

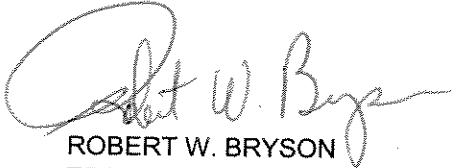
INFRASTRUCTURE SERVICES DIVISION - TRANSPORTATION  
DEPARTMENT OF PUBLIC WORKS - CITY OF MILWAUKEE  
STATE PROJECT I.D.#1060-25-78  
CORE CONTRACT  
TRAFFIC SIGNALS AND SIGNS

## ESTIMATE OF COSTS

### COST ESTIMATE - TRAFFIC SIGNALS AND SIGNS

TRAFFIC SIGNALS	\$336,914.25
TRAFFIC SIGNS	<u>\$15,379.96</u>
TOTAL =	\$352,294.21

APPROVED BY:



ROBERT W. BRYSON  
TRAFFIC & LIGHTING DESIGN MANAGER

TRANSPORTATION SECTION  
TRAFFIC & LIGHTING DESIGN UNIT  
KELLY A. WEBER  
JUNE 15, 2005

INFRASTRUCTURE SERVICES DIVISION  
 DEPARTMENT OF PUBLIC WORKS  
 STATE PROJECT I.D.#1060-25-78  
 2005 SURFACE TRANSPORTATION PROGRAM  
 MARQUETTE INTERCHANGE - CENTRAL

**TRAFFIC SIGNALS**

<u>COST ESTIMATE</u>				<u>UNIT</u>	<u>TOTAL</u>
<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUAN.</u>		<u>COST</u>	<u>ITEM</u>
	<u>COST ESTIMATE</u>				<u>COST</u>
71033	DETECTOR, 2-CHANNEL OPTICOM (711)	6 EA	\$	503.69	\$ 3,022.14
71034	DETECTOR, 4-CHANNEL OPTICOM (721)	2 EA	\$	631.89	\$ 1,263.78
71053B	303-8 CONTROLLER ACT WITHOUT FOUNDATION	2 EA	\$	9,387.99	\$ 18,775.98
71054B	330 CONTROLLER ACT WITHOUT FOUNDATION	1 EA	\$	11,497.43	\$ 11,497.43
71060L	512 SIGNAL HOUSING LED COMPLETE	3 EA	\$	950.91	\$ 2,852.73
71061L	412 SIGNAL HOUSING LED COMPLETE	2 EA	\$	773.52	\$ 1,547.04
71062L	312 SIGNAL HOUSING LED COMPLETE	92 EA	\$	578.78	\$ 53,247.76
71071L	38 SIGNAL HOUSING LED COMPLETE	35 EA	\$	451.26	\$ 15,794.10
71064RL	112 RED LED MODULE	1 EA	\$	85.86	\$ 85.86
71064YL	112 YELLOW LED MODULE	1 EA	\$	88.44	\$ 88.44
71064GL	112 GREEN LED MODULE	1 EA	\$	126.26	\$ 126.26
71072RL	18 RED LED MODULE	3 EA	\$	82.45	\$ 247.35
71072YL	18 YELLOW LED MODULE	3 EA	\$	85.02	\$ 255.06
71072GL	18 GREEN LED MODULE	3 EA	\$	96.54	\$ 96.54
71066LC	DW-W COMBINATION 12' SIGNAL HOUSING LED COMPLETE	78 EA	\$	439.84	\$ 34,307.52
71067L	12" COUNTDOWN PEDESTRIAN SIGNAL HOUSING LED	8 EA	\$	660.39	\$ 5,283.12
71078	DW-W 8" SIGNAL HOUSING	1 EA	\$	380.14	\$ 380.14
71079	512M SIGNAL HOUSING	2 EA	\$	2,607.00	\$ 5,214.00
71081	312 M SIGNAL HOUSING	11 EA	\$	15,739.57	\$ 30,048.27
71082	212 M SIGNAL HOUSING	2 EA	\$	922.53	\$ 1,845.06
71125	PUSH BUTTON MUSHROOM HEAD (ADA 2")	3 EA	\$	120.36	\$ 361.08
71156	LEAD IN CABLE (PROBE)	1545 LF	\$	1.92	\$ 2,966.40
71170	9#14 LTP	6300 LF	\$	2.13	\$ 13,419.00
71171	12#14 LTP	3910 LF	\$	2.23	\$ 8,719.30
71172	17#14 LTP	5185 LF	\$	2.38	\$ 12,340.30
71173	20#14 LTP	1050 LF	\$	2.48	\$ 2,604.00
71190	MAST ARM, FABRICATED	7 EA	\$	1,773.17	\$ 12,412.19
71191	MAST ARM POLE INSTALLED	5 EA	\$	212.54	\$ 1,062.70
71197	SS 13'	95 EA	\$	850.74	\$ 80,820.30
71712	312 Sig. Hous. Relocated	8 EA	\$	212.31	\$ 1,698.48
71716	DW-W 12" Sig. Hous. Relocated	2 EA	\$	212.31	\$ 424.62
71721	38 Sig. Hous. Relocated	5 EA	\$	169.85	\$ 849.25
71728	DW-W 8" Sig. Hous. Relocated	8 EA	\$	212.31	\$ 1,698.48
71827	SS 13' Relocated	7 EA	\$	254.78	\$ 1,783.46
71828	1' Ext Relocated	5 EA	\$	42.46	\$ 212.30
71724	170 Solid State Controller Relocated	6 EA	\$	323.37	\$ 1,940.22
90030A	Install 3#2/1#8 LTP underground cable	50 LF	\$	3.59	\$ 179.50
90030B	Install 3#4/1#8 LTP underground cable	1180 LF	\$	3.26	\$ 3,846.80
90030C	Install 3#6/1#8 LTP underground cable	110 LF	\$	2.72	\$ 299.20
90030Q	Install 2.5" PVC Conduit (Trench)	107 LF	\$	6.40	\$ 684.80
90030R	Saw cut, break out, and restoration of concrete	75 SQ FT	\$	31.74	\$ 2,380.50
90005GQ	Installation of a rectangular vault	1 EA	\$	232.79	\$ 232.79

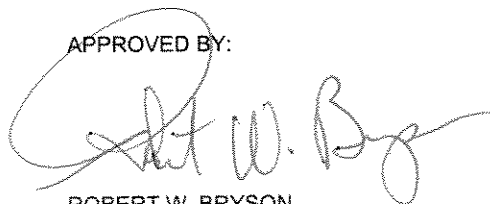
**COST ESTIMATE**

2005 SURFACE TRANSPORTATION PROGRAM=

**\$ 336,914.25**

THERE ARE NO EXCLUDED COSTS IN THIS PROJECT

APPROVED BY:



ROBERT W. BRYSON  
 TRAFFIC & LIGHTING DESIGN MANAGER

TRANSPORTATION SECTION  
 TRAFFIC & LIGHTING DESIGN UNIT  
 JOSEPH A. BONDOWSKI  
 JUNE 13, 2005

INFRASTRUCTURE SERVICES DIVISION  
 DEPARTMENT OF PUBLIC WORKS  
 STATE PROJECT I.D.#1060-25-78  
 2005 SURFACE TRANSPORTATION PROGRAM  
 MARQUETTE INTERCHANGE - CORE

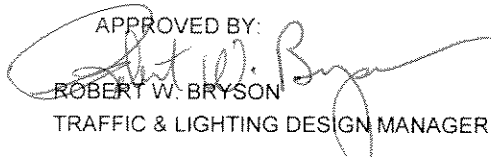
TRAFFIC SIGNS

<u>COST ESTIMATE</u>		<u>TRAFFIC SIGNS</u>		TOTAL
<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUAN.</u>	<u>UNIT COST</u>	<u>ITEM COST</u>
73000	30 X 30 STOP	1	\$52.59	\$52.59
73004	36 X 36 YIELD	1	\$56.51	\$56.51
73020	30X30 DO NOT ENTER	3	\$53.15	\$159.45
73021	24X36 WRONG WAY	2	\$51.34	\$102.68
73023	24X30 ONE WAY (LA)	17	\$44.93	\$763.81
73024	18X24 ONE WAY (RA)	2	\$31.83	\$63.66
73025	24X30 ONE WAY (RA)	18	\$44.93	\$808.74
73034	12X18 PARKING-SINGLE MESSAGE	36	\$21.98	\$791.28
73036	18X24 PARKING-DOUBLE MESSAGE	29	\$48.00	\$1,392.00
73038	36X42 OVERNIGHT PARKING ORDINANCE	3	\$104.55	\$313.65
73081	12x36 HAZARD MARKER (LEFT MOUNT)	6	\$28.98	\$173.88
73083	24X24 DOUBLE DOWN ARROW	3	\$28.91	\$86.73
73087	24X48 LEFT ARROW	1	\$49.69	\$49.69
73090	24X30 HOSPITAL	1	\$44.93	\$44.93
73097	24X30 KEEP RIGHT	7	\$44.93	\$314.51
73140	15X21 PUSH BUTTON FOR WALK SIGNAL	2	\$17.76	\$35.52
73142	24X36 STOP HERE ON RED (LA)	1	\$51.36	\$51.36
73143	24X36 STOP HERE ON RED (RA)	1	\$51.36	\$51.36
73144	24X24 AHEAD SIGNAL	1	\$28.91	\$28.91
73145	24X24 LEFT TURN SIGNAL	1	\$38.22	\$38.22
73147	24X24 NO TURN ON RED	2	\$38.22	\$76.44
73157	30X36 ONLY (LA)	6	\$61.08	\$366.48
73158	36X48 ONLY (LA) OVERHEAD	1	\$154.58	\$154.58
73159	30X36 ONLY (RA)	3	\$61.08	\$183.24
73161	30X30 LEFT LANE MUST TURN LEFT	5	\$53.15	\$265.75
73163	30X30 RIGHT LANE MUST TURN RIGHT	6	\$53.15	\$318.90
73166	36X36 MULTIPLE TURN	1	\$80.80	\$80.80
73172	24X30 LEFT TURN LANE (ARROW)	1	\$44.93	\$44.93
73181	24X24 NO LEFT TURN	11	\$38.22	\$420.42
73188	18X24 BIKE ROUTE	4	\$31.83	\$127.32
73194	24X30 SPEED LIMIT	4	\$44.93	\$179.72
73212	18X24 LEFT CHEVRON	4	\$24.85	\$99.40
73294	3' RSP SOCKET	38	\$35.92	\$1,364.96
73295	SOC. (CONC. INST.)	17	\$33.62	\$571.54
73296	2" X 9'6" PIPE	53	\$46.36	\$2,457.08
73298	2' X 11'-0" PIPE	2	\$51.30	\$102.60
73310	MOUNTING HARDWARE CP/SS/AP	129	\$3.21	\$414.09
73311	MOUNTING HARDWARE PS	59	\$4.17	\$246.03
73312	SNS MOUNTING CP	30	\$21.60	\$648.00
73318	GREEN SNS 30"	13	\$36.74	\$477.62
73319	GREEN SNS 36"	26	\$40.91	\$1,063.66
73325	SNS MOUNTING SIGNALS	9	\$15.65	\$140.85
73327	6X8 PUSH BUTTON FOR WALK SIGNAL	3	\$12.30	\$36.90
73329	24X30 BICYCLE LANE BEGINS	1	\$44.93	\$44.93
73330	24X30 BICYCLE LANE ENDS	1	\$44.93	\$44.93
73335	24X30 ONE WAY (DOUBLE FACED)	1	\$69.31	\$69.31
			TOTAL=	\$15,379.96

COST ESTIMATE

2005 SURFACE TRANSPORTATION PROGRAM = \$15,379.96

THERE ARE NO EXCLUDED COSTS IN THIS PROJECT.

APPROVED BY:  
  
 ROBERT W. BRYSON  
 TRAFFIC & LIGHTING DESIGN MANAGER

TRANSPORTATION SECTION  
 TRAFFIC & LIGHTING DESIGN UNIT  
 JOSEPH A. HALVORSON  
 MAY 4, 2005