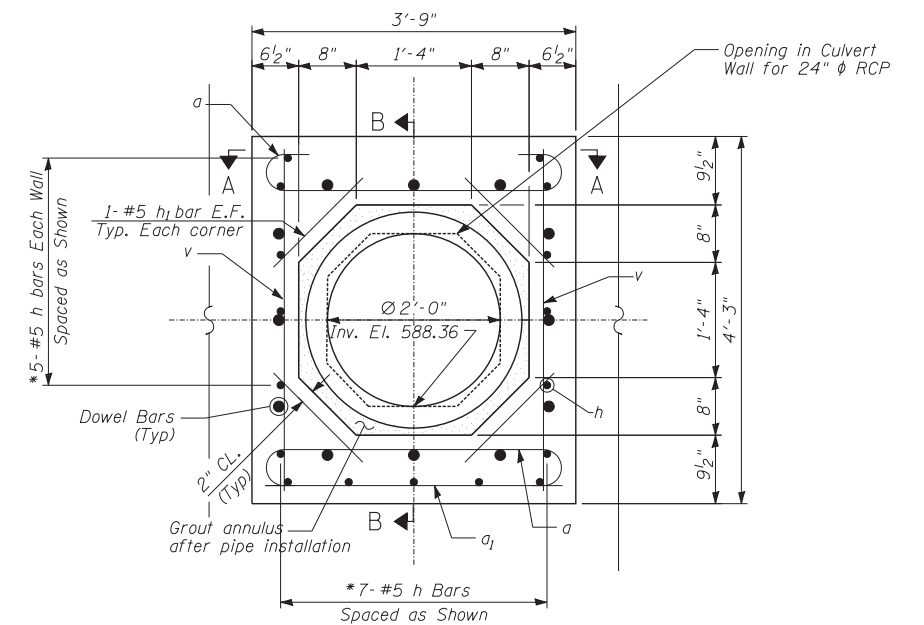


CONCRETE REMOVAL & DOWEL BAR LAYOUT - ELEVATION



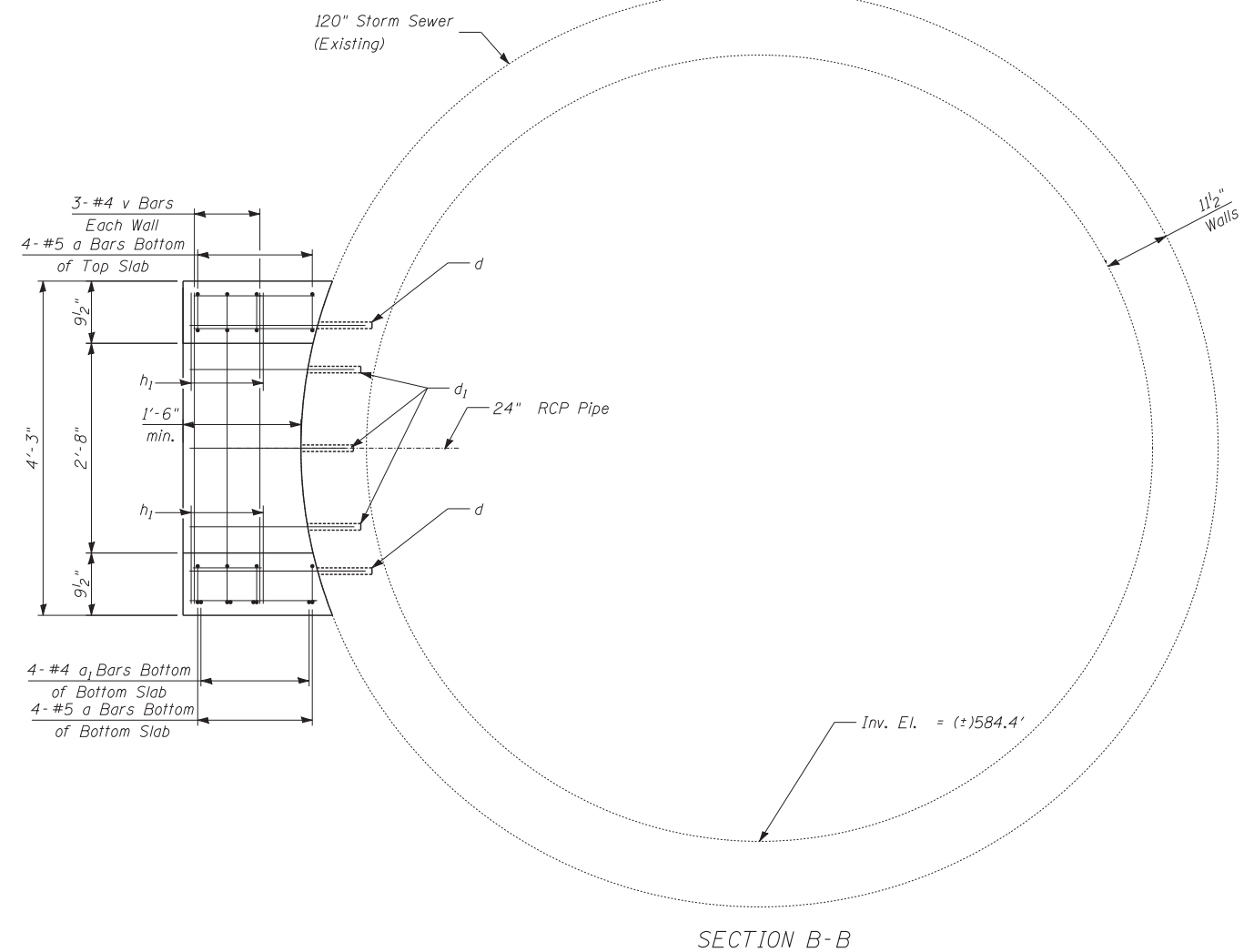
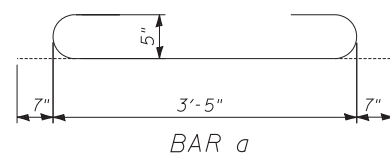
COLLAR DETAIL - ELEVATION

* Cut Bars to Fit Radius.

BILL OF MATERIAL

Bar	Number	Size	Length	Shape	
a	8	#5	4'-7"		
a1	4	#4	3'-5"		
h	17	#5	1'-6"		
h1	8	#5	2'-2"		
v	6	#5	4'-6"		
d	6	#6	2'-4"		
d1	6	#4	2'-1"		
Proposed Storm Sewer Connection To Existing Storm Sewer				EACH	1

NOTES:
 Drill and epoxy grout d & d₁ bars according to Article 584 of the Standard Specifications.
 The volume of concrete removal is 0.2 cu. yd.
 The volume of concrete for the pipe collar is 0.7 cu. yd.



SECTION B-B

TYLIN INTERNATIONAL

USER NAME =	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -
	DATE - 5/23/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**147TH STREET PROJECT
PROPOSED 24" STORM SEWER CONNECTION TO EXISTING STORM SEWER**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
XX	(0405-1 & 0506-2) R-1	COOK	577	262
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. TO STA.