MaineDOT

ENGINEERING INSTRUCTION

Title: Clear Zone Reference: C2

Discipline: General Engineering

Approved by Engineering Council June 11, 2026
Date

Chief Engineer
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Supersedes C2 January 2019

Background:

The clear zone is an unobstructed, traversable area provided beyond the edge of the traveled way for the recovery of errant vehicles. Clear zone widths are most affected by the traffic's speed, volume, and alignment along with the slope of the area adjacent to the travel way. Clear zone distances should not be defined solely by roadway classification (highway corridor priority and context classification) or scope of work to be performed. Even the most basic levels of pavement treatment should consider the potential risk to the traveling public to determine the application of appropriate clear zones.

There are four methods of providing a clear zone. In order of preference:
1. Remove the obstacle
2. Redesign the obstacle so it can be safely traversed (this may include using breakaway devices)
3. Relocate the obstacle to reduce the likelihood of being struck
4. Reduce impact severity by using an appropriate longitudinal barrier or impact attenuator

Engineering Instruction:

Consistent application along a corridor is critical. The tables below represent a starting point for any work contemplated. Clear zones are one of MaineDOT's controlling criteria requiring a design exception when there are variations from the guidance. It is imperative that any variations be discussed and approved.

Clear Zone Offset (Interstate):

All Interstate roadways shall have a 30' minimum clear zone

Clear Zone Offset (Non Interstate):

Table 1: Clear Zone offset for Corridor Priority 1 and 2

AADT	Design Speed (mph)			
	25-30*	35-40*	45-50	55+
0-2000	10’	10’	12’	15’
2001-6000	10’	12’	14’	18’
>6000	10’	12’	18’	20’

Table 2: Clear Zone offset for Corridor Priority 3,4 and 5

AADT	Design Speed (mph)			
	25-30 *	35-40 *	45-50	55+
0-2000	10’	10’	10’	15’
2001-6000	10’	10’	10’	15’
>6000	10’	10’	15’	15’

Note: offset measurement is from the edge of travelway

*** If the clear zone obstruction was in place prior to January 1, 2015, the clear zone may be reduced to 50% of the value in the 25-30 mph column and 75% of the value in the 35-40 mph column. Obstructions authorized to remain via design exception shall be granted licenses if they are within the Right of Way. No new obstructions (those installed after January 1, 2015) will be allowed or licensed within the full clear zones prescribed above.**

Pavement Preservation - All Corridor Priorities & Context Classifications

Clear zones are beneficial but are to be considered only when practicable.

- 10’ Clear Zone desirable
- Follow Utility Accommodation Rules

User Notes:

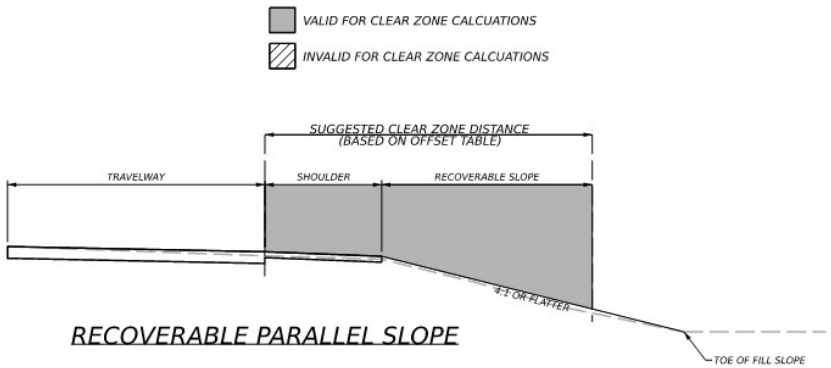
1. Determine Corridor Priority and identify appropriate Clear Zone Table
2. Determine Design Speed and AADT and proceed into Table
3. Identify the Clear Zone for the Corridor
4. Determine Clear Run-out Area, if applicable

- Specific locations may warrant individual analysis for Clear Zone determination, particularly with respect to roadway classification. Design exceptions should be considered in village and urban context.
- Consideration shall be given to Environmental and R/W impacts in determining the clear run out area for 3:1 slopes.
- Evaluate any significant corridor or spot safety issues to determine if clear zone offset addresses needs.
- Utilities shall follow the most current Utility Accommodation Rules.
- Collector Highway Improvement Projects (CHIP) shall follow the most current CHIP design standards.
- Side slope information can be found in the relevant Design Guidance

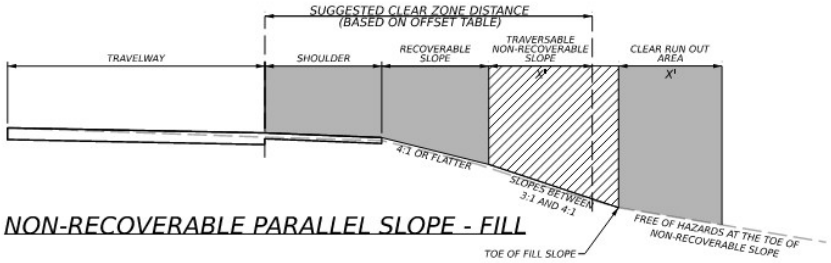
Definitions:

Lateral Offset:	distance from the edge of traveled way, shoulder, or other designated point to a vertical roadside element.
Recoverable Slope:	slope on which a motorist may, to a greater or lesser extent, retain or regain control of an errant vehicle by slowing or stopping. Typically, 4:1 or flatter.
Non-recoverable Slope:	slope which is considered traversable but on which an errant vehicle will continue to the bottom. Typically, between 4:1 and 3:1.
Clear Run-out Area:	area free of hazards at the toe of a non-recoverable slope for use by an errant vehicle.

CLEAR ZONE FIGURES

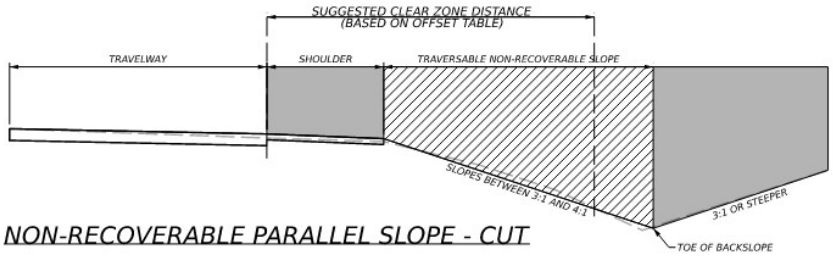


RECOVERABLE PARALLEL SLOPE



NON-RECOVERABLE PARALLEL SLOPE - FILL

A CLEAR ZONE SHOULD BE PROVIDED AT THE TOE OF A NON-RECOVERABLE FILL SLOPE. THIS IS KNOWN AS A CLEAR RUN OUT AREA. THIS WIDTH IS EQUAL TO THE CLEAR ZONE WIDTH PROVIDED IN THE OFFSET TABLE MINUS THE SHOULDER WIDTH. WHERE POSTED SPEEDS ARE 45 MPH OR MORE, THIS WIDTH WILL BE 10 FEET.



NON-RECOVERABLE PARALLEL SLOPE - CUT

A CLEAR ZONE SHOULD BE PROVIDED AT THE TOE OF A NON-RECOVERABLE CUT SLOPE (DITCH SECTION). THIS WIDTH IS EQUAL TO THE CLEAR ZONE WIDTH IN THE OFFSET TABLE MINUS THE SHOULDER WIDTH. WHERE POSTED SPEEDS ARE 45 MPH OR MORE, THIS WIDTH MAY BE LIMITED TO A MAXIMUM OF 10 FEET BEYOND THE TOE. WHERE POSTED SPEEDS ARE LESS THAN 45 MPH, THIS WIDTH MAY BE LIMITED TO A MAXIMUM OF 5 FEET.

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