PLAN VIEW OF BLOCK LAYERS

MATERIALS LIST
Total Blocks
(Optional) Gravel Fill Tons
Geotextile Sq Yd

ELEVATIONS AND WIDTHS
Top Of Earth Berm
Top Of Highest Block
Emergency Spillway
Weir Crest
Exit Apron
Emergency Spillway Width
Emergency Spillway Location: Left, Right, Both, None
(circle one, x out others)

Top Layer
(_6_ Blocks)

3rd Layer (From Bottom)
# Of Blocks = 10 + L + W/2 =
_____ Blocks

2nd Layer (From Bottom)
# Of Block = 5 + L/2 + W/4 =
_____ Blocks

Bottom Layer
# Of Blocks = 4 + L/2 + (L/8+0.5)W =
_____ Blocks

ISOMETRIC VIEW
(For specific block locations and numbers
see Plan View this sheet and Sheet 2 of 2)

W
Earth Berm
Top El

Outlet Elevation

Outlet Channel

Slope 1.5 : 1 or Flatter (See Note 5)

Outlet Elev.

Waterway Flow

Slope 4": Min

Top Width x Min

Outlet Channel

Outlet Elevation

Emergency Spillway
(Left) El=
Width=

Emergency Spillway
(Right) El=
Width=

Outlet Elev.

Outlet Elevation

Outlet Channel

Outlet Elev.

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Outlet Elev.
STRUCTURE CAPACITY

<table>
<thead>
<tr>
<th>L</th>
<th>Q(cfs)</th>
<th>Q(ft³)</th>
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<tbody>
<tr>
<td>4 ft</td>
<td>105</td>
<td>4</td>
</tr>
<tr>
<td>8 ft</td>
<td>175</td>
<td>4</td>
</tr>
<tr>
<td>12 ft</td>
<td>245</td>
<td>4</td>
</tr>
<tr>
<td>16 ft</td>
<td>315</td>
<td>4</td>
</tr>
<tr>
<td>20 ft</td>
<td>210</td>
<td>8</td>
</tr>
<tr>
<td>24 ft</td>
<td>280</td>
<td>8</td>
</tr>
<tr>
<td>28 ft</td>
<td>350</td>
<td>8</td>
</tr>
</tbody>
</table>

CONSTRUCTION NOTES:
1. Modular concrete block shall:
   - Have nominal dimensions of 2' x 2' x 4" thick, weigh at least 2300 lbs.,
   - Have uniform flat sides and re-entrant corners.
2. Geotextile (non-woven, needle-punched) Minimum criteria:
   - Tensile strength (lb) ASTM D 4632 ≥ 202 lb
   - Elongation at break (%) ASTM D 4632 ≥ 50%
   - Trapezoidal tear strength (lb) ASTM D 4533 ≥ 100 lb
   - Permeability sec⁻¹ ASTM D 4491 max 0.25 mm (US sieve size 70)
3. Any geotextile splice shall overlap a minimum of 18 inches, with
   - Upstream or upslope geotextile overlapping the abutting downslope geotextile.
4. Geotextile shall be placed at all soil-block interfaces.
5. All blocks not placed on other blocks must be placed on undisturbed soil. A minimum 6 inch thick layer of 3/4" (IDOT Grad. No. CA 15 or 16) rock fill (base) may be placed between the natural ground (subbase) and the geotextile to provide a level base. No material shall be placed between the blocks and the geotextile.
6. Earth bars will be extended on either end of structure, unless
   - Burring is into a culvert headwall.
7. If designer wants an outlet channel side slope flatter than 1:5:1 then
   - Headwall blocks must be extended.
8. Minimum L = 4 ft and minimum W = 4 ft.
9. For Tile Outlet Detail, form hole in the concrete block using pipe one
   - Size larger than the desired tile diameter, Grout, or add mastic in between formed pipe and tile outlet pipe.
10. L & W shall be in multiple of 4.
11. Grout any gaps between blocks that are 1/2" or wider.
12. Berm shall be seeded and mulched according to 342 Critical Area
    - Planting Specifications.