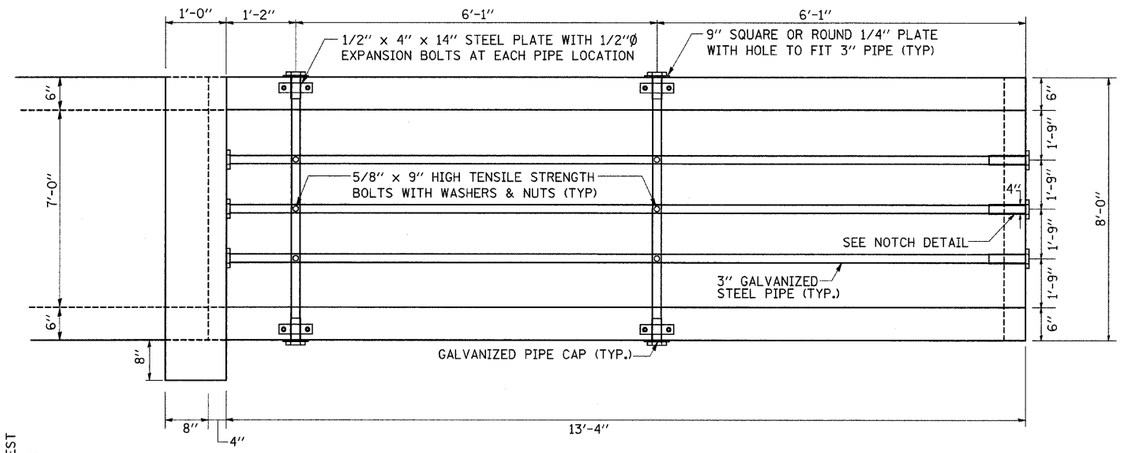
CONTRACT NO. 64D51

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*303	129M&TS	WINNEBAGO	110	59
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

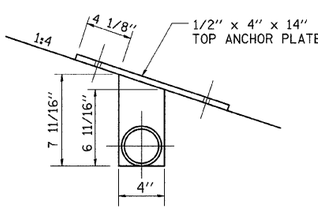
*(IL 173)

GRATED CULVERT EXTENSION NO. 1

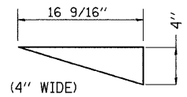
STA. 244+35 RT & STA. 244+57 LT.



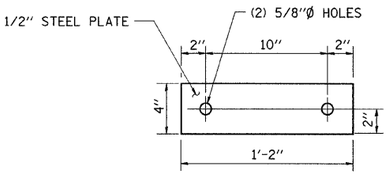
PLAN VIEW



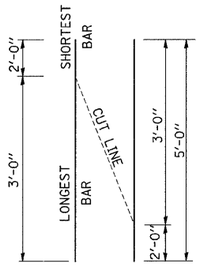
DETAIL "A"



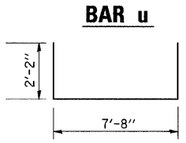
NOTCH DETAIL



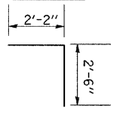
TOP ANCHOR PLATE



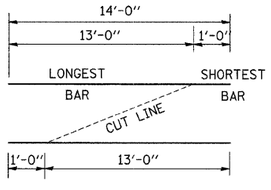
BAR v
CUT DIAGRAM



BAR u



BAR d



BAR h
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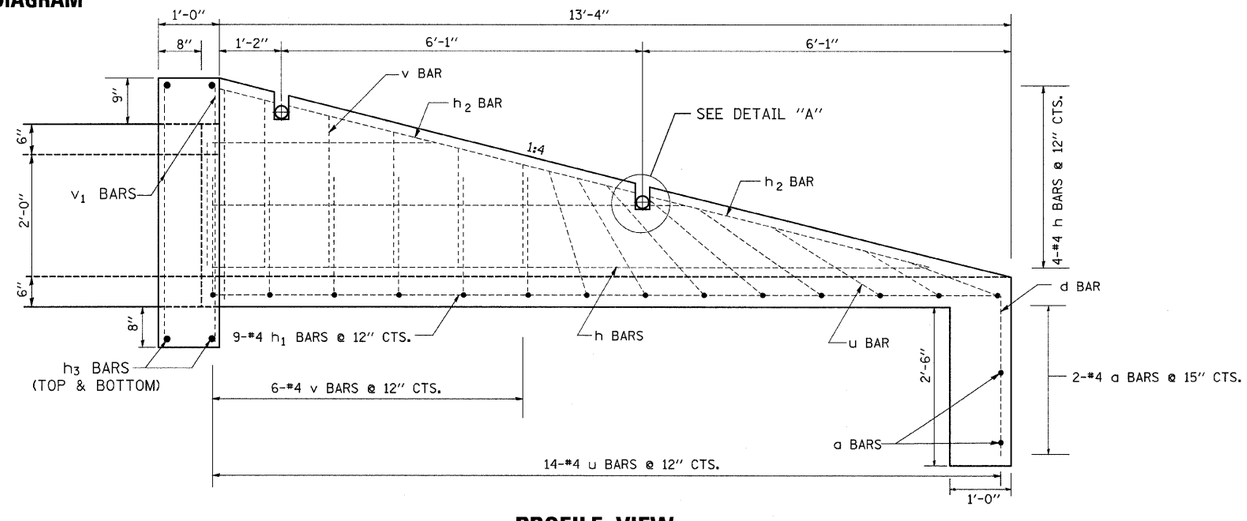

PROFILE VIEW

*CONNECTION COLLAR BILL OF MATERIALS

BAR	NO.	SIZE	LENGTH	SHAPE
h3	4	4	17'-3"	——
v1	8	4	4'-1"	——
DESCRIPTION			UNIT	QTY
CLASS "SI" CONCRETE			CU YD	1.2
REINFORCEMENT BARS			LB	67.9

*FOR INFORMATIONAL PURPOSES ONLY.
COST TO BE INCLUDED IN THE BID ITEM "PRECAST CONCRETE BOX CULVERT 7'x2' "

**GRATED CULVERT EXTENSION, NO. 1 BILL OF MATERIALS

BAR	NO.	SIZE	LENGTH	SHAPE	LBS
a	2	4	7'-8"	——	10.2
d	9	4	4'-8"	⌐	28.1
h	4	4	14'-0"	——	37.4
h1	9	4	13'-4"	——	80.2
h2	4	4	5'-8"	——	15.1
v	6	4	5'-0"	——	20.0
u	14	4	12'-0"	⌙	112.2
				TOTAL	303.2

DESCRIPTION	UNIT	QTY
CLASS "SI" CONCRETE	CU YD	3.5
REINFORCEMENT BARS	LB	303.2
3" I.D. GALVANIZED STEEL PIPE	2 @	8'-4"
	3 @	13'-6"
3" GALV. PIPE CAPS	EACH	10
1/4" GALV. STEEL PLATE (9" NORMAL)	EACH	4
1/2"x4"x14" GALV. STEEL PLATES	EACH	4
5/8"x9" GALV. STEEL BOLTS	EACH	6
EXPANSION BOLTS 1/2"	EACH	8

** QUANTITIES GIVEN ARE FOR EACH BOX CULVERT END SECTION FOR INFORMATIONAL PURPOSES ONLY. COST TO BE INCLUDED IN THE BID ITEM "GRATED CULVERT EXTENSION, NO. 1.

GENERAL NOTES:

SLOPE FLOW LINE OF THE EXTENSION AT THE SAME RATE AS THE FLOW LINE OF THE PIPE.

BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 710.11 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

THE CONTRACT UNIT PRICE "EACH" FOR GRATED CULVERT EXTENSION NO. 1 SHALL INCLUDE THE EXPANSION BOLTS, GALVANIZED PIPE & CAPS, CLASS SI CONCRETE, REINFORCEMENT BARS, BOLTS, NUTS, WASHERS, INSTALLATION ON THE PROPOSED CULVERT, EARTH EXCAVATION WHERE REQUIRED, AND ANY NECESSARY GRADING TO FIT INLET AS SHOWN IN THE CROSS SECTIONS OR TO SLOPE.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40 AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRACTOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

SEE PLAN PROFILE SHEET FOR MORE INFORMATION.
SEE CULVERT LOCATION PLANS FOR MORE INFORMATION.

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