

MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR GRADING, BASE, CURB & GUTTER & BITUMINOUS SURFACING

LOCATED ON C.S.A.H. 17 (LEXINGTON) FROM I-35W WEST RAMP TO 109th AVE. N.E.

STATE PROJ. NO. 02-617-06
 MINN. PROJ. NO. _____
 GROSS LENGTH 2280.5 FEET 0.432 MILES
 BRIDGES-LENGTH - FEET - MILES
 EXCEPTIONS-LENGTH - FEET - MILES
 NET LENGTH - FEET - MILES
 MILE POINT - TO MILE POINT -

STATE PROJ. NO. _____
 MINN. PROJ. NO. _____
 GROSS LENGTH _____ FEET _____ MILES
 BRIDGES-LENGTH _____ FEET _____ MILES
 EXCEPTIONS-LENGTH _____ FEET _____ MILES
 NET LENGTH _____ FEET _____ MILES
 MILE POINT _____ TO MILE POINT _____

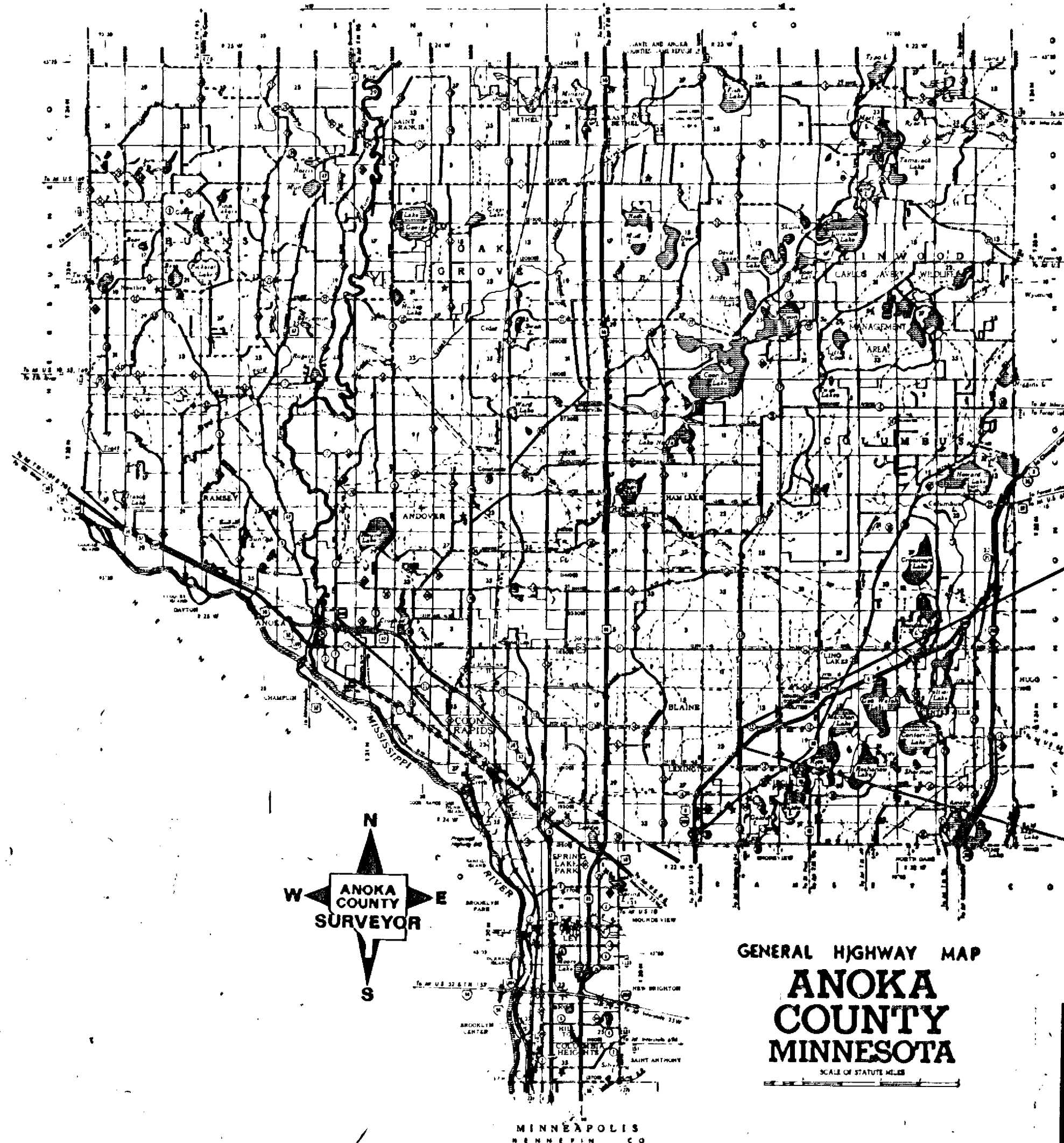
FED. PROJ. NO. _____

GOVERNING SPECIFICATIONS

THE 1983 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATION FOR CONSTRUCTION" AND SUPPLEMENTAL SPECIFICATIONS, DATED JUNE 10, 1986, SHALL GOVERN

INDEX

- 1 - TITLE SHEET
- 2 - ESTIMATED QUANTITIES, DETAIL TAB & TYPICAL SECTION
- 3 - ALIGNMENT, SIGNING & STRIPING SHEET
- 4 - DETAILS
- 5-7 - PLAN & PROFILE SHEETS
- 8-11 - CROSS SECTION
- 12-14 - TRAFFIC CONTROL PLAN
- 15 - RELOCATE LIGHTING UNIT



END PROJECT S.A.P. 02-617-06
 P.O.T. STA. 22+80.5

BEGIN PROJECT S.A.P. 02-617-06
 P.O.T. STA. 0+00

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 _____ REG. NO. 7285 ENGR. *Robert D. Frigaard*
 ROBERT D. FRIGAARD P.E.

Recommended for Approval *Robert D. Frigaard* June 5, 1987
 CITY ENGINEER

Right of Way Approval _____ 19____

Recommended for Approval _____ 19____

Recommended for Approval _____ 19____

Recommended for Approval *C.C. Weickelbaum* 6/15/87
 DISTRICT ENGINEER

Recommended for Approval _____ 19____

Recommended for Approval *Julia Skallman* 6/30/87
 PLANS & SPECS ENGINEER

Approved *7/1/87* *Stanley W. Day*
 STATE AID ENGINEER

Approved *June 5, 1987* *Paul K. Lund*
 COUNTY ENGINEER

DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 APPROVED _____
 DIVISION ADMINISTRATOR DATE

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF THIS PLAN WERE MADE 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 *ROBERT D. FRIGAARD* P.E. REG. NO. 7285

SCALE
 INDEX MAP 2.00 MI.
 PLAN & PROFILE } HORIZ. 50 ft.
 } VERT. 5 ft.
 CROSS SECTIONS 10 ft.
 SIGNAL N.A.

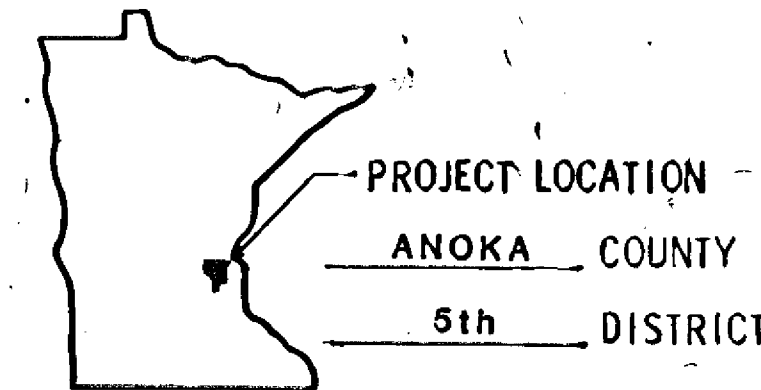
DESIGN DATA

9 TON DESIGN
 R - VALUE = .55 G.E. 20.88
 Z N18-986,935
 = 8.115 Design Speed 50 MPH
 = 12.175 Based on 475 ft Sight Distance
 = Height of eye 3.50' Height of object 0.50'
 = % Design Speed not achieved at:
 = % STA. TO STA. MPH
 = STA. TO STA. MPH

OSM CONSULTING ENGINEERS LAND SURVEYORS
ORR-SCHELEN-MAYERON AND ASSOCIATES, INC.
 Division of KIDDE Consultants, Inc.
 2021 EAST HENNEPIN AVENUE - SUITE 238
 MINNEAPOLIS, MINNESOTA 55413
 TELEPHONE: 612-331-8660

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

STATE PROJ. NO.	AREA	JOB



PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

ADT (Current Year)
 ADT (Future Year)
 DHV (Design Hr. Vol.)
 D (Directional Distr.)
 T (Heavy Commercial)
 Soil Factor

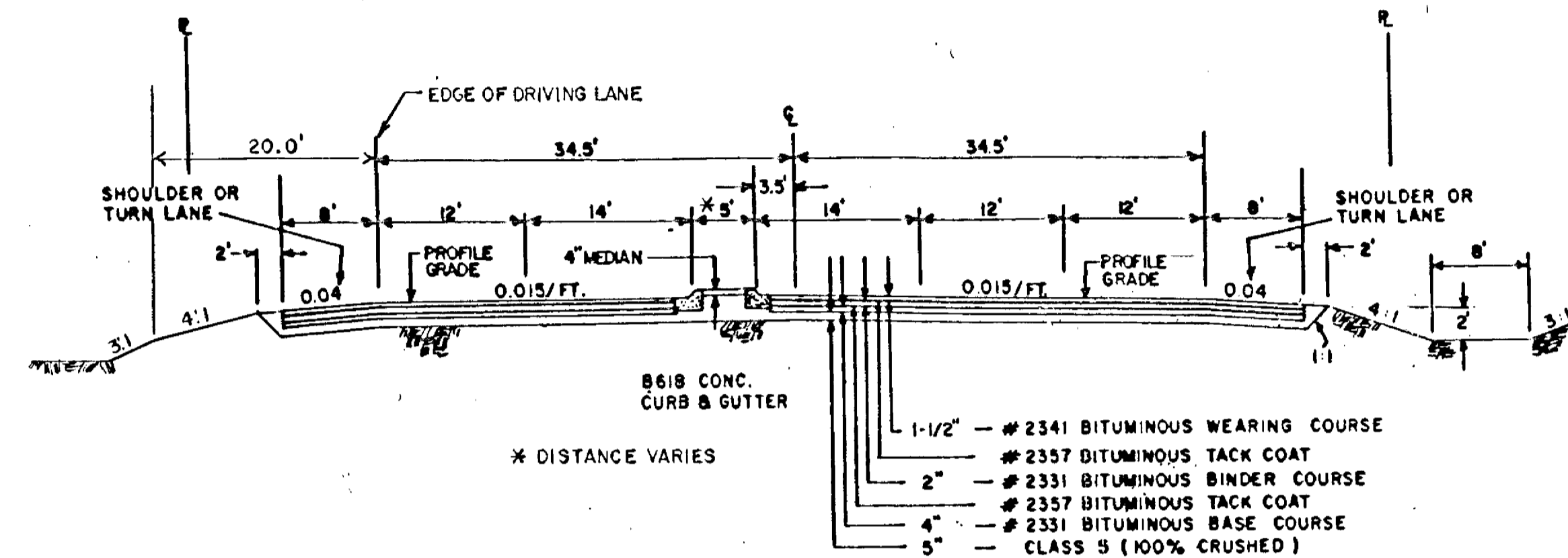
STATE AID PROJ. NO. 02-617-06 COUNTY PROJ. NO. _____
 STATE PROJ. NO. _____ SHEET NO. 1 OF 15 SHEETS

S.A.P. 02 - 617 - 06				
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	FINAL QUANTITIES
2021.501	MOBILIZATION	LUMP SUM	1	
2101.502	CLEARING	TREE	12	
2101.507	GRUBBING	TREE	12	
2104.501	REMOVE PIPE (ALL SIZES)	LIN FT	185	
2104.501	REMOVE CURB AND GUTTER	LIN FT	60	
0104.606	RELOCATE FENCE	LIN FT	647	
2104.505	REMOVE CONCRETE PAVEMENT, DRIVE, MED.	SQ YD	400	
2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	6450	
2105.501	COMMON EXCAVATION	CU YD	4500	
2105.521	GRANULAR BORROW (LV)	CU YD	12300	
2211.501	AGGREGATE BASE, CLASS 5, 100% CRUSHED	TON	6250	
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	346	
2331.510	BINDER COURSE MIXTURE	TON	2400	
2331.514	BASE COURSE MIXTURE	TON	4800	
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	109	
2341.508	WEARING COURSE MIXTURE	TON	1780	
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	1900	
0331.603	SAW INPLACE BITUMINOUS (FULL DEPTH)	LIN FT	105	
2501.515	15" R.C. PIPE APRON	EACH	4	
2503.541	15" R.C.P CLASS IV PIPE			
	-SEWER, DESIGN 3006	LIN FT	40	
2531.501	CONCRETE CURB & GUTTER			
	-DESIGN B-618	LIN FT	2556	
2531.503	4" CONCRETE MEDIAN	SQ YD	985	
2531.503	6" CONCRETE MEDIAN	SQ YD	70	
0301.604	SAWING CONCRETE PAVEMENT(FULL DEPTH)	LIN FT	185	
DIV. II	SODDING	SQ YD	1000	
DIV. II	SEEDING	ACRE	2.5	
0563.601	TRAFFIC CONTROL	LUMP SUM	1	
0564.601	PAVEMENT MARKING	LUMP SUM	1	
0564.601	SIGNING	LUMP SUM	1	
0575.603	EROSION CONTROL BARRIER	LIN FT	700	
0104.601	RELOCATE LIGHTING UNIT	LUMP SUM	1	

BASIS OF PLANNED QUANTITIES

- 2331 PLANT MIXED BASE COURSE
BITUMINOUS MIXTURE 110 LBS./S.Y. PER 1" THICKNESS
BITUMINOUS MATERIAL FOR MIXTURE 4.8% BY WT.
- 2331 PLANT MIXED BINDER COURSE
BITUMINOUS MIXTURE 110 LBS./S.Y. PER 1" THICKNESS
BITUMINOUS MATERIAL FOR MIXTURE 4.8% BY WT.
- 2341 PLANT MIXED WEARING COURSE
BITUMINOUS MIXTURE 110 LBS./S.Y. PER 1" THICKNESS
BITUMINOUS MATERIAL FOR MIXTURE 6.2% BY WT.
- 2357 BITUMINOUS MATERIAL FOR TACK COAT 0/05 GAL PER S.Y.

NOTE: (TYPICAL)
WITHIN AN AREA 20' FROM THE EDGE OF THE DRIVING LANE THE
SIDE SLOPE TO BE 4:1 WITH 3:1 SLOPE THEREAFTER



TYPICAL SECTION
(NO SCALE)

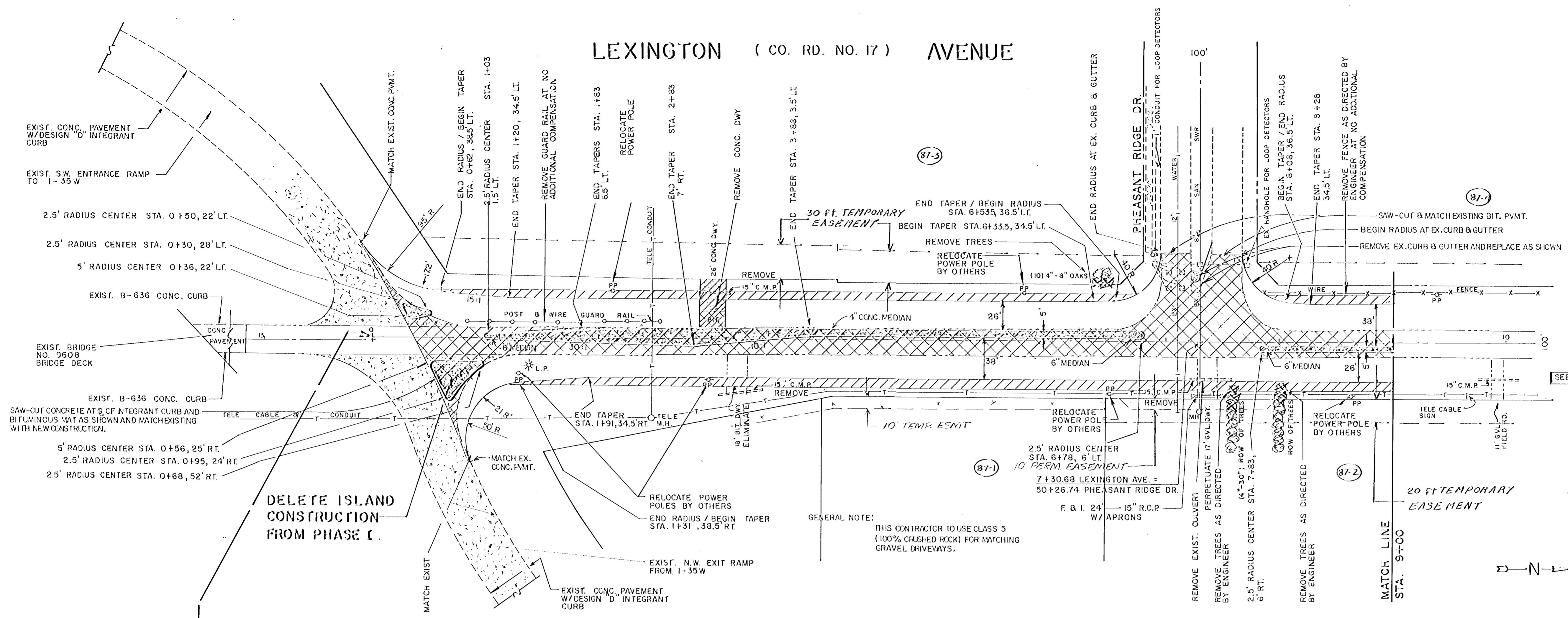
STANDARD PLATES	
PLATE NO.	DESCRIPTION
0004 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3006 F	GASKET JOINT FOR R.C. PIPE
3100 G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
7100 F	CONCRETE CURB AND GUTTERS (DESIGNS B & V)
7109 A	MEDIAN NOSE (UNDIVIDED TO DIVIDED ROADWAY)
8000 I	STANDARD BARRICADES
8127 A	LIGHT BASE - DESIGN E
20	GROUND POST AND ISLAND POST DETAIL
42	EROSION CONTROL BARRIER
9000 B	APPROACHES & ENTRANCES

GENERAL NOTE

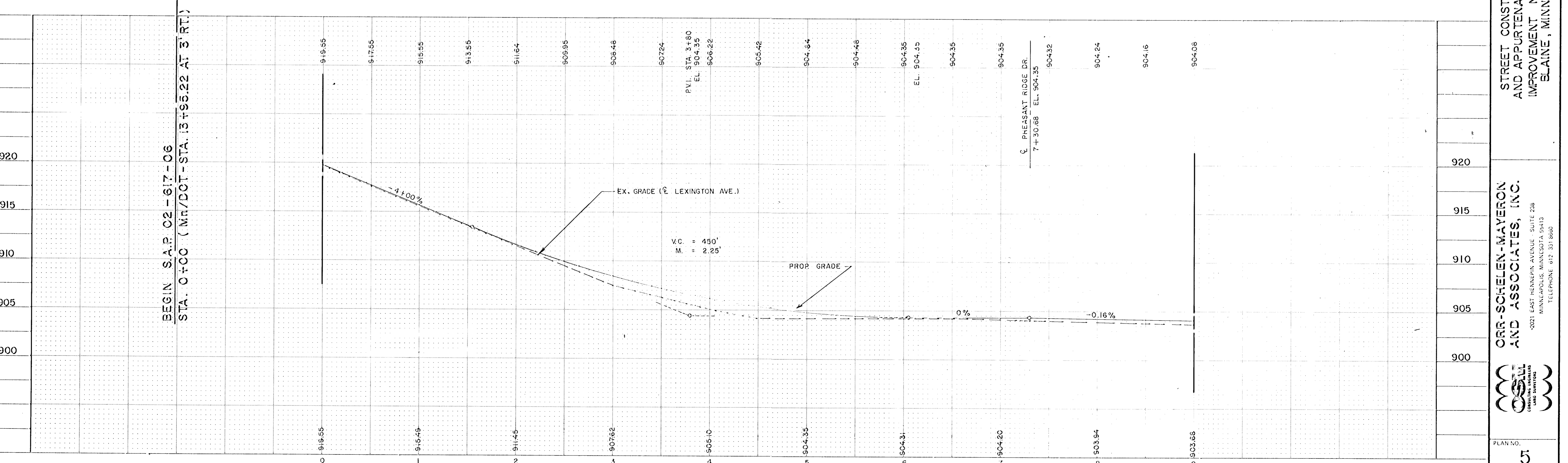
THE CONTRACTOR SHALL REMOVE SUFFICIENT TOPSOIL MATERIAL WITHIN THE EXCAVATION AREAS AND AREAS ON WHICH EMBANKMENTS WILL BE PLACED, STOCKPILE IF NECESSARY, AND USE IT FOR TOPSOIL COVERING ON THE NEW SLOPES AND DITCH BOTTOMS. THIS WILL BE CONSIDERED AS COMMON EXCAVATION.

REVISION NO.		EXPLANATION					
PLAN BY: R. G. D.	DESIGN BY: M. R. H.	CHECKED BY: J. A. H.	COMING NO.:	RECORD COPY BY:	DATE		
<small>I HEREBY CERTIFY THAT THE PLAN SPECIFICATIONS OR REPORT THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</small> ROBERT D. FRAGAARD P.E. <small>NO. 11,452, EXPIRES 7-2-85</small>							
ESTIMATED QUANTITIES				& TYPICAL SECTIONS			
ORR-SCHELEN-MAYERON AND ASSOCIATES, INC. <small>2021 EAST HENNEPIN - SUITE 238 MINNEAPOLIS, MINNESOTA 55413 TELEPHONE 612-331-8660</small>							
2							

LEXINGTON (CO. RD. NO. 17) AVENUE

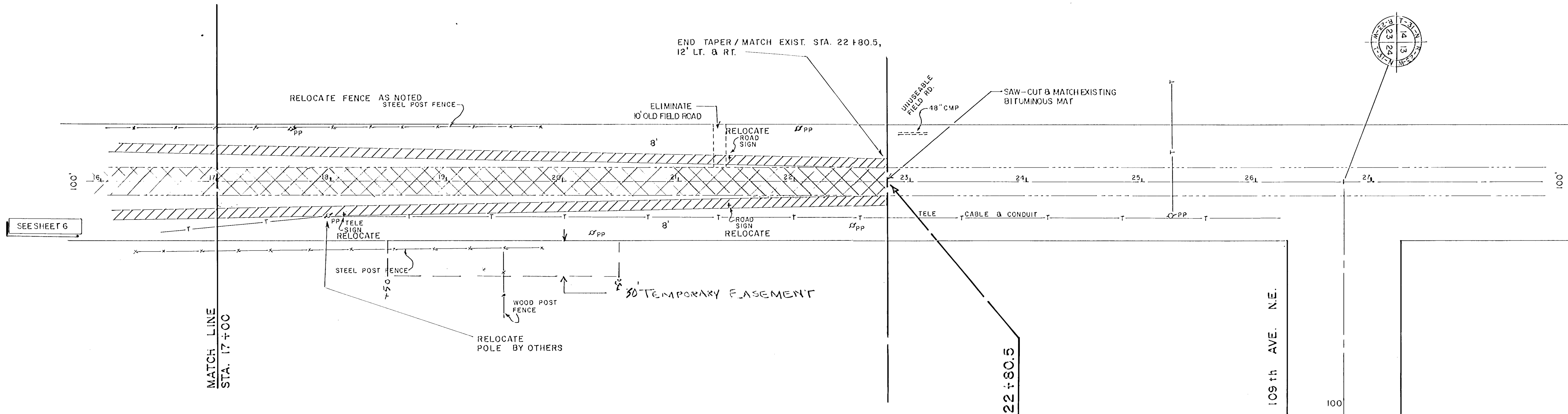
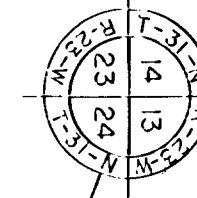
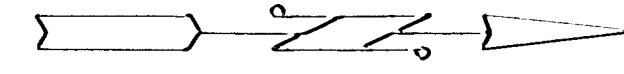


GENERAL NOTE: THIS CONTRACTOR TO USE CLASS 5 (100% CRUSHED ROCK) FOR MATCHING GRAVEL DRIVEWAYS.



BEGIN S.A.P. 02-617-06
 STA. 0+00 (Mn/DOT - STA. 13+95.22 AT 3' RT.)

REVISION NO. _____ DATE _____	SCALE: HORIZ. 1" = 50' VERT. 1" = 5' PLAN BY: R. G. D. CHECKED BY: J. A. H. DATE: 3/9/61	PROJECT NO. 87-07 SHEET NO. 5 OF 15 SHEETS	STREET CONSTRUCTION AND APPURTENANT WORK IMPROVEMENT NO. 87-07 BLAINE, MINNESOTA
ORR-SCHELEN-WAYRON AND ASSOCIATES, INC. 2021 EAST HENNEPIN AVENUE - SUITE 238 MINNEAPOLIS, MINNESOTA 55413 TELEPHONE: 612 331 8660			

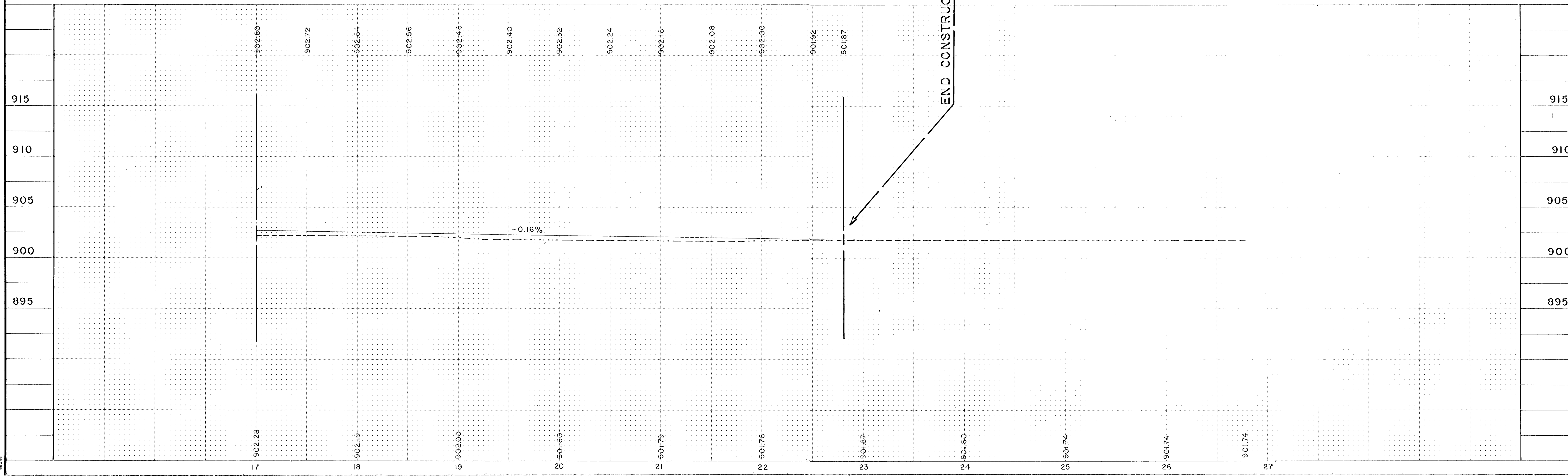


SEE SHEET 6

MATCH LINE
STA. 17+00

END CONSTRUCTION STA. 22+80.5

109th AVE. N.E.



	<p>ORR-SCHEELEN-MAYERON AND ASSOCIATES, INC. 2021 EAST HENRIK AVENUE SUITE 238 MINNEAPOLIS, MINNESOTA 55413 TELEPHONE 612-331-8600</p>	<p>STREET CONSTRUCTION AND APPURTENANT WORK IMPROVEMENT NO. 87-07 BLAINE, MINNESOTA</p>	<p>SCALE: HOR. 1" = 50' VERT. 1" = 5' DESIGNED BY: R. G. D. M. R. H. CHECKED BY: J. A. H. DRAWN BY: J. A. H. DATE: 12-14-72</p>	<p>EXPLANATION</p>
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E

3+00

(907.6)

2+50

(909.4)

2+00

(911.5)

1+50

(913.5)

1+00

(915.5)

0+29
(913.9)

0+25
(918.71)

E

0+00
7+155

SECTION CUR. 25/27

EXIT RAMP FROM 25W

ENTRANCE RAMP TO 25W

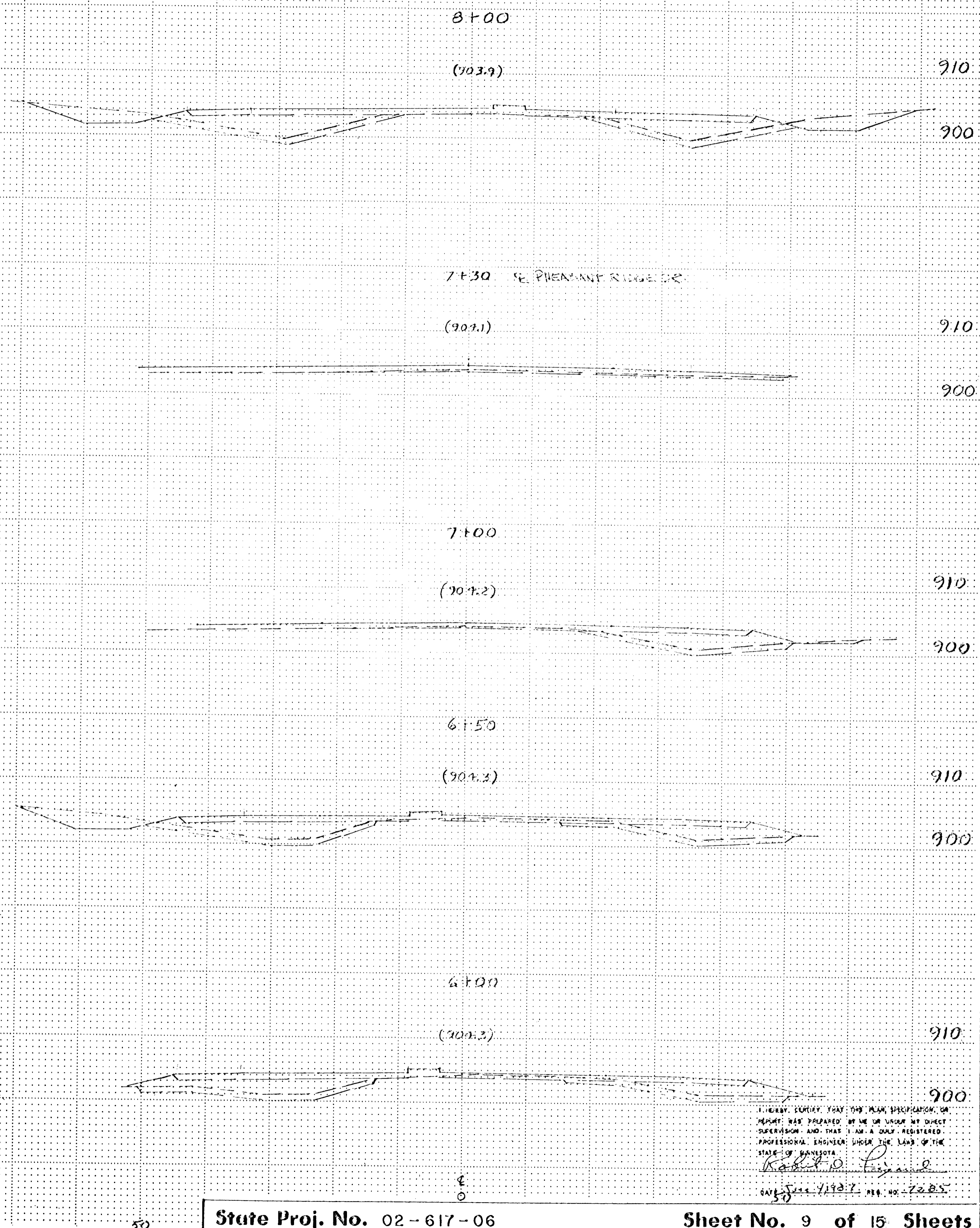
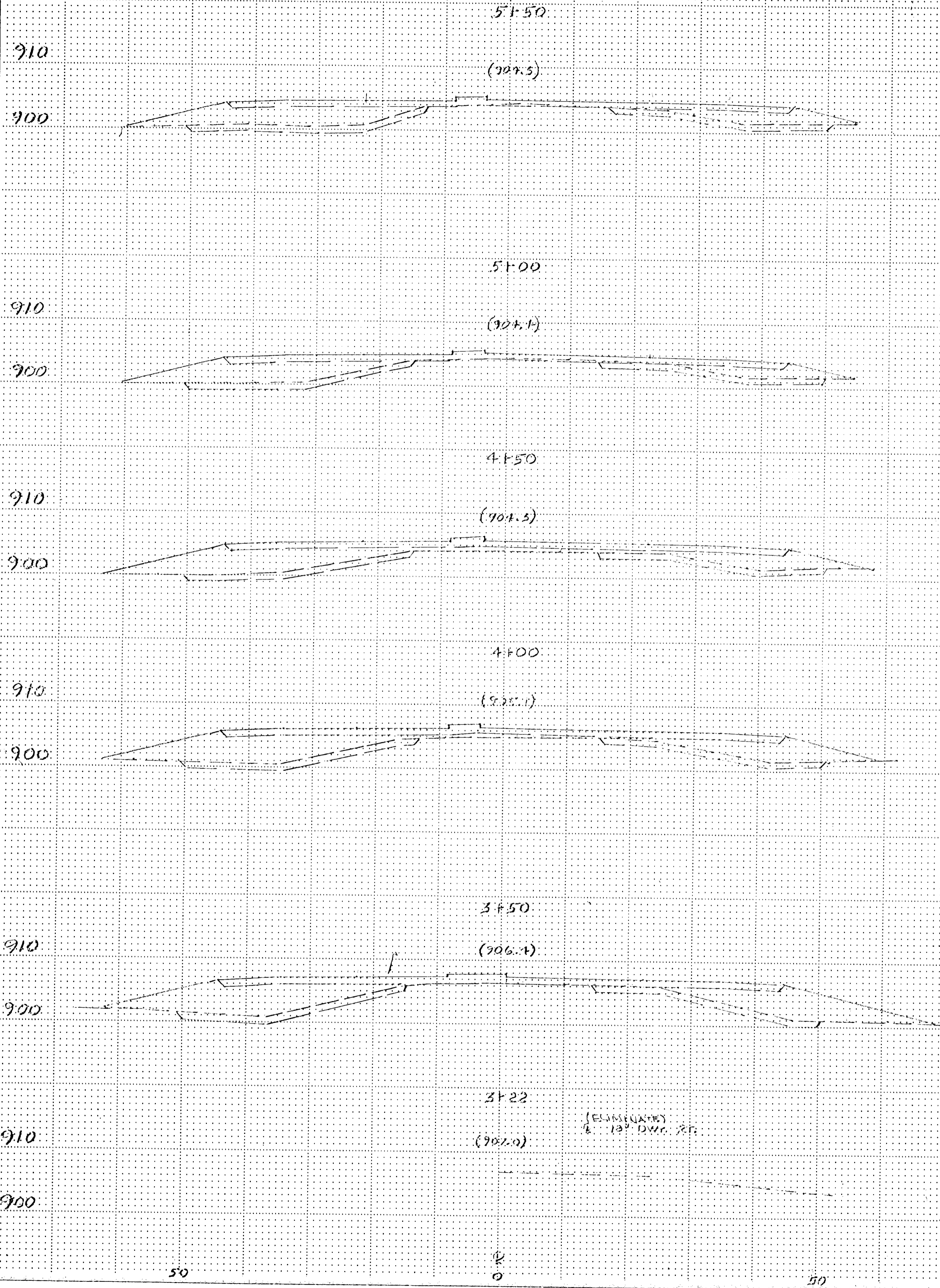
3% (TYP)

4% (TYP)

4% (TYP)

3% (TYP)

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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 MISSISSIPPI.
Robert W. Lyman
DATE June 1, 1936 REG. NO. 7285

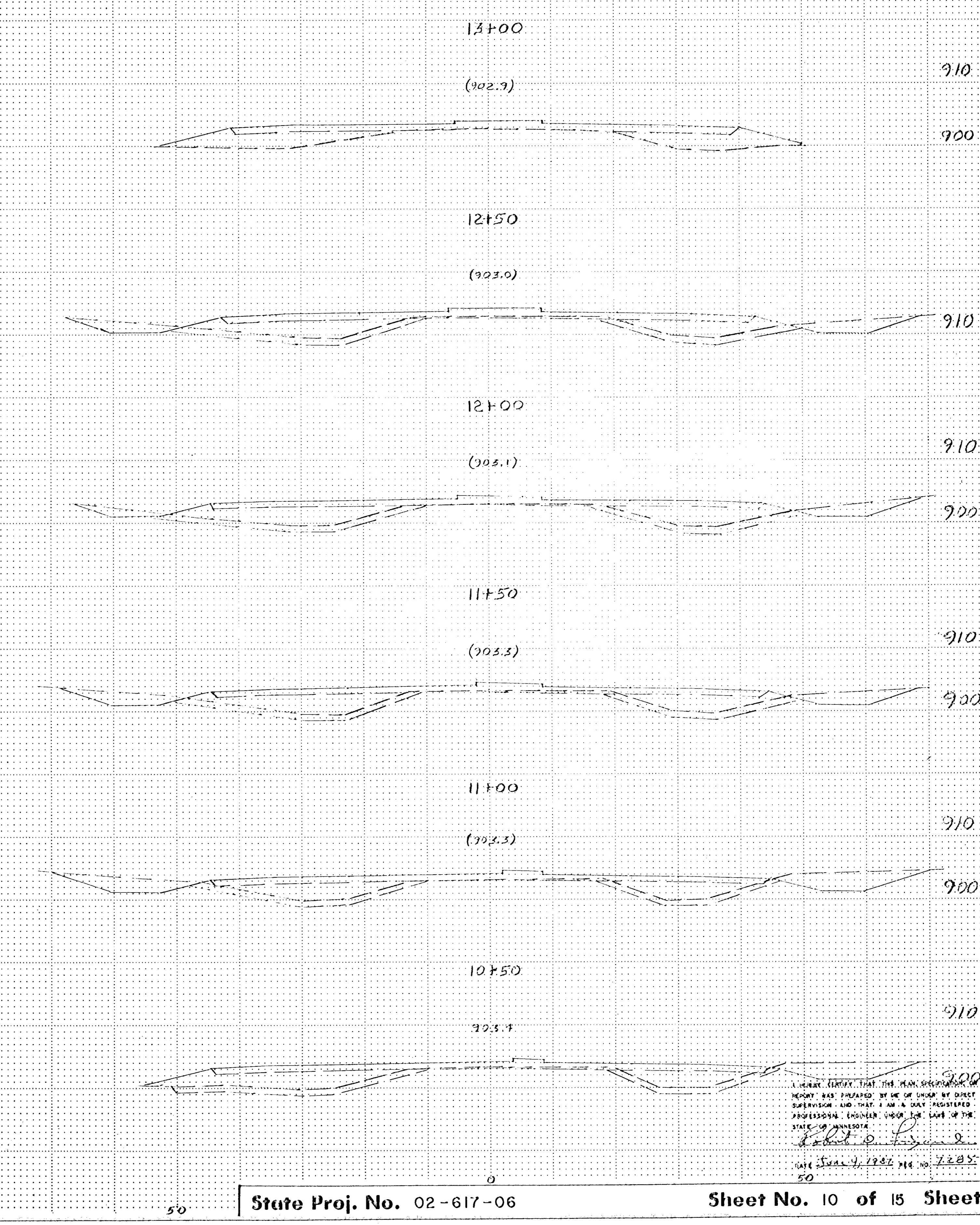
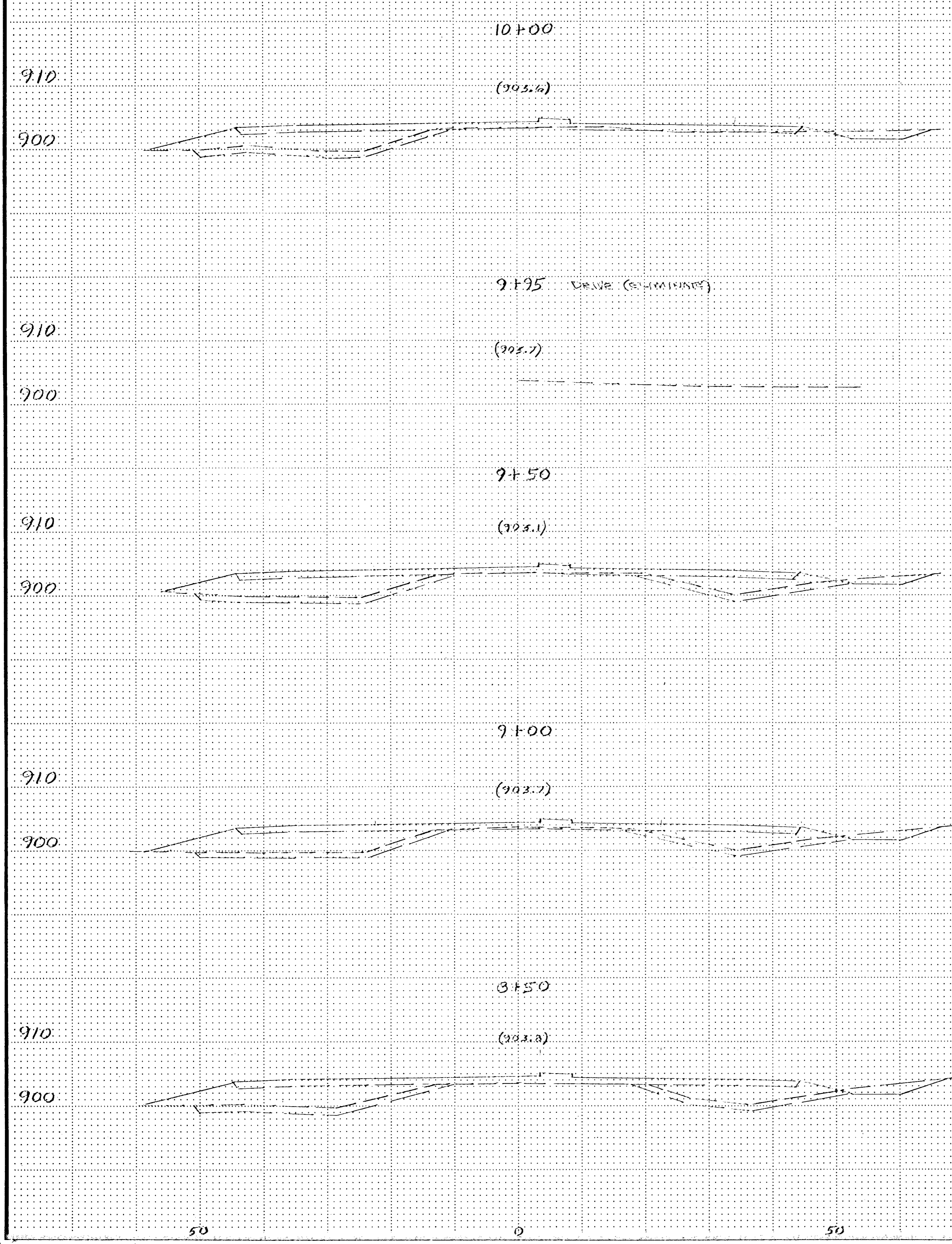


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Robert O. Peterson

DATE: June 11, 1987 REG. NO. 2285

COPY EQUIPMENT FORM #1

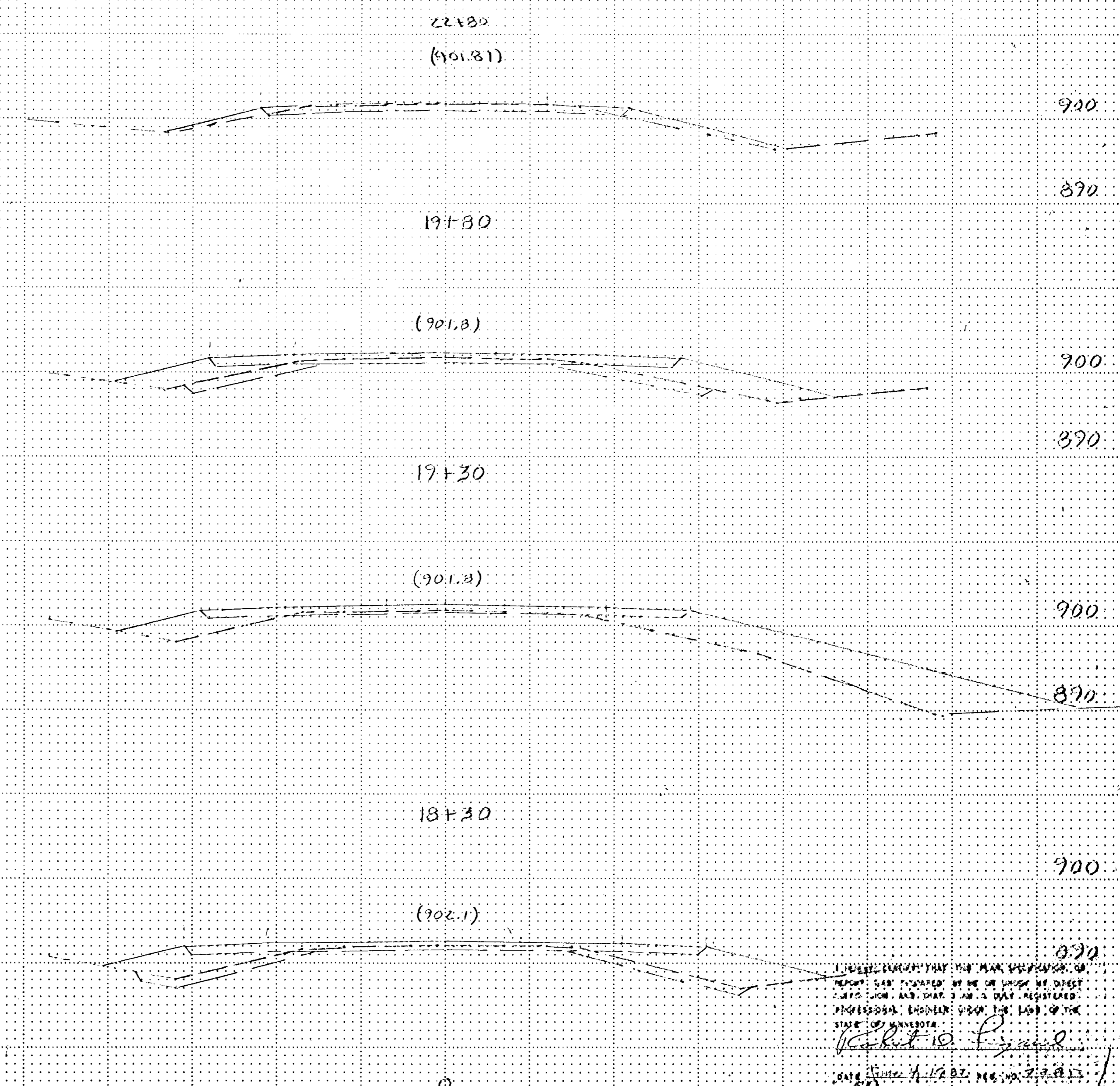
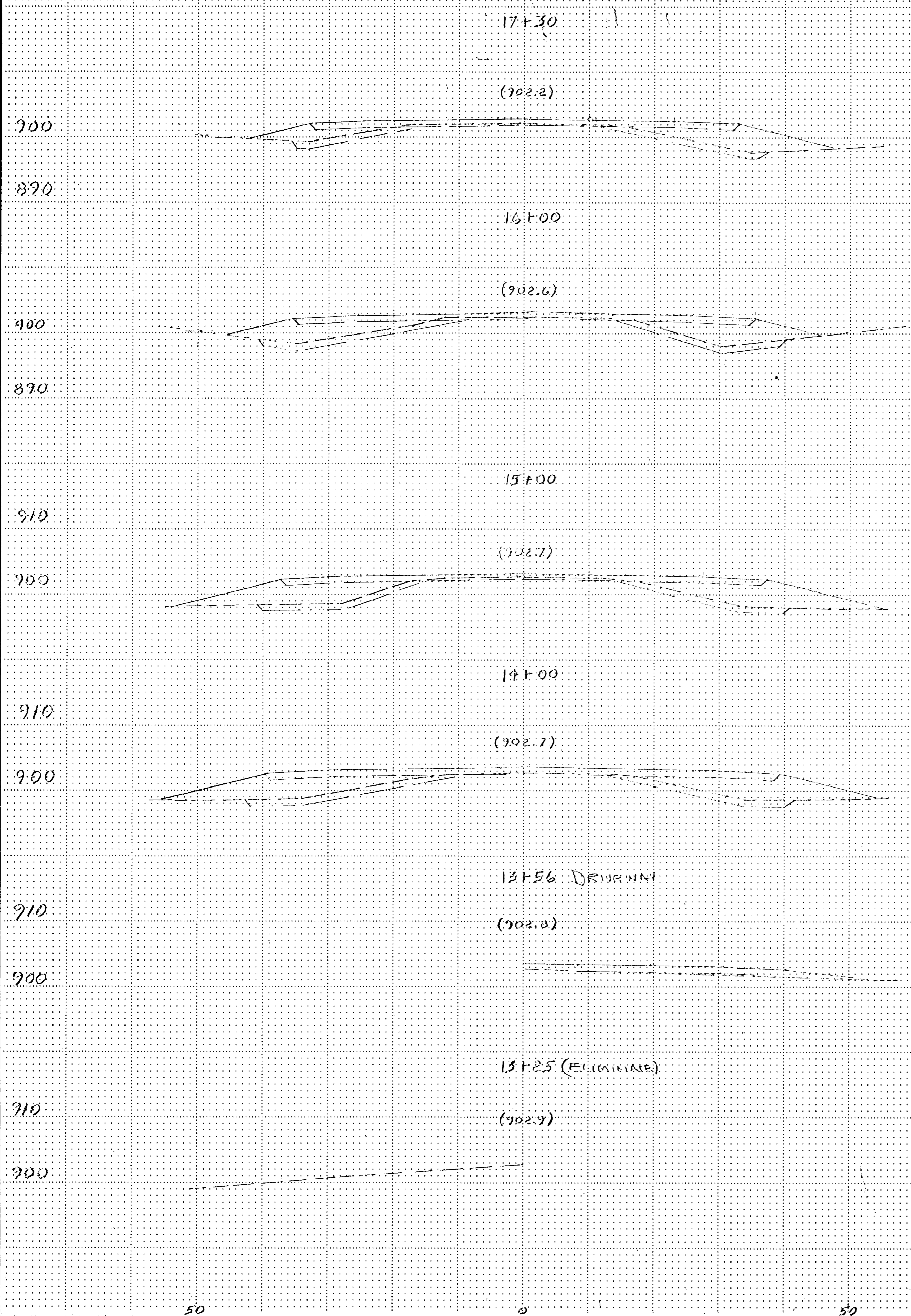


I HEREBY CERTIFY THAT THE PLAN SPECIFICATIONS AND REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Robert P. Lyman

DATE: June 4, 1966 REG. NO. 72035

COPY EQUIPMENT FORM #1



I HEREBY CERTIFY THAT THE MAN SIGNING THIS REPORT WAS PRESENT AT THE TIME THE DATA WERE OBTAINED AND THAT I AM A REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Robert H. Lyman

DATE: *June 4, 1962* P.M. OR 2:28 P.M.

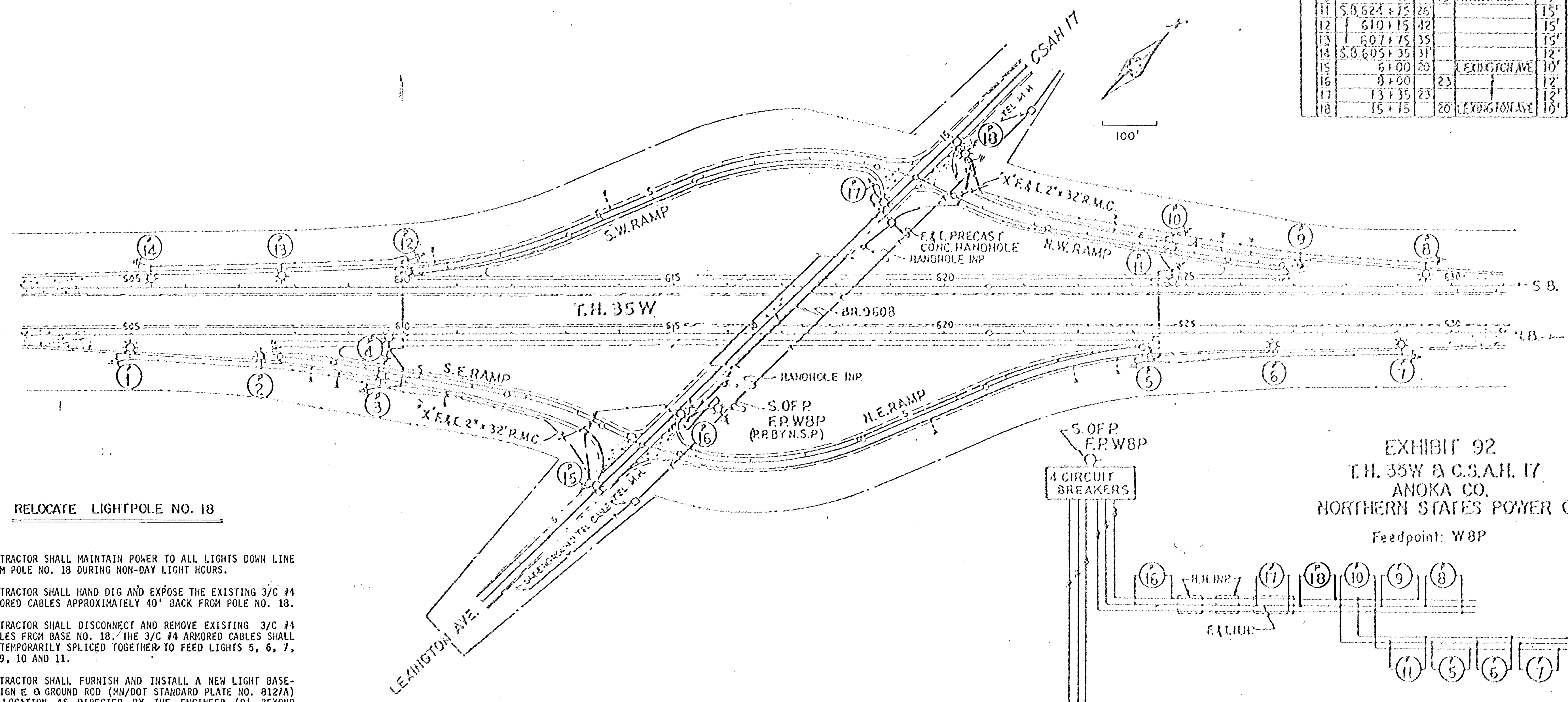
COPY EQUIPMENT FORM #1

F.P.WBP

LIGHTING STANDARDS & BASES					
NO	STATION	LT	RT	LOCATION	MAST ARM
1	NB. 605+00	38			15'
2	NB. 607+40	53			15'
3	4+30	18		S.E. RAMP	4'
4	NB. 609+75	26			15'
5	1 624+25	42			15'
6	1 626+65	35			15'
7	NB. 629+05	31			12'
8	SB. 629+55	38			15'
9	SB. 627+15	53			15'
10	4+40	18		N.W. RAMP	4'
11	S.B. 624+75	26			15'
12	1 610+15	42			15'
13	1 607+75	35			15'
14	S.B. 605+35	31			12'
15	6+00	20		LEXINGTON AVE	10'
16	8+00	23			12'
17	13+35	23			12'
18	15+15	20		LEXINGTON AVE	10'

N.S.P. AREA MAP NO. 347

BLAINE



RELOCATE LIGHTPOLE NO. 18

1. CONTRACTOR SHALL MAINTAIN POWER TO ALL LIGHTS DOWN LINE FROM POLE NO. 18 DURING NON-DAY LIGHT HOURS.
2. CONTRACTOR SHALL HAND DIG AND EXPOSE THE EXISTING 3/C #4 ARMORED CABLES APPROXIMATELY 40' BACK FROM POLE NO. 18.
3. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING 3/C #4 CABLES FROM BASE NO. 18. THE 3/C #4 ARMORED CABLES SHALL BE TEMPORARILY SPLICED TOGETHER TO FEED LIGHTS 5, 6, 7, 8, 9, 10 AND 11.
4. CONTRACTOR SHALL FURNISH AND INSTALL A NEW LIGHT BASE-DESIGN E & GROUND ROD (MN/DOT STANDARD PLATE NO. 8127A) IN LOCATION AS DIRECTED BY THE ENGINEER (9' BEYOND ROADWAY SURFACE IN SAME GENERAL LOCATION).
5. CONTRACTOR SHALL RELOCATE EXISTING POLE NO. 18 ON NEW BASE AND RE-CONNECT EXISTING 3/C #4 ARMORED CABLES.
6. CONTRACTOR SHALL REMOVE ORIGINAL LIGHT BASE NO. 18.
7. ANY DAMAGE TO THE EXISTING 3/C #4 ARMORED CABLE SHALL REQUIRE THE CONTRACTOR TO INSTALL NEW 3/C #4 ARMORED CABLE FROM POLE 17 THROUGH POLE 18 TO POLE 10 AND ALSO REQUIRE NEW 3" R.S.C. (WITH BRUSHINGS) EXTENDING AT LEAST 1 FOOT BEYOND THE ROADWAY TO CROSS LEXINGTON AVENUE AND THE N.W. RAMP.

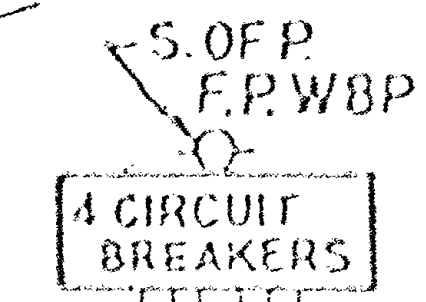
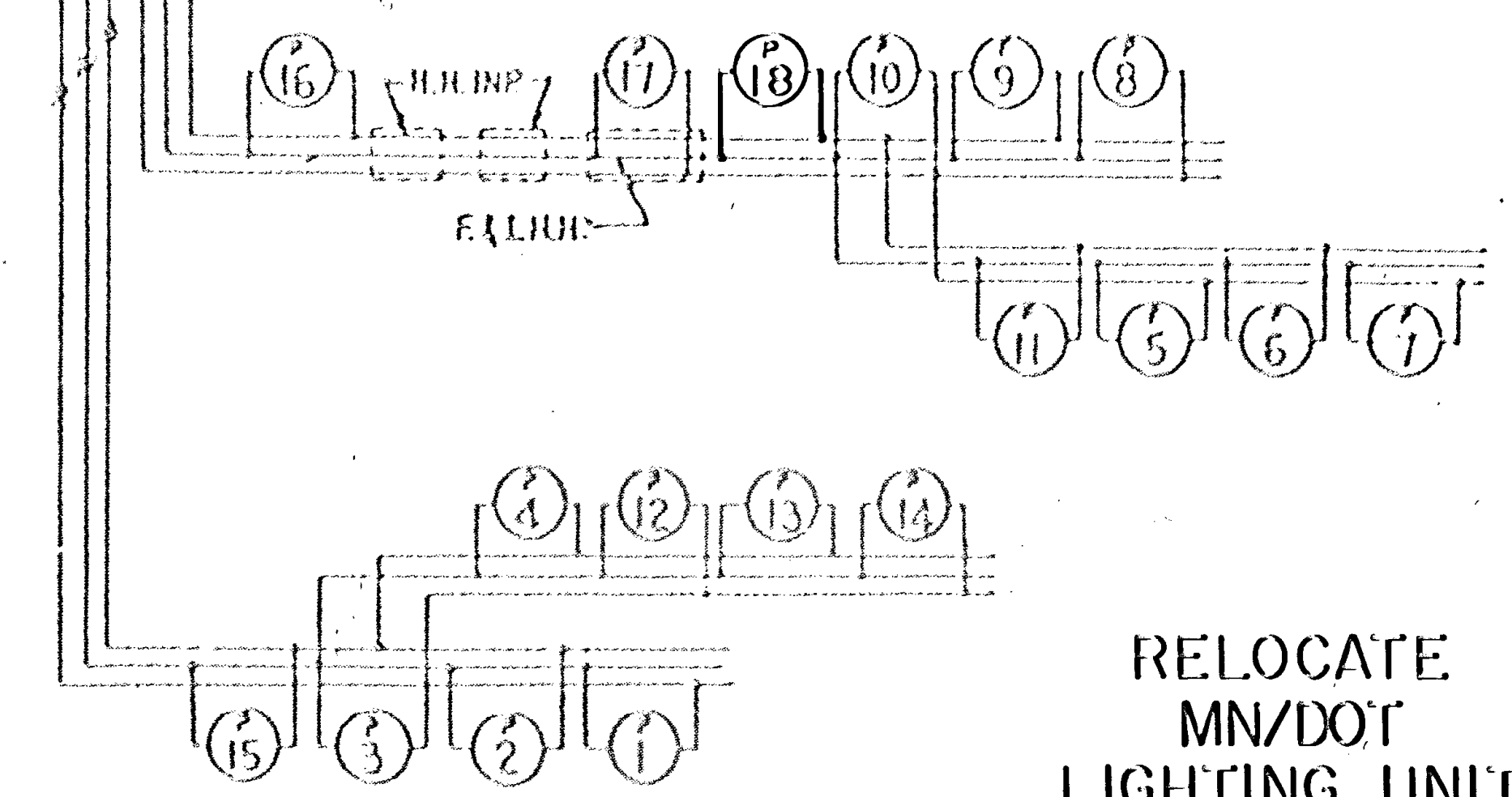


EXHIBIT 92
C.H. 35W & C.S.A.H. 17
ANOKA CO.
NORTHERN STATES POWER CO.

Feedpoint: WBP



**RELOCATE
MN/DOT
LIGHTING UNIT
NO. 18**

SHEET TOTAL
18-400 WATT MERCURY VAPOR LIGHTS