BRIDGE: CUY-90-0758 **SFN:** 1808567

CALCULATED BY: ERK **DATE:** 03/04/21
CHECKED BY: MTJ **DATE:** 03/04/21

CARPENTER MARTY transportation

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	DESCRIPTION

514E00050 SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

Girders

	Span 1 & 5	Span 2 & 4	Span 3
Flange width =	1.67 ft	1.67 ft	1.67 ft
Web area =	1,160.13 ft^2	1,568.44 ft^2	1,742.56 ft^2
Section length =	130.00 ft	175.00 ft	195.00 ft
Area =	2,970.26 ft^2	4,011.88 ft^2	4,460.12 ft^2

Number of girders = 10 each

Stingers

Flange width = 0.50 ft
Web height = 1.5000 ft
Section length = 805.00 ft
Area = 3,622.50 ft^2

Number of stringers = 8 each

Total area = 213,223.92 ft^2
Additional for cross frames (15%) = 31,983.59 ft^2
Total with contingency = 245,207.51 ft^2

Total Quantity = 245300 SF

514E00056 FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

Total Quantity = 245300 SF

514E00060 FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

Total Quantity = 245300 SF

514E00066 FIELD PAINTING STRUCTURAL STEEL, FINISH COAT

Total Quantity = 245300 SF

514E00504 GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Total length of girders to grind = 14490.00 ft

Total time for griding = 241.50 manhours *1 minute per linear foot of girder er BDM 404.1.11*

Total Quantity = 250 MNHR

514E10000 FINAL INSPECTION REPAIR

Length of girders to inspect = 14490.00 ft
Per CMS, inspection every = 150.00 ft
Quantity of inspections for beams = 97 each

Number of cross frames = 704 each
Per CMS, inspection for 5% of cross frames = 5%
Quantity of inspections for cross frames = 36 each

Total Quantity = 140 EACH