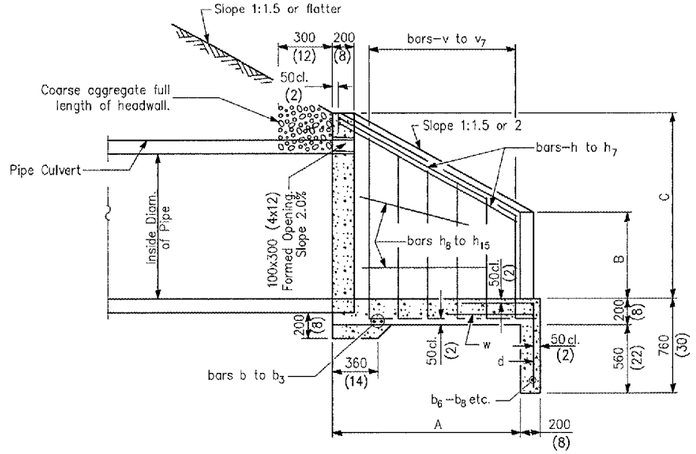
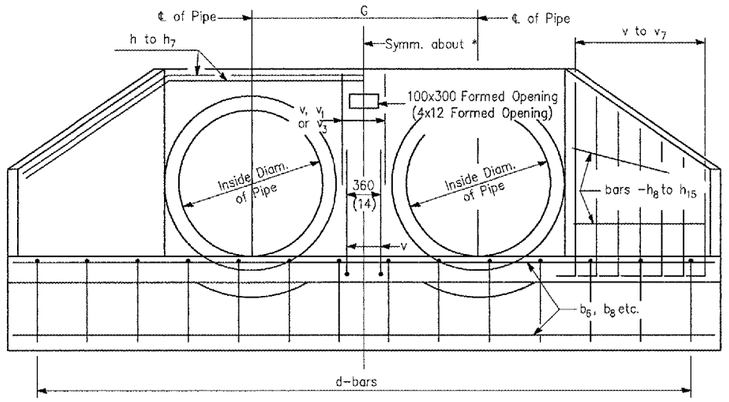
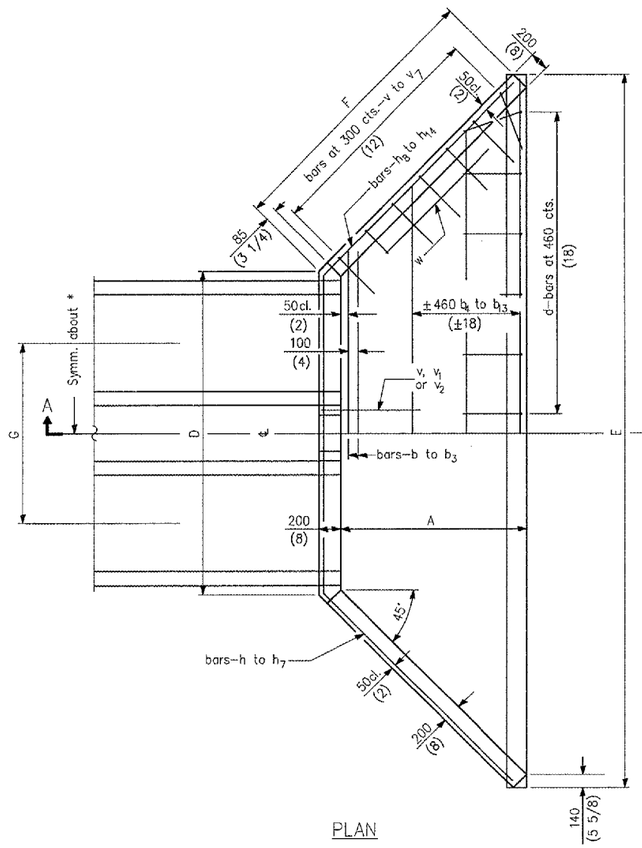


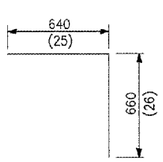
SECTION A–A



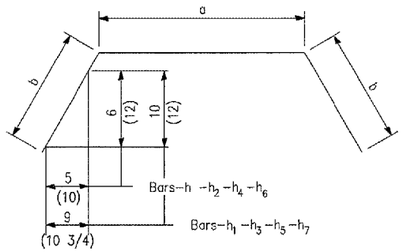
END ELEVATION



PLAN



No. 15(No. 4)–BAR d

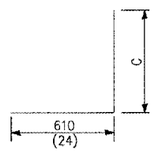


No. 15(No. 4)BARS – h to h7

Bend in field
One Required in each headwall

GENERAL NOTES

1. AS THE EMBANKMENT SLOPE ABOVE HEADWALL IS GREATER THAN 1:2 WINGS FOR 1:2 SLOPE SHALL BE PROVIDED.
2. ALL SLOPE RATIONS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H)
3. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
4. CONCRETE SHALL BE IN ACCORDANCE WITH ITEM 610 (IDOT CLASS SI).
5. ALL WORK PAID FOR UNDER ITEM AR800978.



No. 15(No. 4)BARS v to v7

DIMENSIONS AND QUANTITIES

DESIGN NO.	NOMINAL DIAM. of PIPE	SLOPE of FILL	DIMENSIONS							QUANTITIES	
			A	B	C	D	E	F	G	Concrete 2 End Secs. m^3 (cu. yds.)	Reinf. Bars 2 End Secs. kg (lbs.)
D1.5 m–2 (D60–2)	1500 (60)	1:2	1.88 m (6'–2")	890 (35)	1.83 m (6'–0")	4.29 m (14'–1")	8.16 m (26'–10")	2.74 m (9'–0")	2.29 m (7'–6")	11.5 (15.0)	440 (780)

BARS IN ONE END SECTION

D1.5–2 (D60–2)	
BARS	No.
d	18
b_3	2
b_7	1
b_9	1
b_{12}	1
b_{13}	2
h_7	2
h_{14}	4
v_5	8
v_3	6
v	6
w	2

DIMENSIONS OF STRAIGHT BARS

BAR	SIZE	LENGTH (m)
b	No. 15 (No. 5)	3.58 (11'–9")
b_1	No. 15 (No. 5)	3.95 (13'–0")
b_2	No. 15 (No. 5)	4.27 (14'–0")
b_3	No. 15 (No. 5)	4.65 (15'–3")
b_4	No. 15 (No. 4)	4.42 (14'–6")
b_5	No. 15 (No. 4)	4.95 (16'–3")
b_6	No. 15 (No. 4)	5.26 (17'–3")
b_7	No. 15 (No. 4)	5.49 (18'–0")
b_8	No. 15 (No. 5)	5.79 (19'–0")
b_9	No. 15 (No. 5)	6.25 (20'–6")
b_{10}	No. 15 (No. 4)	6.48 (21'–3")
b_{11}	No. 15 (No. 4)	7.01 (23'–0")
b_{12}	No. 15 (No. 4)	7.32 (24'–0")
b_{13}	No. 15 (No. 4)	7.92 (26'–0")
h_8	No. 15 (No. 4)	1.45 (4'–9")
h_9	No. 15 (No. 4)	1.6 (5'–3")
h_{10}	No. 15 (No. 4)	1.83 (6'–0")
h_{11}	No. 15 (No. 4)	1.98 (6'–6")
h_{12}	No. 15 (No. 4)	2.21 (7'–3")
h_{13}	No. 15 (No. 4)	2.44 (8'–0")
h_{14}	No. 15 (No. 4)	2.67 (8'–9")
w	No. 15 (No. 4)	1.22 (4'–0")

DIMENSIONS OF BENT BARS

No. 15 –bars v to v 7 (No. 5)			No. 15 –bars h to h 7 (No. 5)			
BARS	c	TOTAL LENGTH	BARS	a	b	TOTAL LENGTH
v	1.83 m (6'–0")	2.44 m (8'–0")	h	3.18 m (10'–5")	1.57 m (5'–2")	6.32 m (20'–9")
v_1	1.68 m (5'–6")	2.29 m (7'–6")	h_1	3.18 m (10'–5")	2.03 m (6'–8")	7.24 m (23'–9")
v_2	1.52 m (5'–0")	2.13 m (7'–0")	h_2	3.53 m (11'–7")	1.78 m (5'–10")	7.09 m (23'–3")
v_3	1.37 m (4'–6")	1.98 m (6'–6")	h_3	3.53 m (11'–7")	2.31 m (7'–7")	8.15 m (26'–9")
v_4	1.22 m (4'–0")	1.83 m (6'–0")	h_4	3.87 m (12'–9")	1.98 m (6'–6")	7.83 m (25'–9")
v_5	1.07 m (3'–6")	1.68 m (5'–6")	h_5	3.87 m (12'–9")	2.51 m (8'–3")	8.89 m (29'–0")
v_6	910 (36)	1.52 m (5'–0")	h_6	4.24 m (13'–11")	2.18 m (7'–2")	8.60 m (28'–3")
v_7	760 (30)	1.37 m (4'–6")	h_7	4.24 m (13'–11")	2.79 m (9'–2")	9.82 m (32'–3")

IDOT STANDARD 542121

REINFORCED CONCRETE END SECTIONS FOR MULTIPLE PIPE CULVERTS

DETAILS SHOWN ARE NOT TO SCALE

LE037

HANSON

HANSON PROFESSIONAL SERVICES INC.

815 Commerce Drive, Suite 200
Oak Brook, Illinois 60523
Telephone: 630.990.3800
Fax: 630.990.3801

Chicago-Romeoville Airport

JOLIET REGIONAL PORT DISTRICT

1 Hangar Road
Romeoville, Illinois 60446
Telephone: 815.838.9497
Fax: 815.838.9524

CONSTRUCT RUNWAY 2-20
DRAINAGE CULVERTS AND IMPROVEMENTS

AIP PROJECT NO. 3-17-0140-B40
IDA PROJECT NO. LOT-3596

No.	Drawing Issue Description	Date	By

Date

MAY 5, 2006

Sheet Title

TWIN 60-INCH RCP CULVERT PIPE END SECTION

840–05C8046
Project Number

LDH	04/20/06	Layout By / Date
LDH	04/20/06	Designed By / Date
CRC	05/05/06	Reviewed By / Date
LDH	---|---	Drawn By / Sheet No.

46

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