

307-252
CC-48(4)
CITY COUNCIL MEETING

JULY 21, 1982

REGULAR CALENDAR

Agenda item K-1 - "Approve 4-way stop, Stockton and Pine Street" was introduced by Public Works Director Ronsko. Mr. Ronsko apprised the Council that the Public Works Department has reviewed the intersection as part of its ongoing program to reduce high accident locations. Any one of the following conditions may indicate the need for a four-way stop sign installation:

1. Where traffic signals are warranted and the need is urgent, the four-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.
2. An accident problem, as indicated by five or more reported accidents of a type susceptible of correction by a four-way stop installation in a 12-month period. Types of accidents susceptible of correction include right angle and left turn collisions.
3. Minimum volume warrant:
 - a. The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any eight hours of an average day, and
 - b. The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 units per hour for the same eight hours with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour.

This intersection meets all three of the above.

1. The intersection has warranted traffic signals for sometime. A copy of the most recent investigations of the intersection for signals was presented for Council's perusal, however, preliminary review indicates that it's probably No. 5 in priority. If the City continues to install new signals at one intersection per year, the problem can only become worse in that time.
2. There have been five accidents in the last year and ten in the last two years which are of the type susceptible to correction, (i.e. right angle impact where one or the other or both vehicles failed to properly yield the right-of-way.)
3. The average of the highest 8 hours gives a total hourly traffic of 841 considerably above the minimum of 500 and the average of the highest 8 hours on the minor street is 267 vehicles per hour. People crossing Pine Street at this location will attest to the fact that considerable delay is encountered and may, in fact, increase the possibility of accidents because of the frustration level that sometimes develops.

The City has previously prohibited some curb parking to provide visibility for drivers entering or crossing Pine Street. The installation of four-way stop signs at the intersection will enable the City to convert a portion of these blocks to on-street parking. In order to reduce accidents and based on the established guidelines, it is the Public Works Department's recommendation that a four-way stop sign be installed at Pine and Stockton Streets.

A very lengthy discussion followed with questions being directed to Staff.

PROPOSED FOUR-WAY
STOP - STOCKTON
AND PINE STREET
REJECTED

Councilman Pinkerton then moved to deny Staff's recommendation for approval of the installation of four-way stop signs at the intersection of Stockton and Pine Streets and eliminate a portion of the red curb on Pine Street at the same location.

The motion failed to carry by the following tie vote:

Ayes: Council Member- Pinkerton and Reid

Noes: Council Member- Olson and Snider

Absent: Council Member - Murphy

Additional discussion followed and Council indicated it was desirous of having an opportunity to review the 1982 Traffic Signal Priority Study just received, before the matter is brought back to the Council.



CITY OF LODI

PUBLIC WORKS DEPARTMENT

RECEIVED

COUNCIL COMMUNICATION

1982 JUL 13 PM 4:15

K-1

TO: City Council

FROM: City Manager

DATE: July 12, 1982

ALICE M. REIMCHE
CITY CLERK
CITY OF LODI

SUBJECT: Installation of Four-Way Stop Signs at Intersection of Stockton Street and Pine Street.

RECOMMENDED ACTION: That the City Council by resolution approve the installation of four-way stop signs at the intersection of Stockton and Pine Streets and eliminate a portion of the red curb on Pine Street at the same location.

BACKGROUND INFORMATION: The Public Works Department has reviewed the intersection as part of its ongoing program to reduce high accident locations. Any one of the following conditions may indicate the need for a four-way stop sign installation:

1. Where traffic signals are warranted and the need is urgent, the four-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.
2. An accident problem, as indicated by five or more reported accidents of a type susceptible of correction by a four-way stop installation in a 12-month period. Types of accidents susceptible of correction include right angle and left turn collisions.
3. Minimum volume warrant:
 - a. The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any eight hours of an average day, and
 - b. The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 units per hour for the same eight hours with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour.

This intersection meets all three of the above.

APPROVED:

HENRY A. GLAVES, City Manager

FILE NO.

K-1

COUNCIL COMMUNICATION

July 12, 1982

Page 2

1. The intersection has warranted traffic signals for sometime. A copy of the most recent investigations of the intersection for signals is attached, however, preliminary review indicates that it's probably No. 5 in priority. If the City continues to install new signals at one intersection per year, the problem can only become worse in that time.
2. There have been five accidents in the last year and ten in the last two years which are of the type susceptible to correction, (i.e. right angle impact where one or the other or both vehicles failed to properly yield the right-of-way.)
3. The average of the highest 8 hours gives a total hourly traffic of 841 considerably above the minimum of 500 and the average of the highest 8 hours on the minor street is 267 vehicles per hour. People crossing Pine Street at this location will attest to the fact that considerable delay is encountered and may, in fact, increase the possibility of accidents because of the frustration level that sometimes develops.

The City has previously prohibited some curb parking to provide visibility for drivers entering or crossing Pine Street. The installation of four-way stop signs at the intersection will enable the City to convert a portion of these blocks to on-street parking as shown on the attached sketch. In order to reduce accidents and based on the established guidelines, it is the Public Works Department's recommendation that a four-way stop sign be installed at Pine and Stockton Streets.



Jack L. Ronsko
Public Works Director

Attachment

JLR/GER/meq

cc: Police Department



CITY OF LODI

PUBLIC WORKS DEPARTMENT

K-1

N



PROPOSED RED 15'

1965
ADT

EXISTING
RED
27'

3637
ADT

PINE ST.

4524
ADT

15'

EXISTING
REP
38'

STOCKTON ST.

2370
ADT

PROPOSED RED 8'

Drawn

No.

Revised

By

Approved By

Checked

Date

Public Works Director
RCE 17509



CITY OF LODI

PUBLIC WORKS DEPARTMENT

TRAFFIC SIGNAL WARRANT

Sheet 1 of 2

Major St: PINE ST
Minor St: STOCKTON ST

Critical Approach Speed 30 mph
Critical Approach Speed 25 mph

WARRANT 1 - Minimum Vehicular Volume

Satisfied Yes No
80 %

APPROACH LANES	Minimum Requirements															
	U	R	U	R	900	1000	1100	1200	1300	1400	1500	1600	1700	Hour		
Major Street	1	2 or more	500	350	600	420	564	609	657	652	637	644	683	673		
Minor Street	1	2 or more	150	105	200	140	125	122	133	145	146	147	188	195		

90%
400
120

NOTE: Left turn movements from Major St. included when LT-phasing is proposed

WARRANT 2 - Interruption of Continuous Traffic

Satisfied Yes No
80 %

APPROACH LANES	Minimum Requirements															
	U	R	U	R	SAME											
Major Street	1	2 or more	750	525	900	630	564	609	657	652	637	644	683	673		
Minor Street	1	2 or more	75	53	100	70	125	122	133	145	146	147	188	195		

80%
600
60

NOTE: Left turn movements from Major St. included when LT-phasing is proposed

WARRANT 3 - Minimum Pedestrian Volume

Satisfied Yes No
— %

Major Street Volume	Minimum Requirements															
	No Median	Raised 4" Median	U	R	LESS											
Ped's Xing Major Street			150	105												

WIDEBLOCK SIGNAL PROPOSED

MIN. REQUIREMENT: 150 Feet

DISTANCE TO NEAREST ESTABLISHED CROSSWALK: N/E _____ ft S/W _____ ft

Satisfied Yes No

WARRANT 4 - School Crossings

Not Applicable

See School Crossings Warrant Sheet

Drawn	No	Revised	By	Approved By
Checked				
Date				

Public Works Director
RCE 10720



CITY OF LODI

PUBLIC WORKS DEPARTMENT

TRAFFIC SIGNAL WARRANTS

Sheet 2 of 2

K-1

WARRANT 5 - Progressive Movement

Satisfied Yes No

MINIMUM REQUIREMENTS		DISTANCE TO NEAREST SIGNAL		
> 1000 ft	N _____ S _____	N, E _____ ft.	W _____ ft.	Not Satisfied <input type="checkbox"/>
ON ISOLATED ONE WAY ST OR ST WITH ONE WAY TRAFFIC SIGNIFICANCE ADJACENT SIGNALS ARE SO FAR APART THAT NECESSARY PLATOONING & SPEED CONTROL WOULD BE LOST				} Fulfilled <input type="checkbox"/> Not Satisfied <input type="checkbox"/>
ON 3-WAY ST WHERE ADJACENT SIGNALS DO NOT PROVIDE NECESSARY PLATOONING & SPEED CONTROL PROPOSED SIGNALS COULD CONSTITUTE A PROGRESSIVE SIGNAL SYSTEM				

WARRANT 6 - Accident Experience

Satisfied

Yes No

SIGNAL WILL NOT SERIOUSLY DISRUPT PROGRESSIVE TRAFFIC FLOW		<input checked="" type="checkbox"/>	<input type="checkbox"/>
ADEQUATE TRIAL OF LESS RESTRICTIVE REMEDIES HAS FAILED TO REDUCE ACC. FREQ		<input type="checkbox"/>	<input checked="" type="checkbox"/>
ACC WITHIN A 12 MO PERIOD SUSCEPTIBLE OF CORRA INVOLVING INJURY OR >\$1000 DAMAGE		<input checked="" type="checkbox"/>	<input type="checkbox"/>
MINIMUM REQUIREMENT	NUMBER OF ACCIDENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 OR MORE	5		
MINIMUM VOLUME REQUIREMENT		SATISFIED	
80% OR MORE OF	WARRANT 1 - MINIMUM VEHICULAR VOLUME	80%	<input checked="" type="checkbox"/> <input type="checkbox"/>
	WARRANT 2 - INTERRUPTION OF CONTINUOUS TFC	80%	
	WARRANT 3 - MINIMUM PEDESTRIAN VOLUME	- %	

WARRANT 7 - Systems Warrant

Satisfied Yes No

MINIMUM VOLUME REQUIREMENT	ENTERING VOLUMES - ALL APPROACHES	<input type="checkbox"/> Not Satisfied
600 VEH/HR	DURING TYPICAL WEEKDAY PEAK HOUR	} Fulfilled <input type="checkbox"/> Not Satisfied <input type="checkbox"/>
	VEN FOR EACH OF ANY 3 HRS OF P.M.	
	SATURDAY AND/OR SUNDAY	<input type="checkbox"/>
CHARACTERISTICS - MAJOR ROUTES		<input type="checkbox"/> Not Satisfied
PART OF HWY SYSTEM SERVING AS PRINCIPLE NETWORK FOR THROUGH TFC		
CONNECTS AREA OF PRINCIPAL TRAFFIC GENERATION		
RURAL OR SUBURBAN HWY OUTSIDE OF, ENTERING, OR TRAVELING A CITY		
MAJOR FREEWAY STREET FWY OR EXPWAY RAMP TERMINALS		
APPEARS AS MAJOR ROUTE ON AN OFFICIAL PLAN		
ANY MAJOR ROUTE CHARACTERISTICS MET, BOTH STS.		<input type="checkbox"/> & <input type="checkbox"/> Fulfilled

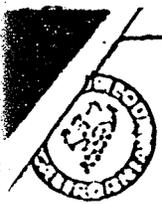
WARRANT 8 - Combination of Warrants

Satisfied Yes No

REQUIREMENT	WARRANT	SATISFIED
TWO WARRANTS SATISFIED 80% OR MORE	1 - MINIMUM VEHICULAR VOLUME	%
	2 - INTERRUPTION OF CONTINUOUS TRAFFIC	%
	3 - MINIMUM PEDESTRIAN VOLUME	%

The satisfaction of a warrant is not necessarily justification for signals. Delay, congestion, confusion or other evidence of the need for right of way assignment must be shown.

Drawn	No	Revised	By	Approved By
Checked				
Date				Public Works Director RCE 10720



CITY OF LODI

PUBLIC WORKS DEPARTMENT

INTERSECTION COUNTS

K-1

INTERSECTION OF STOCKTON & PINE

DATE 5-25-82 DAY OF WEEK TUES

#5

#2

#6

#1

DIRECTION	NORTHBOUND	SOUTHBOUND	EASTBOUND	WESTBOUND	TOTAL
2400-0100	29	14	21	14	78
0100-0200	16	13	13	5	47
0200-0300	10	7	5	10	32
0300-0400	1	5	5	1	12
0400-0500	3	4	16	12	35
0500-0600	22	22	38	28	110
0600-0700	47	53	151	48	299
0700-0800	77	59	205	151	492
0800-0900	86	85	268	224	663
0900-1000	x 125	118	314	250	807
1000-1100	x 122	102	346	263	833
1100-1200	x 133	113	341	316	903
1200-1300	x 145	118	372	280	915
1300-1400	x 146	123	341	296	906
1400-1500	x 147	123	351	293	914
1500-1600	x 188	156	386	297	1027
1600-1700	x 195	143	358	315	1011
1700-1800	219	112	230	229	790
1800-1900	186	122	252	170	730
1900-2000	192	158	171	152	673
2000-2100	148	118	150	113	529
2100-2200	76	104	116	89	385
2200-2300	34	71	41	44	190
2300-2400	23	22	33	37	115
24 HOUR TRAFFIC	2370	1965	4524	3637	12496

4335

35%

8161

652

HIGHEST 8 HOURS MAJOR STREET

5019

avg/hr

627

70%

HIGHEST 8 HOURS MINOR STREET

2197

avg/hr

275

30%

HIGHEST 8 HOURS TOTAL

7216

avg/hr

902

TOTAL 24-HOURS ADT

12496