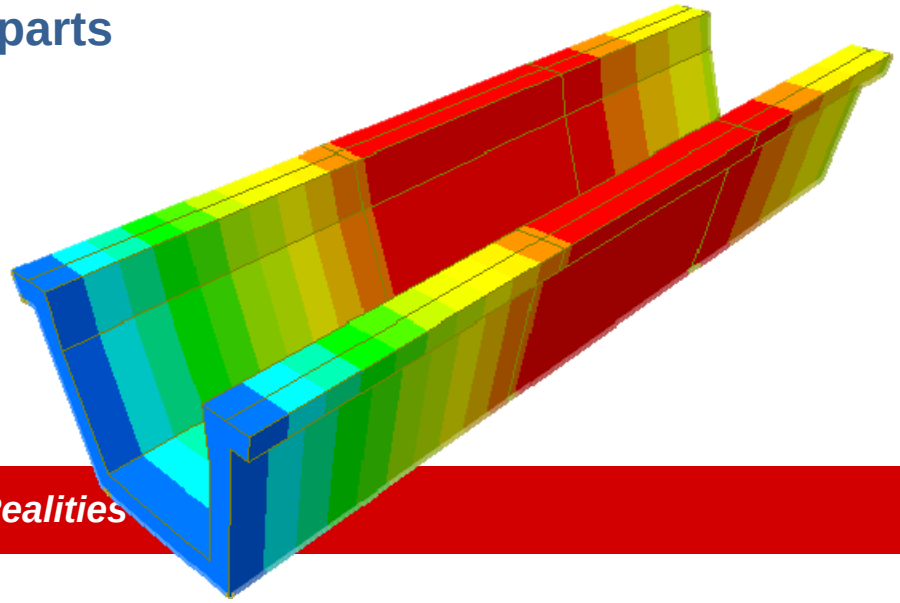
Spliced U girder bridge project

Session 1: Section definition with 3 parts



Bridging Your Innovations to Realities

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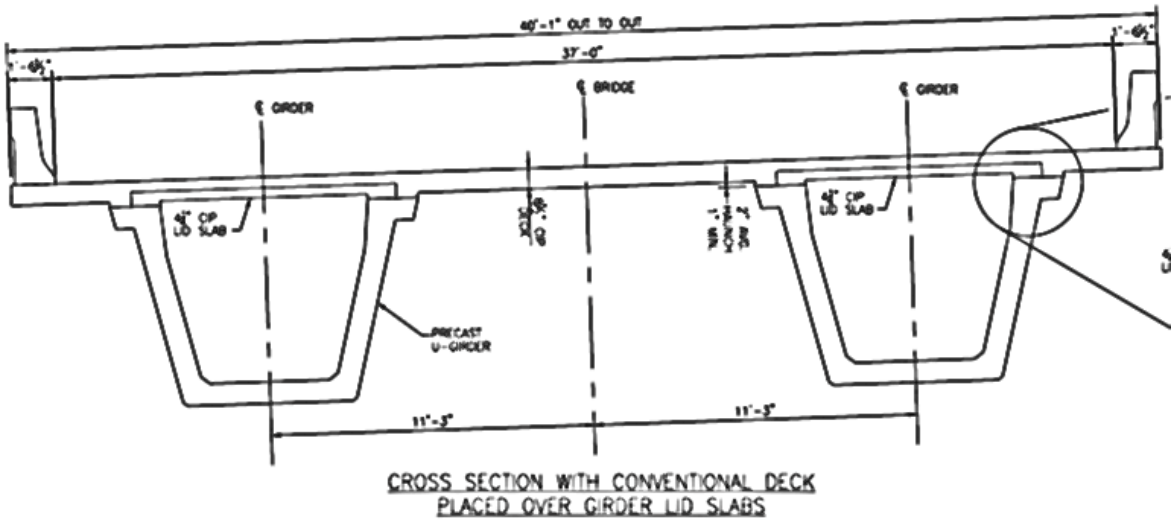
We will cover…

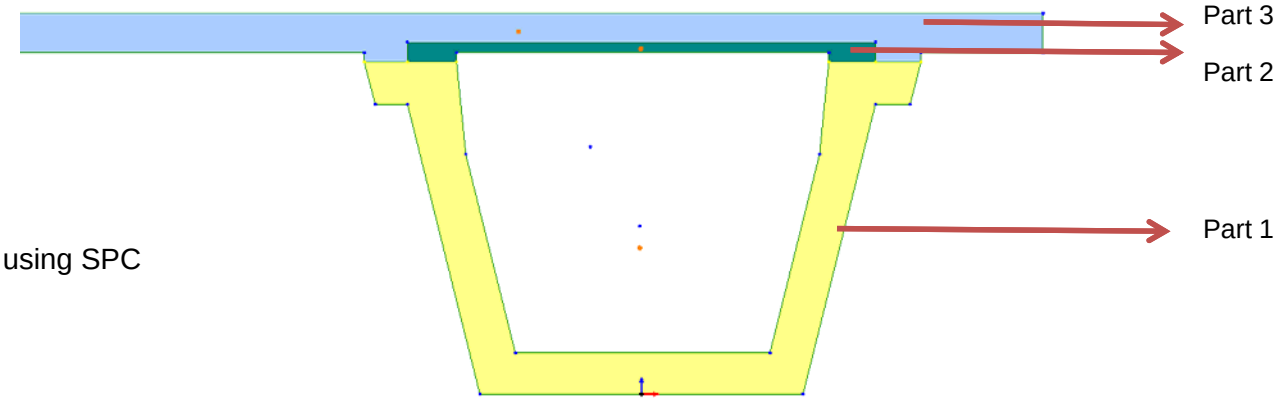
- **Section definition**
  - Using dxf files for user defined sections in SPC
  - Generating Composite sections with multiple parts
  - Importing in midas Civil
  - Simple model
  - Setting up construction stages
  - Construction stage analysis
  - Results

Section



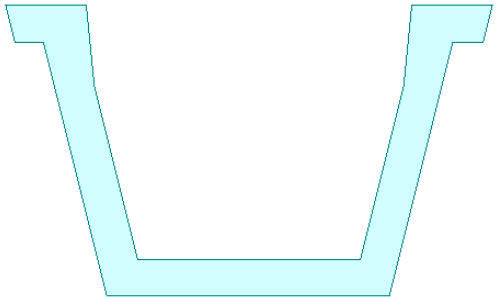
CROSS SECTION WITH CONVENTIONAL DECK PLACED OVER GIRDER LID SLABS

Section created using SPC



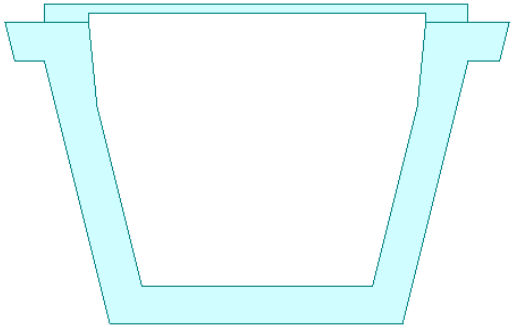
Construction Staging

CS 1



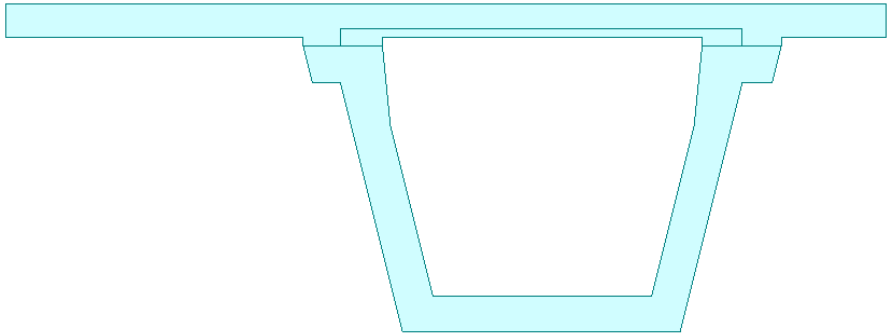
Part 1

CS 2



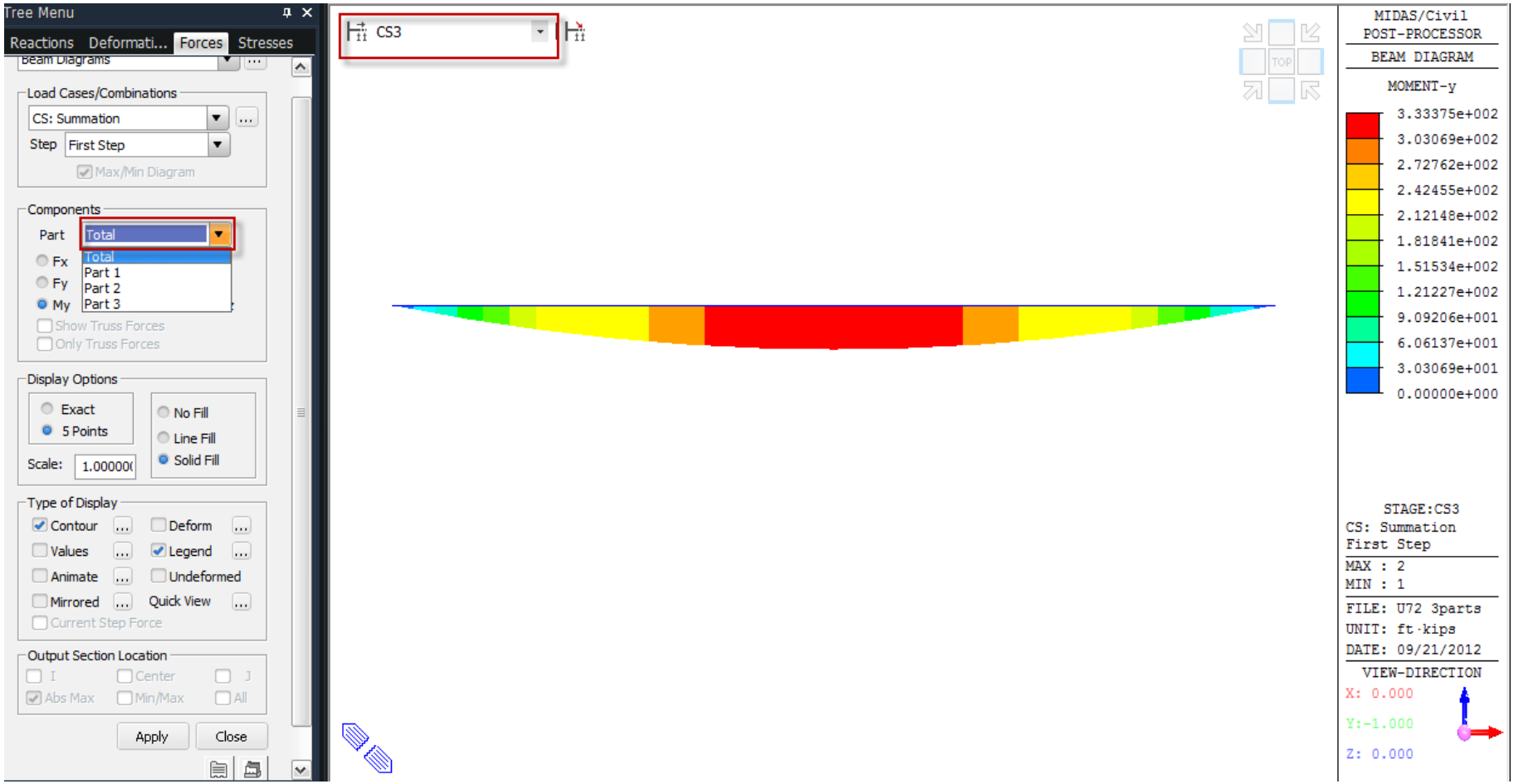
Part 1 + Part 2

CS 3



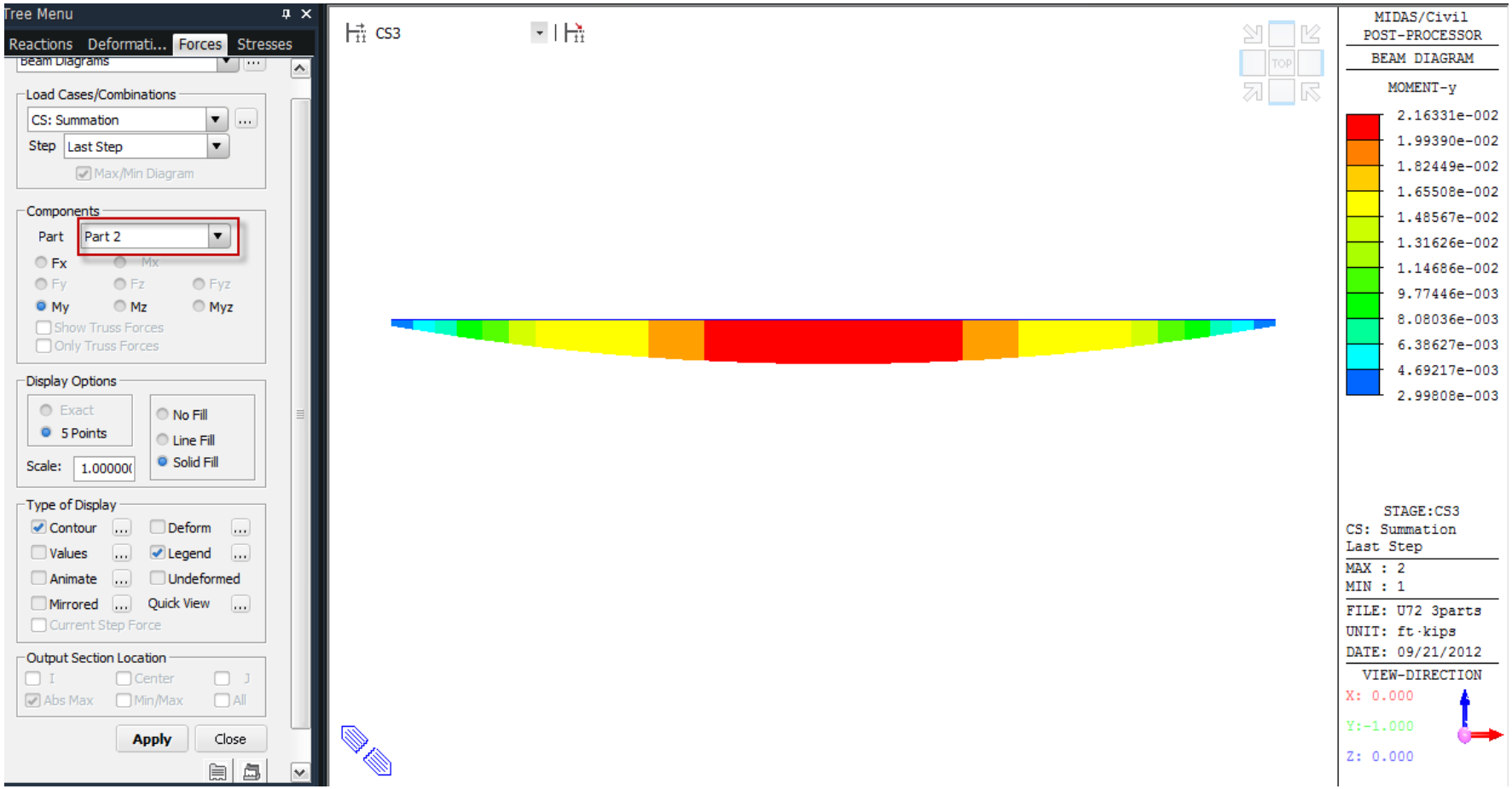
Part + Part 2 + Part 3

Construction Staging

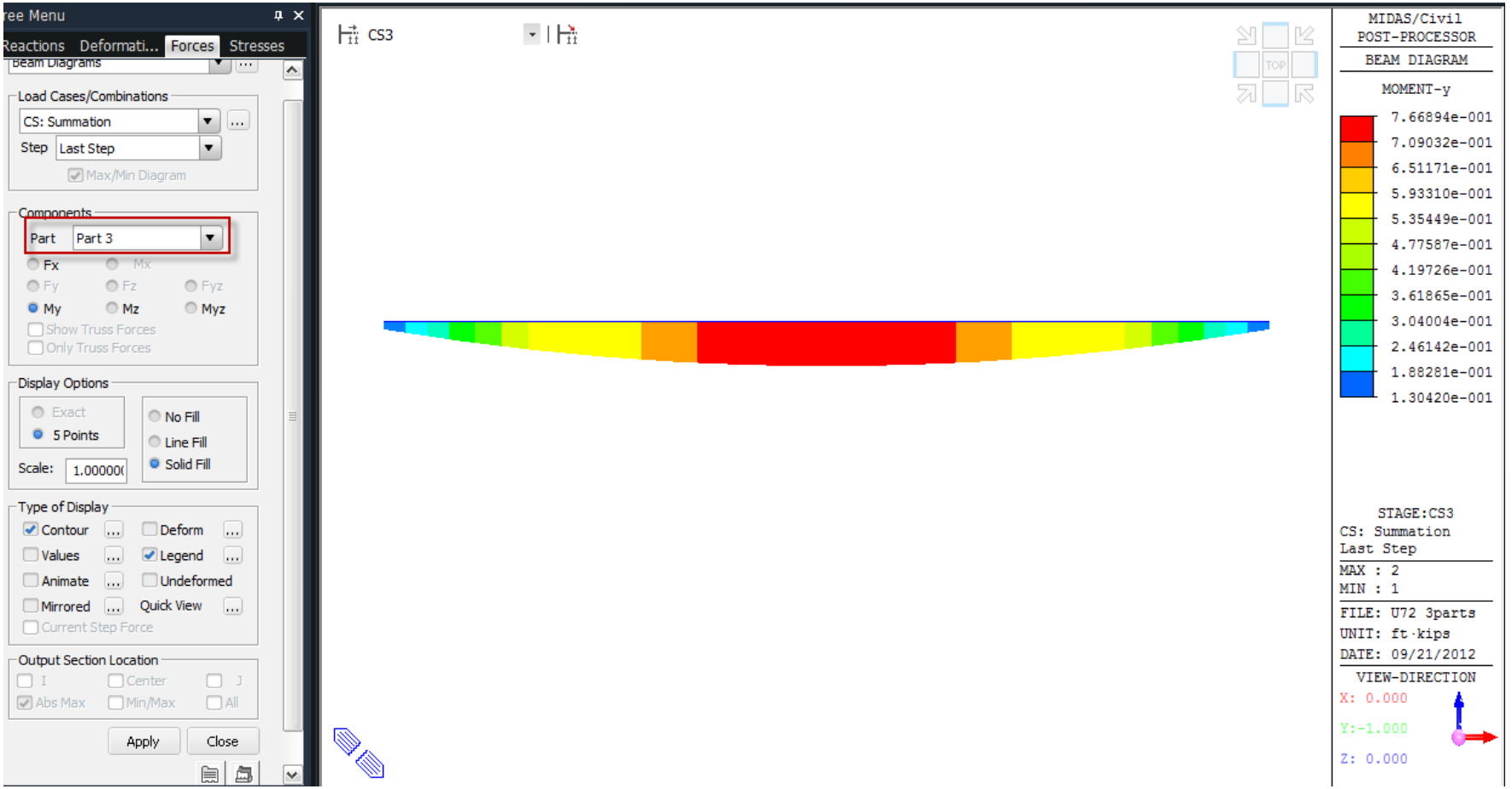


Construction Staging

Construction Staging

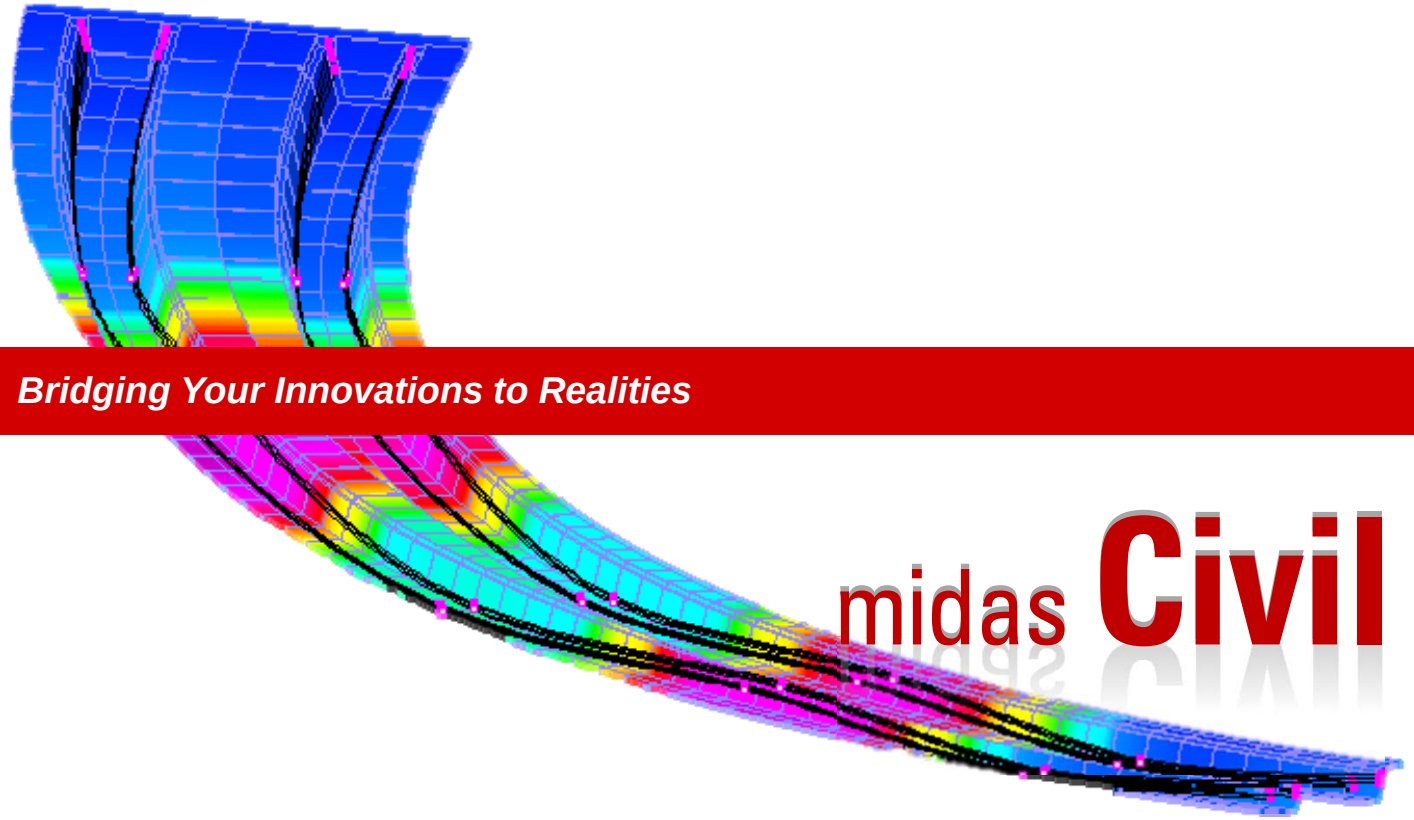


Construction Staging



Spliced U girder bridge project

Session 2: Tendons & Construction Stages



Bridging Your Innovations to Realities

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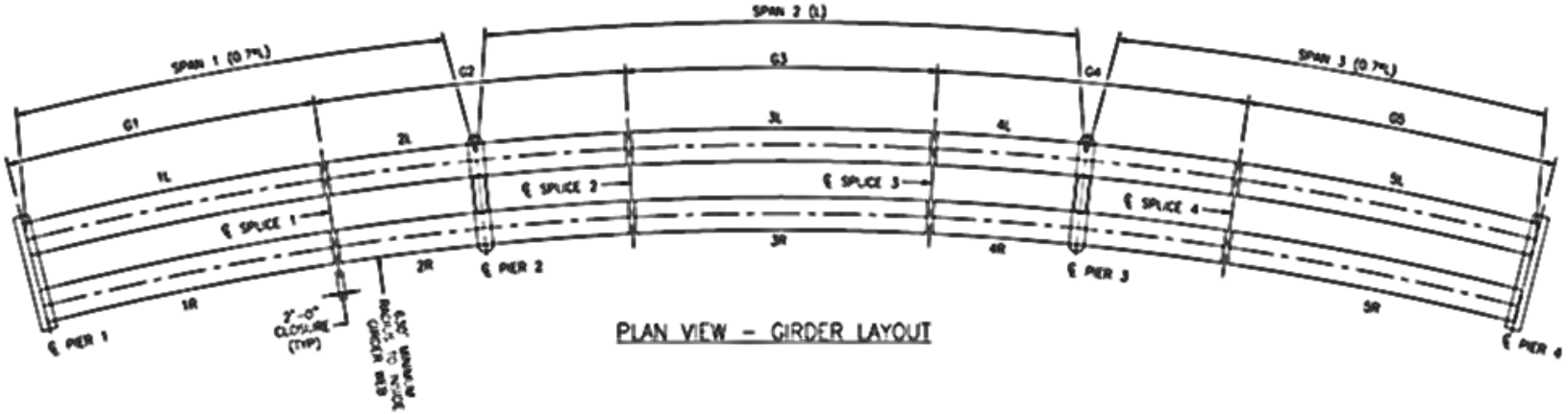
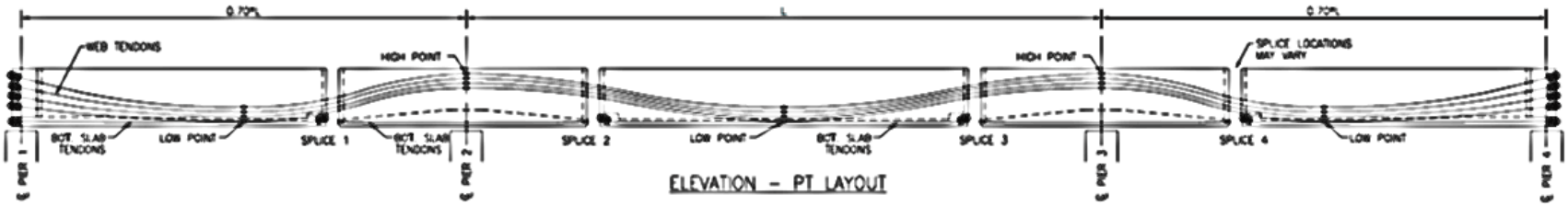
We will cover…

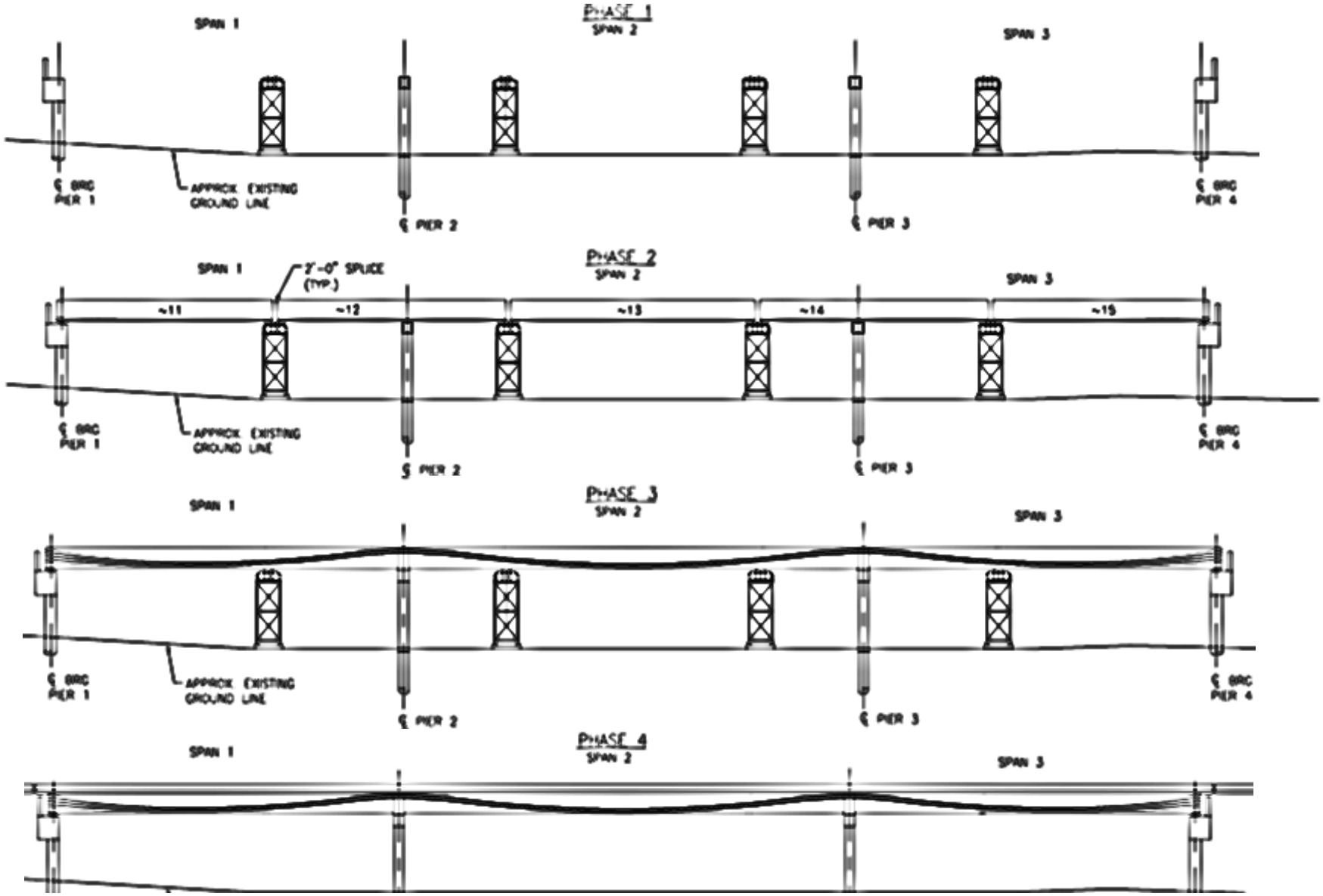
- **Tendons & Construction Stages**
  - Geometry generation from Dxf
  - Sections assignment
  - Boundary
  - Tendon layout
  - Setting up construction stages
  - Construction stage analysis
  - Results

Layout


SPAN 1 (0.7%L)
SPAN 2 (L)
SPAN 3 (0.7%L)
C1
C2
C3
C4
C5
1L
2L
3L
4L
5L
SPLICE 1
SPLICE 2
SPLICE 3
SPLICE 4
PIER 1
PIER 2
PIER 3
PIER 4
1R
2R
3R
4R
5R
2'-0" CLOSURE (TYP)
PLAN VIEW - GIRDER LAYOUT


0.7L
L
0.7L
WEB TENDONS
HIGH POINT
HIGH POINT
SPLICE LOCATIONS MAY VARY
BOT SLAB TENDONS
LOW POINT
SPLICE 1
BOT SLAB TENDONS
SPLICE 2
LOW POINT
BOT SLAB TENDONS
SPLICE 3
SPLICE 4
LOW POINT
PIER 1
PIER 2
PIER 3
PIER 4
ELEVATION - PT LAYOUT

Construction Staging



Construction Staging

Stage	Element	Boundary		Load	Remarks
CS1 (14)	Girder (14)	Abutment Links Beam end release Temp.		Self Weight	
CS2 (1)					Lid Activated (14)
CS3 (14)				PT	
CS4 (1)	Dummy Deck (14)	Bearings	Beam end Release Temp.		Slab activated (14)
CS5 (10000)				SDL	

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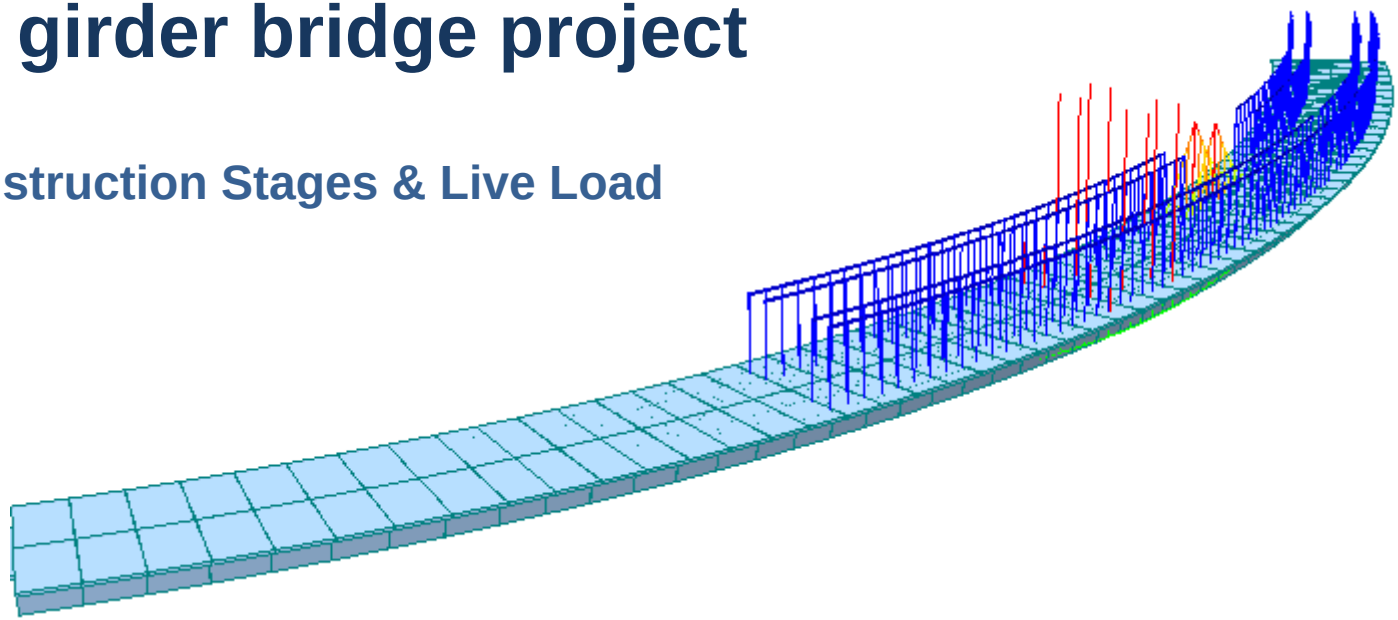
Session 3: Construction Stages & Live Load



Bridging Your Innovations to Realities

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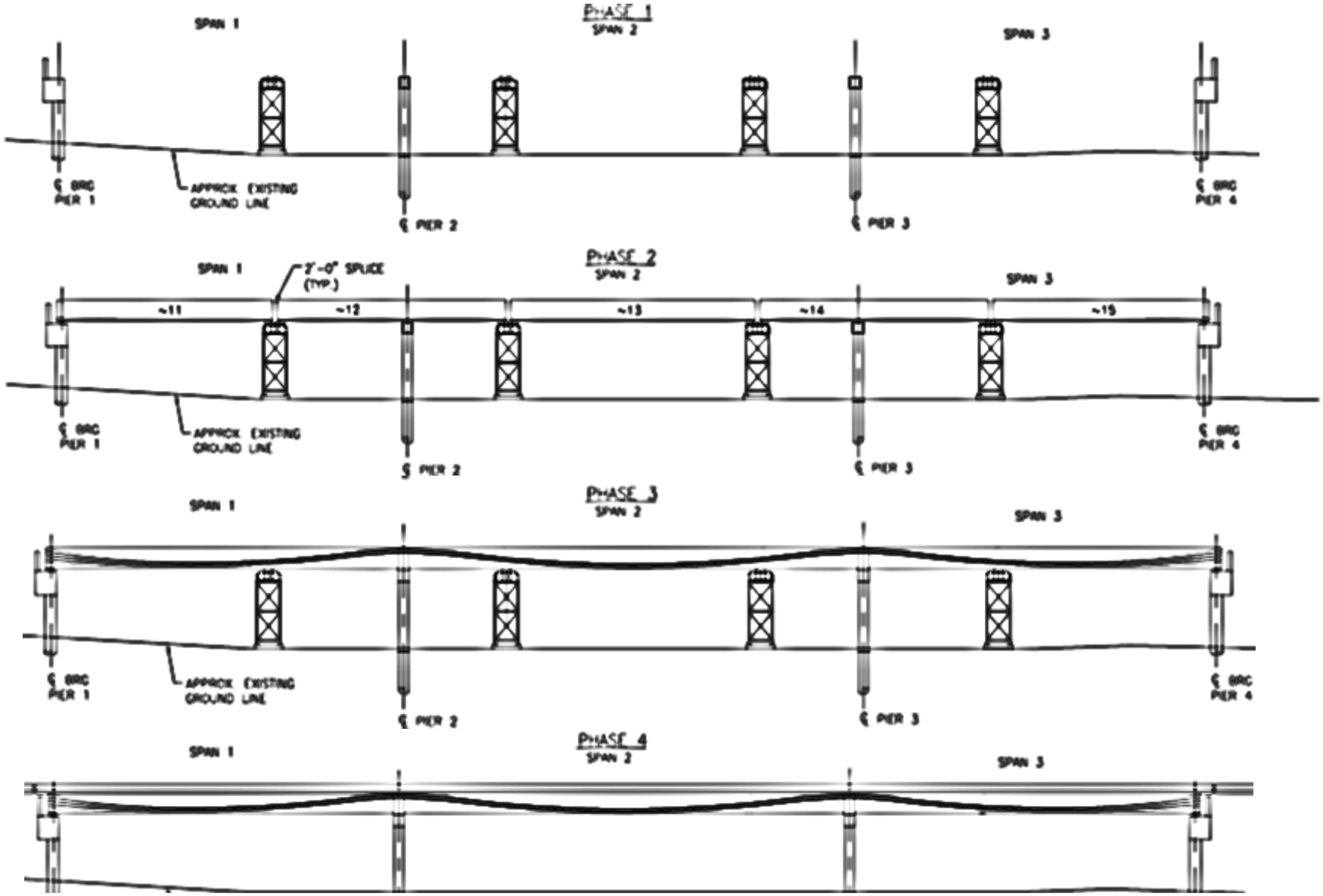
We will cover…

- **Construction Stages & Live Loads**
  - Setting up construction stages
  - Construction stage analysis
  - Defining two lanes with HL 93 vehicles
  - Results

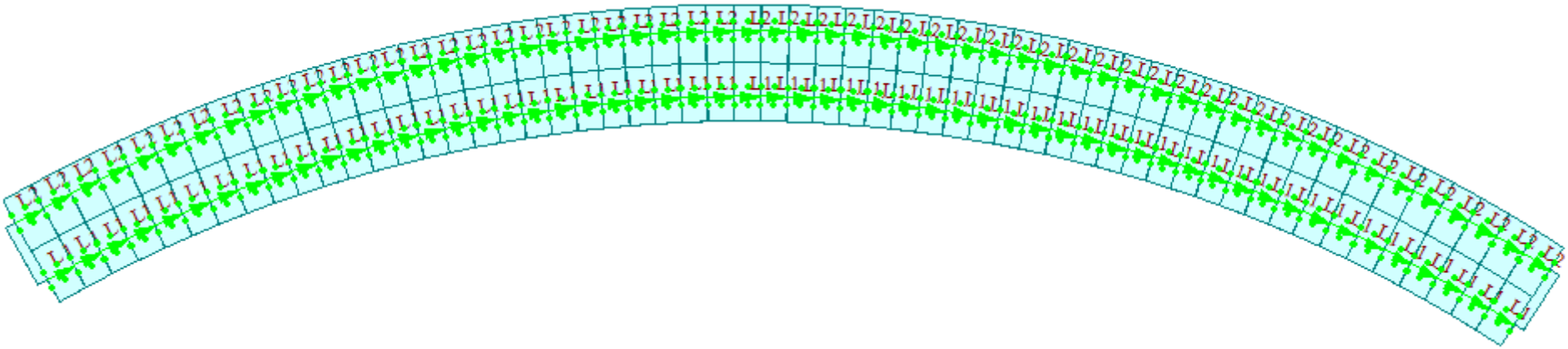
Construction Staging



Construction Staging

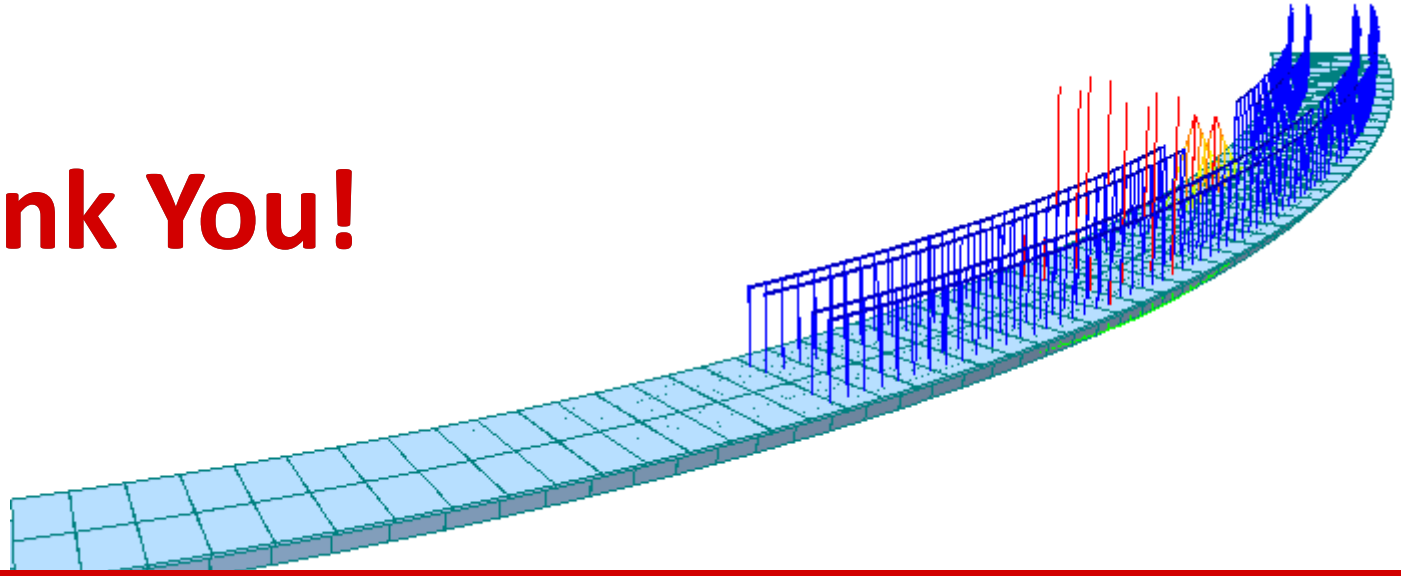
Stage	Element	Boundary		Load	Remarks
CS1 (14)	Girder (14)	Abutment Links Beam end release Temp.		Self Weight	
CS2 (1)					Lid Activated (14)
CS3 (14)		Bearings	Beam end Release Temp.	PT	
CS4 (1)	Dummy Deck (14)				Slab activated (14)
CS5 (10000)				SDL	

Live Load



Code: AASHTO LRFD
Lanes: 2
Vehicle type: HL93 (TRK & TDM)

Thank You!



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