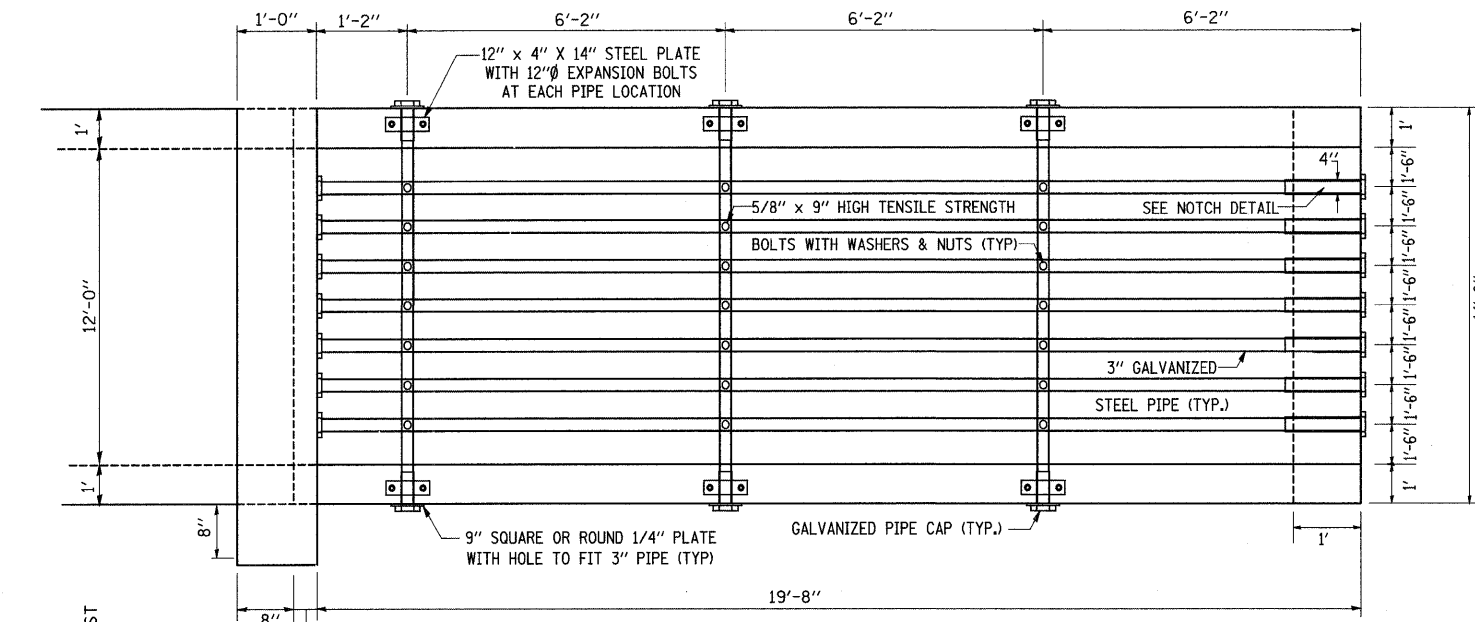
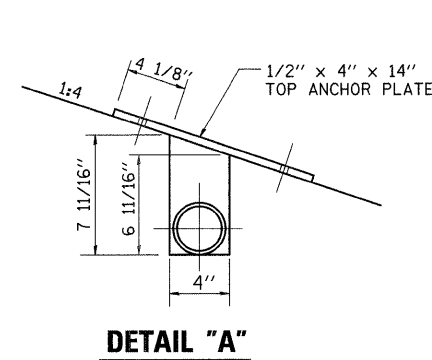


# GRATED CULVERT EXTENSION NO. 1

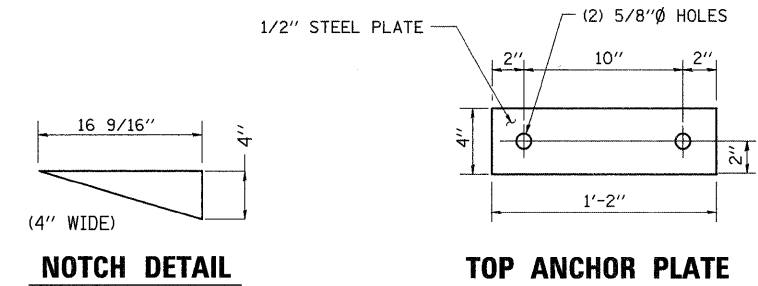
STA. 73 + 70 LT



**PLAN VIEW**

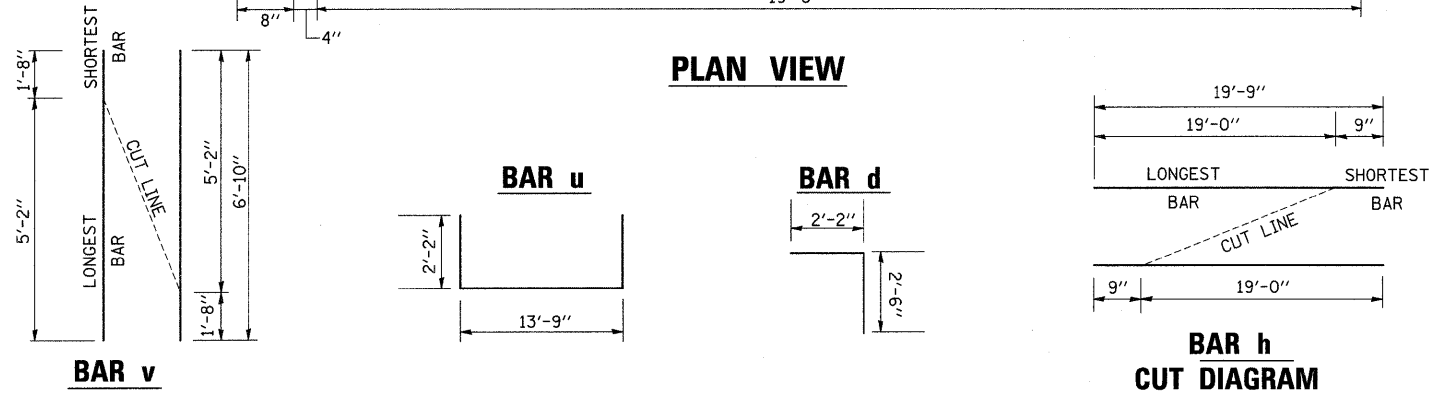


**DETAIL "A"**



**NOTCH DETAIL**

**TOP ANCHOR PLATE**



**BAR v CUT DIAGRAM**

**BAR h CUT DIAGRAM**

**\*CONNECTION COLLAR BILL OF MATERIALS**

BAR	NO.	SIZE	LENGTH	SHAPE	LBS
h3	4	4	29'-3"	—	78.16
v1	8	4	7'-2"	—	38.30
TOTAL					116.46
DESCRIPTION		UNIT	QTY		
CLASS "SI" CONCRETE		CU YD	1.8		
REINFORCEMENT BARS		LB	116.45		

\*FOR INFORMATIONAL PURPOSES ONLY.  
COST TO BE INCLUDED IN THE BID ITEM  
"PRECAST CONCRETE BOX CULVERT 12'x4' "

**\*\*GRATED CULVERT EXTENSION, NO. 1  
BILL OF MATERIALS FOR ONE EXTENSION**

BAR	NO.	SIZE	LENGTH	SHAPE	LBS	
a	3	4	13'-9"	—	27.56	
d	15	4	4'-8"	└	46.76	
h	6	4	19'-9"	—	79.16	
h1	15	4	19'-9"	—	197.90	
h2	6	4	5'-11"	—	23.71	
v	14	4	6'-10"	—	63.91	
u	21	4	18'-1"	└	253.67	
TOTAL					692.67	
DESCRIPTION					UNIT	QTY
CLASS "SI" CONCRETE					CU YD	15.3
REINFORCEMENT BARS					LB	692.66
3" I.D. GALVANIZED STEEL PIPE					3 @	14'-4"
					7 @	20'-6"
3" GALV. PIPE CAPS					EACH	20
1/4" GALV. STEEL PLATE (9" NORMAL)					EACH	6
1/2"x4"x14" GALV. STEEL PLATES					EACH	6
5/8"x9" GALV. STEEL BOLTS					EACH	21
EXPANSION BOLTS 1/2"					EACH	12

\*\* QUANTITIES GIVEN ARE FOR ONE 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.

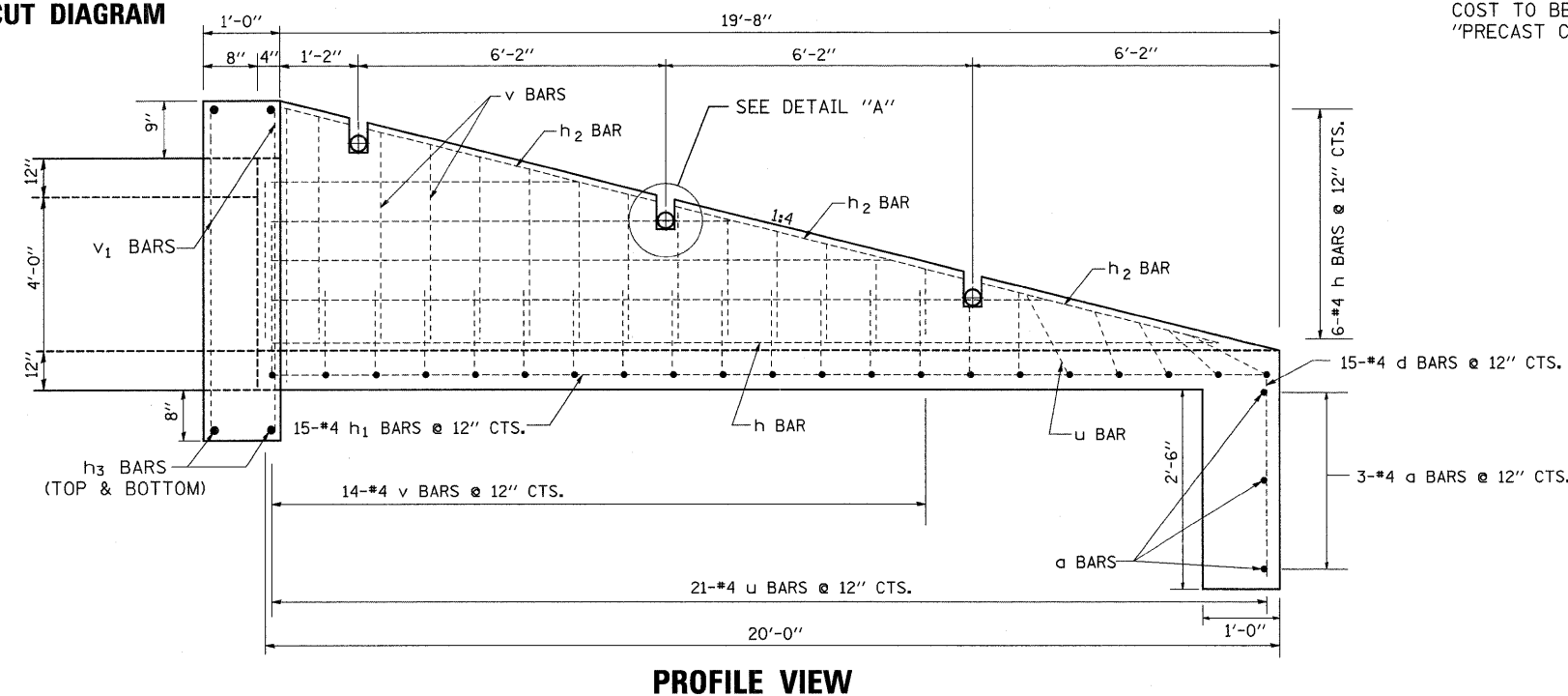
BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 710.11 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

THE CONTRACT UNIT PRICE "EACH" FOR GRATED CULVERT EXTENSION NO. 1 SHALL INCLUDE THE EXPANSION BOLTS, GALVANIZED PIPE & CAPS, PLATES, 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.



**PROFILE VIEW**

FILE NAME = e:\projects\p211406\d11406spl.dgn	USER NAME = polzinej	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GRATED CULVERT EXTENSION, NO. 1</b>			F.A.P. RTE. 303	SECTION (40R)T	COUNTY WINNEBAGO	TOTAL SHEETS 67	SHEET NO. 43
PLOT SCALE = 5/8" = 1' / IN.	CHECKED -	REVISED -	FED. ROAD DIST. NO.					ILLINOIS	FED. AID PROJECT	CONTRACT NO. 64C65		
PLOT DATE = Mon Aug 04 11:37:50 2008	DATE -	REVISED -	SCALE:					SHEET NO.	OF SHEETS	STA.	TO STA.	