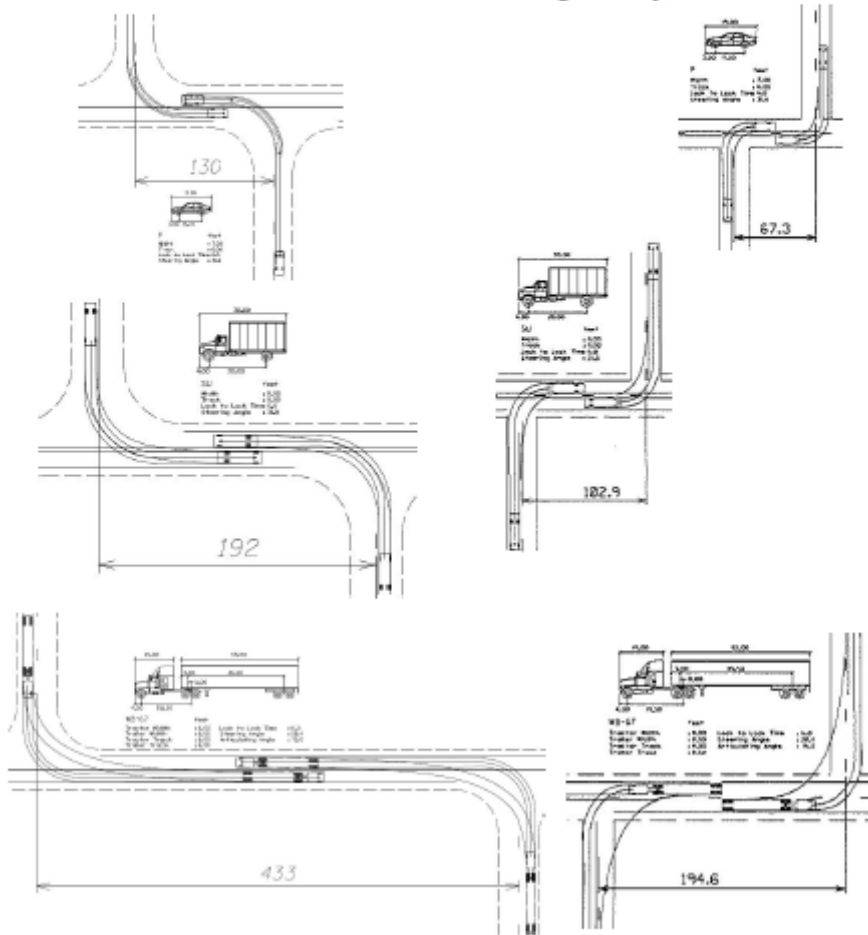


Attachment B

Background for Determining the Distances
Shown in Tables 1 to 4 in Attachment A

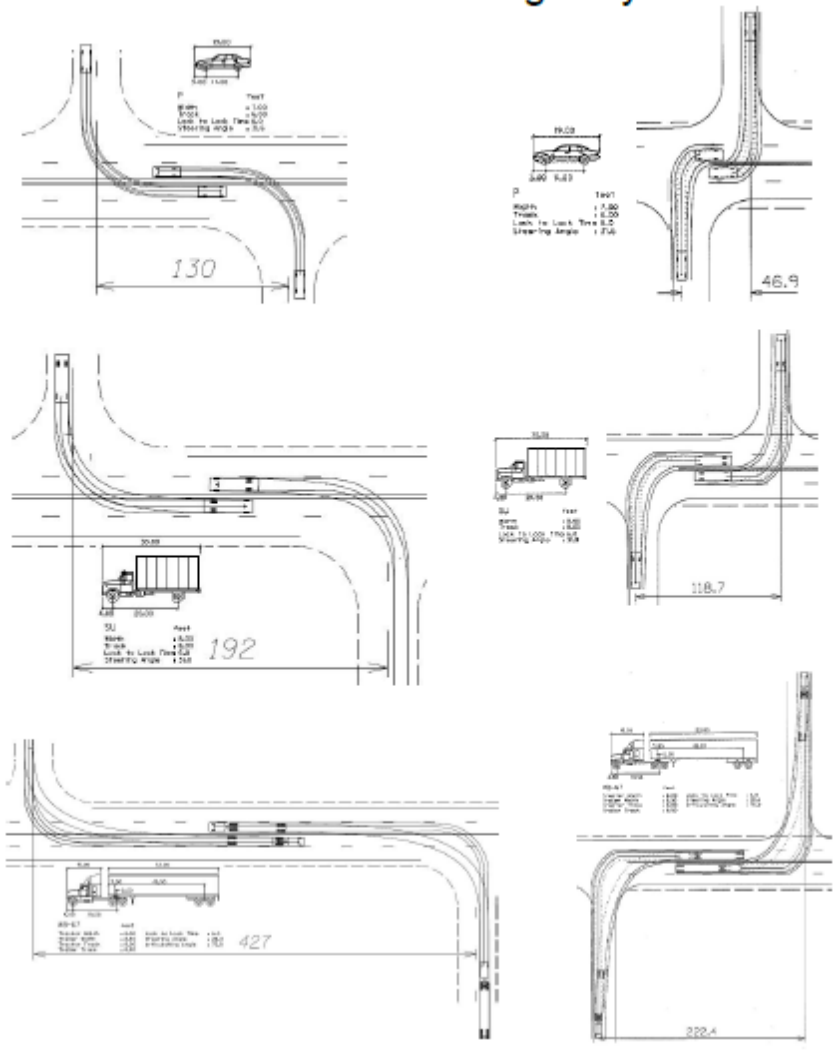
AM Technical Bulletin 13-04(B) Attachment B Background for Attachment A Dimensions

Table 1: 2-Lane Highway

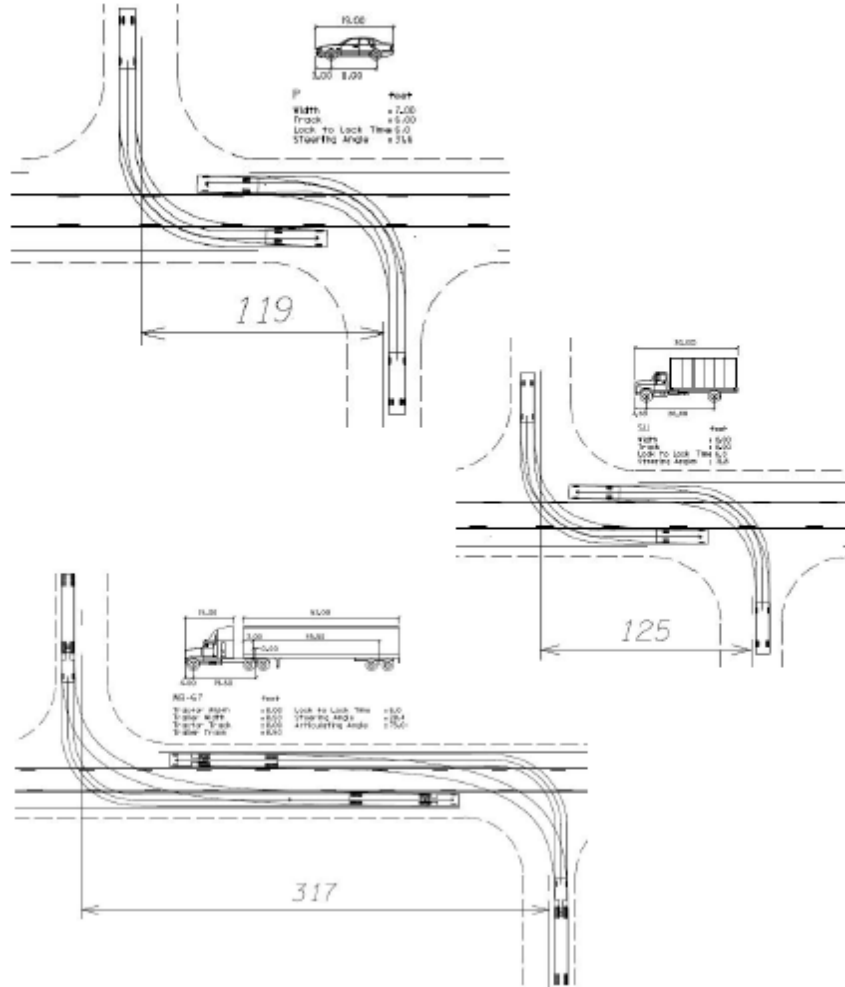


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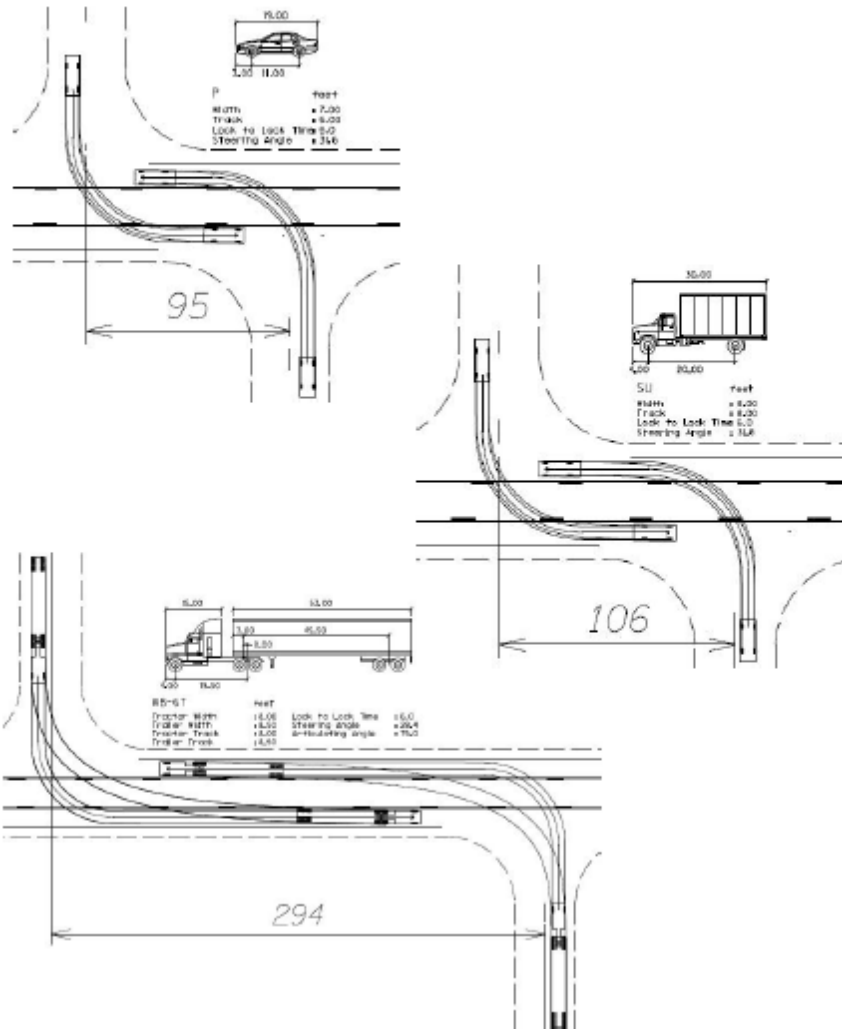
Table 2: 4-Lane Highway



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 Table 3: 3-Lane Highway
 Single-Stage Left Turn (14' TWLTL)

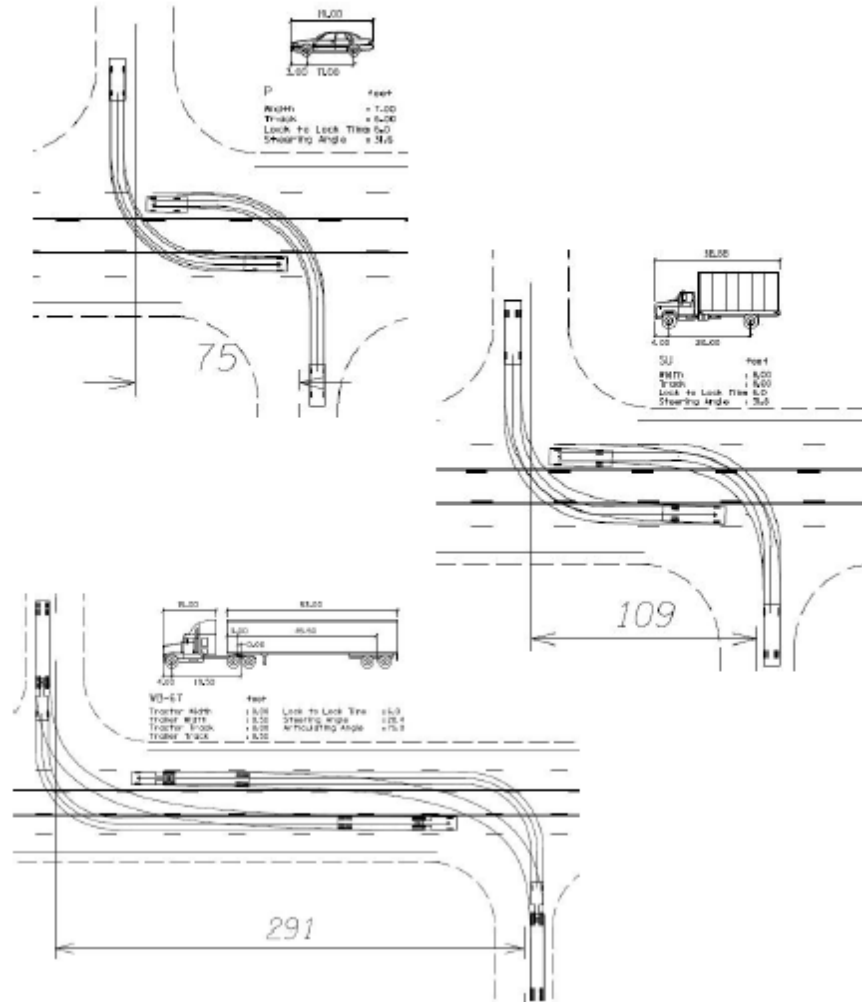


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 Table 3: 3-Lane Highway
 Single-Stage Left Turn (16' TWLTL)



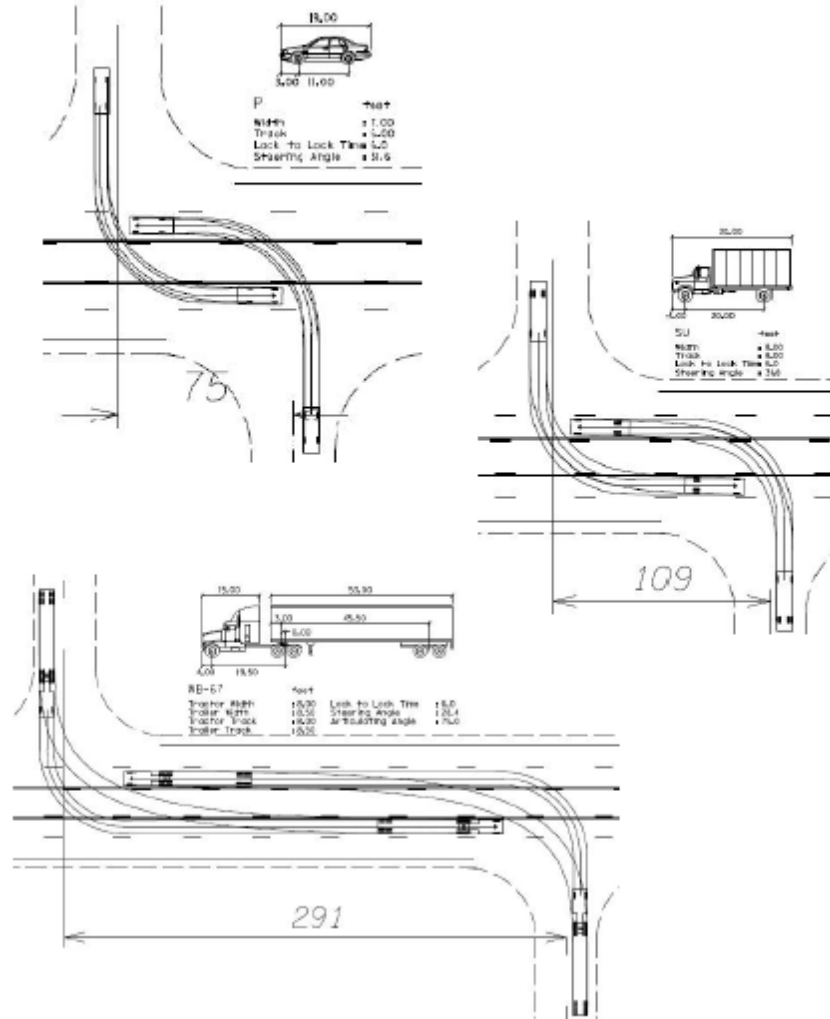
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Table 3: 5-Lane Highway Single-Stage Left Turn (14' TWLTL)



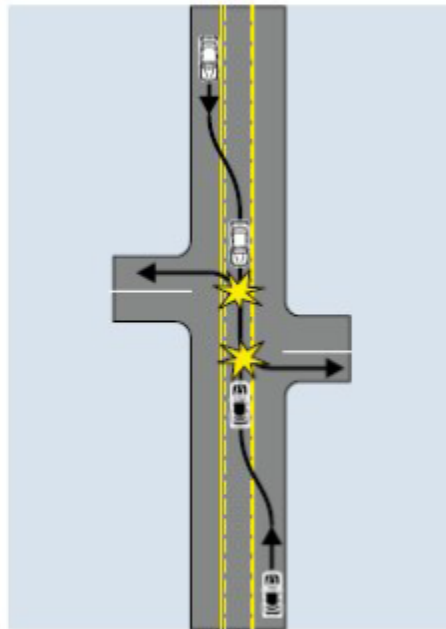
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Table 3: 5-Lane Highway Single-Stage Left Turn (16' TWLTL)



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Table 4: Highway with TWLTL
Desirable Right Offset



Avoid Locating Driveways on Opposite Sides of the Roadway that
Create an Overlap for Left Turns Exiting the Major Roadway
(Source: FHWA *Technical Summary: Access Management in the Vicinity of
Intersections* <http://safety.fhwa.dot.gov/intersection/resources/fhwasa10002/#s17>)

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Table 4: Highway with TWLTL Desirable Right Offset

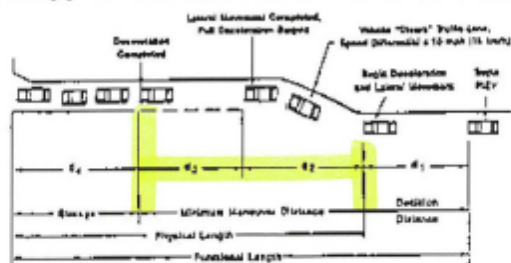


Figure 2: Elements of the Functional Area of An Intersection

Table I-B: Upstream Intersection Area ⁽¹⁾,
Excluding Storage, in Feet

Speed (km/h)	Desirable Condition ⁽²⁾		Limiting Condition ⁽³⁾	
	Deceleration ⁽⁴⁾	PIEV Plus Deceleration ⁽⁵⁾	Deceleration ⁽⁶⁾	PIEV Plus Deceleration ⁽⁷⁾
30	225	315	170	215
35	295	370	220	270
40	375	490	275	335
45	465	595	340	405
50	565	710	410	485
55	675	835	485	565
60	785	960	565	605

⁽¹⁾all distances rounded to 5ft

⁽²⁾2.0 second perception-reaction time; 3.5 fps average deceleration while moving laterally into turn lane, 6.0 fps average deceleration thereafter, speed differential <10 mph

⁽³⁾1.0 second perception-reaction time; 4.5 fps average deceleration while moving laterally into turn lane, 9.0 fps average deceleration thereafter, speed differential <10 mph

⁽⁴⁾distance to decelerate from through traffic speed to a stop while moving laterally into a left-turn or right-turn lane

⁽⁵⁾distance traveled during perception-reaction time plus deceleration distance

(6) Assume vehicle ^{storage} length of 30' 30'
 Assume storage for two vehicles x 2

 Added storage length to
 Deceleration listed above 60'