

Pennsylvania Department of Transportation

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MIDBLOCK CROSSWALK AND TRAIL CROSSING ENGINEERING AND TRAFFIC STUDY

PLEASE TYPE OR PRINT ALL INFORMATION IN BLUE OR BLACK INK

COUNTY		MUNICIPALITY				
STREET NAME		TOWNSHIP ROAD #				
SR#		SEGMENT				
B - REFERENCE INFORMATION						
REFERENCE Chapter 010	SECTION(S)	$\lambda(u)(\mathbf{T})$				
	212.5(D)(1)(v)(1)				
REFERENCE	SECTION(S)					
MUTCD	3B.17					
REFERENCE	SECTION(S)					
PUB 46	Chapter 11	1.9				
REFERENCE	SECTION(S)					
Vehicle Code Title 75 P.a. C.S.	\$ 3542					
		0				
10-8600	Sneet 4 of	8				
C - STUDY ELEMENTS						
FROM PUB 212 APPENDIX:						
□ Crash Analysis (1) □ S	ght Distance (16)	Generic Other:				
Geometric Review (8)	peed Data (17)					
Pedestrian Volumes (12)	affic Volumes (20)					
D - ATTACHMENTS LISTING						
Check those that apply and attach to this form in	the order listed below	N:				
L 1. 10-Day Response Letter	7. Crash Extract	13. Traffic/Pedestrian Volumes				
1 2 Latter or Memo Requesting Study						
		Dist				
2. Letter of Merrie Requesting Study 3. Location Map	9. Collision Diagram	Plot 14. STAMPP Identification Data Plot 15. Speed Limit				
3. Location Map 4. Straight Line Diagram	9. Collision Diagram 10. Speed Study	Plot 14. STAMPP Identification Data Plot 15. Speed Limit 16. Traffic Signal Permit Plan				
2. Letter of Merrie Requesting Study 3. Location Map 4. Straight Line Diagram 5. Photographs 6. Field View Drawing or Condition Diagram	Collision Diagram One Study The Warrant Analysis The Warrant Analysis The Warrant Analysis	Plot 14. STAMPP Identification Data Plot 15. Speed Limit 16. Traffic Signal Permit Plan 17. Other				
2. Letter of Merris Requesting Study 3. Location Map 4. Straight Line Diagram 5. Photographs 6. Field View Drawing or Condition Diagram	 9. Collision Diagram 9. Collision Diagram 10. Speed Study 11. Warrant Analysis 12. Multi-Way Stop or T 	Image: Plot Image: 14. STAMPP Identification Data Plot Image: 15. Speed Limit Image: Image: 16. Traffic Signal Permit Plan Image: 17. Other Image: Image				
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2. Letter of Merrie Requesting Study 3. Location Map 4. Straight Line Diagram 5. Photographs 6. Field View Drawing or Condition Diagram Conf This document is the property of the Commonw	Of a share between state	Plot 14. STAMPP Identification Data Plot 15. Speed Limit 16. Traffic Signal Permit Plan 17. Other ruck Restriction Worksheet neering and Safety Study a. Department of Transportation. The data and information contained				
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A. Straight Line Diagram A. Straight Line Diagram 5. Photographs 6. Field View Drawing or Condition Diagram Conf This document is the property of the Commonw herein are part of a traffic engineering and safety responsibility in the highway transportation system	 a. Collision Piate 9. Collision Diagram 10. Speed Study 11. Warrant Analysis 12. Multi-Way Stop or T idential - Traffic Engi ealth of Pennsylvania y study. This safety s tem and may only be 	Plot 14. STAMPP Identification Data Plot 15. Speed Limit 16. Traffic Signal Permit Plan 17. Other incering and Safety Study a, Department of Transportation. The data and information contained tudy is only provided to those official agencies or persons who have used by such agencies or persons for traffic safety related planning to 25 Pa. C S 3754 and 23 U S C 409 and may not be published re-				
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E - SITE OBSERVATION CHECKLIST

Operational Checklist:		
1. Do obstructions block a driver's view of pedestrians or approaching vehicles?	□ NO	N/A
2. Do drivers respond correctly to signals, signs, or other traffic control devices?	□ NO	□ N/A
3. Is there evidence of crashes (skid marks, property damage, tree/bush damage, broken glass/vehicle parts, etc.)? YES	□ NO	N/A
4. Are there violations of parking or other traffic regulations?	□ NO	N/A
5. Do drivers appear confused about routes, street names, or other guidance information? YES	□ NO	N/A
6. Have you observed the location during peak hours for volume, crashes, and traffic operations? YES	□ NO	N/A
7. Are there traffic flow deficiencies or traffic conflict patterns associated with turning movements? YES	□ NO	□ N/A
8. Are there significant delays and/or congestion? YES	□ NO	□ N/A
9. Are there vehicle/pedestrians conflicts? YES	□ NO	N/A
10. Are there other traffic flow deficiencies or traffic conflict patterns? YES	□ NO	□ N/A
Physical Checklist:		
1. Can sight obstructions be removed or lessened? YES	□ NO	□ N/A
2. Do the street alignments or widths adequately accommodate the type of traffic using the roadway? YES	□ NO	N/A
3. Are curb radii adequate for turning vehicles? YES	□ NO	N/A
4. Are pedestrian crosswalks properly located? YES	□ NO	□ N/A
5. Are signs adequate as to usefulness, message, size, conformity, and placement? YES	□ NO	N/A
6. Are traffic signals adequate as to placement, visibility, glare, conformity, number of signal heads, and timing? 🏼 YES	□ NO	□ N/A
7. Are pavement markings adequate as to their conformance to standards and location? YES	□ NO	N/A
8. Is channelization (islands or pavement markings) adequate for reducing conflict areas,		
separating traffic flows, and defining movements? YES	□ NO	N/A
9. Does the existing legal parking layout affect sight distance for through or turning vehicles?	□ NO	□ N/A
10. Is the pavement condition free of potholes, washboard, slick surface, etc.?		□ N/A

ATE	DATA COLLECTED	PERSON CONDUCTING STUDY	TITLE
1.	What is the posted speed limit or s	statutory speed limit?	M
2.	What is the total width of the road	vay?	fi
3.	What is the number of travel lanes	at the proposed crosswalk?	
4.	Is there a median present?		🗅 YES 🗅 N
	If yes, is the median raised?		🗅 YES 🗅 N
5.	Are sidewalks present?		I YES I M
6.	Is parking permitted in the area of	the proposed crosswalk?	YES 🗅 N
	What distance is the parking area	from the proposed crosswalk?	fi
7.	Is angle parking present?		🗅 YES 🗅 N
8.	Is curbing present?		🗅 YES 🗅 N
	If yes, does curbing include a curb	extension?	🗅 YES 🗅 N
9.	Is the distance to the nearest mark	ed crosswalk 300 feet or more?	🗅 YES 🗅 N
10	What is the exact location of the p	roposed crosswalk (be as specific as possible)?

This traffic engineering and safety study is confidential pursuant to 75 Pa. C.S. 3754 and 23 U.S.C. 409 and may not be disclosed or used in litigation without written permission from PennDOT.

F - SITE DATA (CONTINUED)

12. What is the total number of pedestrians crossing the street within 150 feet of the proposed crosswalk? _

13. In the table below, indicate the four highest one hour periods that pedestrians will use the crosswalk and how many pedestrians will cross.

	TIME	NO. OF PEDESTRIANS CROSSING
Example	7:00 – 8:00 AM	40
1.)		
2.)		
3.)		
4.)		

14. What is the total number of children, elderly, and/or disabled pedestrians crossing the street within 150 feet of the proposed crosswalk? ______

15. In the table below, indicate the four highest one hour periods that children, elderly, and/or disabled pedestrians will use the crosswalk and how many children, elderly, and/or disabled pedestrians will cross?

	TIME	NO. OF PEDESTRIANS CROSSING
Example	7:00 – 8:00 AM	40
1.)		
2.)		
3.)		
4.)		

16. Does the available sight distance between an approaching driver and a person anywhere within the proposed crosswalk satisfy the following minimum values where the driver's eye is assumed to be 3.5 feet above the roadway approaching the crosswalk and the pedestrian's eye is assumed to be 4 feet above the roadway at the crosswalk?.....

Speed Limit	Minimum Sight Distance for a Corresponding Grade (feet)			
(mpn)	-6%	level	+6%	
25	165	155	143	
30	215	200	184	
35	271	250	229	
40	333	305	278	
45	400	360	331	
50	474	425	388	
55	553	495	450	

17. What are the daily trail user volumes?_____ V/A

18.	Has a trail sponsor been identified for the crossing? VES D	0 (⊐ N/A
	If yes, has a trail agreement between the trail sponsor and Local Authority been executed? YE	S	⊐ NO
19.	Does the site meet the requirements for a midblock crosswalk or trail crossing?	S	⊐ NO
	If yes, what is the designated condition of the proposed crosswalk or trail crossing as determined by Table 1: Midblock Crosswalk	valk ar	nd Trail
	Crossing Evaluation Matrix for Candidate Midblock Crosswalk or Trail Crossing Locations?	ПC	D

F - SITE DATA (CONTINUED)

20.). If the site meets the requirements for a midblock crosswalk or trail crossing, list the minimum treatments proposed from Section V Minimum Treatments for Midblock Crosswalks and Trail Crossings				
21.	If the proposed crosswalk or trail crossing me	eets conditions B	, C or D in the previous	s question, note the countermeasures	s that are
	candidate treatments or should always be co are included in the proposed crossing design	nsidered from Ta n. If the counterm	ble 2: Countermeasure easures are not includ	e Selection Matrix. Also note whether ed, provide justification in Section H.	those treatments
	Countermeasure Type	Counter	rmeasure Name	Included in Proposed Desigr	י? (Y/N)
	Candidate treatment				
	Should always be considered				
22	If the proposed grosswalk or trail grossing m	acts condition D t	or full signalization de	as the location satisfy Warrant PA 2	
22.	22. If the proposed crosswalk or trail crossing meets condition D for full signalization, does the location satisfy Warrant PA-2 for a traffic signal?□ YES □ NO				
G - PI					
<u>a - m</u>					
H - EN	IGINEERING JUDGEMENT				
I - AP	PROVALS				
Comments:					
Reviewe	d and Approved by Signature		Name/Title		Date
Reviewe	d and Approved by Signature		Name/Title		Date

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