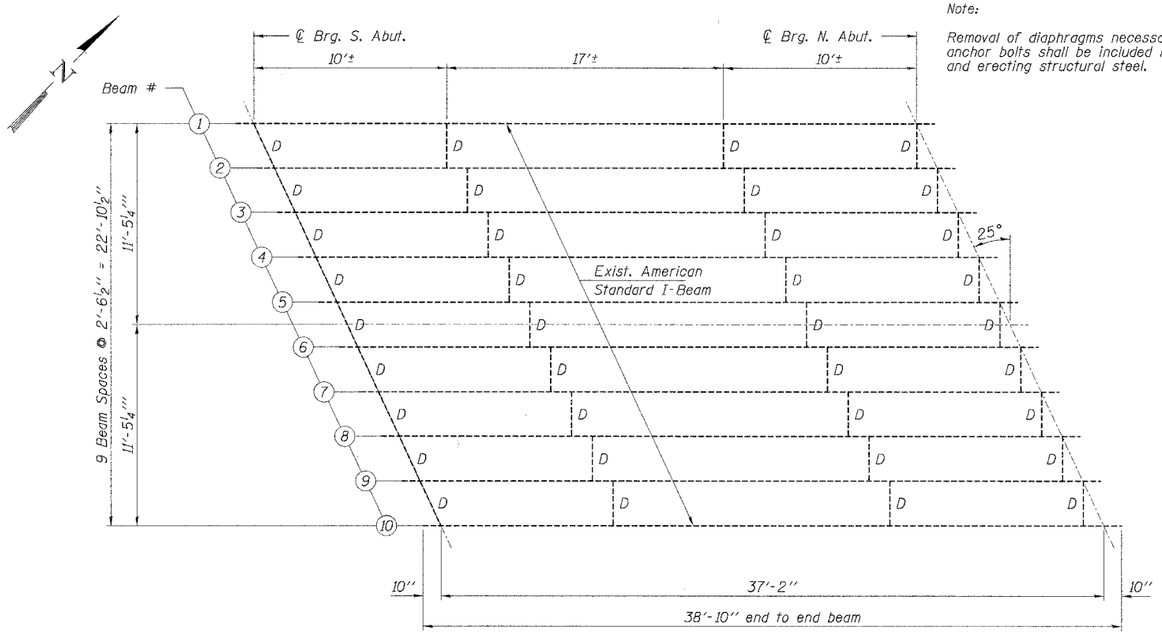
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 585	02-00063 -00-BR	BROWN	16	12
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT- BHS-585(104)	

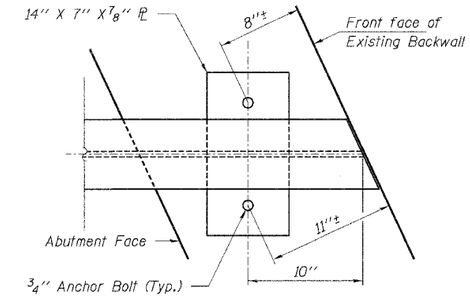
CONTRACT NO. 93399

Note:

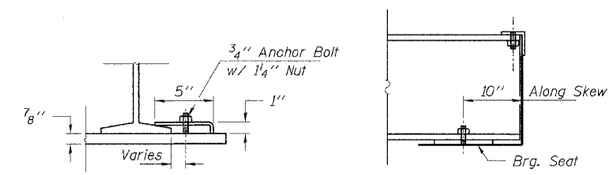
Removal of diaphragms necessary to replace bearing anchor bolts shall be included in the cost of furnishing and erecting structural steel.



EXISTING FRAMING PLAN

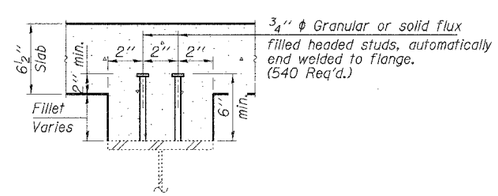


EXISTING ANCHOR BOLT LOCATIONS

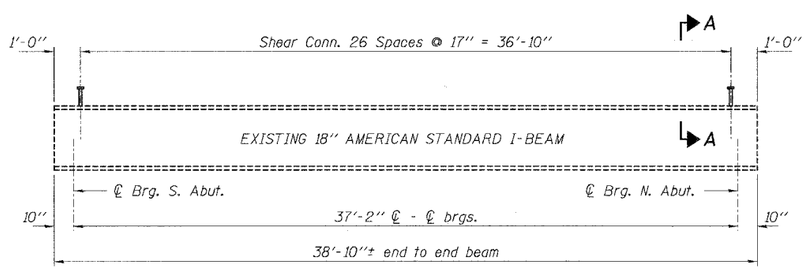


EXISTING EXPANSION BEARING DETAIL

INTERIOR GIRDER MOMENT TABLE		
		0.5 Sp. 1
Is	(in⁴)	806.8
Ic (n)	(in⁴)	3,506.1
Ic (3n)	(in⁴)	2,340.0
Ss	(in³)	89.6
Sc (n)	(in³)	184.0
Sc (3n)	(in³)	157.8
DL	(K/ft.)	0.382
MDL	('K)	66.0
sDL	(K/ft.)	0.071
MsDL	('K)	12.3
ML	('K)	92.3
M (Imp)	('K)	27.7
5/3[ML+M(Imp)]	('K)	200
Ma	('K)	361.7
Mu	('K)	796.3
fsDL non-comp	(k.s.i.)	8.8
fsDL (comp)	(k.s.i.)	0.9
fs5/3(L+Imp)	(k.s.i.)	13.0
fs (Overload)	(k.s.i.)	22.7
VR	(K)	16.2

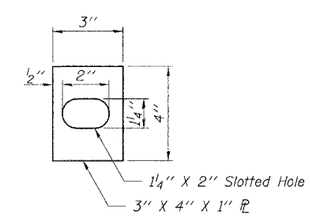


SECTION A-A

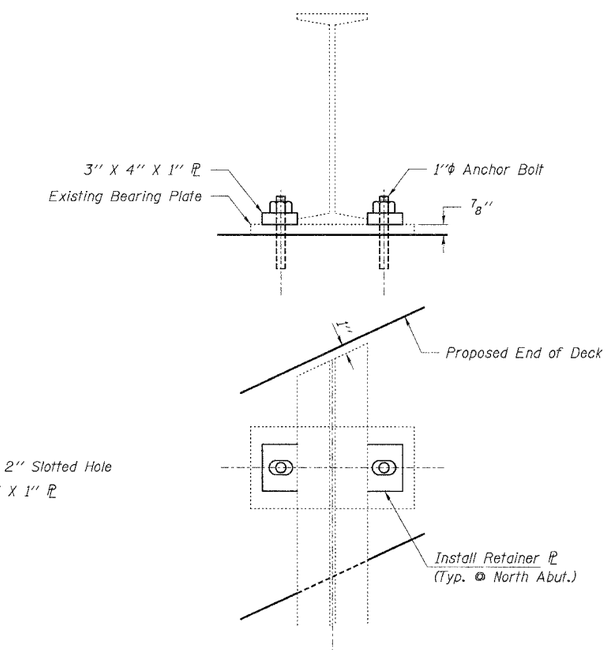


ELEVATION

INTERIOR GIRDER REACTION TABLE		
		Abutments
R(DL+sDL)	(K)	8.8
RL	(K)	12.5
Imp.	(K)	3.8
R (Total)	(K)	25.1



RETAINER PLATE
(20 Required)



PROPOSED EXPANSION BEARING REHAB DETAIL

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

Ic(n) and Sc(n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

Ic(3n) and Sc(3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.

VR is the maximum Live Load + Impact shear range in span.

Ma (Applied Moment)=1.3[MDL + MsDL +5/3 (ML + M_{imp})].

The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.

fs (Overload) is the sum of the stresses due to MDL + MsDL +5/3(ML + M_{imp}).

fs (Total) (Non-compact section) is the sum of the stresses due to 1.3[MDL + MsDL +5/3(ML + M_{imp})].

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DuQuoin, Illinois 62832
618-790-4637

Account Number 12-16-0017-1

Date: 06/10/05

DESIGNED: T.P.L. | CHECKED: S.W.M. | DRAWN: D.T.M.

STRUCTURAL STEEL

SECTION 02-00063-00-BR

C.H. 11 / F.A.S. 585

BROWN COUNTY

STRUCTURE NO. 005-3020 / STATION 10+00

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