

PRIORITY RATING FOR REPLACEMENT
OF ALUMINUM-POST BRIDGE RAIL



MICHIGAN DEPARTMENT OF STATE HIGHWAYS

PRIORITY RATING FOR REPLACEMENT
OF ALUMINUM-POST BRIDGE RAIL

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Research Laboratory Section
Testing and Research Division
Research Project 74 TI-222
Research Report No. R-958

Michigan State Highway Commission
E. V. Erickson, Chairman; Charles H. Hewitt,
Vice-Chairman, Carl V. Pellonpaa, Peter B. Fletcher
John P. Woodford, Director
Lansing, March 1975



OFFICE MEMORANDUM

May 8, 1975

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TO: All Recipients of Research Report No. R-958

FROM: L. T. Oehler

SUBJECT: Corrections to Research Report R-958

Two corrections to be made in the subject report have been found during review of the report by the Design Division. These are:

1. Add Structure B01 of 56044, US 10 over Buff Creek located in District 6. This structure was inadvertently omitted from the report.

The factors for this structure are as follows:

	1	2	3	4	5	6	Product
E.B.	5.45	2.17	1.5	1.0	1.0	1.5	26.61
W.B.	5.45	2.17	1.5	1.0	1.0	1.5	26.61

The priority factors determined above, place these structures in the 10th and 11th positions in the District 6 listing and in positions 121 and 122 statewide.

2. Change S01 of 17033 to S02 of 17033, M 48 over I 75 in District 2.

This increases the total number of structures rated from 389 to 390, (463 to 465 individual bridges).

Please make these corrections in your copy of the report.

TESTING AND RESEARCH DIVISION

L. K. T. Oehler
Engineer of Research

LTO:MAC:bf

Introduction

This report presents the results of a survey conducted to establish a priority order for replacement of two and three-tube aluminum post bridge railings anchored with galvanized bolts, nuts, and washers. Structures with this type of railing were built in the late fifties and early sixties.

This investigation was initiated as a result of a meeting held December 21, 1973, in the office of the Assistant Deputy Director, N. C. Jones. The immediate problem at that time was the deterioration of aluminum anchor bolts and nuts that had been used on a few structures. Surveys by the Research Laboratory determined that there were 22 such structures in existence, some of which were very small and quite isolated. Results of the survey of 18 structures in the lower peninsula, along with recommendations, were included in Research Report R-907 (March 1974). A meeting of Design, Maintenance, and Testing and Research personnel, on June 4, 1974, determined the type of replacement railing to be used for the individual structures. Subsequent letters of October 17 and November 14, 1974, furnished additional information on one structure in the upper peninsula and three structures on US 23 near the Ohio State line. Since that time, 18 of the 22 structures with aluminum anchor bolts have been programmed for rail replacement, at a total estimated cost of \$533,000, with a recommended letting date of May 21, 1975.

There was general agreement at the December 1973 and June 1974 meetings, that all rails with aluminum posts should be replaced at some time in the future, and that priorities should be established for such a program. The Research Laboratory was assigned responsibility for making the surveys and proposing priorities. The work was to be done along with other scheduled Research work as time permitted. That work has been completed and is the subject of this report and includes a total of 389 (463 individual) structures.

Procedure

Rating was performed using the following system:

RATING SYSTEM

Factor No.	Factor Type	Assigned Values for Various Conditions
1	Traffic	ADT/1000
2	Structure Length	Length of structure/100
3	Structure Width	(a) Full Width = 1.0 (b) Narrow Width = 1.5

RATING SYSTEM (Cont.)

4	Geometrics (use only worst condition)	(a) Good sight distance, straight roadway, upgrade or crown of vertical curve = 1.0 (b) Downgrade or bottom of vertical curve = 2.0 (c) Poor sight distance, horizontal curve, or in target area = 3.0
5	Lane Movements	(a) No ramps or merging lanes = 1.0 (b) Exit or entrance ramp = 2.0 (c) Exit and entrance ramps = 3.0
6	Special Conditions	(a) Low speed traffic (gravel county roads or city streets) = 0.75 (b) No unusual conditions = 1.0 (c) Excessive drop to feature crossed, water hazard below, etc. = 1.5

The priority rating is the product of factors one through six.

Since in some cases factors such as vertical or horizontal curves and lane movements differed across the roadway, separated structures, although designated by one number, were treated individually.

Wherever possible, ADT data were obtained from the 1971, "Average 24 Hour Traffic Flow" map. At the time of this writing, this was the latest issue available. ADT data for separated structures were computed as 50 percent of that shown on the map. In cases where the traffic flow map could not be used, the traffic volumes were obtained from the listing provided by the Design Division. Where there were no traffic data available, such as on some county road overpasses, the minimum traffic volume value encountered was used (ADT = 50). These structures are noted in the results.

Structure lengths were obtained from the 1974 "State Highway Bridge and Grade Separations" book.

"Full" structure width refers to the highway shoulder width being maintained across the structure. "Narrow" width indicates locations where the shoulder is narrowed at the approach.

Data pertaining to factors 4, 5, and 6 were obtained by visual obser-

vations of the subject structures. Structures with railings which have been replaced or in the process of replacement were not included in the surveys.

The final replacement priorities were obtained by arranging the structures in descending order according to score attained; that is, the railings on those structures with higher products should be replaced first. Although the replacement priority rating system is somewhat arbitrary, it is felt that the probability of vehicles impacting the railings on the various structures is fairly well represented by the order indicated. The magnitudes of the various factors readily could be changed if pertinent information should indicate that those used are unreasonable, such as might be the case on some structures where traffic volumes were not readily available.

Results

The results of this investigation are given in Tables 1 and 2.

Conclusions

A program for upgrading bridge railings should proceed in approximately the order indicated in the tables. Nearby structures could be included from lower on the list, if required to make reasonably sized contracts. The rate of progress obviously will be limited by the amount of funds that can be made available.

Recommendations

Due to the mode of interaction with vehicles, and favorable experience to date, the General Motors type barrier wall is recommended for critical locations, where the local situation permits its use. Structures where sidewalks must be maintained probably can best be treated by installation of parapet rail with grouted anchorages.

Guardrail to bridge-rail transitions meeting current standards, and guardrail to bridge-rail anchorages should be included in the replacement contracts. Wherever possible, the approach guardrail should be brought up to current standards as well.

TABLE 1
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
District 1	B04 of 07012 US 41 over Falls River	3.7	0.68	1.0	3.0	1.0	1.5	11.32
	B01 of 66012 M 64 over Sleep Creek	1.2	0.45	1.0	1.0	1.0	1.5	0.81
	B04 of 36052 US 141 over E Branch Net River	0.40	1.26	1.0	1.0	1.0	1.5	0.75
	B02 of 07011 US 141 over Tracy Creek	0.40	0.45	1.0	1.0	1.0	1.5	0.27
District 2	S04 of 17033 I 75, US 2 under US 2	3.40	3.53	1.5	3.0	1.0	1.0	54.00
	S03 of 17034 I 75, US 2 under I 75 BS	6.80	2.26	1.5	1.0	1.0	1.0	23.04
	S03 of 49025 I 75, US 2 under US 2 BR	3.80	2.47	1.5	1.0	1.0	1.0	14.07
	S01 of 17033 I 75, US 2 under M 48	0.45	6.73	1.5	3.0	1.0	1.0	13.59
	X01 of 49025 I 75 SB, US 2 over Soo Line RR and Co. Rd	1.40	2.78	1.5	2.0	1.0	1.0	11.66
	X01 of 17033 I 75 NB, US 2 over RR Spur and Tone Rd	1.30	2.49	1.5	1.0	2.0	1.0	9.70
	X01 of 17033 I 75 SB, US 2 over RR Spur and Tone Rd	1.30	2.49	1.5	1.0	2.0	1.0	9.70
	S03 of 17033 I 75, US 2 over Air Force Rd	2.00	2.15	1.5	1.0	1.0	1.0	6.45
	X01 of 49025 I 75 NB, US 2 over Soo Line RR and Co. Rd	1.40	2.78	1.5	1.0	1.0	1.0	5.83
	S02 of 49025 I 75 SB, US 2 over Portage St	1.40	1.38	1.0	2.0	1.0	1.0	3.86
	S04 of 49025 I 75, US 2 under M 123	1.20	1.97	1.5	1.0	1.0	1.0	3.54
	B02 of 17061 M 28 over Hendrie River	1.40	1.04	1.0	1.0	1.0	1.5	2.17
	S09 of 49025 I 75, US 2 SB under M 134	0.85	1.55	1.5	1.0	1.0	1.0	1.96
	S10 of 49025 I 75, US 2 NB under M 134	0.85	1.55	1.5	1.0	1.0	1.0	1.96
	S02 of 49025 I 75 NB, US 2 over Portage St	1.40	1.38	1.0	1.0	1.0	1.0	1.93
District 3	B01 of 49131 M 123 over Carp River	0.90	0.47	1.0	1.0	1.0	1.5	0.63
	B04 of 75032 M 94 over N Br Stutts Creek	0.30	0.30	1.5	1.0	1.0	1.5	0.19
	S05 of 49025* I 75, US 2 SB under Moran Rd	0.05	1.55	1.5	1.0	1.0	1.0	0.10
	S06 of 49025* I 75, US 2 NB under Moran Rd	0.05	1.55	1.5	1.0	1.0	1.0	0.10
	S01 of 18034 US 27 SB over US 27 BR and M 61	4.95	1.57	1.0	3.0	3.0	1.0	32.31
	S01 of 18023 US 10 EB over NB US 27	2.95	2.38	1.5	3.0	1.0	1.0	31.59
	S05 of 18034 US 27 NB over US 27 BR	4.85	1.65	1.0	2.0	1.0	1.0	16.00
	S02 of 18023 US 10 WB over SB US 27	2.95	1.52	1.0	3.0	1.0	1.0	13.44
	S02 of 18033 US 27 SB over US 27 BR	2.75	1.43	1.0	3.0	1.0	1.0	11.79
	S01 of 18034 US 27 NB over US 27 BR and M 61	4.95	1.57	1.0	1.0	3.0	1.0	10.77
	S03 of 18023 US 10 under Clarabella Rd	3.00	2.08	1.5	1.0	1.0	1.0	9.36
	B01 of 18034 US 27 SB over Townline Creek	4.85	0.40	1.0	3.0	1.0	1.5	8.73
	B01 of 18033 US 27 NB over Tobacco River	5.50	0.50	1.0	2.0	1.0	1.5	8.25
	B02 of 18033 US 27 SB over Tobacco River	5.50	0.50	1.0	2.0	1.0	1.5	8.25
	S05 of 18034 US 27 SB over US 27 BR	4.85	1.65	1.0	1.0	1.0	1.0	8.00
	S02 of 18033 US 27 NB over US 27 BR	2.75	1.43	1.0	2.0	1.0	1.0	7.86
	B01 of 18034 US 27 NB over Townline Creek	4.85	0.40	1.0	1.0	1.0	1.5	2.91
	B02 of 67061 M 61 over Middle Branch River	1.90	0.39	1.0	1.0	1.0	1.5	1.11
District 4	S05 of 72013 US 27 under M 55	5.00	2.30	1.0	1.0	3.0	1.0	34.50
	S05 of 16091 I 75 NB over M 27	2.60	2.32	1.5	3.0	1.0	1.0	27.12
	S04 of 16091 I 75 SB over M 27	2.60	2.29	1.5	3.0	1.0	1.0	26.76
	S05 of 20052 I 75 SB over US 27 NB	4.70	3.03	1.5	1.0	1.0	1.0	21.36
	S01 of 16091 I 75 SB under M 68	2.80	1.43	1.5	1.0	3.0	1.0	18.00
	S03 of 20014 I 75 SB under NB I 75 BL	1.90	2.05	1.5	3.0	1.0	1.0	17.49
	X01 of 16091 I 75 NB over PC RR	2.60	1.89	1.0	3.0	1.0	1.0	14.73
	X01 of 16093 I 75 SB over PC RR and Trowbridge Rd	3.20	2.62	1.5	1.0	1.0	1.0	12.09
	X02 of 16093 I 75 NB over PC RR and Trowbridge Rd	3.20	2.52	1.5	1.0	1.0	1.0	12.09
	S04 of 69013 I 75 NB over Charles Brink Rd	3.20	1.11	1.0	3.0	1.0	1.0	10.65

* ADT unknown

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
S03 of 20015	I 75 NB over Lewiston Grade Rd	3.40	0.99	1.0	3.0	1.0	1.0	10.08
S02 of 16091	I 75 NB under M 68	1.40	1.55	1.5	1.0	3.0	1.0	9.75
B01 of 72014	US 27 SB over Muskegon River	4.55	1.35	1.0	1.0	1.0	1.5	9.21
B02 of 72014	US 27 NB over Muskegon River	4.55	1.35	1.0	1.0	1.0	1.5	9.21
B01 of 16091	I 75 NB over Indian River	2.60	1.80	1.0	1.0	1.0	1.5	7.02
B01 of 16091	I 75 SB over Indian River	2.60	1.80	1.0	1.0	1.0	1.5	7.02
X01 of 20014	I 75 SB over PC RR	4.80	1.43	1.0	1.0	1.0	1.0	6.86
X02 of 20014	I 75 NB over PC RR	4.80	1.43	1.0	1.0	1.0	1.0	6.86
X01 of 69013	I 75 NB over PC RR	3.25	1.94	1.0	1.0	1.0	1.0	6.30
X01 of 69013	I 75 SB over PC RR	3.25	1.94	1.0	1.0	1.0	1.0	6.30
X01 of 16091	I 75 SB over PC RR	2.60	1.89	1.0	1.0	1.0	1.0	4.91
B01 of 72013	US 27 SB over Wolf Creek	4.50	0.65	1.0	1.0	1.0	1.5	4.38
B02 of 72013	US 27 NB over Wolf Creek	4.50	0.65	1.0	1.0	1.0	1.5	4.38
S06 of 69013	I 75 SB over M 32	3.25	1.34	1.0	1.0	1.0	1.0	4.35
S07 of 69013	I 75 NB over M 32	3.25	1.34	1.0	1.0	1.0	1.0	4.35
S04 of 20014	I 75 SB over M 72	3.10	1.35	1.0	1.0	1.0	1.0	4.18
S05 of 20014	I 75 NB over M 72	3.10	1.35	1.0	1.0	1.0	1.0	4.18
B01 of 16093	I 75 SB over Sturgeon River	2.70	0.50	1.0	2.0	1.0	1.5	4.05
B02 of 16093	I 75 NB over Sturgeon River	2.70	0.50	1.0	2.0	1.0	1.5	4.05
S02 of 20015	I 75 SB over Lewiston Grade Rd	3.40	0.99	1.0	1.0	1.0	1.0	3.36
B01 of 20015	I 75 SB over AuSable River	3.10	0.70	1.0	1.0	1.0	1.5	3.25
S01 of 20015	I 75 under FAS 270 REL	0.78	2.66	1.5	1.0	1.0	1.0	3.10
B02 of 20015	I 75 NB over AuSable River	3.10	0.65	1.0	1.0	1.0	1.5	3.01
B02 of 04012	M 65 over N Br Thunder Bay River	0.60	2.03	1.5	1.0	1.0	1.5	2.71
S04 of 20015	I 75 SB under M 93	1.00	1.73	1.5	1.0	1.0	1.0	2.59
S05 of 20015	I 75 NB under M 93	1.00	1.68	1.5	1.0	1.0	1.0	2.52
B03 of 20015	I 75 SB over E Br AuSable River	3.40	0.40	1.0	1.0	1.0	1.5	2.04
S03 of 16091	I 75 under Old M 68	0.59	1.95	1.5	1.0	1.0	1.0	1.72
B04 of 20015	I 75 NB over E Br AuSable River	3.40	0.34	1.0	1.0	1.0	1.5	1.72
S01 of 16093	I 75 SB under Wolverine Rd	0.32	1.71	1.5	1.0	1.0	1.0	0.81
S02 of 16093	I 75 NB under Wolverine Rd	0.32	1.71	1.5	1.0	1.0	1.0	0.81
S05 of 69014*	I 75 under Old US 27	0.05	3.26	1.5	3.0	1.0	1.0	0.72
S05 of 69013*	I 75 under Old US 27	0.05	2.66	1.5	3.0	1.0	1.0	0.57
S02 of 20014	I 75 under 4 Mile Rd	0.18	2.12	1.5	1.0	1.0	1.0	0.57
S06 of 20015	I 75 SB under Lovells Rd	0.39	1.30	1.5	1.0	1.0	0.75	0.56
S07 of 20015	I 75 NB under Lovells Rd	0.39	1.29	1.5	1.0	1.0	0.75	0.56
S01 of 69013*	I 75 under Marlette Rd	0.05	3.24	1.5	1.0	1.0	1.0	0.24
S02 of 69013*	I 75 under Old State Rd	0.05	3.98	1.5	1.0	1.0	0.75	0.21
S01 of 69014*	I 75 under Parmater Rd	0.05	2.92	1.5	1.0	1.0	0.75	0.15
S03 of 16093	I 75 SB under Rondo Rd	0.06	2.18	1.5	1.0	1.0	0.75	0.14
S04 of 16093	I 75 NB under Rondo Rd	0.06	2.18	1.5	1.0	1.0	0.75	0.14
S04 of 69014*	I 75 under Sturgeon Valley Rd	0.05	2.69	1.5	1.0	1.0	0.75	0.14
S03 of 69014*	I 75 NB under Winters Rd	0.05	2.12	1.5	1.0	1.0	0.75	0.11
S06 of 69014*	I 75 SB under Alexander Rd	0.05	1.67	1.5	1.0	1.0	0.75	0.09
S07 of 69014*	I 75 NB under Alexander Rd	0.05	1.65	1.5	1.0	1.0	0.75	0.09
S02 of 69014*	I 75 SB under Winters Rd	0.05	1.47	1.5	1.0	1.0	0.75	0.07

District 4 (Cont.)

*ADT unknown

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
District 5	X04 of 41026 I 96 WB over C&O and PC RR and W River Drive	11.35	5.44	1.5	3.0	2.0	1.0	555.69
	X04 of 41026 I 96 EB over C&O and PC RR and W River Drive	11.35	5.44	1.5	3.0	2.0	1.0	555.69
	S07 of 41026 I 96 WB over US 131	11.35	3.15	1.5	3.0	2.0	1.0	321.77
	S07 of 41026 I 96 EB over US 131	11.35	3.15	1.5	3.0	2.0	1.0	321.77
	X03 of 41026 I 296 NB conn. to WB I 96 over C&O and PC RR, W River Dr and I 296 SB	12.4	4.93	1.5	3.0	1.0	1.0	275.09
	X02 of 41026 I 296 SB conn. to I 296 over C&O and PC RR and W River Dr	12.4	4.21	1.5	3.0	1.0	1.0	234.49
	X01 of 41025 I 96 WB over GTW RR	8.95	2.15	1.5	3.0	2.0	1.0	173.18
	X01 of 41025 I 96 EB over GTW RR	8.95	2.15	1.5	3.0	2.0	1.0	173.18
	S06 of 19022 I 96 WB over I 96 BL	7.70	2.37	1.5	3.0	2.0	1.0	164.24
	S06 of 19022 I 96 EB over I 96 BL	7.70	2.37	1.5	3.0	2.0	1.0	164.24
	S06 of 41026 I 96 EB under WB I 296 conn.	12.4	2.52	1.5	3.0	1.0	1.0	140.62
	S14 of 41025 I 96 under Cascade Rd (M 45)	5.40	2.82	1.5	3.0	2.0	1.0	137.05
	S10 of 41025 I 96 under M 44	13.9	3.15	1.5	1.0	2.0	1.0	131.36
	S04 of 41025 I 96 under M 44 conn.	16.8	2.42	1.5	1.0	2.0	1.0	121.97
	S15 of 41025 I 96 under Forrest Hill Rd	8.60	2.95	1.5	3.0	1.0	1.0	114.16
	S12 of 41025 I 96 under WB M 21	5.35	3.11	1.5	3.0	1.0	1.0	74.87
	S08 of 29011 US 27 under M 46	6.70	3.65	1.5	1.0	2.0	1.0	73.36
	S05 of 41025 I 96 under Dean Lake Rd	6.20	2.56	1.5	3.0	1.0	1.0	71.42
	S01 of 41024 I 96 under WB M 11	7.95	2.65	1.5	1.0	2.0	1.0	63.20
	S01 of 41024 I 96 under EB M 11	7.95	2.65	1.5	1.0	2.0	1.0	63.20
	S02 of 70064 I 96 EB over M 104	6.1	2.03	1.5	3.0	1.0	1.0	55.72
	X01 of 37014 US 27 SB over C&O RR	4.20	3.88	1.5	1.0	2.0	1.0	48.88
	X01 of 41026 I 96 EB over GTW RR	9.35	1.74	1.0	3.0	1.0	1.0	48.81
	S04 of 29011 US 27 SB over US 27 BR	4.80	1.44	1.0	3.0	2.0	1.0	41.47
	S04 of 29011 US 27 NB over US 27 BR	4.80	1.43	1.0	3.0	2.0	1.0	41.18
	S04 of 41026 I 96 EB under M 37	26.9	1.44	1.0	1.0	1.0	1.0	38.74
	S05 of 41026 I 96 WB under M 37	26.9	1.43	1.0	1.0	1.0	1.0	38.46
	S16 of 41025 I 96 under Burton Rd	8.60	2.91	1.5	1.0	1.0	1.0	37.54
	S03 of 70064 I 96 WB over M 104	6.1	1.80	1.0	3.0	1.0	1.0	32.94
	S01 of 41025 I 96 WB over Monroe Ave	11.35	1.43	1.0	2.0	1.0	1.0	32.46
	S13 of 41025 I 96 under EB M 21	5.35	3.50	1.5	1.0	1.0	1.0	28.09
	S09 of 70063 I 96 WB over 4 Mile Rd	7.50	1.09	1.0	3.0	1.0	1.0	24.52
	S09 of 70063 I 96 EB over 4 Mile Rd	7.50	1.09	1.0	3.0	1.0	1.0	24.52
	X01 of 37014 US 27 NB over C&O RR	4.20	3.88	1.5	1.0	1.0	1.0	24.44
	S01 of 61152 I 96 ramp over US 31	5.00	1.62	1.0	3.0	1.0	1.0	24.30
	X01 of 70064 I 96 WB over GTW RR	4.8	1.65	1.0	3.0	1.0	1.0	23.76
	B01 of 59041 M 82 over Tamarack Creek	3.60	1.43	1.0	3.0	1.0	1.5	23.17
	S06 of 41025 I 96 under 3 Mile Rd	6.20	2.45	1.5	1.0	1.0	1.0	22.78
	S06 of 37013 US 27 SB under US 27 BR NB	2.15	2.32	1.5	3.0	1.0	1.0	22.45
	B01 of 61152 I 96 EB over Norris Creek	4.50	1.65	1.0	2.0	1.0	1.5	22.28
	B02 of 61152 I 96 WB over Norris Creek	4.50	1.65	1.0	2.0	1.0	1.5	22.28
	S07 of 61152 I 96 WB over Old US 16	5.15	1.43	1.0	3.0	1.0	1.0	22.09
	S08 of 41025 I 96 under Leonard St	5.80	2.47	1.5	1.0	1.0	1.0	21.49
	S06 of 61152 I 96 EB over Old US 16	5.15	1.38	1.0	3.0	1.0	1.0	21.32
	S02 of 61152 I 96 ramp over ramp to US 31	5.00	1.37	1.0	3.0	1.0	1.0	20.55
	S02 of 37014 US 27 SB under US 27 BR NB	1.85	2.36	1.5	3.0	1.0	1.0	19.65
	S07 of 41025 I 96 under Knapp Rd	6.20	2.11	1.5	1.0	1.0	1.0	19.62
	S11 of 41025 I 96 EB ramp under M 21	5.35	2.19	1.5	1.0	1.0	1.0	17.57
	S02 of 41025 I 96 WB over Coit Ave	11.35	1.49	1.0	1.0	1.0	1.0	16.91

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
S02 of 41025	I 96 EB over Coit Ave	11.35	1.49	1.0	1.0	1.0	1.0	16.91
X01 of 41026	I 96 WB over GTW RR	9.35	1.74	1.0	1.0	1.0	1.0	16.27
S01 of 41025	I 96 EB over Monroe Ave	11.35	1.43	1.0	1.0	1.0	1.0	16.23
S09 of 37014	US 27 SB under NB US 27 BR	1.55	2.23	1.5	3.0	1.0	1.0	15.55
S04 of 61152	I 96 WB over Hile Rd	5.15	1.47	1.0	1.0	2.0	1.0	15.14
S04 of 61152	I 96 EB over Hile Rd	5.15	1.47	1.0	1.0	2.0	1.0	15.14
S08 of 70063	I 96 EB over WB M 11	6.75	2.16	1.5	1.0	1.0	1.0	14.58
S01 of 29014	US 27 under US 27 BR	3.50	2.77	1.5	1.0	1.0	1.0	14.54
B01 of 70063	I 96 EB over Crockery Creek	6.10	1.5	1.0	1.0	1.0	1.5	13.72
S03 of 37032	US 10 over WB ramp	2.95	1.51	1.0	3.0	1.0	1.0	13.36
B01 of 37014	US 27 NB over Chippewa River	4.20	2.01	1.5	1.0	1.0	1.0	12.66
B01 of 37014	US 27 SB over Chippewa River	4.20	2.01	1.5	1.0	1.0	1.0	12.66
S08 of 37013	US 27 SB over M 20	2.85	1.47	1.0	3.0	1.0	1.0	12.57
X01 of 19022	I 96 WB over C&O RR	8.35	1.43	1.0	1.0	1.0	1.0	11.94
X01 of 19022	I 96 EB over C&O RR	8.35	1.43	1.0	1.0	1.0	1.0	11.94
B01 of 37013	US 27 NB over Little Salt River	5.20	0.50	1.0	3.0	1.0	1.5	11.70
B01 of 37013	US 27 SB over Little Salt River	5.20	0.50	1.0	3.0	1.0	1.5	11.70
X02 of 37014	US 27 NB over C&O RR and Ex. US 10	2.55	2.85	1.5	1.0	1.0	1.0	10.90
X02 of 37014	US 27 SB over C&O RR and Ex. US 10	2.55	2.85	1.5	1.0	1.0	1.0	10.90
S03 of 41026	I 96 WB over Bristol Rd	9.35	1.13	1.0	1.0	1.0	1.0	10.56
S03 of 41026	I 96 EB over Bristol Rd	9.35	1.13	1.0	1.0	1.0	1.0	10.56
B03 of 29011	US 27 NB over Pine River	3.75	1.52	1.0	1.0	1.0	1.5	8.55
B03 of 29011	US 27 SB over Pine River	3.75	1.52	1.0	1.0	1.0	1.5	8.55
S08 of 37013	US 27 NB over M 20	2.85	1.47	1.0	1.0	2.0	1.0	8.38
B08 of 41033	M 37 over Nash Creek	6.2	0.90	1.0	1.0	1.0	1.5	8.37
X01 of 70064	I 96 EB over GTW RR	4.8	1.65	1.0	1.0	1.0	1.0	7.92
S03 of 70063	I 96 WB over 88th St	6.1	1.12	1.0	1.0	1.0	1.0	6.83
S02 of 70063	I 96 EB over 88th St	6.1	1.12	1.0	1.0	1.0	1.0	6.83
S06 of 29011	US 27 NB over Michigan Ave	4.15	1.47	1.0	1.0	1.0	1.0	6.10
S06 of 29011	US 27 SB over Michigan Ave	4.15	1.47	1.0	1.0	1.0	1.0	6.10
X02 of 29011	US 27 NB over C&O RR	4.15	1.40	1.0	1.0	1.0	1.0	5.81
X02 of 29011	US 27 SB over C&O RR	4.15	1.40	1.0	1.0	1.0	1.0	5.81
S03 of 29011	US 27 NB over US 27 BR	4.65	1.14	1.0	1.0	1.0	1.0	5.30
S02 of 29011	US 27 SB over US 27 BR	4.65	1.14	1.0	1.0	1.0	1.0	5.30
S05 of 29011	US 27 NB over US 27 BR	4.15	1.24	1.0	1.0	1.0	1.0	5.15
S05 of 29011	US 27 SB over US 27 BR	4.15	1.24	1.0	1.0	1.0	1.0	5.15
S05 of 19022	I 96 under Wacousta Rd	1.52	2.14	1.5	1.0	1.0	1.0	4.88
B01 of 29042	M 46 over Bush Creek	5.00	0.40	1.5	1.0	1.0	1.5	4.50
B02 of 41026	I 96 WB over Sand Creek	7.05	0.35	1.0	1.0	1.0	1.5	3.70
B01 of 59042	M 46 over Tamarack Creek	2.20	0.50	1.0	2.0	1.0	1.5	3.30
S07 of 29011	US 27 under Begole Rd	0.80	2.28	1.5	1.0	1.0	1.0	2.74
B02 of 37014	US 27 NB over Salt River	4.20	0.30	1.0	1.0	1.0	1.0	1.26
B02 of 37014	US 27 SB over Salt River	4.20	0.30	1.0	1.0	1.0	1.0	1.26
S08 of 61152*	I 96 under Fruitport Rd	0.05	4.01	1.5	3.0	1.0	1.0	0.90
S01 of 70064*	I 96 under Old US 16	0.05	3.21	1.5	3.0	1.0	1.0	0.72
S03 of 61072*	US 31 under Sherman Rd	0.05	2.05	1.5	3.0	1.0	1.0	0.46
S01 of 61072*	US 31 under Shettler Rd	0.05	1.90	1.5	3.0	1.0	1.0	0.42
S01 of 41026*	I 96 under Fruit Ridge Rd	0.05	3.70	1.5	1.0	1.0	1.0	0.28
S05 of 61152*	I 96 under Sternberg Rd	0.05	3.28	1.5	1.0	1.0	1.0	0.25
S02 of 41024*	I 96 under Kraft Rd	0.05	3.02	1.5	1.0	1.0	1.0	0.23

* ADT unknown

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product	
		1	2	3	4	5	6		
District 5 (Cont.)	S03 of 41024*	I 96 under Thornapple River Dr	0.05	2.99	1.5	1.0	1.0	1.0	0.22
	S01 of 70063*	I 96 under Nunica Rd	0.05	2.62	1.5	1.0	1.0	1.0	0.20
	S01 of 37032*	US 10 under Loomis Rd	0.05	2.34	1.5	1.0	1.0	1.0	0.18
	S02 of 41026*	I 96 under Walker Rd	0.05	2.31	1.5	1.0	1.0	1.0	0.17
	S05 of 37014*	US 27 under Rosebush Rd	0.05	2.12	1.5	1.0	1.0	1.0	0.16
	S03 of 37013*	US 27 under Blanchard Rd	0.05	2.06	1.5	1.0	1.0	1.0	0.15
	S03 of 41025*	I 96 under Cheney Ave	0.05	2.54	1.5	1.0	1.0	0.75	0.14
	S02 of 37032*	US 10 under Leaton Rd	0.05	2.45	1.5	1.0	1.0	0.75	0.14
District 6	B04 of 56044	US 10 WB over Sanford Lake	6.05	3.54	1.5	1.0	2.0	1.5	96.38
	S03 of 25131	I 75 under Holly Rd	3.88	2.90	1.5	3.0	1.0	1.0	50.63
	B04 of 56044	US 10 EB over Sanford Lake	6.05	3.54	1.5	1.0	1.0	1.5	48.19
	X01 of 25131	I 75 NB over C&O RR	9.0	2.32	1.5	1.0	1.0	1.5	46.98
	X01 of 25131	I 75 SB over C&O RR	9.0	2.32	1.5	1.0	1.0	1.5	46.98
	B03 of 56044	US 10 WB over Mud Creek	5.45	1.46	1.0	3.0	1.0	1.5	35.80
	B02 of 56044	US 10 EB over Mud Creek	5.45	1.39	1.0	3.0	1.0	1.5	34.09
	S04 of 25131	I 75 SB over Cook Rd	9.0	1.21	1.0	3.0	1.0	1.0	32.67
	S05 of 25131	I 75 NB over Cook Rd	9.0	1.18	1.0	3.0	1.0	1.0	31.86
	B02 of 76023	I 69 EB over Shiawassee River	4.35	1.80	1.0	2.0	1.0	1.5	23.49
	B02 of 76023	I 69 WB over Shiawassee River	4.35	1.80	1.0	2.0	1.0	1.5	23.49
	S01 of 25131	I 75 under SB M 54	4.3	3.09	1.5	1.0	1.0	1.0	19.93
	S01 of 56044	US 10 under M 18	2.4	2.42	1.5	1.0	2.0	1.0	17.42
	B01 of 76041	M 71 over Shiawassee River	9.2	1.20	1.0	1.0	1.0	1.5	16.56
	B02 of 73131	M 83 over Cass River	4.2	2.40	1.0	1.0	1.0	1.5	15.12
	S03 of 56044	US 10 under M 30	4.2	2.00	1.5	1.0	1.0	1.0	12.60
	S02 of 09035	I 75 under N Union Rd	0.70	2.08	1.5	3.0	1.0	1.0	6.55
	S07 of 25131	I 75 under Grand Blanc Rd	1.0	3.12	1.0	1.0	1.0	1.0	3.12
	B02 of 74022	M 90 over Potts Drain	1.8	0.30	1.5	2.0	1.0	1.5	2.43
	S03 of 73171*	I 75 under Maple Rd	0.05	3.43	1.5	3.0	1.0	1.0	0.77
	S05 of 76023*	I 69 under Newburg Rd	0.05	2.69	1.5	3.0	1.0	1.0	0.60
	S02 of 56045*	US 10 under Shaffer Rd	0.05	3.02	1.5	1.0	1.0	1.0	0.23
	S02 of 25131*	I 75 under Baldwin Rd	0.05	2.92	1.5	1.0	1.0	1.0	0.22
	S05 of 73171*	I 75 under Townline Rd	0.05	2.66	1.5	1.0	1.0	1.0	0.20
	S04 of 56044*	US 10 under Hope Rd	0.05	2.69	1.5	1.0	1.0	1.0	0.20
	S06 of 73171*	I 75 under Curtis Rd	0.05	2.56	1.5	1.0	1.0	1.0	0.19
	S02 of 56044*	US 10 under W River Rd	0.05	2.22	1.5	1.0	1.0	1.0	0.17
	S07 of 73171*	I 75 under Riverview Dr	0.05	2.20	1.5	1.0	1.0	1.0	0.16
	S01 of 56045*	US 10 under Coleman Rd	0.05	2.09	1.5	1.0	1.0	1.0	0.16
	S04 of 73171*	I 75 under Busch Rd	0.05	2.00	1.5	1.0	1.0	1.0	0.15
District 7	S06 of 39014	US 131 under M 43	28.00	2.30	1.5	1.0	3.0	1.0	289.80
	S01 of 11111	I 196 NB over I 94	4.70	3.20	1.5	3.0	1.0	1.0	67.68
	S04 of 11111	I 196 NB over Coloma Rd	4.25	1.24	1.5	2.0	3.0	1.0	47.40
	S01 of 14121	M 60 over US 12	5.20	2.00	1.5	1.0	3.0	1.0	46.80
	B01 of 39032	M 96 over Kalamazoo River	3.00	1.97	1.5	3.0	1.0	1.5	39.87
	S10 of 39014	US 131 SB over 'D' Ave	9.70	1.11	1.0	3.0	1.0	1.0	32.28
	S11 of 39014	US 131 NB over 'D' Ave	9.70	1.10	1.0	3.0	1.0	1.0	32.01
	S04 of 80013	I 196 under M 140	4.90	3.87	1.5	1.0	1.0	1.0	28.44
	S01 of 03033	I 196 under I 196 BL	8.00	2.27	1.5	1.0	1.0	1.0	27.24
	B01 of 11111	I 196 NB over Paw Paw River	4.25	2.00	1.0	2.0	1.0	1.5	25.50

* ADT unknown

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
S04 of 11111	I 196 SB over Coloma Rd	4.25	1.24	1.5	1.0	3.0	1.0	23.70
S01 of 11111	I 196 SB over I 94	4.70	3.20	1.5	1.0	1.0	1.0	22.56
S01 of 80013	I 196 under M 43	6.10	2.38	1.5	1.0	1.0	1.0	21.76
S02 of 11111	I 196 under Old US 12	5.48	2.53	1.5	1.0	1.0	1.0	20.79
S05 of 11111	I 196 under Riverside Rd	1.50	2.65	1.5	3.0	1.0	1.0	17.85
B01 of 11111	I 196 SB over Paw Paw River	4.25	2.00	1.0	1.0	1.0	1.5	12.75
X01 of 11111	I 196 SB over C&O RR	4.25	1.48	1.0	2.0	1.0	1.0	12.58
S08 of 11015	I 94 under Three Oaks Rd	2.50	2.59	1.5	1.0	1.0	1.0	9.70
S07 of 11111	I 196 under US 33	2.60	2.14	1.5	1.0	1.0	1.0	8.34
S04 of 13081	I 94 under Capital Ave	1.77	2.56	1.5	1.0	1.0	1.0	6.79
S06 of 11015	I 94 under Warren Wood Rd	0.39	3.78	1.5	3.0	1.0	1.0	6.60
S03 of 11111	I 196 under Benton Center Rd	0.69	2.13	1.5	3.0	1.0	1.0	6.57
S04 of 11015	I 94 under Union Pier Rd	1.10	3.92	1.5	1.0	1.0	1.0	6.46
X01 of 11111	I 196 NB over C&O RR	4.25	1.48	1.0	1.0	1.0	1.0	6.29
S03 of 11015	I 94 under Kruger Rd	0.29	2.91	1.5	3.0	1.0	1.0	3.78
S06 of 11111	I 196 under Central Ave	0.29	2.33	1.5	3.0	1.0	1.0	3.00
S01 of 03111	US 131 under 102nd Ave	0.91	2.10	1.5	1.0	1.0	1.0	2.86
S07 of 11015	I 94 under Easy Rd	0.50	3.41	1.5	1.0	1.0	0.75	1.91
S11 of 11015	I 94 under Browntown Rd	0.45	2.48	1.5	1.0	1.0	1.0	1.66
S05 of 11015	I 94 under Lakeside Dr	0.30	3.23	1.5	1.0	1.0	1.0	1.44
S15 of 11015	I 94 under Grand Mere Rd	0.40	2.19	1.5	1.0	1.0	1.0	1.30
S14 of 11015	I 94 under Livingston Rd	0.30	2.34	1.5	1.0	1.0	1.0	1.05
S09 of 11015	I 94 under Harbert Rd	0.16	2.18	1.5	1.0	1.0	0.75	0.38
S09 of 39014*	US 131 under Ravine Rd	0.05	3.19	1.5	1.0	1.0	1.0	0.22
S07 of 39014*	US 131 under "H" Ave	0.05	2.48	1.5	1.0	1.0	1.0	0.18
S12 of 39014*	US 131 under "B" Ave	0.05	2.11	1.5	1.0	1.0	1.0	0.15
X01 of 81074	US 23 SB over Huron River and PC RR	15.50	4.75	1.5	3.0	1.0	1.0	331.29
S09 of 81103	Upper US 23 SB under US 23 BL, tri level structure	16.40	2.98	1.5	3.0	1.0	1.5	329.85
S05 of 47064	I 96 EB over NB US 23	14.75	1.64	1.5	3.0	2.0	1.0	217.68
S13 of 47065	I 96 EB over US 23	14.75	1.48	1.0	3.0	3.0	1.0	196.47
S08 of 81062	I 94 SB under US 23	12.30	2.53	1.5	1.0	3.0	1.0	139.98
S08 of 81062	I 94 NB under US 23	12.30	2.53	1.5	1.0	3.0	1.0	139.98
S13 of 81104	I 94 BL under Jackson Rd	24.00	1.19	1.5	3.0	1.0	1.0	128.52
S02 of 47013	US 23 SB over M 36	15.80	1.68	1.5	3.0	1.0	1.0	119.43
S02 of 47013	US 23 NB over M 36	15.80	1.68	1.5	3.0	1.0	1.0	119.43
S10 of 47065	I 96 EB over Grand River Ave	11.00	1.74	1.0	3.0	2.0	1.0	114.84
S10 of 47065	I 96 WB over Grand River Ave	11.00	1.74	1.0	3.0	2.0	1.0	114.84
X01 of 81074	US 23 NB over Huron River and PC RR	15.50	4.75	1.5	1.0	1.0	1.0	110.43
S14 of 47065	I 96 WB over US 23	14.60	1.25	1.0	3.0	2.0	1.0	109.50
S09 of 81103	Mid US 23 SB over US 23 BR	16.40	1.47	1.0	3.0	1.0	1.5	108.45
B01 of 23152	I 96 EB over Grand River	8.35	2.69	1.5	2.0	1.0	1.5	101.07
S02 of 81074	US 23 SB over US 23 BL	16.40	1.88	1.0	1.0	3.0	1.0	92.49
S02 of 81074	US 23 NB over US 23 BL	16.40	1.88	1.0	1.0	3.0	1.0	92.49
X03 of 47065	I 96 EB over C&O RR	9.05	1.94	1.5	3.0	1.0	1.0	78.96
S09 of 23152	I 96 WB over I 69, US 27	8.25	1.88	1.5	1.0	3.0	1.0	69.78
S03 of 47064	I 96 EB over SB US 23	14.75	1.57	1.0	3.0	1.0	1.0	69.45
S04 of 47065	I 96 under M 155	19.50	3.48	1.5	1.0	1.0	1.0	69.36
S04 of 47064	I 96 WB over SB US 23	14.75	1.56	1.5	1.0	2.0	1.0	69.02

* ADT unknown

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
S10 of 23152	I 96 EB over I 69, US 27	8.25	1.85	1.5	1.0	3.0	1.0	68.67
S02 of 23152	I 96 EB over M 43	8.95	1.62	1.5	1.0	3.0	1.0	65.19
S02 of 23152	I 96 WB over M 43	8.95	1.62	1.5	1.0	3.0	1.0	65.19
S04 of 33083	I 96 EB over I 96 BL ramps	8.65	1.47	1.5	1.0	3.0	1.0	57.18
S04 of 33083	I 96 WB over I 96 BL ramps	8.65	1.47	1.5	1.0	3.0	1.0	57.18
X01 of 81104	I 94 EB over PC RR	12.30	1.54	1.0	3.0	1.0	1.0	56.82
B01 of 33084	I 96 EB over Sycamore Creek	9.75	1.29	1.0	3.0	1.0	1.5	56.56
S06 of 47064	US 23 NB over I 96 WB	11.40	1.63	1.0	3.0	1.0	1.0	55.74
S06 of 81076	US 23 under US 12	13.20	2.70	1.5	1.0	1.0	1.0	53.46
S03 of 81074	US 23 SB over Huron River Drive	15.55	1.09	1.0	3.0	1.0	1.0	50.82
B01 of 23152	I 96 WB over Grand River	8.35	2.69	1.5	1.0	1.0	1.5	50.53
S04 of 81104	I 94 under M 52	4.20	2.34	1.5	1.0	3.0	1.0	44.19
S04 of 38103	I 94 EB over Race Rd	13.50	1.09	1.0	3.0	1.0	1.0	44.13
S03 of 47013	US 23 SB over Silver Lake Rd	12.85	1.08	1.0	3.0	1.0	1.0	41.61
S03 of 47013	US 23 NB over Silver Lake Rd	12.85	1.08	1.0	3.0	1.0	1.0	41.61
S03 of 47014	US 23 SB over M 59	9.60	1.40	1.0	3.0	1.0	1.0	40.32
S03 of 47014	US 23 NB over M 59	9.60	1.40	1.0	3.0	1.0	1.0	40.32
S02 of 47014	US 23 SB over Hyne Rd	9.60	1.07	1.0	3.0	1.0	1.0	30.81
S02 of 47014	US 23 NB over Hyne Rd	9.60	1.07	1.0	3.0	1.0	1.0	30.81
S03 of 81104	I 94 WB over Pierce Rd	12.45	1.19	1.0	2.0	1.0	1.0	29.62
X03 of 47065	I 96 WB over C&O RR	9.05	1.94	1.5	1.0	1.0	1.0	26.32
X01 of 81104	I 94 WB over PC RR	12.30	0.58	1.0	3.0	1.0	1.0	21.39
S01 of 81074	US 23 SB, I 94 BL over Packard Rd	15.55	1.37	1.0	1.0	1.0	1.0	21.30
S01 of 81074	US 23 NB, I 94 BL over Packard Rd	15.55	1.37	1.0	1.0	1.0	1.0	21.30
X02 of 81103	US 23, M 14 WB over AA RR	11.50	1.79	1.0	1.0	1.0	1.0	20.58
S04 of 47013	US 23 under Lee Rd	6.00	2.26	1.5	1.0	1.0	1.0	20.34
S07 of 47014	US 23 SB over Center Rd	9.25	1.08	1.0	2.0	1.0	1.0	19.98
S05 of 47013	US 23 SB under Grand River Ave	8.10	1.64	1.5	1.0	1.0	1.0	19.92
S06 of 47013	US 23 NB under Grand River Ave	8.10	1.64	1.5	1.0	1.0	1.0	19.92
S07 of 23152	I 96 WB over Canal Rd	6.35	1.51	1.0	2.0	1.0	1.0	19.16
B01 of 33084	I 96 WB over Sycamore Creek	9.75	1.29	1.0	1.0	1.0	1.5	18.85
X01 of 81103	US 23, M 14 EB over AA RR	11.50	1.59	1.0	1.0	1.0	1.0	18.28
S03 of 81074	US 23 NB over Huron River Drive	15.55	1.09	1.0	1.0	1.0	1.0	16.94
S01 of 33083	I 96 EB over M 99	8.25	1.99	1.0	1.0	1.0	1.0	16.41
S01 of 33083	I 96 WB over M 99	8.25	1.99	1.0	1.0	1.0	1.0	16.41
S03 of 38103	I 94 WB over Race Rd	13.50	1.12	1.0	1.0	1.0	1.0	15.12
S01 of 33085	I 96 EB over M 52	8.95	1.68	1.0	1.0	1.0	1.0	15.03
S02 of 33085	I 96 WB over M 52	8.95	1.68	1.0	1.0	1.0	1.0	15.03
S03 of 81104	I 94 EB over Pierce Rd	12.45	1.19	1.0	1.0	1.0	1.0	14.81
S02 of 47065	I 96 under M 59	1.95	2.51	1.0	3.0	1.0	1.0	14.67
B01 of 58033	US 23 SB over S Br Macon Creek	7.95	1.23	1.0	1.0	1.0	1.5	14.65
B01 of 58033	US 23 NB over S Br Macon Creek	7.95	1.23	1.0	1.0	1.0	1.5	14.65
B02 of 58033	US 23 SB over Mid Br Macon Creek	7.95	1.16	1.0	1.0	1.0	1.5	13.83
B02 of 58033	US 23 NB over Mid Br Macon Creek	7.95	1.16	1.0	1.0	1.0	1.5	13.83
X01 of 33084	I 96 EB over PC RR	9.40	1.41	1.0	1.0	1.0	1.0	13.25
X01 of 33084	I 96 WB over PC RR	9.40	1.41	1.0	1.0	1.0	1.0	13.25
X02 of 47065	I 96 EB over AA RR	9.35	1.38	1.0	1.0	1.0	1.0	12.90
X02 of 47065	I 96 WB over AA RR	9.35	1.38	1.0	1.0	1.0	1.0	12.90
S03 of 33083	I 96 EB over I 96 BL conn.	8.65	1.49	1.0	1.0	1.0	1.0	12.88
S03 of 33083	I 96 WB over I 96 BL conn.	8.65	1.49	1.0	1.0	1.0	1.0	12.88
S01 of 33084	I 96 under Aurelius Rd	3.60	2.30	1.5	1.0	1.0	1.0	12.42
X01 of 23152	I 96 WB over GTW RR	6.35	1.76	1.0	1.0	1.0	1.0	11.17
S08 of 23152	I 96 EB over Canal Rd	6.35	1.74	1.0	1.0	1.0	1.0	11.04

District 8 (Cont.)

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
X02 of 23152	I 96 EB over GTW RR	6.35	1.73	1.0	1.0	1.0	1.0	10.98
S07 of 47014	US 23 NB over Center Rd	9.25	1.08	1.0	1.0	1.0	1.0	9.99
B01 of 81031	US 12 over Saline River	15.60	0.75	1.0	1.0	1.0	0.75	8.77
S02 of 33083	I 96 EB over Washington Ave	7.75	1.08	1.0	1.0	1.0	1.0	8.37
S02 of 33083	I 96 WB over Washington Ave	7.75	1.08	1.0	1.0	1.0	1.0	8.37
B04 of 33084	I 96 EB over Doan Creek	8.95	0.60	1.0	1.0	1.0	1.5	8.05
B05 of 33084	I 96 WB over Doan Creek	8.95	0.60	1.0	1.0	1.0	1.5	8.05
S07 of 33084	I 96 under Okemos Rd	1.85	2.37	1.5	1.0	1.0	1.0	6.57
S02 of 23151	I 96 WB under Creyts Rd	1.82	2.34	1.5	1.0	1.0	1.0	6.37
B02 of 33084	I 96 EB over Deer Creek	9.40	0.45	1.0	1.0	1.0	1.5	6.34
B03 of 33084	I 96 WB over Deer Creek	9.40	0.45	1.0	1.0	1.0	1.5	6.34
B04 of 58033	US 23 SB over N Br Macon River	7.80	0.50	1.0	1.0	1.0	1.5	5.85
B04 of 58033	US 23 NB over N Br Macon River	7.80	0.50	1.0	1.0	1.0	1.5	5.85
B03 of 58033	US 23 SB over Bear Creek	7.80	0.50	1.0	1.0	1.0	1.5	5.85
B03 of 58033	US 23 NB over Bear Creek	7.80	0.50	1.0	1.0	1.0	1.5	5.85
S01 of 23151	I 96 EB under Creyts Rd	1.82	2.13	1.5	1.0	1.0	1.0	5.80
S05 of 33084	I 96 under College Rd	1.81	2.4	1.5	1.0	1.0	1.0	5.80
B01 of 47065	I 96 EB over S Br Shiawassee River	9.35	0.40	1.0	1.0	1.0	1.5	5.61
B02 of 47065	I 96 WB over S Br Shiawassee River	9.35	0.40	1.0	1.0	1.0	1.5	5.61
B02 of 47066	I 96 EB over W Br Red Cedar River	8.15	0.40	1.0	1.0	1.0	1.5	4.89
B03 of 47066	I 96 WB over W Br Red Cedar River	8.15	0.40	1.0	1.0	1.0	1.5	4.89
B04 of 47066	I 96 EB over Mid Br Red Cedar River	8.15	0.40	1.0	1.0	1.0	1.5	4.89
B05 of 47066	I 96 WB over Mid Br Red Cedar River	8.15	0.40	1.0	1.0	1.0	1.5	4.89
S01 of 23152	I 96 under Willow Highway	0.87	2.15	1.5	1.0	1.0	1.0	2.80
S06 of 33084	I 96 under Hagadorn Rd	0.75	2.17	1.5	1.0	1.0	1.0	2.43
B01 of 30061	US 12 over St. Joseph River	4.60	0.45	1.0	1.0	1.0	0.75	1.55
S03 of 23151	I 96 under Waverly Rd	0.29	2.14	1.5	1.0	1.0	1.0	0.93
S06 of 47065*	I 96 under Pinckney Rd	0.05	2.88	1.5	3.0	1.0	1.0	0.63
S04 of 58033*	US 23 under Plank Rd	0.05	2.94	1.5	3.0	1.0	1.0	0.63
S11 of 47065*	I 96 under Flint Rd	0.05	2.51	1.5	3.0	1.0	1.0	0.54
S10 of 81075*	US 23 under 8 Mile Rd	0.05	1.84	1.5	3.0	1.0	1.0	0.39
S08 of 47065*	I 96 WB under I 96 BL	0.05	1.69	1.5	3.0	1.0	1.0	0.36
S12 of 33084*	I 96 under Williamston Rd	0.05	3.41	1.5	1.0	1.0	1.0	0.25
S01 of 81076*	US 23 under Carpenter Rd	0.05	3.51	1.5	1.0	1.0	1.0	0.25
S07 of 47065*	I 96 under Chilson Rd	0.05	3.20	1.5	1.0	1.0	1.0	0.24
S06 of 81074*	US 23 under Plymouth Rd	0.05	2.85	1.5	1.0	1.0	1.0	0.21
S07 of 81074*	US 23, I 94 BL under Ellsworth Rd	0.05	2.89	1.5	1.0	1.0	1.0	0.21
S09 of 47065*	I 96 under Dorr Rd	0.05	2.64	1.5	1.0	1.0	1.0	0.19
S13 of 23152	I 96 under Eaton Highway	0.08	2.17	1.5	1.0	1.0	0.75	0.18
S04 of 33085*	I 96 under Wallace Rd	0.05	3.20	1.5	1.0	1.0	0.75	0.18
S04 of 81076*	US 23 under Willis Rd	0.05	2.52	1.5	1.0	1.0	1.0	0.18
S03 of 81076*	US 23 under Stoney Creek Rd	0.05	2.45	1.5	1.0	1.0	1.0	0.18
S02 of 58033*	US 23 under Cone Rd	0.05	2.43	1.5	1.0	1.0	1.0	0.18
S09 of 33084*	I 96 under Meridian Rd	0.05	2.21	1.5	1.0	1.0	1.0	0.16
S02 of 47066*	I 96 under Nicholson Rd	0.05	2.35	1.5	1.0	1.0	1.0	0.16
S04 of 47066*	I 96 under Fowlerville Rd	0.05	2.39	1.5	1.0	1.0	1.0	0.16
S12 of 47065*	I 96 under Spencer Rd	0.05	2.34	1.5	1.0	1.0	1.0	0.16
S01 of 47014*	US 23 under Spencer Rd	0.05	2.39	1.5	1.0	1.0	1.0	0.16
S08 of 47014*	US 23 under White Lake Rd	0.05	2.21	1.5	1.0	1.0	1.0	0.16
S05 of 81074*	US 23 under Earhart Rd	0.05	3.17	1.5	1.0	1.0	0.75	0.16

* ADT unknown

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
S04 of 81074*	US 23 under Geddes Rd	0.05	2.33	1.5	1.0	1.0	1.0	0.16
S05 of 47014*	US 23 under Clyde Rd	0.05	2.08	1.5	1.0	1.0	1.0	0.15
S13 of 33084*	I 96 under Dietz Rd	0.05	2.13	1.5	1.0	1.0	1.0	0.15
S03 of 33085*	I 96 under Elm Rd	0.05	2.17	1.5	1.0	1.0	1.0	0.15
S08 of 81075*	US 23 under 6 Mile Rd	0.05	2.16	1.5	1.0	1.0	1.0	0.15
S01 of 58033*	US 23 under Milwaukee Rd	0.05	2.09	1.5	1.0	1.0	1.0	0.15
S04 of 47014*	US 23 under Crouse Rd	0.05	1.91	1.5	1.0	1.0	1.0	0.13
S02 of 81104*	I 94 under Kalmbach Rd	0.05	2.37	1.5	1.0	1.0	0.75	0.12
S02 of 81076*	US 23 under Willow Rd	0.05	2.09	1.5	1.0	1.0	0.75	0.11
S01 of 81104*	I 94 under Notten Rd	0.05	2.13	1.5	1.0	1.0	0.75	0.11
S06 of 23152	I 96 under Millet Rd	0.05	2.16	1.5	1.0	1.0	0.75	0.11
S06 of 47014*	US 23 under Fausett Rd	0.05	2.07	1.5	1.0	1.0	0.75	0.11
S04 of 81103*	US 23, M 14 under Nixon Rd	0.05	2.10	1.5	1.0	1.0	0.75	0.11
S05 of 81076*	US 23 under Bemis Rd	0.05	2.07	1.5	1.0	1.0	0.75	0.11
S03 of 58033*	US 23 under Sherman Rd	0.05	2.08	1.5	1.0	1.0	0.75	0.11
S05 of 81104*	I 94 under Freer Rd	0.05	2.09	1.5	1.0	1.0	0.75	0.11
S10 of 33084*	I 96 EB under Zimmer Rd	0.05	1.34	1.5	1.0	1.0	1.0	0.09
S11 of 33084*	I 96 WB under Zimmer Rd	0.05	1.33	1.5	1.0	1.0	1.0	0.09
S06 of 81075*	US 23 under Joy Rd	0.05	1.86	1.5	1.0	1.0	0.75	0.09
S05 of 81075*	US 23 under Warren Rd	0.05	1.87	1.5	1.0	1.0	0.75	0.09
S02 of 81103*	US 23, M 14 WB under Pontiac Trail	0.05	1.74	1.0	1.0	1.0	1.0	0.08
S01 of 81103*	US 23 EB under Pontiac Trail	0.05	1.33	1.0	1.0	1.0	1.0	0.06
S10 of 63173	I 75 NB, US 10 over Dixie Highway	8.50	3.00	1.5	3.0	2.0	1.0	229.50
S10 of 63172	I 75 NB over Joslyn Rd	12.25	2.14	1.5	2.0	2.0	1.0	157.29
S06 of 63172	I 75 NB over I 75 BL	22.15	1.94	1.0	3.0	1.0	1.0	128.91
S06 of 63172	I 75 SB over I 75 BL	22.15	1.94	1.0	3.0	1.0	1.0	128.91
S08 of 63172	M 24 over NB M 24 conn.	16.15	1.83	1.0	3.0	1.0	1.0	88.66
S08 of 63172	M 24 over SB M 24 conn.	16.15	1.83	1.0	3.0	1.0	1.0	88.66
X01 of 63172	I 75 NB over GTW RR	13.7	1.44	1.0	2.0	2.0	1.0	78.91
S02 of 63173	I 75 SB under Ex. US 10	10.00	1.83	1.0	2.0	2.0	1.0	73.20
S01 of 63101	I 696 EB under WB I 96	6.15	2.11	1.5	3.0	1.0	1.0	58.39
S03 of 82271	US 24, I 75 conn. SB over NB US 24	9.3	1.93	1.0	3.0	1.0	1.0	53.85
S04 of 63101	I 696 WB over Drake Rd	16.0	1.09	1.0	3.0	1.0	1.0	52.75
S03 of 82081	M 153 under Greenfield Rd	67.0	1.04	1.0	1.0	1.0	0.75	52.26
X01 of 82271	US 24, I 75 conn. NB over PC RR	9.3	1.82	1.0	3.0	1.0	1.0	50.78
S07 of 63172	I 75 under NB M 24 conn.	12.2	2.47	1.5	1.0	1.0	1.0	45.20
S07 of 63172	I 75 under SB M 24 conn.	12.2	2.47	1.5	1.0	1.0	1.0	45.20
S01 of 82271	US 24, I 75 conn. SB over Racho Rd	9.3	1.43	1.0	3.0	1.0	1.0	42.60
S02 of 82271	US 24, I 75 conn. NB over Racho Rd	9.3	1.43	1.0	3.0	1.0	1.0	42.60
S10 of 63172	I 75 SB over Joslyn Rd	12.25	2.14	1.5	1.0	1.0	1.0	39.32
S03 of 63173	I 75 NB over Ex. US 10	9.00	1.97	1.0	1.0	2.0	1.0	35.46
X01 of 82271	US 24, I 75 conn. SB over PC RR	9.3	1.82	1.0	2.0	1.0	1.0	33.85
B01 of 82191	I 75 SB over Blakely Drain	25.50	0.41	1.0	1.0	2.0	1.5	31.36
B02 of 82191	I 75 NB over Blakely Drain	25.50	0.40	1.0	1.0	2.0	1.5	30.60
S17 of 63172	I 75 under M 15	7.80	2.39	1.5	1.0	1.0	1.0	27.96
S15 of 63172	I 75 SB over Clarkston Rd	11.60	1.13	1.0	2.0	1.0	1.0	26.20
X01 of 63172	I 75 SB over GTW RR	13.7	1.44	1.0	1.0	1.0	1.0	19.73
S12 of 63172	I 75 SB over Clintonville Rd	11.10	1.62	1.0	1.0	1.0	1.0	17.98
S12 of 63172	I 75 NB over Clintonville Rd	11.10	1.62	1.0	1.0	1.0	1.0	17.98

* ADT unknown

TABLE 1 (Cont.)
PRIORITY RATING OF STRUCTURES BY DISTRICT

Structure No.	Description	Factor Values						Product
		1	2	3	4	5	6	
S04 of 63101	I 696 EB over Drake Rd	16.0	1.09	1.0	1.0	1.0	1.0	17.58
S09 of 63101	I 696 EB over Inkster Rd	16.0	1.07	1.0	1.0	1.0	1.0	17.12
S09 of 63101	I 696 WB over Inkster Rd	16.0	1.07	1.0	1.0	1.0	1.0	17.12
S16 of 63172	I 75 NB over Clarkston Rd	11.60	1.09	1.0	1.0	1.0	1.0	12.64
S01 of 63173*	I 75, US 10 under Holcomb Rd	0.05	3.76	1.5	3.0	1.0	1.0	0.81
S04 of 63173*	I 75, US 10 under Davisburg Rd	0.05	2.94	1.5	3.0	1.0	1.0	0.63
S03 of 63101*	I 696 under Halstead Rd	0.05	2.65	1.5	3.0	1.0	1.0	0.60
S11 of 82191*	I 75 under Sibley Rd	0.05	1.98	1.5	3.0	1.0	1.0	0.45
S08 of 63173*	I 75, US 10 under Lahring Rd	0.05	2.14	1.5	3.0	1.0	1.0	0.45
S12 of 82191*	I 75 under Pennsylvania Rd	0.05	3.51	1.5	1.0	1.0	1.0	0.26
S06 of 63173*	I 75, US 10 under Holly Rd	0.05	3.41	1.5	1.0	1.0	1.0	0.25
S13 of 63172*	I 75 under Waldon Rd	0.05	3.36	1.5	1.0	1.0	1.0	0.24
S09 of 63173*	I 75, US 10 under Belford Rd	0.05	2.20	1.5	2.0	1.0	0.75	0.24
S02 of 63101*	I 696 under Haggerty Rd	0.05	2.90	1.5	1.0	1.0	1.0	0.22
S05 of 63173*	I 75, US 10 under Rattalee Lake Rd	0.05	2.82	1.5	1.0	1.0	1.0	0.21
S06 of 63101*	696 under Farmington Rd	0.05	2.58	1.5	1.0	1.0	1.0	0.19
S07 of 63101*	I 696 under Orchard Lake Rd	0.05	2.38	1.5	1.0	1.0	1.0	0.18
S08 of 63101*	I 696 under Middle Belt Rd	0.05	2.38	1.5	1.0	1.0	1.0	0.18
S05 of 63172*	I 75 under Walton Blvd	0.05	2.16	1.5	1.0	1.0	1.0	0.16
S11 of 63172*	I 75 under Baldwin Rd	0.05	2.36	1.5	1.0	1.0	1.0	0.16
S07 of 63173*	I 75, US 10 under Grange Hall Rd	0.05	2.37	1.5	1.0	1.0	1.0	0.16
S09 of 63172*	I 75 under Giddings Rd	0.05	2.66	1.5	1.0	1.0	0.75	0.15
S04 of 82062	US 12 under Scotten Ave	18 by 24 concrete barrier between roadway and sidewalk. Aluminum railing for pedestrian traffic only.						

* ADT unknown

TABLE 2
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
X04 of 41026	I 96 WB over C&O and PC RR and W River Dr	555.69
X04 of 41026	I 96 EB over C&O and PC RR and W River Dr	555.69
X01 of 81074	US 23 SB over Huron River and PC RR	331.29
S09 of 81103	Upper US 23 SB under US 23 BL, tri level structure	329.85
S07 of 41026	I 96 WB over US 131	321.77
S07 of 41026	I 96 EB over US 131	321.77
S06 of 39014	US 131 under M 43	289.80
X03 of 41026	I 296 NB conn. to WB I 96 over C&O and PC RR, W River Dr and I 296 SB	275.09
X02 of 41026	I 296 SB conn. to I 296 over C&O and PC RR and W River Dr	234.49
S10 of 63173	I 75 NB, US 10 over Dixie Highway	229.50
S05 of 47064	I 96 EB over NB US 23	217.68
S13 of 47065	I 96 EB over US 23	196.47
X01 of 41025	I 96 WB over GTW RR	173.18
X01 of 41025	I 96 EB over GTW RR	173.18
S06 of 19022	I 96 WB over I 96 BL	164.24
S06 of 19022	I 96 EB over I 96 BL	164.24
S10 of 63172	I 75 NB over Joslyn Rd	157.29
S06 of 41026	I 96 EB under WB I 296 conn.	140.62
S08 of 81062	I 94 EB under US 23	139.98
S08 of 81062	I 94 WB under US 23	139.98
S14 of 41025	I 96 under Cascade Rd (M 45)	137.05
S10 of 41025	I 96 under M 44	131.36
S06 of 63172	I 75 NB over I 75 BL	128.91
S06 of 63172	I 75 SB over I 75 BL	128.91
S13 of 81104	I 94 BL under Jackson Rd	128.52
S04 of 41025	I 96 under M 44 conn.	121.97
S02 of 47013	US 23 SB over M 36	119.43
S02 of 47013	US 23 NB over M 36	119.43
S10 of 47065	I 96 EB over Grand River Ave	114.84
S10 of 47065	I 96 WB over Grand River Ave	114.84
S15 of 41025	I 96 under Forrest Hill Rd	114.16
X01 of 81074	US 23 NB over Huron River and PC RR	110.43
S14 of 47065	I 96 WB over US 23	109.50
✓S09 of 81103	Middle structure US 23 SB over US 23 BR	108.45
B01 of 23152	I 96 EB over Grand River	101.07
B04 of 56044	US 10 WB over Sanford Lake	96.38
S02 of 81074	US 23 SB over US 23 BL	92.49
S02 of 81074	US 23 NB over US 23 BL	92.49
S08 of 63172	M 24 over NB M 24 conn.	88.66
S08 of 63172	M 24 over SB M 24 conn.	88.66

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
X03 of 47065	I 96 EB over C&O RR	78.96
X01 of 63172	I 75 NB over GTW RR	78.91
S12 of 41025	I 96 under WB M 21	74.87
S08 of 29011	US 27 under M 46	73.36
S02 of 63173	I 75 SB under Ex. US 10	73.20
S05 of 41025	I 96 under Dean Lake Rd	71.42
S09 of 23152	I 96 WB over I 69, US 27	69.78
S03 of 47064	I 96 EB over SB US 23	69.45
S04 of 47065	I 96 under M 155	69.36
S04 of 47064	I 96 WB over SB US 23	69.02
S10 of 23152	I 96 EB over I 69, US 27	68.67
S01 of 11111	I 196 NB over I 94	67.68
S02 of 23152	I 96 EB over M 43	65.19
S02 of 23152	I 96 WB over M 43	65.19
S01 of 41024	I 96 under WB M 11	63.20
S01 of 41024	I 96 under EB M 11	63.20
S01 of 63101	I 696 EB under WB I 96	58.39
S04 of 33083	I 96 EB over I 96 BL ramps	57.18
S04 of 33083	I 96 WB over I 96 BL ramps	57.18
X01 of 81104	I 94 EB over PC RR	56.82
B01 of 33084	I 96 EB over Sycamore Creek	56.56
S06 of 47064	US 23 NB over I 96 WB	55.74
S02 of 70064	I 96 EB over M 104	55.72
S04 of 17033	I 75, US 2 under US 2	54.00
S03 of 82271	US 24, I 75 conn. SB over NB US 24	53.85
S06 of 81076	US 23 under US 12	53.46
S04 of 63101	I 696 WB over Drake Rd	52.75
S03 of 82081	M 153 under Greenfield Rd	52.26
S03 of 81074	US 23 SB over Huron River Dr	50.82
X01 of 82271	US 24, I 75 conn. NB over PC RR	50.78
S03 of 25131	I 75 under Holly Rd	50.63
B01 of 23152	I 96 WB over Grand River	50.53
X01 of 37014	US 27 SB over C&O RR	48.88
X01 of 41026	I 96 EB over GTW RR	48.81
B04 of 56044	US 10 EB over Sanford Lake	48.19
S04 of 11111	I 196 NB over Coloma Rd	47.40
X01 of 25131	I 75 NB over C&O RR	46.98
X01 of 25131	I 75 SB over C&O RR	46.98
S01 of 14121	M 60 over US 12	46.80
S07 of 63172	I 75 under NB M 24 conn.	45.20
S07 of 63172	I 75 under SB M 24 conn.	45.20
S04 of 81104	I 94 under M 52	44.19
S04 of 38103	I 94 EB over Race Rd	44.13

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
S01 of 82271	US 24, I 75 conn. SB over Racho Rd	42.60
S02 of 82271	US 24, I 75 conn. NB over Racho Rd	42.60
S03 of 47013	US 23 SB over Silver Lake Rd	41.61
S03 of 47013	US 23 NB over Silver Lake Rd	41.61
S04 of 29011	US 27 SB over US 27 BR	41.47
S04 of 29011	US 27 NB over US 27 BR	41.18
S03 of 47014	US 23 SB over M 59	40.32
S03 of 47014	US 23 NB over M 59	40.32
B01 of 39032	M 96 over Kalamazoo River	39.87
S10 of 63172	I 75 SB over Joslyn Rd	39.32
S05 of 41026	I 96 WB under M 37	38.46
S04 of 41026	I 96 EB under M 37	38.34
S16 of 41025	I 96 under Burton Rd	37.54
B03 of 56044	US 10 WB over Mud Creek	35.80
S03 of 63173	I 75 NB over Ex. US 10	35.46
S05 of 72013	US 27 under M 55	34.50
B02 of 56044	US 10 EB over Mud Creek	34.09
X01 of 82271	US 24, I 75 conn. SB over PC RR	33.85
S03 of 70064	I 96 WB over M 104	32.94
S04 of 25131	I 75 SB over Cook Rd	32.67
S01 of 41025	I 96 WB over Monroe Ave	32.46
S01 of 18034	US 27 SB over US 27 BR and M 61	32.31
S10 of 39014	US 131 SB over "D" Ave	32.28
S11 of 39014	US 131 NB over "D" Ave	32.01
S05 of 25131	I 75 NB over Cook Rd	31.86
S01 of 18023	US 10 EB over NB US 27	31.59
B01 of 82191	I 75 SB over Blakely Drain	31.36
S02 of 47014	US 23 SB over Hyne Rd	30.81
S02 of 42014	US 23 NB over Hyne Rd	30.81
B02 of 82191	I 75 NB over Blakely Drain	30.60
S03 of 81104	I 94 WB over Pierce Rd	29.62
S04 of 80013	I 196 under M 140	28.44
S13 of 41025	I 96 under EB M 21	28.09
S17 of 63172	I 75 under M 15	27.96
S01 of 03033	I 196 under I 196 BL	27.24
S05 of 16091	I 75 NB over M 27	27.12
S04 of 16091	I 75 SB over M 27	26.76
X03 of 47065	I 96 WB over C&O RR	26.32
S15 of 63172	I 75 SB over Clarkston Rd	26.20
B01 of 11111	I 196 NB over Paw Paw River	25.50
S09 of 70063	I 96 WB over 4 Mile Rd	24.52
S09 of 70063	I 96 EB over 4 Mile Rd	24.52
X01 of 37014	US 27 NB over C&O RR	24.44

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
S01 of 61152	I 96 ramp over US 31	24.30
X01 of 70064	I 96 WB over GTW RR	23.76
S04 of 11111	I 196 SB over Coloma Rd	23.70
B02 of 76023	I 69 EB over Shiawassee River	23.49
B02 of 76023	I 69 WB over Shiawassee River	23.49
B01 of 59041	M 82 over Tamarack Creek	23.17
S03 of 17034	I 75, US 2 under I 75 BS	23.04
S06 of 41025	I 96 under 3 Mile Rd	22.78
S01 of 11111	I 196 SB over I 94	22.56
S06 of 37013	US 27 SB under US 27 BR NB	22.45
B01 of 61152	I 96 EB over Norris Creek	22.28
B02 of 61152	I 96 WB over Norris Creek	22.28
S07 of 61152	I 96 WB over Old US 16	22.09
S01 of 80013	I 196 under M 43	21.76
S08 of 41025	I 96 under Leonard St	21.49
X01 of 81104	I 94 WB over PC RR	21.39
S05 of 20052	I 75 SB over US 27 NB	21.36
S06 of 61152	I 96 EB over Old US 16	21.32
S01 of 81074	US 23 SB, I 94 BL over Packard Rd	21.30
S01 of 81074	US 23 NB, I 94 BL over Packard Rd	21.30
S02 of 11111	I 196 under Old US 12	20.79
X02 of 81103	US 23, M 14 WB over AA RR	20.58
S02 of 61152	I 96 ramp over ramp to US 31	20.55
S04 of 47013	US 23 under Lee Rd	20.34
S07 of 47014	US 23 SB over Center Rd	19.98
S01 of 25131	I 75 under SB M 54	19.93
S05 of 47013	US 23 SB under Grand River Ave	19.92
S06 of 47013	US 23 NB under Grand River Ave	19.92
X01 of 63172	I 75 SB over GTW RR	19.73
S02 of 37014	US 27 SB under US 27 BR NB	19.65
S07 of 41025	I 96 under Knapp Rd	19.62
S07 of 23152	I 96 WB over Canal Rd	19.16
B01 of 33084	I 96 WB over Sycamore Creek	18.85
X01 of 81103	US 23, M 14 EB over AA RR	18.28
S01 of 16091	I 75 SB under M 68	18.00
S12 of 63172	I 75 SB over Clintonville Rd	17.98
S12 of 63172	I 75 NB over Clintonville Rd	17.98
S05 of 11111	I 196 under Riverside Rd	17.85
S04 of 63101	I 696 EB over Drake Rd	17.58
S11 of 41025	I 96 EB ramp under M 21	17.57
S03 of 20014	I 75 SB under NB I 75 BL	17.49
S01 of 56044	US 10 under M 18	17.42
S09 of 63101	I 696 EB over Inkster Rd	17.12

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
S09 of 63101	I 696 WB over Inkster Rd	17.12
S03 of 81074	US 23 NB over Huron River Dr	16.94
S02 of 41025	I 96 WB over Coit Ave	16.91
S02 of 41025	I 96 EB over Coit Ave	16.91
B01 of 76041	M 71 over Shiawassee River	16.56
S01 of 33083	I 96 EB over M 99	16.41
S01 of 33083	I 96 WB over M 99	16.41
X01 of 41026	I 96 WB over GTW RR	16.27
S01 of 41025	I 96 EB over Monroe Ave	16.23
S05 of 18034	US 27 NB over US 27 BR	16.00
S09 of 37014	US 27 SB under NB US 27 BR	15.55
S04 of 61152	I 96 WB over Hile Rd	15.14
S04 of 61152	I 96 EB over Hile Rd	15.14
B02 of 73131	M 83 over Cass River	15.12
S03 of 38103	I 94 WB over Race Rd	15.12
S01 of 33085	I 96 EB over M 52	15.03
S02 of 33085	I 96 WB over M 52	15.03
S03 of 81104	I 94 EB over Pierce Rd	14.81
X01 of 16091	I 75 NB over PC RR	14.73
S02 of 47065	I 96 under M 59	14.67
B01 of 58033	US 23 SB over S Br Macon Creek	14.65
B01 of 58033	US 23 NB over S Br Macon Creek	14.65
S08 of 70063	I 96 EB over WB M 11	14.58
S01 of 29014	US 27 under US 27 BR	14.54
S03 of 49025	I 75, US 2 under US 2 BR	14.07
B02 of 58033	US 23 SB over Mid Br Macon Creek	13.83
B02 of 58033	US 23 NB over Mid Br Macon Creek	13.83
B01 of 70063	I 96 EB over Crockery Creek	13.72
S01 of 17033	I 75, US 2 under M 48	13.59
S02 of 18023	US 10 WB over SB US 27	13.44
S03 of 37032	US 10 over WB ramp	13.36
X01 of 33084	I 96 EB over PC RR	13.25
X01 of 33084	I 96 WB over PC RR	13.25
X02 of 47065	I 96 EB over AA RR	12.90
X02 of 47065	I 96 WB over AA RR	12.90
S03 of 33083	I 96 EB over I 96 BL conn.	12.88
S03 of 33083	I 96 WB over I 96 BL conn.	12.88
B01 of 11111	I 196 SB over Paw Paw River	12.75
B01 of 37014	US 27 NB over Chippewa River	12.66
B01 of 37014	US 27 SB over Chippewa River	12.66
S16 of 63172	I 75 NB over Clarkston Rd	12.64
S03 of 56044	US 10 under M 30	12.60
X01 of 11111	I 196 SB over C&O RR	12.58

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
S08 of 37013	US 27 SB over M 20	12.57
S01 of 33084	I 96 under Aurelius Rd	12.42
X01 of 16093	I 75 SB over PC RR and Trowbridge Rd	12.09
X02 of 16093	I 75 NB over PC RR and Trowbridge Rd	12.09
X01 of 19022	I 96 WB over C&O RR	11.94
X01 of 19022	I 96 EB over C&O RR	11.94
S02 of 18033	US 27 SB over US 27 BR	11.79
B01 of 37013	US 27 NB over Little Salt River	11.70
B01 of 37013	US 27 SB over Little Salt River	11.70
X01 of 49025	I 75 SB, US 2 over Soo Line RR and County Rd	11.66
B04 of 07012	US 41 over Falls River	11.32
X01 of 23152	I 96 WB over GTW RR	11.17
S08 of 23152	I 96 EB over Canal Rd	11.04
X02 of 23152	I 96 EB over GTW RR	10.98
X02 of 37014	US 27 NB over C&O RR and Ex. US 10	10.90
X02 of 37014	US 27 SB over C&O RR and Ex. US 10	10.90
S01 of 18034	US 27 NB over US 27 BR and M 61	10.77
S04 of 69013	I 75 NB over Charles Brink Rd	10.65
S03 of 41026	I 96 WB over Bristol Rd	10.56
S03 of 41026	I 96 EB over Bristol Rd	10.56
S03 of 20015	I 75 NB over Lewiston Grade Rd	10.08
S07 of 47014	US 23 NB over Center Rd	9.99
S02 of 16091	I 75 NB under M 68	9.75
X01 of 17033	I 75 NB, US 2 over RR Spur and Tone Rd	9.70
X01 of 17033	I 75 SB, US 2 over RR Spur and Tone Rd	9.70
S08 of 11018	I 94 under Three Oaks Rd	9.70
S03 of 18023	US 10 under Clarabella Rd	9.36
B01 of 72014	US 27 SB over Muskegon River	9.21
B02 of 72014	US 27 NB over Muskegon River	9.21
B01 of 81031	US 12 over Saline River	8.77
B01 of 18034	US 27 SB over Townline Creek	8.73
B03 of 29011	US 27 NB over Pine River	8.55
B03 of 29011	US 27 SB over Pine River	8.55
S08 of 37013	US 27 NB over M 20	8.38
B08 of 41033	M 37 over Nash Creek	8.37
S02 of 33083	I 96 EB over Washington Ave	8.37
S02 of 33083	I 96 WB over Washington Ave	8.37
S07 of 11111	I 196 under US 33	8.34
B01 of 18033	US 27 NB over Tobacco River	8.25
B02 of 18033	US 27 SB over Tobacco River	8.25
B04 of 33084	I 96 EB over Doan Creek	8.05
B05 of 33084	I 96 WB over Doan Creek	8.05
S05 of 18034	US 27 SB over US 27 BR	8.00

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
X01 of 70064	I 96 EB over GTW RR	7.92
S02 of 18033	US 27 NB over US 27 BR	7.86
B01 of 16091	I 75 NB over Indian River	7.02
B01 of 16091	I 75 SB over Indian River	7.02
X01 of 20014	I 75 SB over PC RR	6.86
X02 of 20014	I 75 NB over PC RR	6.86
S03 of 70063	I 96 WB over 88th St	6.83
S02 of 70063	I 96 EB over 88th St	6.83
S04 of 13081	I 94 under Capital Ave	6.79
S06 of 11015	I 94 under Warren Wood Rd	6.60
S03 of 11111	I 196 under Benton Center Rd	6.57
S07 of 33084	I 96 under Okemos Rd	6.57
S02 of 09035	I 75 under N Union Rd	6.55
S04 of 11015	I 94 under Union Pier Rd	6.46
S03 of 17033	I 75, US 2 over Air Force Rd	6.45
S02 of 23151	I 96 WB under Creyts Rd	6.37
B02 of 33084	I 96 EB over Deer Creek	6.34
B03 of 33084	I 96 WB over Deer Creek	6.34
X01 of 69013	I 75 NB over PC RR	6.30
X01 of 69013	I 75 SB over PC RR	6.30
X01 of 11111	I 196 NB over C&O RR	6.29
S06 of 29011	US 27 NB over Michigan Ave	6.10
S06 of 29011	US 27 SB over Michigan Ave	6.10
B04 of 58033	US 23 SB over N Br Macon River	5.85
B04 of 58033	US 23 NB over N Br Macon River	5.85
B03 of 58033	US 23 SB over Bear Creek	5.85
B03 of 58033	US 23 NB over Bear Creek	5.85
X01 of 49025	I 75 NB, US 2 over Soo Line RR and Co. Rd	5.83
X02 of 29011	US 27 NB over C&O RR	5.81
X02 of 29011	US 27 SB over C&O RR	5.81
S01 of 23151	I 96 EB under Creyts Rd	5.80
S05 of 33084	I 96 under College Rd	5.80
B01 of 47065	I 96 EB over S Br Shiawassee River	5.61
B02 of 47065	I 96 WB over S Br Shiawassee River	5.61
S03 of 29011	US 27 NB over US 27 BR	5.30
S02 of 29011	US 27 SB over US 27 BR	5.30
S05 of 29011	US 27 NB over US 27 BR	5.15
S05 of 29011	US 27 SB over US 27 BR	5.15
X01 of 16091	I 75 SB over PC RR	4.91
B02 of 47066	I 96 EB over W Br Red Cedar River	4.89
B03 of 47066	I 96 WB over W Br Red Cedar River	4.89
B04 of 47066	I 96 EB over Mid Br Red Cedar River	4.89
B05 of 47066	I 96 WB over Mid Br Red Cedar River	4.89

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
S05 of 19022	I 96 under Wacousta Rd	4.88
B01 of 29042	M 46 over Bush Creek	4.50
B01 of 72013	US 27 SB over Wolf Creek	4.38
B02 of 72013	US 27 NB over Wolf Creek	4.38
S06 of 69013	I 75 SB over M 32	4.35
S07 of 69013	I 75 NB over M 32	4.35
S04 of 20014	I 75 SB over M 72	4.18
S05 of 20014	I 75 NB over M 72	4.18
B01 of 16093	I 75 SB over Sturgeon River	4.05
B02 of 16093	I 75 NB over Sturgeon River	4.05
S02 of 49025	I 75 SB, US 2 over Portage St	3.86
S03 of 11015	I 94 under Kruger Rd	3.78
B02 of 41026	I 96 WB over Sand Creek	3.70
S04 of 49025	I 75, US 2 under M 123	3.54
S02 of 20015	I 75 SB over Lewiston Grade Rd	3.36
B01 of 59042	M 46 over Tamarack Creek	3.30
B01 of 20015	I 75 SB over AuSable River	3.25
S07 of 25131	I 75 under Grand Blanc Rd	3.12
S01 of 20015	I 75 under FAS 270 REL	3.10
B02 of 20015	I 75 NB over AuSable River	3.01
S06 of 11111	I 196 under Central Ave	3.00
B01 of 18034	US 27 NB over Townline Creek	2.91
S01 of 03111	US 131 under 102nd Ave	2.86
S01 of 23152	I 96 under Willow Highway	2.80
S07 of 29011	US 27 under Begole Rd	2.74
B02 of 04012	M 65 over N Br Thunder Bay River	2.71
S04 of 20015	I 75 SB under M 93	2.59
S05 of 20015	I 75 NB under M 93	2.52
B02 of 74022	M 90 over Potts Drain	2.43
S06 of 33084	I 96 under Hagadorn Rd	2.43
B02 of 17061	M 28 over Hendrie River	2.17
B03 of 20015	I 75 SB over E Br AuSable River	2.04
S09 of 49025	I 75, US 2 SB under M 134	1.96
S10 of 49025	I 75, US 2 NB under M 134	1.96
S02 of 49025	I 75 NB, US 2 over Portage St	1.93
S07 of 11015	I 94 under Easy Rd	1.91
S03 of 16091	I 75 under Old M 68	1.72
B04 of 20015	I 75 NB over E Br AuSable River	1.72
S11 of 11015	I 94 under Brownstown Rd	1.66
B01 of 30061	US 12 over St. Joseph River	1.55
S05 of 11015	I 94 under Lakeside Dr	1.44
S15 of 11015	I 94 under Grand Mere Rd	1.30
B02 of 37014	US 27 NB over Salt River	1.26

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
B02 of 37014	US 27 SB over Salt River	1.26
B02 of 67061	M 61 over Middle Branch River	1.11
S14 of 11015	I 94 under Livingston Rd	1.05
S03 of 23151	I 96 under Waverly Rd	0.93
S08 of 61152	I 96 under Fruitport Rd	0.90
B01 of 66012	M 64 over Sleep Creek	0.81
S01 of 16093	I 75 SB under Wolverine Rd	0.81
S02 of 16093	I 75 NB under Wolverine Rd	0.81
S01 of 63173	I 75, US 10 under Holcomb Rd	0.81
S03 of 73171	I 75 under Maple Rd	0.77
B04 of 36052	US 141 over E Branch Net River	0.75
S05 of 69014	I 75 under Old US 27	0.72
S01 of 70064	I 96 under Old US 16	0.72
B01 of 49131	M 123 over Carp River	0.63
S06 of 47065	I 96 under Pinckney Rd	0.63
S04 of 58033	US 23 under Plank Rd	0.63
S04 of 63173	I 75, US 10 under Davisburg Rd	0.63
S05 of 76023	I 69 under Newburg Rd	0.60
S03 of 63101	I 696 under Halstead Rd	0.60
S05 of 69013	I 75 under Old US 27	0.57
S02 of 20014	I 75 under 4 Mile Rd	0.57
S06 of 20015	I 75 SB under Lovells Rd	0.56
S07 of 20015	I 75 NB under Lovells Rd	0.56
S11 of 47065	I 96 under Flint Rd	0.54
S03 of 61072	US 31 under Sherman Rd	0.46
S11 of 82191	I 75 under Sibley Rd	0.45
S08 of 63173	I 75, US 10 under Lahring Rd	0.45
S01 of 61072	US 31 under Shettler Rd	0.42
S10 of 81075	US 23 under 8 Mile Rd	0.39
S09 of 11015	I 94 under Harbert Rd	0.38
S08 of 47065	I 96 WB under I 96 BL	0.36
S01 of 41026	I 96 under Fruit Ridge Rd	0.28
B02 of 07011	US 141 over Tracy Creek	0.27
S12 of 82191	I 75 under Pennsylvania Rd	0.26
S06 of 63173	I 75, US 10 under Holly Rd	0.25
S12 of 33084	I 96 under Williamston Rd	0.25
S05 of 61152	I 96 under Sternberg Rd	0.25
S01 of 81076	US 23 under Carpenter Rd	0.25
S01 of 69013	I 75 under Marlette Rd	0.24
S07 of 47065	I 96 under Chilson Rd	0.24
S13 of 63172	I 75 under Waldon Rd	0.24
S09 of 63173	I 75, US 10 under Belford Rd	0.24
S02 of 41024	I 96 under Kraft Rd	0.23

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
S02 of 56045	US 10 under Shaffer Rd	0.23
S03 of 41024	I 96 under Thornapple River Dr	0.22
S02 of 25131	I 75 under Baldwin Rd	0.22
S09 of 39014	US 131 under Ravine Rd	0.22
S02 of 63101	I 696 under Haggerty Rd	0.22
S02 of 69013	I 75 under Old State Rd	0.21
S06 of 81074	US 23 under Plymouth Rd	0.21
S07 of 81074	US 23, I 94 BL under Ellsworth Rd	0.21
S05 of 63173	I 75, US 10 under Rattalee Lake Rd	0.21
S01 of 70063	I 96 under Nunica Rd	0.20
S05 of 73171	I 75 under Townline Rd	0.20
S04 of 56044	US 10 under Hope Rd	0.20
B04 of 75032	M 94 over N Br Stutts Creek	0.19
S06 of 73171	I 75 under Curtis Rd	0.19
S09 of 47065	I 96 under Dorr Rd	0.19
S06 of 63101	I 696 under Farmington Rd	0.19
S01 of 37032	US 10 under Loomis Rd	0.18
S07 of 39014	US 131 under "H" Ave	0.18
S13 of 23152	I 96 under Eaton Highway	0.18
S04 of 33085	I 96 under Wallace Rd	0.18
S04 of 81076	US 23 under Willis Rd	0.18
S03 of 81076	US 23 under Stoney Creek Rd	0.18
S02 of 58033	US 23 under Cone Rd	0.18
S07 of 63101	I 696 under Orchard Lake Rd	0.18
S08 of 63101	I 696 under Middle Belt Rd	0.18
S02 of 41026	I 96 under Walker Rd	0.17
S02 of 56044	US 10 under W River Rd	0.17
S05 of 37014	US 27 under Rosebush Rd	0.16
S07 of 73171	I 75 under Riverview Dr	0.16
S01 of 56045	US 10 under Coleman Rd	0.16
S09 of 33084	I 96 under Meridian Rd	0.16
S02 of 47066	I 96 under Nicholson Rd	0.16
S04 of 47066	I 96 under Fowlerville Rd	0.16
S12 of 47065	I 96 under Spencer Rd	0.16
S01 of 47014	US 23 under Spencer Rd	0.16
S08 of 47014	US 23 under White Lake Rd	0.16
S05 of 81074	US 23 under Earhart Rd	0.16
S04 of 81074	US 23 under Geddes Rd	0.16
S05 of 63172	I 75 under Walton Blvd	0.16
S11 of 63172	I 75 under Baldwin Rd	0.16
S07 of 63173	I 75, US 10 under Grange Hall Rd	0.16
S01 of 69014	I 75 under Parmater Rd	0.15
S03 of 37013	US 27 under Blanchard Rd	0.15

TABLE 2 (Cont.)
PRIORITY RATING OF STRUCTURES - STATEWIDE

Structure No.	Description	Product
S04 of 73171	I 75 under Busch Rd	0.15
S12 of 39014	US 131 under "B" Ave	0.15
S05 of 47014	US 23 under Clyde Rd	0.15
S13 of 33084	I 96 under Dietz Rd	0.15
S03 of 32035	I 96 under Elm Rd	0.15
S08 of 81075	US 23 under 6 Mile Rd	0.15
S01 of 58033	US 23 under Milwaukee Rd	0.15
S09 of 63172	I 75 under Giddings Rd	0.15
S03 of 16093	I 75 SB under Rondo Rd	0.14
S04 of 16093	I 75 NB under Rondo Rd	0.14
S04 of 69014	I 75 under Sturgeon Valley Rd	0.14
S03 of 41025	I 96 under Cheney Ave	0.14
S02 of 37032	US 10 under Leaton Rd	0.14
S04 of 47014	US 23 under Crouse Rd	0.13
S02 of 81104	I 94 under Kalmbach Rd	0.12
S03 of 69014	I 75 NB under Winters Rd	0.11
S02 of 81076	US 23 under Willow Rd	0.11
S01 of 81104	I 94 under Notten Rd	0.11
S06 of 23152	I 96 under Millet Rd	0.11
S06 of 47014	US 23 under Fausett Rd	0.11
S04 of 81103	US 23, M 14 under Nixon Rd	0.11
S05 of 81076	US 23 under Bemis Rd	0.11
S03 of 58033	US 23 under Sherman Rd	0.11
S05 of 81104	I 94 under Freer Rd	0.11
S05 of 49025	I 75, US 2 SB under Moran Rd	0.10
S06 of 49025	I 75, US 2 NB under Moran Rd	0.10
S06 of 69014	I 75 SB under Alexander Rd	0.09
S07 of 69014	I 75 NB under Alexander Rd	0.09
S10 of 33084	I 96 EB under Zimmer Rd	0.09
S06 of 81075	US 23 under Joy Rd	0.09
S05 of 81075	US 23 under Warren Rd	0.09
S11 of 33084	I 96 WB under Zimmer Rd	0.09
S02 of 81103	US 23, M 14 WB under Pontiac Trail	0.08
S02 of 69014	I 75 SB under Winters Rd	0.07
S01 of 81103	US 23 EB under Pontiac Trail	0.06
S04 of 82062	US 12 under Scotten Ave - 18 x 24 concrete barrier between roadway and sidewalk. Aluminum rail- ing for pedestrian traffic only.	