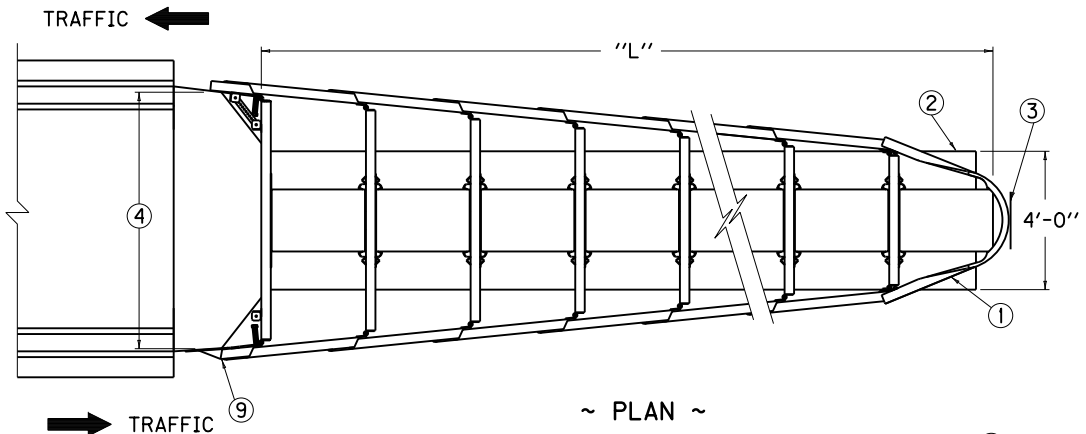
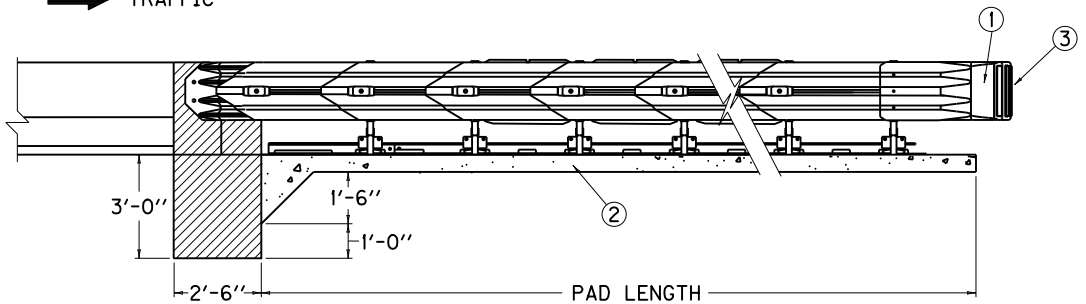
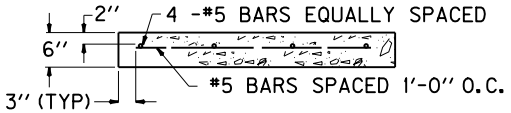


~ PLAN ~



~ ELEVATION ~



~ CONCRETE PAD SECTION ~

~ LEGEND ~

① NOSE ASSEMBLY
② 6" CONCRETE PAD
③ OBJECT MARKER TYPE 1, (SEE CUR. MUTCD MANUAL FOR DETAILS) CENTER HORIZ. AND VERT.
④ MEDIUM WIDTH = 70 1/2", APPROX. 2.8 CU. YD. CONC. AND 265 LBS. OF STEEL FOR MED. BACKUP. WIDE WIDTH = 91 1/2", APPROX. 3.8 CU. YD. CONC. AND 299 LBS. OF STEEL FOR WIDE BACKUP.

CLASS	SPEED (MPH)	ATTENUATOR			APPROX. CU. YD. CONC. FOR PAD	SUGGESTED ADT* RANGE (P.C.P.L.)**
		MODEL	PRODUCT NAME	LENGTH		
B	45 & LESS	TL2	SHORTRACC	14'-0"	1.12	UP TO 12,000
			3-BAY QUADGUARD	12'-0"	0.87	
	OVER 45	TL3	TRACC	21'-0"	1.63	
			6-BAY QUADGUARD	21'-0"	1.53	
C	OVER 45	TL3	SCI100GM	23'-0"	1.7	8,000 AND OVER
			QUADGUARD ELITE	26'-7"	1.98	

* AVERAGE DAILY TRAFFIC
** PASSENGER CARS PER LANE

~ NOTES ~

1. THE CONTRACT UNIT PRICE SHALL BE CRASH CUSHION TYPE VII, CLASS ♠, ⬡, △.
   ♠ CLASS B OR C, AS REQUIRED
   ⬡ TEST LEVEL 2 (TL2) OR TEST LEVEL 3 (TL3), AS REQUIRED.
   △ EITHER M MEDIUM, OR W WIDE, OR S SPECIAL WIDE UNITS
2. THE CONC. PAD SHALL BE REQUIRED ONLY WHEN THE UNIT IS CONSTRUCTED ON NON-RIGID PAVEMENT AND SHALL BE MEASURED AND PAID FOR PER CUBIC YARD OF CLASS "AA" CONC., WHICH SHALL INCLUDE ALL NECESSARY EXCAVATION AND REINFORCING STEEL. THE PAD SHALL BE CURED AND FINISHED AS EITHER SIDEWALK OR PAVEMENT. REAR FOOTINGS AND REAR BACK-UP WALL, EXCEPT ON STRUCTURES, SHALL BE REQUIRED AT ALL INSTALLATIONS, WHICH SHALL BE MEASURED AND PAID FOR AS CLASS "AA" CONCRETE AND SHALL INCLUDE ALL NECESSARY EXCAVATION AND REINFORCING STEEL.
3. THE CROSS SLOPE ON THE PAD OR PAVEMENT SHALL NOT EXCEED 5 PERCENT.
4. WHEN INSTALLED ON A STRUCTURE, DETAILS FOR ANCHORAGE SHALL BE DEVELOPED AND SHOWN ELSEWHERE ON THE PLANS.
5. SPECIAL WIDTH UNITS ARE AVAILABLE FROM THE MANUFACTURERS. WHEN SPECIAL WIDE UNITS ARE REQUIRED DETAILS OF THE UNIT SHALL BE DEVELOPED AND SHOWN ELSEWHERE ON THE PLANS.
6. SEE SHOP DRAWINGS FROM MANUFACTURER FOR BACK UP DETAILS.
7. CONCRETE PAD AND BELOW GRADE ANCHOR SHALL BE PLACED MONOLITHICALLY.
8. CRASH CUSHION TYPE VII IS A PATENTED (ONE SOURCE) PRODUCT MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC. OF CHICAGO, IL., TRINITY INDUSTRIES, INC. OF DALLAS, TX. OR SCI PRODUCTS, INC. OF ST. CHARLES, IL.
9. END SHOE MAY BE ELIMINATED WITH ONE WAY TRAFFIC.
10. THE CRASH CUSHION TYPE VII MAY ALSO BE UTILIZED FOR TEMPORARY USE AND CONSTRUCTION ZONES (CLASS BT OR CLASS CT).
11. A CRASH CUSHION TYPE VII CLASS B IS TO BE USED IN AREAS WHERE CRASH HISTORY IS NOT KNOWN TO BE SEVERE.
12. A CRASH CUSHION TYPE VII CLASS C IS CONSIDERED A SEVERE USE CRASH CUSHION.
13. WHEN SELECTING BETWEEN THE CRASH CUSHION CLASS B OR C, CONSIDER THE FOLLOWING FACTORS:
    - WHETHER THE HAZARD TO BE SHIELDED IS LOCATED IN A HIGH OR LOW RISK IMPACT AREA;
    - INITIAL, MAINTENANCE, AND RESTORATION COST; AND
    - EASE OR DIFFICULTY OF RESTORATION OF THE SYSTEM AFTER IMPACT. THE IMPORTANCE OF THIS FACTOR WILL BE RELATED TO THE TRAFFIC AND HAZARD LEVELS AT A SITE. MORE TRAFFIC AND HIGHER HAZARDS WILL MAKE SPEEDY REPAIR OR REPLACEMENT A HIGHER PRIORITY. A SUGGESTED ADT RANGE IS GIVEN IN THE TABLE BELOW FOR GUIDANCE. THIS GUIDANCE SHOULD NOT SUPERSEDE THE APPLICATION OF SOUND ENGINEERING PRINCIPLES BY EXPERIENCED DESIGN PROFESSIONALS.

KENTUCKY
DEPARTMENT OF HIGHWAYS

CRASH CUSHION TYPE VII CLASS B AND C

(ONE & TWO DIRECTION)

STANDARD DRAWING NO. RBE-040-09

SUBMITTED David Kratt, DIRECTOR DIVISION OF DESIGN — 11-21-07 DATE

APPROVED Marilyn Mathews, STATE HIGHWAY ENGINEER — 11-21-07 DATE