



DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$

LOADING HS 20-44 & ALT.

TOTAL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	84	#5	7'-10"	U
a2	12	#4	6'-3"	—
d	14	#4	4'-6"	T
h1	18	#5	9'-7"	—
h1	24	#4	9'-7"	—
h2	24	#5	9'-7"	—
h3	36	#7	8'-0"	L
h4	28	#6	7'-3"	L
h8	48	#7	13'-3"	L
h9	6	#7	27'-9"	—
v	60	#4	6'-9"	—
v1	16	#4	10'-1"	—
Concrete Box Culverts			Cu. Yd.	32.4
Reinforcement Bars			Pound	4,270
Expan Bolts 3/4 x 9			Each	20

NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
 Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 OR M-53, Gr 60.
 All construction joints shall be bonded.
 See Roadway Plans for Location of Culvert Extensions Each side of Roadway
 Work this Sheet with Sheet 37 of
 See Sheet 37 of for Sect A-A



DESIGNED - GEH	REVISED -
CHECKED - SOG	REVISED -
DRAWN - JJE	REVISED -
CHECKED -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BOX CULVERT EXTENSIONS W/CAST-IN-PLACE BOX CULVERT
 STRUCTURE NO: 079-2420

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	124-1.75-1185-3	RANDOLPH	130	40
CONTRACT NO. 76E92				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				