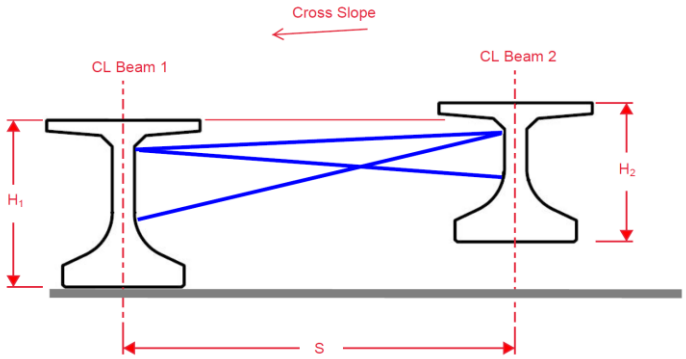
Analysis #3

Bridge 3

A2B ENGINEERING, LLC CONSULTING ENGINEERS	Subject: Girder Bracing Design		
	Comp by: MLS	Date: 09/13/18	Sheet Number: of
	Check by: PRS	Job Number: 135-17-1	



Analysis No. = 3
Description = Bridge 3

Left Girder Height =	54	[in]	Overturning Moment =	70	[ft*kip]
Right Girder Height =	48	[in]	Horizontal Force =	8	[kip]
Girder Spacing =	6.5	[ft]			
Distance from top of left girder to bracing =	12	[in]	Brace E =	29000	[ksi]
Distance from bot. of left girder to bracing =	12	[in]	Brace A =	2	[in^2]
Distance from bot. of right girder to bracing =	12	[in]	Brace I =	2.85	[in^4]
Distance from bot. of right girder to bracing =	12	[in]			
Cross Slope =	0.02				

Brace Type = HDPB 15'-26'
Lines of horizontal Bracing per brace line = 1
Lines of diagonal bracing per brace line = 1

	Member		
	1	2	3
Tensile Strength	-	-	-
Max Tension	14.490	13.283	-4.292
Lines Required	-	-	-
Compressive Strength	-	-	-
Max Compression	-2.155	-1.975	-29.539
Lines Required	-	-	-

Lines of bracing required = Geometry Error

Stiffness = 32208 [kip-ft/rad]

Span Length = 150 [ft]
Bracing Point Type = End Points only
Empirical Scale Factor = 1
Pu = 75 [psf]
Pavg = 37.5 [psf]
Beam Weight = 971 [plf]

C0 = 2.213540411
C = 0.416570726 >1

Check = NG