C/L OF CULVERT NORMAL TO C/L OF ROADWAY. HEADWALL IS SYMMETRICAL ABOUT C/L

PLAN TYPE "A"

SLOPE AS SHOWN ON CROSS SECTIONS

SECTION D–D

SECTION C–C

NOTES:
CHART CONTINUED ON SHEET 2 OF 2
* ONE WALL

<table>
<thead>
<tr>
<th>PIPE DIA. &quot;D&quot;</th>
<th>α</th>
<th>β</th>
<th>γ</th>
<th>L2</th>
<th>h2</th>
<th>C.Y. ▪ CONC. C.M.P</th>
<th>C.Y. ▪ CONC. R.C.P</th>
<th>STEEL LBS.</th>
<th>L1</th>
<th>L2</th>
<th>h1</th>
<th>h2</th>
<th>C.Y. ▪ CONC. C.M.P</th>
<th>C.Y. ▪ CONC. R.C.P</th>
<th>STEEL LBS.</th>
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<td>1'-6&quot;</td>
<td>2'-6&quot;</td>
<td>#5</td>
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<td>8'-9&quot;</td>
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<td>7.1</td>
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<td>#5</td>
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CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE & DRAINAGE

CAST-IN-PLACE PIPE CULVERT HEADWALLS 42" TO 84"

SSS MANAGER

REvised 12/6/13

STANDARD DRAWING AA–S167
LOCATION AND GRADING PLAN
FOR SKewed PIPE CULVERT — TYPE "B"

PLAN
TYPE "B"

NOTES:
1. HEADWALL WHERE REQUIRED WILL BE PROVIDED FOR SKewed AND NONSKewed CULVERTS HAVING A DIAMETER OR RISE OF 43" TO 84". TYPE "A" IS USED WHEN SKewed ANGLE(φ) IS 10° OR LESS AND TYPE "B" WHEN ANGLE IS 11° OR OVER.
2. REINFORCING STEEL SHALL BE #5 BAR.
3. DIMENSIONS AND QUANTITIES ARE SHOWN FOR CIRCULAR SECTIONS ONLY. CALCULATE REINFORCEMENT FOR ELLIPTICAL CONCRETE OR CORRUGATED PIPE ARCHES IN ACCORDANCE WITH NEAREST SIZE CIRCULAR PIPE. ESTABLISHED DIMENSIONS FOR VERTICAL DIAMETER SHALL APPLY FOR RISE AND DIMENSIONS FOR HORIZONTAL DIAMETER SHALL APPLY TO SPAN.
4. CONCRETE SHALL BE CLASS "C".
5. FOUNDATION: INCREASE WIDTH OF BASE WHERE SOIL BORINGS INDICATE A BEARING CAPACITY LESS THAN 2600 LBS. PER SQ. FT. IT WILL BE NECESSARY TO INCREASE THE WIDTH OF THE FOOTING.
6. WHEN SLOPES OTHER THAN 2:1 ARE USED ADJUST LENGTH "L1" & "L2" AND HEIGHT "h1" & "h2" AS REQUIRED.
8. THE CONTRACTOR MAY PROPOSE TO USE PRECAST IN LIEU OF CAST IN PLACE BUT MUST SUBMIT DETAILED DRAWINGS OF THE PROPOSED STRUCTURE WITH AN OHIO REGISTERED PROFESSIONAL ENGINEER'S STAMP OF APPROVAL.

<table>
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<th>b</th>
<th>c</th>
<th>BAR &quot;D&quot;</th>
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<th>L2</th>
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* ONE WALL

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CAST-IN-PLACE PIPE CULVERT
HEADWALLS
42" TO 84"

STANDARD DRAWING
AA-S167
REVISED 12/6/13
PAGE 2/2

SSES MANAGER

[Signature]