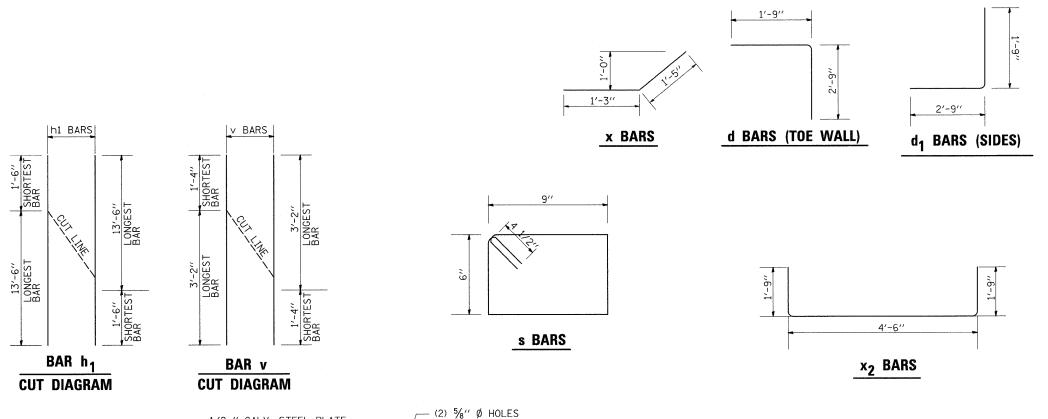
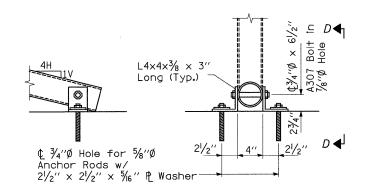
## **BOX CULVERT END SECTION CULVERT NO. 11** STA. 1050 + 36

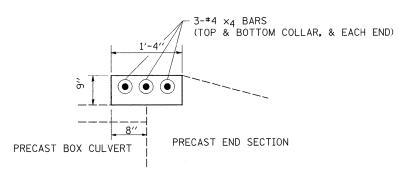


## 1/2 " GALV. STEEL PLATE -**DETAIL "A"** -(2) 1/2 " DIA. GALV. EXPANSION BOLTS (TYP.) 1/2" × 4" × 14" — TOP ANCHOR PLATE (GALVANIZED) \_\_\_5.2" 6'-0" 1'-2" × 4 BARS TOP ANCHOR PLATE



VIEW D-D

VIEW C-C



COLLAR DETAIL "PRECAST OPTION ONLY"

## **BILL OF MATERIALS**

(For Information Only)

BAR	BAR NUMBER			ENGTH	SHAPE	
a	30	#4		7′-5′′		
d	26	#4		4'-6''		
d <sub>1</sub>	8	#4		4'-6''		
h	18	#4		14'-5"		
h <sub>1</sub>	7	#4		15'-0"		
h <sub>2</sub>	2	#4		14'-0''		
s	9	#4		3′-3′′		
V	9	#4		4′-6′′		
×	9	#4		2'-8''		
$\times_1$	3	#4		7′-5′′		
× <sub>2</sub>	4	#4		8'-0''	ш	
× <sub>3</sub>	4	#6		7′-5′′		
*×4	12	#4		8'-9''		
DESCRIPTION				UNIT	QTY.	
Concrete Box Culverts				CuYd	5.1	
Reinforcement Bars				LBS	656	
3" I.D. Galv Steel Pipe				2 <b>o</b>	8'-0"	
	•					
	,			2 @	12'-4"	
¹/₂′′ Dia. Gal			;			
	v. Expansi		<b>;</b>	2 @	12'-4"	
¹∕₂" Dia. Gal	v. Expansi • Caps	on Bolts		2 @ EACH EACH	12'-4'' 8	
½″ Dia. Gal 3″ Galv Pipe	v. Expansi e Caps eel Plate	on Bolts (9" Nomi		2 @ EACH EACH	12'-4" 8 8	
$\frac{1}{2}$ " Dia. Gal 3" Galv Pipe 1/4" Galv St	v. Expansi caps eel Plate Galv Stee	on Bolts (9" Nomi I Plate		2 © EACH EACH	12'-4" 8 8 4	
/ <sub>2</sub> " Dia. Gal 3" Galv Pipe 1/4" Galv St 1/2"x4"x14"	v. Expansi e Caps reel Plate Galv Steel v Steel Bo	on Bolts (9" Nomî I Plate Its		2 @ EACH EACH EACH	12'-4" 8 8 4 4	
1/2" Dia. Gal 3" Galv Pipe 1/4" Galv St 1/2"x4"x14" 5/8"x9" Gal	v. Expansi e Caps eel Plate Galv Stee v Steel Bo /8 x 3" La	on Bolts (9" Nomî I Plate Its		2 @ EACH EACH EACH EACH	12'-4" 8 8 4 4 4	
1/2" Dia. Gal 3" Galv Pipe 1/4" Galv St 1/2"x4"x14" 5/8"x9" Galv L 4 x 4 x3.	v. Expansi caps cel Plate Galv Stee v Steel Bo /8 x 3" Lo	on Bolts (9" Nomi   Plate  ts		2 @ EACH EACH EACH EACH EACH	12'-4" 8 8 4 4 4 2	

\* Only required with precast end section. Weight not included in Reinforcement Bars quantity.

## **GENERAL NOTES:**

This work shall be paid for at the contract unit price per Each for Box Culvert End Section No. 11.

This work shall be done in according to the applicable portions of sections 503, 508, AND 540 of the Standard Specifications.

Contractor shall field verify Galvanized pipe lengths.

Exposed edges shall be beveled  $\frac{3}{4}$ ".

The contract unit price "EACH" for Box Culvert End Section No. 11 shall include the Bolts, Galvanized pipe, Nuts, Washers, Anchor Rods, and pipe caps. Steel Plates, Reinforcement Bars, and Concrete Box Culverts.

The Contractor has the option of using Precast construction for the end section, if so the concrete collar will also be included in the cost of Box Culvert End Section No. 11

Contractor shall provide galvanizing for holes, threads, etc. for fieldfabricated grate assembly.

The cost of earth excavation, where required, and necessary grading to fit the inlet as shown in the cross-sections or to the slope is included in the cost of Box Culvert End Section No. 11

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60 (IL Modified). See Special Provisions.

Steel plates shall conform to AASHTO M-270 Grade 36 and shall be gavanized conforming to AASHTO M-111.

Bolts, Nuts, Washers, and Anchor Rods shall be in accordance with article 505 of the Standard Specifications and shall be galvanized.

See Plan and Profile Sheet for more information.

See Cross Section Sheet for more information.

201/ 0111/227 5112	OFOTION	OULVERT NO 44	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
BOX C	CULVERT END	SECTION	CULVERT NO. 11	742	37R-4	OGLE	867	190	
	,					CONTRAC	T NO.	64E17	
SCALE:	SHEET NO. 1 OF 2	SHEETS STA.	TO STA.	FED. RO	AD DIST, NO. THE INDIS FED. AT	D PROJECT			

FILE NAME = DESIGNED REVISED REVISED :\pw\_work\PWIDOT\CUSHMANBW\dms31213\ 106608culvdetail.dgn DRAWN PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED PLOT DATE = Wed Mar 31 08:57:16 2010

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**