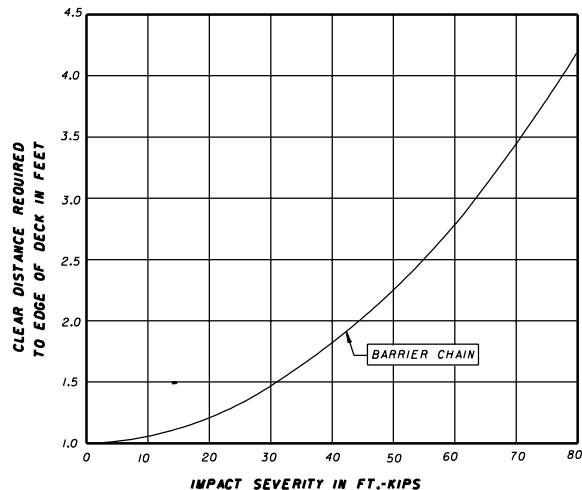


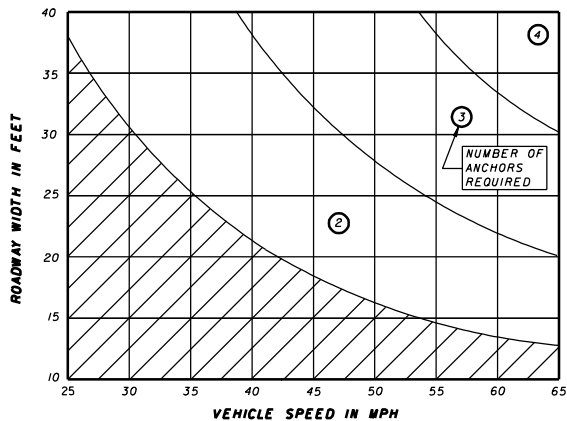
IMPACT SEVERITY VS ROADWAY WIDTH

FIGURE 1.



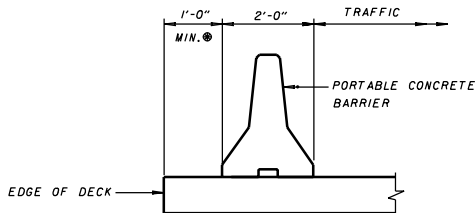
PLACEMENT VS IMPACT SEVERITY OF AN UNANCHORED BARRIER CHAIN

FIGURE 2



ANCHORS REQUIRED PER BARRIER SEGMENT

FIGURE 3



BARRIER LOCATION DETAIL

CONCRETE BARRIER INSTALLATION

1. DETERMINE IF THE BARRIER INSTALLATION CAN REMAIN UNANCHORED, BECAUSE OF THE AVAILABILITY OF SPACE BETWEEN THE BARRIER CHAIN LOCATION AND THE EDGE OF THE BRIDGE DECK.

TO FIND THE IMPACT SEVERITY ENTER FIGURE 1 WITH THE KNOWN ROADWAY WIDTH AND THE POSTED SPEED LIMIT*. THEN, WITH THE KNOWN IMPACT SEVERITY, ENTER FIGURE 2 AND FIND THE MINIMUM CLEAR DISTANCE REQUIRED FROM THE EDGE OF THE BRIDGE DECK AT WHICH AN UNANCHORED BARRIER CAN BE LOCATED.

2. IF IT IS DETERMINED THAT THE BARRIER CHAIN MUST BE ANCHORED, ENTER FIGURE 3 WITH THE KNOWN ROADWAY WIDTH AND THE POSTED SPEED* TO FIND THE NUMBER OF ANCHORS REQUIRED PER BARRIER SEGMENT.

3. WHEN ANCHORING IS REQUIRED, ALL BARRIER SEGMENTS SHALL BE FASTENED TO THE BRIDGE DECK USING ONE INCH DIA. HIGH STRENGTH THROUGH BOLTS OR APPROVED RESIN ANCHORS. WHEN RESIN ANCHORS ARE USED THEY MUST BE EMBEDDED A MINIMUM OF 6½" INTO FIRM CONCRETE. GENERALLY, ALL ANCHORS SHALL BE PLACED ON THE TRAFFIC SIDE OF THE BARRIER WITH THE ANCHOR PATTERN SYMMETRICAL ABOUT THE CENTER OF EACH SEGMENT.

4. PRECAST CONCRETE BARRIER SEGMENTS LOCATED ON BRIDGE DECKS CROSSING OVER ACTIVE ROADWAYS, RAILROADS, AND/OR RECREATIONAL AREAS, SHALL BE SECURED BY NOT LESS THAN TWO ANCHORS. **

* THE POSTED SPEED LIMIT SHALL BE DEFINED AS THE SPEED THAT IS ACTIVELY ENFORCED EITHER BY LEGAL MEANS OR TRAFFIC CONTROL DEVICES.

** UNLESS BARRIER SEGMENTS ARE TO BE INSTALLED 6 FT. OR MORE, CLEAR DISTANCE FROM THE EDGE OF DECK, EQUIPMENT, AND/OR PROBABLE WORK AREAS.

NOTES TO DESIGNER:

GENERALLY, ALL BARRIERS SHALL BE PLACED NO CLOSER THEN ONE FOOT FROM THE EDGE OF DECK. IN THOSE DESIGNS WHERE THE TRAFFIC LANE WIDTH DICTATES THAT THE BARRIER SEGMENTS MUST BE LOCATED AT OR NEAR THE EDGE OF DECK, THE DESIGNER SHALL DOUBLE THE NUMBER OF ANCHORS REQUIRED.

AS FAR AS PRACTICAL THE ADDITIONAL ANCHORS SHALL BE LOCATED ON THE TRAFFIC SIDE OF THE BARRIERS. OTHERWISE, THE ADDITIONAL ANCHORS MAY BE PLACED ON THE NON-TRAFFIC SIDE OF THE BARRIER SEGMENTS. WHEN USED ON EXISTING DECKS, ADDITIONAL ANCHORS PLACED ON THE NON-TRAFFIC SIDE MUST BE THRU BOLTED.

PRECAST CONCRETE BARRIER SEGMENTS NOT OTHERWISE REQUIRING ANCHORS SHALL, WHEN PLACED NEAR OR AT THE EDGE OF DECK, HAVE A MINIMUM OF TWO ANCHORS.

NOTE: "ROADWAY WIDTH" SHALL BE DEFINED AS THE CLEAR DISTANCE BETWEEN THE TRAFFIC SIDE TOE OF THE PORTABLE CONCRETE BARRIER CHAIN AND THE PERMANENT BRIDGE RAILING OR FACE OF SIDEWALK CURB.

REVISIONS	STATE OF OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF BRIDGES AND STRUCTURAL DESIGN				DRAWING NO. PCB-DD
	DESIGN DATA PORTABLE CONCRETE BARRIER INSTALLATION GUIDELINES				
	APPROVED:	ENGINEER OF BRIDGES			
DATE:	PREPARED AJM	DRAWN GFJ	CHECKED WTF	REVIEWED LMW	