

STATE PROJ. NO. \_\_\_\_\_  
 GROSS LENGTH 8450 FEET 1.60 MILES  
 BRIDGES-LENGTH FEET MILES  
 EXCEPTIONS-LENGTH FEET MILES  
 NET LENGTH 8450 FEET 1.60 MILES

# ANOKA COUNTY CITY OF BLAINE

## CONSTRUCTION PLAN FOR GRADING, BASE & BITUMINOUS SURFACE

LOCATED ON 101ST AVE/95TH AVE BETWEEN XYLITE ST. NE AND INT. HWY 35W, WEST SERVICE RD. (Geographic Description)  
 A POINT 685 FT WEST OF THE NW CORNER OF SECTION 27, TOWNSHIP 31, RANGE 23, ANOKA COUNTY, MN FROM ANOKA COUNTY, MN TO A POINT 975 FT EAST OF THE SW CORNER OF THE NE 1/4 OF THE SE 1/4 OF SEC 27, TOWNSHIP 31, RANGE 23, ANOKA COUNTY, MN (Legal Description)

MINN. PROJ. NO. \_\_\_\_\_  
 GOVERNING SPECIFICATIONS  
 THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND "SUPPLEMENTAL SPECIFICATION" DATED JAN 2, 1991 SHALL GOVERN

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### DESIGN DESIGNATION

ENR 20 989,519  
 R Value 67  
 ADT (1990) = 7,577  
 Proj. ADT (2010) = 12,881  
 Proj. HCADT = 7.5%  
 Soil Factor N/A  
 9' for Design

Design Speed 50 MPH  
 Based on STOPPING Sight Distance  
 Height of eye 3.5' Height of object 0.5'  
 Design Speed not achieved at:  
 STA. to STA. MPH  
 STA. to STA. MPH  
 STA. to STA. MPH  
 Functional Classification: Collector  
 Traffic Lanes: 2  
 Parking Lanes: 0  
 Shoulder Width: 12'

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 MAY 16, 1991 REG. NO. 10146 ENGR. *Charles Spittle*  
 CITY BLAINE

Approved *Paul K. Lund* 5/27, 1991  
 ANOKA COUNTY ENGINEER

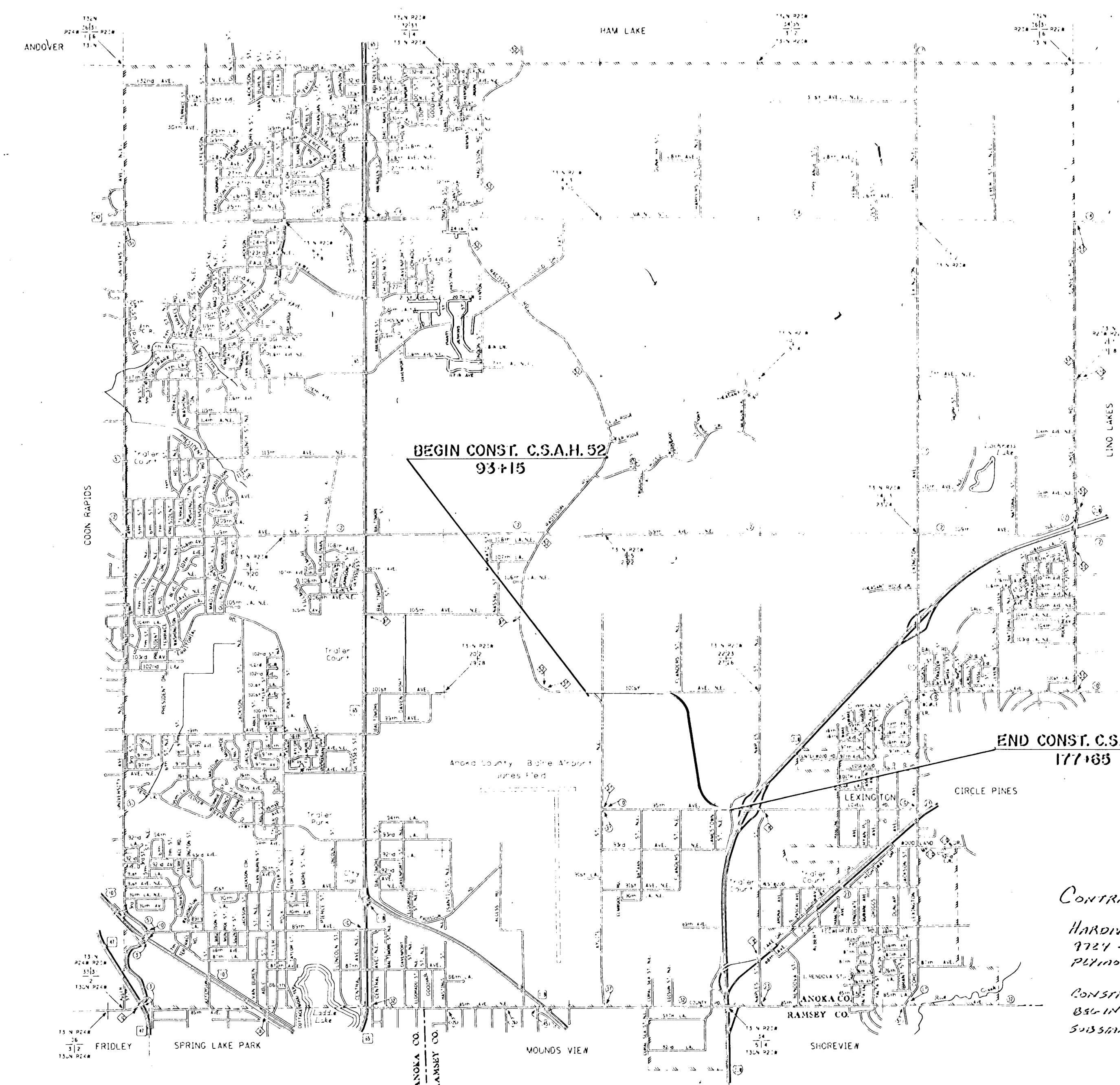
CONTRACTOR:  
 HARVIES INC. 512-7050  
 7721 - 16th Ave. N.  
 Plymouth MN 55111  
 CONSTRUCTION DATES:  
 8/20/91 - 1/13/92  
 SUBMITTALS COMPLETE 1/13/92

PROJECT NUMBERS  
 CITY 91-07  
 ANOKA COUNTY 91-06-37  
 FAA-MAC 3-27-0062-01/02

REVISED 6/3/91

STATE AID PROJ. NO. \_\_\_\_\_  
 STATE PROJ. NO. \_\_\_\_\_ SHEET NO. 1 OF 26 SHEETS

EXISTING	LEGEND
	STORM SEWER & MANHOLE
	SANITARY SEWER & MANHOLE
	WATERMAIN, HYDRANT VALVE & MANHOLE
	CULVERT
	CATCH BASIN
	BULKHEAD
	UNDERGROUND TELEPHONE CABLE OR CONDUIT
	TELEPHONE MANHOLE
	UNDERGROUND ELECTRIC CABLE OR CONDUIT
	ELECTRIC MANHOLE
	GAS MAIN & VALVE
	STREET LIGHT
	MAILBOX
	SIGN (HWY., PARK, STOP, ETC.)
	STREET SIGN
	POWER POLE W/GUY WIRE
	TREE (DECIDUOUS)
	TREE (CONIFEROUS)
	BUSH-SHRUB
	HEDGE
	WOODED AREA
	FENCE
	GUARD RAIL
	DITCH
	TRAFFIC SIGNAL HANDHOLE
	CONCRETE CURB & GUTTER
	BITUMINOUS CURB
	CONCRETE PAVEMENT
	BUILDING
	SECTION LINE
	QUARTER LINE
	SIXTEENTH LINE
	RIGHT OF WAY LINE
	SLOPE EASEMENT
	CONSTRUCTION CENTERLINE
	RIGHT OF WAY
	STORM SEWER & MANHOLE
	SANITARY SEWER & MANHOLE
	WATERMAIN, HYDRANT VALVE & MANHOLE
	CULVERT
	CATCH BASIN
	BULKHEAD
	CONCRETE CURB & GUTTER



REVISED 6/3/91

**ESTIMATED QUANTITIES**

ITEM NO.	ITEM	UNIT	C.S.A.H. 52 QUANTITIES	OTHER QUANTITIES	TOTAL QUANTITIES
2101.501	CLEARING	AC	104	0	104
2101.506	GRUBBING	AC	10.4	0	10.4
2104.501	REMOVE CULVERTS	LF	506	0	506
2104.502	REMOVE/REINSTALL FENCES	LS	1	0	1
2104.505	REMOVE BITUMINOUS PAVEMENT	SY	13,000	0	13,000
④ 2105.501	COMMON EXCAVATION	CY	86,779	0	86,779
2105.505	MUCK EXCAVATION	CY	5,748	0	5,748
2103.501	BUILDING REMOVAL	LS	1	0	1
① 2211.501	AGGREGATE BASE, CLASS 5	TON	19,149	2851	22,000
② 2331.508	TYPE 41 WEARING COURSE	TON	3,973	1427	5400
2331.510	TYPE 31 BINDER COURSE	TON	4200	0	4200
2331.514	TYPE 31 BASE COURSE	TON	5,600	0	5,600
2451.508	GRANULAR BEDDING	TON	250	0	250
2501.511	18" CS PIPE CULVERT	LF	1,298	0	1,298
2501.511	24" RC PIPE CULVERT, CLASS III	LF	520	0	520
2501.515	18" CS PIPE APRON	EA	30	0	30
2501.515	24" RC PIPE APRON	EA	12	0	12
2564.531	F & I SIGN PANELS, TYPE C	SF	569.56	58.06	627.62
2573.502	SILT FENCE, TYPE HEAVY DUTY	LF	5,000	0	5,000
2575.501	SEEDING (ROADSIDE) NO. 900	AC	15.0	0	15.0
③ 2575.501	SEEDING (MITIGATION AREA)	AC	4.85	0	4.85
2575.505	SODDING, EROSION CONTROL TYPE	SY	5000	0	5000
2575.514	MULCH (ROADSIDE), TYPE I	AC	104	0	104
③ 2575.514	MULCH (MITIGATION AREA)	AC	4.85	0	4.85
0563.601	TRAFFIC CONTROL	LS	1	0	1
0564.603	4" SOLID WHITE PAINT	LF	20100	600	20700
0564.603	4" SKIP WHITE PAINT, 10-40	LF	250	0	250
0564.603	4" SOLID DOUBLE YELLOW PAINT	LF	5400	0	5400
0564.603	4" SKIP YELLOW PAINT, 10-40	LF	900	500	1400
0564.603	4" SOLID YELLOW PAINT	LF	900	600	1500
2557.501	WIRE FENCE, DESIGN-BARBED	LF	1525	0	1525
2554.505	PERMANENT BARRICADE	LF	32	0	32

- ③ SEED MIXTURE AND MULCH TO BE DETERMINED WITH FINAL DESIGN OF WETLAND MITIGATION AREA
- ④ 66,034 CY OF COMMON EXCAVATION IS FROM THE WETLAND MITIGATION SITE  
2,900 CY OF COMMON EXCAVATION IS FROM ROAD OBLITERATION

**SOILS AND CONSTRUCTION NOTES**

TOP OF GRADING SUBGRADE IS DEFINED AS THE BOTTOM OF THE AGGREGATE BASE

IN FILL AREAS, THE SUBGRADE SHALL BE CONSTRUCTED WITH SELECTED GRADING MATERIALS

SELECTED GRADING MATERIALS SHALL CONSIST OF GRANULAR MATERIAL OF WHICH THE UPPER 1.0 FOOT OF THE SUBGRADE SHALL CONSIST OF SELECT GRANULAR MATERIALS.

GRANULAR MATERIAL, REGARDLESS OF SOURCE, SHALL MEET THE REQUIREMENTS OF SPEC. 3149.2A

SELECT GRANULAR MATERIAL SHALL MEET THE REQUIREMENTS OF SPEC. 3149.2B

COMPACTION OF THE GRADING PORTION OF THIS PROJECT SHALL BE BY THE "SPECIFIED DENSITY METHOD"

TEST ROLLING WILL NOT BE REQUIRED

BITUMINOUS AND/OR CONCRETE ITEMS REMOVED BY CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL EITHER BE RECYCLED OR DISPOSED OFF THE PROJECT LIMITS

DISPOSITION OF EXCAVATED MATERIAL SHALL BE IN ACCORDANCE WITH SPEC. 2105.3D

WHERE MATCHING INTO THE INPLACE ROAD AT THE ENDS OF CONSTRUCTION, CUT VERTICALLY TO THE TOP OF THE GRADING SUBGRADE AND THEN AT A 20:1 PAPER TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION

WHERE CONNECTING NEW SURFACING TO AN INPLACE PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING THE INPLACE PAVEMENT

USE TACK COAT BETWEEN ALL BITUMINOUS MIXTURES PRIOR TO PLACING BITUMINOUS MIXTURES. THE BITUMINOUS TACK COAT MATERIAL SHALL BE APPLIED AT A UNIFORM RATE OF 0.03 TO 0.05 GALLONS PER SQUARE YARD BETWEEN BITUMINOUS LAYERS. THE APPLICATION RATES ARE FOR UNDILUTED EMULSIONS (AS SUPPLIED FROM THE REFINERY); ASPHALT EMULSION MAY BE FURTHER DILUTED IN THE FIELD IN ACCORDANCE WITH SPEC. 2357

COMPACTION OF THE BITUMINOUS BASE AND BINDER SHALL BE BY THE "SPECIFIED DENSITY METHOD". COMPACTION OF THE WEAR SHALL BE BY THE "ORDINARY COMPACTION METHOD"

COMPACTION OF THE AGGREGATE BASE LAYERS SHALL BE BY THE "SPECIFIED DENSITY METHOD"

PLACE A MINIMUM OF 4" TOPSOIL OR SLOPE DRESSING ON ALL AREAS DISTURBED BY CONSTRUCTION AND SCHEDULED FOR PERMANENT TURF ESTABLISHMENT. FERTILIZE WITH COMMERCIAL FERTILIZER, ANALYSIS 10-10-10, AT A RATE OF 450 ACRE, OR EQUIVALENT

ALL SOD UTILIZED WITHIN THE PROJECT LIMITS SHALL MEET THE REQUIREMENTS OF SPEC. 3878.2B (EROSION CONTROL SOD)

**BASIS OF ESTIMATED QUANTITIES**

- 2211.501 AGGREGATE BASE CLASS 5 138LBS/CU.F.T.
- 2331.508 TYPE 41 WEAR COURSE MIXTURE 148LBS/CU.F.T.
- 2331.510 TYPE 31 BINDER COURSE MIXTURE 143LBS/CU.F.T.
- 2331.514 TYPE 31 BASE COURSE MIXTURE 143LBS/CU.F.T.
- 2357.502 TACK COAT 0.05 GAL./SQ.YD (INCIDENTAL)

**QUANTITIES FOR APPROACHES AND ENTRANCES**

- ① CLASS 5, 820 TONS FOR APPROACHES  
500 TONS FOR ENTRANCES
- ② TYPE 41 WEAR, 515 TONS FOR APPROACHES  
310 TONS FOR ENTRANCES

**EARTHWORK SUMMARY**

COMMON EXCAVATION (EV) - REGULAR - 78,679 CY  
TOPSOIL - 8,100 CY

MUCK EXCAVATION (EV) - 5,748 CY

EXCESS COMMON EMBANKMENT (CV) - 12,432 CY

**NOTES**

CONTRACTOR SHALL PLACE 4" TOPSOIL PRIOR TO SEEDING, UTILIZE TOPSOIL (ORGANIC MATERIAL) GENERATED FROM COMMON EXCAVATION. TOPSOIL PLACEMENT, INCIDENTAL TO SEEDING

SHRINKAGE FACTOR OF 120% USED FOR NORMAL GRADING (EV TO CV)

MUCK EXCAVATION SHALL BE PLACED IN EXCAVATED WETLAND MITIGATION SITE AS DIRECTED BY ENGINEER, CONTRACTOR MAY STOCKPILE NEAR SITE IF NECESSARY (INCIDENTAL TO MUCK EXCAVATION)

EXCESS COMMON EMBANKMENT SHALL BE PLACED OUTSIDE THE 1:1 OR 1 1/2:1 SLOPES SEE TYPICAL SECTIONS

EXCESS TOPSOIL MAY BE USED IN THE WETLAND MITIGATION SITE.

**STANDARD PLATES**

PLATE NO.	DESCRIPTION
0005 D	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 L	REINFORCED CONCRETE PIPE
3006 F	GASKET JOINT FOR RC PIPE
3040 F	CORRUGATED METAL PIPE CULVERT
3100 G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3123 J	METAL APRON FOR C.S. PIPE
3124 B	METAL APRON CONNECTION
3145 E	CONCRETE PIPE TIES
3221 C	CORRUGATED STEEL PIPE COUPLING BAND
8000 I	STANDARD BARRICADES
9000 B	APPROACHES AND ENTRANCES
9102 D	TURF ESTABLISHMENT AREAS (AT PIPE CULVERT ENDS)
8002 F	PERMANENT BARRICADE

**GENERAL NOTES**

ALL PRIVATE ENTRANCES SHALL HAVE 25' RADIUS UNLESS OTHERWISE NOTED

ALL ROAD APPROACHES SHALL HAVE MINIMUM RADIUS OF 40'

PAVE PRIVATE ENTRANCES TO END OF RADIUS OR AS DIRECTED BY THE ENGINEER PAVING SHALL CONSIST OF 3" TYPE 41 WEAR AND 4" CLASS 5, MATCH WITH 4" OF CLASS 5 BEYOND RADIUS

PAVE TO EDGE OF SAND-GRAVEL SURFACE AT PRIVATE ENTRANCES ON ICIST AVE, EAST OF FLANDERS ST. AND ON XYLITE ST. SOUTH OF C.S.A.H. 52

ALL CULVERTS INSTALLED AT ENTRANCES SHALL BE PLACED AT PROPOSED DITCH GRADE

CONTRACTOR SHALL PROVIDE TEMPORARY MAILBOX LOCATIONS DURING CONSTRUCTION, AND SHALL BE INSTALLED BEHIND BIT. MAT, AS DIRECTED BY ENGINEER, WHEN CONSTRUCTION IS COMPLETED. SEE DETAIL FOR INSTALLATION.

CONTRACTOR SHALL INSTALL SILT FENCE ADJACENT TO WETLANDS AND OTHER LOCATIONS AS DIRECTED BY ENGINEER

CONTRACTOR SHALL SCARIFY AND COMPACT THE UPPER 1' OF EXISTING MATERIAL FROM STA. 125+00 - 172+00 PRIOR TO PLACING GRANULAR FILL

UPON COMPLETION OF GRADING/FILL TO SUBGRADE ELEVATION OF C.S.A.H. 52 FROM XYLITE ST. TO FLANDERS ST., ALLOW FILL MATERIAL TO CONSOLIDATE UNDERLYING ORGANIC MATERIAL FOR A PERIOD OF 1-2 WEEKS PRIOR TO PLACING CLASS 5 AGGREGATE BASE

CONTRACTOR SHALL REPAIR FAILED AREAS ON NAPLES STREET AS REQUIRED TO PROVIDE DRIVEABLE SURFACE. PAYMENT WILL BE INCLUDE IN ITEM 2331.508, REMOVALS INCLUDED IN 2104.505

CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS AS DIRECTED BY ENGINEER

CONTRACTOR SHALL CLEAR AND GRUB TO CONSTRUCTION LIMITS AS DIRECTED BY ENGINEER

EXIST. DRAIN FIELDS MAY OR MAY NOT BE FUNCTIONAL AT TIME OF CONSTRUCTION, CONTRACTOR TO COORDINATE HIS DRAIN FIELD GRADING WORK WITH THE PROPERTY OWNER TO MAINTAIN AS NECESSARY. ANY REMOVAL OF DRAIN FIELDS IS INCIDENTAL TO COMMON EX. THE PROPERTY OWNER IS RESPONSIBLE FOR RECONSTRUCTION OF NEW DRAIN FIELD OUTSIDE OF THE RIGHT OF WAY

REMOVAL OF EXISTING APRONS IS INCIDENTAL, LENGTH OF APRON IS INCLUDED WITH THE REMOVAL OF CULVERTS



**ENGINEERING DEPARTMENT**

9150 Central Ave., N.E. Blaine, Minnesota 55434

Phone (612) 784-6700

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 Minnesota

*Charles Smith*  
Date 5/14/91, Reg No. 10146

DATE  
6/3/91

REVISION  
ESTIMATED QUANT.  
STANDARD PLATES

PROJECT NO. 91-07

DESIGN BY: DMK

DRAWN BY: DMK

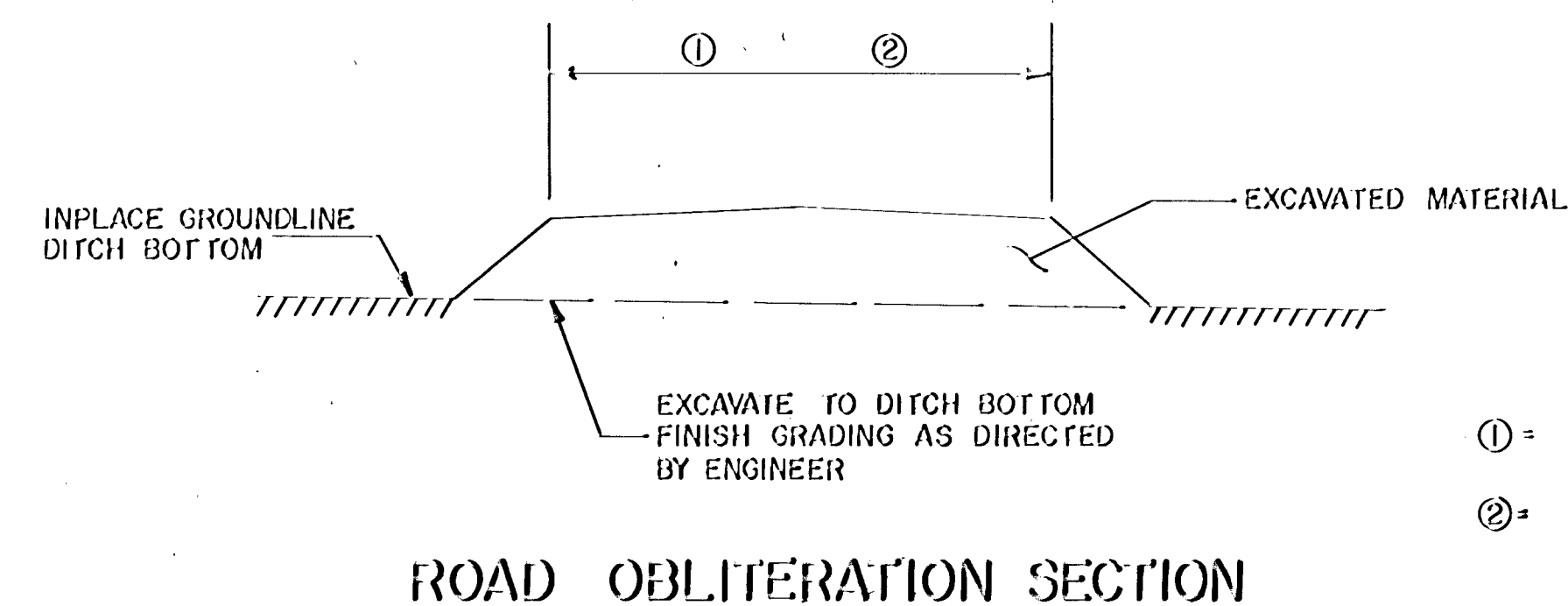
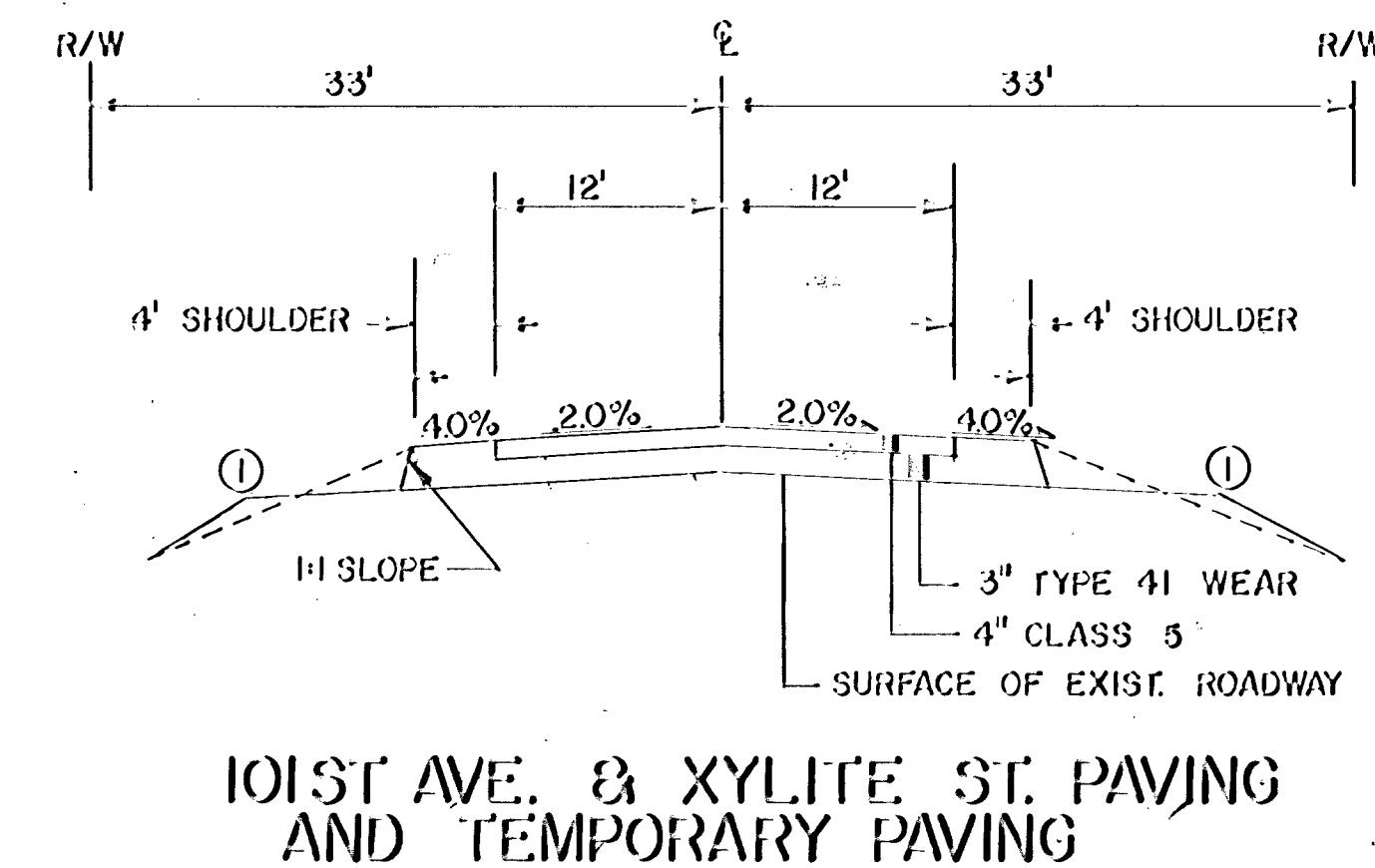
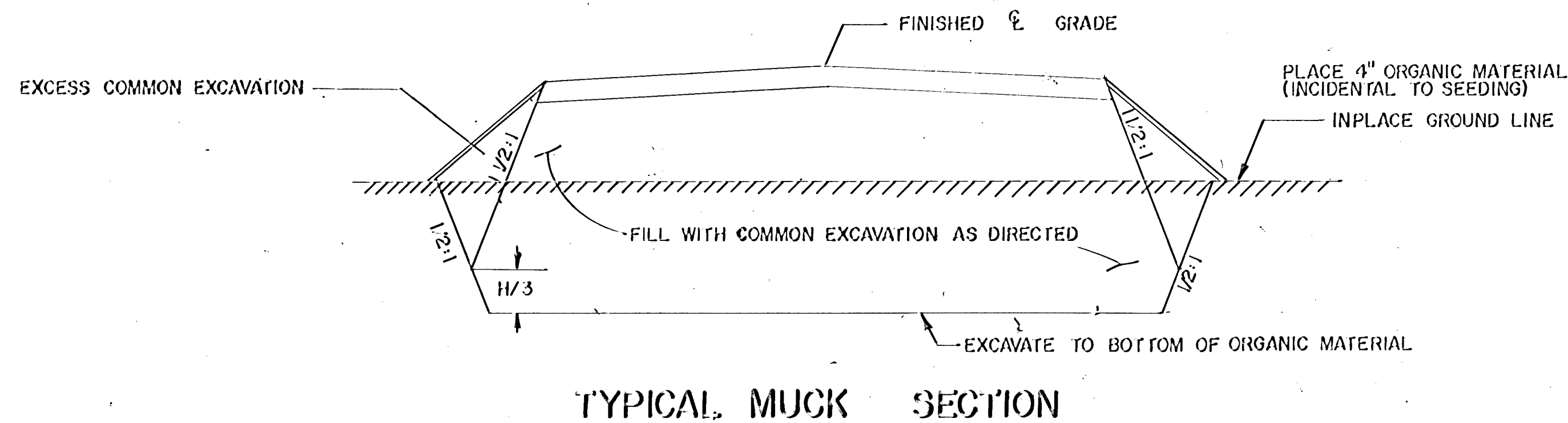
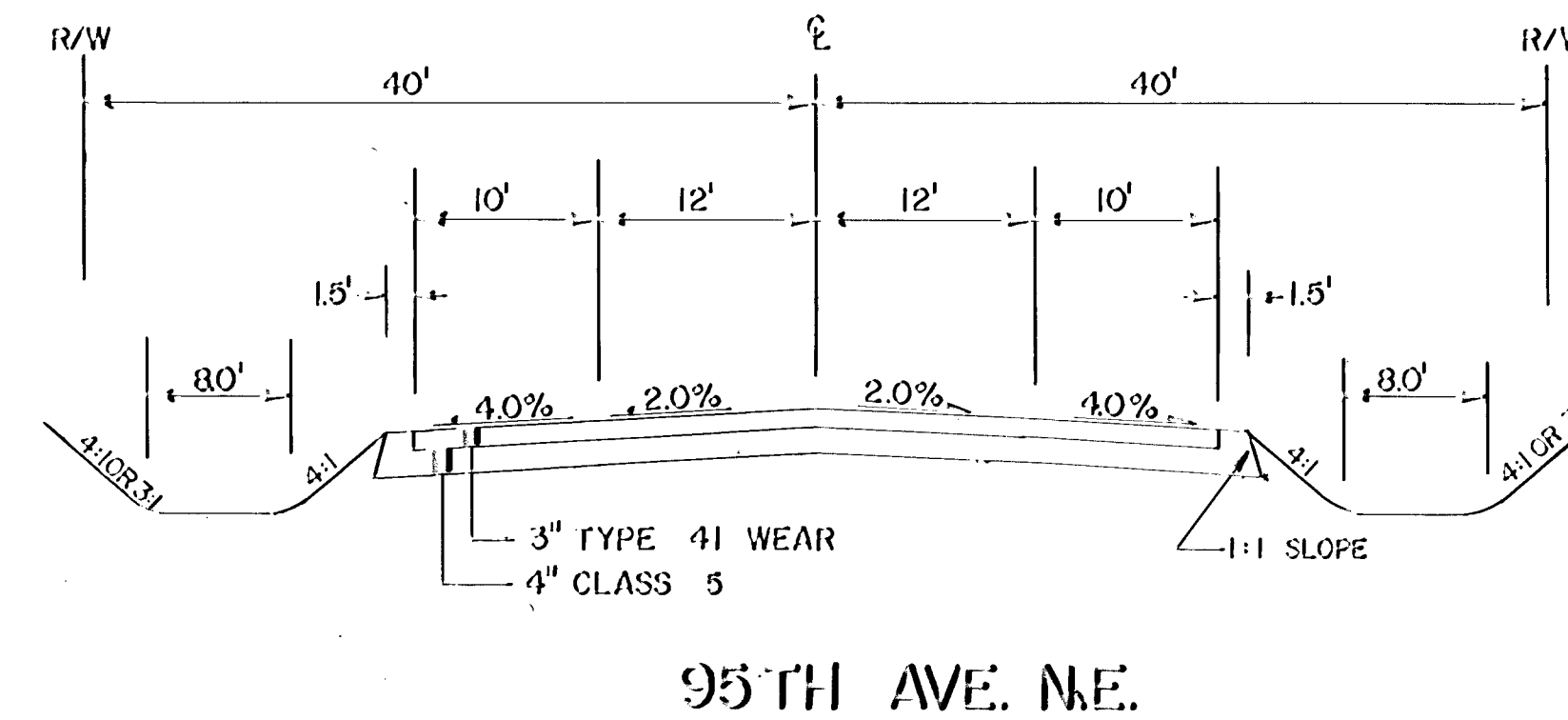
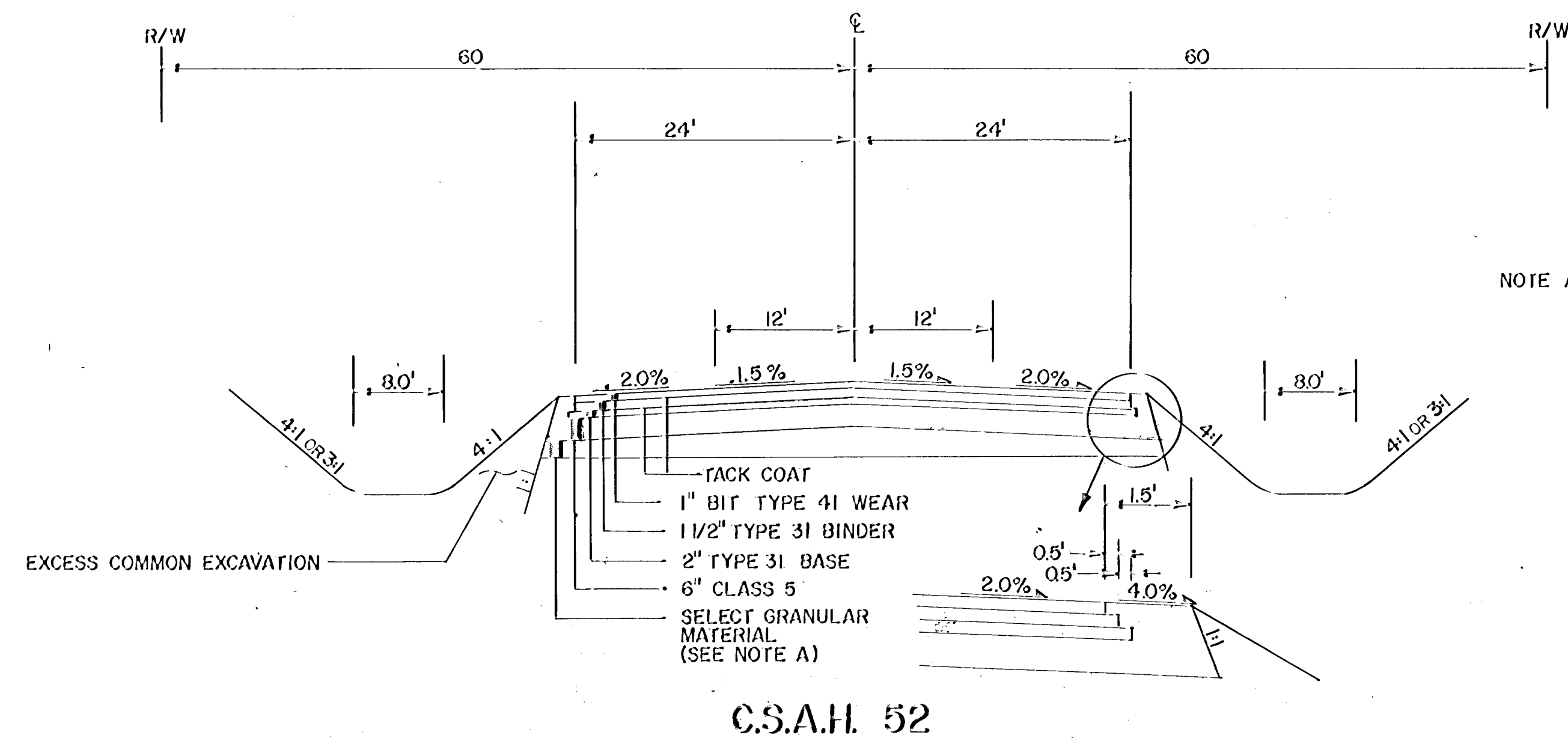
CHECKED BY: TJS

APPROVED BY:

AS BUILT BY:

DATE:

**C.S.A.H. 52 ESTIMATED QUANTITIES**



ENGINEERING DEPARTMENT  
 9150 Central Ave., N.E. Blaine, Minnesota 55434  
 Phone (612) 784-6700

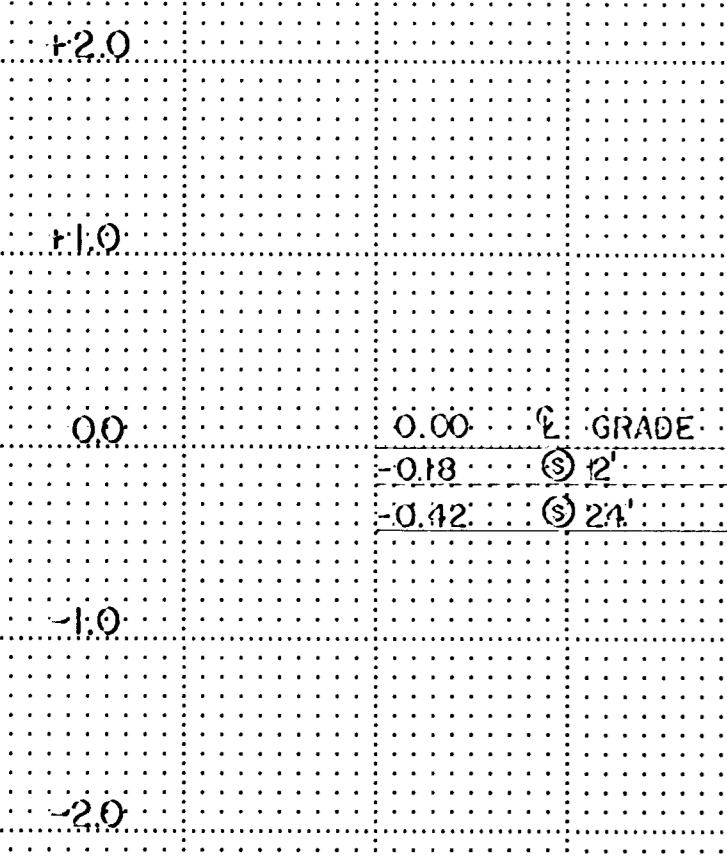
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the State of Minnesota.  
*Charles J. Spittle*  
 Date: 5/12/97 Reg No 10146

DATE	REVISION

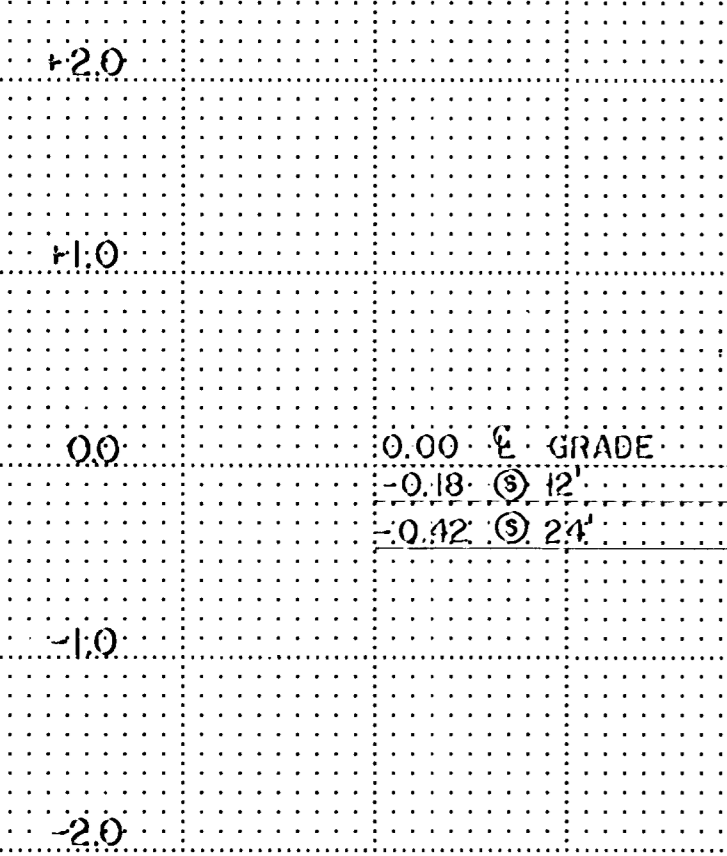
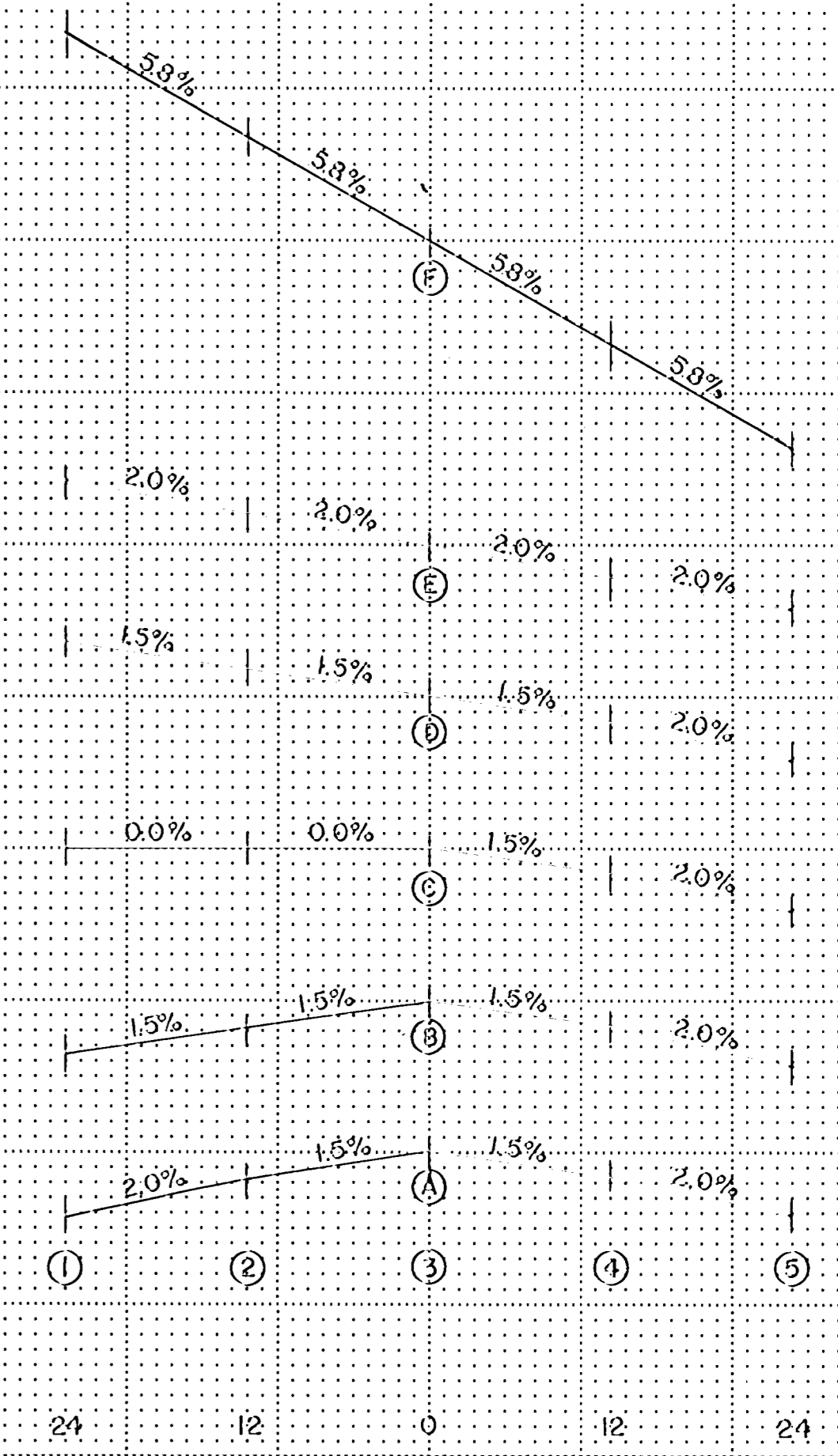
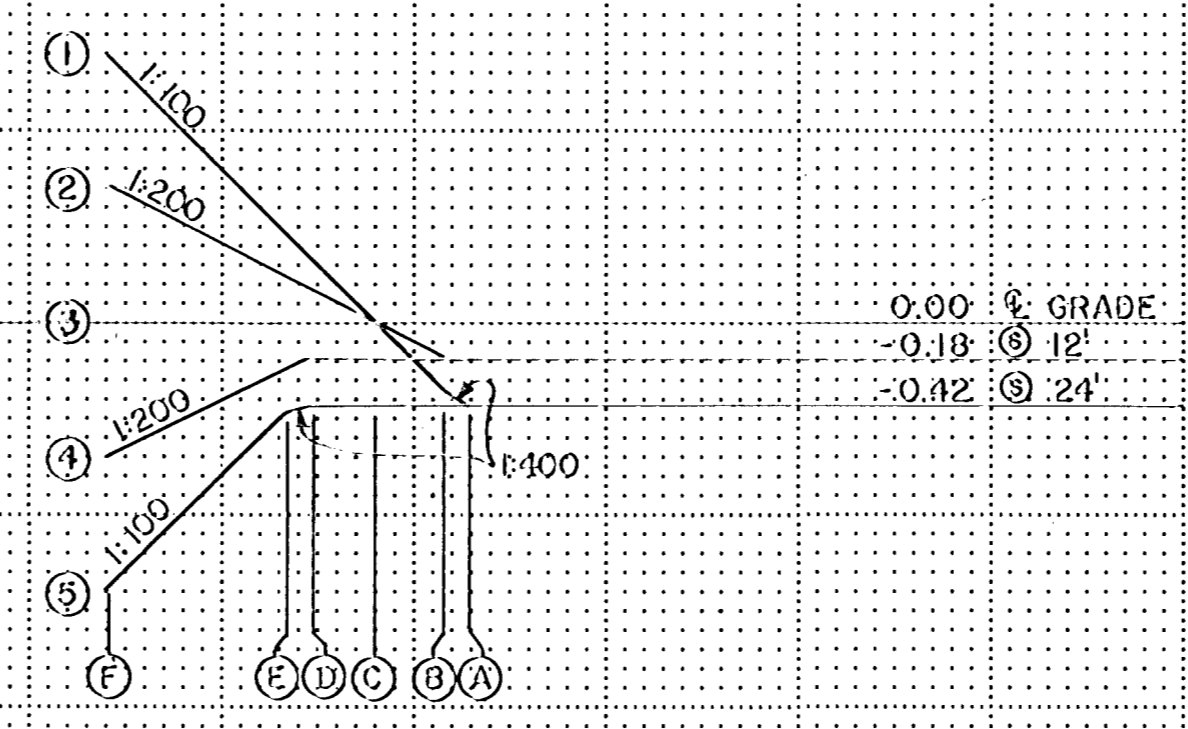
PROJECT NO. 91-07
DESIGN BY: DMK
CHECKED BY: TJS
AS BUILT BY: /

DRAWN BY: KDP, MGC
APPROVED BY: /
DATE: / /

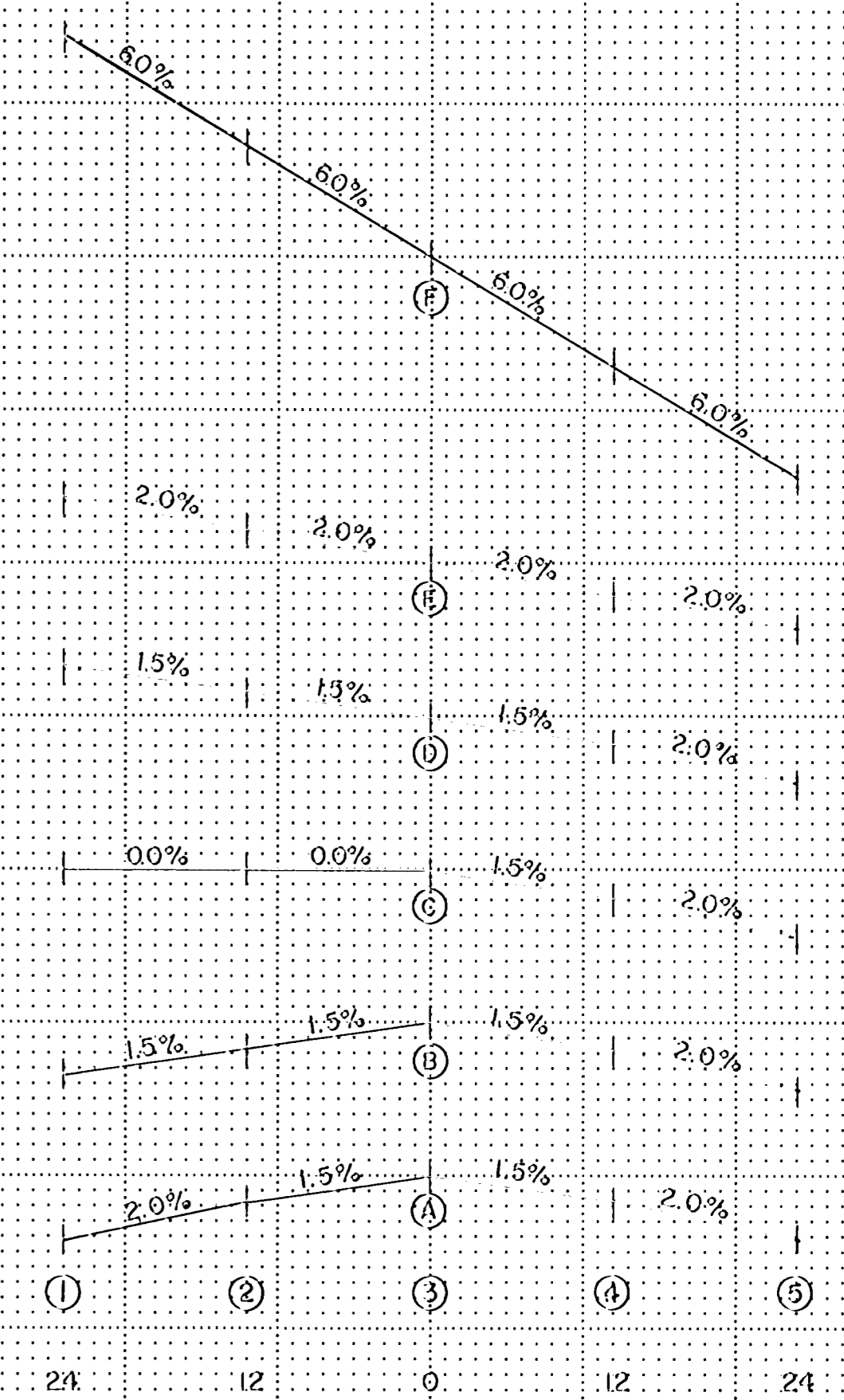
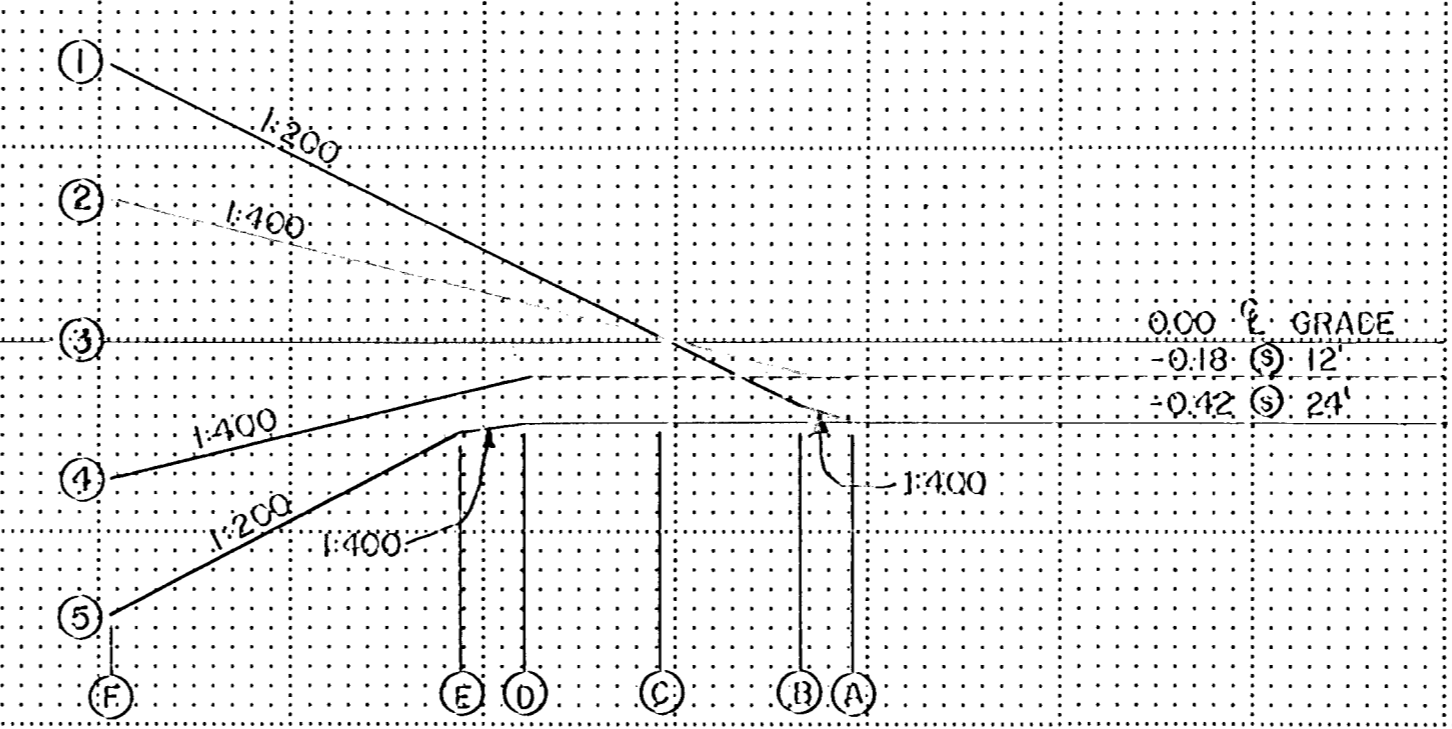
C.S.A.H. 52 TYPICAL SECTIONS



**CURVE NO. 2**  
SUPER ELEVATION RATE = 5.8%



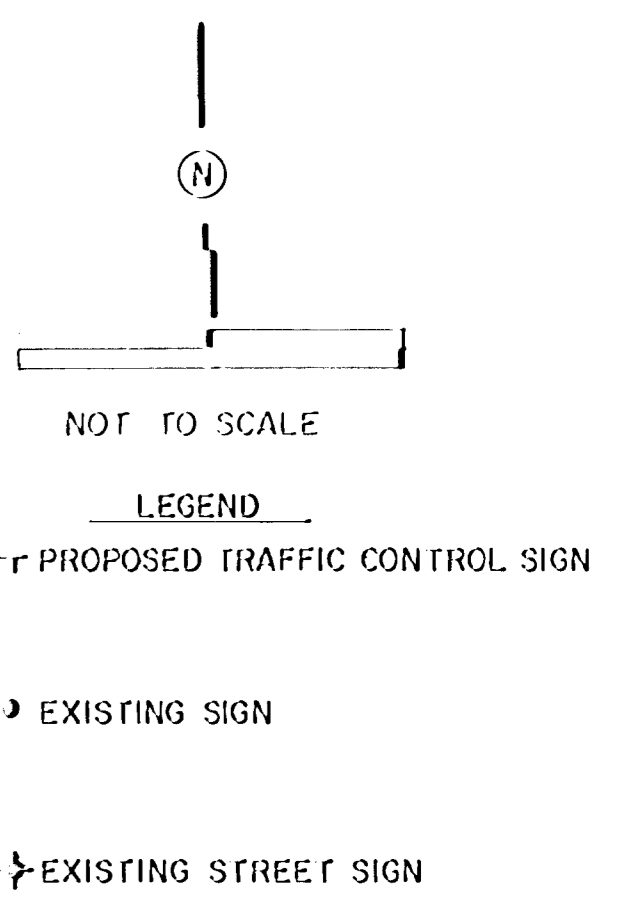
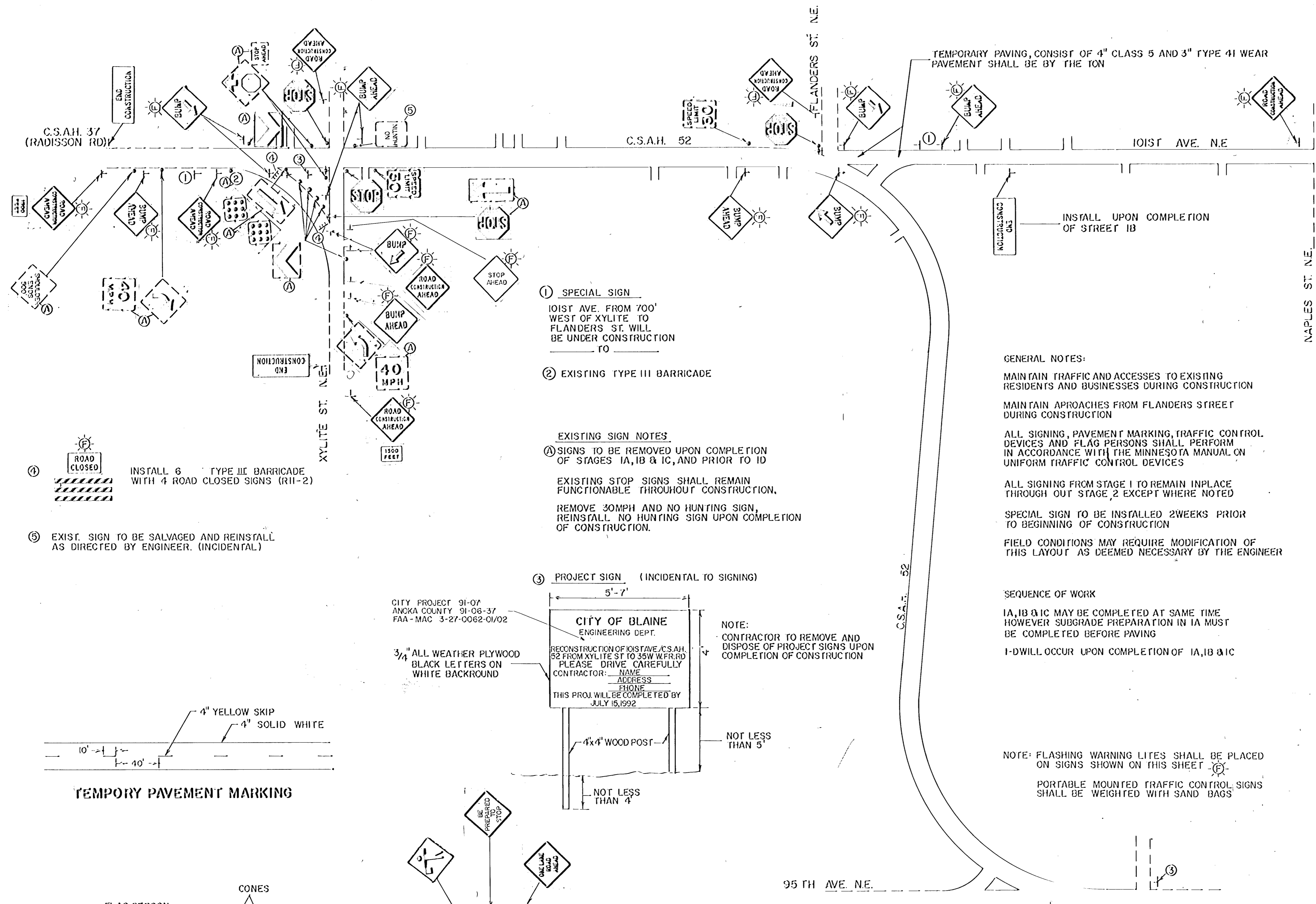
**CURVE NO. 1**  
SUPER ELEVATION RATE = 6.0%



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.  
*Charles Smith*  
Date 5/16/91 Reg No. 12176

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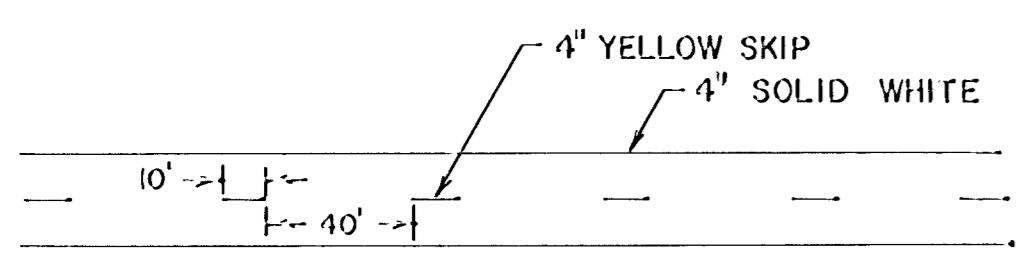
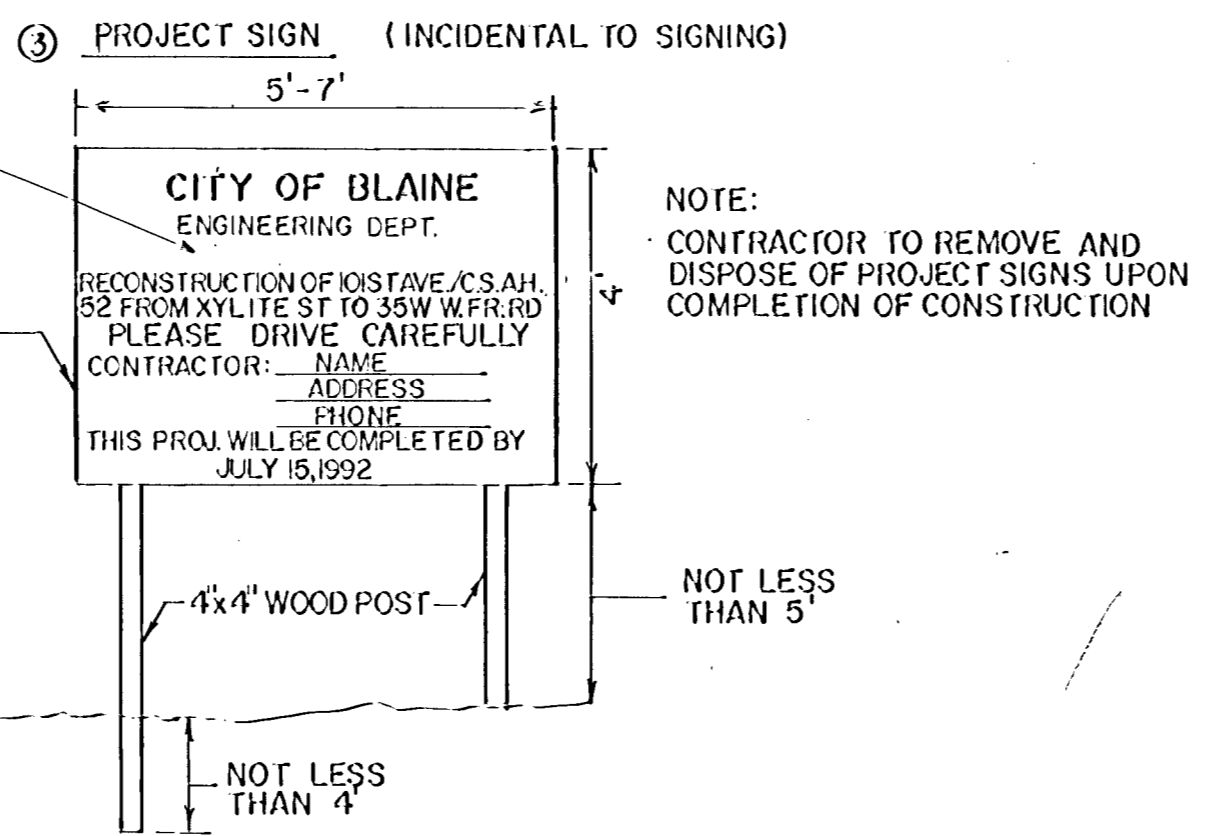




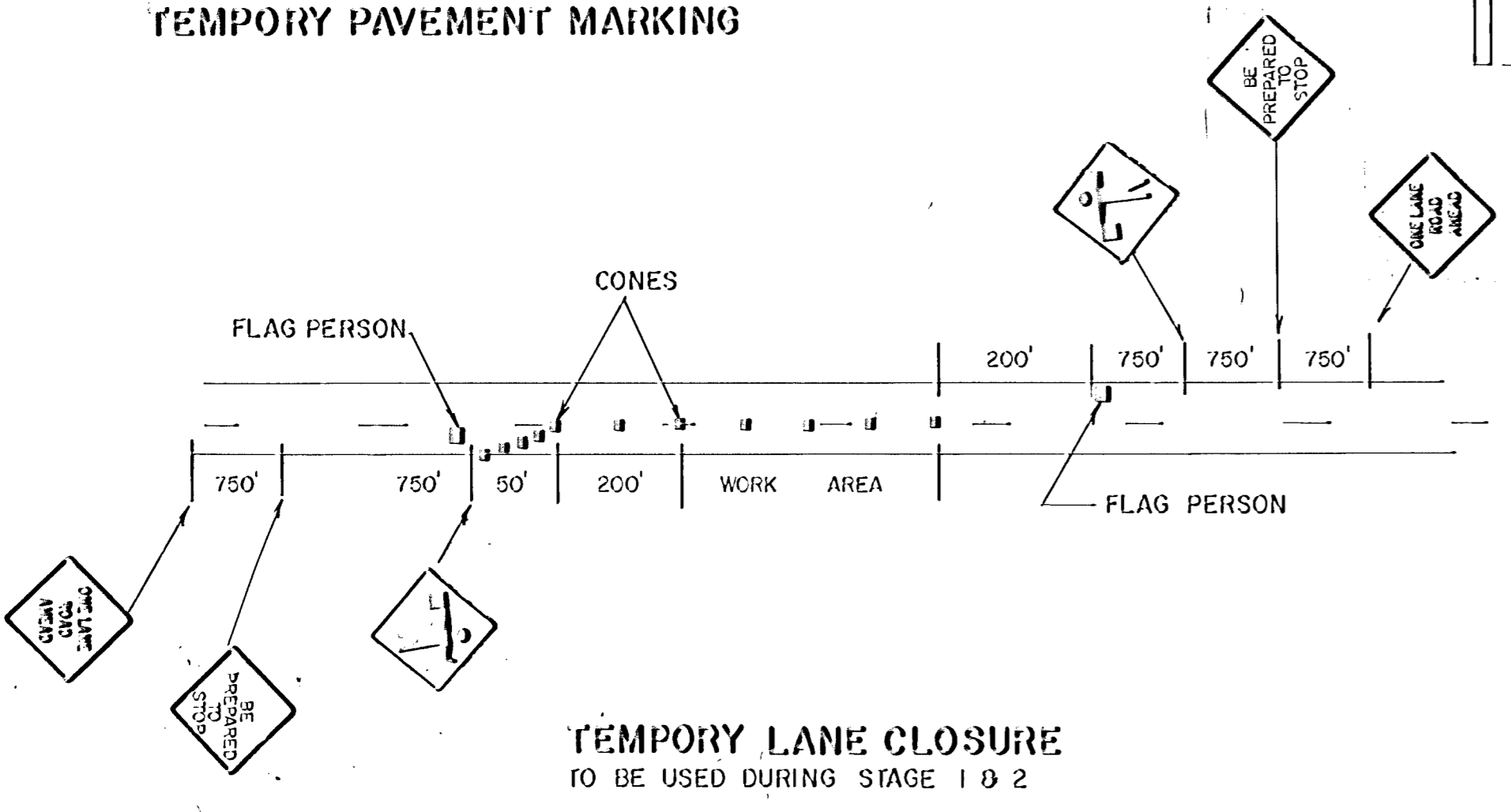
- ④ ROAD CLOSED  
INSTALL 6 TYPE III BARRICADE WITH 4 ROAD CLOSED SIGNS (R11-2)
- ⑤ EXIST. SIGN TO BE SALVAGED AND REINSTALL AS DIRECTED BY ENGINEER. (INCIDENTAL)

- ① SPECIAL SIGN  
101ST AVE. FROM 700' WEST OF XYLITE TO FLANDERS ST. WILL BE UNDER CONSTRUCTION TO
- ② EXISTING TYPE III BARRICADE

**EXISTING SIGN NOTES**  
 A) SIGNS TO BE REMOVED UPON COMPLETION OF STAGES IA, IB & IC, AND PRIOR TO ID  
 EXISTING STOP SIGNS SHALL REMAIN FUNCTIONABLE THROUGHOUT CONSTRUCTION.  
 REMOVE 30MPH AND NO HUNTING SIGN, REINSTALL NO HUNTING SIGN UPON COMPLETION OF CONSTRUCTION.



TEMPORARY PAVEMENT MARKING



TEMPORARY LANE CLOSURE TO BE USED DURING STAGE 1 & 2

**GENERAL NOTES:**  
 MAINTAIN TRAFFIC AND ACCESSES TO EXISTING RESIDENTS AND BUSINESSES DURING CONSTRUCTION  
 MAINTAIN APPROACHES FROM FLANDERS STREET DURING CONSTRUCTION  
 ALL SIGNING, PAVEMENT MARKING, TRAFFIC CONTROL DEVICES AND FLAG PERSONS SHALL PERFORM IN ACCORDANCE WITH THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES  
 ALL SIGNING FROM STAGE 1 TO REMAIN IN PLACE THROUGH OUT STAGE 2 EXCEPT WHERE NOTED  
 SPECIAL SIGN TO BE INSTALLED 2 WEEKS PRIOR TO BEGINNING OF CONSTRUCTION  
 FIELD CONDITIONS MAY REQUIRE MODIFICATION OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER

**SEQUENCE OF WORK**  
 IA, IB & IC MAY BE COMPLETED AT SAME TIME HOWEVER SUBGRADE PREPARATION IN IA MUST BE COMPLETED BEFORE PAVING  
 ID WILL OCCUR UPON COMPLETION OF IA, IB & IC

NOTE: FLASHING WARNING LITES SHALL BE PLACED ON SIGNS SHOWN ON THIS SHEET  
 PORTABLE MOUNTED TRAFFIC CONTROL SIGNS SHALL BE WEIGHTED WITH SAND BAGS

- STAGE 1**
- IA - C.S.A.H. 52 BETWEEN C.S.A.H. 37 AND FLANDERS STREET
  - IB - 101ST AVE. BETWEEN FLANDERS STREET AND NAPLES STREET, AND XYLITE STREET SOUTH OF 101ST AVENUE
  - IC - TEMPORARY PAVING AT FLANDERS STREET ON 101ST AVENUE
  - ID - ROAD OBLITERATION BETWEEN XYLITE STREET AND C.S.A.H. 37

**NOTES:**  
 PLACE CLASS 5 AND 24' BITUMINOUS MAT WITH SHOULDERS  
 ALL CONSTRUCTION SHALL BE MAINTAINED WITHIN THE EXISTING RIGHT OF WAY AND BE COMPLETED BY AUGUST 5, 1991  
 TEMPORARY PAVEMENT MARKINGS - STA 93+15 TO STA 117+00 SHALL BE MARKED AS SHOWN AS PERMANENT MARKINGS ON THE SIGNING AND STRIPING SHEET, STA 117+00 TO FLANDERS MARK CENTERLINE WITH 4" SKIP YELLOW PAINT (10-40), (INCIDENTAL TO TRAFFIC CONTROL).

**CONSTRUCTION NOTES:**

- IA - CONTRACTOR MUST FILL TO SUBGRADE AS SHOWN ON PLANS WITH OPTION OF CONSTRUCTING A 32' ROAD TO ACCOMMODATE A 24' MAT AND 4' SHOULDERS AND FINISH CONSTRUCTION DURING STAGE 2 OR CONSTRUCT ENTIRE PROPOSED ROAD TO 51' AND CONFINING CONSTRUCTION TO LIMITS OF THE EXISTING 66' RIGHT OF WAY.
- INSTALL 6" CLASS 5, 2" TYPE 3I BASE COARSE AND 1 1/2" TYPE 3I BINDER, AND MATCH TO EXISTING PAVEMENT ON C.S.A.H. 37.
- INSTALL CROSS CULVERTS WITHIN THE LIMITS OF EXISTING RIGHT OF WAY
- TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED, CONTRACTOR HAS OPTION OF POLYMER LINE TAPE OR PAINTING, INCIDENTAL TO TRAFFIC CONTROL
- IB - CONTRACTOR MUST GRADE EXISTING SAND-GRAVEL SURFACE TO 2% CROWN PRIOR TO PLACING CLASS 5
- MATCH INTO EXISTING PAVEMENT AT NAPLES STREET AND XYLITE STREET
- PERMANENT PAVEMENT MARKINGS, SEE SHEET 16
- IC - CONSTRUCT TEMPORARY PAVING IN THE VICINITY OF FLANDERS STREET AS DIRECTED BY THE ENGINEER
- BUMP AND BUMP AHEAD SIGNS SHALL BE REMOVED UPON COMPLETION OF WORK
- ID - UPON COMPLETION OF STAGES IA, IB & IC OBLITERATE ROAD BETWEEN XYLITE STREET AND C.S.A.H. 37 AND RECONSTRUCT AREAS SHOWN AS ID TO REMOVE HIGH POINT CREATED FROM THE SUPERELEVATED ROAD. CONSTRUCTION TO OCCUR BETWEEN 9AM TO 3PM

**ENGINEERING DEPARTMENT**  
 9150 Central Ave., N.E. Blaine, Minnesota 55434  
 Phone (612) 784-6700

Charles Lentae  
 5/14/91 10146

DATE: 6/3/91  
 REVISION: TRAFFIC CONTROL

PROJECT NO: 91-07  
 DESIGN BY: DMK  
 CHECKED BY: TJS  
 AS BUILT BY: \_\_\_\_\_  
 DRAWN BY: DMK, KCP  
 APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

**C.S.A.H. 52 TRAFFIC CONTROL / STAGE 1**

C.S.A.H. 37  
(RADISSON RD)

C.S.A.H. 52

101ST AVE. N.E.

FLANDERS ST. N.E.

NAPLES ST. N.E.

XYLITE ST. N.E.

REMOVAL OF TEMPORARY PAVING PAID BY S.Y.

PLACE ON "ROAD CONSTRUCTION AHEAD" SIGN

**EXISTING SIGN NOTES**  
EXISTING SIGNS SHALL REMAIN IN PLACE, PRIOR TO CONSTRUCTION ON 95TH AVE AS DIRECTED BY ENGINEER

**GENERAL NOTES:**

MAINTAIN TRAFFIC AND ACCESS TO EXISTING RESIDENTS AND BUSINESSES DURING CONSTRUCTION  
MAINTAIN APPROACHES FROM JAMESTOWN STREET DURING CONSTRUCTION  
ALL SIGNING, PAVEMENT MARKINGS, TRAFFIC CONTROL DEVICES, AND FLAG PERSONS SHALL PERFORM IN ACCORDANCE WITH THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.  
SPECIAL SIGN TO BE INSTALLED 2 WEEKS PRIOR TO BEGINNING OF CONSTRUCTION.  
FIELD CONDITIONS MAY REQUIRE MODIFICATION OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER

**SEQUENCE OF WORK**

2A-CONSTRUCT C.S.A.H. 52 SOUTH TO 95TH AVE.  
2B-BEGIN CONSTRUCTION UPON COMPLETION OF 2A

NOTE: PORTABLE MOUNTED TRAFFIC CONTROL SIGNS SHALL BE WEIGHED WITH SAND BAGS

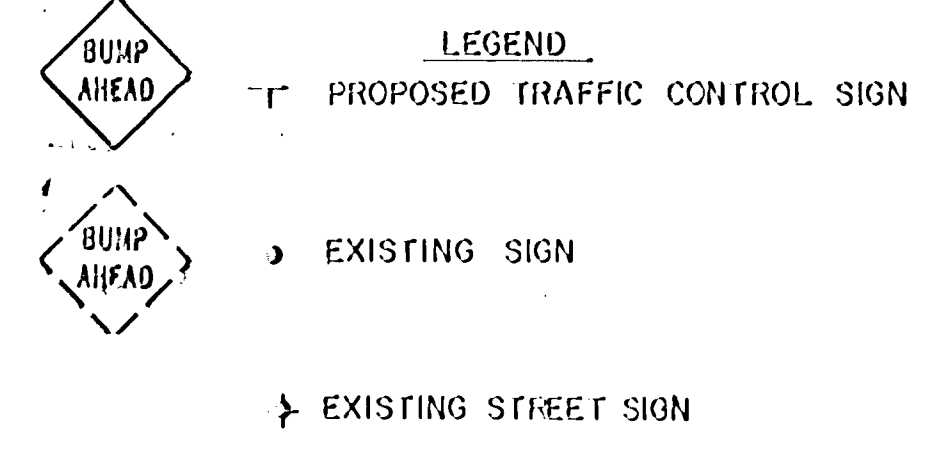
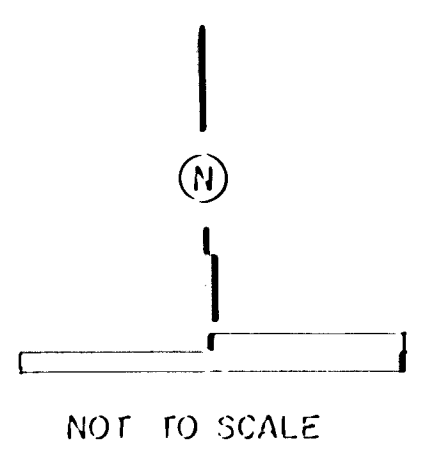
FLASHING WARNING LIGHTS SHALL BE PLACED ON SIGNS SHOWN ON THIS SHEET

**STAGE 2**

2A-FINISH C.S.A.H. 52 BETWEEN C.S.A.H. 37 AND FLANDERS STREET, CONSTRUCT C.S.A.H. 52 SOUTH FROM 101ST AVE. TO 95TH AVE. APPROACHES TO FLANDERS STREET, 101ST AVE, JAMESTOWN STREET AND 95TH AVE.  
2B-OBLITERATE TEMPORARY PAVING 101ST AVE. AT FLANDERS STREET AND EXISTING PAVING ON 95TH AVE.

**NOTES:**

ROAD OBLITERATION WILL OCCURE UPON COMPLETION OF C.S.A.H. 52 AND ROAD APPROACHES  
REMOVAL OF BITUMINOUS AND CONSTRUCTION ON 95TH AVE. SHALL BE PERFORMED DURING THE LATER PORTION OF STAGE 2 SO AS NOT TO INCONVINCE TRAFFIC  
2 LANES OF TRAFFIC NEED TO BE MAINTAINED ON 95TH AVE. THROUGHOUT THE PROJECT  
TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED IF WEAR COURSE IS NOT PLACED BY WINTER, MARKINGS SHALL CONFORM TO PERMANENT PAVEMENT MARKINGS AS SHOWN ON SIGNING & STRIPING PLAN, (INCIDENTAL TRAFFIC CONTROL)  
INSTALL 40MPH ADVISORY PLATES ON "ROAD CONSTRUCTION AHEAD" SIGNS AS DIRECTED BY ENGINEER.



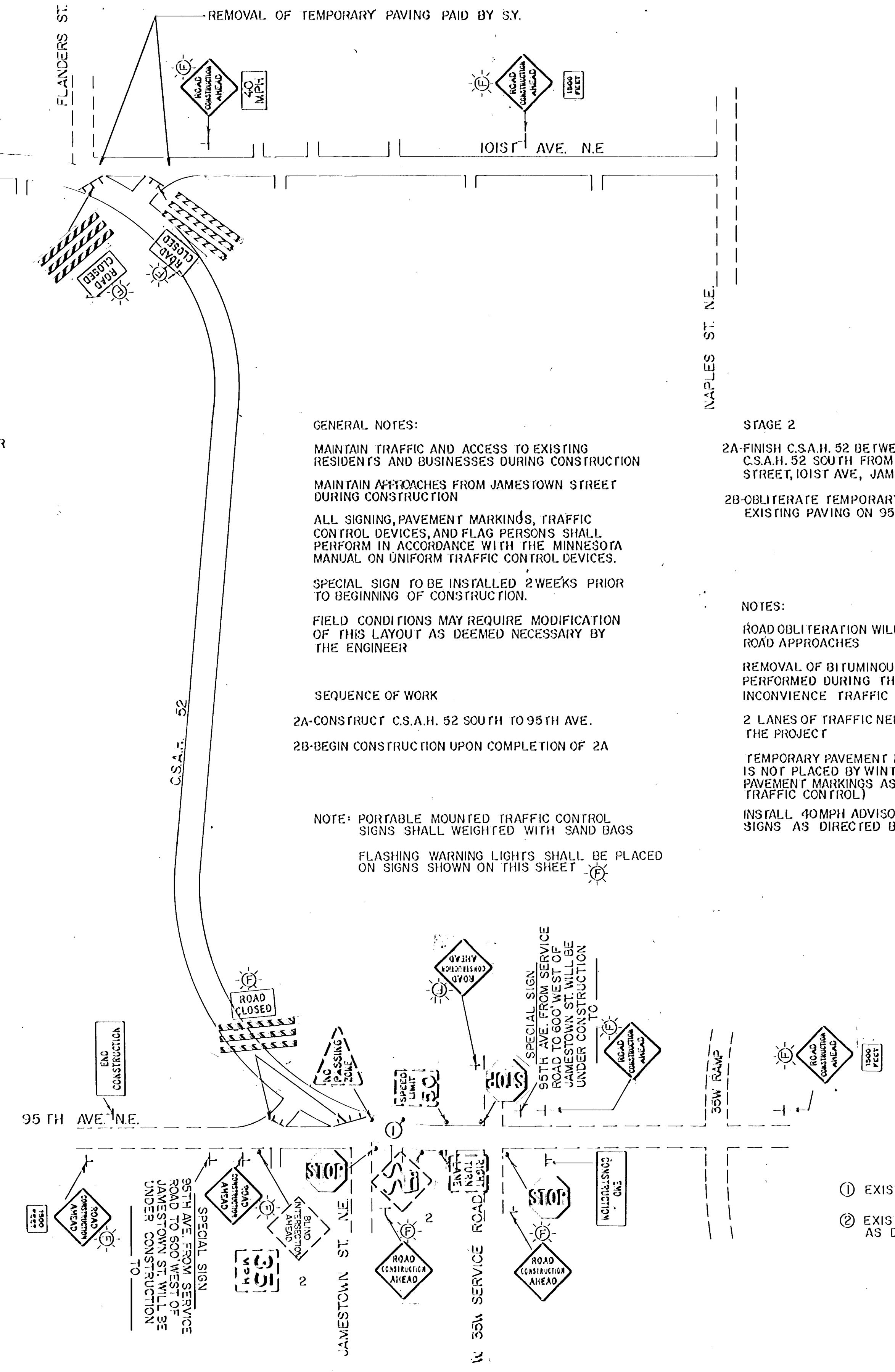
**TRAFFIC CONTROL TABULATION**

**STAGE 1**

SIGN	SIZE	QUAN.	SIGN	SIZE	QUAN.	SIGN	SIZE	QUAN.
ROAD CONSTRUCTION AHEAD W20-1	48"x48"	7	ROAD CONSTRUCTION AHEAD W20-4	48"x48"	2	BUMP AHEAD SPECIAL	48"x48" BLACK ON ORANGE	6
1500 FEET W20-100P	36"x24"	2	BE PREPARED TO STOP W20-X5	48"x48"	2	BUMP SPECIAL	48"x48" BLACK ON ORANGE	6
END CONSTRUCTION G20-2	60"x24"	3	FLAG		2	STOP AHEAD SPECIAL	36"x36" BLACK ON ORANGE	1
TYPE III BARRICADE		6	ROAD CLOSED R11-2	48"x30" BLACK ON WHITE	4			

**STAGE 2**

TYPE III BARRICADE		12	ROAD CONSTRUCTION AHEAD W20-1	48"x48"	9	1500 FEET W20-100P	36"x24"	3
END CONSTRUCTION G20-2	60"x24"	2	ROAD CLOSED R11-2	48"x30" BLACK ON WHITE	4	40 MPH W20-100P	36"x24"	2



- ① EXIST. NO PARKING SIGN
- ② EXIST. SIGN TO BE SALVAGED AND REINSTALLED AS DIRECTED BY ENGINEER (INCIDENTAL)

**ENGINEERING DEPARTMENT**  
9150 Central Ave. N.E. Blaine, Minnesota 55434  
Phone (612) 784-6700

DATE: 6/3/91  
REVISION: TRAFFIC CONTROL

PROJECT NO: 91-07  
DESIGN BY: DMK  
DRAWN BY: DMK, KCP  
CHECKED BY: TJS  
APPROVED BY:  
AS BUILT BY: DATE:

**C.S.A.H. 52 - TRAFFIC CONTROL / STAGE 2**





① APPROX. LOCATION OF EXISTING DRAINFIELD

101+40 - 35' RT., REMOVE 18" x 42' CMP  
CONSTRUCT 24' WIDE ENT.  
47' RT., INSTALL 18" x 80' CSP 76'  
INSTALL 2- APRONS

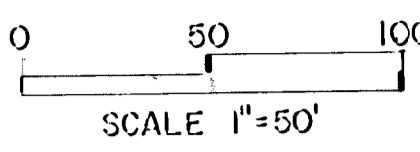
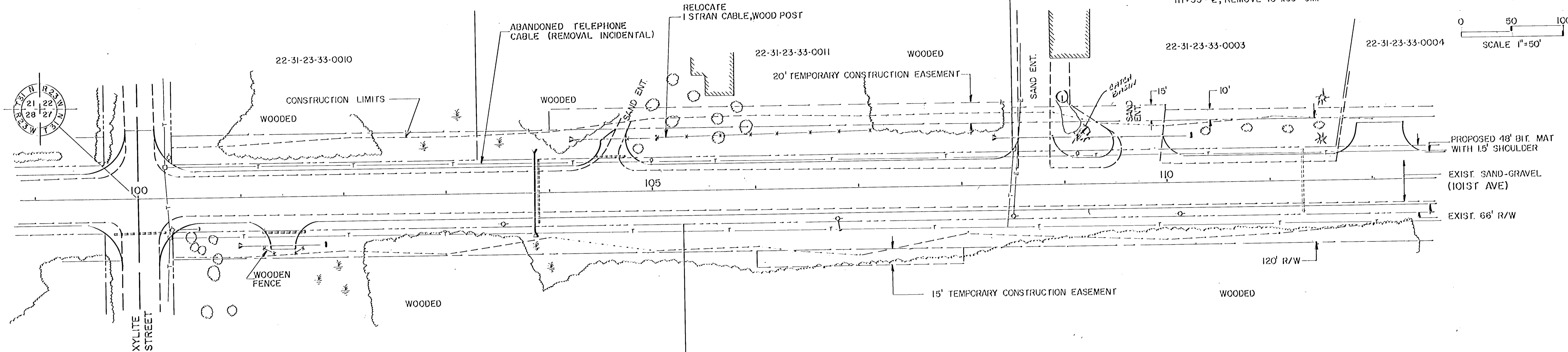
103+90 -  $\phi$  REMOVE 18" x 65' CMP  
103+75  $\phi$  INSTALL 24" x 80' RCP  
INSTALL 2- APRONS

104+39 - 34' LT., REMOVE 18" x 30' CMP  
50' LT., INSTALL 18" x 75' CSP 66'  
INSTALL 2- APRONS

108+74 - CONSTRUCT EXIST. ENT. TO 36'  
OR AS DIRECTED ENGINEER  
45' LT., INSTALL 18" x 80' CSP 185'  
INSTALL 2- APRONS  
INSTALLED CATCH BASIN

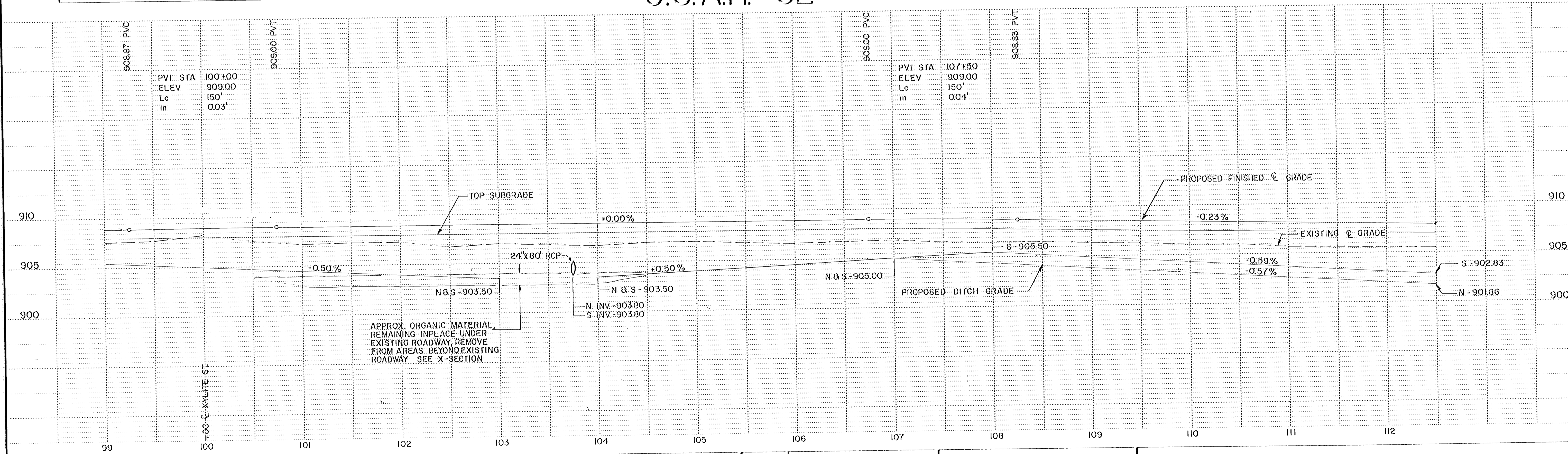
109+72 - 35' LT., REMOVE 18" x 40' CMP  
45' LT., INSTALL 18" x 100' CSP  
INSTALL 2- APRONS  
CONSTRUCT ENT. TO MATCH EXIST.  
OR AS DIRECTED BY ENGINEER

111+35 -  $\phi$ , REMOVE 18" x 60' CMP



B.M. ELEV. 906.75  
SE. CORNER OF SE. GARAGE DOOR FLOOR,  
SE. TOP CORNER CONCRETE FOOTING  
(2" x 6" TOP) 2501 101ST AVE

# C.S.A.H. 52



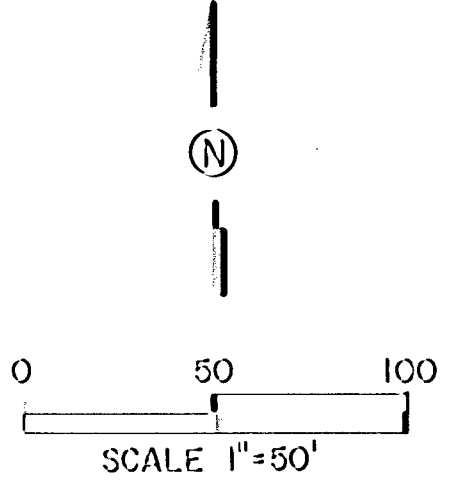
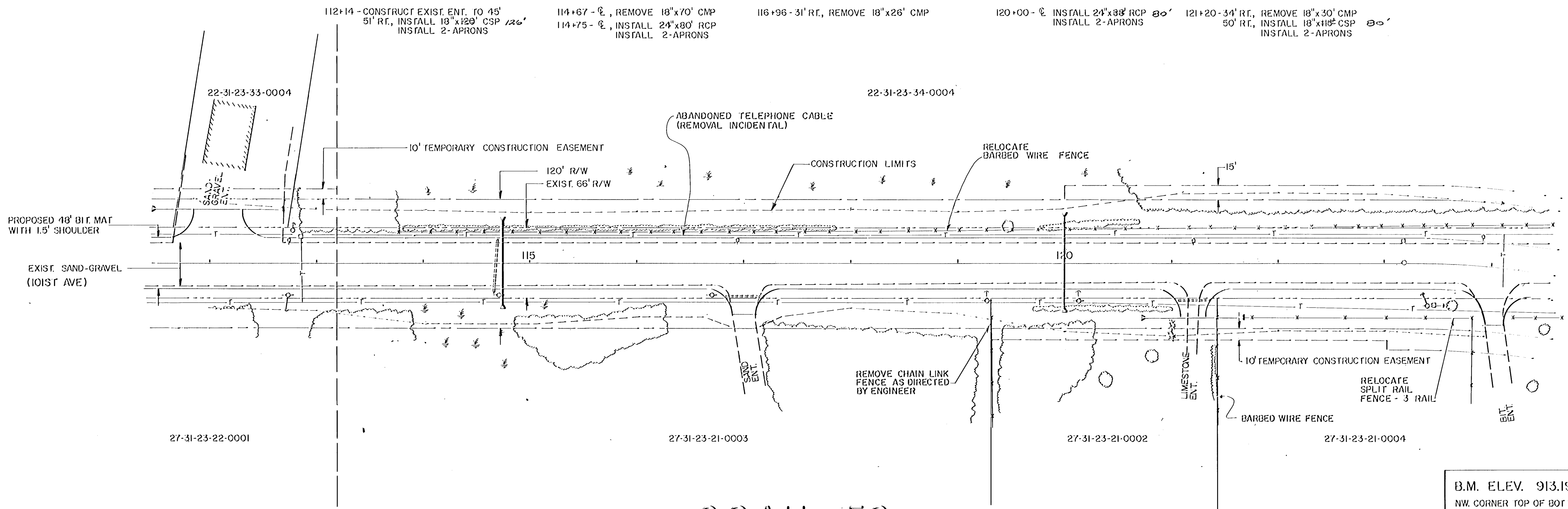
**ENGINEERING DEPARTMENT**  
9150 Central Ave., N.E. Blaine, Minnesota 55434  
Phone (612) 784-6700

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 Minnesota.  
*Charles Lentz*  
Date 5/16/91 Reg. No. 10146

DATE	REVISION

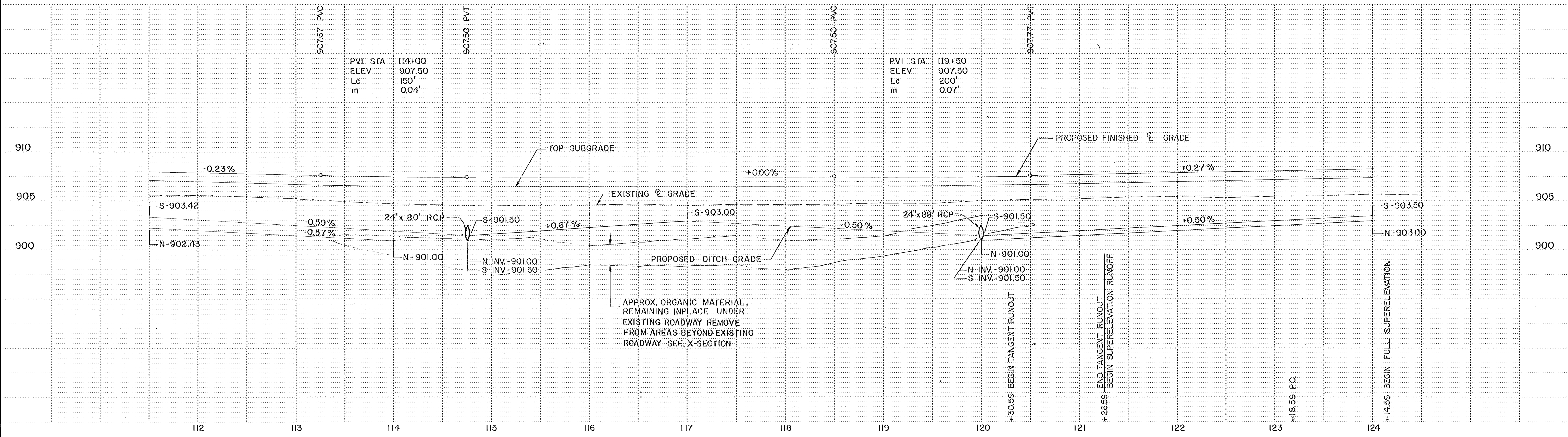
PROJECT NO. 91-07	DESIGN BY: DMK	DRAWN BY: DMK, KDP
CHECKED BY: TJS	APPROVED BY:	
AS BUILT BY: DMK	DATE: 12/12/92	


## C.S.A.H. 52 PLAN & PROFILE



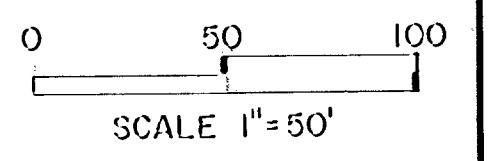
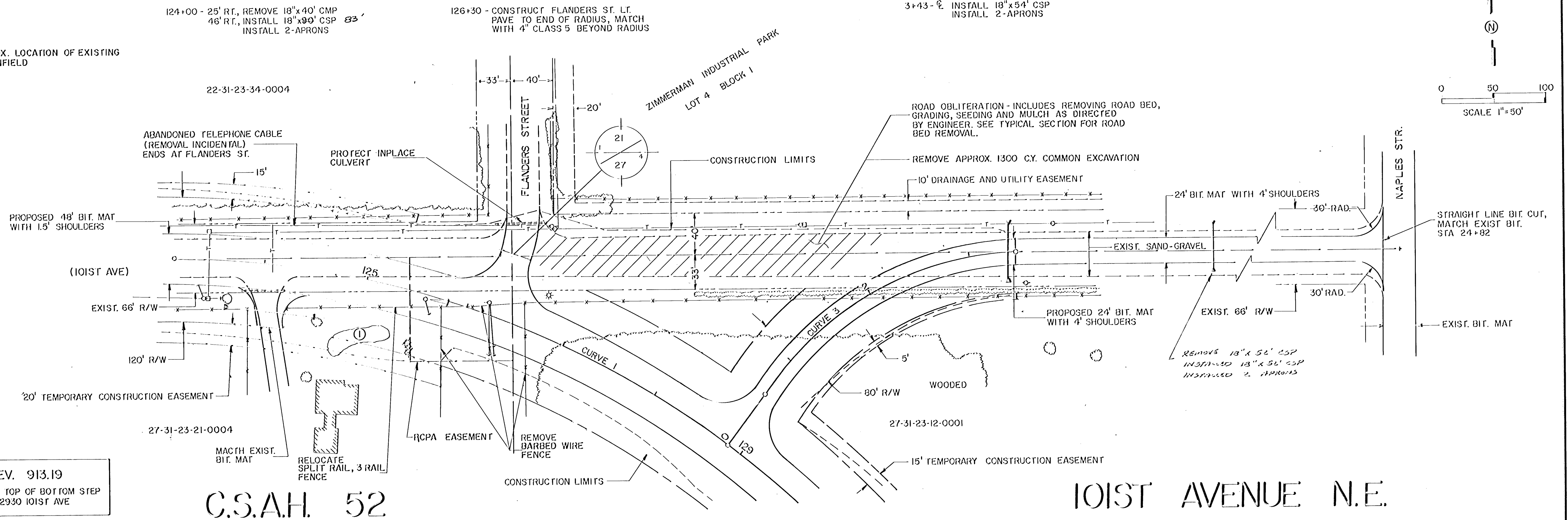
# C.S.A.H. 52

B.M. ELEV. 913.19  
 NW CORNER TOP OF BOTTOM STEP  
 HOUSE NO. 2930 101ST AVE



	<b>ENGINEERING DEPARTMENT</b>	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 Minnesota. <i>Charles Lewter</i> Date <u>5/16/91</u> Reg. No. <u>10146</u>	DATE	REVISION	PROJECT NO. 91-07	<h2>C.S.A.H. 52 PLAN PROFILE</h2>	SHEET NO. 10 OF 26 SHEETS
	9150 Central Ave., N.E. Blaine, Minnesota 55434		DESIGN BY: DMK	DRAWN BY: DMK, KDP			
	Phone (612) 784-6700		CHECKED BY: TJS	APPROVED BY:			
			AS BUILT BY: JMK	DATE: 12.16.92			

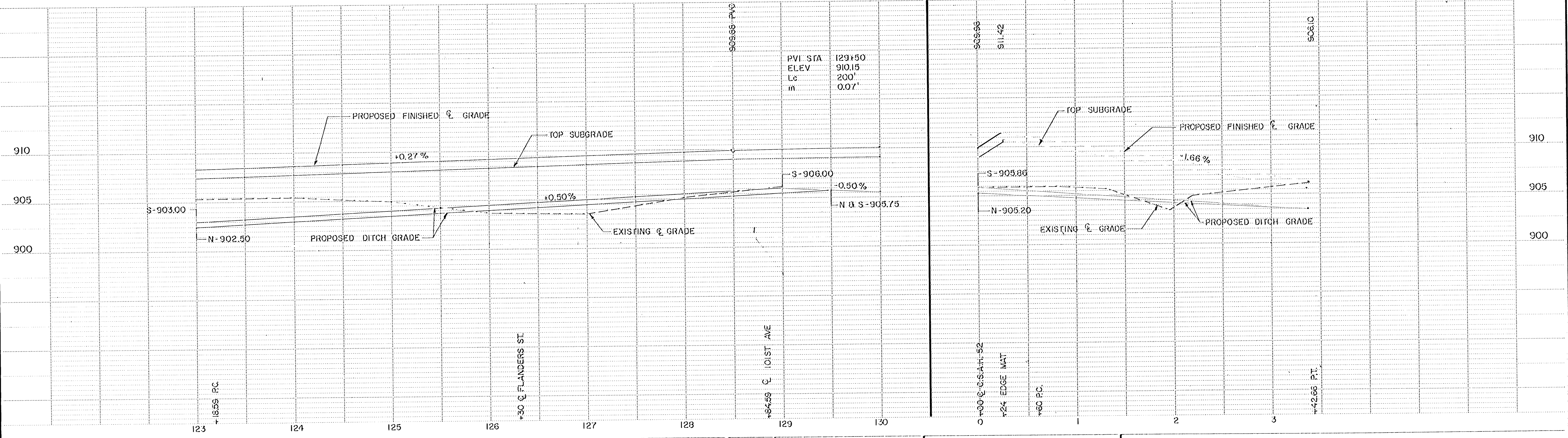
① APPROX. LOCATION OF EXISTING DRAINFIELD



B.M. ELEV. 913.19  
NW CORNER TOP OF BOTTOM STEP  
HOUSE NO. 2930 IOIST AVE

C.S.A.H. 52

IOIST AVENUE N.E.



**ENGINEERING DEPARTMENT**  
9150 Central Ave., N.E. Blaine, Minnesota 55434  
Phone (612) 784-6700

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 Minnesota.  
*Charles J. Janssen*  
Date 5/14/91 Reg. No. 10146

DATE	REVISION

PROJECT NO. 91-07	
DESIGN BY: DMK	DRAWN BY: DMK, KDP
CHECKED BY: TJS	APPROVED BY: [Signature]
AS BUILT BY: DMK	DATE: 11/12/92

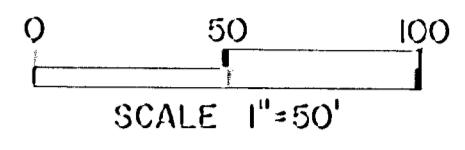
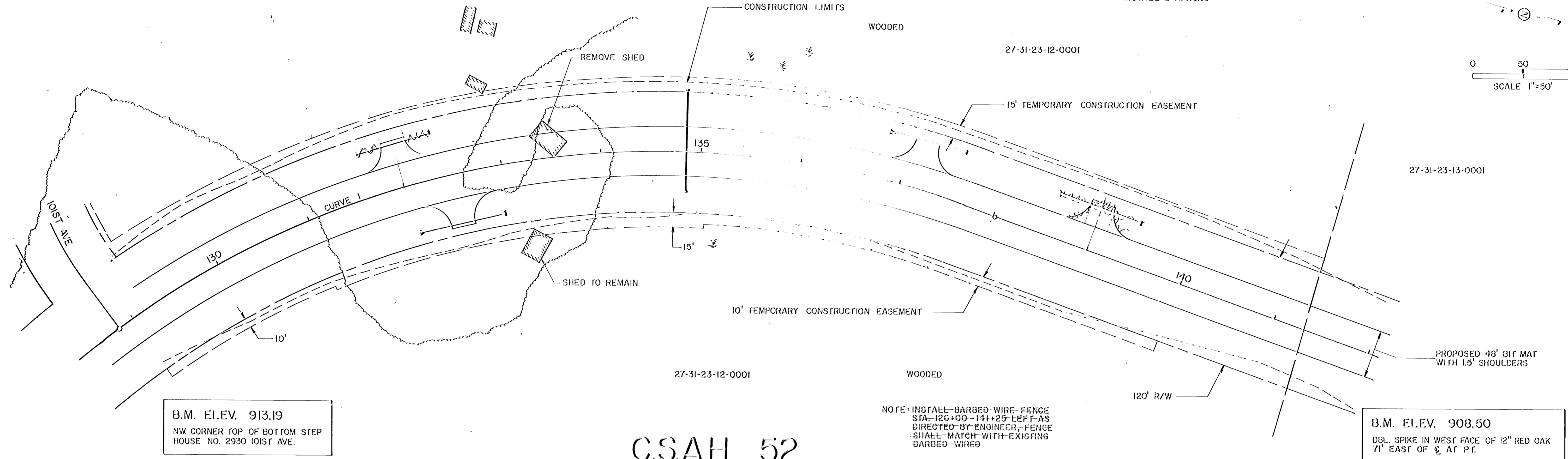
C.S.A.H. 52 PLAN & PROFILE

132+00-CONSTRUCT 24' WIDE ENT.  
47' LF, INSTALL 18" x 72" CSP  
INSTALL 2-APRONS

131+80  
132+50- CONSTRUCT 24' WIDE ENT.  
49' RT., INSTALL 18" x 84" CSP 76'  
INSTALL 2-APRONS

134+85 & CULVERT  
INSTALLED 24" x 96" ROP  
INSTALLED 2 APRONS

137+15  
139+00-CONSTRUCT 24' WIDE ENT  
43' LF, INSTALL 18" x 84" CSP 72'  
INSTALL 2-APRONS

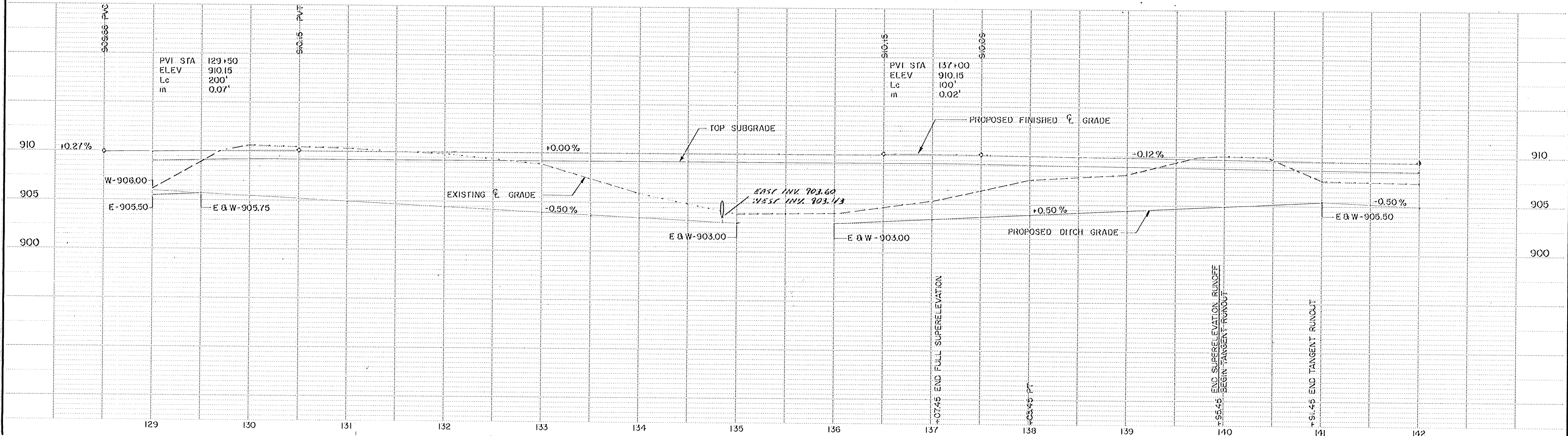


B.M. ELEV. 913.19  
NW CORNER TOP OF BOTTOM STEP  
HOUSE NO. 2930 101ST AVE.

B.M. ELEV. 908.50  
DBL. SPIKE IN WEST FACE OF 12" RED OAK  
71' EAST OF  $\phi$  AT P.T.

# C.S.A.H. 52

NOTE: INSTALL BARBED WIRE FENCE  
STA. 129+00-141+25 LEFT AS  
DIRECTED BY ENGINEER, FENCE  
SHALL MATCH WITH EXISTING  
BARBED WIRE



**ENGINEERING DEPARTMENT**  
19150 Central Ave., N.E. Blaine, Minnesota 55434  
Phone (612) 784-6700

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*Charles J. Jentsch*  
Date 5/16/97, Reg. No. 10146

DATE	REVISION

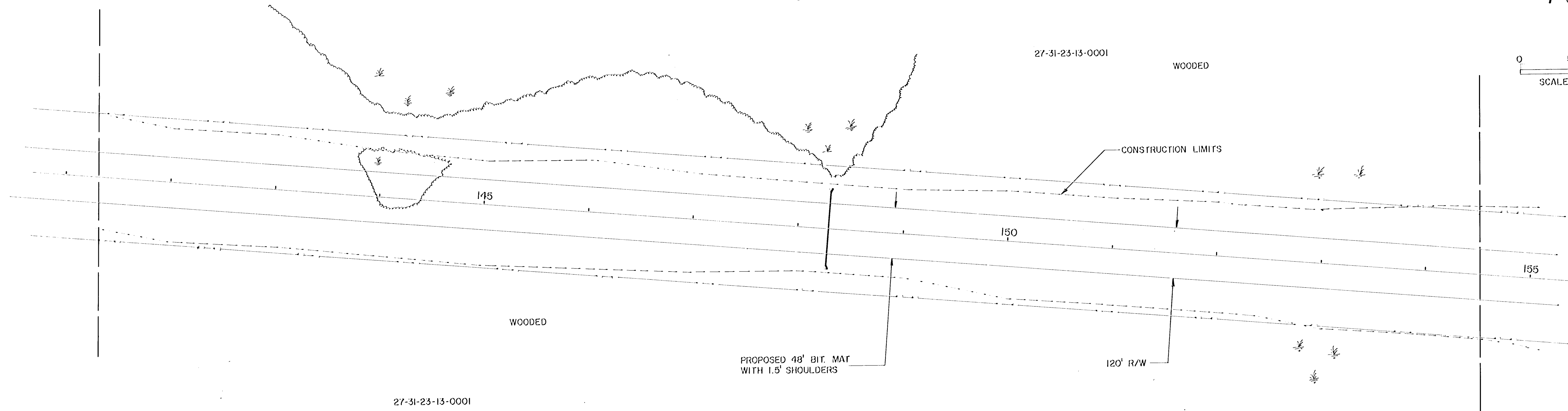
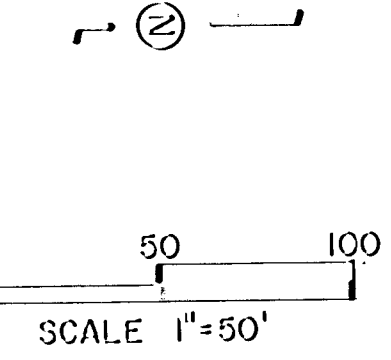
PROJECT NO. 91-07  
DESIGN BY: DMK  
DRAWN BY: DMK, RDP  
CHECKED BY: FJS  
APPROVED BY:  
AS BUILT BY: *DMK*  
DATE: 12/10/92

## C.S.A.H. 52 PLAN & PROFILE

148+30 @ CULVERT  
 INSTALLED 24" x 70' RCP  
 INSTALLED 2 APRONS

27-31-23-13-0001

WOODED

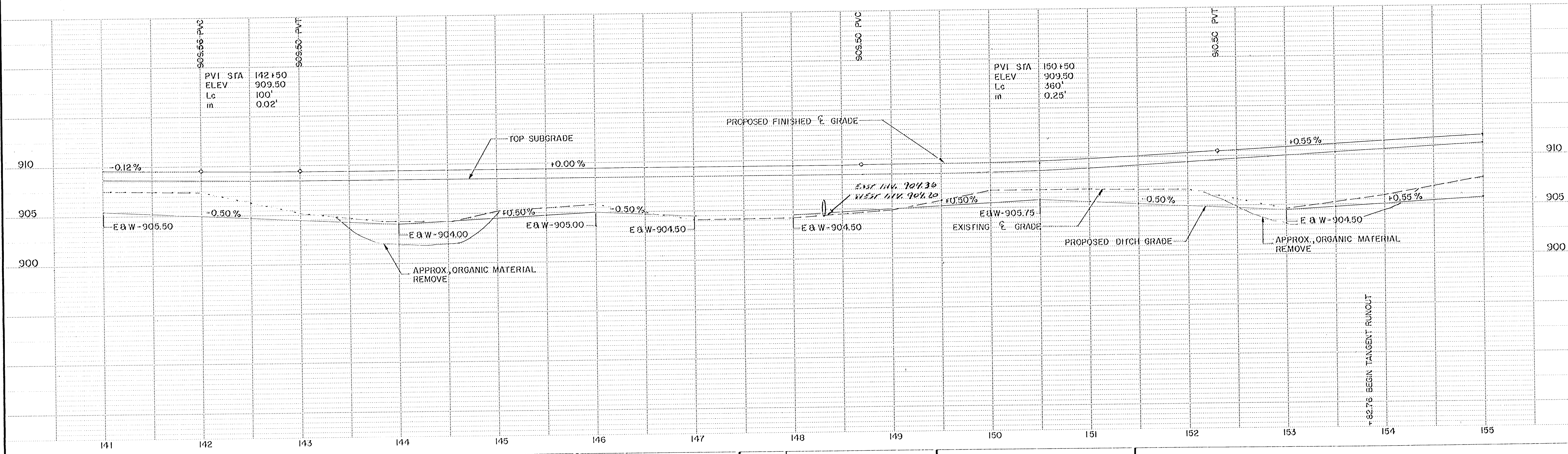


27-31-23-13-0001

B.M. ELEV. 908.05  
 DBL. SPIKE IN FACE OF 10" RED OAK  
 59' EAST OF C/L AT STA. 146+00

# C.S.A.H. 52

B.M. ELEV. 907.91  
 DBL. SPIKE IN 6" CLUMP BIRCH,  
 120' WEST OF C/L AT STA. 150+70



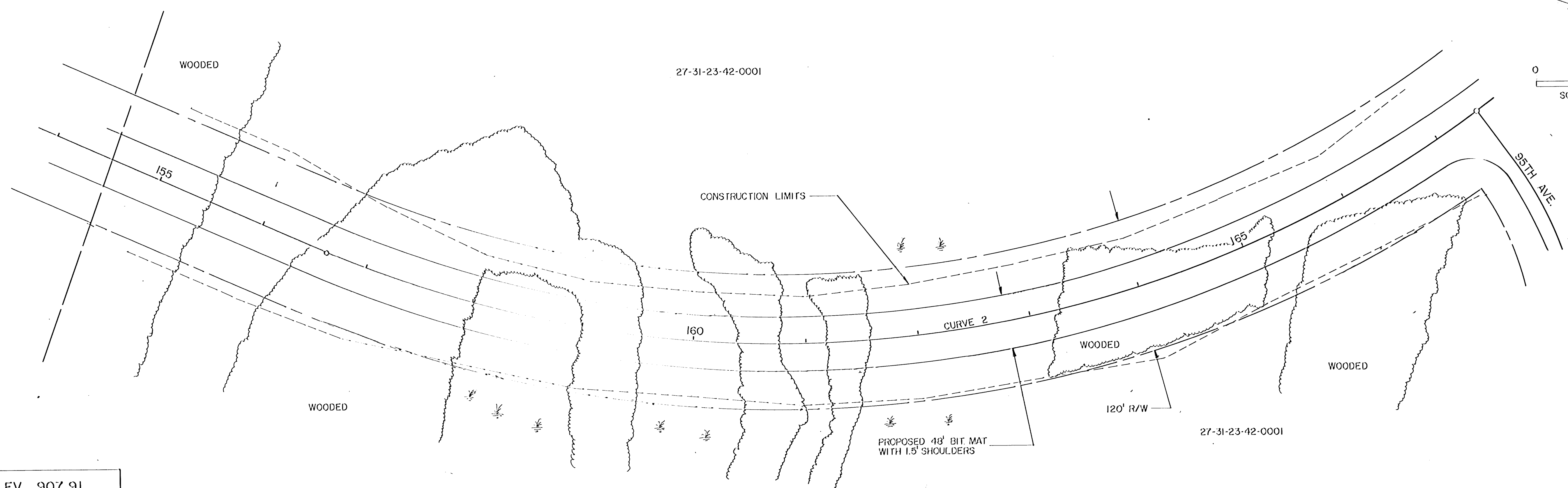
**ENGINEERING DEPARTMENT**  
 9150 Central Ave., N.E. Blaine, Minnesota 55434  
 Phone (612) 784-6700

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 Minnesota.  
*Charles J. Lovell*  
 Date 5/16/91, Reg. No. 10146

DATE	REVISION

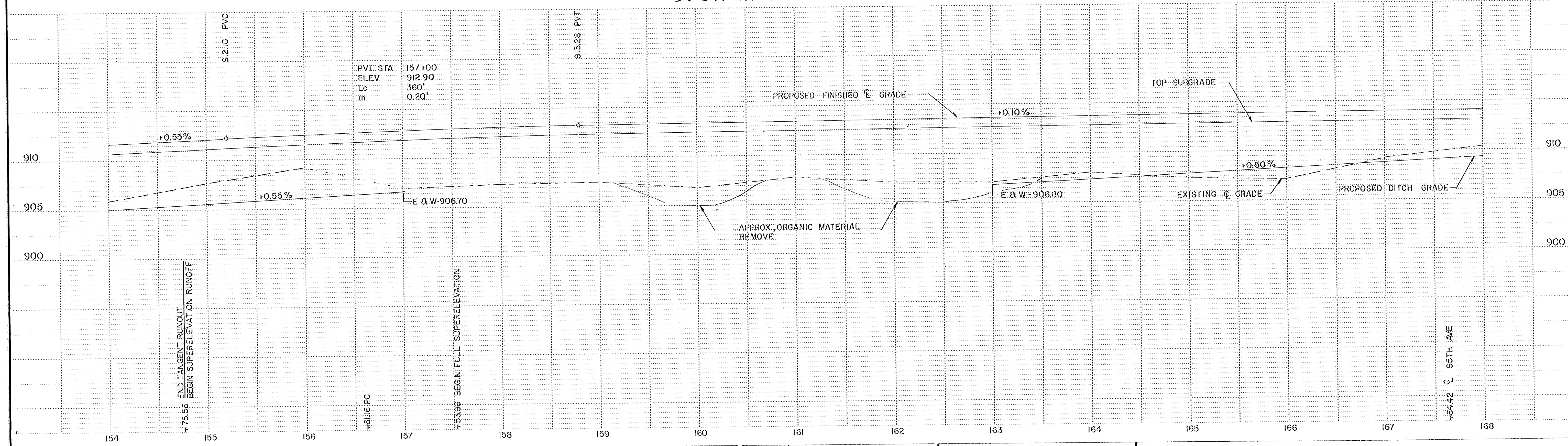
PROJECT NO. 91-07	DRAWN BY: DMK, KDP
DESIGN BY: DMK	APPROVED BY:
CHECKED BY: TJS	
AS BUILT BY: L...	DATE: 12/15/12

**C.S.A.H. 52 PLAN & PROFILE**  
 SHEET NO. 13 OF 26 SHEETS



B.M. ELEV. 907.91  
 DBL. SPIKE IN 6" CLUMP BIRCH  
 120' WEST OF C AT STA. 150+70

# C.S.A.H. 52



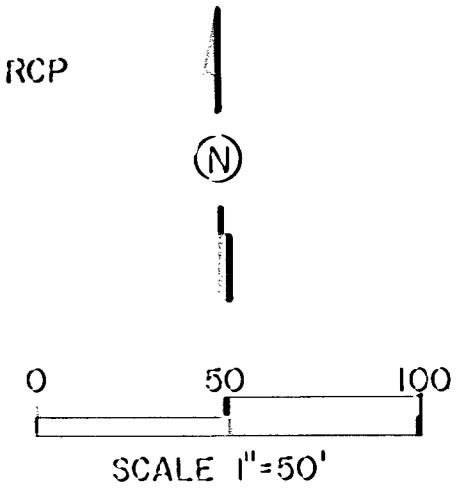
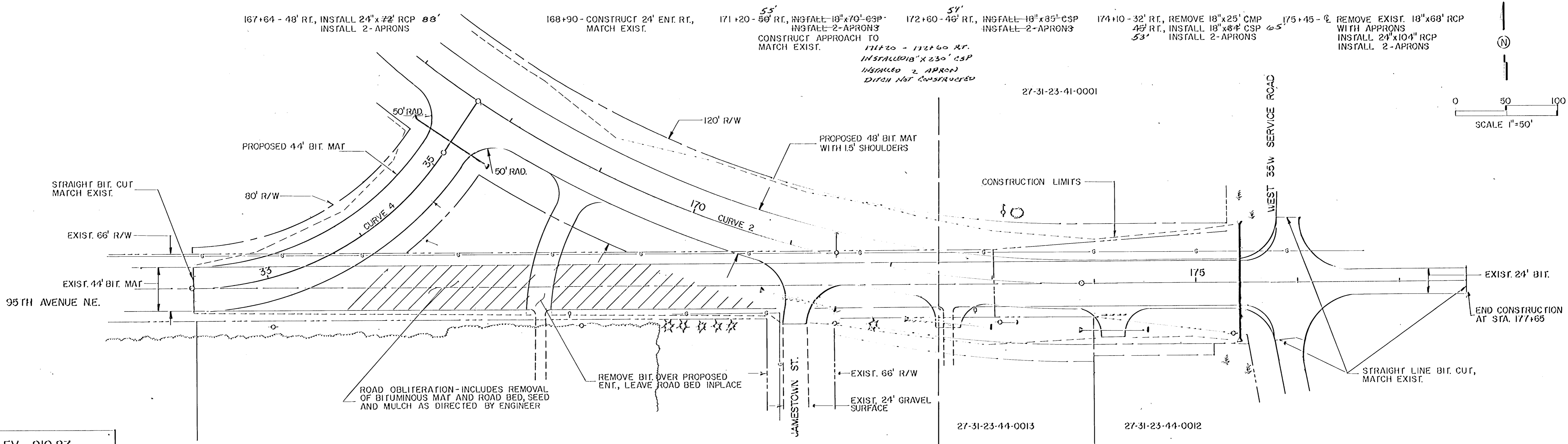
**ENGINEERING DEPARTMENT**  
 9150 Central Ave., N.E. Blaine, Minnesota 55434  
 Phone (612) 784-6700

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 Minnesota.  
*Charles J. Lentz*  
 Date 5/16/91 Reg. No. 10146

DATE	REVISION

PROJECT NO. 91-07	
DESIGN BY: DMK	DRAWN BY: DMK, KDP
CHECKED BY: FJS	APPROVED BY:
AS BUILT BY: Druis	DATE: 12/19/92

**C.S.A.H. 52 PLAN & PROFILE**

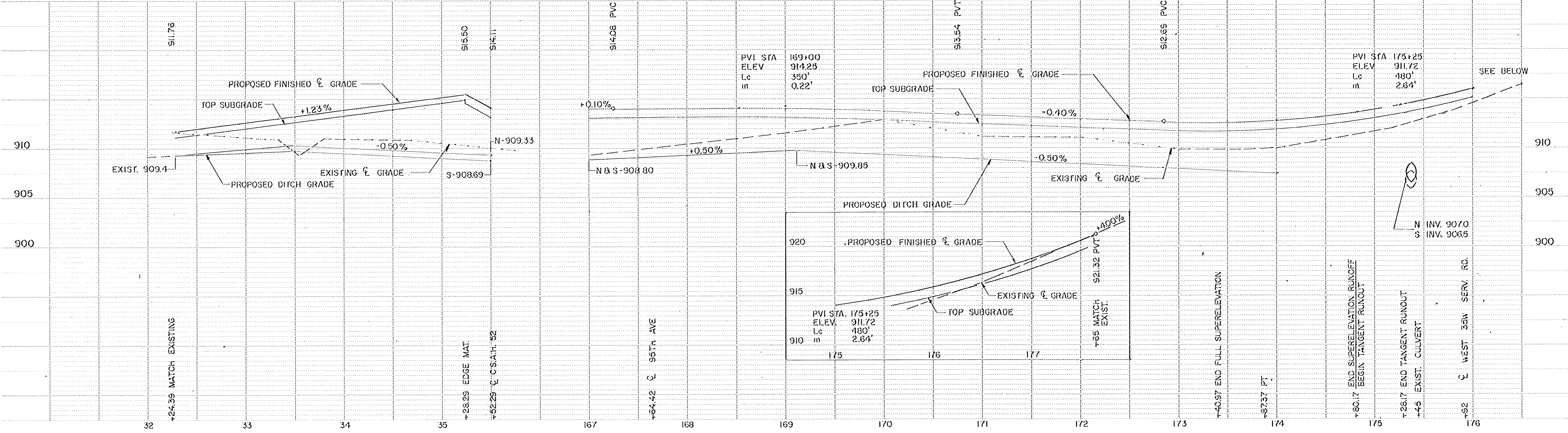


B.M. ELEV. 910.87  
 SW. CORNER TOP OF BOTTOM STEP  
 HOUSE NO. 9455 FLANDERS ST.

B.M. ELEV. 932.13  
 BRASS DISK SE. CORNER OF BRIDGE  
 AT 95TH AVE. & INTERSTATE 35W

# 95TH AVENUE N.E.

# C.S.A.H 52



**ENGINEERING DEPARTMENT**  
 9150 Central Ave., N.E. Blaine, Minnesota 55434  
 Phone (612) 784-6700

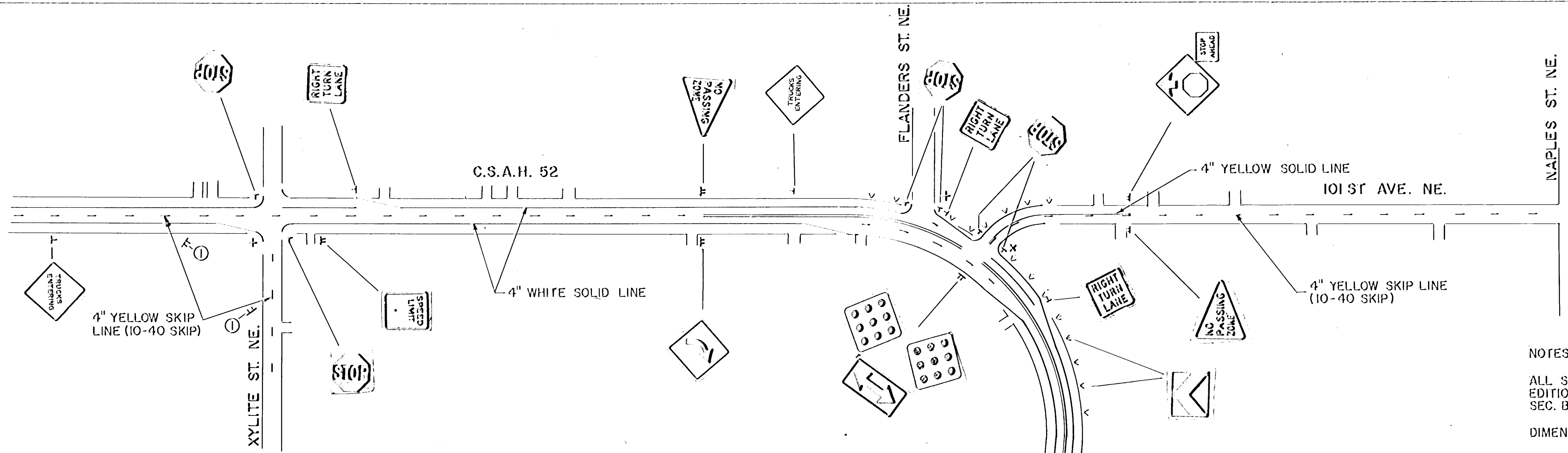
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the State of Minnesota.  
*Charles J. Jensen*  
 Date 5/16/92, Reg. No. 10146

DATE	REVISION

PROJECT NO. 91-07  
 DESIGN BY: DMK  
 CHECKED BY: TJS  
 AS BUILT BY: DMK

DRAWN BY: DMK, KDP  
 APPROVED BY:  
 DATE: 12/10/92

## C.S.A.H. 52 PLAN & PROFILE



NOTES:

ALL SIGNING & STRIPING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING SEC. B, DATED MARCH, 1990.

DIMENSIONS SHOWN ON THIS PLAN ARE FOR PAVEMENT MARKINGS ONLY.

LOCATION OF SIGNS ARE APPROXIMATE, EXACT LOCATION WILL BE DETERMINED IN FIELD BY ANOKA COUNTY HIGHWAY DEPARTMENT.

PRIOR TO THE OPENING OF C.S.A.H. 52 TO THROUGH TRAFFIC, ALL PERMANENT SIGNING MUST BE INSTALLED.

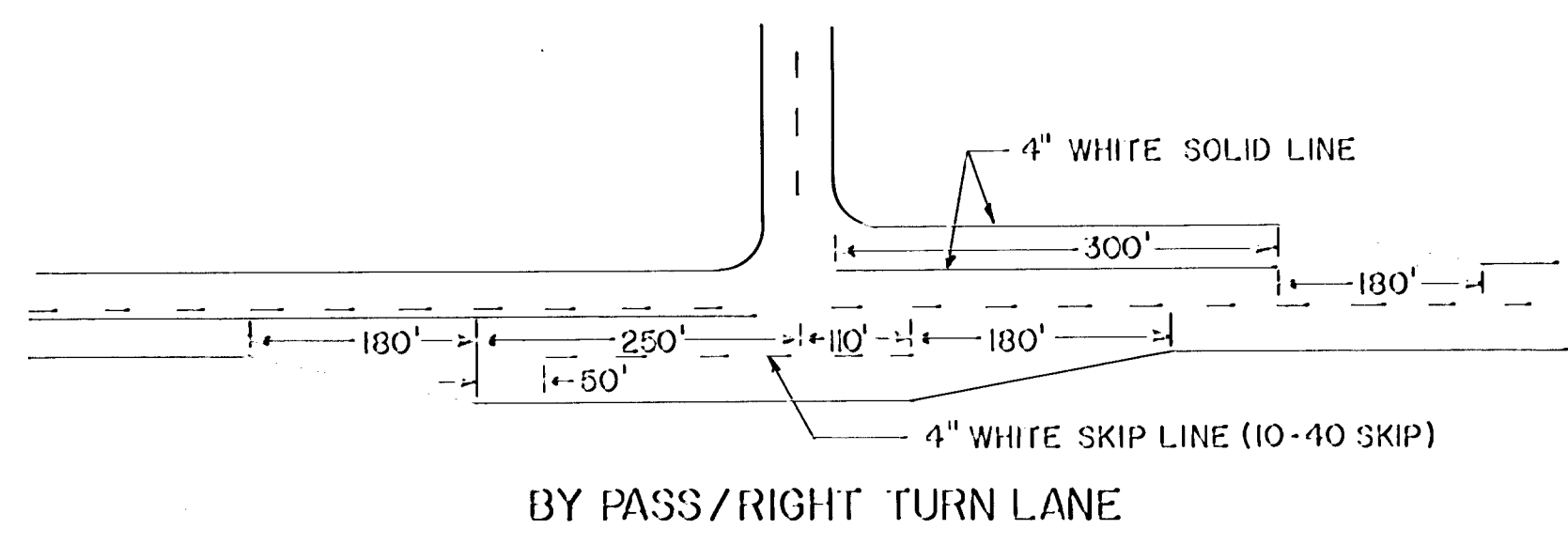
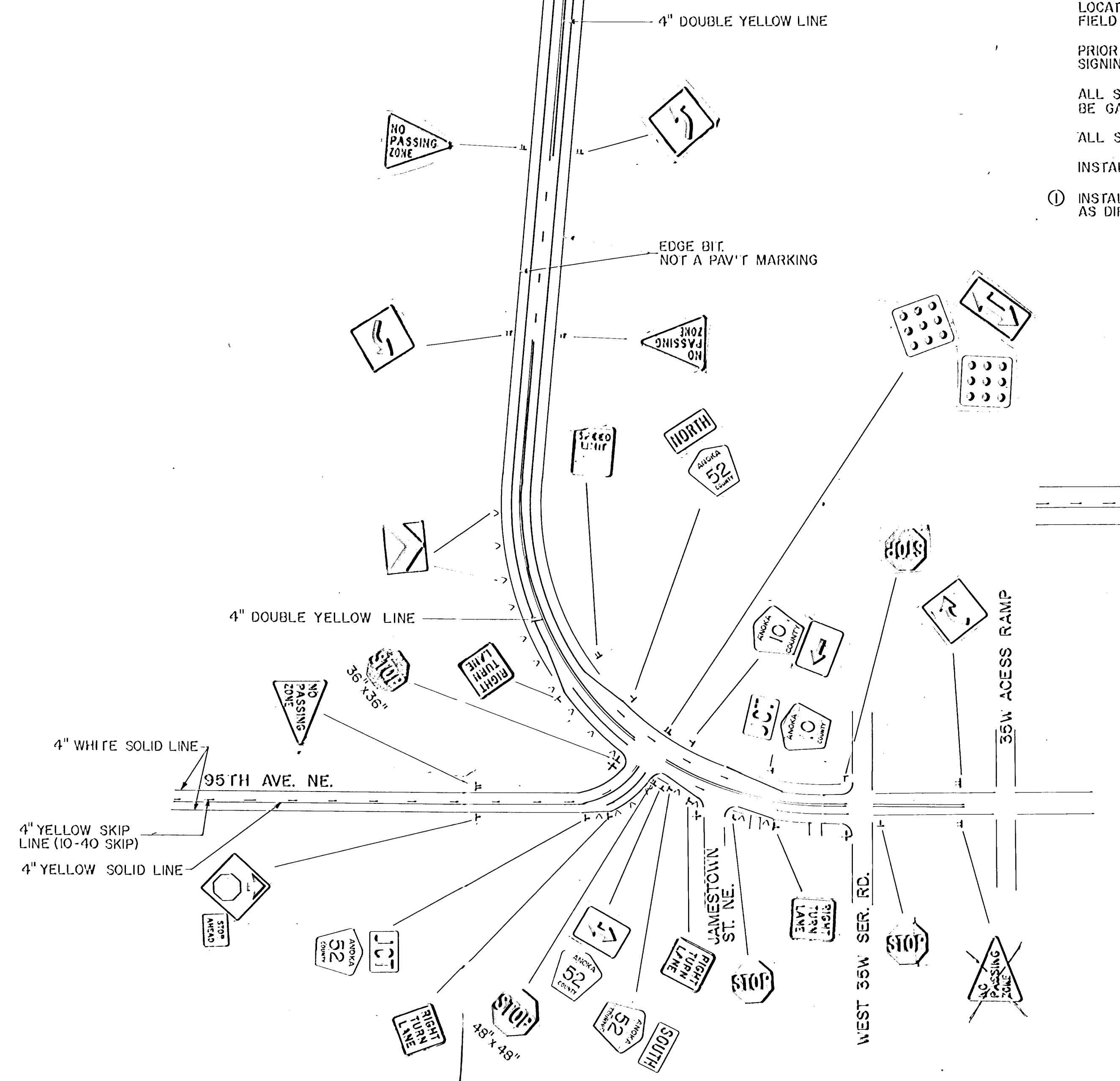
ALL SIGN POSTS SHALL BE PAINTED BLACK EXCEPT FOR STREET SIGNS WHICH WILL BE GALVANIZED.

ALL STOP SIGNS ARE 30"x30" UNLESS NOTED ON PLAN

INSTALL 18"x24" CHEVRON SIGNS (W1-8) ON 101ST AVE. NE. & 95TH AVE. NE.

① INSTALL 32 LF PERMANENT BARRICADE AT THE ENDS OF OBLITERATED XLITE ST. AS DIRECTED BY ENGINEER.

SIGNING TABULATION								
SIGN	SIZE	QUAN.	SIGN	SIZE	QUAN.	SIGN	SIZE	QUAN.
STOP	30"x30"	7	RIGHT TURN LANE	30"x30"	7	W1-8	18"x24"	16
RI-1	36"x36"	1	R3-X1	30"x30"	7	W1-8	24"x30"	52
	48"x48"	1						
	36"x36"	2		36"x36"	2	JCT	21"x15"	2
W1-2R	18"x18"	4	W1-2L	24"x48"	2	M2-1	21"x15"	1
X4-2	Y. ON Y.		W1-7	36"x48"x48"	6	M6-4	21"x15"	1
	8"x36"	12 BLADES	NO PASSING ZONE					
STREET SIGN			W14-3	36"x36"	2	M6-1	24"x12"	1
	24"x30"	2		24"x18"	2	NORTH		
R2-1	36"x36"	2	W3-1A	24"x24"	6	M3-1	24"x12"	1
			MI-6			SOUTH		
W11-X3						M3-3		



- ① CONTRACTOR SHALL INSTALL SPEED LIMIT SIGN WITH NO INDICATING SPEED, A.C.H.D. WILL PLACE SPEED LIMIT ON SIGNS.
- ② REFER TO SIGN LAYOUT TO IDENTIFY ROAD NUMBER FOR MI-6 SIGNS
- ③ STREET SIGN BLADE LENGTH SHOWN IS APPROXIMATE, USE LENGTH THAT FITS STREET NAME



**ENGINEERING DEPARTMENT**  
 9150 Central Ave., N.E. Blaine, Minnesota 55434  
 Phone (612) 784-6700

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 Minnesota.  
*Charles L. Lunde*  
 Date 5/16/91 Reg No. 10146

DATE  
6/3/91

REVISION  
SIGNING AND STRIPING

PROJECT NO. 91-07  
 DESIGN BY: A.C.H.D. DRAWN BY: DMK  
 CHECKED BY: APPROVED BY:  
 AS BUILT BY: DMK DATE: 12/16/92

**C.S.A.H. 52 SIGNING & STRIPING**

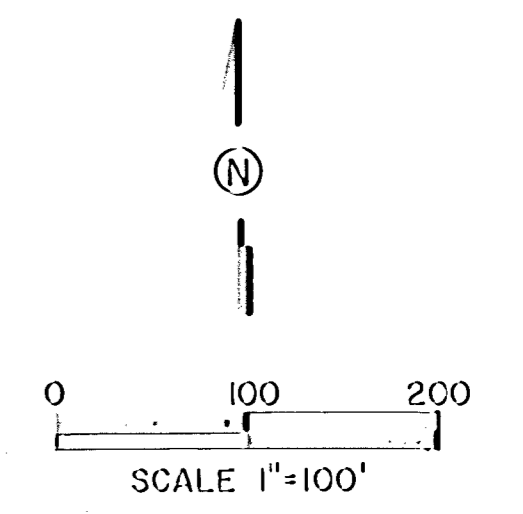




NOTE: CONTRACT TO EXCAVATE 59,603 C.Y. OF MATERIAL TO BE USED AS GRANULAR BORROW FOR C.S.A.H. 52.

AREA OF MITIGATION SITE SHALL BE A MINIMUM OF 4.85 ACRES

AN ALTERNATIVE WETLAND MITIGATION SITE MAY BE SUBSTITUTED FOR THE SITE SHOWN, ALTERNATIVE LOCATION IS APPROX. 200' TO 800' WEST OF CSAH 52 AT STA. 145+00



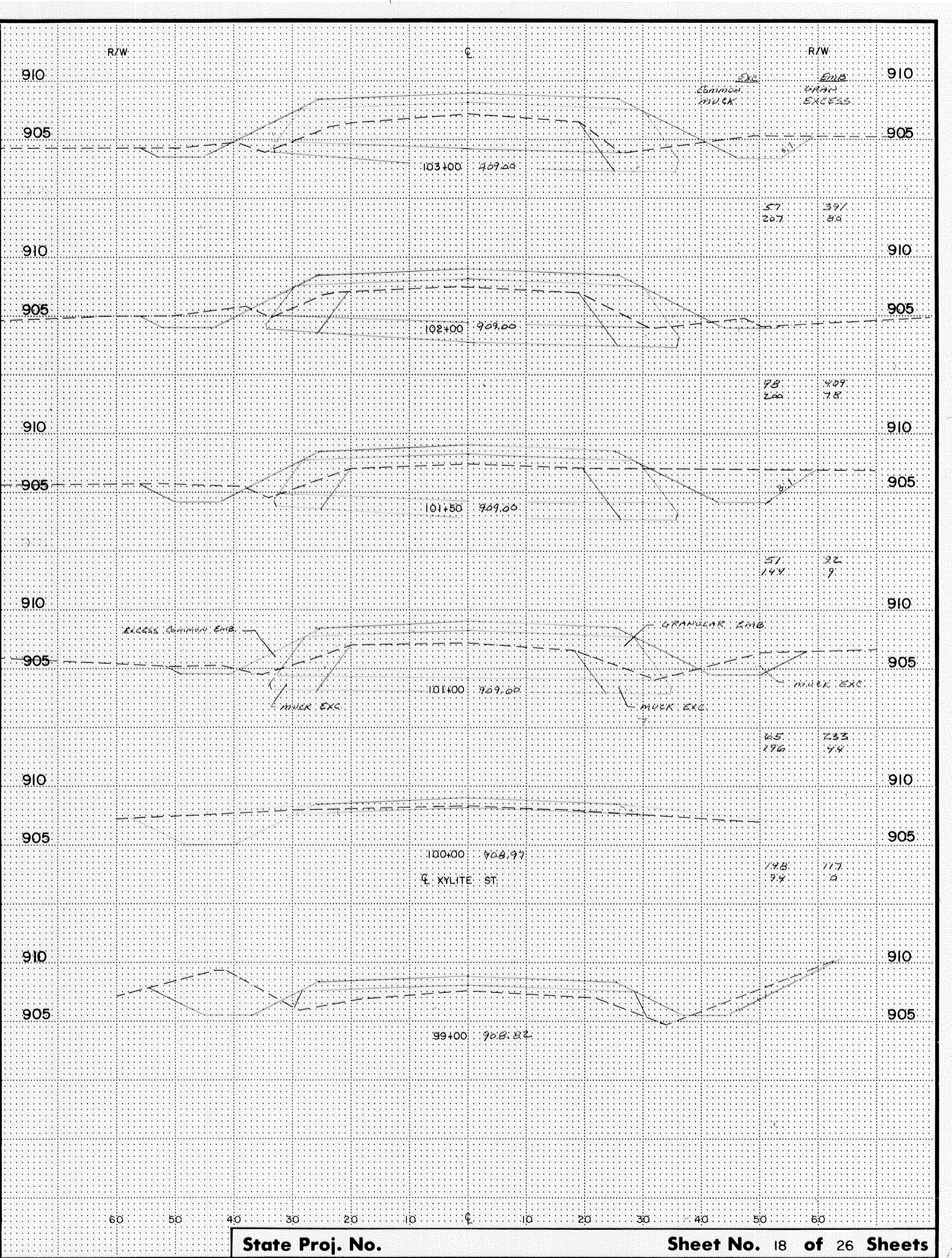
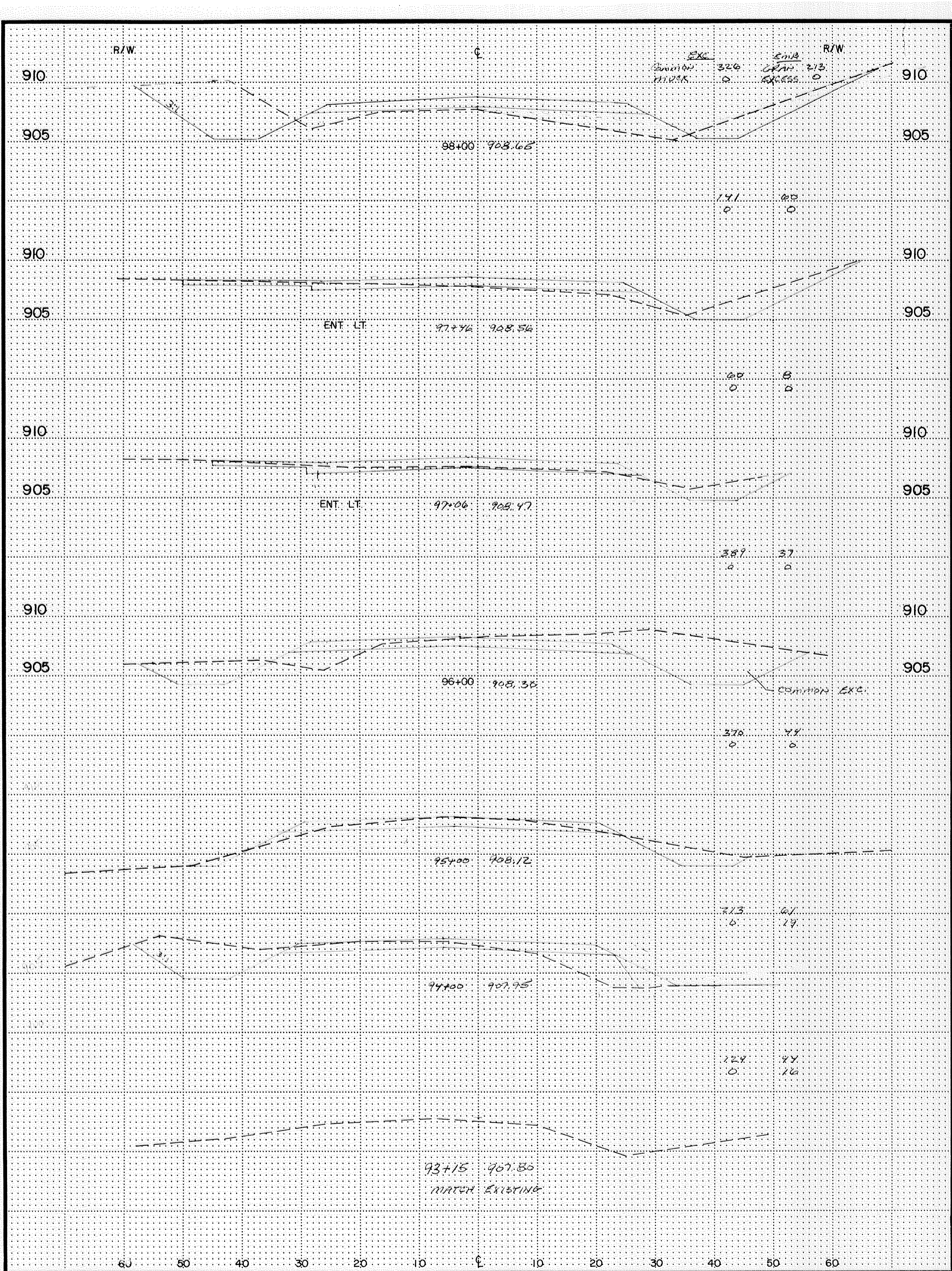
**ENGINEERING DEPARTMENT**  
 9150 Central Ave. N.E. Blaine, Minnesota 55434  
 Phone (612) 784-6700

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 Minnesota.  
*Charles Jensen*  
 Date: 5/14/91 Reg No. 10146

DATE	REVISION	PROJECT NO
		91-07
		DESIGN BY DMK
		DRAWN BY KDP,DMK
		CHECKED BY TJS
		APPROVED BY
		AS BUILT BY
		DATE

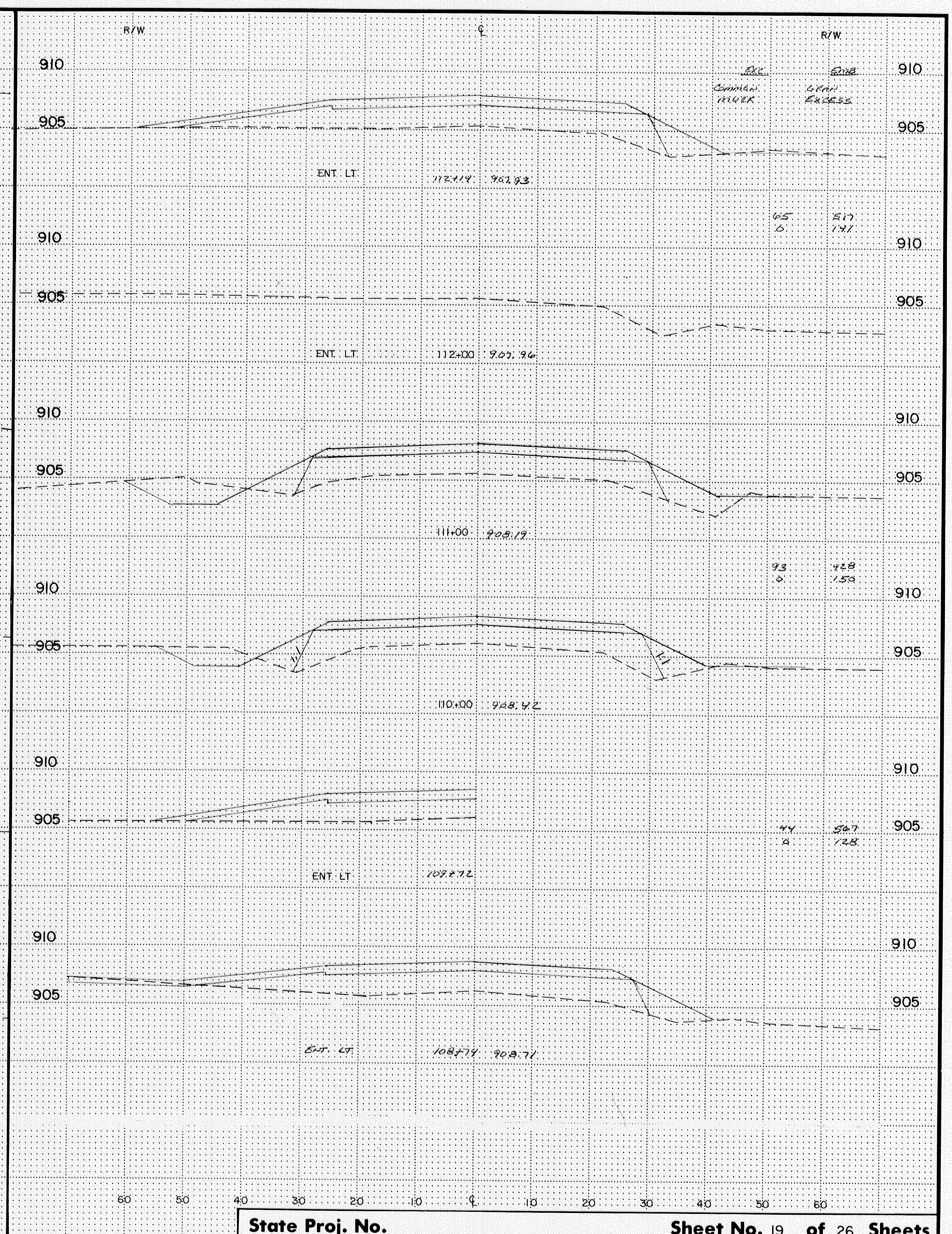
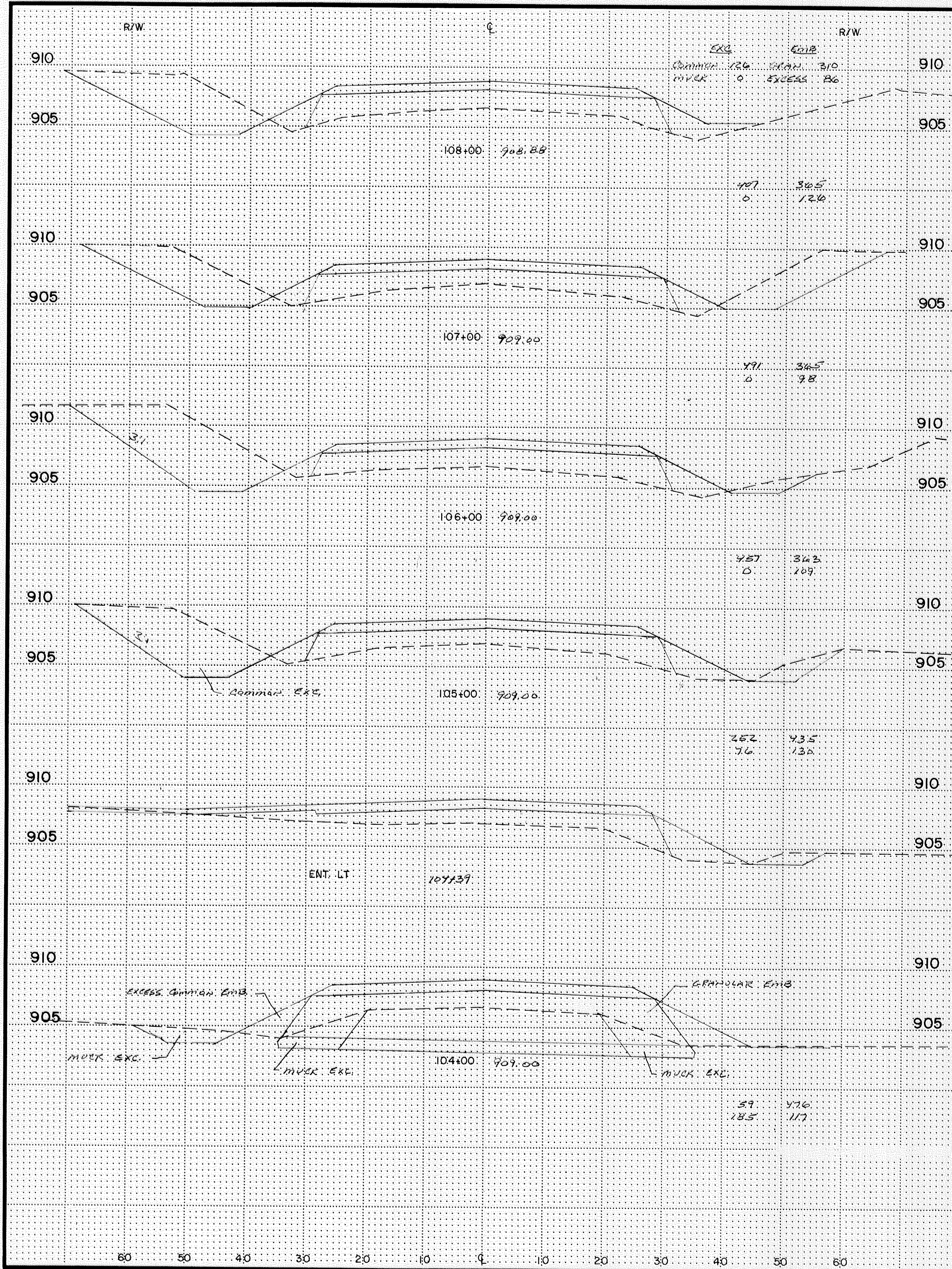
**WETLAND MITIGATION**

VOID, SEE WETLAND MITIGATION RECORD DRAWING SHEET 1 OF 1



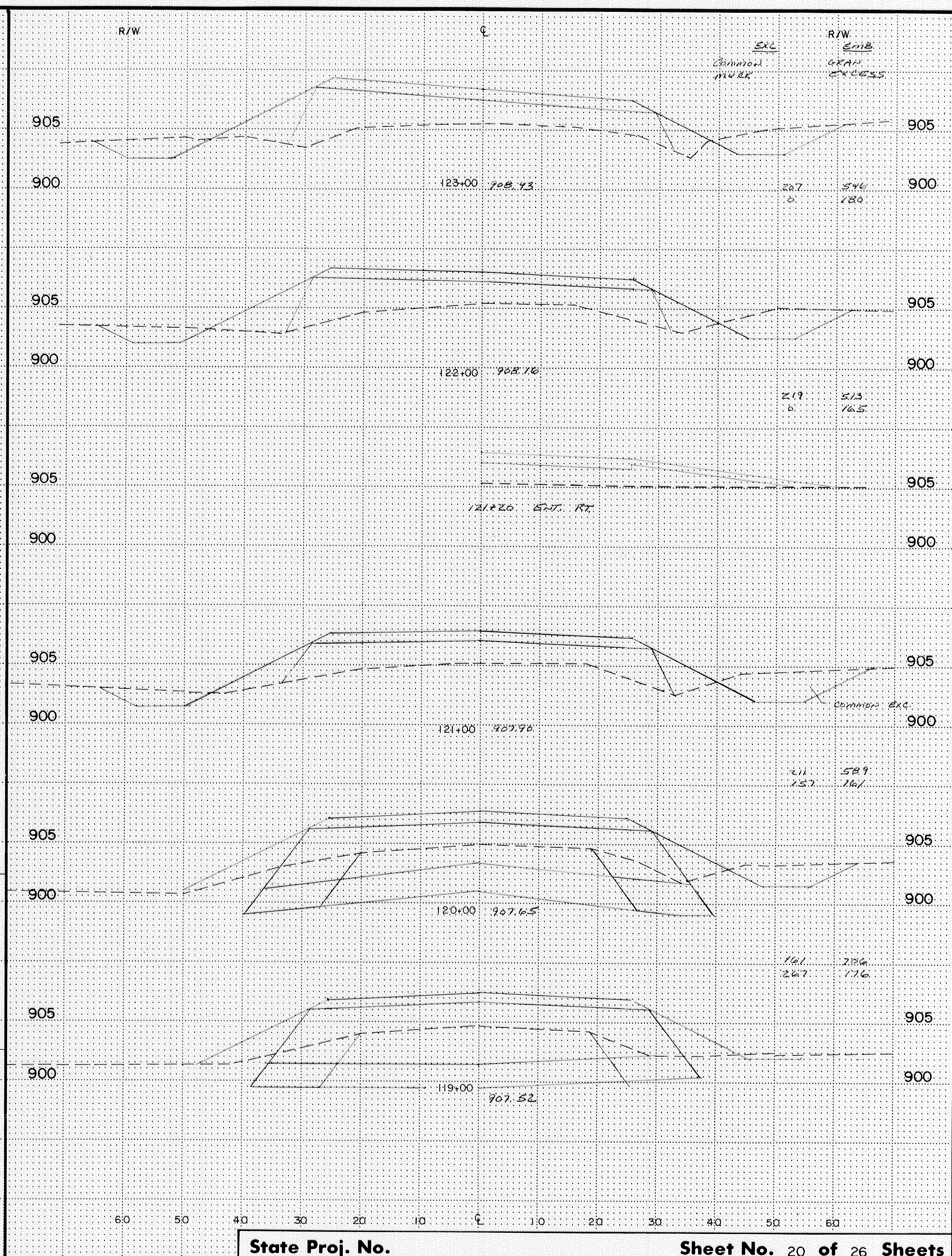
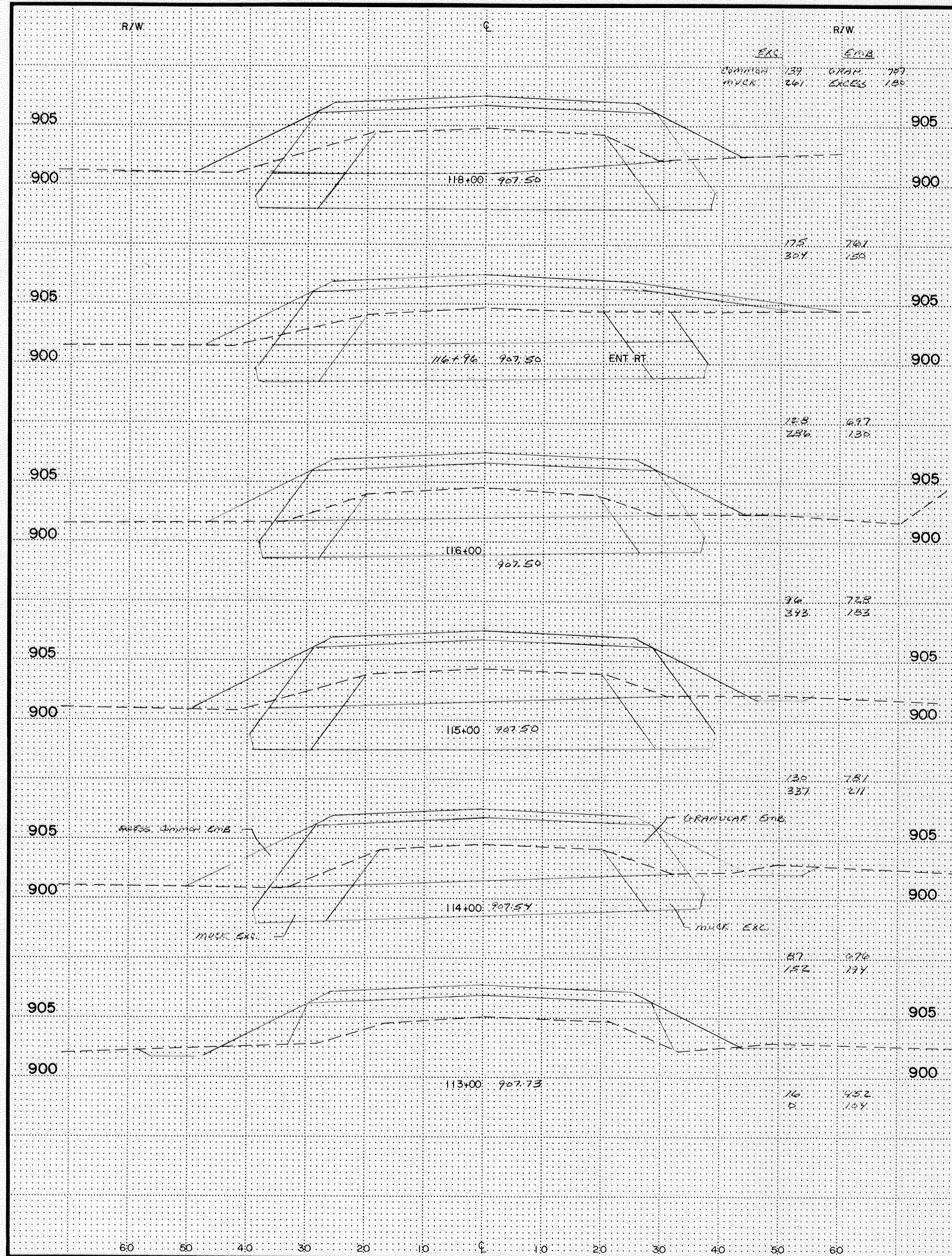
State Proj. No.

Sheet No. 18 of 26 Sheets



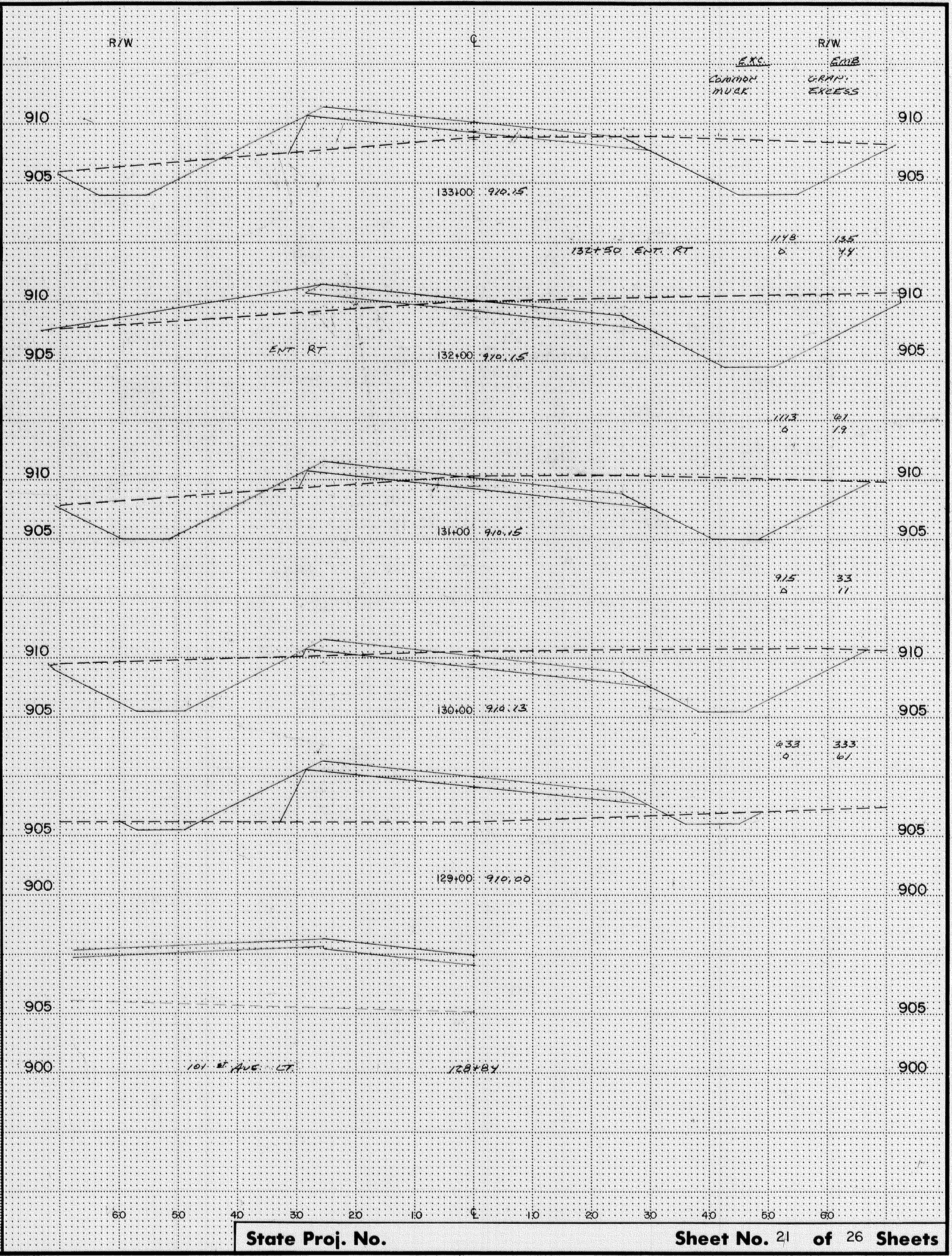
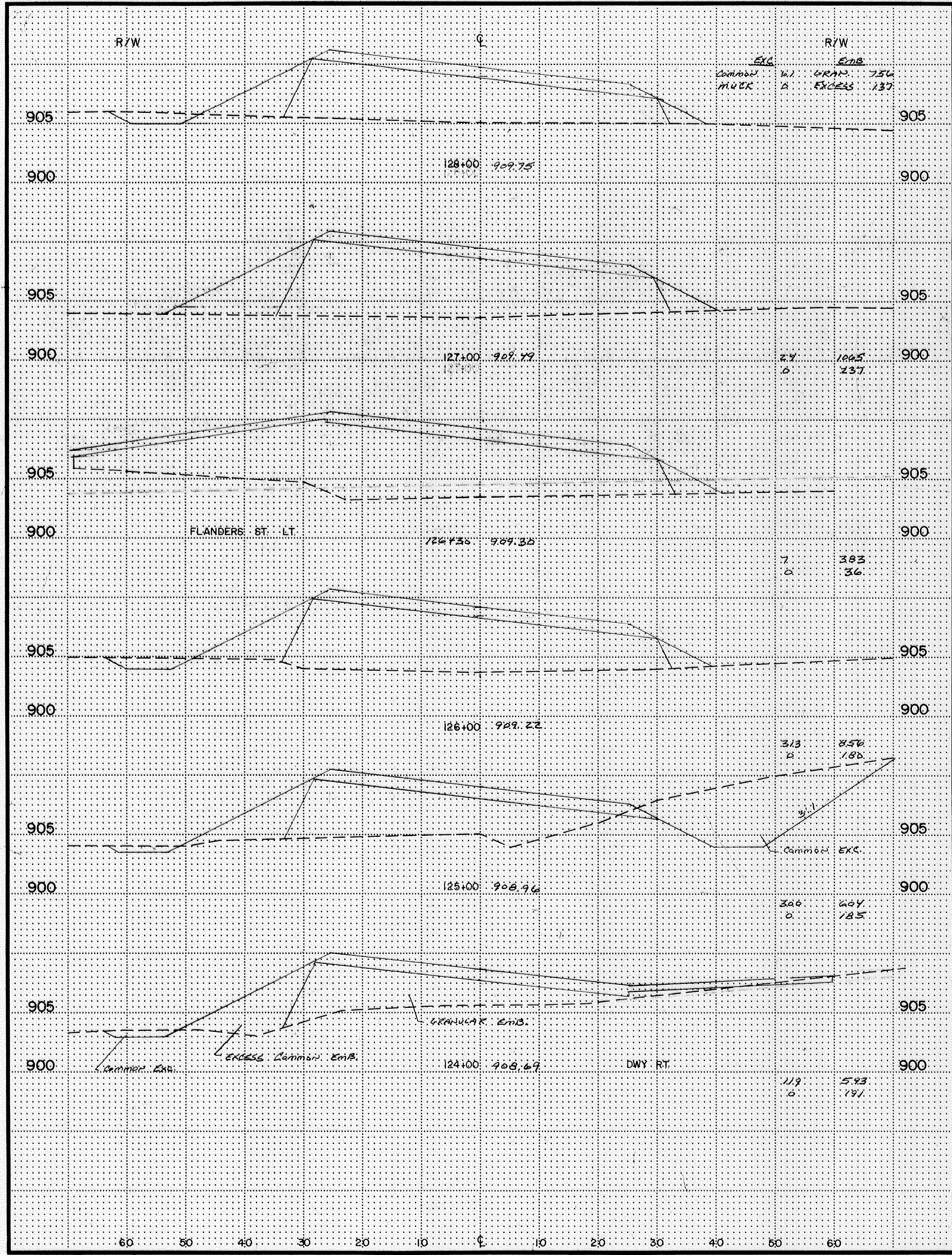
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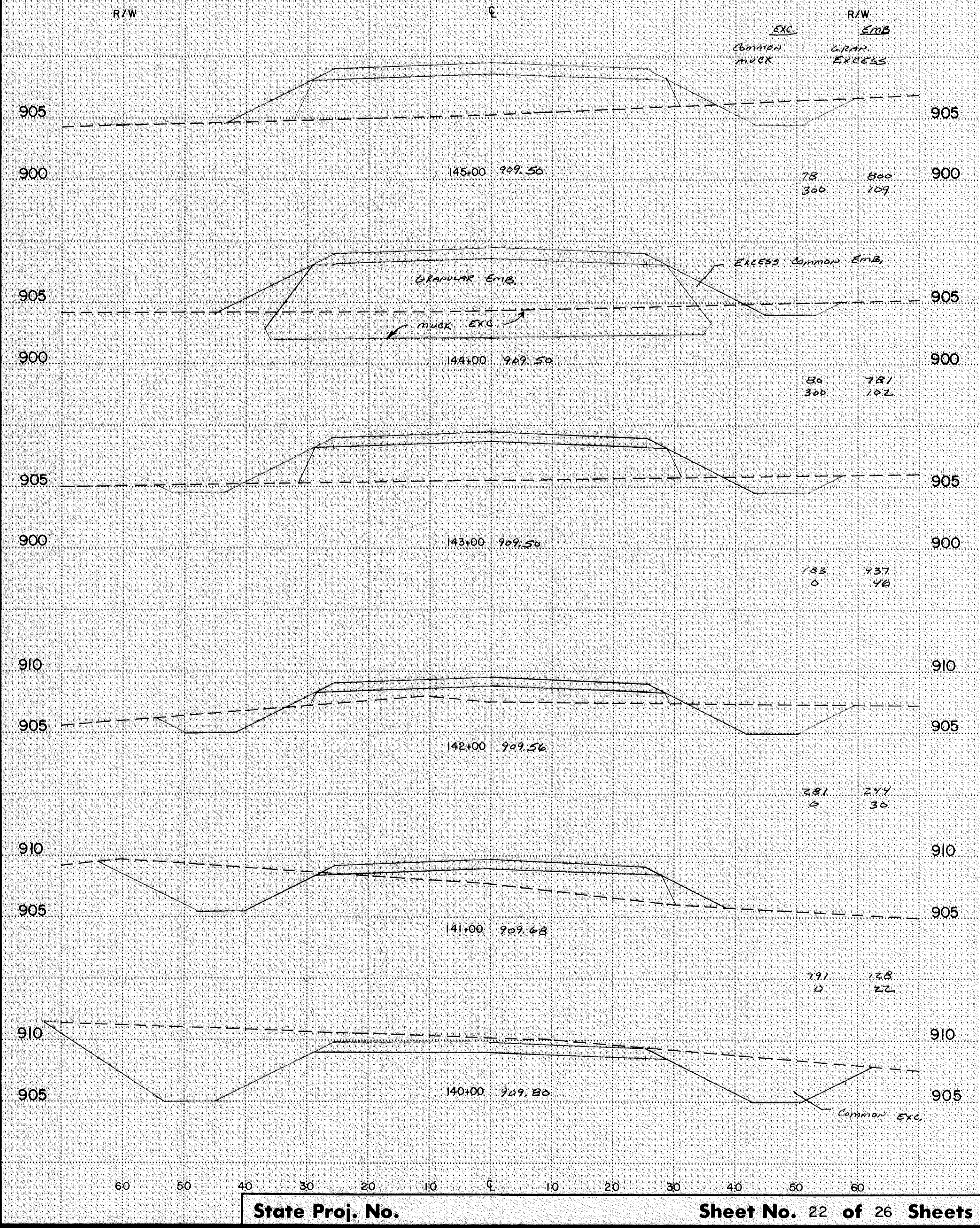
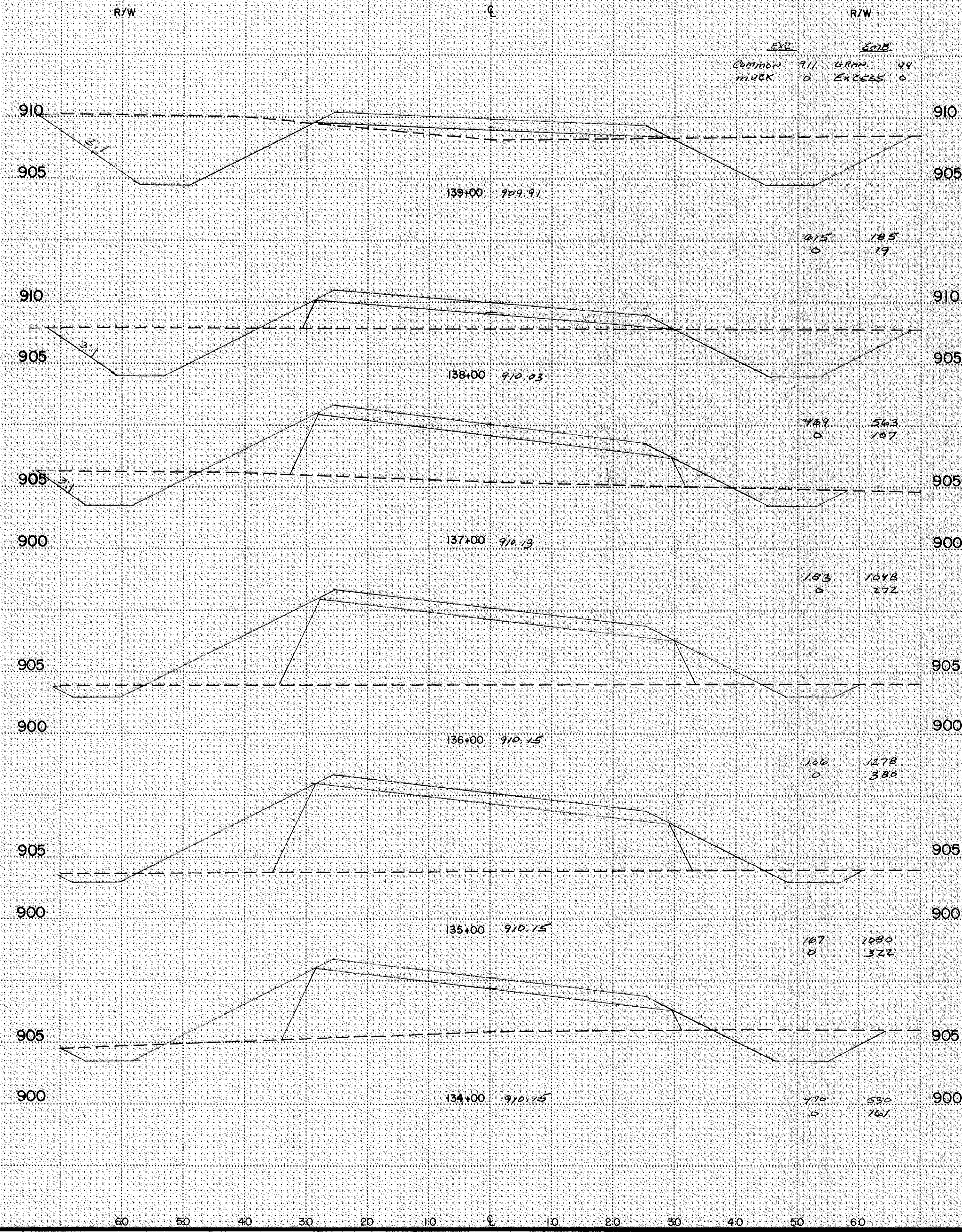
Sheet No. 19 of 26 Sheets



State Proj. No.

Sheet No. 20 of 26 Sheets

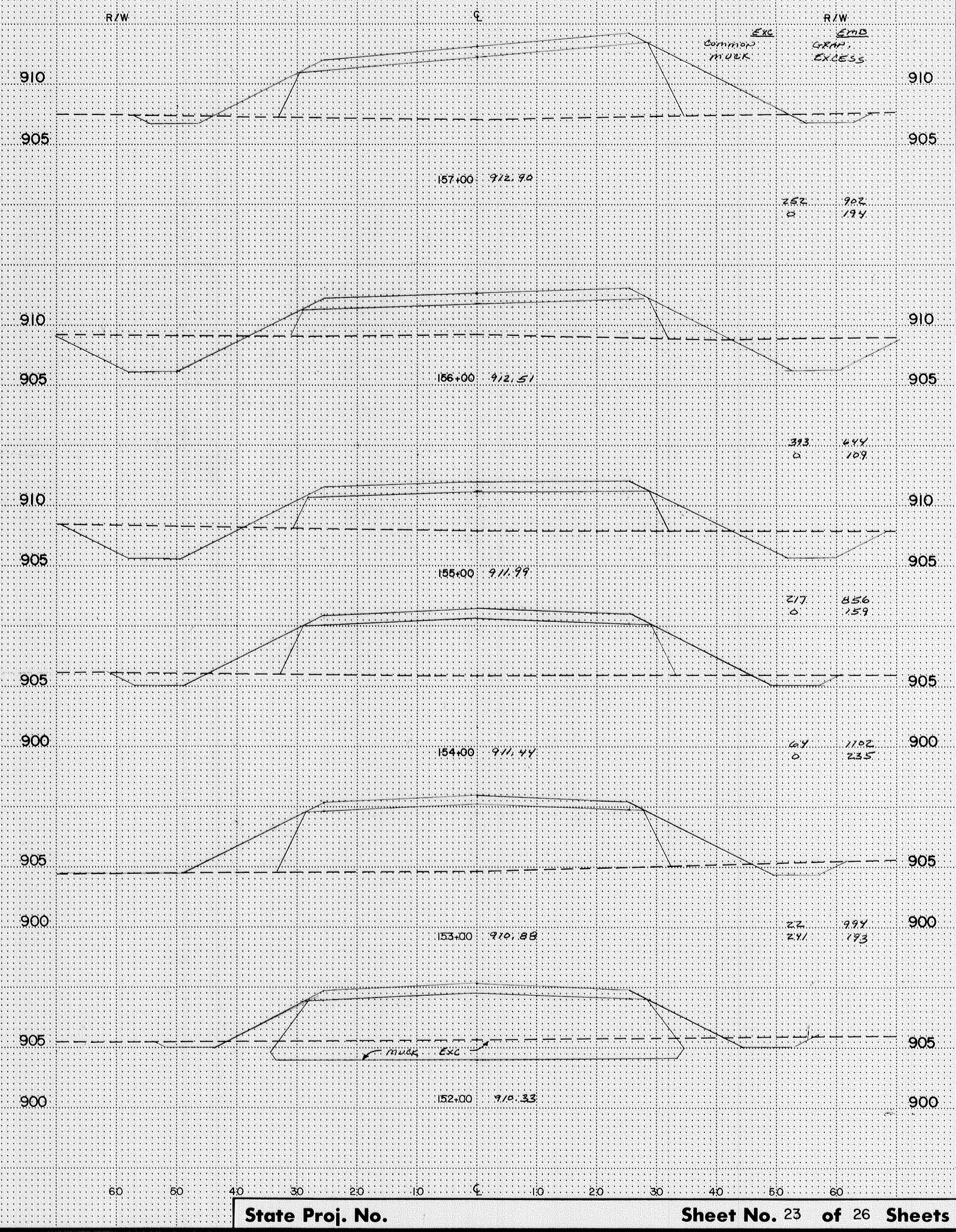
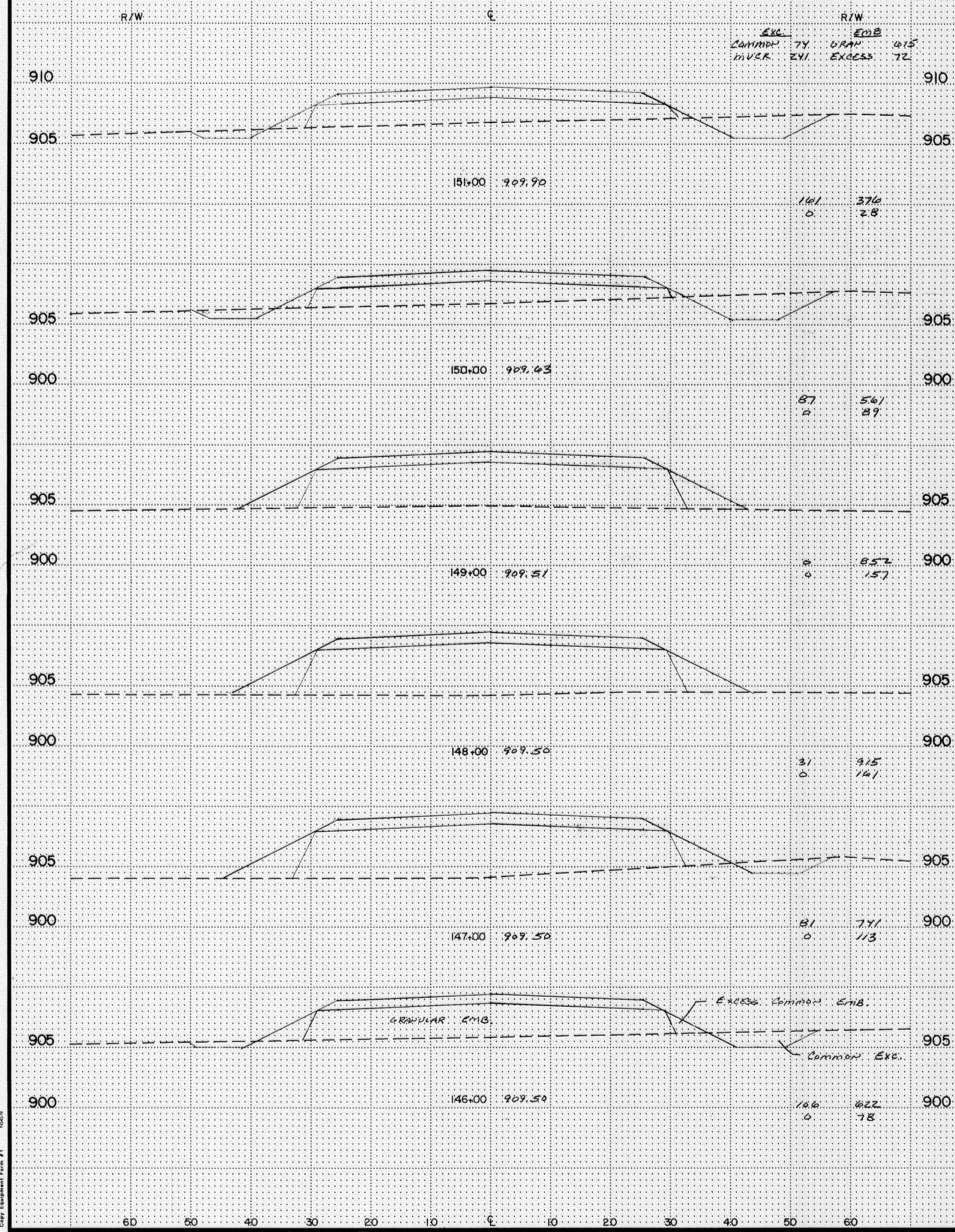




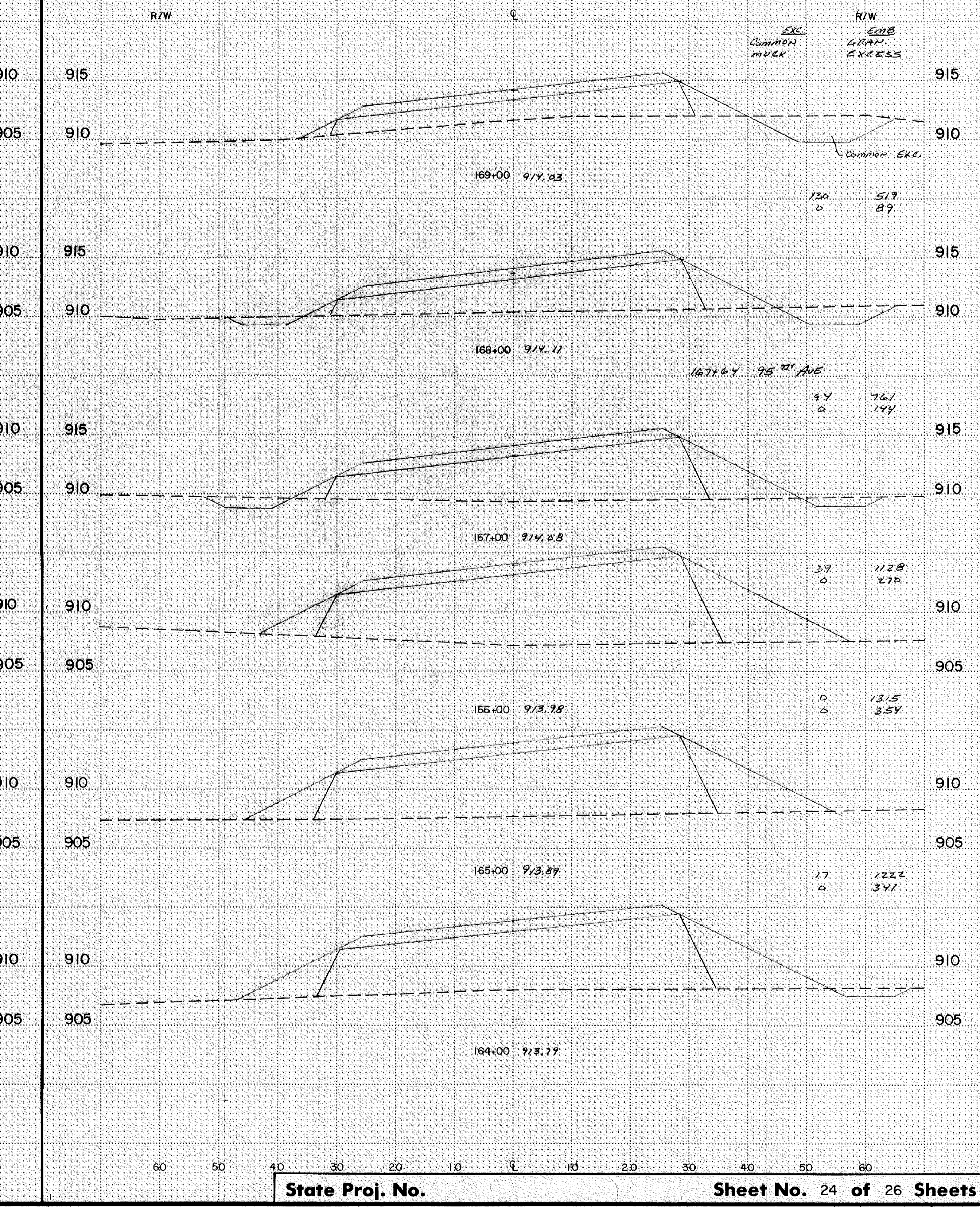
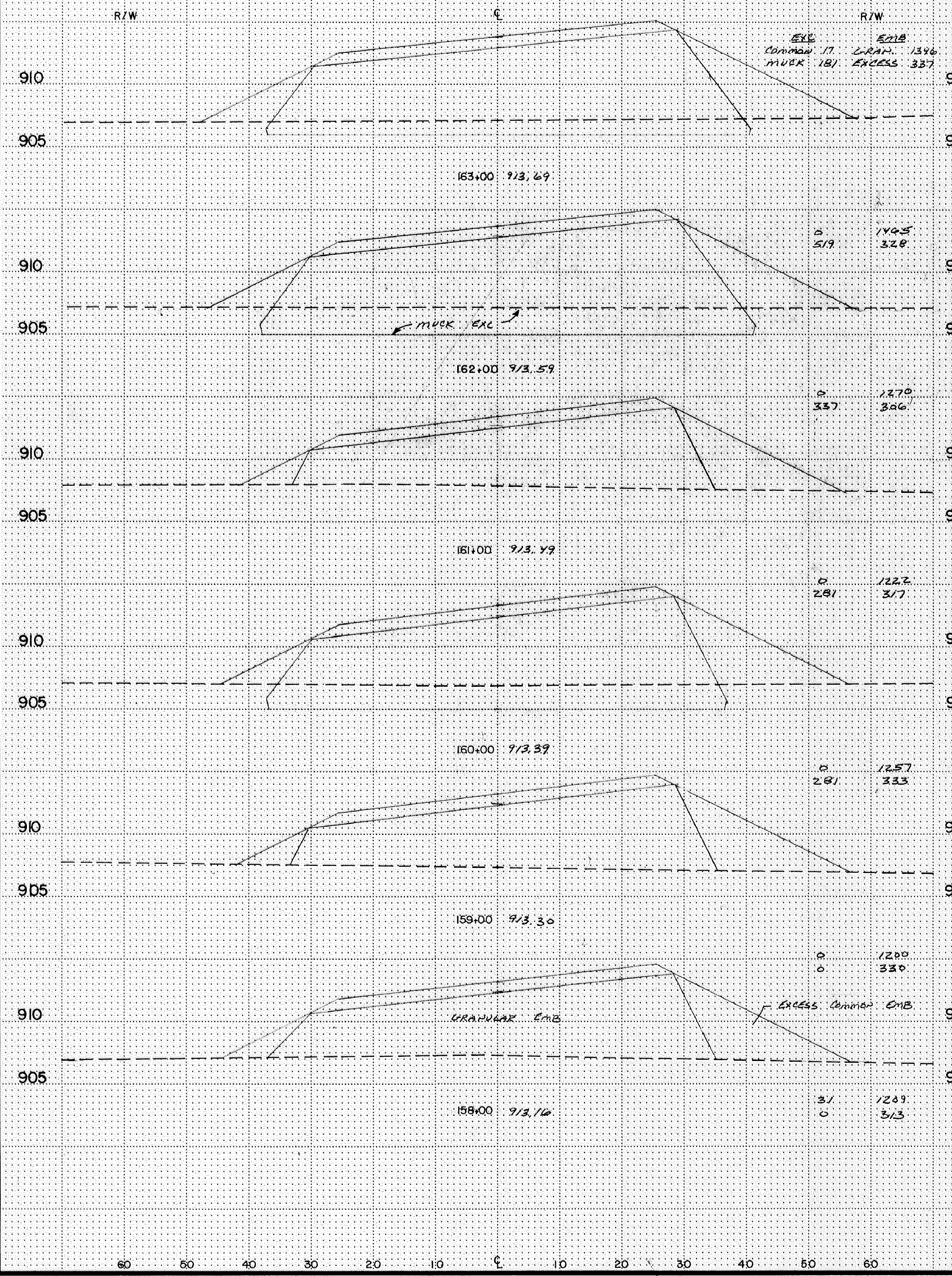
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Exc  
Common 74  
muck 241

EMB  
GRAV 015  
EXCESS 72

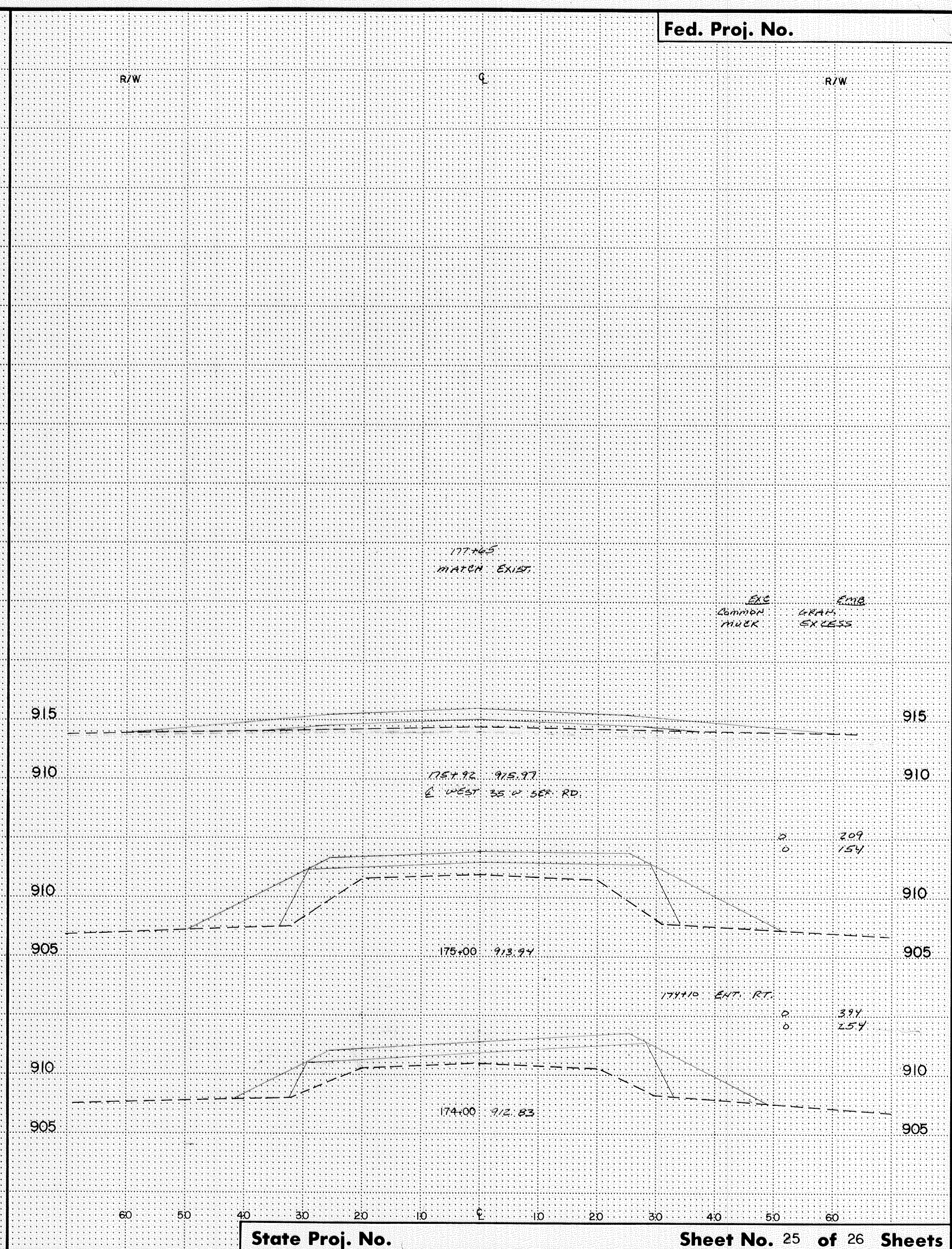
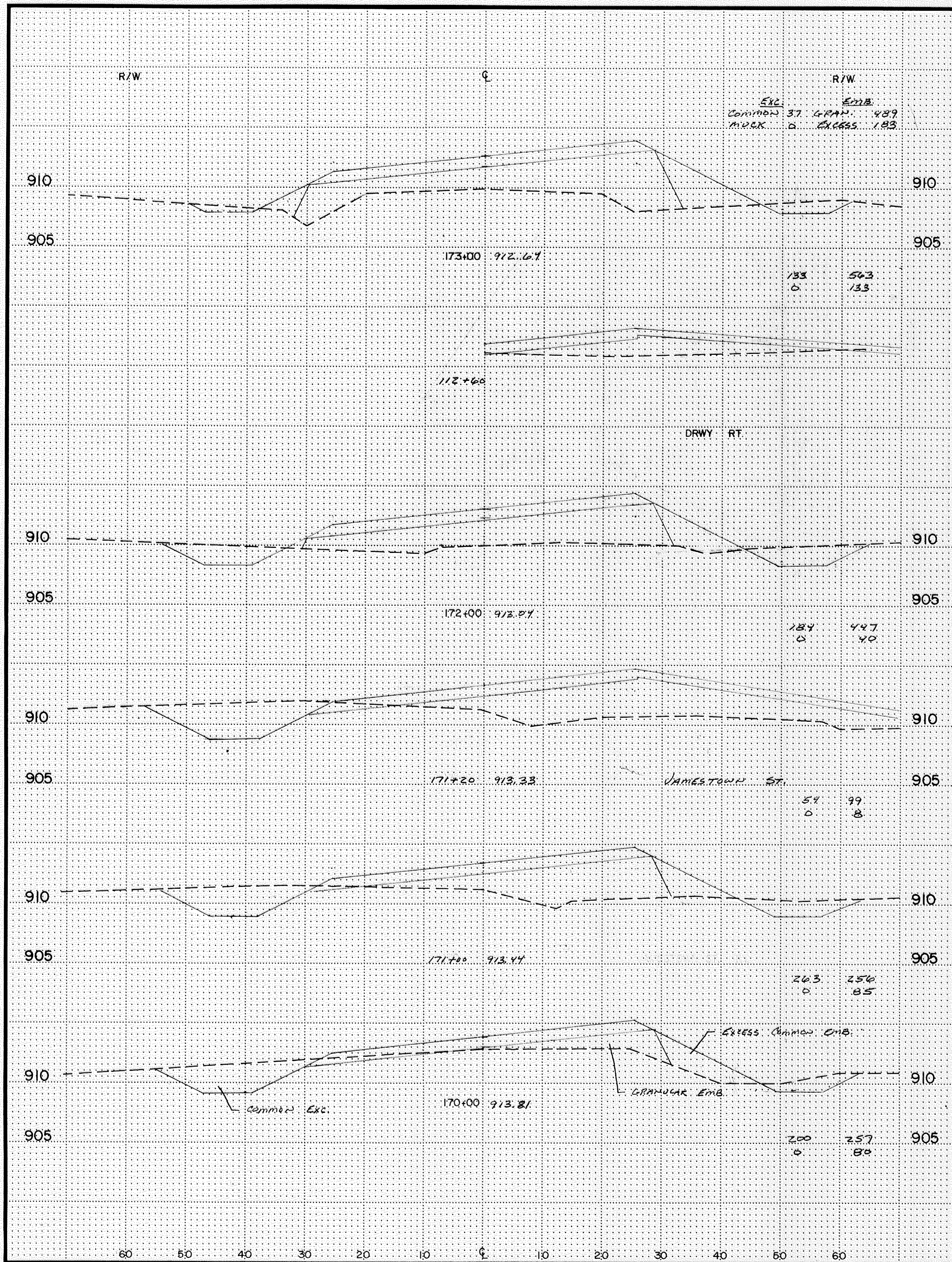


Copy Equipment Form #1



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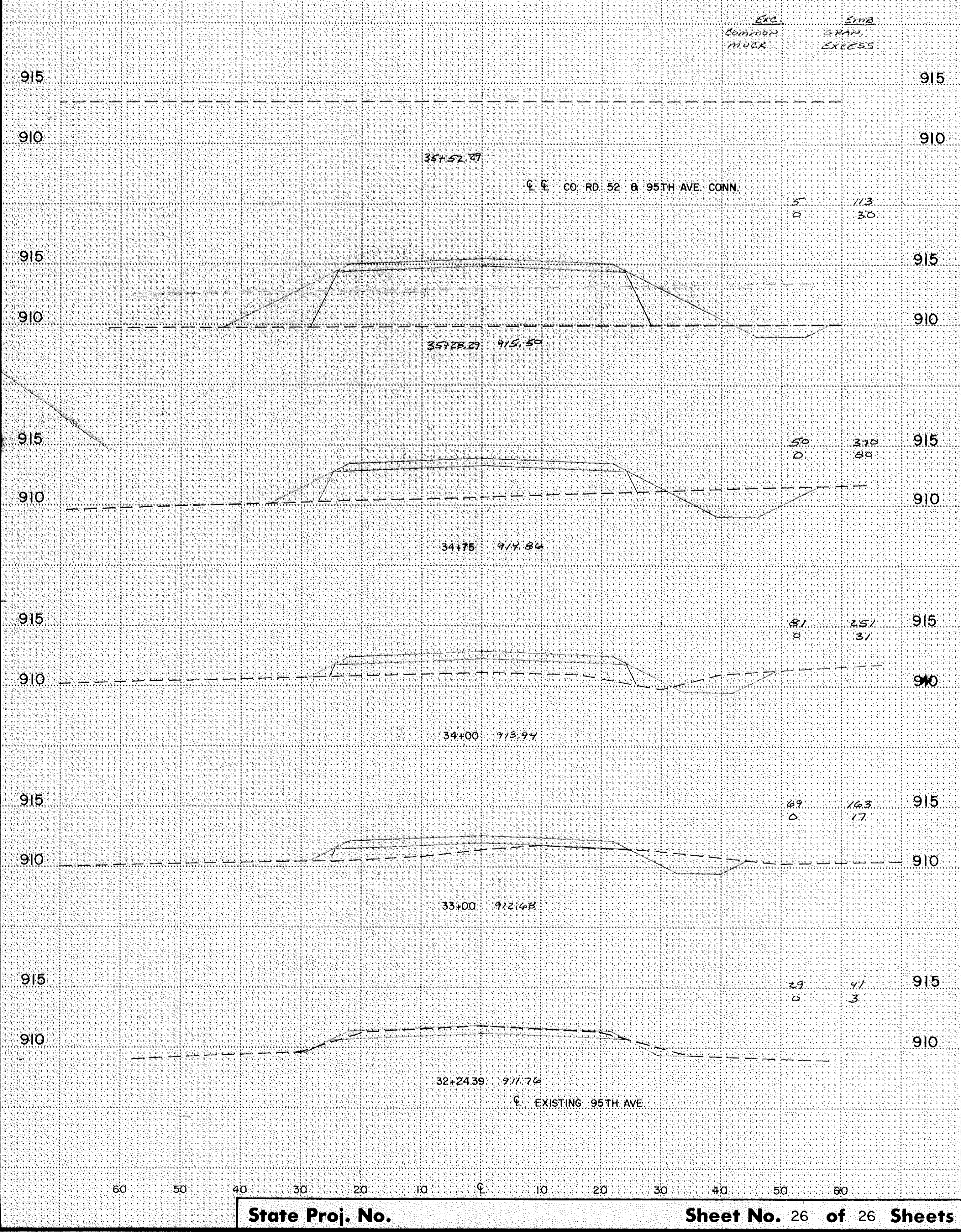
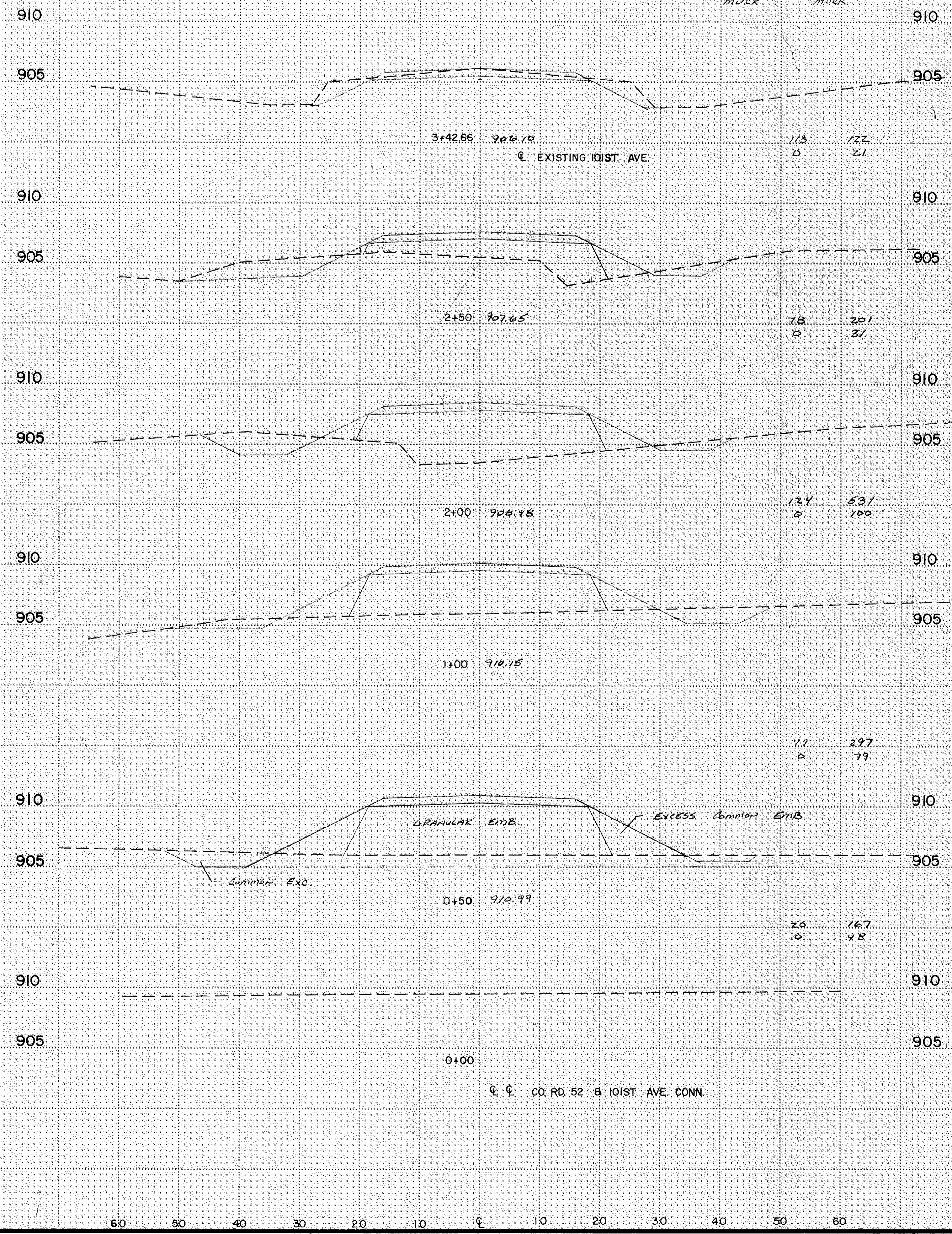




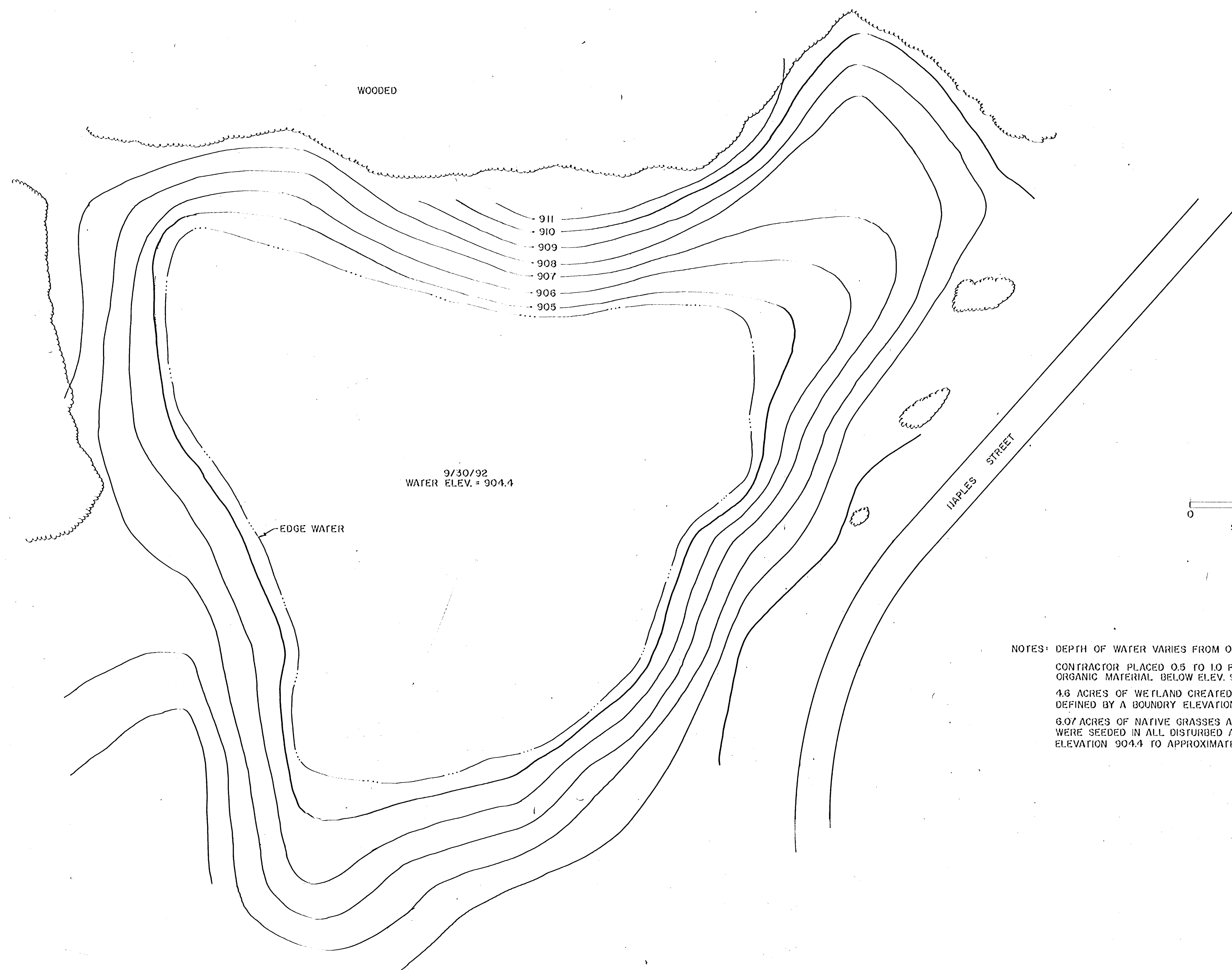
Copy Equipment Form #1

Exc. Common MUCK  
EMB GRAN. MUCK

Exc. Common MUCK  
EMB GRAN. EXCESS



Copy Equipment Form #1 10/5/78



NOTES: DEPTH OF WATER VARIES FROM 0.5 TO 1.5 FEET.  
 CONTRACTOR PLACED 0.5 TO 1.0 FEET OF ORGANIC MATERIAL BELOW ELEV. 905.0.  
 4.6 ACRES OF WETLAND CREATED. AREA IS DEFINED BY A BOUNDARY ELEVATION OF 905.0.  
 6.07 ACRES OF NATIVE GRASSES AND WILDFLOWERS WERE SEEDED IN ALL DISTURBED AREAS FROM ELEVATION 904.4 TO APPROXIMATELY 909.0 THRU 911.0



**ENGINEERING DEPARTMENT**  
 9150 Central Ave., N.E. Blaine, Minnesota 55434  
 Phone (612) 784-6700

I CERTIFY THIS RECORD DRAWING ACCURATELY REFLECTS THE EXISTING CONDITIONS OF THE WETLAND MITIGATION SITE FOR CSAH 52.  
*David V. ...*  
 Date 11/12/92 TITLE ENG. TECH.

DATE	REVISION

PROJECT NO. 91-07	
DESIGN BY:	DRAWN BY: DMK
CHECKED BY:	APPROVED BY:
AS BUILT BY: E.G. RUD & SONS INC.	DATE: 9/30/92

I.P. NO. 91-07 (CSAH 52)  
 WETLAND MITIGATION - RECORD DRAWING  
 SHEET NO. 1 OF 1 SHEETS