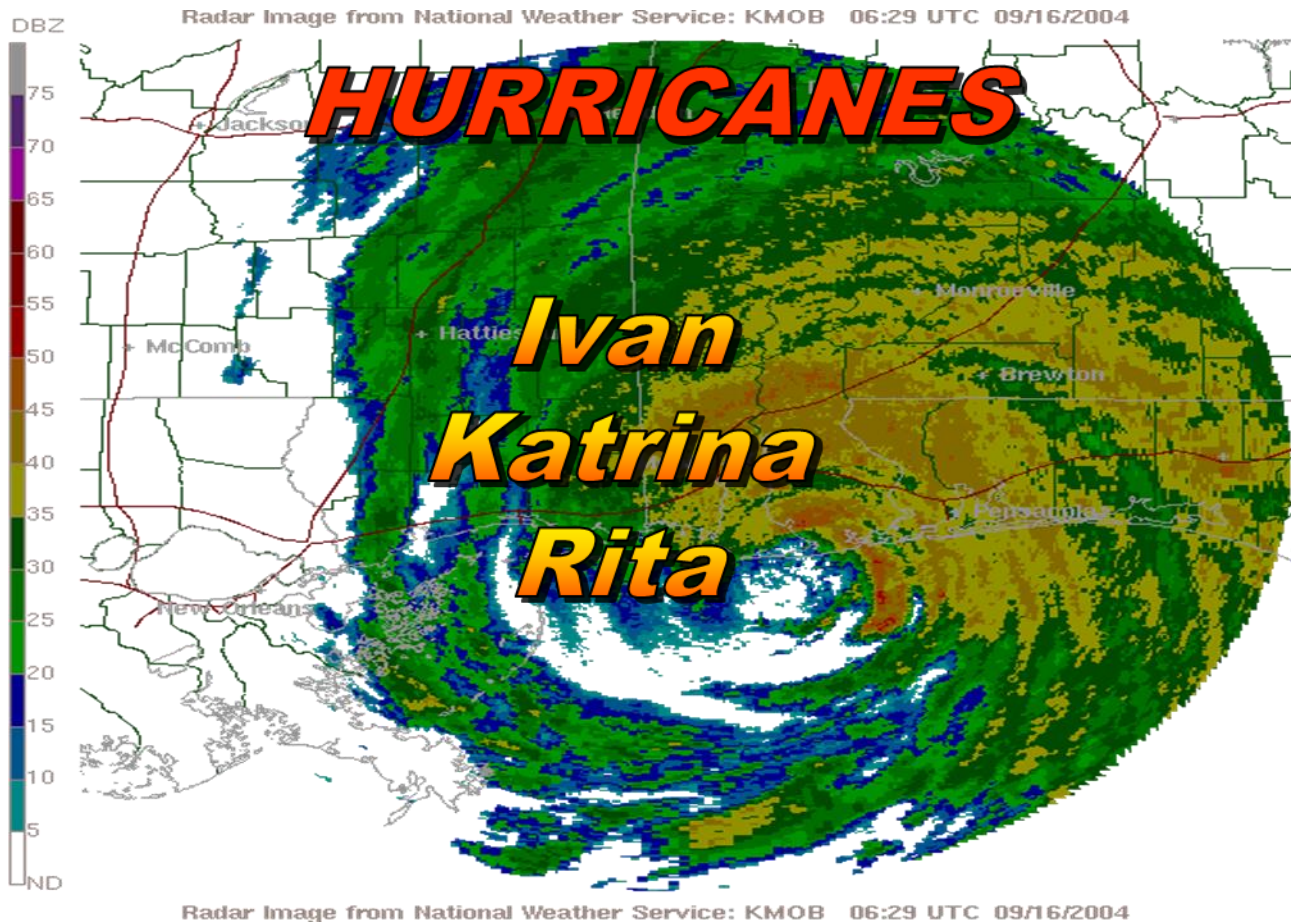


- 2 Twin 160ft 24ft wide bridges
- Hs-25 Loading requirement
- Epoxy deck
- Acrow supplied Guardrail
- Cantilever Launch
- 5 month rental estimate
- Relieved Millions/day because of closure



**Washington State
Department of Transportation**

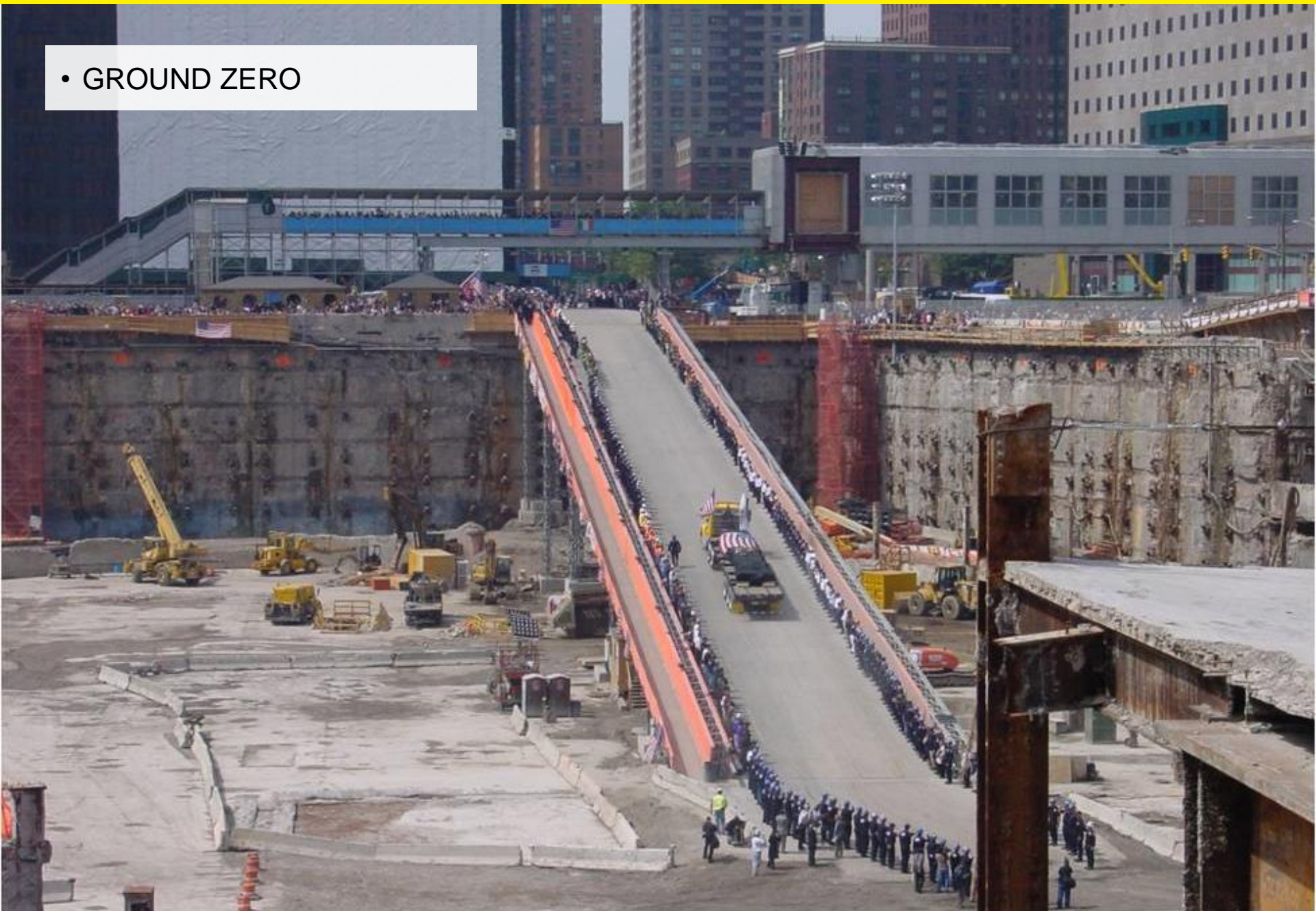
Skagit River Bridge vizualization

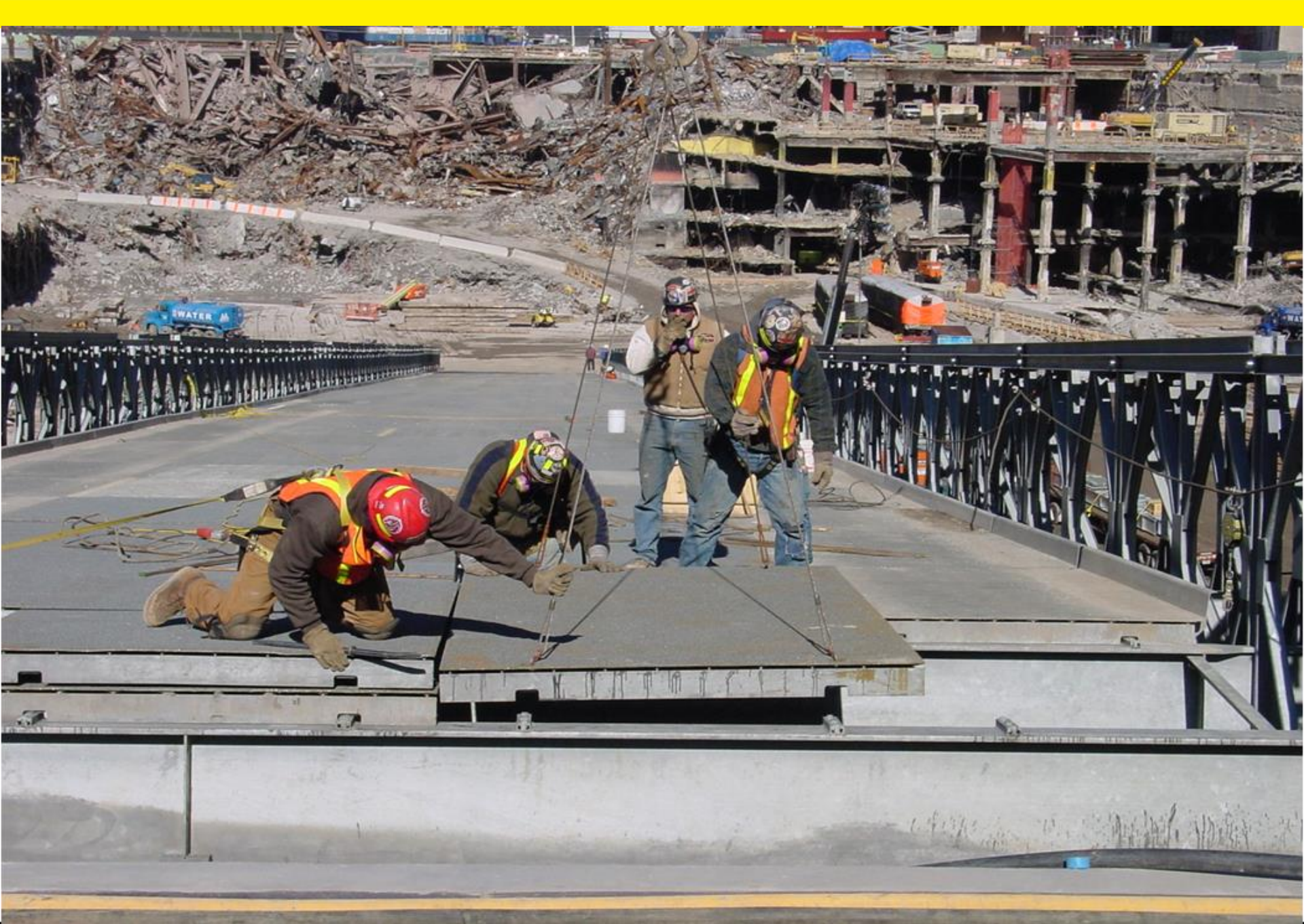


Acrow provides 1 mile of bridge to LADOT and 10000 LF to FLDOT for hurricane recovery

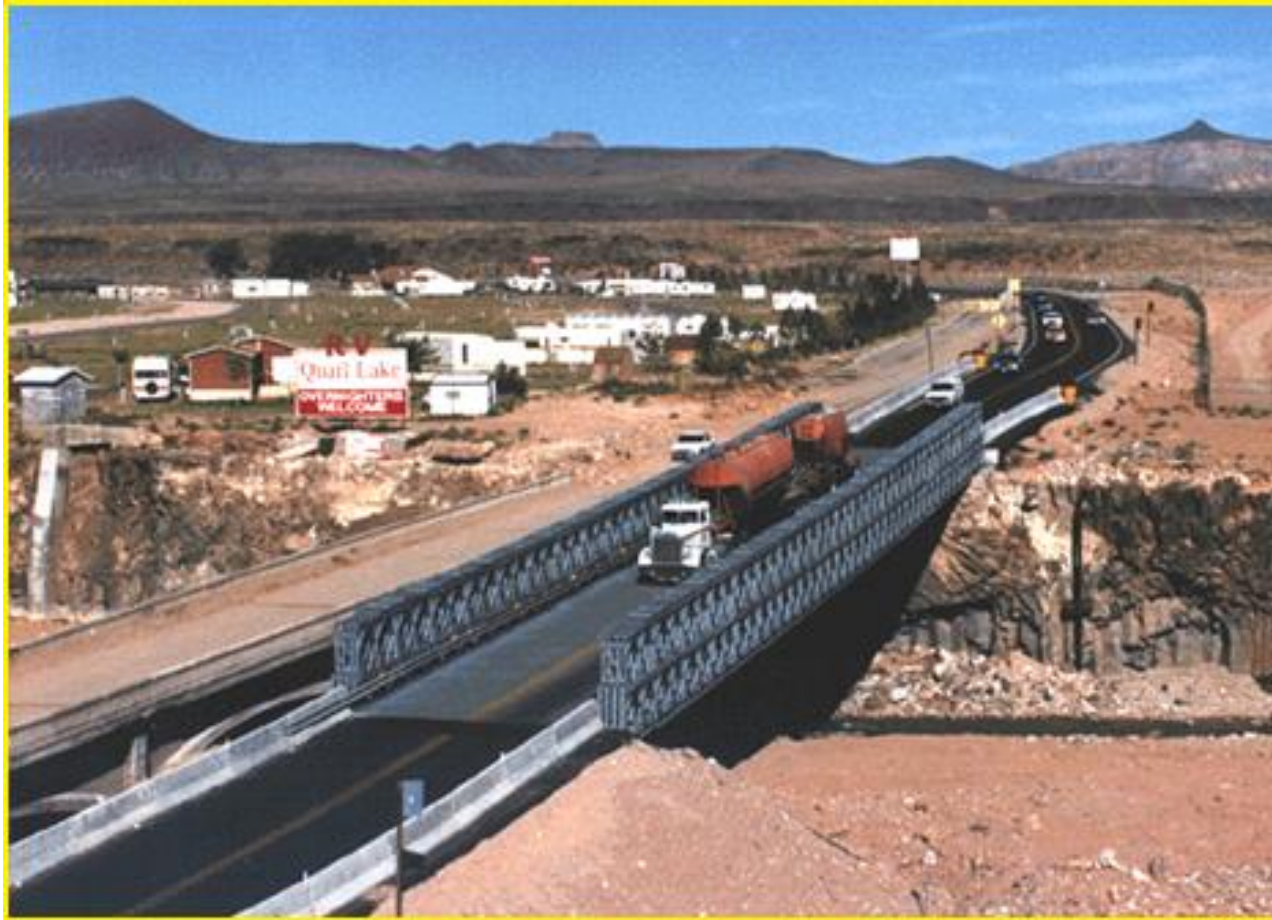


- GROUND ZERO





1990 – Hurricane Utah over Virgin River
Acrow provides bridge to UDOT “temporary”



Acrow Panel Bridge Features and Benefits

Why was it a fit for Division?

- **Rapid Construction – Most are done in Days not Months**
 - **Components available immediately**
- **No cutting or field welding required – Components are ready to assemble**
- **Minimal Machinery Tool and Manpower Required**
- **Manufactured in the USA with Pennsylvania Steel**
- **100 percent reusable components**
- **Meets standards for AASHTO's design for permanent bridging**
- **Galvanized to ASTM 123 for 70 year life**

Applicable Timeline for Division Project

- LNL done for CDOT April 11, CDOT has possible application
- Lift bridge specific presentation April 12
- Quote for site in various configurations April/May 13
- Emergency contract exercised and final quote with revised span length April 14
- Verbal commitment May 14
- LOI/Lease June 14
- Delivery Aug 7th 14
- Finish build 30 Sept 14

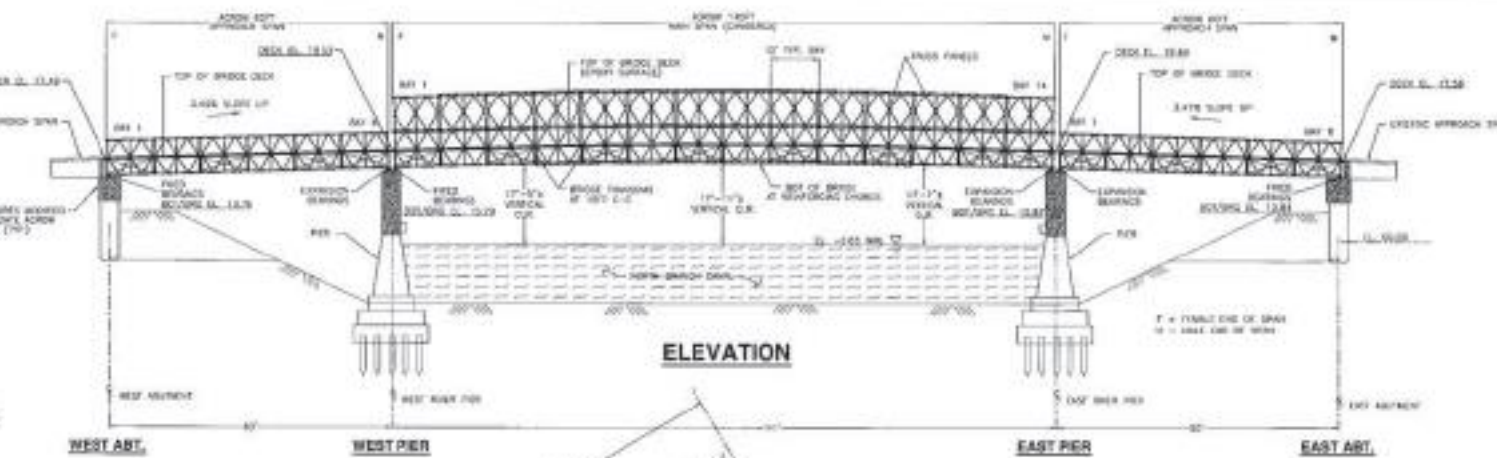
Acrow Hurdles

Hurdles getting project:

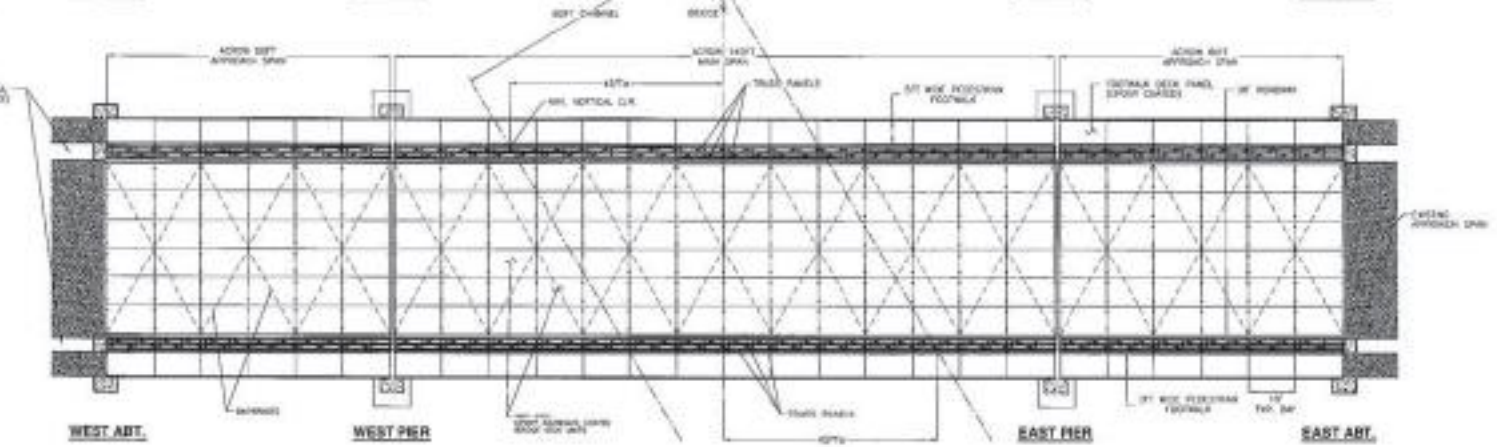
- Long span/Independent span requirement
- HTNB plans call for open grid deck
- How to maintain vertical clearance requirement
- Site profile sloped; not conducive for “typical” cantilevered launch
- Site not suitable for lift in/crane assist
- Design not first choice by CDOT or consultant (Rolled Beam)
- Of 3 manufacturers, not the lowest cost in initial comparison

Hurdles during project:

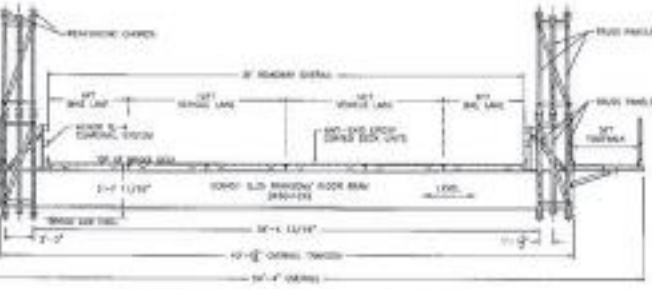
- Special procurement/Specials manufactured/out of cycle demands for shipping deadlines
- Project Site difficulties/Extremely complex launch
- Unique requirements from CDOT including deck drain analysis and mfg certs requirement for everything
- Tight project window 90 days total from shut of old bridge to first traffic on new
- Extremely laborious from an engineering perspective



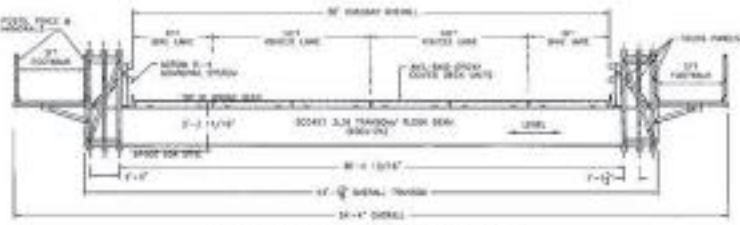
ELEVATION



PLAN



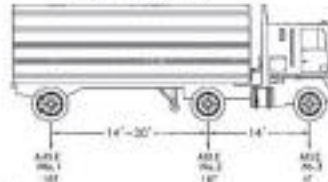
ACROW BRIDGE MAIN SPAN SECTION (140FT)



ACROW BRIDGE APPROACH SECTION (80FT)

- BRIDGE DECK**
- 12" DECK WITH CURB
 - TOP FINISH STANDARD SPECIFICATIONS FOR HOTBIT BRIDGE AND CURB
- LIVE LOAD**
- MOVIES HS20-44
 - 70,000 LB LINE LOAD FOR BRIDGE
 - 300 LB LINE LOAD FOR APPROACH
- DECK FLOOR**
- 4" - 6" DECK FLOOR CONCRETE
 - ACROW T-1-4 CURBING SYSTEM
- PIERS**
- 1) BRIDGE CHAIRS, BRACKETS & DETAILS
 - 2) BRIDGE DECK, BRACKETS, DETAILS
 - 3) BRIDGE DECK, BRACKETS, DETAILS
 - 4) BRIDGE DECK, BRACKETS, DETAILS
 - 5) BRIDGE DECK, BRACKETS, DETAILS
 - 6) BRIDGE DECK, BRACKETS, DETAILS
 - 7) BRIDGE DECK, BRACKETS, DETAILS
 - 8) BRIDGE DECK, BRACKETS, DETAILS
 - 9) BRIDGE DECK, BRACKETS, DETAILS
 - 10) BRIDGE DECK, BRACKETS, DETAILS
 - 11) BRIDGE DECK, BRACKETS, DETAILS
 - 12) BRIDGE DECK, BRACKETS, DETAILS
 - 13) BRIDGE DECK, BRACKETS, DETAILS
 - 14) BRIDGE DECK, BRACKETS, DETAILS
 - 15) BRIDGE DECK, BRACKETS, DETAILS
 - 16) BRIDGE DECK, BRACKETS, DETAILS
 - 17) BRIDGE DECK, BRACKETS, DETAILS
 - 18) BRIDGE DECK, BRACKETS, DETAILS
 - 19) BRIDGE DECK, BRACKETS, DETAILS
 - 20) BRIDGE DECK, BRACKETS, DETAILS
 - 21) BRIDGE DECK, BRACKETS, DETAILS
 - 22) BRIDGE DECK, BRACKETS, DETAILS
 - 23) BRIDGE DECK, BRACKETS, DETAILS
 - 24) BRIDGE DECK, BRACKETS, DETAILS
 - 25) BRIDGE DECK, BRACKETS, DETAILS
 - 26) BRIDGE DECK, BRACKETS, DETAILS
 - 27) BRIDGE DECK, BRACKETS, DETAILS
 - 28) BRIDGE DECK, BRACKETS, DETAILS
 - 29) BRIDGE DECK, BRACKETS, DETAILS
 - 30) BRIDGE DECK, BRACKETS, DETAILS
 - 31) BRIDGE DECK, BRACKETS, DETAILS
 - 32) BRIDGE DECK, BRACKETS, DETAILS
 - 33) BRIDGE DECK, BRACKETS, DETAILS
 - 34) BRIDGE DECK, BRACKETS, DETAILS
 - 35) BRIDGE DECK, BRACKETS, DETAILS
 - 36) BRIDGE DECK, BRACKETS, DETAILS
 - 37) BRIDGE DECK, BRACKETS, DETAILS
 - 38) BRIDGE DECK, BRACKETS, DETAILS
 - 39) BRIDGE DECK, BRACKETS, DETAILS
 - 40) BRIDGE DECK, BRACKETS, DETAILS
 - 41) BRIDGE DECK, BRACKETS, DETAILS
 - 42) BRIDGE DECK, BRACKETS, DETAILS
 - 43) BRIDGE DECK, BRACKETS, DETAILS
 - 44) BRIDGE DECK, BRACKETS, DETAILS
 - 45) BRIDGE DECK, BRACKETS, DETAILS
 - 46) BRIDGE DECK, BRACKETS, DETAILS
 - 47) BRIDGE DECK, BRACKETS, DETAILS
 - 48) BRIDGE DECK, BRACKETS, DETAILS
 - 49) BRIDGE DECK, BRACKETS, DETAILS
 - 50) BRIDGE DECK, BRACKETS, DETAILS
 - 51) BRIDGE DECK, BRACKETS, DETAILS
 - 52) BRIDGE DECK, BRACKETS, DETAILS
 - 53) BRIDGE DECK, BRACKETS, DETAILS
 - 54) BRIDGE DECK, BRACKETS, DETAILS
 - 55) BRIDGE DECK, BRACKETS, DETAILS
 - 56) BRIDGE DECK, BRACKETS, DETAILS
 - 57) BRIDGE DECK, BRACKETS, DETAILS
 - 58) BRIDGE DECK, BRACKETS, DETAILS
 - 59) BRIDGE DECK, BRACKETS, DETAILS
 - 60) BRIDGE DECK, BRACKETS, DETAILS
 - 61) BRIDGE DECK, BRACKETS, DETAILS
 - 62) BRIDGE DECK, BRACKETS, DETAILS
 - 63) BRIDGE DECK, BRACKETS, DETAILS
 - 64) BRIDGE DECK, BRACKETS, DETAILS
 - 65) BRIDGE DECK, BRACKETS, DETAILS
 - 66) BRIDGE DECK, BRACKETS, DETAILS
 - 67) BRIDGE DECK, BRACKETS, DETAILS
 - 68) BRIDGE DECK, BRACKETS, DETAILS
 - 69) BRIDGE DECK, BRACKETS, DETAILS
 - 70) BRIDGE DECK, BRACKETS, DETAILS
 - 71) BRIDGE DECK, BRACKETS, DETAILS
 - 72) BRIDGE DECK, BRACKETS, DETAILS
 - 73) BRIDGE DECK, BRACKETS, DETAILS
 - 74) BRIDGE DECK, BRACKETS, DETAILS
 - 75) BRIDGE DECK, BRACKETS, DETAILS
 - 76) BRIDGE DECK, BRACKETS, DETAILS
 - 77) BRIDGE DECK, BRACKETS, DETAILS
 - 78) BRIDGE DECK, BRACKETS, DETAILS
 - 79) BRIDGE DECK, BRACKETS, DETAILS
 - 80) BRIDGE DECK, BRACKETS, DETAILS
 - 81) BRIDGE DECK, BRACKETS, DETAILS
 - 82) BRIDGE DECK, BRACKETS, DETAILS
 - 83) BRIDGE DECK, BRACKETS, DETAILS
 - 84) BRIDGE DECK, BRACKETS, DETAILS
 - 85) BRIDGE DECK, BRACKETS, DETAILS
 - 86) BRIDGE DECK, BRACKETS, DETAILS
 - 87) BRIDGE DECK, BRACKETS, DETAILS
 - 88) BRIDGE DECK, BRACKETS, DETAILS
 - 89) BRIDGE DECK, BRACKETS, DETAILS
 - 90) BRIDGE DECK, BRACKETS, DETAILS
 - 91) BRIDGE DECK, BRACKETS, DETAILS
 - 92) BRIDGE DECK, BRACKETS, DETAILS
 - 93) BRIDGE DECK, BRACKETS, DETAILS
 - 94) BRIDGE DECK, BRACKETS, DETAILS
 - 95) BRIDGE DECK, BRACKETS, DETAILS
 - 96) BRIDGE DECK, BRACKETS, DETAILS
 - 97) BRIDGE DECK, BRACKETS, DETAILS
 - 98) BRIDGE DECK, BRACKETS, DETAILS
 - 99) BRIDGE DECK, BRACKETS, DETAILS
 - 100) BRIDGE DECK, BRACKETS, DETAILS

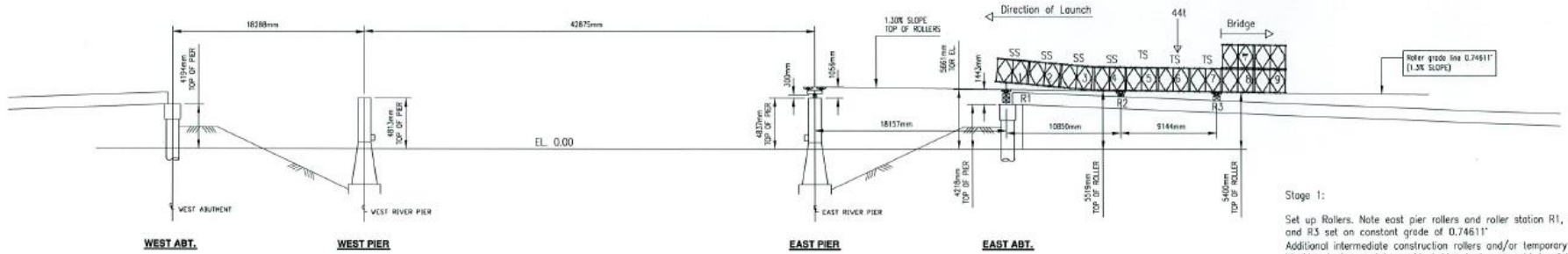
DIAGRAM OF PERMISSIBLE LIVE LOADS - HS20



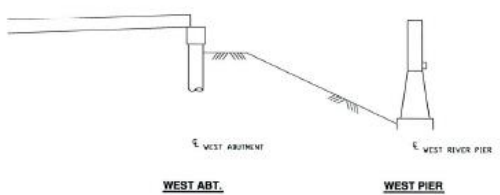
REMARK: TRUCKS ARE NOT TO USE BRIDGE UNLESS SPECIFIED ALTHOUGH HIGH WINDS HAS BEEN NOTED, THE BRIDGE SHALL BE OPEN AT ALL TIMES AND BEING PROTECTED DURING THE PERMISSIBLE LIVE LOADS. IT SHOULD ALSO BE NOTED THAT HEAVY VEHICLES ARE NOT

INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PROVIDED AS INFORMATION. IT IS NEITHER A CONTRACT NOR A WARRANTY. NO LIABILITY FOR NEGLIGENCE, REPRODUCTION OR DISTRIBUTION IS PERMITTED. DISSEMINATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THE LEGEND, COMPANY AND DATE OF

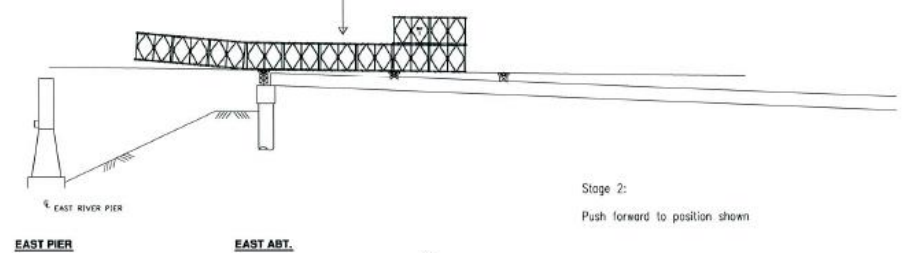
DATE	BY	APPV	<p>ACROW BRIDGE</p> <p>Building Bridges. Connecting People.</p> <p>ACROW CORPORATION OF AMERICA 181 New Ross, Parsippany, NJ 07654</p> <p>ACROW FRANK JONES BRIDGE GENERAL PLAN, ELEVATION & SECTION 140FT x 2LANE 36FT W/ 80FT APPROACH S & 3FT WIDE FOOTWALKS DIVISION STREET TEMPORARY BRIDGE OVER NORTH BRANCH CANAL CITY OF CHICAGO, IL</p> <p>SCALE: AS SHOWN</p>
DATE	BY	APPV	
DATE	BY	APPV	



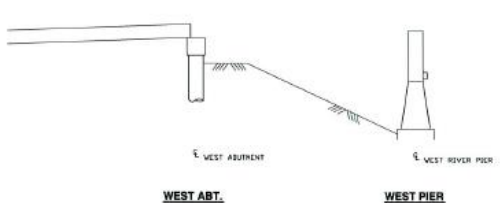
Stage 1:
 Set up Rollers. Note east pier rollers and roller station R1, R2 and R3 set on constant grade of 0.74611'. Additional intermediate construction rollers and/or temporary blocking to be used to enable bridge to be assembled safely. Assemble nose and 2 bays of bridge



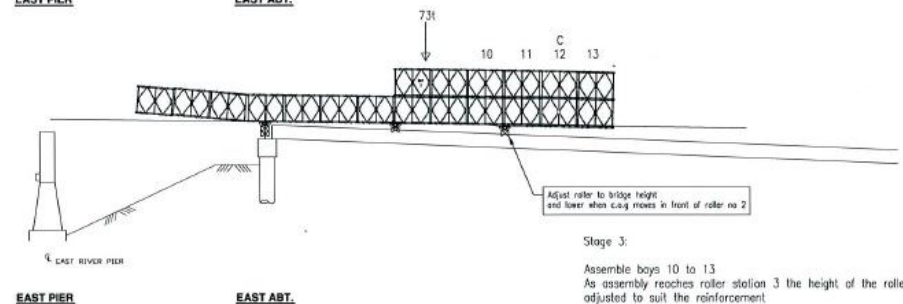
WEST ABUT. WEST PIER



Stage 2:
 Push forward to position shown



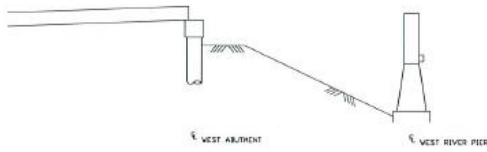
WEST ABUT. WEST PIER



Stage 3:
 Assemble bays 10 to 13. As assembly reaches roller station 3 the height of the roller is adjusted to suit the reinforcement

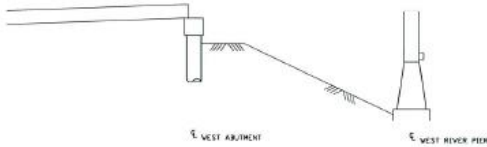
INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED SOLELY FOR THE ADDRESSEE. ANY UNAUTHORIZED DISCLOSURE, REPRODUCTION, OR DISTRIBUTION IS PROHIBITED. DUPLICATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THIS LEGEND. 000000 ACROW CORP 2014

APPR.	BY	ACROW BRIDGE	Building Bridges. Connecting People. Acrow Corporation of America 181 New Road, Parsippany, NJ 07054
DESCRIPTION	DATE	SCALE	CONTRACT NO.
AC	JULY 28, 2014	AS SHOWN	
DRAWN BY	SP	DATE	CONTRACT NO.
CHECKED BY	SP	SCALE	AS SHOWN
APPROVED BY	SP		
REV.	DATE	DESCRIPTION	DRAWING NO. REV.
		F.H. PASCHEN CHICAGO, IL	AB1664-LP SHT 3 OF 3



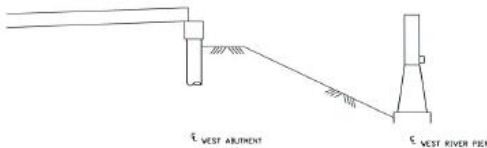
WEST ABT.

WEST PIER



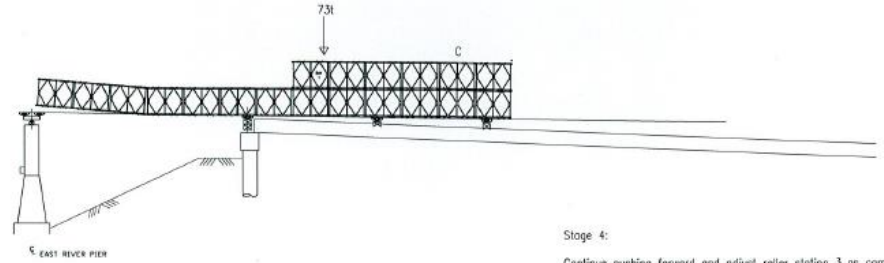
WEST ABT.

WEST PIER

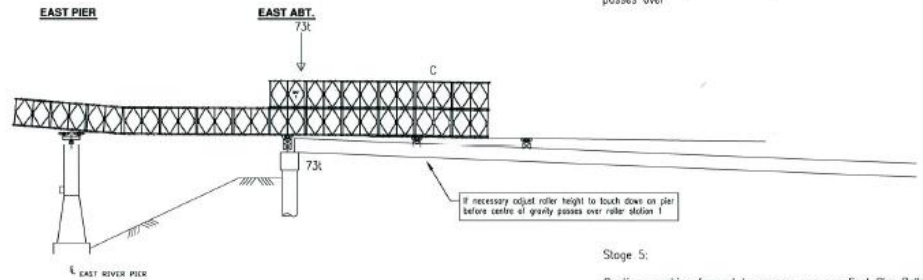


WEST ABT.

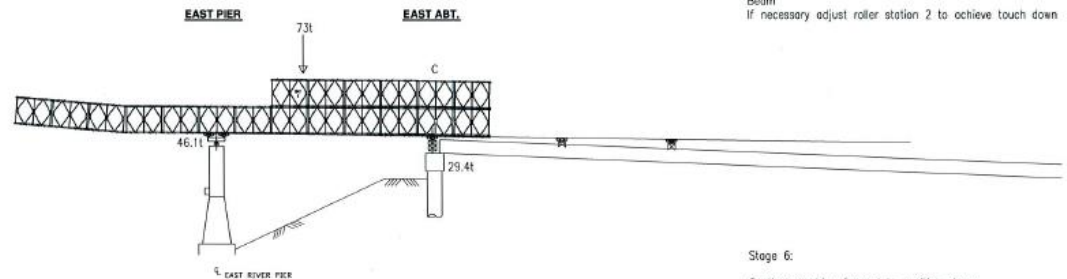
WEST PIER



Stage 4:
Continue pushing forward and adjust roller station 3 as camber passes over



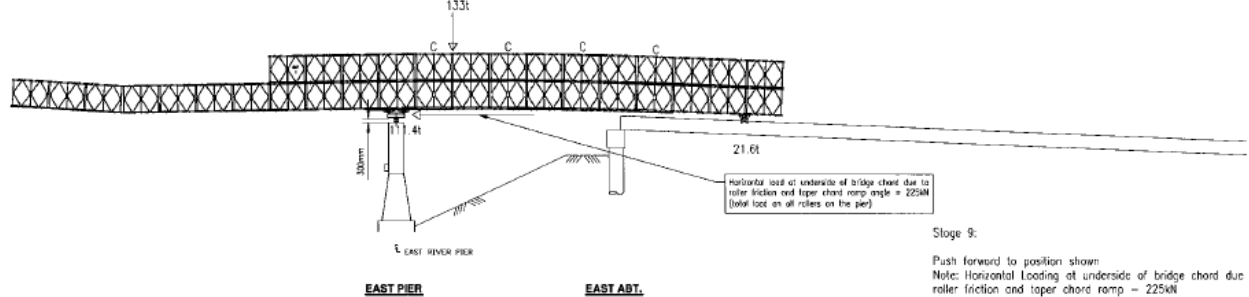
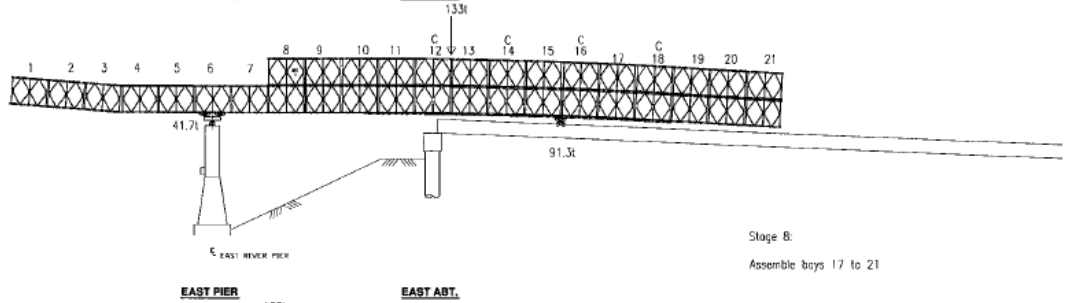
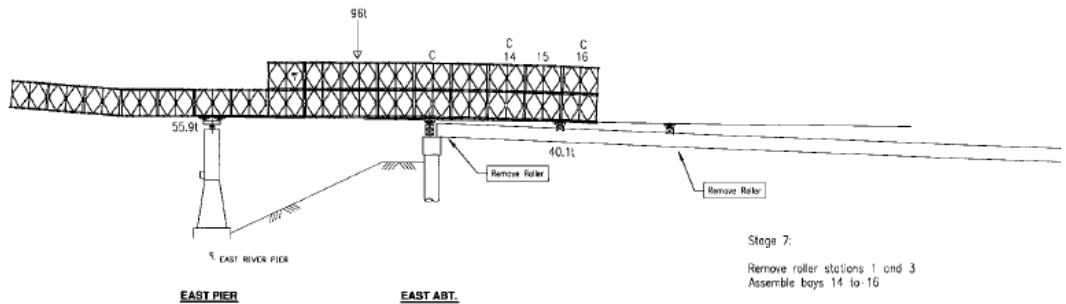
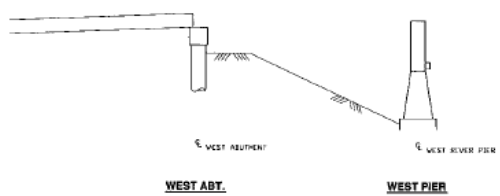
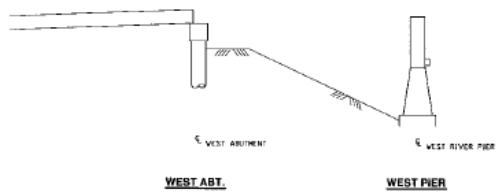
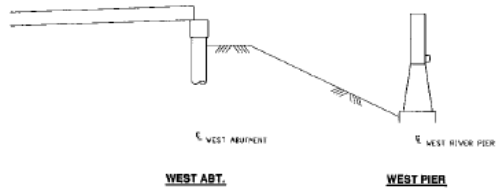
Stage 5:
Continue pushing forward to engage nose on East Pier Balance Beam
If necessary adjust roller station 2 to achieve touch down



Stage 6:
Continue pushing forward to position shown

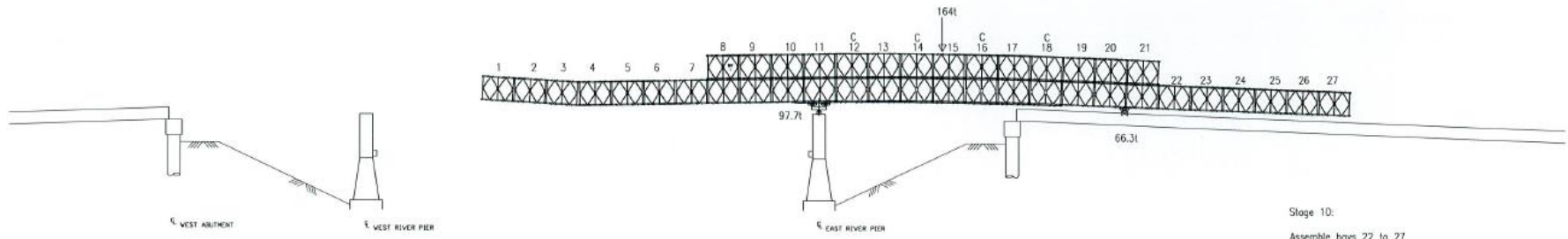
INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED SOLELY FOR THE ADDRESSEE. ANY UNAUTHORIZED DISCLOSURE, REPRODUCTION, OR DISTRIBUTION IS PROHIBITED. DUPLICATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THIS LEGEND. (07/2014) ACROW 0209 2014

BY:	ACROW BRIDGE			Building Bridges. Connecting People. Acrow Corporation of America 181 New Road, Parsippany, NJ 07054
DESCRIPTION:	ACROW PANEL 700XS BRIDGE LAUNCHING SEQUENCE 140FT x 2LANE 36FT W/ 60FT APPROACH SPANS & 5FT WIDE FOOTWALKS DIVISION STREET TEMPORARY BRIDGE OVER NORTH BRANCH CANAL CITY OF CHICAGO, IL			
DATE:	DRAWN BY: <u>AC</u>	DATE: <u>JULY 28, 2014</u>	CONTRACT NO. _____	
	CHECKED BY: <u>SP</u>	SCALE: AS SHOWN		
	APPROVED BY: <u>SP</u>			
	F.H. PASCHEN CHICAGO, IL			DRAWING NO. <u>AB1664-LP</u> REV. _____ SHT <u>3</u> OF <u>3</u>



INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED SOLELY FOR THE ADDRESSEE. ANY UNAUTHORIZED DISCLOSURE, REPRODUCTION, OR DISTRIBUTION IS PROHIBITED. DUPLICATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THIS LEGEND. CONSULT ACROW CORP 3114

BY	APR/	ACROW BRIDGE	Building Bridges, Connecting People.	
			Acrow Corporation of America 181 New Road, Parsippany, NJ 07054	
DESCRIPTION		ACROW PANEL 700XS BRIDGE LAUNCHING SEQUENCE 140FT x 2LANE 36FT W/ 60FT APPROACH SPANS & 5FT WIDE FOOTWALKS DIVISION STREET TEMPORARY BRIDGE RIVER NORTH BRANCH CANAL CITY OF CHICAGO, IL		
	DRAWN BY	AC	DATE	JULY 29, 2014
	CHECKED BY	SP	SCALE	AS SHOWN
	APPROVED BY	SP		CONTRACT NO.
REV	DATE			DRAWING NO. A81664-LP
		F.H. PASCHEN CHICAGO, IL	C	REV. SHT 3 OF 3



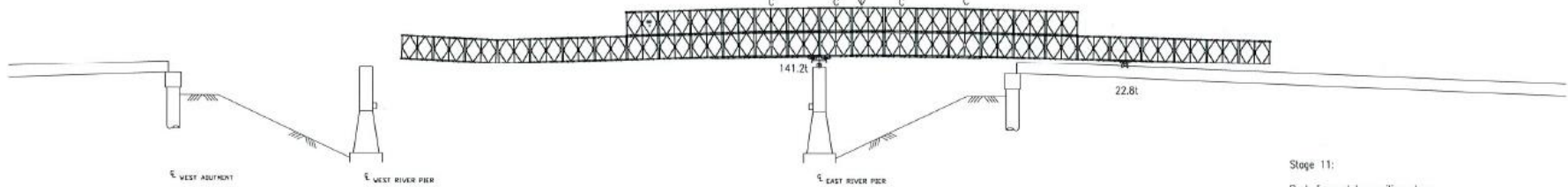
Slope 10:
Assemble bays 22 to 27

WEST ABT.

WEST PIER

EAST PIER

EAST ABT.



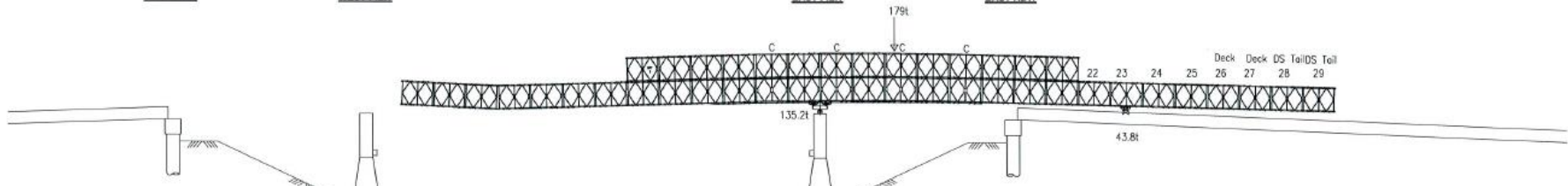
Slope 11:
Push forward to position shown

WEST ABT.

WEST PIER

EAST PIER

EAST ABT.



Slope 12:
Assemble bays 28 to 29
Deck out bays 26 & 27 for counterweight

WEST ABT.

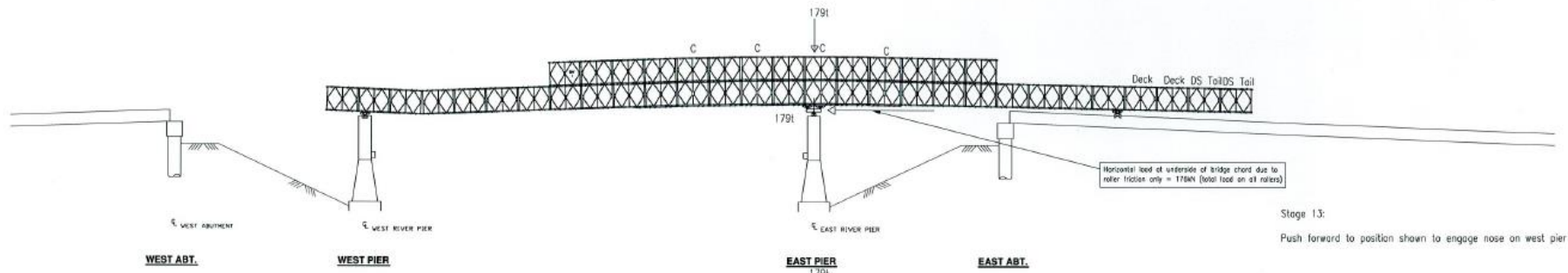
WEST PIER

EAST PIER

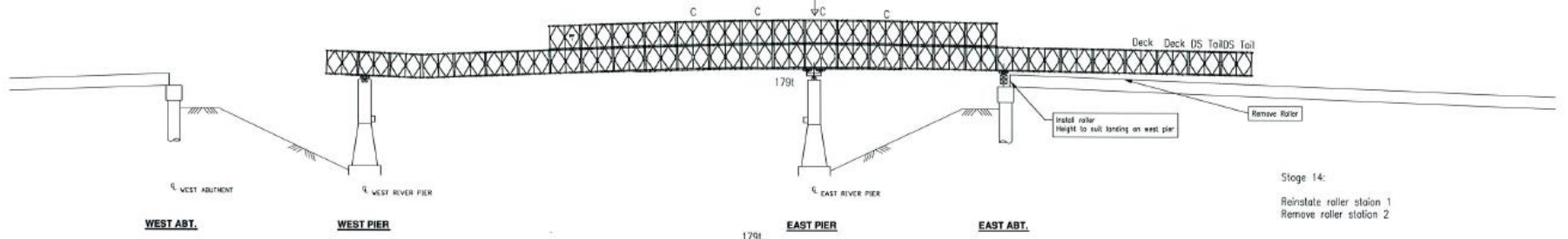
EAST ABT.

INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED SOLELY FOR THE ADDRESSEE. ANY UNAUTHORIZED DISCLOSURE, REPRODUCTION, OR DISTRIBUTION IS PROHIBITED. DUPLICATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THIS LEGEND. ©ACROW 2014

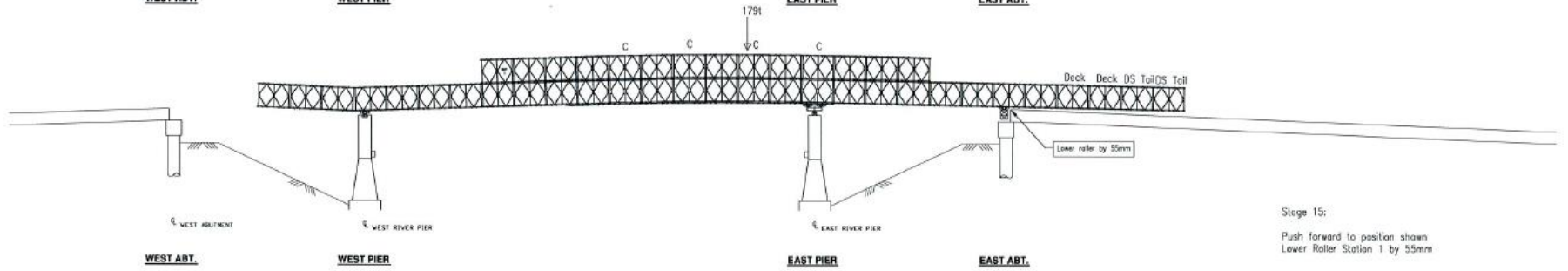
APPRE	ACROW		Building Bridges. Connecting People.	
BR	BRIDGE		Acrow Corporation of America 181 New Road, Parsippany, NJ 07054	
DESCRIPTION	ACROW PANEL 700XS BRIDGE LAUNCHING SEQUENCE 140FT x 2LANE 36FT W/ 60FT APPROACH SPANS & 5FT WIDE FOOTWALKS DIVISION STREET TEMPORARY BRIDGE OVER NORTH BRANCH CANAL CITY OF CHICAGO, IL			
	DRAWN BY	AC	DATE	JULY 28, 2014
	CHECKED BY	SP	SCALE	AS SHOWN
	APPROVED BY	SP		CONTRACT NO.
REV	DATE	F.H. PASCHEN CHICAGO, IL		REV.
				DRAWING NO. AB1664-LP
				SHT 3 OF 3



Stage 13:
Push forward to position shown to engage nose on west pier



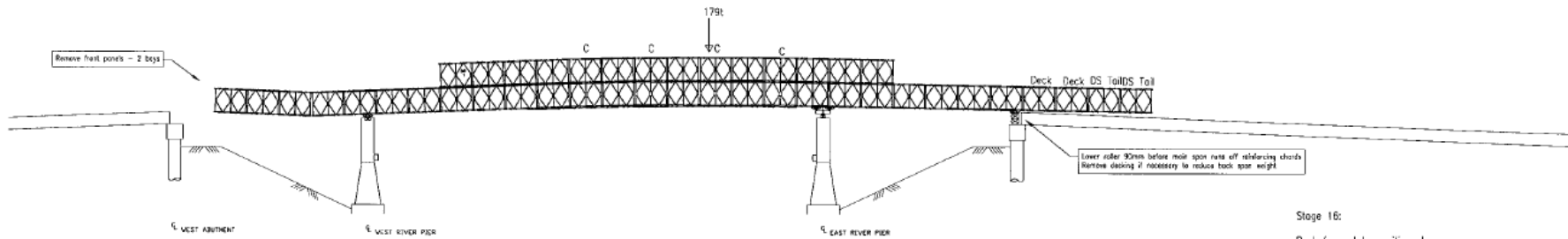
Stage 14:
Reinstall roller station 1
Remove roller station 2



Stage 15:
Push forward to position shown
Lower Roller Station 1 by 55mm

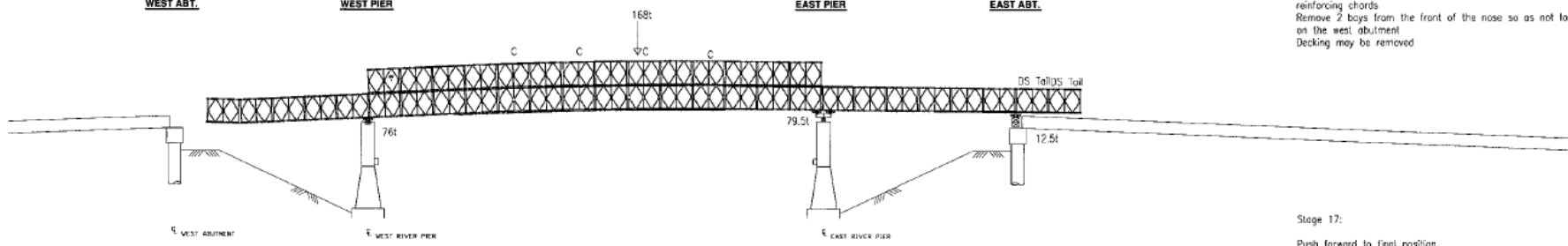
INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED SOLELY FOR THE ADDRESSEE. ANY UNAUTHORIZED DISCLOSURE, REPRODUCTION, OR DISTRIBUTION IS PROHIBITED. DUPLICATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THIS LEGEND. COPYRIGHT ACROW CORP 2014

BY	APPR.	ACROW BRIDGE		Building Bridges. Connecting People. Acrow Corporation of America 181 New Road, Parsippany, NJ 07054
DESCRIPTION	ACROW PANEL 700XS BRIDGE LAUNCHING SEQUENCE 140FT x 2LANE 36FT W/ 60FT APPROACH SPANS 8.9FT WIDE FOOTWALKS DIVISION STREET TEMPORARY BRIDGE DIVER NORTH BRANCH CANAL CITY OF CHICAGO, IL			
DESIGNED BY	AC	DATE	JULY 26, 2014	CONTRACT NO.
CHECKED BY	SP	SCALE	AS SHOWN	
APPROVED BY	SP			
REV. DATE	F.H. PASCHEN CHICAGO, IL		DRAWING NO. AB1664-LP SHT 3 OF 3	



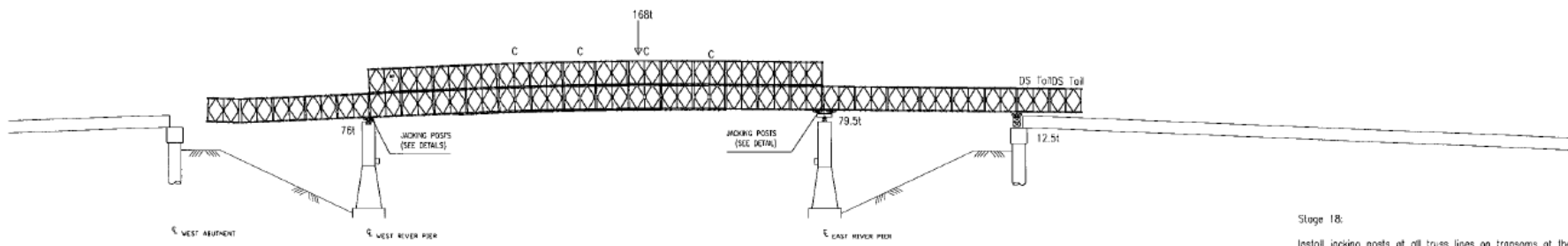
Stage 16:

Push forward to position shown
 Lower roller station 1 by 90mm before main span runs off the reinforcing chords
 Remove 2 bays from the front of the nose so as not to impact on the west abutment
 Decking may be removed



Stage 17:

Push forward to final position

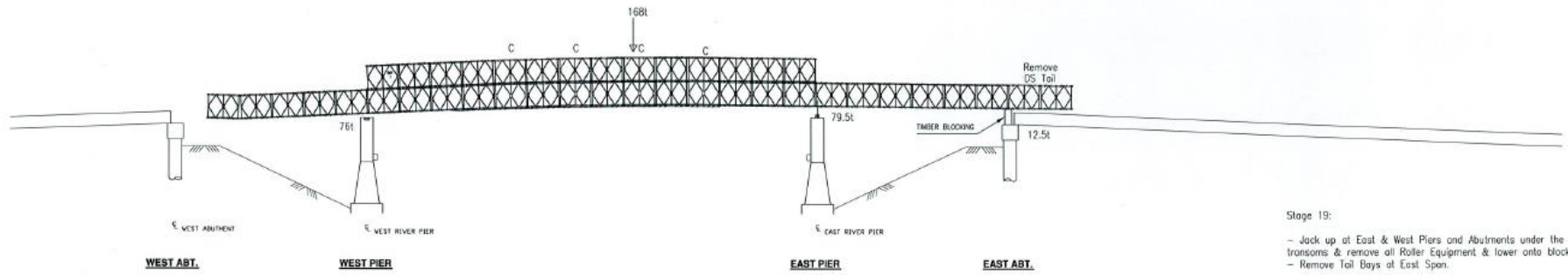


Stage 18:

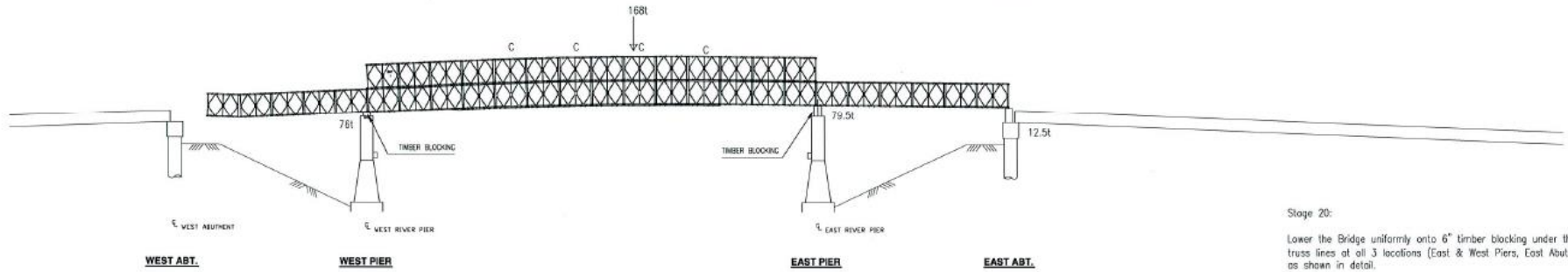
Install jacking posts at all truss lines on transoms at the East & West Pier. (refer to details)

INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED SOLELY FOR THE ADDRESSEE. ANY UNAUTHORIZED DISCLOSURE, REPRODUCTION, OR DISTRIBUTION IS PROHIBITED. DUPLICATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THIS LEGEND. COPYRIGHT ACROW CORP 2014

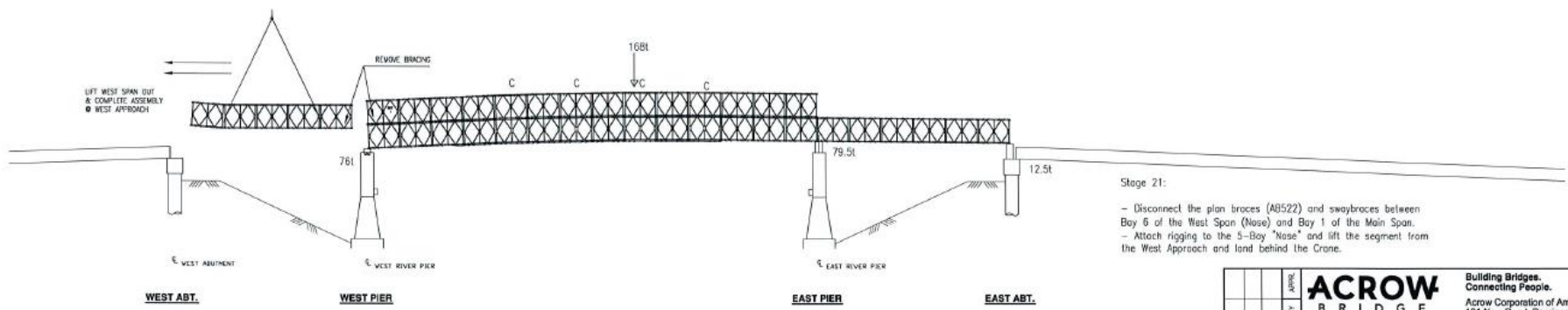
BY	APPR.	ACROW BRIDGE	Building Bridges. Connecting People. Acrow Corporation of America 181 New Road, Parsippany, NJ 07054
DESCRIPTION	DATE	ACROW PANEL 700XS BRIDGE LAUNCHING SEQUENCE 140FT x 2LANE 36FT W/ 50FT APPROACH SPANS & 5FT WIDE FOOTWALKS DIVISION STREET TEMPORARY BRIDGE OVER NORTH BRANCH CANAL CITY OF CHICAGO, IL	
DRAWN BY	SP	SCALE: AS SHOWN	CONTRACT NO.
CHECKED BY	SP		
APPROVED BY	SP		
DATE		F. H. PASCHEN CHICAGO, IL	DRAWING NO. ABI664-LP REV. SHT 3 OF 3



Stage 19:
 - Jack up at East & West Piers and Abutments under the transoms & remove all Roller Equipment & lower onto blocking
 - Remove Tail Bays at East Span.



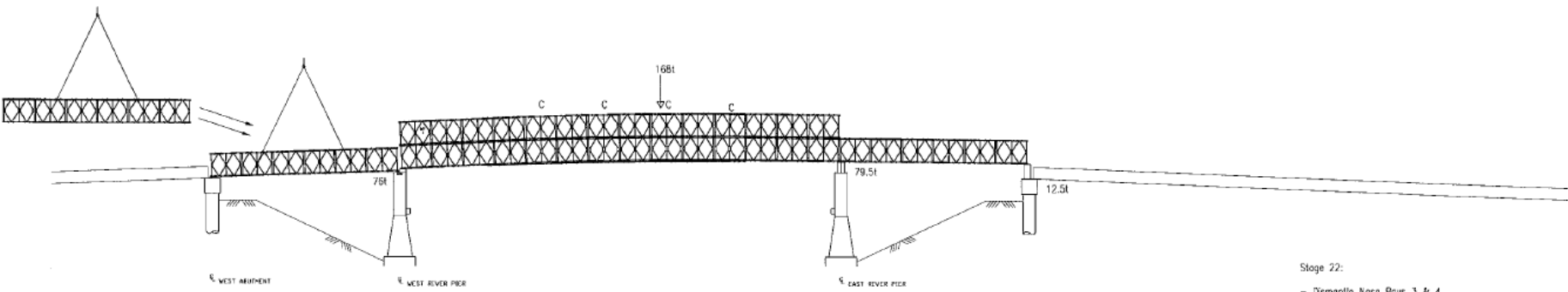
Stage 20:
 Lower the Bridge uniformly onto 6" timber blocking under the truss lines at all 3 locations (East & West Piers, East Abutment) as shown in detail.



Stage 21:
 - Disconnect the plan braces (A0522) and swaybraces between Bay 6 of the West Span (Nose) and Bay 1 of the Main Span.
 - Attach rigging to the 5-Bay "Nose" and lift the segment from the West Approach and land behind the Crane.

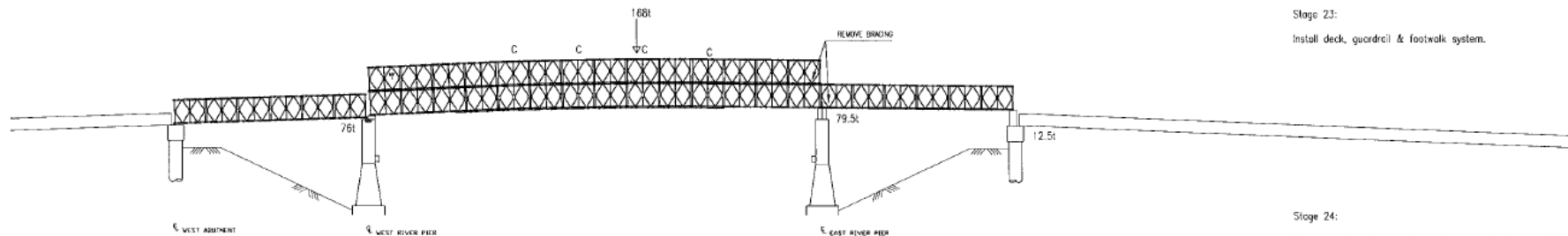
INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED SOLELY FOR THE ADDRESSEE. ANY UNAUTHORIZED DISCLOSURE, REPRODUCTION, OR DISTRIBUTION IS PROHIBITED. DUPLICATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THIS LEGEND. copyright acrow corp 2014

APPR.	ACROW BRIDGE		Building Bridges. Connecting People.
BY			Acrow Corporation of America 181 New Road, Parsippany, NJ 07054
DESCRIPTION	ACROW PANEL 700XS BRIDGE LAUNCHING SEQUENCE 140FT x 2LANE 36FT W/ 60FT APPROACH SPANS & 5FT WIDE FOOTWALKS DIVISION STREET TEMPORARY BRIDGE OVER NORTH BRANCH CANAL CITY OF CHICAGO, IL		
	DRAWN BY	AC	DATE JULY 28, 2014
	CHECKED BY	SP	SCALE: AS SHOWN
	APPROVED BY	SP	CONTRACT NO.
REV.	DATE	F.H. PASCHEN CHICAGO, IL	
		DRAWING NO.	REV.
		AB1664-LP	
		SHT 3 OF 3	



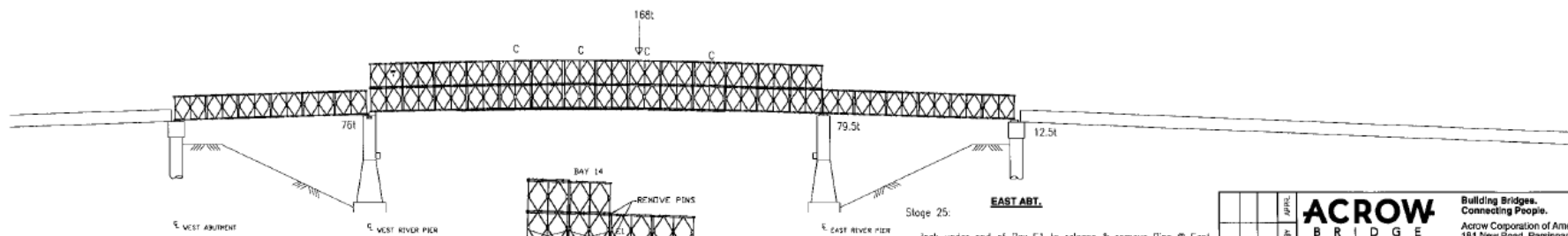
WEST ABT. WEST PIER EAST PIER EAST ABT.

Stage 22:
 - Dismantle Nose Bays 3 & 4.
 - Construct Bays 1, 2 & 1 of the West Span & torque all bolts.
 - Lift the West Span as a unit, and install on bearings at the West Abutment & West Pier.



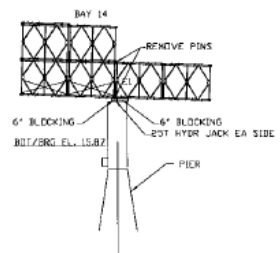
WEST ABT. WEST PIER EAST PIER EAST ABT.

Stage 23:
 Install deck, guardrail & footwalk system.



WEST ABT. WEST PIER EAST PIER EAST ABT.

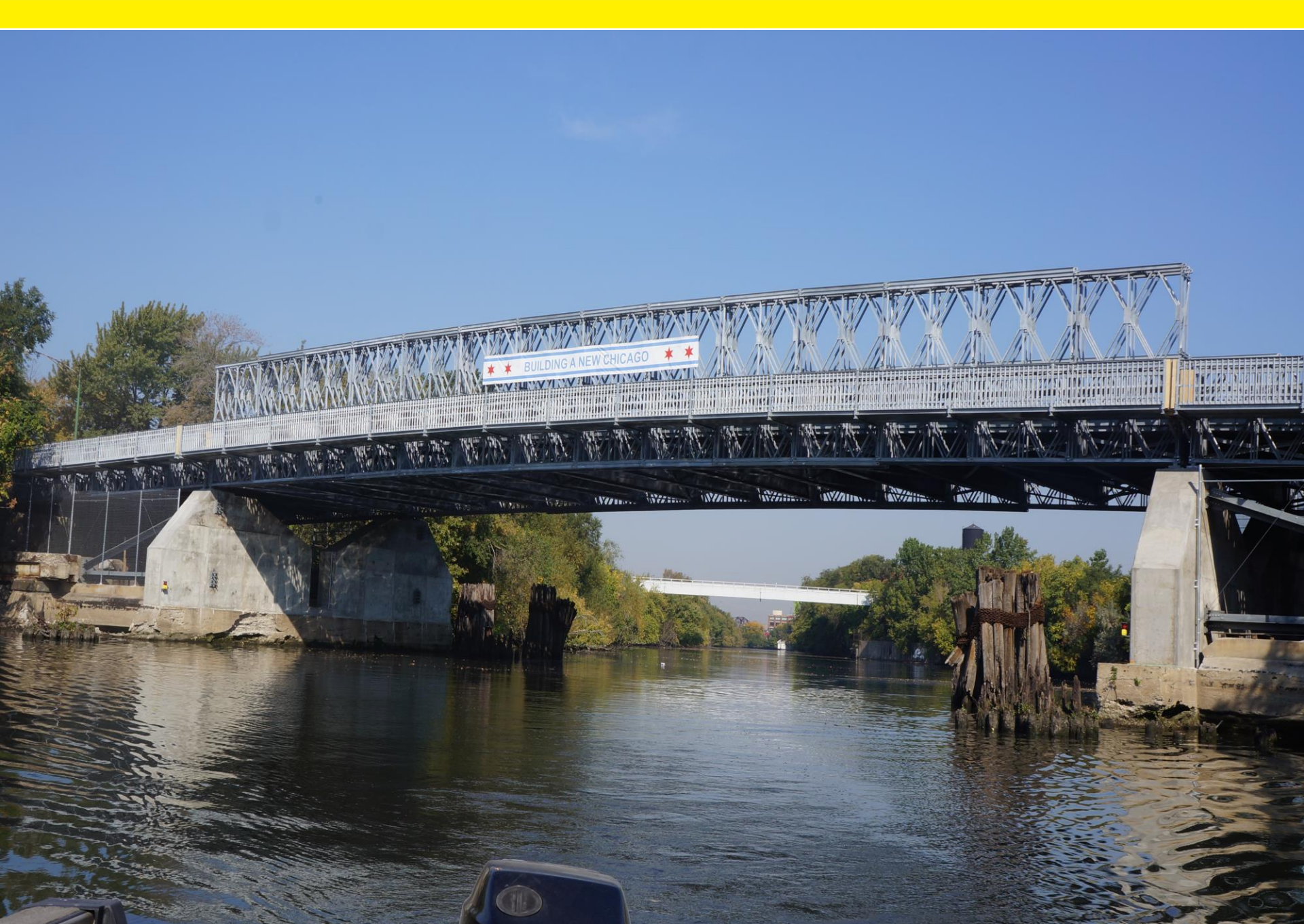
Stage 25:
 - Jack under end of Bay E1 to release & remove Pins @ East Pier Trusses
 - Install blocking & slide plate assembly under the West & East ends of the East Span trusses (see detail)



INFORMATION DISCLOSED HEREIN IS THE PROPERTY OF ACROW CORPORATION OF AMERICA. THIS MATERIAL IS PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED SOLELY FOR THE ADDRESSEE. ANY UNAUTHORIZED DISCLOSURE, REPRODUCTION, OR DISTRIBUTION IS PROHIBITED. DUPLICATION OF ANY PORTION OF THIS DATA SHALL INCLUDE THIS LEGEND. ©2004 ACROW CORP 2014

ACROW BRIDGE Building Bridges. Connecting People. Acrow Corporation of America 181 New Road, Parsippany, NJ 07054	
ACROW PANEL 700X5 BRIDGE LAUNCHING SEQUENCE 140FT x 2LANE 36FT W/ 60FT APPROACH SPANS & 5FT WIDE FOOTWALKS DIVISION STREET TEMPORARY BRIDGE OVER NORTH BRANCH CANAL CITY OF CHICAGO, IL	
DRAWN BY: AC CHECKED BY: SP APPROVED BY: SP	DATE: JULY 29, 2014 SCALE: AS SHOWN CONTRACT NO.
F.H. PASCHEN CHICAGO, IL	DRAWING NO. AB1664-LP SHEET 3 OF 3





★ ★ BUILDING A NEW CHICAGO ★ ★



LOOK AT THAT CAMBER!!!!

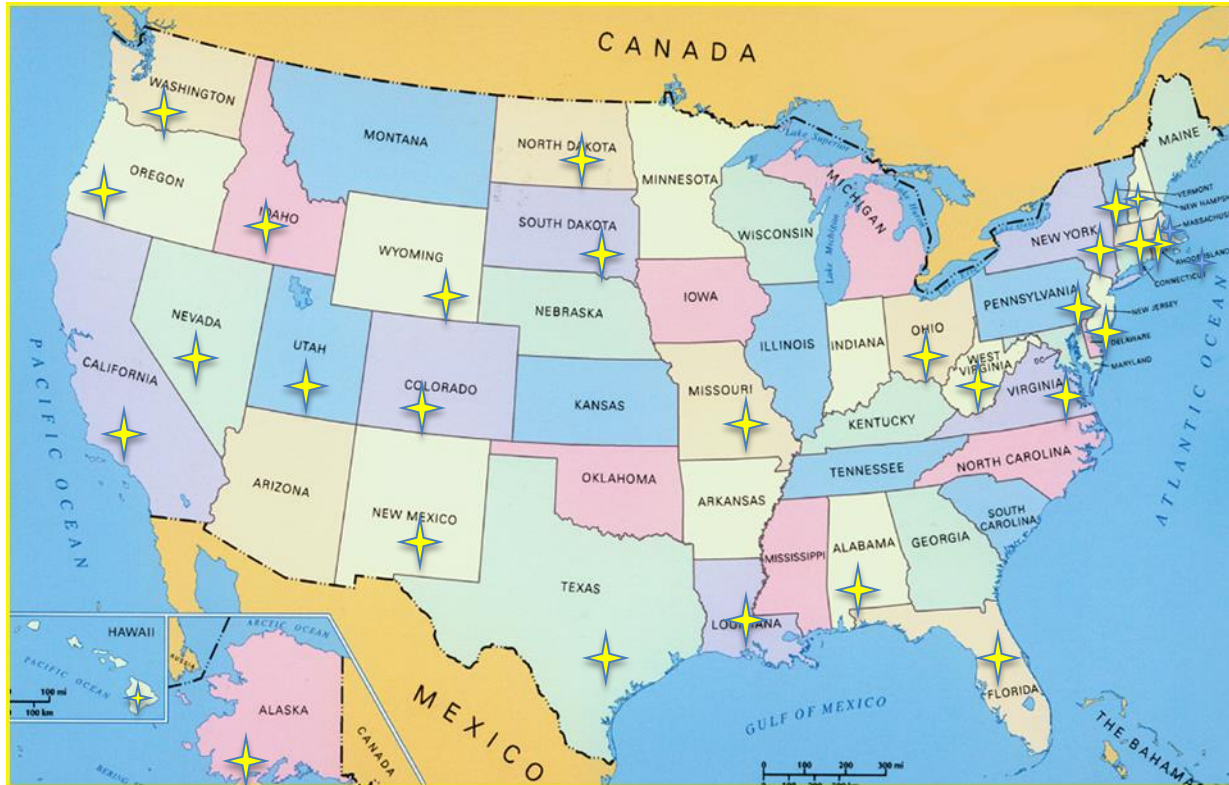




- I-95 CT
- Bridgeport
- 90ft 3L36
- HL-93
- 72 hrs



37 States own Acrow Bridge to handle emergency work and reduce costs in rehab projects



- Planned Temporary



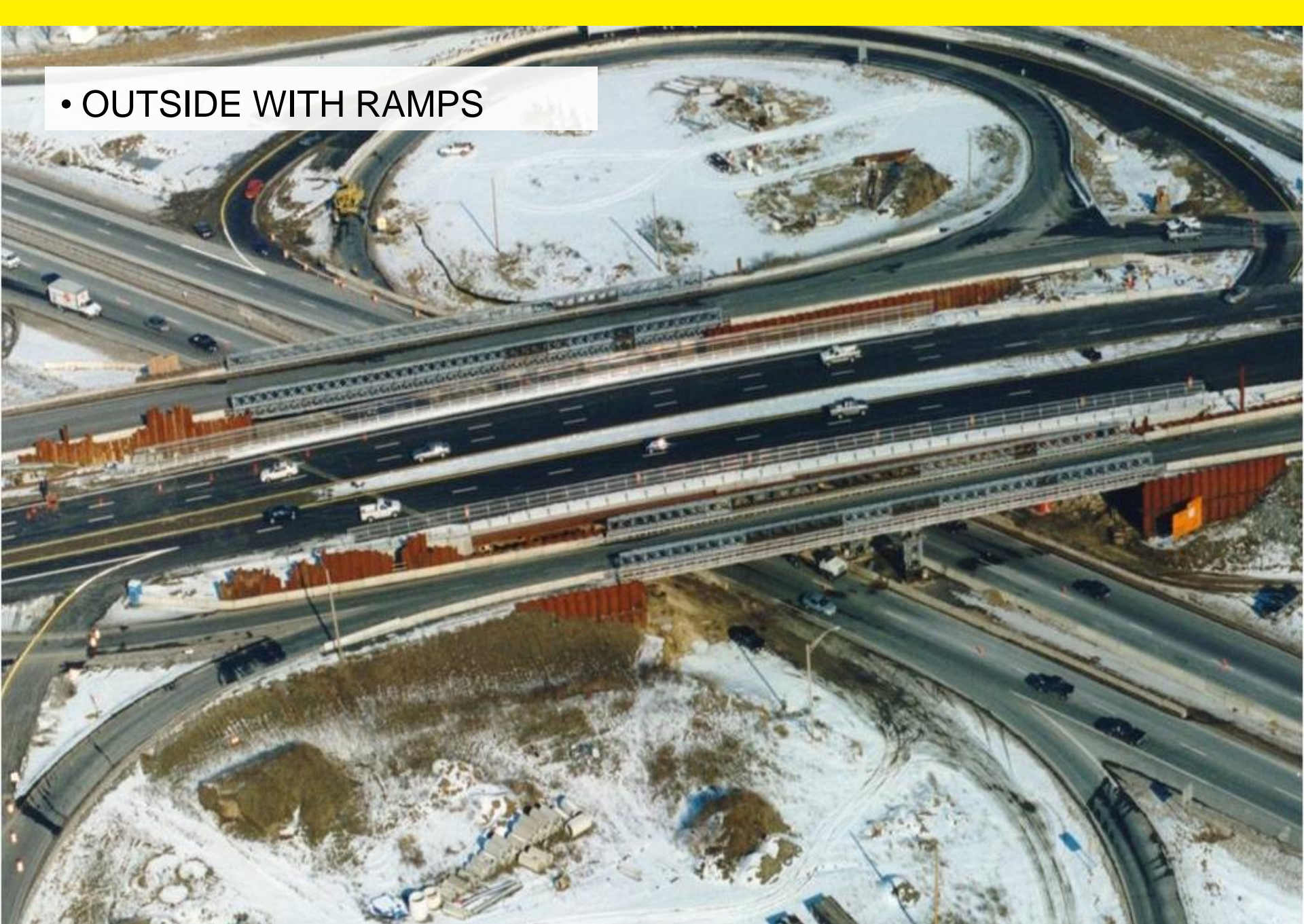
- I-81 PN
- 60k ADT
- 35% Truck Traffic
- Installed for 2.5 years



- Interstate



- OUTSIDE WITH RAMPS



OTHER APPLICATIONS FOR PANEL BRIDGING

- **Not just Detour Bridges**
- **Permanent Bridges**
- **Beam Launches**
- **Railroad Bridges**
- **Heavy Haul Bridges**
 - Mining, Oil & Gas
 - Construction
- **Moveable Bridges**
 - Lift & Bascule

HEAVY DUTY SHORING

False work support

Roof Lifts

Special Beam Lifts

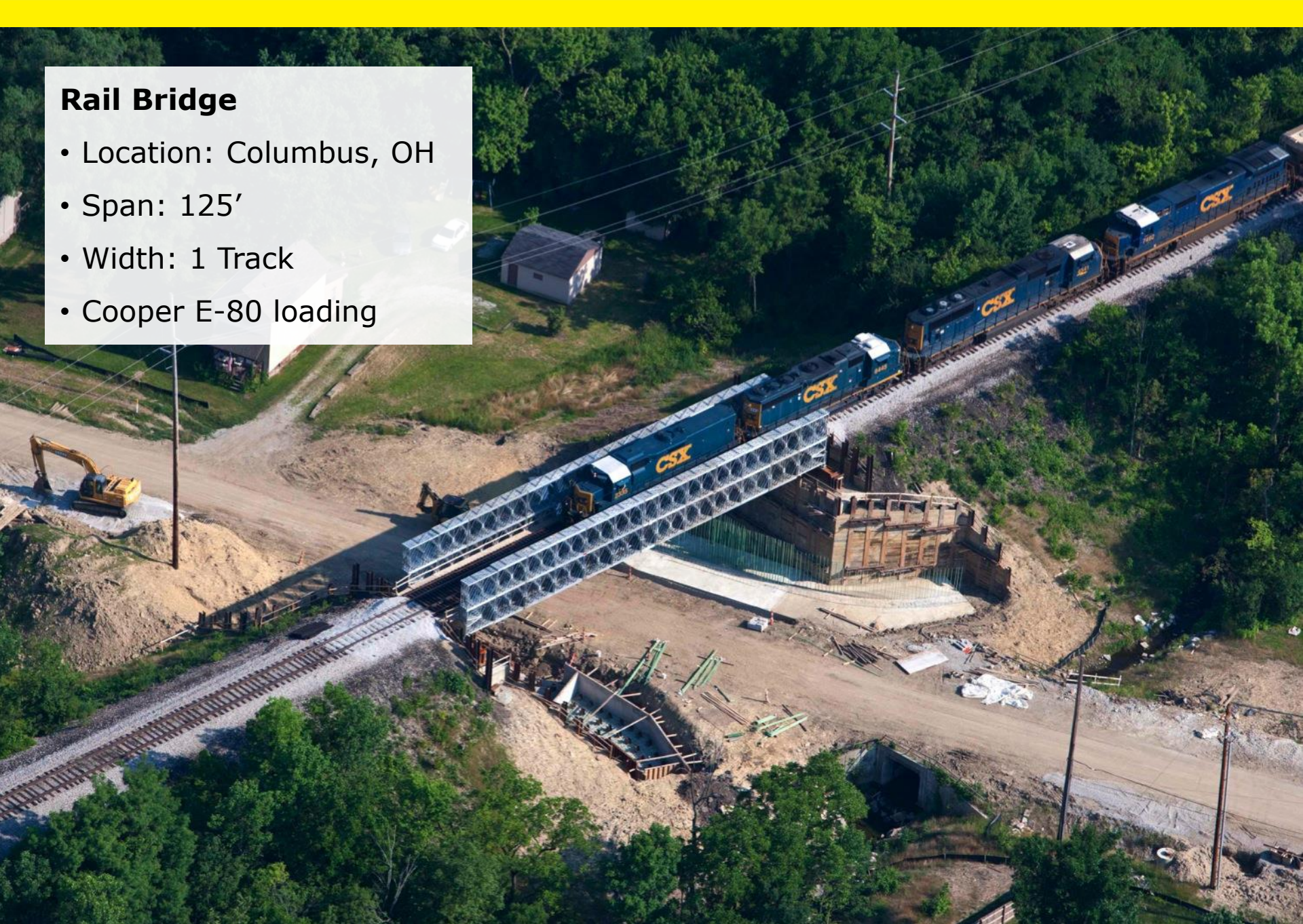
Beam Bridges

- FORE RIVER – Quincy MA



Rail Bridge

- Location: Columbus, OH
- Span: 125'
- Width: 1 Track
- Cooper E-80 loading



- FALSEWORK





• ROOF LIFTS _ BEAM LIFTS

- MILITARY



- TEMPORARY PEDESTRIAN



INSTALLATION METHODS

- LIFT IN
- CRANE ASSISTED LAUNCHING
- FULL CANTILEVERED LAUNCH

• LIFT IN



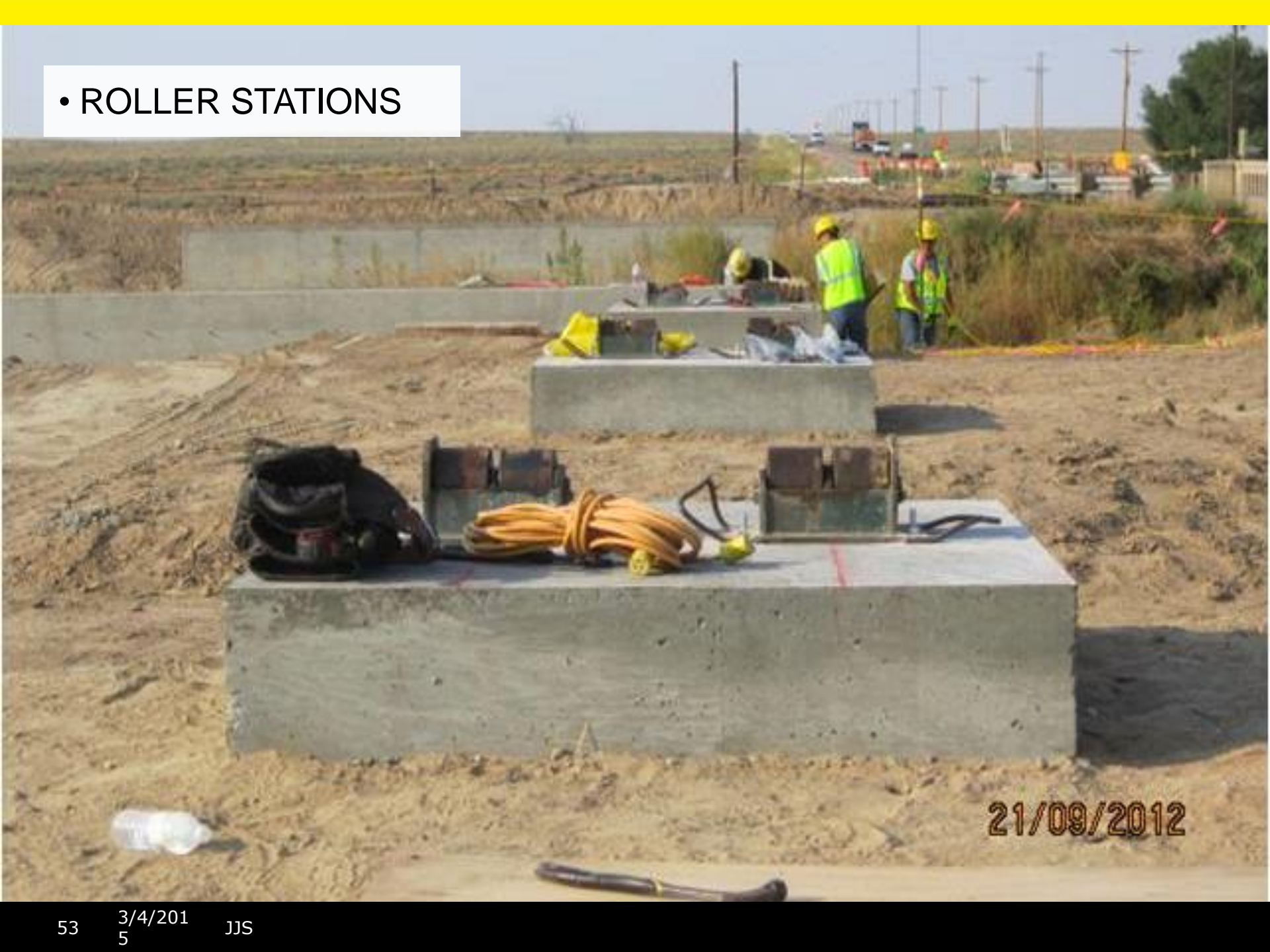
- Counter balanced



- Crane Assisted Launch



- ROLLER STATIONS

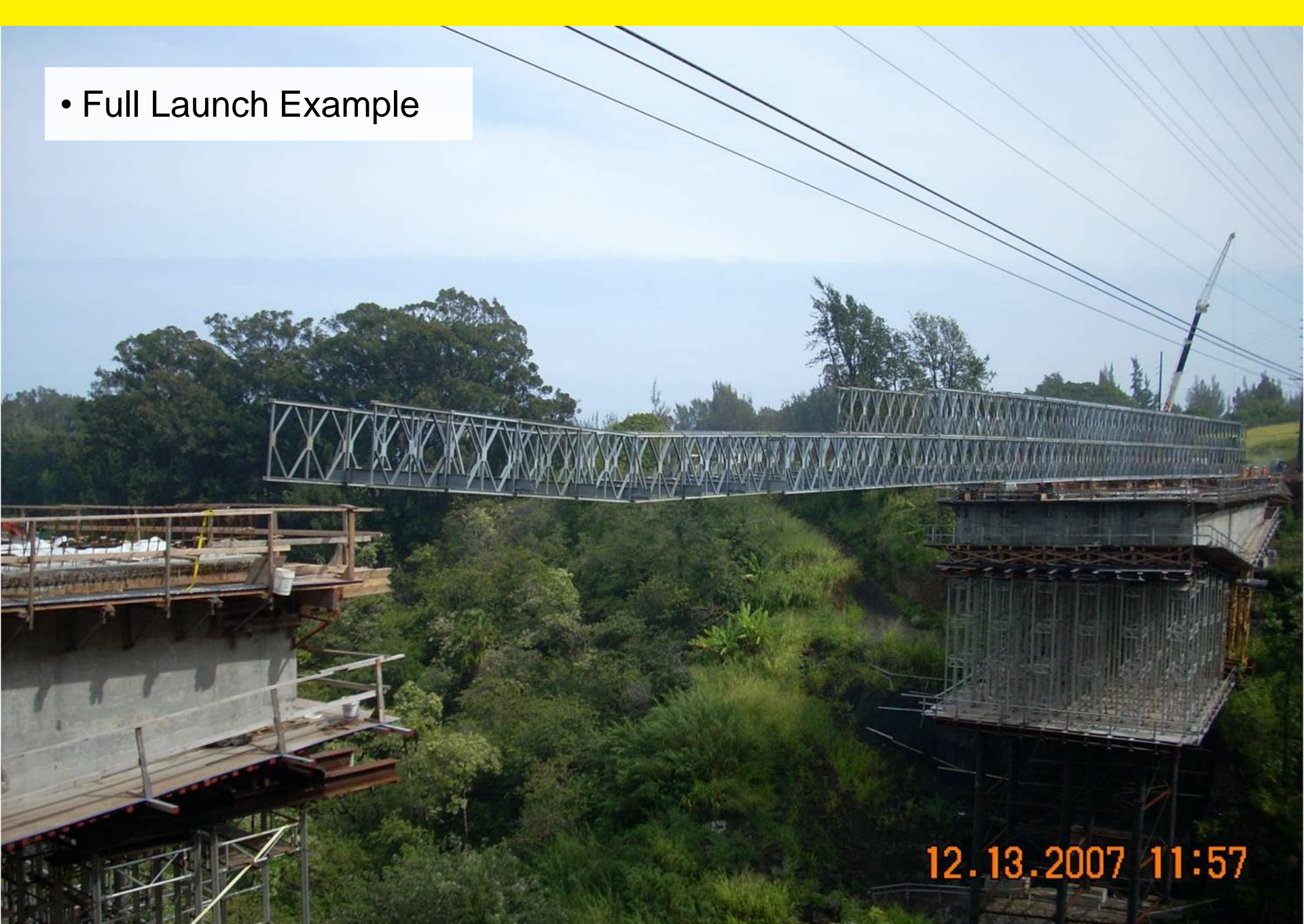


21/09/2012

- Rocking Rollers at abutments



- Full Launch Example



12.13.2007 11:57

- Full Cantilevered Launch

- Kaltag Alaska



FABRICATION

- **AISC Certified Major Bridge**

- Quality US made steel
- All hot dipped Galvanized
- ISO 9001
- AWS inspected

Thank you!

www.acrowusa.com

The logo for ACROW BRIDGE is centered on a yellow rectangular background. The word "ACROW" is written in a large, bold, black sans-serif font. Below it, the word "BRIDGE" is written in a smaller, black sans-serif font, with each letter spaced out.

ACROW
B R I D G E

