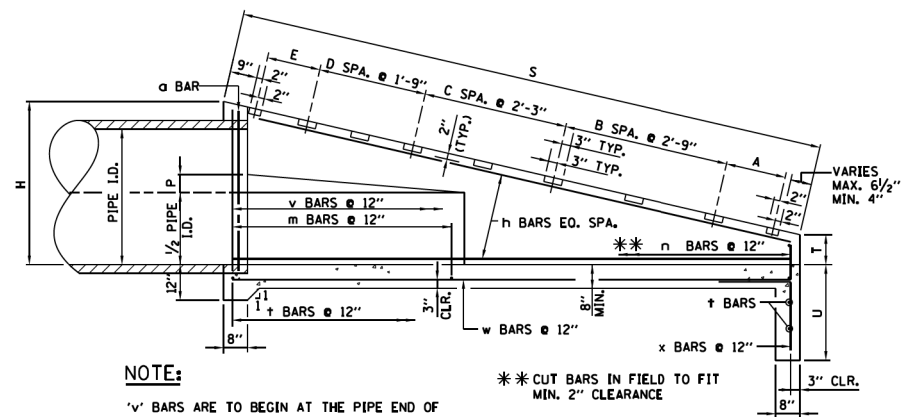


PLAN

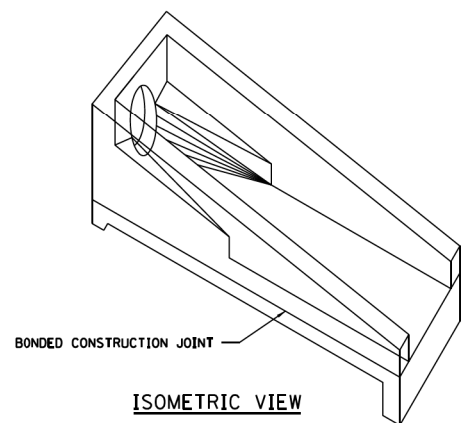


NOTE:

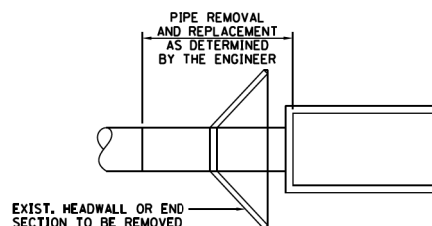
'v' BARS ARE TO BEGIN AT THE PIPE END OF THE SLOPED EXTERIOR HEADWALLS. 'm' BARS ARE TO BEGIN AT THE PIPE END OF THE SLOPED INTERIOR HEADWALLS.

\*\* CUT BARS IN FIELD TO FIT MIN. 2" CLEARANCE

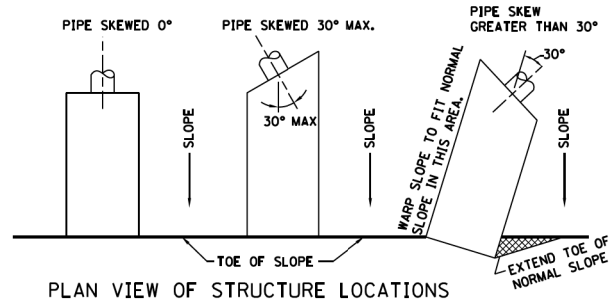
SECTION A-A



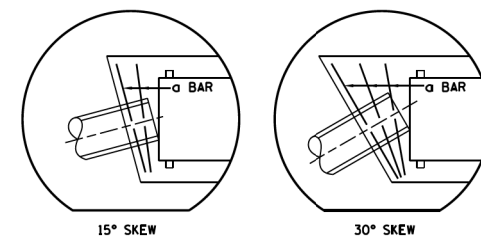
ISOMETRIC VIEW



INSTALLATION DETAIL



PLAN VIEW OF STRUCTURE LOCATIONS



15° SKEW

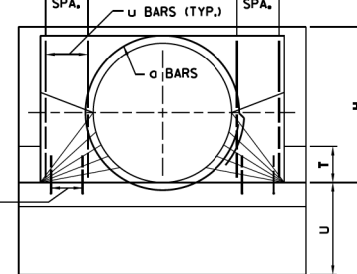
30° SKEW

NOTES:

ADDITIONAL 'A' BARS SHALL BE FURNISHED AND PLACED BY THE CONTRACTOR. THE ADDITIONAL BARS ARE NOT INCLUDED IN THE LISTED QUANTITIES BUT WILL BE PAID FOR AS REINFORCING STEEL. (EPOXY COATED)

1 ADDITIONAL BAR REQUIRED FOR EACH 15° SKEW OR FRACTION THEREOF.

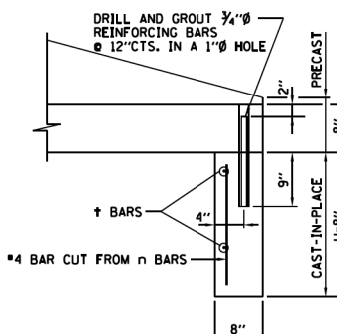
PIPE DIA'S 18", 24", & 30" 1 SPA.  
PIPE DIA'S 36", 42", & 48" 2 EQ. SPA.



FRONT ELEVATION

NOTES:

1. SLOPED HEADWALL TYPE III SHALL BE CONSTRUCTED FLUSH WITH EXISTING OR PROPOSED SLOPE.
2. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
3. ALL REINFORCEMENT BARS SHOWN SHALL BE EPOXY COATED.
4. BAR BENDING DETAILS ARE DIMENSIONED OUT TO OUT OF BARS.
5. ALL EXPOSED EDGES SHALL HAVE A 3/4" - 45° CHAMFER. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW THE FINISHED GROUND LINE.
6. COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BAR SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.
7. CARE SHALL BE EXERCISED IN REMOVING ANY LENGTH OF EXISTING PIPE SO THE REMAINING PIPE IS UNDAMAGED AND FULLY FUNCTIONING.
8. FOR DIMENSIONS AND QUANTITIES FOR ONE HEADWALL SEE SHEET 2 (OF 3) IN THIS SERIES.
9. FOR STEEL GRATING DETAILS SEE SHEET 3 (OF 3) IN THIS SERIES.
10. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT.



PRECAST CONNECTION DETAIL

SHEET 1 OF 3



DATE	REVISIONS
1-1-2011	REVISED NOTES
2-7-2012	DELETED TWIN PIPE DETAILS, DELETED PIPE DIA. 18", 24", 30" FOR 1:4 AND 1:6 SLOPES, DELETED SIDE PIPE DESIGN

HEADWALL TYPE III  
18"-24"-30"-36"-42"-48"  
FOR 1:4, 1:6, AND 1:10 SLOPES  
STANDARD B6-03

APPROVED: *Paul Kovacs* CHIEF ENGINEER DATE 2-7-2012

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com



FILE NAME = \$FILES\$

USER NAME = default  
PLOT SCALE = H=1"=10' V=1"=5'  
PLOT DATE = 6/18/2012

DESIGNED -  
DRAWN -  
CHECKED - RGR  
DATE - 6/19/2012

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOLLWAY STANDARD DRAWING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	49-1-R-1	LAKE	677	618

CONTRACT NO. 60L77  
ILLINOIS FED. AID PROJECT

S:\1101\95\CADD\60L77 IL 173\60L77-INT-151TH.dgn