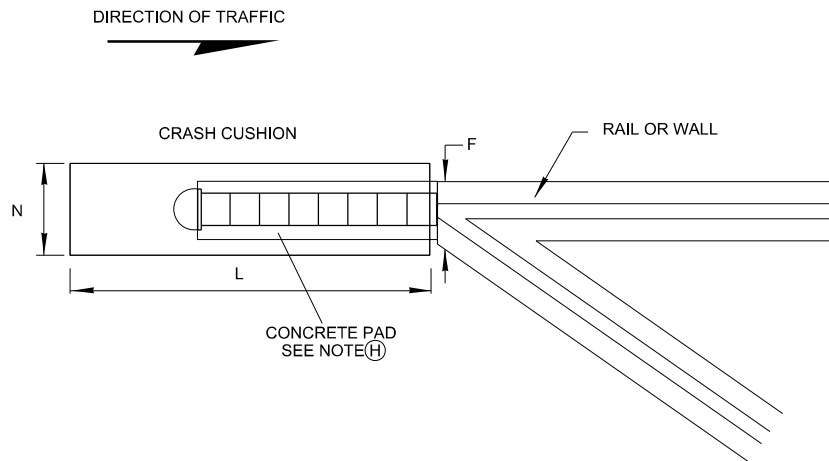


**CRASH CUSHION AT THE END OF GUARDRAIL
OR BARRIER WALL**



**CRASH CUSHION AT THE END OF DIVERGING GUARDRAILS
OR BARRIER WALLS**

LEGEND

N: APPROXIMATE WIDTH OF SPACE NECESSARY FOR THE PLACEMENT OF A CRASH CUSHION.

L: APPROXIMATE LENGTH.

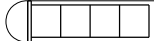
F: WIDTH OF A FIXED OBJECT THAT WILL BE SHIELDED WITH A CRASH CUSHION.

MINIMUM CRASH CUSHION RESERVE AREA (FT)

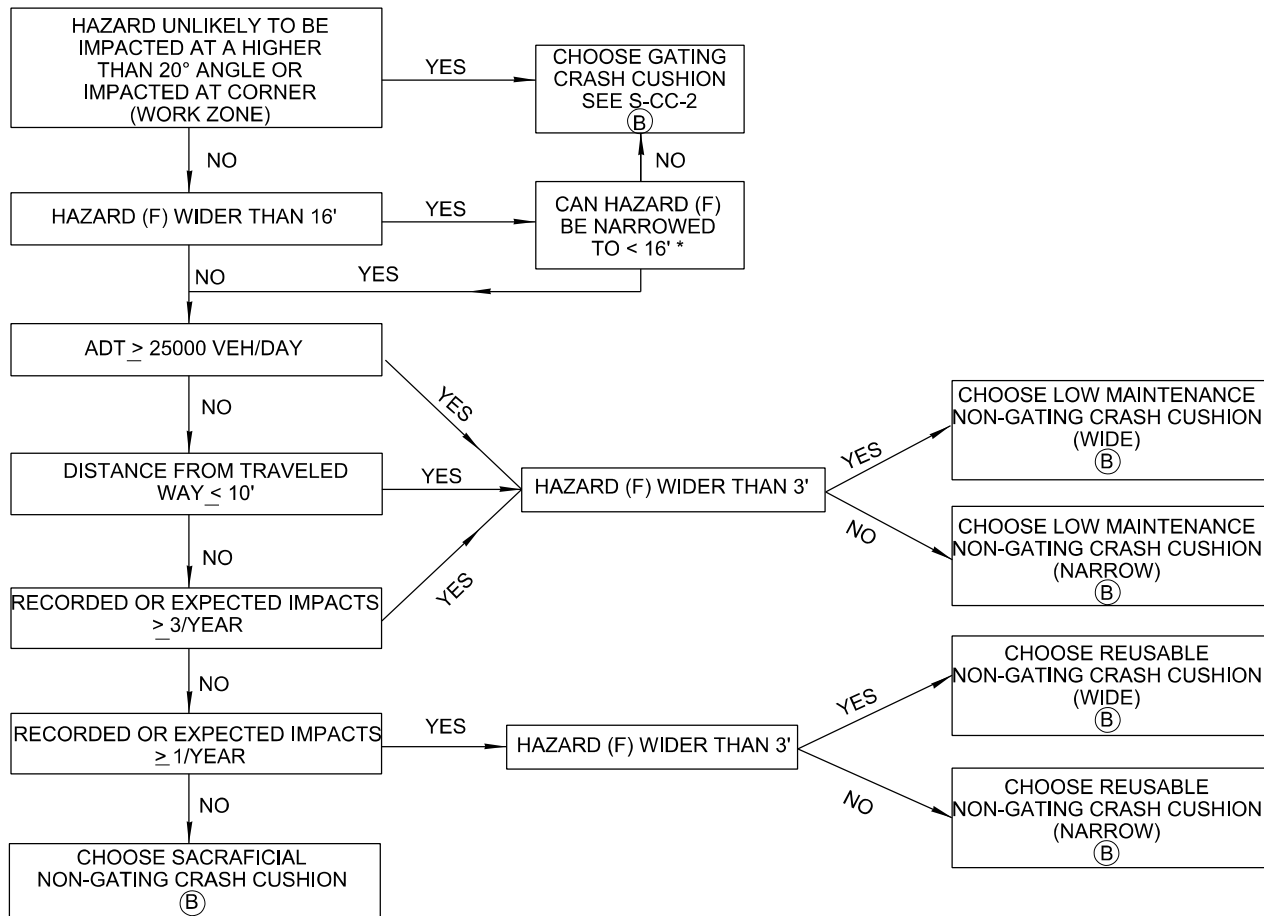
DESIGN SPEED MPH (MAIN LINE)	MINIMUM DIMENSIONS ①				DESIRABLE DIMENSIONS	
	RESTRICTED DIMENSIONS ②		UNRESTRICTED DIMENSIONS			
	N	L	N	L	N	L
30	6	8	8	11	12	17
50	6	17	8	25	12	33
70	6	28	8	45	12	55

① MINIMUM DIMENSIONS SHOULD ONLY BE USED AT LOCATIONS WHERE IT IS INFEASIBLE TO PROVIDE THE DESIRABLE AREA. IN CASES WHEN MORE THAN THE MINIMUM AREA CAN BE PROVIDED, AS MUCH SPACE AS POSSIBLE SHOULD BE PROVIDED.

② RESTRICTED MINIMUM DIMENSIONS SHOULD ONLY BE USED IF THE MINIMUM UNRESTRICTED DIMENSIONS ARE UNATTAINABLE.

LEGEND:  CRASH CUSHION

CRASH CUSHION SELECTION



* REDUCTION TO 16' CAN BE DONE BY MODIFYING BARRIER OR TRANSITION SECTION

GENERAL NOTES

- (A) CRASH CUSHIONS SHOULD ONLY BE USED IF LIMITED SPACE (SUCH AS A GORE AREA) PRECLUDES THE USE OF GUARDRAIL END TERMINALS OR AT OTHER LOCATIONS WHERE GUARDRAIL END TERMINAL WILL NOT FUNCTION.
- (B) CRASH CUSHIONS SHALL BE INSTALLED PER MANUFACTURERS SHOP DRAWINGS. SYSTEMS APPEARING ON THE QUALIFIED PRODUCT LIST 34 SECTION C ONLY MAY BE USED FOR THE SPECIFIED CATEGORY DETERMINED.
- (C) THE NOSE OR FIRST BARREL OF THE CRASH CUSHION SHALL BE MARKED WITH OBJECT MARKER STRIPING TYPE 3 INCLUDED IN THE COST OF THE SYSTEM.
- (D) SYSTEMS SHALL BE INSTALLED ON HARD, SMOOTH SURFACES WITH SLOPES LESS THAN 5% AND VARIATION OF CROSS SLOPE LESS THAN 2% CHANGE FOR THE LENGTH OF RESERVE AREA.
- (E) ONLY TL-3 CRASH CUSHION SHALL BE USED ON TDOT PROJECTS.
- (F) CURBS SHALL NOT BE INSTALLED IN AREAS NEAR CRASH CUSHIONS, EXISTING CURBS TO BE REMOVED UNLESS OTHERWISE SPECIFIED.
- (G) IF A CRASH CUSHION WOULD COMPROMISE SIGHT DISTANCE A SYSTEM WITH REDUCED HEIGHT (LESS THAN 36" HEIGHT) MAY BE SPECIFIED.
- (H) ALL PERMANENT INSTALLATIONS REQUIRE CONCRETE FOUNDATION AS SHOWN ON MANUFACTURERS SHOP DRAWINGS.
- (I) NON-GATING CRASH CUSHIONS (ATTENUATORS) SHALL BE PAID FOR:

PERMANENT

705-20.20	LOW MAINT CRASH CUSHION NARROW (MASH TL-3)	EACH
705-20.21	LOW MAINT CRASH CUSHION WIDE(MASH TL-3)	EACH
705-20.22	REUSABLE CRASH CUSHION NARROW (MASH TL-3)	EACH
705-20.23	REUSABLE CRASH CUSHION WIDE (MASH TL-3)	EACH

THE PAYMENT OF ATTENUATOR INCLUDES CONCRETE FOUNDATION WORK ZONES

705-20.25	TEMPORARY CRASH CUSHION (MASH TL-3)	EACH
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STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

CRASH CUSHION

2-13-13

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