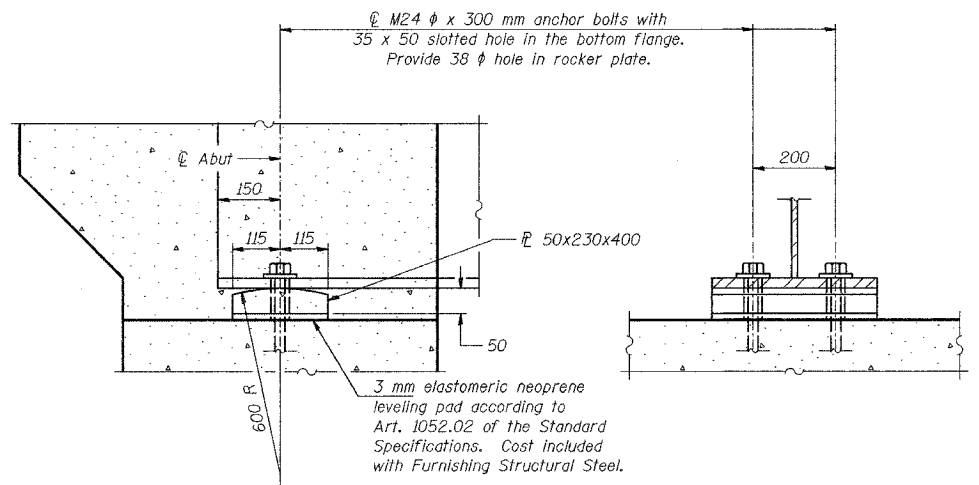
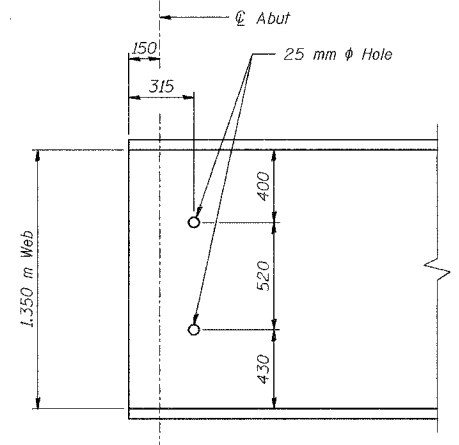


*** INTERIOR CROSS FRAME CF**
132 Required

Note: Assemble Cross Frame at Stage Construction Line after closure pour. Field drill holes in Girder 13 stiffeners on the side of Stage Construction Joint only.



INTEGRAL ABUTMENT ROCKER PLATE
48 Required



*** END OF GIRDER ELEVATION**

INTERIOR BEAM MOMENT TABLE		
0.5 Span		
I_s	(10^6 mm^4)	16510
$I_c (n)$	(10^6 mm^4)	31120
$I_c (3n)$	(10^6 mm^4)	23385
S_s	(10^3 mm^3)	24988
$S_c (n)$	(10^3 mm^3)	30161
$S_c (3n)$	(10^3 mm^3)	27985
Z	(10^3 mm^3)	—
D	(kN/m)	15.06
M_D	(kN·m)	2440
s_D	(kN/m)	11.42
M_{sD}	(kN·m)	1851
M_L	(kN·m)	2128
$M (Imp)$	(kN·m)	438
${}_2[M_L + M(Imp)]$	(kN·m)	4276
M_a	(kN·m)	11137
M_u	(kN·m)	12258
$f_s \text{ (non-comp)}$	(MPa)	98
$f_s \text{ (comp)}$	(MPa)	66
$f_s \text{ (L+Imp)}$	(MPa)	142
$f_s \text{ (Overload)}$	(MPa)	306
$f_s \text{ (Total)}$	(MPa)	—
VR	(kN)	216

INTERIOR BEAM REACTION TABLE		
	W Abut	E Abut
R_D	(kN)	477
R_L	(kN)	241
$Imp.$	(kN)	50
$R \text{ (Total)}$	(kN)	767

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s (Total & Overload).
 $I_c(n)$ and $S_c(n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 $I_c(3n)$ and $S_c(3n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)
 VR is the maximum Live Load + Impact shear range in span.
 Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
 M_a (Applied Moment) = $1.3[M_D + M_{sD} + {}_2(M_L + M_{Imp})]$.
The Plastic Moment capacity (M_u) is computed according to AASHTO 10.48.1 and 10.50.1.1.
 f_s (Overload) is the sum of the stresses due to $M_D + M_{sD} + {}_2(M_L + M_{Imp})$.
 f_s (Total) (Non-compact section) is the sum of the stresses due to $1.3[M_D + M_{sD} + {}_2(M_L + M_{Imp})]$.

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

NOTES:
All open holes shall be 28 mm ϕ for M22 HS bolts
All dimensions are in millimeters (mm) except as noted.

*** FOR INFORMATION ONLY**

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.L. ROUTE 80/94 (BORMAN EXPRESSWAY)
OVER HARRISON AVENUE

FRAMING DETAILS
SECTION 2626.2-R-2
LAKE COUNTY, INDIANA
STATION 8+754.874
STRUCTURE NO. I-80-1-8461 (EB & WB)
DATE 09/05 (016-1005 & 016-1006)

AMERICAN
CONSULTING ENGINEERS