## ANCHORED/CONNECTED BRIDGE APPROACH BARRIERS

### DRAWING SCHEDULE

<table>
<thead>
<tr>
<th>DRAWING NUMBER</th>
<th>DESCRIPTION</th>
<th>REV.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>STD-EC-010-17</td>
<td>OPTIONS SUMMARY &amp; GENERAL NOTES</td>
<td>0</td>
<td>DECEMBER 13, 2019</td>
</tr>
<tr>
<td>STD-EC-010-18</td>
<td>EXAMPLE APPROACH BARRIER LAYOUT</td>
<td>0</td>
<td>DECEMBER 13, 2019</td>
</tr>
<tr>
<td>STD-EC-010-19</td>
<td>ANCHOR CRB DETAILS</td>
<td>0</td>
<td>DECEMBER 13, 2019</td>
</tr>
<tr>
<td>STD-EC-010-20</td>
<td>BURIED ANCHORAGE DETAILS &amp; DELINERATOR ATTACHMENT TAB DETAILS</td>
<td>0</td>
<td>DECEMBER 13, 2019</td>
</tr>
<tr>
<td>STD-EC-010-21</td>
<td>FIXED ANGLE CONNECTION OPTION DETAILS</td>
<td>0</td>
<td>DECEMBER 13, 2019</td>
</tr>
<tr>
<td>STD-EC-010-22</td>
<td>HINGED CONNECTION OPTION DETAILS</td>
<td>0</td>
<td>DECEMBER 13, 2019</td>
</tr>
</tbody>
</table>
**STANDARD BRIDGE DRAWING**

**ANCHORED/CONNECTED BRIDGE APPROACH BARRIERS**

**EXAMPLE APPROACH BARRIER LAYOUT**

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**APPROACH BARRIER LAYOUT NOTES:**
- General arrangement engineer to determine req'd ballast wall geometry. Ministry standard ballast wall geometry frequently requires modification to ensure adequate fill retention & space for approach barriers.
- Right/left banks are determined when looking downstream at the bridge.
- Right/left shoulders are determined when approaching the bridge by road.
- See sheet 1 for general notes.

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**NOTE:**
Top of anchor pipe to be 25 below top of CRB (x 25).

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**FIXED ANGLE CONNECTION FOR CL-3 RAILING & PLATES & PLATES BURIED ANCHORAGE EXAMPLE SHOWN**

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**CREEK FLOW DIRECTION**

**RIGHT BANK - RIGHT SHOULDER**

**SLOPE**

**300 MIN LEVEL FILL BEHIND BARRIERS**

**LINE OF APPROACH BARRIERS - NUMBER, ANGLE, ETC. TO BE DETERMINED BY BRIDGE GENERAL ARRANGEMENT ENGINEER**

**PULLOUT EDGE (TO SUIT ROAD DESIGN)**

**ROADWAY WIDTH (TO SUIT ROAD DESIGN)**

**RIGHT BANK - LEFT SHOULDER**

**BRIDGE DECK WIDTH (AS REC'D)**

**1.5H:1BV MIX FILL SLOPE TYP.**

**1.5H:1BV MIX FILL SLOPE TYP.**

**BASES TO BE LACKOATED**

**0.3m x 0.9m DELINEATOR**

**TYP BRIDGE RAILING**

**ANCHOR CRB**

**CTB-1E**

**CBN-H**

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**SECTION 1:00**

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**EXAMPLE RIGHT BANK APPROACH BARRIER LAYOUT PLAN**
EMBEDDED COUPLER ASSEMBLY
(TYP. 4 TOTAL, 3 ON END & 1 ON TRAFFIC FACE)
250 x 150 L.G. BOLT INSERTED 35
INTO 100 L.G. THREADED COUPLER
SEE SHEET 5/6 FOR
CORRESPONDING EXTERIOR
ATTACHMENT BOLTS & WASHERS)

BRIDGE END ELEV
1:20
ANCHOR CRIB NOTES
- 2 RIGHT SHOULDER ANCHOR CRIBS (AS SHOWN) & 2 LEFT
SHOULDER ANCHOR CRIBS (NOT SHOWN) TYP. PER BRIDGE,
- 25 CHAMBERS TYP. U.N.D.
- CHAMBERS AT BASE & HOOK END TO BE AS PER M/T CRIB-H
- 700 mm LONG TRANSITION ZONE TO TYP. M/T CRIB SHAPE &
DETAILING TO BE DETAILED ON FABRICATOR PREPARED SHOP
DRAWINGS, AND TO BE CONSTRUCTED WITH HIGH QUALITY,
SMOOTH ANGLES, TRANSITIONS & FINISHING MEETING TYP. M/TI
CRIB SPECS.
- SEE SHEET 1 FOR GENERAL NOTES

TRAFFIC FACE ELEV
1:20
(REINFORCEMENT NOT SHOWN FOR CLARITY)

HOOK END ELEV
1:20
(NOT SHOWING WIDENING BEYOND THE END)

STANDARD BRIDGE DRAWING
ANCHORED/CONNECTED BRIDGE APPROACH BARRIERS

ANCHOR CRIB DETAILS

[Diagram showing various dimensions and annotations]
GENERAL CONNECTION PLAN

25 DIA x 57 LG BOLT (2 TOT) 
CW 16 OVERSIZED WASHER
(B9 DIA x 9.56 CW 27 DIA
CENTRED HOLE) PER BOLT

BENT FACE PLATE
FULL PENETRATION WELD REQD.
WELDING PROCEDURE DATA SHEET
(WPS) TO BE PROVIDED TO
MINISTRY IN-PLANT QUALITY
ASSURANCE (QA) INSPECTOR

152x152x6.4 HSS SOCKET. SHORT SIDE
LENGTH = 300. LONG SIDE LENGTH VARIES.
ANGLE & HT ALSO VARIES
CW 27 DIA HOLE TOP & BOT.

FIXED ANGLE WELDED ASSEMBLY
PLAN DETAIL

0° ANGLE 
& CL-3 
RAIL
EXAMPLE SHOWN

6.4 x 254 HT
BENT FACE PLATE
CW 2 - 32x64 VERT. SLOTS

EXAMPLE OF CL-2 HT.
SOCKET SHOWN WITH
LONG DASHED LINES

TRANSITION SPLICE TUBE - PLAN

127x127x4.8 SPLICE TUBE CW
2 - 30x100 SLOTS TOP & BOT.

HSS 127x127x4.8 TRANSITION SPLICE TUBE (LENGTH VARIES, MIN LENGTH = 650)

EMBEDDED COUPLER ASSEMBLY (TYP) 
(SEE SHEET 3 FOR DETAILS)

EXAMPLE ANGLE SHOWN

MIN 150
MIN 100

MIN 150

MIN 100

EXAMPLE ANGLE SHOWN

TRAFFIC FACE ELEV.

LENGTH VARIES
(650 MM)

SYN
63

TYP. CL-2 OR CL-3 HSS 
BRIDGE RAILING CW 27 DIA
HOLE (TOP & BOTTOM)

ANCHOR CRB

EMBEDDED COUPLER ASSEMBLY (TYP)
(SEE SHEET 3 FOR DETAILS)

ENGINEERED
M FEB 10 / 2019
CACHED ON DEC 13 / 2019
PROOFREAD ON DEC 13 / 2019

FEMALE 
DRAWN BY 
FOR-11300-301919F

SHEET 5 OF 6
DRAWN ON DEC 13 / 2019
CHECKED BY 
MICHELE HARVEY
MKE PENTER

PRESS RELEASE
MCKINLEY COUNTY
FOR 11300-301919F

FOR-11300-301919F

1:10

1:10

REVISIONS

STANDARD BRIDGE DRAWING
ANCHORED/CONNECTED BRIDGE APPROACH BARRIERS

FIXED ANGLE CONNECTION NOTES:
- REQUIRES CUSTOM DETAILING & FABRICATION FOR SPECIFIC ANGLES & FOR CL-2 OR CL-3 RAIL HT.
- NOT EASILY FIELD ADJUSTABLE
- DWG SHOWS RIGHT SHOULDER CONNECTION DETAILING
(TYPICALLY 2 RIGHT SHOULDER CONNECTIONS & 2 LEFT SHOULDER CONNECTIONS ARE REQD FOR EACH BRIDGE)
- SEE SHEET 1 FOR GENERAL NOTES

MIN 150

MIN 100

MIN 150

MIN 100

EXTERIOR RADIUS = 19

150

150

150

150