

# Appendix 108-1 – Sample Brass-LRFD Data File

AGENCY Delaware Department of Transportation  
ENGINEER Craig Kursinsky  
BRIDGE-NAME 2917N150, SR-1 over SR-1 interchange  
TITLE 2917N150, Single span steel girder with composite deck  
TITLE Contract 89-110-04, Interior Girder

ANALYSIS B,3,RAT  
POINT-OF-INTEREST T,Y,Y

DIST-CONTROL-GIRDER 4  
DIST-CONTROL-DL TA,UD,UD  
DIST-CONTROL-LL a1,,11.78  
DIST-LANE-GEOMETRY 12.0

MAP-SPEC-CHECK ST,1,D,SHR,Y  
MAP-SPEC-CHECK ST,2,D,SHR,Y  
MAP-SPEC-CHECK ST,1,L,SHR,Y  
MAP-SPEC-CHECK ST,2,L,SHR,Y

OUTPUT 2,YES

DECK-GEOMETRY 8,102,8.50,33.25,33.25,0.50  
SOFFIT-INTERIOR 2.50,7.50,7.50  
SOFFIT-LT-EXT -.3125,7.50,33.25,2.50,7.50,7.50  
SOFFIT-RT-EXT 2.50,7.50,7.50,-.3125,7.50,33.25  
DECK-MATL-PROPERTIES ,,.000

DECK-LOAD-DESCR 1,DC,2,Bridge Railing  
DECK-LOAD-LINE 1,.030,8  
DECK-LOAD-LINE 1,.030,772.5

DECK-LOAD-DESCR 2,DC,1,SIP Forms  
DECK-LOAD-UNIFORM 2,.015,39.25,90  
DECK-LOAD-UNIFORM 2,.015,141.25,90  
DECK-LOAD-UNIFORM 2,.015,243.25,90  
DECK-LOAD-UNIFORM 2,.015,345.25,90  
DECK-LOAD-UNIFORM 2,.015,447.25,90  
DECK-LOAD-UNIFORM 2,.015,549.25,90  
DECK-LOAD-UNIFORM 2,.015,651.25,90

COMMENT ASTM A572 Grade 50 Structural Steel

STEEL-PLATE-GIRDER 1,12,1.375,50,.5625,50,16,1.125,50  
STEEL-PLATE-GIRDER 2,12,1.375,50,.5625,50,16,1.750,50

SHEAR-CONN-SCHEDULE 1,c

STIF-BEARING 100,7.500,.875,,,,W,50  
STIF-BEARING 110,7.500,.875,,,,W,50

STIF-TRAN-GROUP 1,10.000,.5,,,50  
STIF-TRAN-SCHEDULE 1,1,202.125,0,202.125  
STIF-TRAN-SCHEDULE 1,1,252,202.125,1008  
STIF-TRAN-SCHEDULE 1,1,189.875,1210.125,189.875

BRACING-SCHEDULE 1,202.125,0,202.125

BRACING-SCHEDULE 1,252,202.125,1008  
BRACING-SCHEDULE 1,189.875,1210.125,189.875

LAT-SUPPORT-SCHEDULE 1,0

COMMENT Class 'D' Concrete for deck, F'c = 4.5 ksi  
COMMENT Epoxy coated A615 Gr 60 Rebars  
COMPOSITE-MATERIALS 4.5,60

COMPOSITE-SLAB 1,,8.5,2.50  
COMPOSITE-SLAB 2,,8.5,2.50

COMPOSITE-REBAR 1,B,9,5,4.4375  
COMPOSITE-REBAR 1,T,7,5,8.0625

COMPOSITE-REBAR 2,B,9,5,4.4375  
COMPOSITE-REBAR 2,T,7,5,8.0625

COMMENT 1 span.  
COMMENT Span length is 1400".  
SPAN-LINEAR 1,1400,54

SPAN-SECTION 1,1,350,1  
SPAN-SECTION 1,2,1050,2  
SPAN-SECTION 1,1,1400,1

SUPPORT-FIXITY 1,R,R,F  
SUPPORT-FIXITY 2,F,R,F

LOAD-DEAD-DESCR 3,DC,1,Diaphragms

LOAD-DEAD-POINT 3,1,0,0.390,0  
LOAD-DEAD-POINT 3,1,0,0.180,202.125  
LOAD-DEAD-POINT 3,1,0,0.180,454.125  
LOAD-DEAD-POINT 3,1,0,0.180,706.125  
LOAD-DEAD-POINT 3,1,0,0.180,958.125  
LOAD-DEAD-POINT 3,1,0,0.180,1210.125  
LOAD-DEAD-POINT 3,1,0,0.390,1400

COMMENT Live Loads  
LOAD-LIVE-CONTROL B  
LOAD-LIVE-DEFINITION 1,HL-93-TRUCK,DTK,D  
LOAD-LIVE-DEFINITION 2,HL-93-TANDEM,DTM,D  
LOAD-LIVE-DEFINITION 3,HL-93-LANE,DLN,D  
LOAD-LIVE-DEFINITION 4,HS20T,TRK,D,,,Y  
LOAD-LIVE-DEFINITION 5,LANEHS20,TRK,D  
LOAD-LIVE-DEFINITION 6,S220,TRK,L  
LOAD-LIVE-DEFINITION 7,S335,TRK,L  
LOAD-LIVE-DEFINITION 8,S437,TRK,L  
LOAD-LIVE-DEFINITION 9,T330,TRK,L  
LOAD-LIVE-DEFINITION 10,T435,TRK,L  
LOAD-LIVE-DEFINITION 11,T540,TRK,L  
LOAD-LIVE-DEFINITION 12,AC2,PTK,P  
LOAD-LIVE-DEFINITION 13,AC3,PTK,P  
LOAD-LIVE-DEFINITION 14,AC4,PTK,P

LOAD-LIVE-DEFINITION 15,AC5,PTK,P

COMMENT ADTT = 537, Use live load factor of 1.52 for legal loads &  
COMMENT 1.50 for permit loads.

COMMENT Ref MBE Table 6A.4.2.2-1 & 6A.4.5.4.2a-1

FACTORS-LOAD-LL ST,1,,1.53,1.00

FACTORS-LOAD-LL ST,2,,0.00,1.50

FACTORS-LOAD-LL SE,2,,1.30,1.00

COMMENT Resistance factors for Steel.

FACTORS-RESIST-STEEL 1.0,1.0,1.0,0.9,0.85,1.0,0.9

COMMENT Resistance factors for system per AASHTO MBE 6A.4.2.4.

FACTORS-RESIST-MOD ST,FL,1.00

FACTORS-RESIST-MOD ST,SH,1.00

FACTORS-RESIST-MOD SE,FL,1.00

FACTORS-RESIST-MOD SE,SH,1.00

COMMENT Resistance factors for condition.

COMMENT NBI > 6, Condition Factor = 1.00

FACTORS-RESIST-COND ST,1.00

FACTORS-RESIST-COND SE,1.00