TE-102 (8-09)

MULTIWAY STOP CONTROL AT INTERSECTIONS ENGINEERING AND TRAFFIC STUDY

PLEASE TYPE OR PRINT ALL INFORMATION IN BLUE OR BLACK INK

pennsylvania
DEPARTMENT OF TRANSPORTATION
www.dot.state.pa.us

A - LOCATION INFORMATION

COUNTY	MUNICIPALITY

MAJOR STREET INFORMATION

SR#	TR#	STREET NAME

STATION	LOCATION

MINOR STREET INFORMATION

SR#	TR#	STREET NAME

STATION	LOCATION

B - REFERENCE INFORMATION

REFERENCE	SECTION(S)
Chapter 212	212.106 (c)
MUTCD	2B.07, 3B.16
Vehicle Code Title 75 Pa. C.S.	§3323, 6109(a)(6) and 6124

C - STUDY ELEMENTS

FROM PUB 212 APPENDIX:

- ☐ Crash Analysis (1)
- ☐ Acceleration Lane (2)
- ☐ Geometric Review (8)
- ☐ Pedestrian Volumes (12)
- ☐ Sight Distance (16)
- ☐ Speed Data (17)
- ☐ Traffic Volumes (20)
- ☐ Other _____

D - ATTACHMENTS LISTING

Check those that apply and attach to this form in the order listed below:

- ☐ 1. 10 Day Response Letter
- ☐ 2. Letter or Memo Requesting Study
- ☐ 3. Location Map
- ☐ 4. Straight Line Diagram
- ☐ 5. Photographs
- ☐ 6. Field View Drawing
- ☐ 7. Crash Extract
- ☐ 8. Crash Rate
- ☐ 9. Crash Plot
- ☐ 10. Speed Study
- ☐ 11. Warrant
- ☐ 12. Multi-Way Stop or Truck Restriction Worksheet
- ☐ 13. Traffic/Pedestrian Volumes
- ☐ 14. STAMPP Identification Data
- ☐ 15. Speed Permit
- ☐ 16. Other _____

E - SITE OBSERVATION CHECKLIST

Operational Checklist:

1. Do obstructions block the drivers' view of approaching vehicles? ☐ YES ☐ NO ☐ N/A
2. Do drivers respond correctly to signals, signs, or other traffic control devices? ☐ YES ☐ 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 regulations or other traffic movements? ☐ YES ☐ 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 and crashes? ☐ YES ☐ NO ☐ N/A
7. Are there traffic flow deficiencies or traffic conflict patterns associated with turning movements? ☐ YES ☐ NO ☐ N/A
8. Is there significant delays and/or congestion? ☐ YES ☐ NO ☐ N/A
9. Do pedestrian movements through the location cause 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, or 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 paint 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? ☐ YES ☐ NO ☐ N/A
10. Is the pavement condition free of potholes, washboard, slick surface, etc.? ☐ YES ☐ NO ☐ N/A

F - SITE DATA

DATE DATA COLLECTED	PERSON CONDUCTING STUDY	TITLE

1. Is the multiway stop being installed as an interim measure until the signal approval and installation is completed? ☐ YES ☐ NO

2. List the number of crashed for the previous 12 month period by type and/or causation factor. **This may include non-reportable crashes.**

3. 85th percentile speed of major approach is _____ MPH.

4a. Does the vehicular volume entering the intersection from the major street approaches average at least 300 vehicles/hour for any 8 hours? ☐ YES ☐ NO

4b. Does the combined vehicular, pedestrian and bicycle volume from the minor street approaches average at least 200/hour, for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour? ☐ YES ☐ NO

4c. If #3 > 40 MPH, then the minimum vehicular volume warrants are 70% of 4a and 4b.

F - SITE DATA (CONTINUED)

5. Where #2, #4a and #4b are satisfied to 80% of their minimum values. **Note: #4c is excluded from this condition.**

6a. Determine and list the minimum intersection sight distance for all approaches.

6b. List the posted, approach speeds on all intersection legs.

6c. Is there any practical method for improving the sight distance at these intersections? . . . . . ☐ YES ☐ NO

7. List any other factors justifying a multiway stop.

8. Has the municipality agreed to purchase, erect and maintain the signs necessary to legalize the above stop intersection at no cost to the Department . . . . . ☐ YES ☐ NO

9. Has the Through Highway permit been modified . . . . . ☐ YES ☐ NO

G - REMARKS

H - ENGINEERING JUDGEMENT

I - APPROVALS

Comments

Reviewed and Approved by Signature	Name/Title	Date
Reviewed and Approved by Signature	Name/Title	Date