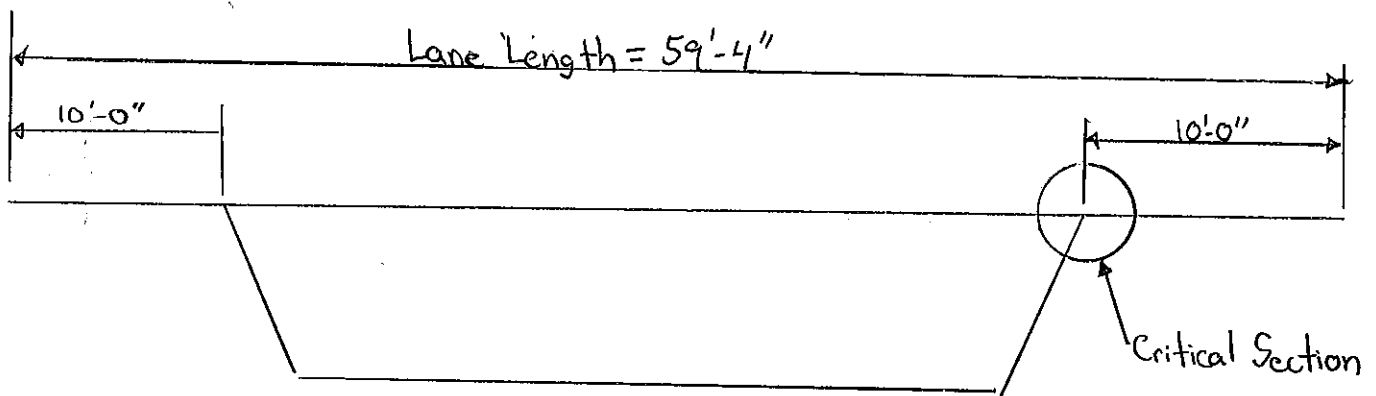
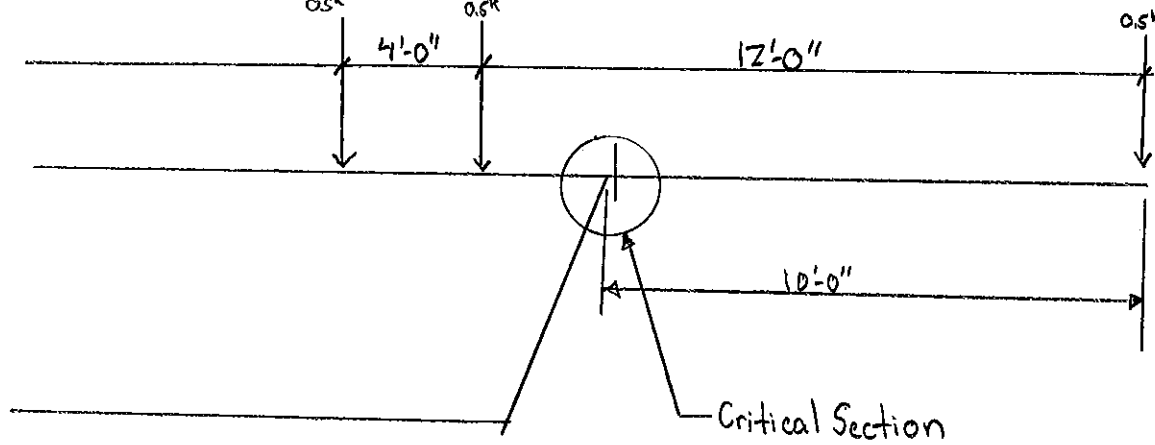


TYPICAL VEHICLE



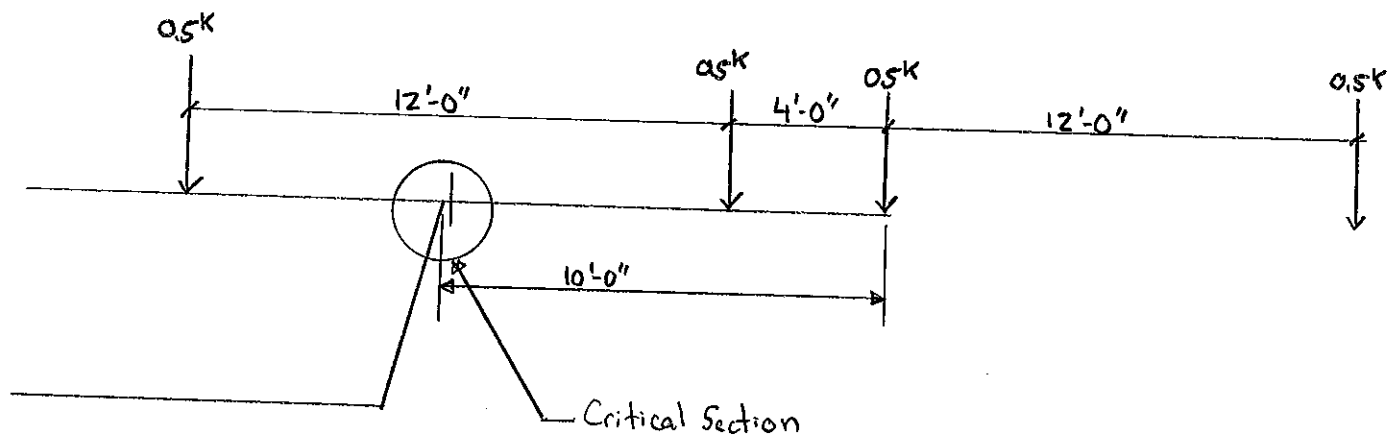
TYPICAL SECTION



$$\text{Moment @ Critical Section} = (0.5k)(10'-0'') = 5k\text{-ft}$$

$$\text{Shear @ Critical Section} = 0.5k$$

CASE 1 - VEHICLE REMAINS FULLY IN LANE



$$\text{Moment @ Critical Section} = (0.5k)(10'-0'') + (0.5k)(6'-0'') = 8k\text{-ft}$$

$$\text{Shear @ Critical Section} = 0.5k + 0.5k = 1.0k$$

CASE 2 - VEHICLE DOES NOT REMAIN FULLY IN LANE

Diagrams for Frame Object 4 (VAR-12to15)

Case 2Lane

Items Major (V2 and M3)

End Length Offset (Location)

I-End Jt: 24
0.00000 ft
(0.00000 ft)

J-End Jt: 23
0.00000 ft
(0.00000 ft)

Display Options

☒ Scroll for Values
☐ Show Max

Location 2.5031 ft

Resultant Shear

Shear V2

0.999 Kip

0.000 Kip

at 2.5031 ft

Resultant Moment

Moment M3

0.0000 Kip-ft

-7.9916 Kip-ft

at 2.5031 ft

Reset to Initial Units

Done

Units Kip, ft, F

General Vehicle Data

Vehicle Name

2 Lane

Floating Axle Loads

Value Width Type Axle Width

0. One Point

0. One Point

For Lane Moments

For Other Responses

☐ Double the Lane Moment Load when Calculating Negative Span Moments

Usage

☒ Lane Negative Moments at Supports

☒ Interior Vertical Support Forces

☒ All other Responses

Min Dist Allowed From Axle Load

Lane Exterior Edge 1.

Lane Interior Edge 2.

Miscellaneous Parameters

☐ Use BD 37/01 (2002) for Uniform Load Length Effects

☐ Vehicle Applies To Straddle (Adjacent) Lanes Only

Straddle Reduction Factor

Load Plan

Load Elevation

Loads

Load Length Type	Minimum Distance	Maximum Distance	Uniform Load	Uniform Width Type	Uniform Width	Axle Load	Axle Width Type	Axle Width
Leading Load	Infinite		0.	Zero Width		0.5	One Point	
Leading Load	Infinite		0.	Zero Width		0.5	One Point	
Fixed Length	12.		0.	Zero Width		0.5	One Point	
Fixed Length	4.		0.	Zero Width		0.5	One Point	
Fixed Length	12.		0.	Zero Width		0.5	One Point	
Trailing Load	Infinite		0.	Zero Width		0.5	One Point	

Add

Insert

Modify

Delete

☒ Vehicle Remains Fully In Lane (In Lane Longitudinal Direction)

OK

Cancel

Units Kp. ft. F