



CITY OPERATIONS - PUBLIC WORKS

Traffic Signal Warrant Conforming to OTM Book 12, Nov. 2007

For the Intersection of STANLEY CARBERRY DR @ COUNTRYSIDE DR, Based on the Study Done Mar 27, 2024

Intersection Type	Cross			
Approach Lanes on Major	* Two or More	Channelized Right Turn:	<input type="checkbox"/> North Approach	<input type="checkbox"/> East Approach
Approach Lanes on Minor	One		<input type="checkbox"/> South Approach	<input type="checkbox"/> West Approach
Flow Condition	Restricted			

Justification	Description	Minimum Requirement	Compliance	
			Sectional %	Entire %
1. Minimum Vehicular Volume	A. Vehicle Volume, All Approaches for each of the heaviest 8 hours	900	100	14
	B. Vehicle Volume, along the minor road for each of the same 8 hours	170	14	
2. Delay to Cross Traffic	A. Vehicle Volume, along the major road for each of the heaviest 8 hours	900	100	20
	B. Combined Vehicle and Pedestrian Volume crossing the major road, for each of the same 8 hours	75	20	
3. Volume/Delay Combination	Justifications 1 and 2 both fulfilled to the extent of 80% or more	---	---	0
4. Minimum Four-Hour Vehicle Volume	All plotted points representing hourly volume for minor approach vs. major approach for four highest hours fall above the applicable curve	---	---	0
5. Collision Experience	A. Total reported collisions of types susceptible to correction by a traffic signal per 12-month period averaged over 36 months	5	7	7
	B. Adequate trial of less restrictive remedies, where satisfactory observance and enforcement have failed to reduce the number of collisions	---	100	
6. Pedestrian Volume and Delay	A. Plotted point representing 8-hour pedestrian volume vs. 8-hour vehicular volume falls in justified zone	---	0	0
	B. Plotted point representing 8-hour volume of pedestrians experiencing delays of 10 s or more vs. 8-hour pedestrian volume falls in justified zone	---	0	
Conclusion: Traffic Signal is not justified				

Justification Details

Justification 1 - Minimum Vehicular Volume

A - All Approaches

	Min. Req.	Min. Req.	08:00	09:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Volume	900	720	1,832	1,916	1,014	1,255	1,231	2,254	2,415	2,335	14,252
Compliance %	100	80	100	100	100	100	100	100	100	100	800

Part A Fulfilled (%) 100

B - Minor Road, Both Approaches

	Min. Req.	Min. Req.	08:00	09:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Volume	170	136	23	23	20	19	23	25	27	23	183
Compliance %	100	80	14	14	12	11	14	15	16	14	110

Part B Fulfilled (%) 14

Justification 1 Fulfilled (%) 14

Justification 2 - Delay to Cross Traffic

A - Major Road, Both Approaches

	Min. Req.	Min. Req.	08:00	09:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Volume	900	720	1,809	1,893	994	1,236	1,208	2,229	2,388	2,312	14,069
Compliance %	100	80	100	100	100	100	100	100	100	100	800

Part A Fulfilled (%) 100

B - Traffic Crossing Major Road

	Min. Req.	Min. Req.	08:00	09:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Volume	75	60	15	17	14	17	14	13	14	18	122
Compliance %	100	80	20	23	19	23	19	17	19	24	164

Part B Fulfilled (%) 20

Justification 2 Fulfilled (%) 20

Justification 3 - Volume/Delay Combination

Justification 1 Fulfilled 80% or More Was Fulfilled (%) 0

Justification 2 Fulfilled 80% or More Was Fulfilled (%) 0

Justification 3 Fulfilled (%) 0

Justification 4 - Minimum Four-Hour Vehicle Volume

Hour Ending	Total Volume of Both Major Approaches	Volume of Heaviest Minor Approach	Required Value	Requirement Satisfied?
09:00	1,893	15	80	no
16:00	2,229	18	80	no
17:00	2,388	17	80	no
18:00	2,312	14	80	no

Justification 4 Fulfilled (%) 0

Justification 5 - Collision Experience

A Number of reportable collisions susceptible to prevention by a traffic signal 1
Based on the minimum justification value of 5, Part A Fulfilled (%) 7

B Adequate trial of less restrictive remedies requirement was fulfilled (%) 100

Justification 5 Fulfilled (%) 7

Justification 6 - Pedestrian Volume and Delay

Total number of vehicles 14,252

A Total number of pedestrians crossing the major road 2
Plotted point representing 8-Hour Pedestrian Volume vs. 8-Hour Vehicular Volume falls in Justified zone 0

Number of delayed pedestrians
B Plotted point representing 8-Hour Volume of Pedestrians Experiencing Delays of 10 s or more vs. 8-Hour Pedestrian Volume falls in Justified zone 0

Justification 6 Fulfilled (%) 0
