2 FT MIN. DISTANCE **EDGE OF PAVEMENT** OF WALL EDGE OF NEAREST PAVEMENT SECTION PAVEMENT SECTION NEAREST TRAFFIC TRAFFIC A: TOP OF SHORING = REINFORCED EDGE OF PAVEMENT ZONE **B: BOTTOM OF SHORING** REINFORCEMENT BOTTOM OF EXCAVATION OR EXISTING GRADE **FINISHED** GRADE BOTTOM OF WALL REINFORCED ZONE NOTE: WALL OR SHORING HEIGHT = A - B

## FIGURE A

## **NOTES**

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

  (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).
- 4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.
- 5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- 6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- 7- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.
- 8- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS AND OR AS APPROVED BY THE ENGINEER.
- 9- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- 10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

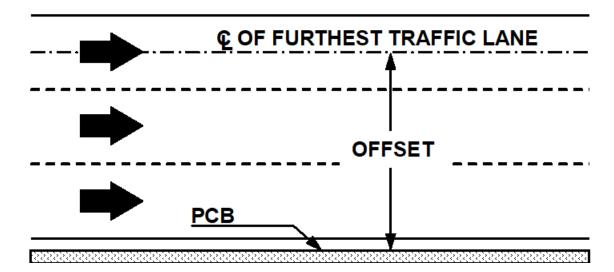
PROJ. REFERENCE NO.	SHEET NO.
R-3830	TMP-2

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

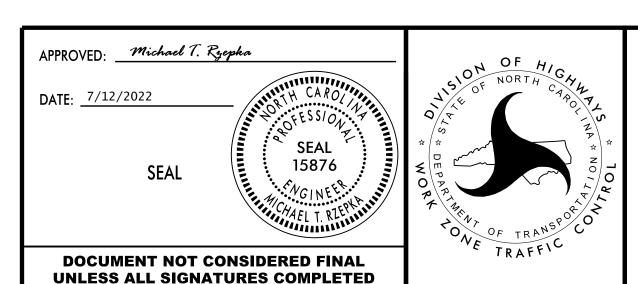
## MINIMUM REQUIRED CLEAR DISTANCE, inches

Barrier	Pavement	Offset *	Design Speed, mph						
Type	Type	ft	< 30	31-40	41-50	51-60	61-70	71-80	
<u> </u>		<8	24	26	29	32	36	40	
		8-14	26	28	31	35	38	42	
		14-20	27	29	34	36	39	43	
		20-26	28	31	35	38	40	44	
	Asphalt	26-32	29	32	36	39	42	45	
	Tispitate	32-38	30	34	38	41	43	46	
Ą		38-44	31	34	41	43	45	48	
PCB		44-50	31	35	41	43	46	49	
		50-56	32	36	42	44	47	50	
Unanchored		>56	32	36	42	45	47	51	
<b>h</b> 0		<8	17	18	21	22	25	26	
nc		8-14	19	20	23	25	26	29	
na		14-20	22	22	24	26	28	31	
n		20-26	23	24	26	27	30	34	
	Concrete	26-32	24	25	27	28	32	35	
		32-38	24	26	27	30	33	36	
		38-44	25	26	28	30	34	37	
		44-50	26	26	28	32	35	37	
		50-56	26	26	28	32	35	38	
		>56	26	27	29	32	36	38	
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds						
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds						

<sup>\*</sup> See Figure Below



## FIGURE B



PORTABLE CONCRETE BARRIER
AT TEMPORARY
SHORING LOCATIONS