

Sample Plan

TRAFFIC CONTROL SIGNAL SYSTEMS PLANS ----- NARRATIVE

References:

Design Scene: Chapter 16 - Traffic
Road Design Manual: Chapter 10-5
Traffic Signal Design Web Site:
www.dot.state.mn.us/trafficeng/signals/signalsplansheets.html

Miscellaneous: <http://hub.metro/design/coordination.html> Traffic-Design Coordination Guidance

General Information:

During the roadway plan development, designers must be aware of the need for a Signal Plan. This Plan may be grouped into traffic control signals, pedestrian signals, other highway traffic signals, or train-approach signals and gates.

To develop a Signal Plan, coordination meetings between Design, the Project Manager, Construction and Traffic Engineering Section, Signal Design are recommended throughout the duration of the project. The number and extent of these meetings will depend on the complexity, length, and duration of the project. In some instances, the Signal Plan may be a separate plan and not included in the Grading Plan.

If the Signal Plan is to be incorporated into the road plan, the following items must be coordinated:

- Signal Agreement
- Cost Participation and Funding (Federal, State Aid, Local)
- Signal Maintenance, Payment for power, EVP...
- Design Standards (based on who will operate the signals)
- Pedestrian ramps and stop bar/crosswalk locations
- Source of Power (utility coordination)
- SJR(S)
- Mast arm signing

The Designer will need to provide construction sheets or general layout sheets (hard copy or electronic copy) to Signal Design for them to use as a base map to draft their Signal Plans.

Signal plan sheets to be inserted into the final plan should include a list of construction pay items and quantities so the designer can include these items in the Estimated Quantities tabulation.

The Signal Plans sheets should also be included in the plan as shown on the Title Sheet's Index. Page numbers for the Signal Plans sheets will be SS1 to SS*.

Coordinate with Signal Design and Construction the need for any temporary signals.

Sample Plan

TRAFFIC CONTROL SIGNAL SYSTEMS PLANS ----- CHECKLIST

- ___ 1. Pay Items correspond with those in TRNS*PORT
- ___ 2. Tab letter, Sheet No. and correct S.P.'s
- ___ 3. Signal Design Engineer's signature

REVISION DATE 04/08/16
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 26-JAN-2017 11:02
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ABBREVIATIONS

APS	ACCESSIBLE PEDESTRIAN SIGNAL
AWF	ADVANCE WARNING FLASHER
C.D.	COUNT DOWN
D2-1 (e.g.)	DETECTOR (PHASE 2, NO. 1)
DEG	DEGREES
DWK	DON'T WALK INDICATION
EQ.G	EQUIPMENT GROUND
EVP	EMERGENCY VEHICLE PRE-EMPTION
F&I	FURNISH AND INSTALL
FL	FLASH/FLASHING
FYA	FLASHING YELLOW ARROW
FYLA	FLASHING YELLOW LEFT ARROW
GLA	GREEN LEFT ARROW
GRN	GREEN INDICATION
GR. RD.	GROUND ROD
GRA	GREEN RIGHT ARROW
GTA	GREEN THRU ARROW
HH	HANDHOLE
HPS	HIGH PRESSURE SODIUM
IND	INDICATION
IMC	INTERMEDIATE METAL CONDUIT
INP	INPLACE
INS. GR.	INSULATED GROUND
JB	JUNCTION BOX
LED	LIGHT EMITTING DIODE
LUM	LUMINAIRE
NEU	NEUTRAL
NMC	NONMETALLIC CONDUIT
P1-1 (e.g.)	PEDESTRIAN HEAD (PHASE 1, NO. 1)
PB	PUSH BUTTON
PB2-1 (e.g.)	PUSH BUTTON (PHASE 2, NO. 1)
PEC	PHOTOELECTRIC CELL
PED	PEDESTRIAN
PVC	POLYVINYL CHLORIDE (CONDUIT)
RED	RED INDICATION
R&S	REMOVE AND SALVAGE
RLA	RED LEFT ARROW
RSC	RIGID STEEL CONDUIT
S&I	SALVAGE AND INSTALL
SOP	SOURCE OF POWER
SPR	SPARE
STA	STATION
WLK	WALK INDICATION
YEL	YELLOW INDICATION
YLA	YELLOW LEFT ARROW
YRA	YELLOW RIGHT ARROW

CONSTRUCTION PLAN FOR TRAFFIC CONTROL SIGNAL SYSTEMS AND INTERCONNECT

AT THE INTERSECTIONS OF: T.H. 66 AND C.S.A.H. 23 (SNELLING BLVD. N.W.) AND T.H. 66 AT CO. RD. 82 (HAMLINE BLVD. N.W.), IN MAYBERRY, MADISON COUNTY

**FOR MOST CURRENT SIGNAL
SAMPLE PLAN SET, VISIT THE WEB SITE
LISTED IN THE NARRATIVE REFERENCES**

INDEX	
SHEET NO.	DESCRIPTION
SS1	SIGNATURE, TABULATED QUANTITIES, ABBREVIATIONS, SYMBOLS, AND STANDARD PLATES
SS2-SS4	DETAILS
SS5-SS12	SIGNAL PLAN LAYOUTS SYSTEM "A"
SS13-SS20	SIGNAL PLAN LAYOUTS SYSTEM "B"

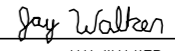
SAMPLE PLAN

SYMBOLS

■	HANDHOLE
○	EQ.G CONNECTION
◄	EVP CONFIRMATORY LIGHT
↔	EVP DETECTOR
◄↔	EVP DETECTOR AND CONFIRMATORY LIGHT
⓪	FIBER OPTIC VAULT
△	LUMINAIRE NO.
③	SIGNAL BASE NO.
③-2	SIGNAL HEAD NO./FLASHER HEAD NO.
BM 4	BARREL MOUNT BASE NO.
WP 4	WOOD POLE NO.
●	SPLICE
V	VIDEO DETECTION
M	MICROWAVE DETECTION
S	SONIC DETECTION

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

I HEREBY CERTIFY THAT SHEETS SS1 THRU SS20 OF THIS PLAN WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.


 JAY WALKER
 DATE 2/01/14 LIC. NO. 00000

TABULATED QUANTITIES			COST BREAKDOWN OF QUANTITIES				
ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	STATE	ANOKA COUNTY	CITY OF RAMSEY	FEDERAL	CITY OF RAMSEY STATE AID PROJECT NUMBER
HAUL SALVAGED MATERIAL	LUMP SUM	1	1.0	0.0	0.0	0.0	
FULL-T-ACT T CONTROL SIGNAL SYSTEM	SIG SYS	1	0.10	0.05	0.05	0.80	199-116-01 (0.05)
EMERGENCY VEHICLE PRE-EMPTION SYSTEM "A"	LUMP SUM	1	0.10	0.0	0.10	0.80	199-116-01(0.05)/199-020-01(0.05)
EMERGENCY VEHICLE PRE-EMPTION SYSTEM "B"	LUMP SUM	1	0.1333	0.0	0.0667	0.80	LOCAL
TRAFFIC CONTROL INTERCONNECTION	LUMP SUM	1	0.1143	0.0571	0.0286	0.80	199-010-01 (.0286)
REVISE SIGNAL SYSTEM	SYSTEM	1	0.1333	0.0667	0.0	0.80	

STANDARD PLATES - SIGNAL SYSTEMS

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

PLATE NO.	DESCRIPTION	PLATE NO.	DESCRIPTION
▶ 8111	E TRAFFIC SIGNAL BRACKETING (PEDESTAL MOUNTED)	▶ 8122	F PEDESTAL AND PEDESTAL BASE
▶ 8112	I PEDESTAL FOUNDATION	▶ 8123	G POLE AND MAST ARM
▶ 8117	G PRECAST CONCRETE HAND HOLE	▶ 8126	L POLE FOUNDATION (PA90 AND PA100)
▶ 8118	D SERVICE EQUIPMENT AND POLE	▶ 8129	A SHIM AND WASHER
▶ 8119	C GROUND MOUNTED CABINET FOUNDATION	▶ 8130	E SAW CUT LOOP DETECTORS
▶ 8120	Q POLE FOUNDATION (PA-85)	▶ 8132	B PREFORMED RIGID PVC CONDUIT LOOP DETECTOR
▶ 8121	H TRANSFORMER BASE AND POLE BASE PLATE		

▶ STANDARD PLATES APPLICABLE TO THIS PROJECT

SUMMARY OF QUANTITIES FOR INTERCONNECT (FOR INFORMATION ONLY)	
6-PR. #19 DIRECT BURIED	1640 LIN FT
PVC HANDHOLE	4 EACH
53 mm RSC	40 LIN FT

DRAWN BY: NAME A. B.	REVISED BY:	REVISED BY:	AS BUILT BY:	SHEET 1 OF 1
CHECKED: N. B. DATE:	CHECKED: DATE:	CHECKED: DATE:	CHECKED: DATE:	
SYSTEM I.D.: 22022				
METER ADDRESS: 241 W. T.H. 66				
STATE AID PROJECT: SP 199-116-01/SP 199-020-01				
TRAFFIC CONTROL SIGNAL SYSTEMS PLANS				
T.H. 66 AT C.S.A.H. 23 (SNELLING BLVD. N.W.)				
IN MAYBERRY, MADISON COUNTY				

State Proj. No. 0000-00 T.H. 00 Sheet No. SS1 of SS1 Sheets