Fed. Proj. No. \_\_\_

#### STATE OF MINNESOTA

#### DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR THAFFIL CONTROL SIGNAL STOTEM

#### County State Aid Highway No. 12

Between AT JCT OF CR 51 And C.S.A.H. 12.

GROSS LENGTH\_\_\_\_\_FEET\_\_\_MILES
BRIDGES LENGTH\_\_\_\_FEET\_\_\_MILES
EXCEPTIONS LENGTH\_\_\_FEET\_\_\_MILES
NET\_LENGTH\_\_\_FEET\_\_\_WILES

Shoet No 1 Table Sheet & Layout Map

No 2 Est Boannibes & Typical Sec

No 3 To Plan & Profide

No To Cross Sections

ALL APPLICABLE FEGERAL STATE AND LOCAL LAW, AND GREINANCE, WILL BE WITH A MILE CONSTRUCTION OF THIS PROJECT.

I HEPLBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIFFECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

COUNTY ENGINEER

PECOMMENDED FOR APPROVAL

DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

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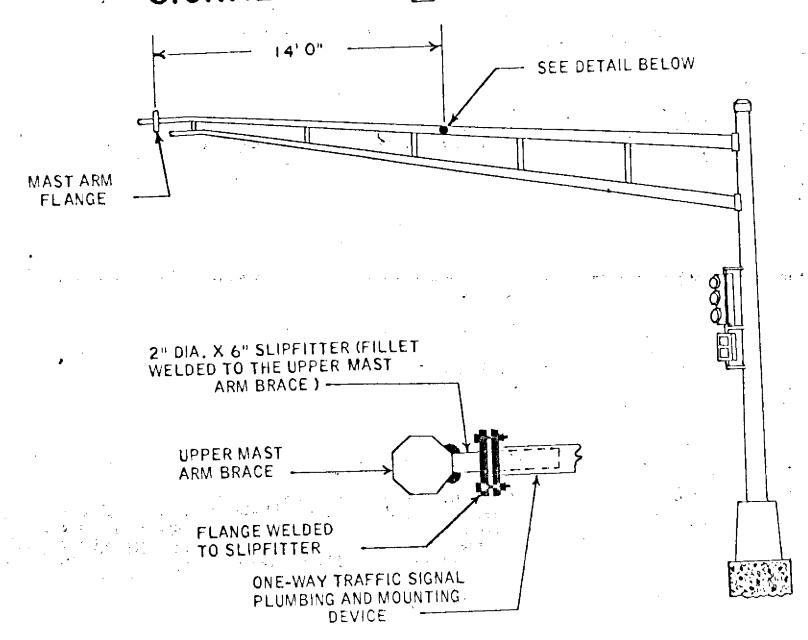
1972

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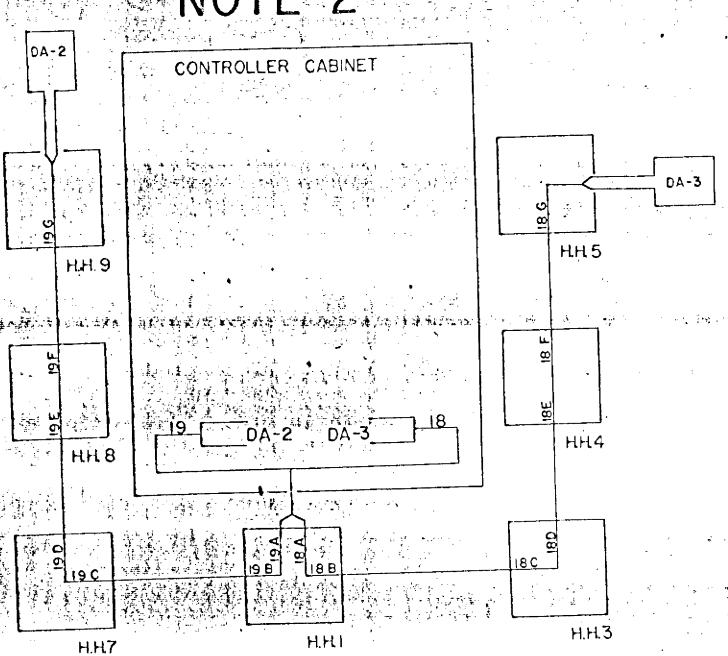
1972

Minn. Proj. No. \_\_\_\_\_\_ County Proj. No. \_\_\_\_\_ State Proj. No. \_\_\_\_\_ S. A. P. \_\_\_\_ 02-612-03

## SIGNAL BASE (I) MAST ARM DETAILS



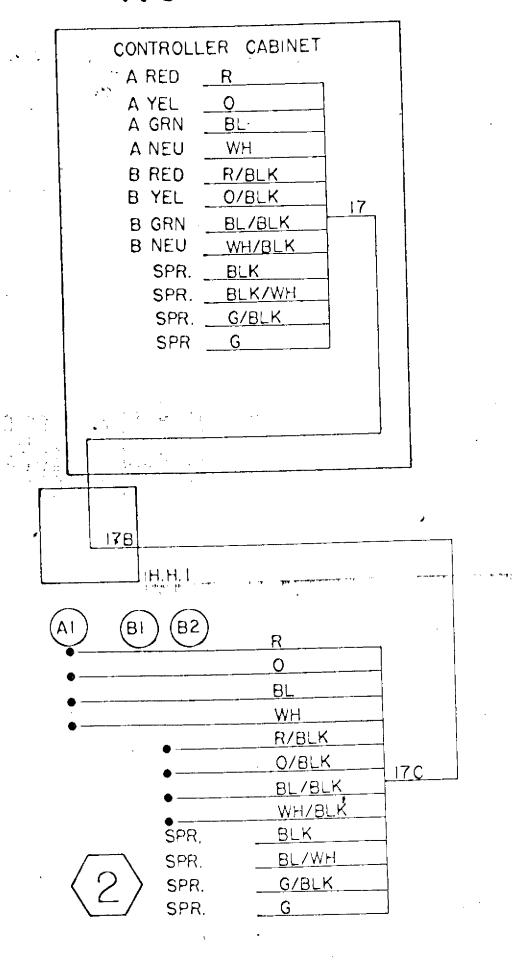
STATE	MENT OF ESTIMATED QU	ANTITIES .	<u> </u>
ITEM NO.	ITEM	UNIT	TOTAL ESTIMATE QUANTITIE
2565.501	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SIGNAL SYSTEM	SIGNAL SYS.	



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

STANDARD DETAIL PLATES		
PLATE NO.	DESCRIPTION	
8112A	PEDESTAL FOUNDATION	
8122A	PEDESTALS	
8111A	TRAFFIC SIGNAL BRACKETING (TYPE 2C)	
8115A	PEDESTRIAN PUSH BUTTON INSTALLATION	
01157		
8123A	POLE AND MAST ARM	
8110B	TRAFFIC SIGNAL BRACKETING (TYPE 2 0-D)	
8124A	SIGNAL HEAD MOUNTS (MAST ARM)	
0124A		
011/8	STEEL GUARD POST	
8116B	PRECAST CONCRETE HAND HOLE	
8117C		
03.104	SERVICE EQUIPTMENT & POLE	
8118A	SERVICE EXCITATION OF THE SERVICE OF	
:	GROUND MOUNTED CONTROLLER FOUNDATION	
81198	GROUND MIDDINTED CONTROLLER 1 COMP.	

### NOTE\*I



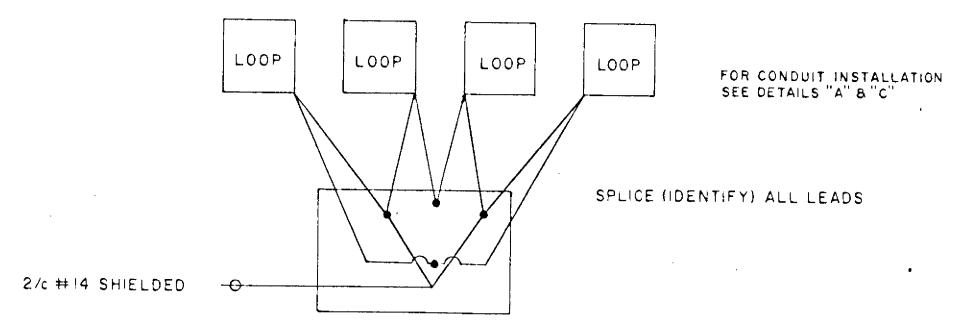
FULL ACTUATED TRAFFIC CONTROL SIGNAL DETAILS & NOTES

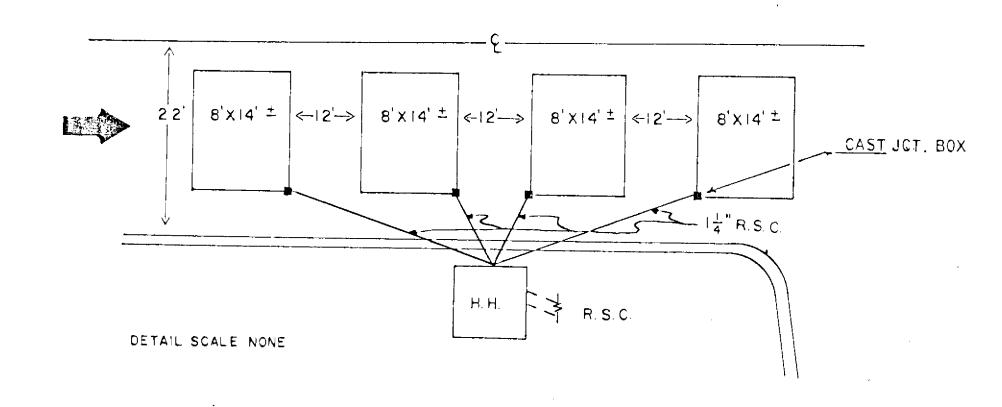
C.S.A.H. # 12 & CR. # 51

State Proj. No. S.A.P. 02-612-03

Sheet No. 3 of 5 Sheets

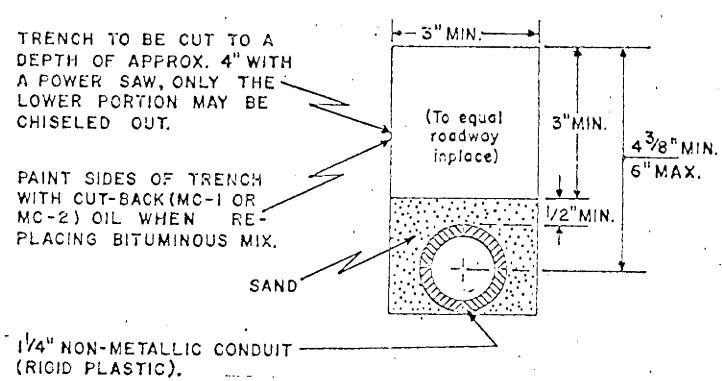
#### LOOP DETECTOR DETAIL"I"



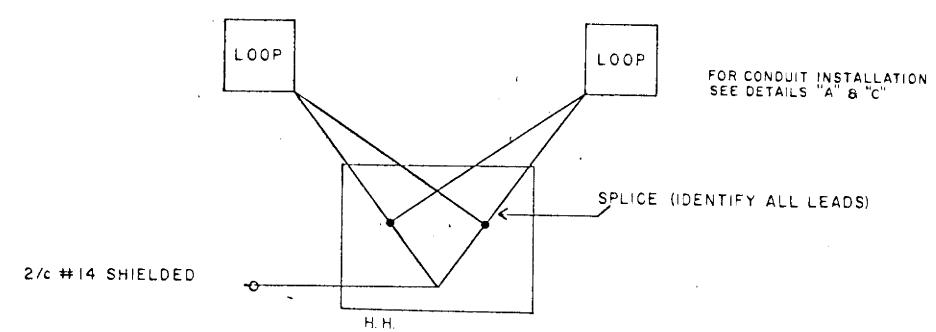


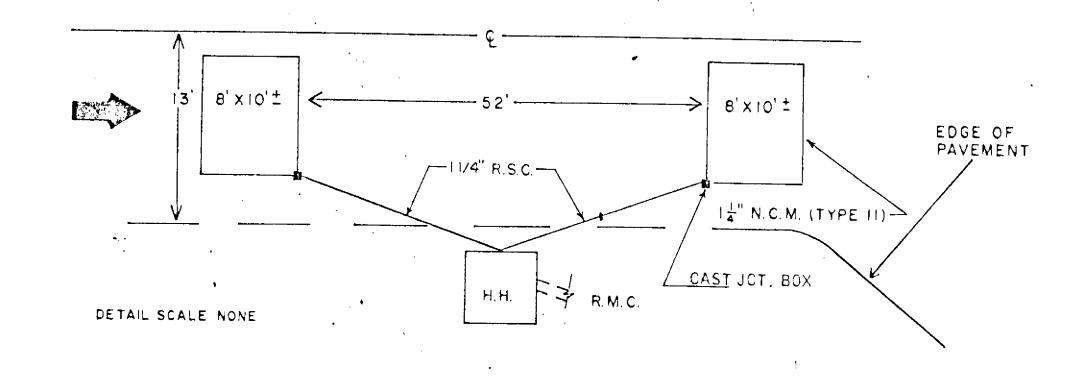
# CONDUIT INSTALLATION DETAIL "A" FOR LOOP DETECTOR

SCALE NONE



#### LOOP DETECTOR DETAIL "2"



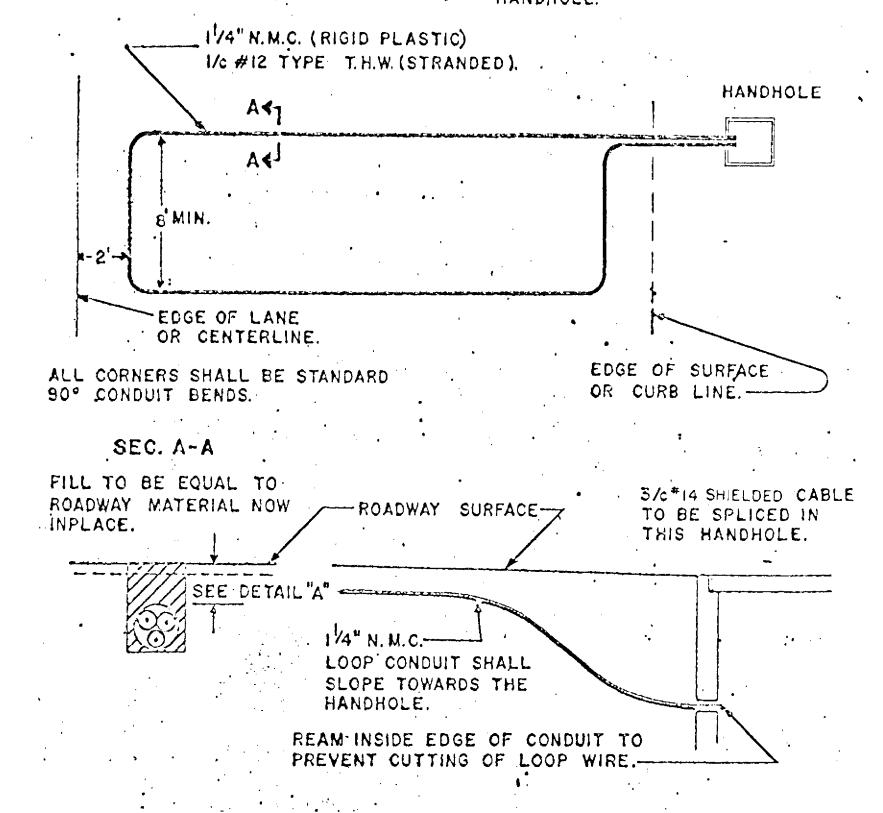


#### LOOP DETECTOR DETAIL "B"

SCALE HONE

NOTE: NUMBER OF TURNS IN THE LOOPS SHALL BE AS SPECIFIED BY THE MANUFACTURER OF THE LOOP DETECTOR EQUIPMENT.

THE LOOP SHALL BE ONE CONTINU-OUS WIRE WITH NO SPLICES AND EACH TURN SHALL BE PULLED TIGHT WITH NO SLACK IN THE HANDHOLE.



#### LOOP DETECTOR DETAIL "C"

NOTE: NUMBER OF TURNS IN

LOOPS SHALL BE AS SPECIFIED

BY THE MANUFACTURER OF
THE LOOP DETECTOR EQUIPMENT.

A 4-7

OR CURB LINE

FILL TO BE EQUAL TO ROADWAY

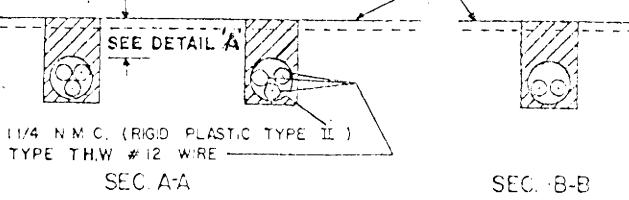
MATERIAL NOW INPLACE

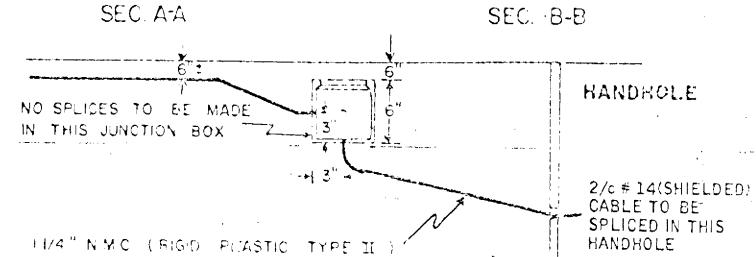
ROAD SURFACE

ALL CORNERS SHALL BE A +-

STANDARD 90° CONDUIT

BENDS





6 X6"X6" STEEL CAST JCT, BOX FOR UNDERGROUND INSTALLATION LOOP CONDUIT SHALL SLOPE TOWARDS JUNCTION BOX

FULL ACTUATED
TRAFFIC CONTROL SIGNAL
DETAILS

C.S.A.H. # 12 & CR. # 51

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#### **EQUIPMENT AND INDICATIONS**

