

INTERIOR FLOOR BEAM

Shear D.L. = 27 k
L.L.+1 = 57 k + 15 k.s.i. = 5.6 sq.in.

Moment D.L. = 26 k-ft
L.L.+1 = 57 k-ft + 15 k-ft = 72 k-ft

S req'd = 370 sq.in. + 27 k.s.i. = 135 cu.in.

Allowable L.L. deflection = 240 / 800 = 0.30 in.

A440 - 24 WF 76
web area = 10.5 sq.in.
section mod. = 175.4 cu.in.
L.L. deflection = 0.30 in.

END FLOOR BEAM

Shear D.L. = 14 k
L.L.+1 = 34 k + 15 k.s.i. = 4.53 sq.in.

Moment D.L. = 26 k-ft
L.L.+1 = 57 k-ft + 15 k-ft = 72 k-ft

By L.L. deflection use
A440 - 24 WF 76
web area = 10.5 sq.in.
section mod. = 175.4 cu.in.

INTERIOR STRINGERS

Shear D.L. = 4.6 k
L.L.+1 = 23.0 k + 11 k.s.i. = 2.5 sq.in.

Moment D.L. = 23.0 k-ft
L.L.+1 = 87.0 k-ft + 11 k-ft = 98 k-ft

S req'd = 110.0 sq.in. + 16 k.s.i. = 73.4 cu.in.

A7 - 16 WF 45
web area = 5.3 sq.in.
section mod. = 72.4 cu.in.

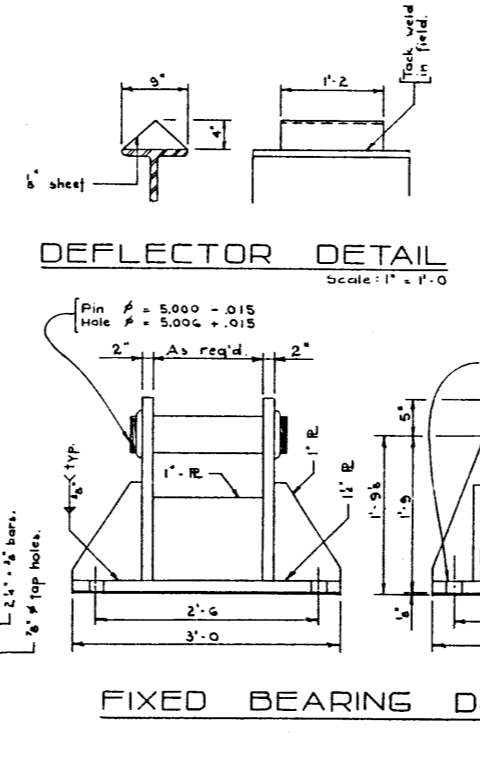
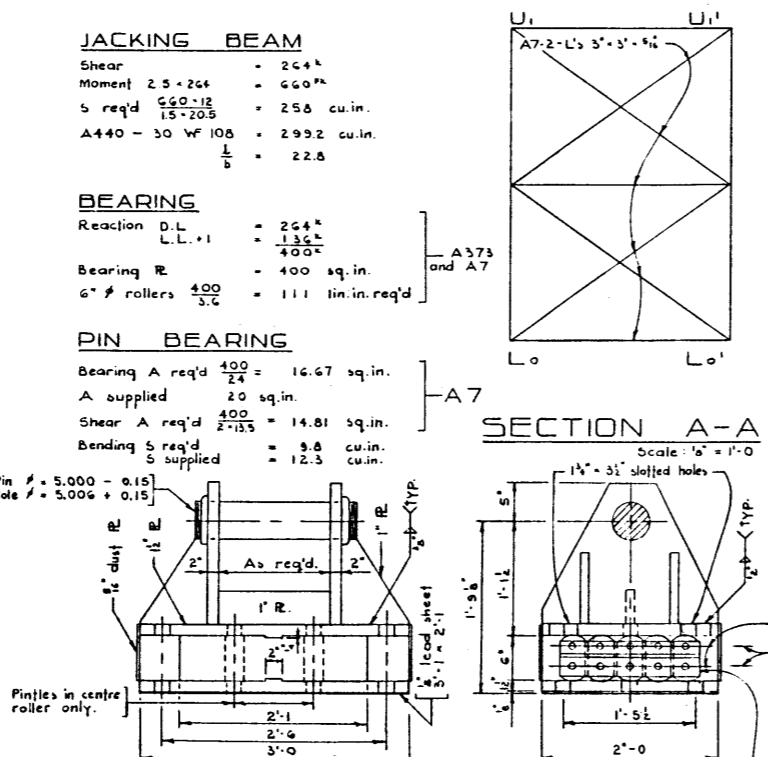
EXTERIOR STRINGER

Shear D.L. = 2.3 k
L.L.+1 = 23.0 k + 11 k.s.i. = 2.3 sq.in.

Moment D.L. = 11.3 k-ft
L.L.+1 = 87.0 k-ft + 11 k-ft = 98 k-ft

S req'd = 56.5 sq.in. + 16 k.s.i. = 65.1 cu.in.

A7 - 16 WF 40
web area = 4.9 sq.in.
section mod. = 64.4 cu.in.



DESIGNED BY: Henry H. Hendrickson
DATE: September 6, 1950
CHECKED BY: Gordon W. Swickel
DATE: October 12, 1950

200' DECK TRUSS
STRESSES - SECTIONS - DETAILS
(A-440 AND A-7 STEEL)

GOVERNMENT OF THE PROVINCE OF ALBERTA
DEPARTMENT OF HIGHWAYS
BRIDGE BRANCH, EDMONTON

NO.	DATE	DESCRIPTION	BY
4			
3	Feb 12/52	Change 16WF50 to 18WF50	W.J.H.
1	25 Nov. 1950	Change to stay plates; top chord	H.H.H.

FILE NO. _____ HWY. NO. _____ DWG. NO. **5-729**
LOCATION _____ SCALE Shown _____ SHEET _____ OF _____