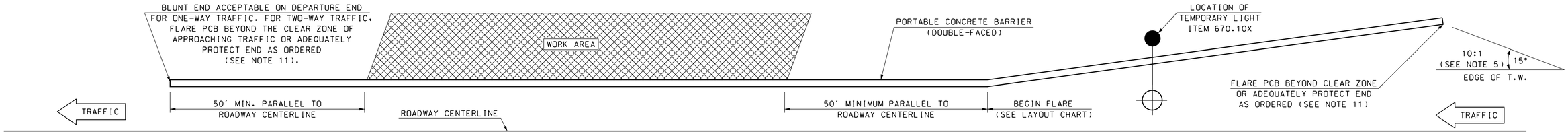


TRAFFIC OR TRAFFIC

(SEE NOTE ABOVE)

LAYOUT OF PORTABLE CONCRETE BARRIER

(NTS)

PORTABLE CONCRETE BARRIER LAYOUT			
OPERATING SPEED	DESIRABLE LATERAL OFFSET FROM T.W. **	MAXIMUM FLARE RATE * (FREE-STANDING)	MINIMUM LENGTH OF PCB SYSTEM
≤ 30 MPH	2'	7:1	
40 MPH	5'	9:1	
50 MPH	6.5'	11:1	
60 MPH	8'	13:1	
70 MPH	10'	15:1	
ALL SPEEDS	15' MAX ***		100'

* MEASURE FLARE FROM A LINE PARALLEL TO THE ROADWAY ℄, WHETHER ON A CURVE OR A TANGENT.

** FOR RESTRICTED SITE CONDITIONS, LESSER OFFSETS MAY BE PERMITTED BY THE ENGINEER.

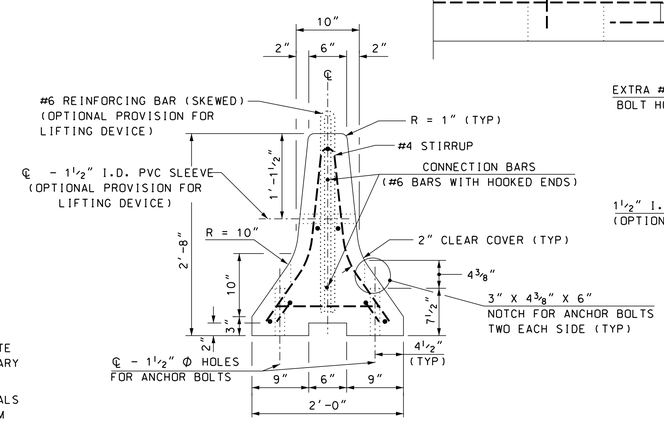
*** TO REDUCE POTENTIAL FOR HIGH-ANGLE IMPACTS (> 15°)

GENERAL NOTES

1. THE PORTABLE CONCRETE BARRIER DETAILS, AS SHOWN ON THIS SHEET, ARE IN COMPLIANCE WITH THE REQUIREMENTS OF NCHRP REPORT 350.
2. CONCRETE BARRIER SHALL BE FURNISHED BY THE CONTRACTOR AND PAID AS ITEM 606.417, PORTABLE CONCRETE BARRIER FOR TRAFFIC CONTROL. CONNECTIONS TO EXISTING BARRIERS, WHEN REQUIRED, SHALL BE SUBSIDIARY TO ITEM 606.417.
3. THE CONTRACTOR SHALL FURNISH AND INSTALL APPROVED RETROREFLECTIVE DELINEATORS AT 25-FOOT INTERVALS ALONG THE TOP AND/OR ONE FOOT DOWN THE SIDE OF THE PORTABLE CONCRETE BARRIER, SUBSIDIARY TO ITEM 606.417. THE COLOR OF DELINEATORS SHALL, IN ALL CASES, CONFORM TO THE COLOR OF EDGE LINE MARKINGS. DELINEATORS SUPPLEMENT, BUT DO NOT REPLACE, THE NEED FOR RETROREFLECTIVE SOLID EDGE LINE MARKINGS.
4. UNPROTECTED OPENINGS IN PORTABLE CONCRETE BARRIER WILL NOT BE PERMITTED, UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER.
5. A 10:1 OR FLATTER FORESLOPE (SUBSIDIARY TO ITEM 606.417) SHALL BE PROVIDED IN ADVANCE OF ALL PORTABLE CONCRETE BARRIER SYSTEMS WITHIN THE CLEAR ZONE. REFER TO THE **ROADSIDE DESIGN GUIDE** AASHTO, 2006, FOR CLEAR ZONE WIDTHS AND ADDITIONAL INFORMATION.
6. WHEN PORTABLE CONCRETE BARRIER IS INSTALLED ON BOTH SIDES OF TRAFFIC, THE BEGINNINGS OF THE BARRIER SHALL BE STAGGERED BY AT LEAST 50 FEET.
7. OTHER BARRIER CONFIGURATIONS AND END CONNECTIONS ARE SUBJECT TO APPROVAL BY THE ENGINEER. BARRIERS OF DIFFERENT GEOMETRIC SHAPES SHALL NOT BE MIXED ON THE SAME RUN.
8. PLACE RETROREFLECTORIZED DRUMS OR BARRICADES IN ACCORDANCE WITH 6C-2 OF THE MUTCD IN ADVANCE OF PORTABLE CONCRETE BARRIER TO WARN AND ALERT DRIVERS.
9. DETAILS FOR ANCHOR BOLTS ARE SHOWN ONLY FOR USE AS REQUIRED OR DIRECTED.
10. TEMPORARY LIGHTS SHALL BE PAID UNDER ITEM 670.10X.
11. ADEQUATE PROTECTION SHALL BE MEASURES AS DESCRIBED IN THE CURRENT EDITION OF THE ROADSIDE DESIGN GUIDE AS ADOPTED BY THE DEPARTMENT. PLACING GRANULAR MATERIAL AT THE END(S) OF BARRIER SHALL NOT BE CONSIDERED ADEQUATE PROTECTION.

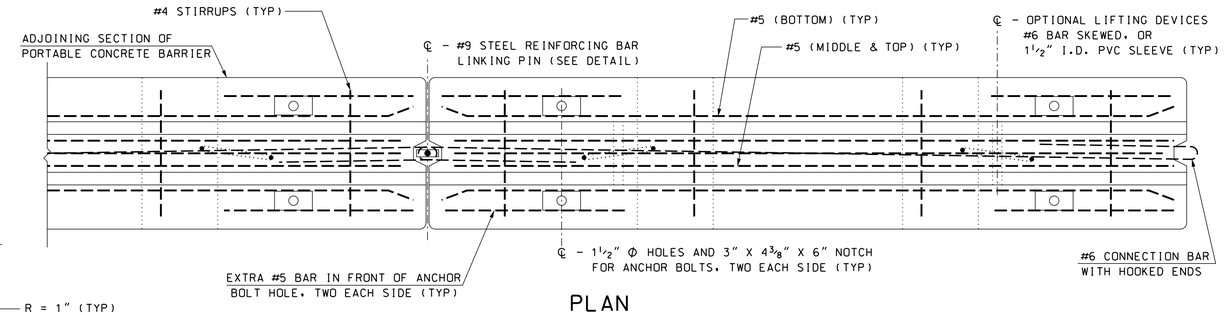
MATERIAL NOTES

1. BARRIERS SHALL BE LIGHT COLORED CLASS "AA" CONCRETE HAVING A MINIMUM 28 DAY COMPRESSION STRENGTH OF 4,000 PSI. BARRIERS SHALL HAVE A SMOOTH UNIFORM SURFACE FREE OF DEFECTS AND IRREGULARITIES. CASTING DATE SHALL BE SHOWN ON BARRIER. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL SHALL BE AASHTO M31 (ASTM-A615) GRADE 60. REINFORCEMENT SHOWN IS THE MINIMUM REQUIRED.
3. EACH BARRIER UNIT SHALL INCLUDE ONE LINKING PIN.
4. LIFTING OPTIONS SHOWN ARE ADVISORY ONLY. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO PROVIDE ADEQUATE LIFTING POINTS ON EACH BARRIER.
5. CONNECTING DEVICES SHALL BE COMPATIBLE WITH OTHER UNITS AND SHALL ALLOW PLACEMENT ON A 110' RADIUS.
6. DELINEATORS SHALL BE ATTACHED TO THE BARRIER USING AN APPROVED ADHESIVE MATERIAL OR BY BOLTS AND ANCHORS AS SHOWN ON STANDARD NO. DL-1.



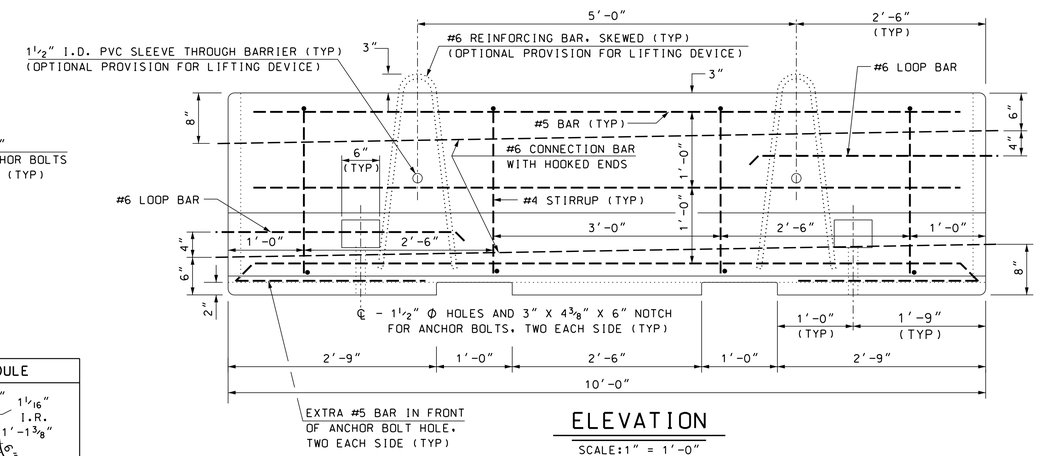
TYPICAL SECTION

SCALE: 1" = 1'-0"



PLAN

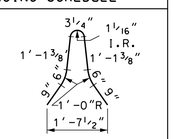
SCALE: 1" = 1'-0"



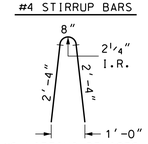
ELEVATION

SCALE:1" = 1'-0"

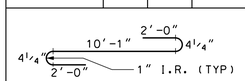
PORTABLE CONCRETE BARRIER REINFORCING SCHEDULE				
DESCRIPTION	SIZE	NO.	UNBENT LENGTH	TYPE
CONNECTION BARS	#6	2	14'-9 1/2"	
BOTTOM LONGITUDINAL	#5	2	9'-10"	
CENTER & TOP LONGITUDINAL	#5	3	9'-4"	
BOTTOM TRANSVERSE	#5	4	1'-4"	
STIRRUPS	#4	4	5'-0"	
EXTRA ANCHOR HOLE BARS	#5	4	2'-5"	
LIFTING DEVICE (OPTIONAL)	#6	2	5'-4"	
LOOP BAR	#6	2	6'-10 1/4"	



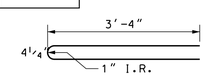
#4 STIRRUP BARS



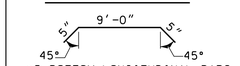
#6 LIFTING DEVICES (OPTIONAL)



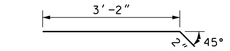
#6 CONNECTION BARS



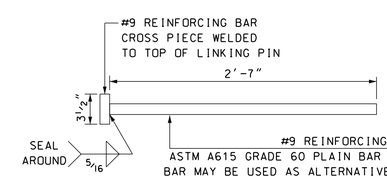
#6 LOOP BAR (TOP VIEW)



#5 BOTTOM LONGITUDINAL BARS

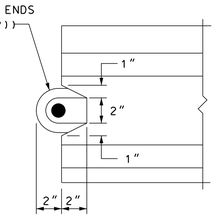


#6 LOOP BAR (SIDE VIEW)



LINKING PIN

SCALE: 1" = 1'-0"



END NOTCH DETAIL

SCALE: 2" = 1'-0"

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION, CONCORD, N.H.

PORTABLE CONCRETE BARRIER

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
English/LAN-CLOS	PCB4-3LP10	AS NOTED