S.O. No.	185747		
Subject:	CUY-90 Rehabilitation		
	Joslyn Estimated Quantities	Sheet No. ____ of ____	
		Drawing No.	
Computed by	DAF	Check by CDC	Date 3/28/2023
			4/4/2023

Michael Baker INTERNATIONAL

Verified*

51321501	513	21501	17050	LB	REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS PER PLAN

Use 17050 LB from Stage 2 Estimate

Number of Left Rear Bays =	8	7 @ 9'-3 3/16", 1 @ 12'-10 7/8"
Number of Right Rear Bays =	9	8 @ 9'-3 3/16", 1 @ 12'-5 716""
Number of Left Fwd Bays =	7	7 @ 9'-3 3/16"
Number of Right Fwd Bays =	8	7 @ 9'-3 3/16", 1 @ 5'-3 9/16"

C =	12.90	ft
Number of bays =	2.00	
Web Depth =	72.00	in
Number of Diagonals =	4.00	
C/4 =	3.22	ft
Diagonal Length =	6.81	ft
Vertical Length =	6.00	ft
Horizontal Length =	12.90	ft
Member weight per foot =	9.80	lb/ft
Number of plates =	4.00	
Estimated SF per plate =	2.00	SF
Weight per 1/2" plate (490 pcf) =	40.83	lb
Steel weight per bay =	615.55	lb
Subtotal =	1231.10	lb

END CROSSFRAME DETAILS

* - THE ½" THICK PLATE IS PART OF THE EXPANSION JOINT SYSTEM. SEE THE APPROPRIATE EXPANSION JOINT STANDARD BRIDGE DRAWING FOR DETAILS INCLUDING MATERIAL AND COATING REQUIREMENTS.

** - THE WORK LINE SHALL BE THE INSIDE FACE OF THE PROTRUDING ANGLE LEG EXTENDED AS SHOWN. THE WORK POINT SHALL BE AT THE INTERSECTION OF THESE LINES.

C =	9.27	ft
Number of bays =	29.00	
Web Depth =	72.00	in
Number of Diagonals =	4.00	
C/3 =	3.09	ft
Diagonal Length =	6.75	ft
Vertical Length =	0.00	ft
Horizontal Length =	9.27	ft
Member weight per foot =	9.80	lb/ft
Number of plates =	3.00	
Estimated SF per plate =	2.00	SF
Weight per 1/2" plate (490 pcf) =	40.83	lb
Steel weight per bay =	477.84	lb
Subtotal =	13857.22	lb

NOTE: THE WELDING SYMBOLS SHOWN ABOVE ARE TYPICAL FOR ALL SIMILAR LOCATIONS OF THIS END CROSSFRAME. THE WELDED ATTACHMENT DETAILS AND TYPICAL DIMENSIONS SHOWN ARE TYPICAL FOR THE CROSSFRAMES DETAILED BELOW.

C =	5.30	ft
Number of bays =	1.00	
Web Depth =	72.00	in
Number of Diagonals =	2.00	
C/2 =	2.65	ft
Diagonal Length =	6.56	ft
Vertical Length =	0.00	ft
Horizontal Length =	5.30	ft
Member weight per foot =	9.80	lb/ft
Number of plates =	3.00	
Estimated SF per plate =	2.00	SF
Weight per 1/2" plate (490 pcf) =	40.83	lb
Steel weight per bay =	302.96	lb
Subtotal =	302.96	lb

Total =	15391	lb
Contingency =	10%	
Total =	16930	lb