

DRAWING

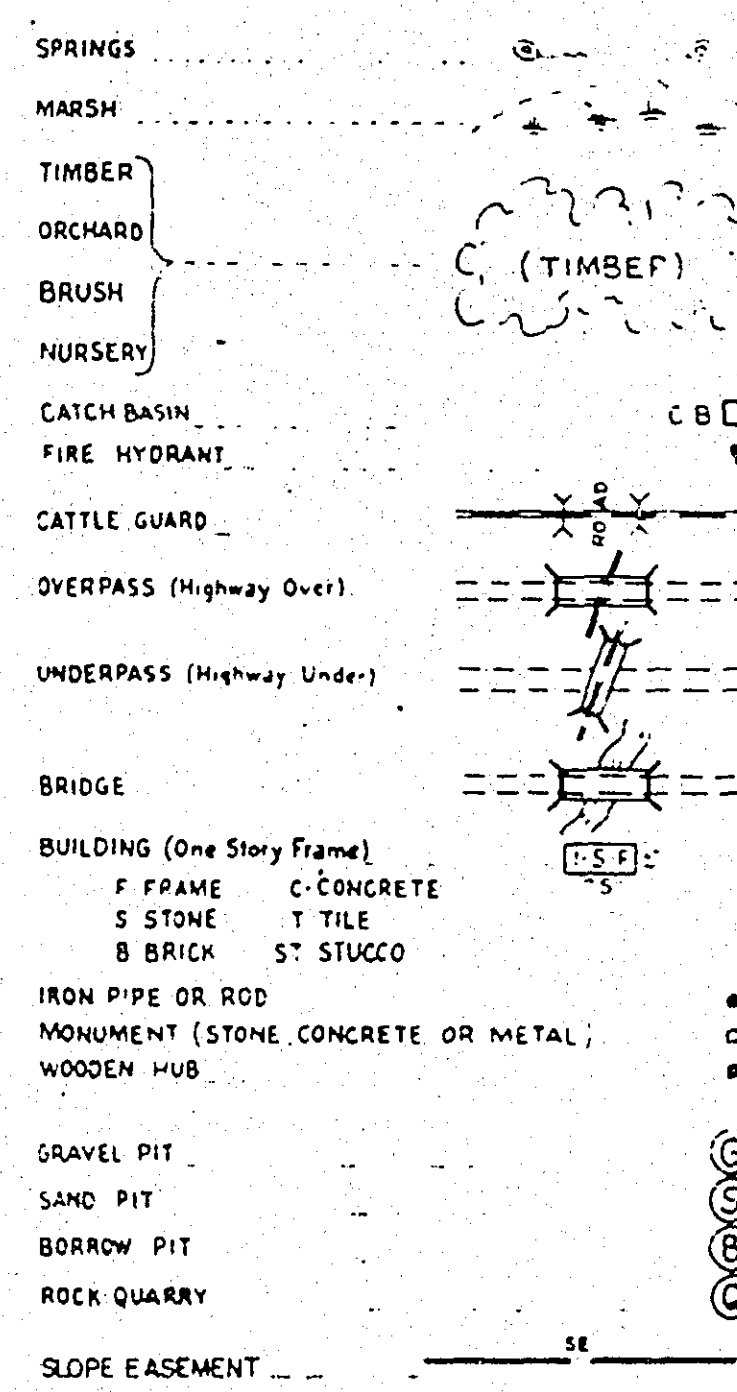
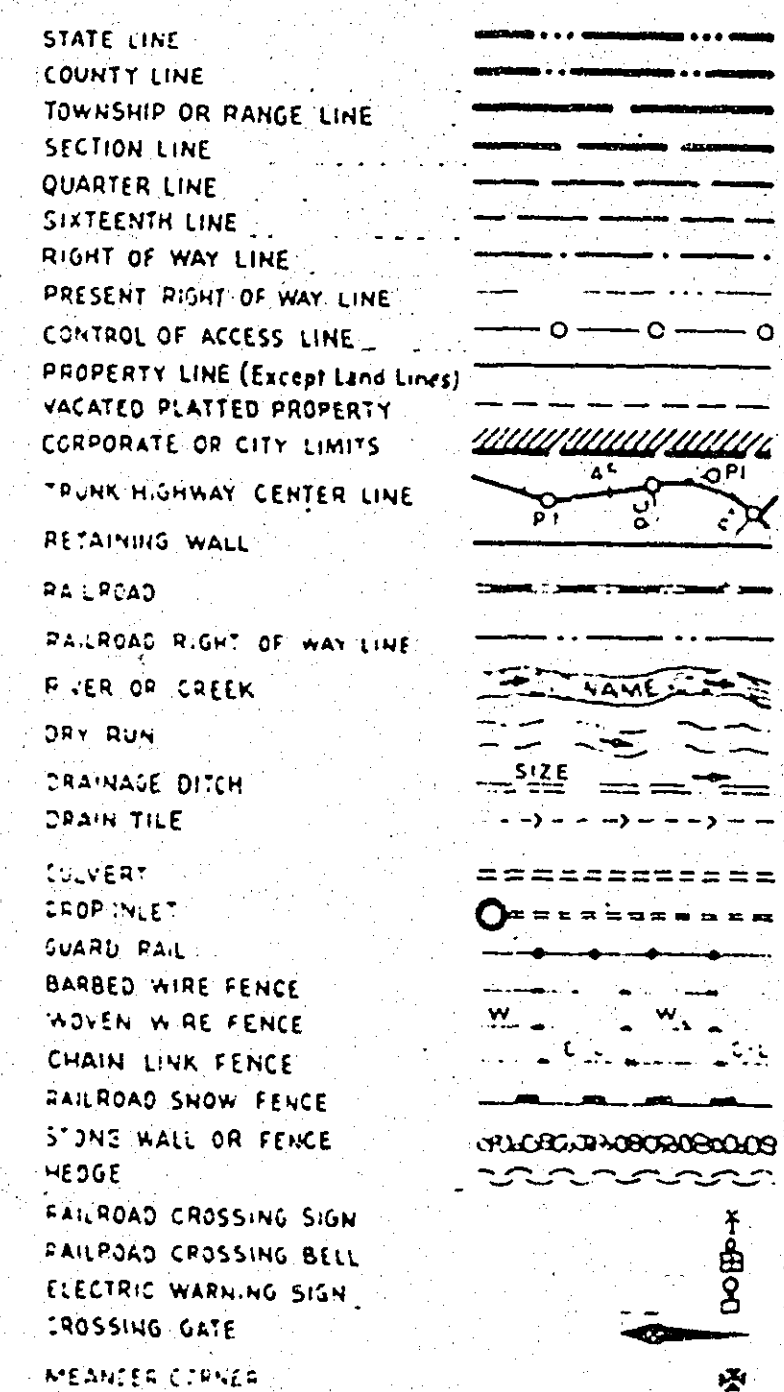
DRAWING NUMBER
23-150

DRAWING NUMBER

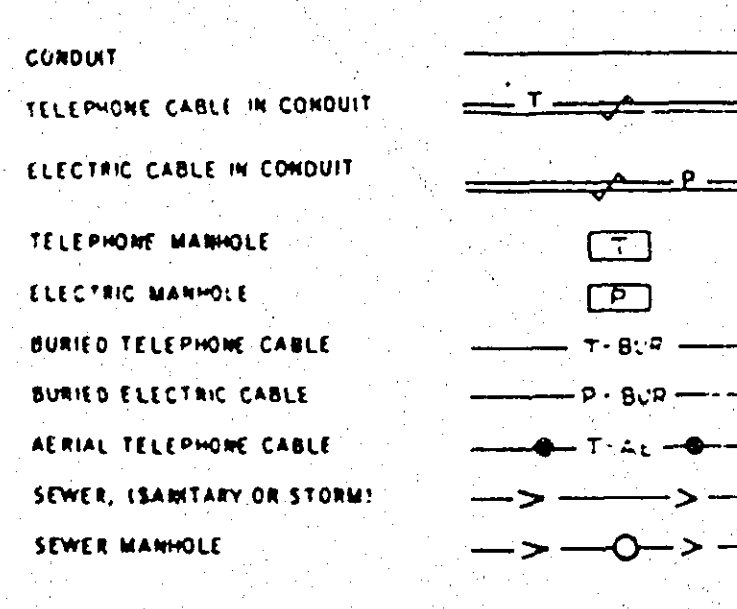
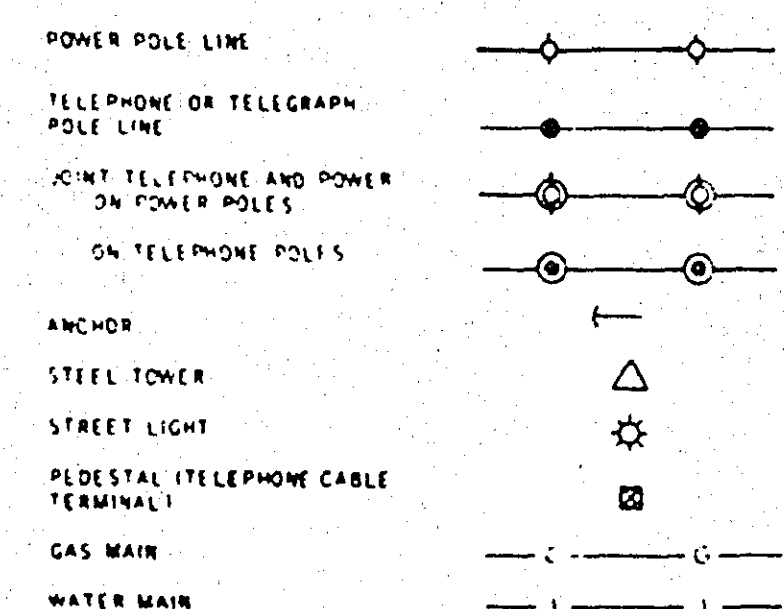
NUMBER

PLAN HOLD CORPORATION
REPRODUCED BY NIA
FURNISH LOG OF PLAN TO THIS LINEPLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REPRODUCED BY NUMBER 0548
FURNISH LOG OF PLAN TO THIS LINEPLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REPRODUCED BY NUMBER 0548
FURNISH LOG OF PLAN TO THIS LINEIRVINE, CALIFORNIA
0548/0548
FURNISH LOG OF PLAN TO THIS LINE

PLANS SYMBOLS



UTILITIES SYMBOLS



SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

DRAWN BY Grazyna Napiwocki DATE 4-12-90CHECKED BY John M. Sharp DATE 4-16-90RECOMMENDED FOR APPROVAL DES DATE 4/3/90RECOMMENDED FOR APPROVAL KMR DATE 4/10/90RECOMMENDED FOR APPROVAL 928 DATE 4/10/90RECOMMENDED FOR APPROVAL LKF RHP DATE 4-18-90RECOMMENDED FOR APPROVAL DLR DATE 4-10-90RECOMMENDED FOR APPROVAL JAP DATE 4-10-90RECOMD Wanda J. Horn DATE 4-24-90RECOMD Paul R. Kimmel DATE 4-12-90RECOMD Paul R. Kimmel DATE 4-12-90

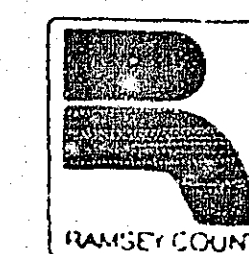
PLAN REVISIONS		
DATE	SHEET NO	BY



PROJECT LOCATION
VICTORIA STREET (CSAH 52)
AT COUNTY ROAD E (CSAH 15/COUNTY ROAD 99)
S.A.P. 62-652-09

CITY OF SHOREVIEW

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: JPH
DATE: 2-10-92



RAMSEY COUNTY

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLANS FOR TRAFFIC SIGNAL SYSTEM

VICTORIA STREET (CSAH 52) AT
COUNTY ROAD E (CSAH 15/COUNTY ROAD 99)

S.A.P. 62-652-09

INDEX

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2	ESTIMATED QUANTITIES AND DETAILS
3	EQUIPMENT PAD LAYOUT AND FOUNDATION
4	INTERSECTION LAYOUT
5-6	FIELD WIRING DIAGRAM
7-9	UTILITIES/PLAN AND PROFILE FOR ROAD CONSTRUCTION

Recommended for Approval Kenneth E. Walters 6-18-90
COUNTY ENGINEER
APPROVED R. A. Ingard 5/24/90
CITY ENGINEER
APPROVED R. A. Ingard
CHAIR OF THE RAMSEY COUNTY BOARD
Recommended for Approval Julie Skallman 10/4/90
STATE AID PLANS & SPECIFICATIONS ENGINEER
Recommended for Approval John M. Sharp
DISTRICT STATE AID ENGINEER
Recommended for Approval Michael P. Rhine
MINN/DOT TRAFFIC ENGINEERING
APPROVED Dennis C. Carlson
STATE AID ENGINEER

RAMSEY COUNTY, MINNESOTA

TRAFFIC SIGNAL SYSTEM
TITLE SHEET



I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
John M. Sharp
Date 4/17/90 Reg No. 9089

FILE NO.
891401
9

23-150

23-150 Victoria Street at Co Rd E
SAP 62-652-09

1/9

24X

ABBREVIATIONS

YEL	GREEN
GRN	WALK
WLK	NEUTRAL
NEU	DON'T WALK
DNK	LUMINAIRE
LUM	DOWNLIGHT
DNL	SWITCH
SW	SWITCHED
SWD	CHECK SWITCH
CH SW	HANDHOLE
H	JUNCTION BOX
JB	GROUND ROD
GR R	SERVICE
SERV	SPLICE
TH A	THRU ARROW
LTA	LEFT TURN ARROW
RTA	RIGHT TURN ARROW
TRA	THRU AND RIGHT ARROW
THA 1/2	THRU ARROW RED
GTA 1/2	LEFT TURN ARROW GREEN
YTA 1/2	RIGHT TURN ARROW YELLOW
P1 1/2	PEDESTRIAN INDICATIONS PHASE 1
P2 1/2	PUSH BUTTON PHASE 2
S 2 1/2	SIGNAL HEADS PHASE 3
D 1/2	DETECTOR PHASE 1
P 1/2	PHOTOELECTRICAL CELL
ST 1/2	STREET LIGHT
SOP	SOURCE OF POWER
EQG	EQUIPMENT GROUND
SPR	SPARE CONDUCTORS
RSC	RIGID STEEL CONDUIT
NMC	NON METAL CONDUIT
EQG	EQUIPMENT GROUND
EVP	EMERGENCY VEHICLE PRE-EMPTION
TDW	TELEPHONE DROP WIRE
F	FURNISH AND INSTALL
R&S	REMOVE AND SALVAGE
FL	FLASH FLASHING
R	RED
O	ORANGE
BL	BLUE
W	WHITE
R BLK	RED WITH BLACK TRACER
O BLK	ORANGE WITH BLACK TRACER
B BLK	BLUE WITH BLACK TRACER
WH BLK	WHITE WITH BLACK TRACER
BLK	BLACK
BLK WH	BLACK WITH WHITE TRACER
G BLK	GREEN WITH BLACK TRACER
S	GREEN
CLR	CLEAR
BR GR	BARE GROUND
H P S	HIGH PRESSURE SODIUM
EVP	EVP DETECTOR DIRECTION
SIGNAL	SIGNAL
FACE	FACE
LUMINAIRE	LUMINAIRE

STANDARD PLATES

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

PLATE NO	DESCRIPTION
* 0005 A	SPECIFICATION REFERENCE TO STANDARD PLATES
7035 J	CONCRETE WALK & CURB RETURNS AT ENTRANCES
7036 C	PEDESTRIAN CURB RAMP
7100 F	CONCRETE CURB AND GUTTERS (DESIGN B & DESIGN V)
7103 C	PRECAST CONCRETE CURB
* 8000 I	STANDARD BARRICADES
* 8110 C	TRAFFIC SIGNAL BRACKETING (POLE MOUNTED)
* 8111 B	TRAFFIC SIGNAL BRACKETING (PEDESTAL MOUNTED)
* 8112 C	PEDESTAL FOUNDATION
* 8113 C	MAGNETIC VEHICLE DETECTOR INSTALLATION
* 8115 C	PEDESTRIAN PUSH BUTTON INSTALLATION
* 8117 F	PRECAST CONCRETE HANDHOLE
* 8119 C	SERVICE EQUIPMENT & POLE, TRAFFIC CONTROL SIGNALS
* 8120 H	GROUND MOUNTED CABINET FOUNDATION
* 8121 B	POLE FOUNDATION (P80 & P90)
* 8222 C	TRANSFORMER BASE WITH POLE BASE PLATE
* 8223 B	PEDESTAL AND PEDESTAL BASE
* 8123 B	POLE AND MAST ARM (LUMINAIRE AND TRAFFIC LIGHTS)
* 8124 D	MAST ARM SIGNAL HEAD MOUNTS
* 8126 C	P-100 POLE FOUNDATION
* 8130 D	SAW CUT LOOP DETECTORS

* STANDARD PLATES APPLICABLE TO THIS PROJECT.

ESTIMATED QUANTITIES

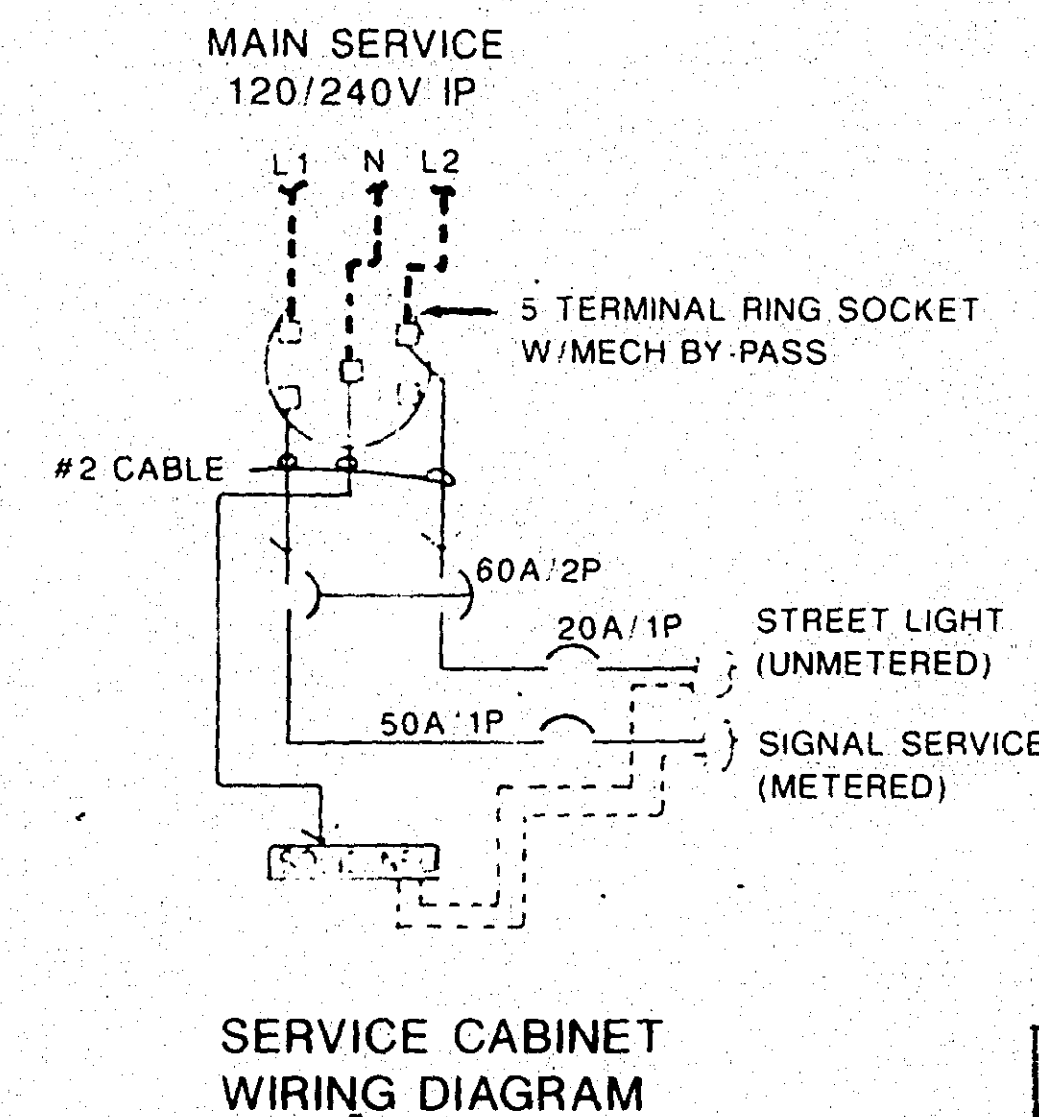
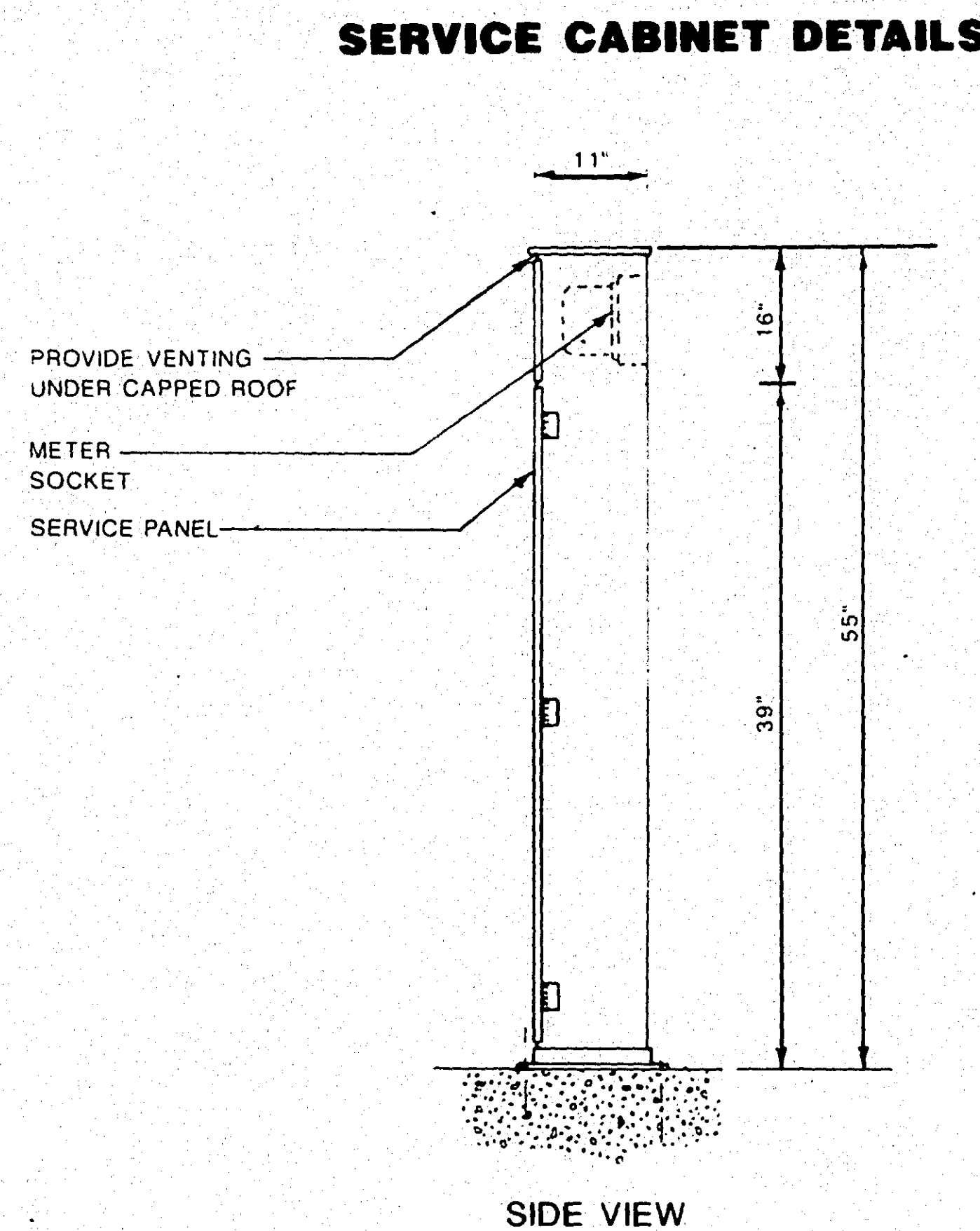
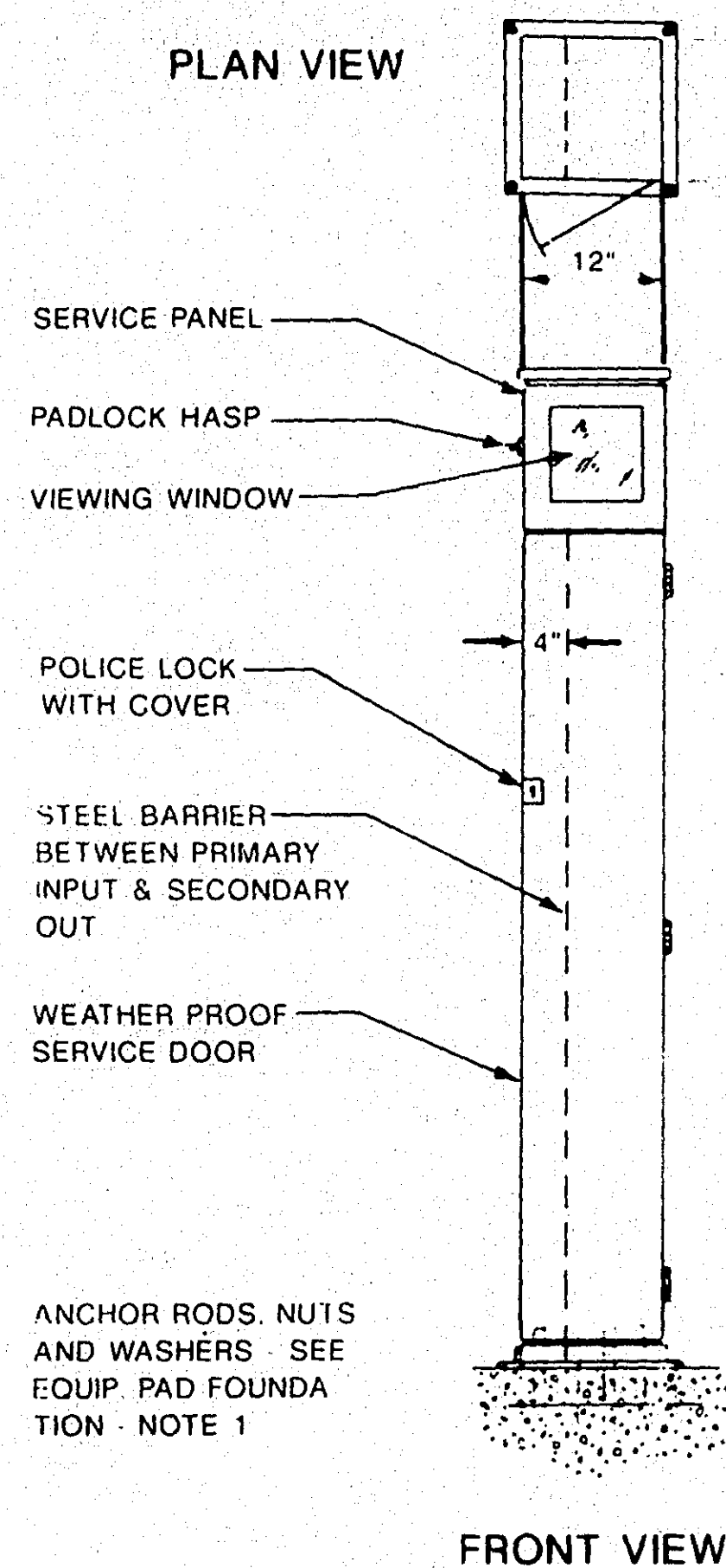
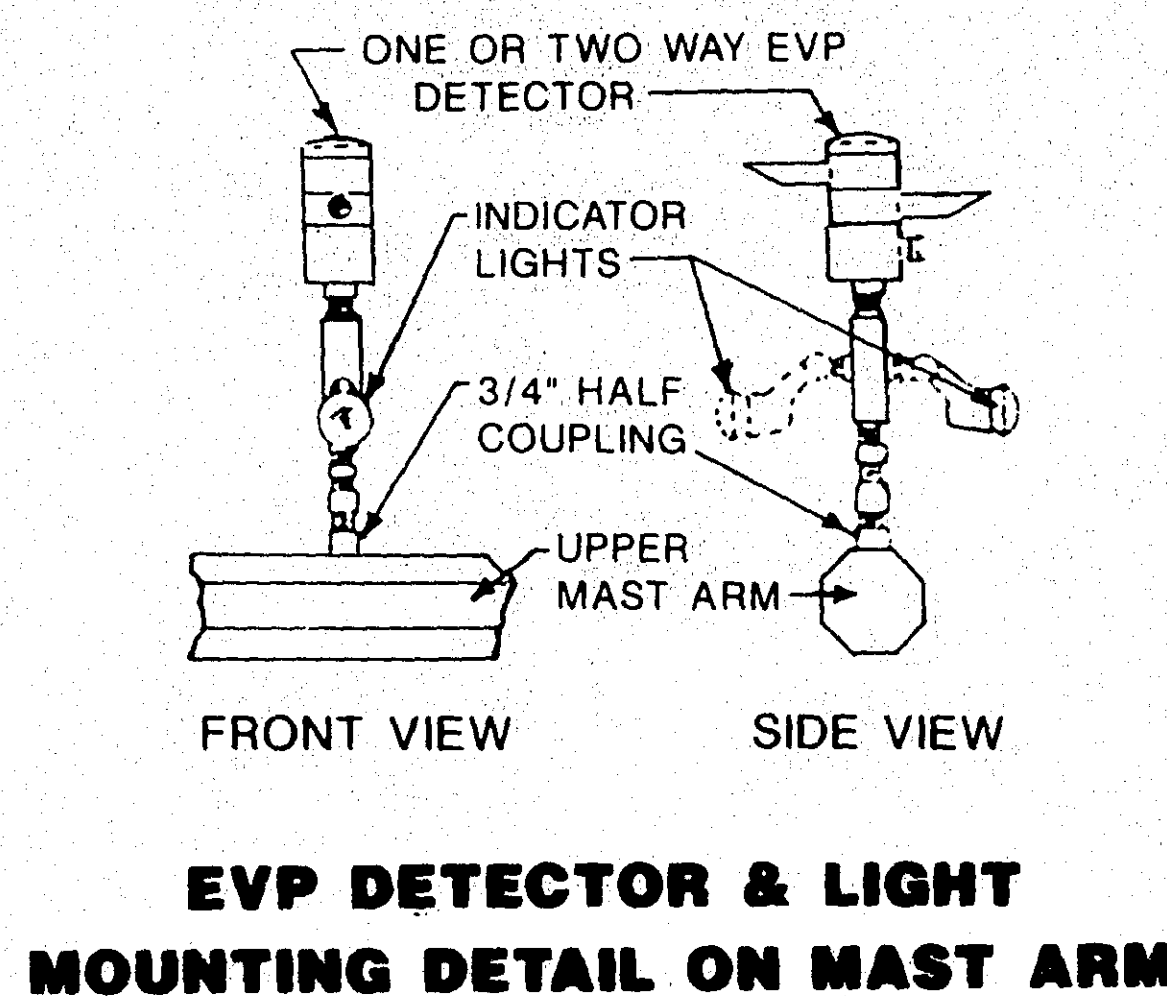
PROJECT NO.	ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES	PARTICIPATION (%)		
					C.S.A.H. 62-652-09	RAMSEY COUNTY	SHOREVIEW
62-652-09	2565.511	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SIGNAL SYSTEM	SIGNAL SYSTEM	1	75	25	0
	0585.601	EMERGENCY VEHICLE PRE-EMPTION SYSTEM	LUMP SUM	1	0	0	100

LEGEND OF SYMBOLS

SIGNAL BASE NO.	⑤
SIGNAL FACE NO.	④
CONTROLLER AND CABINET	□
CONTROLLER AND CABINET - INPLACE	□
HANDHOLE	□
HANDHOLE - INPLACE	□
CONDUIT	—
CONDUIT - INPLACE	—
SIGNAL FACE	→
SIGNAL FACE WITH BACKGROUND SHIELD	→
SIGNAL FACE - INPLACE	→
PEDESTRIAN INDICATIONS	→
PEDESTRIAN INDICATIONS - INPLACE	→
PEDESTRIAN PUSH BUTTON ON PEDESTAL OR POLE	→
PEDESTRIAN PUSH BUTTON STATION	→
TRAFFIC SIGNAL PEDESTAL	→
TRAFFIC SIGNAL PEDESTAL - INPLACE	→
TRAFFIC SIGNAL POLE AND MAST ARM	→
TRAFFIC SIGNAL POLE AND MAST ARM - INPLACE	→
MAST ARM AND LUMINAIRE	→
MAST ARM AND LUMINAIRE - INPLACE	→
WOOD POLE	→
WOOD POLE - INPLACE	→
SOURCE OF POWER	→
EMERGENCY VEHICLE PRE-EMPTION DETECTOR	→

CONDUCTOR COLOR CODE

R-RED
O-ORANGE
BL-BLUE
WH-WHITE
R/BLK-RED WITH BLACK TRACER
O/BLK-ORANGE WITH BLACK TRACER
BL/BLK-BLUE WITH BLACK TRACER
WH/BLK-WHITE WITH BLACK TRACER
BLK-BLACK
BLK/WH-BLACK WITH WHITE TRACER
G/BLK-GREEN WITH BLACK TRACER
G-GREEN



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: JPH
DATE: 2-10-92

NO.	BY	DATE	REVISIONS	ITEM	DESIGN	CHECKED	DATE	FILE NO.	DATE	2	9
								89140	4/16/90		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota
Date 4/17/90 Reg No. 9089

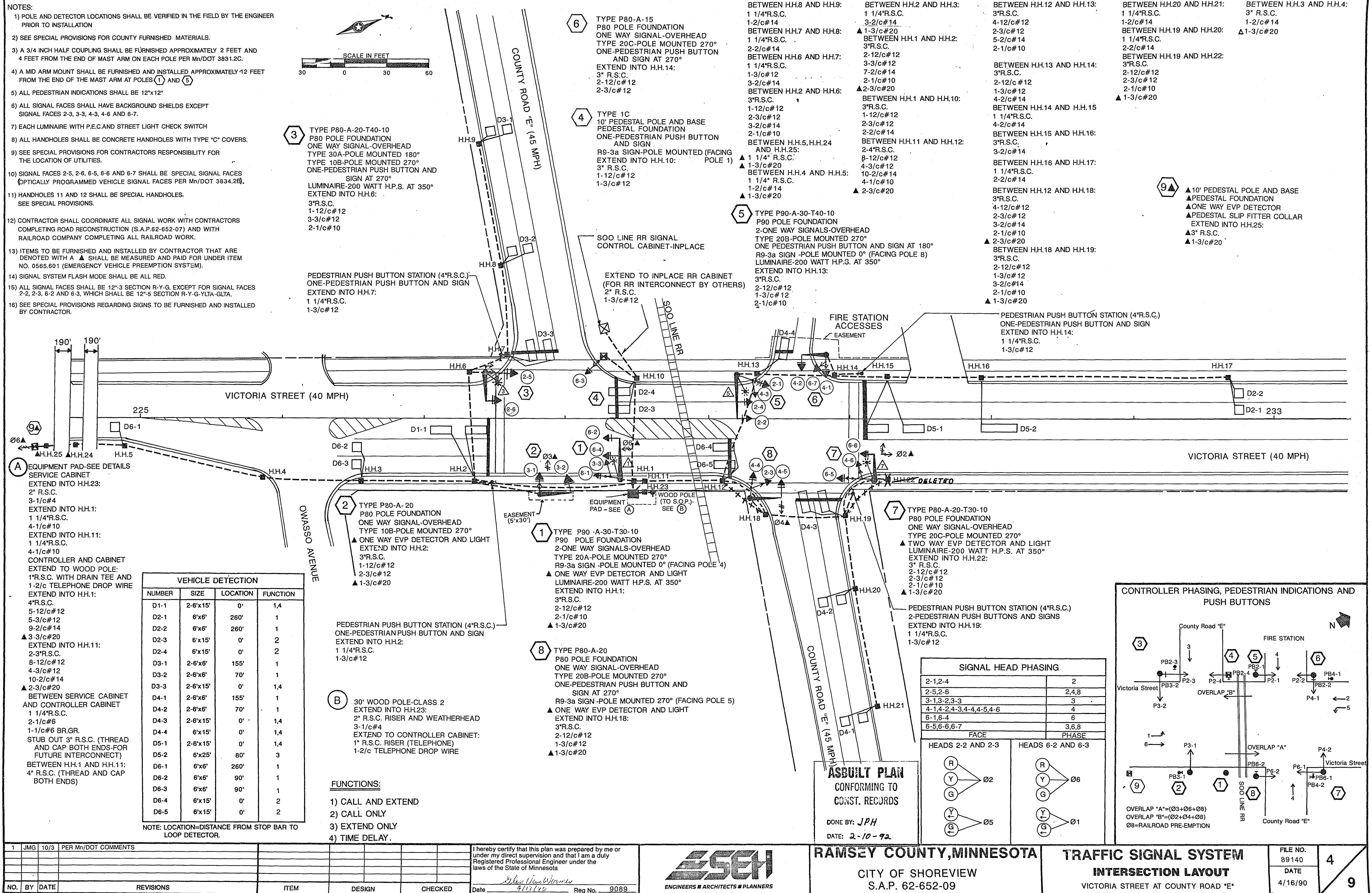
ES&H
ENGINEERS & ARCHITECTS & PLANNERS

RAMSEY COUNTY, MINNESOTA
CITY OF SHOREVIEW
S.A.P. 62-652-09

ESTIMATED QUANTITIES AND DETAILS

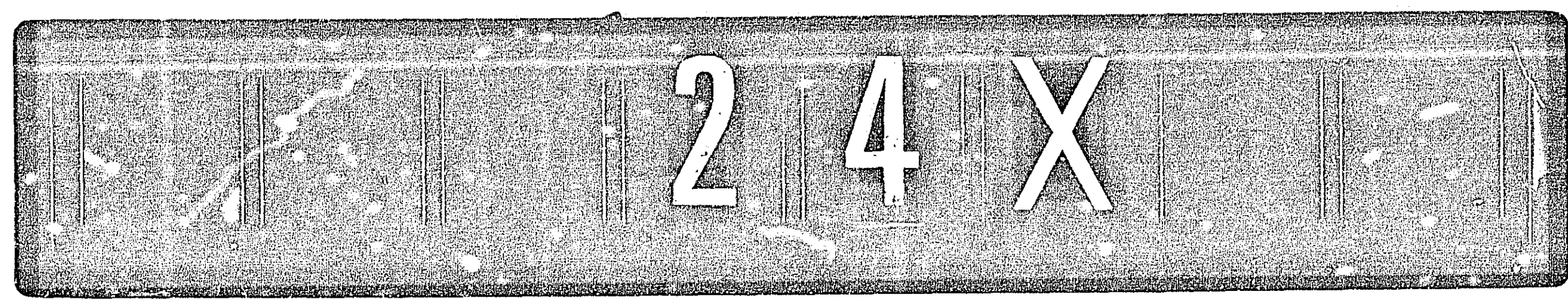
23-150 Victoria Street at Co Rd E
SAP 62-652-09 1/9

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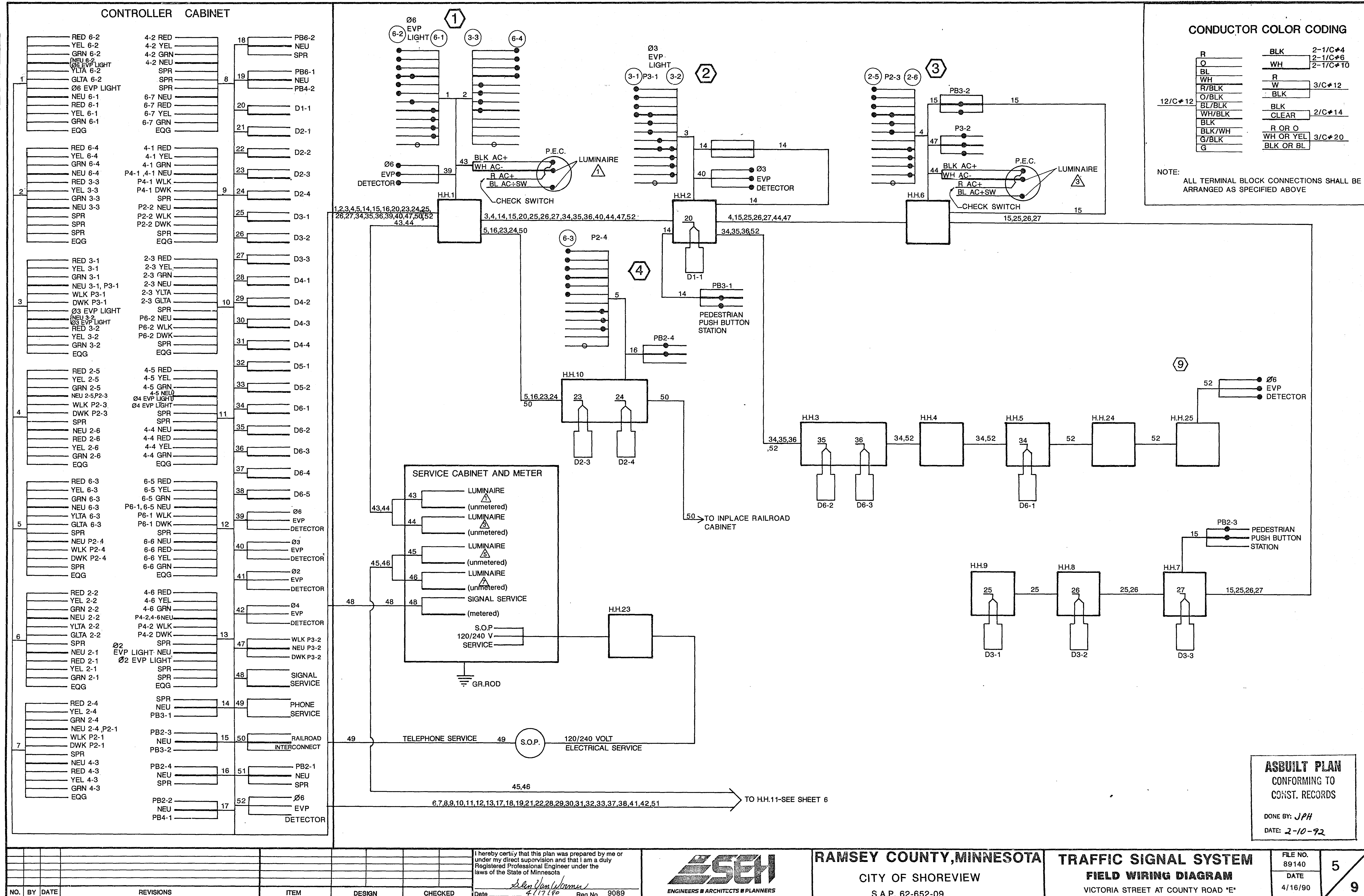


23-150 Victoria Street at Co Rd E
SAP 62-652-09

1/9



NOTE:
ALL TERMINAL BLOCK CONNECTIONS SHALL BE
ARRANGED AS SPECIFIED ABOVE



73-150

23-150 Victoria Street at Co Rd E
SAP 62-652-09 1/9

DRAWING

PLAN HOLD CORPORATION
REGISTERED BY ILLINOIS
REGISTERED BY ILLINOIS

BASE OVERLAY DRG. NO.

DRAWING NUMBER
23-150

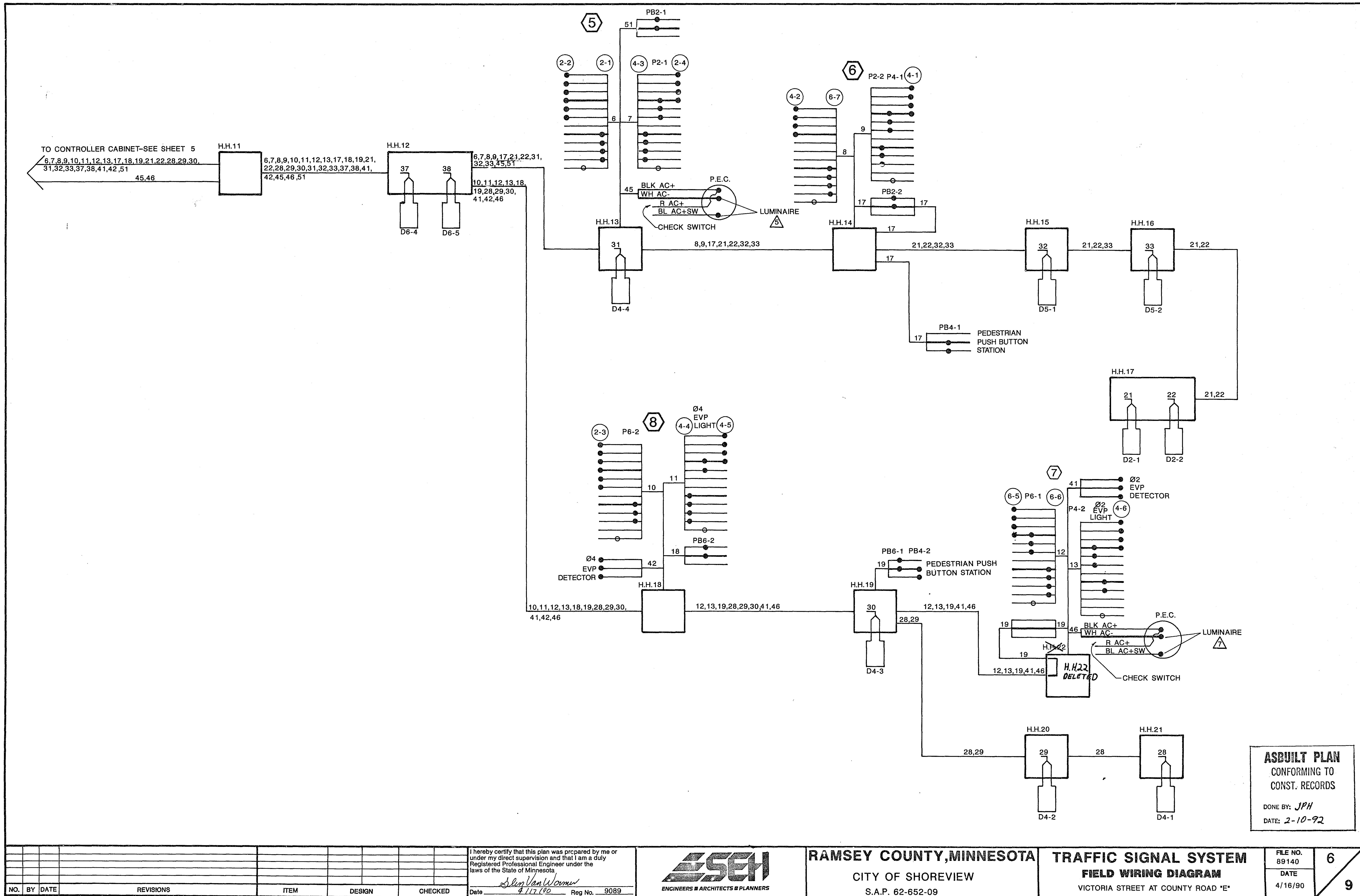
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REGISTERED BY ILLINOIS
REGISTERED BY ILLINOIS

DRAWING NUMBER

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REGISTERED BY ILLINOIS
REGISTERED BY ILLINOIS

NUMBER

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REGISTERED BY ILLINOIS
REGISTERED BY ILLINOIS



ASBUILT PLAN
CONFORMING TO
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DONE BY: JPH
DATE: 2-10-92

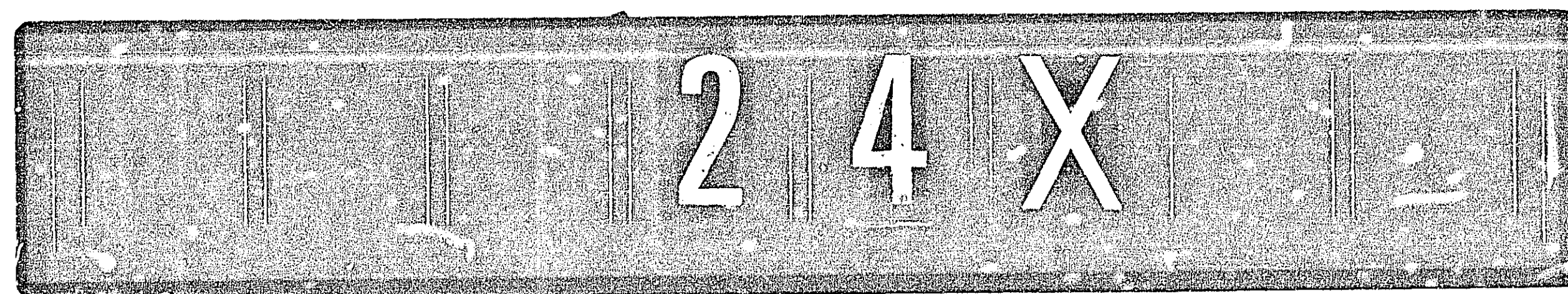
FILE NO.
89140
DATE
4/16/90

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23-150

23-150 Victoria Street at Co Rd E
SAP 62-652-09

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DRAWING

DRAWING NUMBER
23-150

DRAWING NUMBER

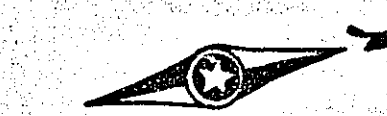
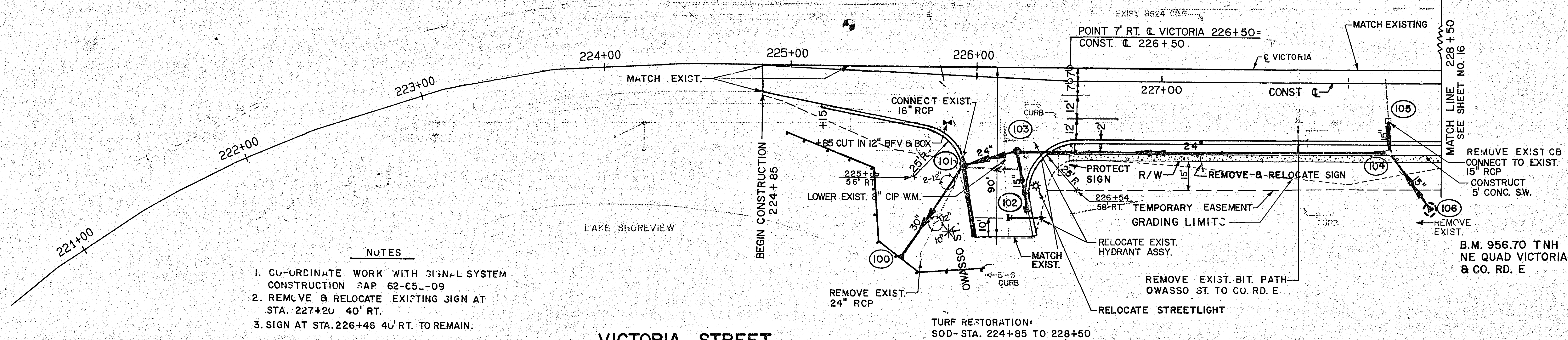
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POSITION: DATE OF PLANPLAN HOLD CORPORATION
RENDERED BY NUI
POSITION: DATE OF PLANPLAN HOLD CORPORATION
RENDERED BY NUI
POSITION: DATE OF PLANPLAN HOLD CORPORATION
RENDERED BY NUI
POSITION: DATE OF PLAN

BASE OVERLAY (ORC NO.)

FOR INFORMATION ONLY

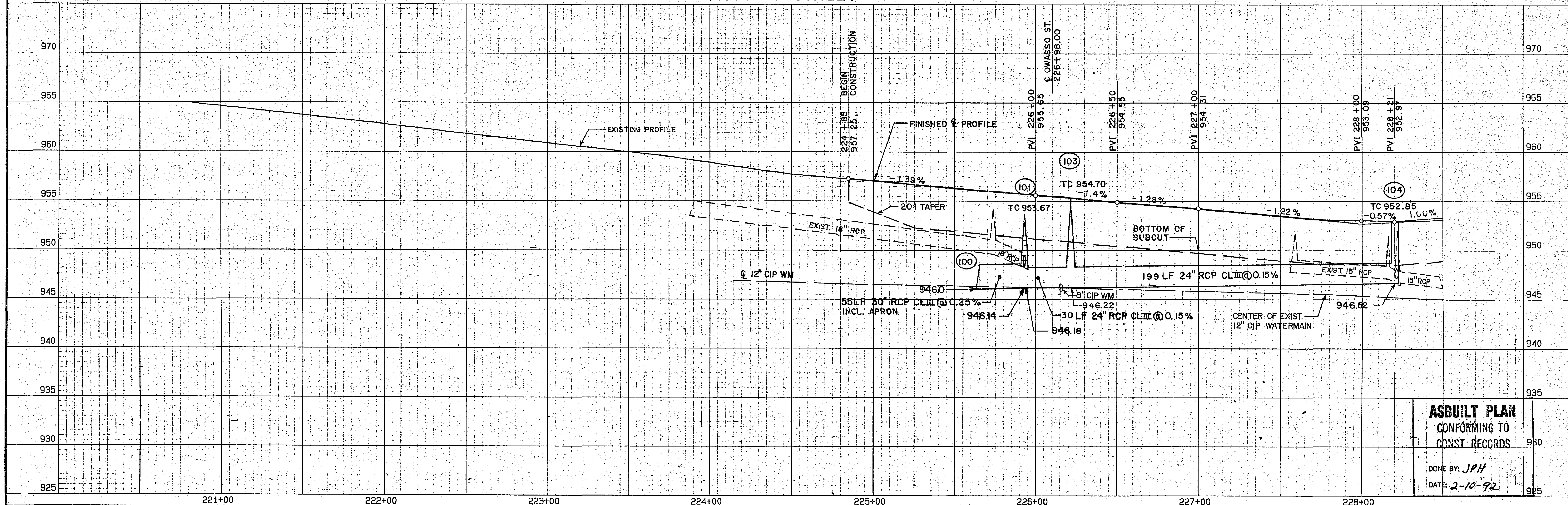
COUNTY RD. E

SCALE IN FEET
0 30 60

NOTES

1. CO-ORDINATE WORK WITH 31\"/>

VICTORIA STREET

ASBUILT PLAN
CONFORMING TO
CONST. RECORDSDONE BY: JPH
DATE: 2-10-92

NO.	BY	DATE	REVISIONS	ITEM	DESIGN	CHECKED

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Date: 2/28/92 Reg. No. 1046

SEH
ENGINEERS ■ ARCHITECTS ■ PLANNERSRAMSEY CO. MINNESOTA
VICTORIA STREETUTILITIES
PLAN & PROFILEFILE NO.
89140
DATE
4/16/907
9

S.A.P. 62-652-07 23-150

23-150 Victoria Street at Co Rd E
SAP 62-652-09

1/9

2-4-X

23-150 Victoria Street at Co Rd E
SAP 62-652-09 1/9

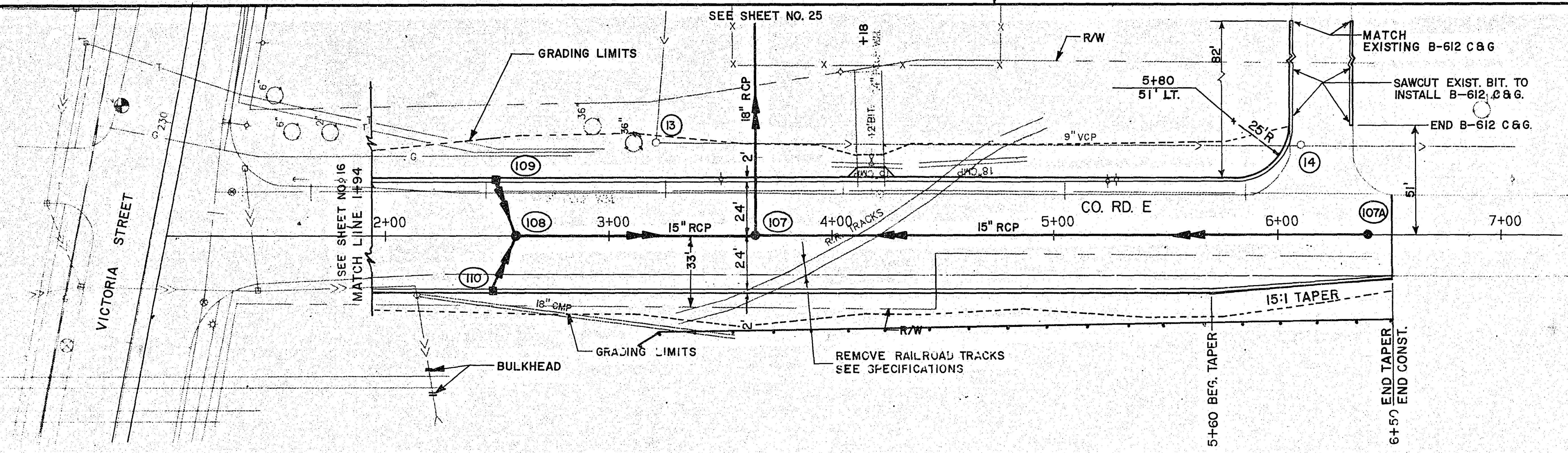
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23-150

DRAWING NUMBER
23-150

DRAWING NUMBER
23-150

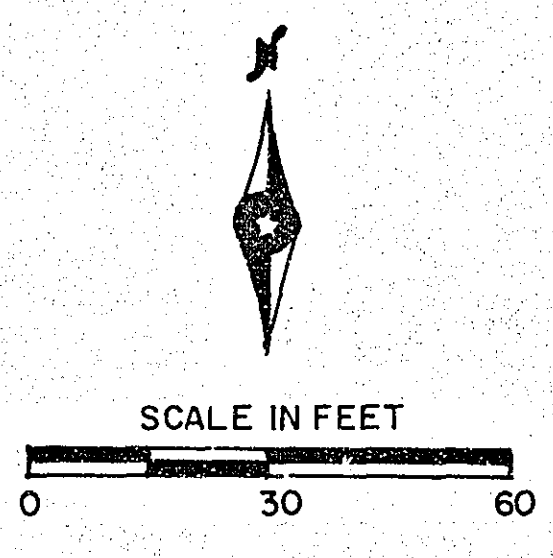
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FOR INFORMATION ONLY

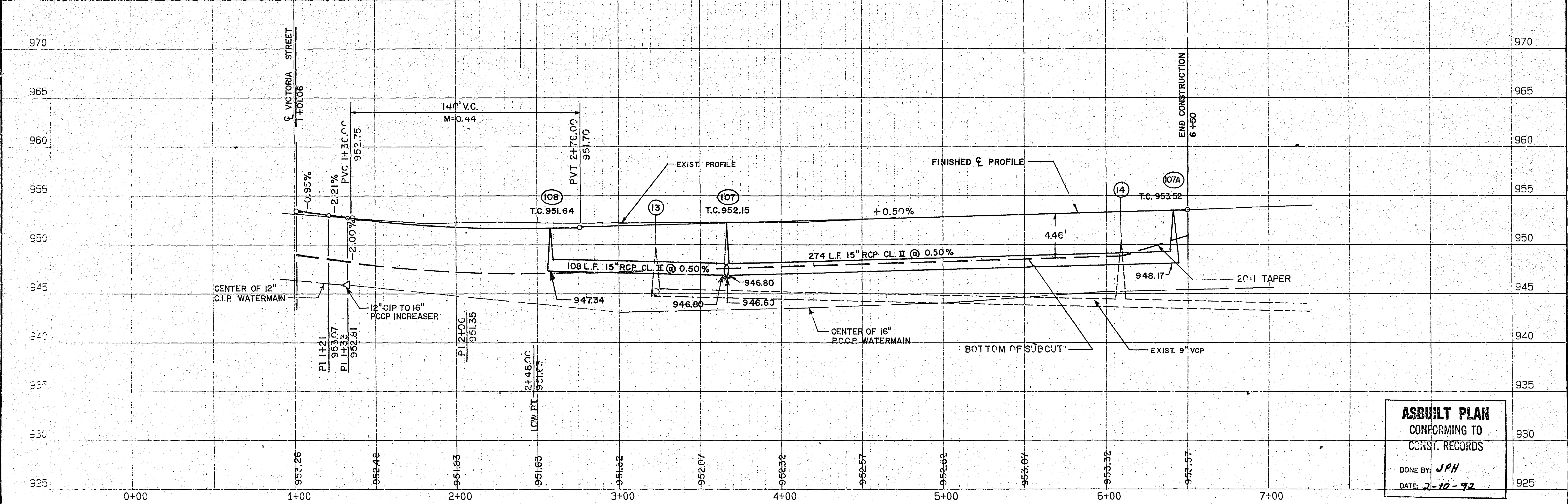
- NOTE:
- 1 - REMOVE EXISTING DILVERTS
 - 2 - CO-ORDINATE WORK WITH SIGNAL SYSTEM CONSTRUCTION S.A.P. # 62-652-09.

TURF RESTORATION:
SEED VICTORIA ST. TO STA. 6+50



B.M. 956.70 TNH
NE QUAD VICTORIA
S: CO. RD. E

COUNTY ROAD E



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: JPH
DATE: 2-10-92

NO. BY DATE				REVISIONS				ITEM				DESIGN				CHECKED			
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.				Date: 2/28/90				Reg. No. 9046				SEH				ENGINEERS ARCHITECTS PLANNERS			
RAMSEY CO. MINNESOTA				VICTORIA STREET				UTILITIES				PLAN & PROFILE				FILE NO. 89140			
																DATE 4/16/90			
																9			
																9			

S.A.P. 62-652-07

23-150 Victoria Street at Co Rd E
SAP 62-652-09
1/9

