

PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT RIGHT-OF-WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT-OF-WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER

SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F-FRAME C-CONCRETE
S-STONE T-TILE
B-BRICK ST-STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH
POLE LINE
JOINT TELEPHONE AND POWER
ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL TELEPHONE CABLE
TERMINAL
GAS MAIN
WATER MAIN

CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE



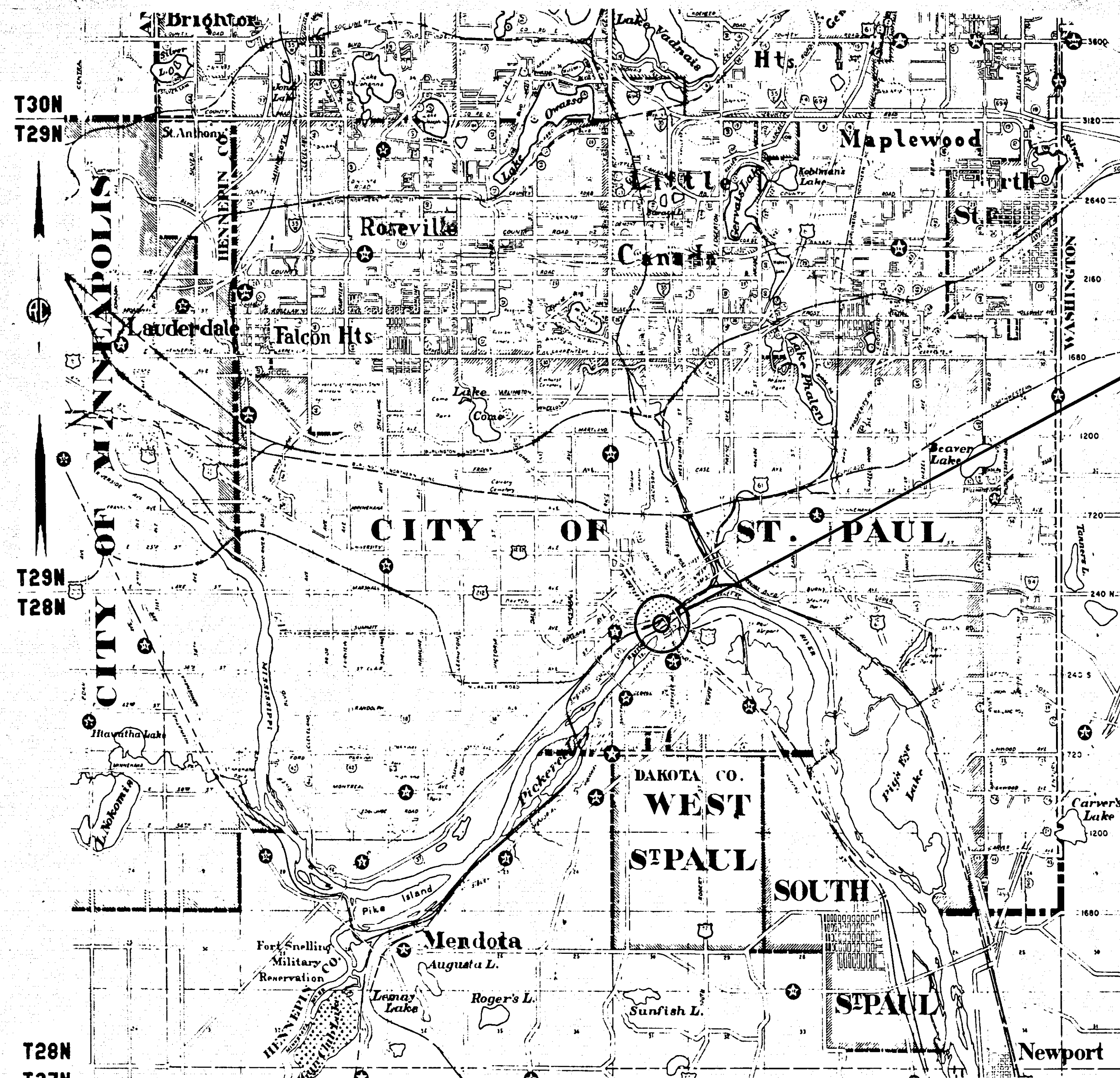
NOTE: SECTION NUMBERS READ FROM THE SOUTH.

PIT DATA

PIT NO. Located in Dead Haul
PIT NO. Located in Dead Haul

THE "MINNESOTA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1972 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED APRIL 1, 1976 SHALL GOVERN.

PLAN, 0 25 50 75 100
PROFILE, HORZ., 0 25 50 75 100
PROFILE, VERT., 0 10 20
CROSS SECTIONS, 0 5 10
LAYOUT, 1:5,280'



OFFICE OF COUNTY ENGINEER RAMSEY COUNTY

ADULT DETENTION CENTER ACCESS ROAD CONSTRUCTION PLAN FOR GRADING & BITUMINOUS SURFACING COUNTY PROJECT NO. O.P.-30

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES & TYPICAL SECTION
3	PLAN & PROFILE
4-6	CROSS SECTIONS
7	GUARDRAIL PLAN (INFORMATION ONLY)

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.
Walter J. Leonard
Date 2-24-78 Reg. No. 5782

RECOMMENDED FOR APPROVAL *Kenneth E. Wells* DATE 3-1-78
COUNTY ENGINEER
APPROVED *Wm. J. Adair* DATE
CHAIRMAN OF THE RAMSEY COUNTY BOARD
APPROVED: DATE
APPROVED: DATE

RECOMMENDED FOR APPROVAL *MDK* DATE 2/24/78
ENVIRONMENTAL ENGINEER
RECOMMENDED FOR APPROVAL *MDK* DATE 1/23/78
MAINTENANCE ENGINEER
RECOMMENDED FOR APPROVAL *MDK* DATE 1/23/78
CONSTRUCTION ENGINEER
RECOMMENDED FOR APPROVAL *MDK* DATE
R.O.W. ENGINEER
RECOMMENDED FOR APPROVAL *MDK* DATE 2/24/78
TRAFFIC ENGINEER

REVISED	DATE	DESIGNED BY	
		DRAWN BY	
		CHECKED BY	

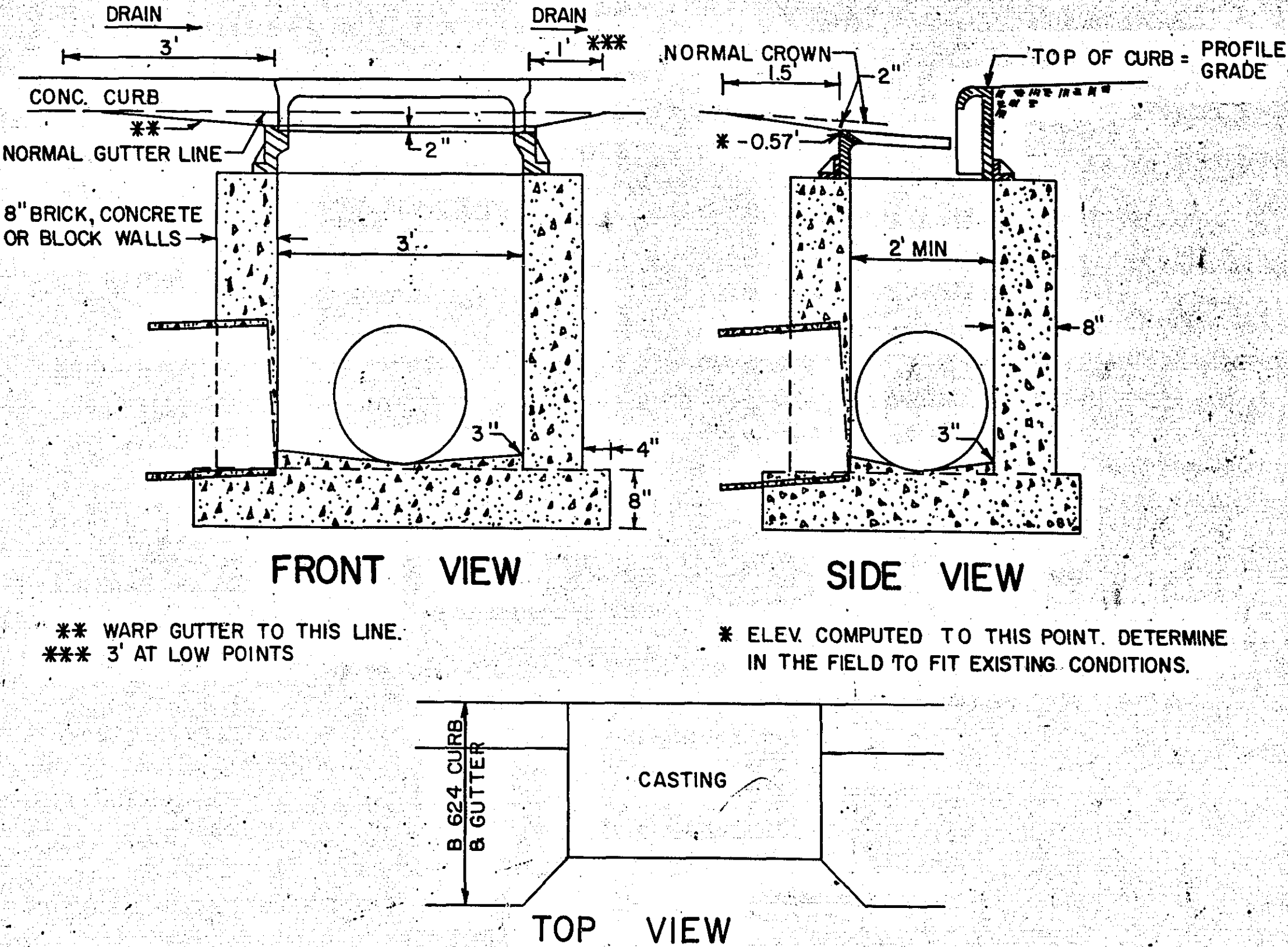
CO. PROJ. NO. OP-30

Sheet No. 1 of 7 Sheets

20-114

STATEMENT OF ESTIMATED QUANTITIES				
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	FINAL ESTIMATED QUANTITIES
2021.501	MOBILIZATION	LUMP-SUM	1	
2104.505	REMOVE CONCRETE PAVEMENT	S.Y.	91	
2105.501	COMMON EXCAVATION	C.Y.	4,348	
2130.501	WATER	(M) GAL.	25	
2211.501	AGGREGATE BASE, CLASS 5	TON	1,756	
2211.501	AGGREGATE BASE, CLASS 5 100% CRUSHED	TON	290	
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	45	
2331.510	BINDER COURSE MIXTURE	TON	819	
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	237	
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	1,419	
2361.504	ASPHALT CEMENT	TON	27	
2361.508	WEARING COURSE MIXTURE	TON	273	
2503.511	15" R.C. PIPE SEWER, CLASS IV	L.F.	66	
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C.2	EACH	2	
2506.522	ADJUST FRAME & RING CASTING	EACH	2	
2531.501	CONCRETE CURB & GUTTER, DESIGN B624	L.F.	1,355	
* CONTRACTOR SHALL SPECIFY AGGREGATE CLASS 6 OR CLASS 5 (100% CRUSHED)				

CATCH BASIN DESIGN NO. R.C.-2

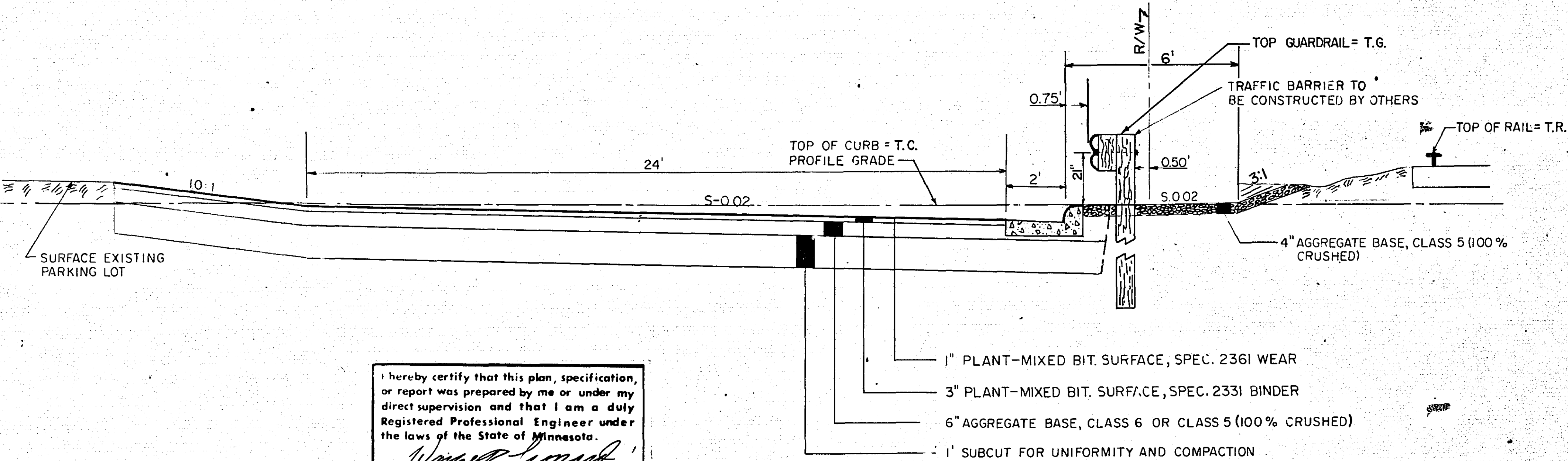


NOTE: CASTING, GRATE AND FRAME TO BE NEENAH R-3064 OR EQUAL, GRATE TO BE REVERSIBLE.

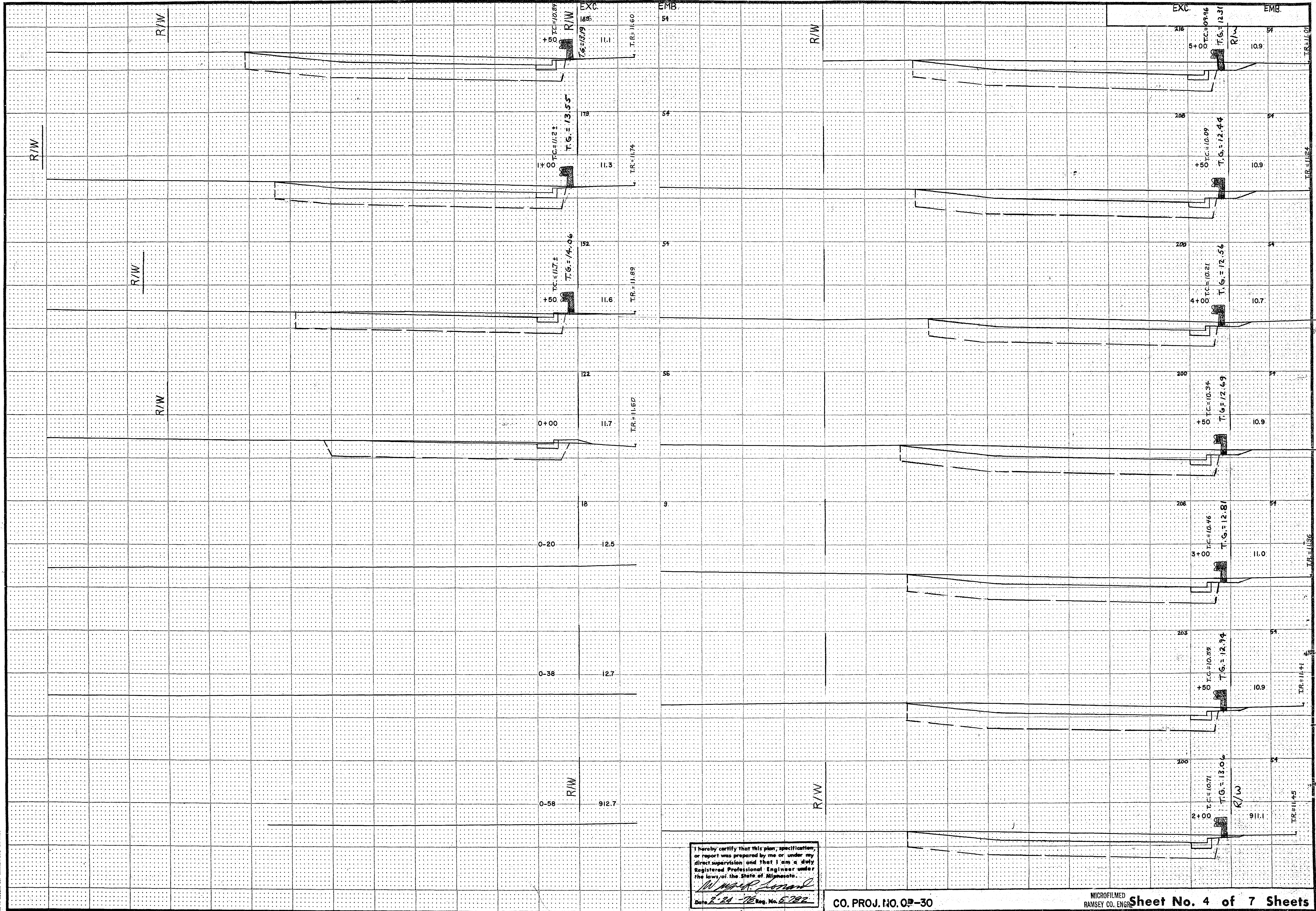
STANDARD DETAIL PLATES

	SPECIFICATION REFERENCE TO STANDARD PLATES
0002A	
3000G	REINFORCED CONCRETE PIPE
3006B	GASKET JOINT FOR R.C. PIPE
7100F	CONCRETE CURB AND GUTTERS
7110E	CURB AND GUTTER CONSTRUCTION AT CATCH BASINS
7111E	INSTALLATION OF CATCH BASIN CASTINGS
8000F	STANDARD BARRICADES

TYPICAL SECTION



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.
Walter J. Lomax
Date 2-24-78 Reg. No. 5782



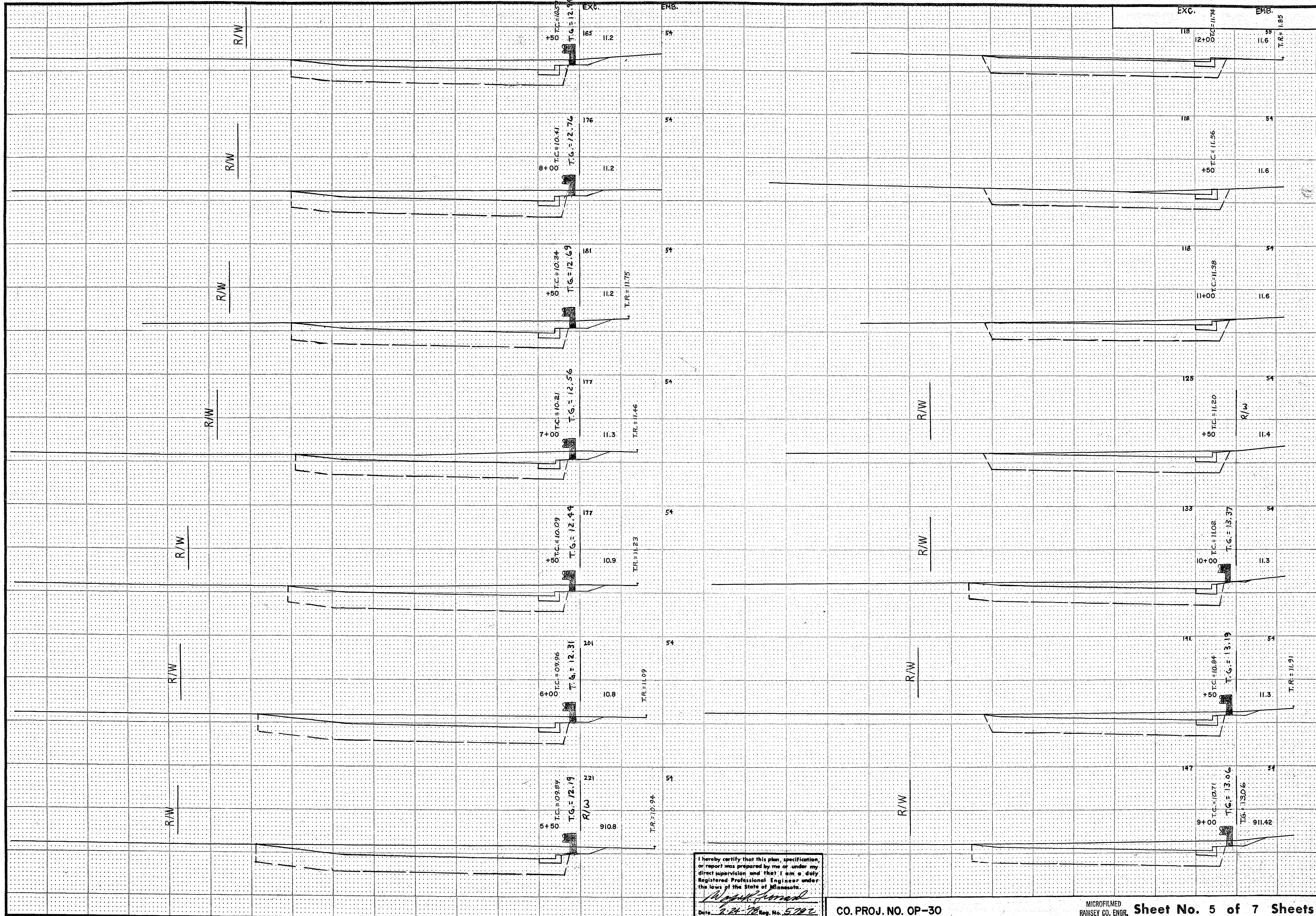
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
W. H. R. Leonard
Date 2-24-76 Reg. No. 5782

CO. PROJ. NO. 09-30

MICROFILMED
RAMSEY CO., ENGR. Sheet No. 4 of 7 Sheets

20-114

FUNCTIONAL CROSS SECTION - OPEN DOTTED
N. A. ROBERT CO., MINNEAPOLIS, ST. PAUL

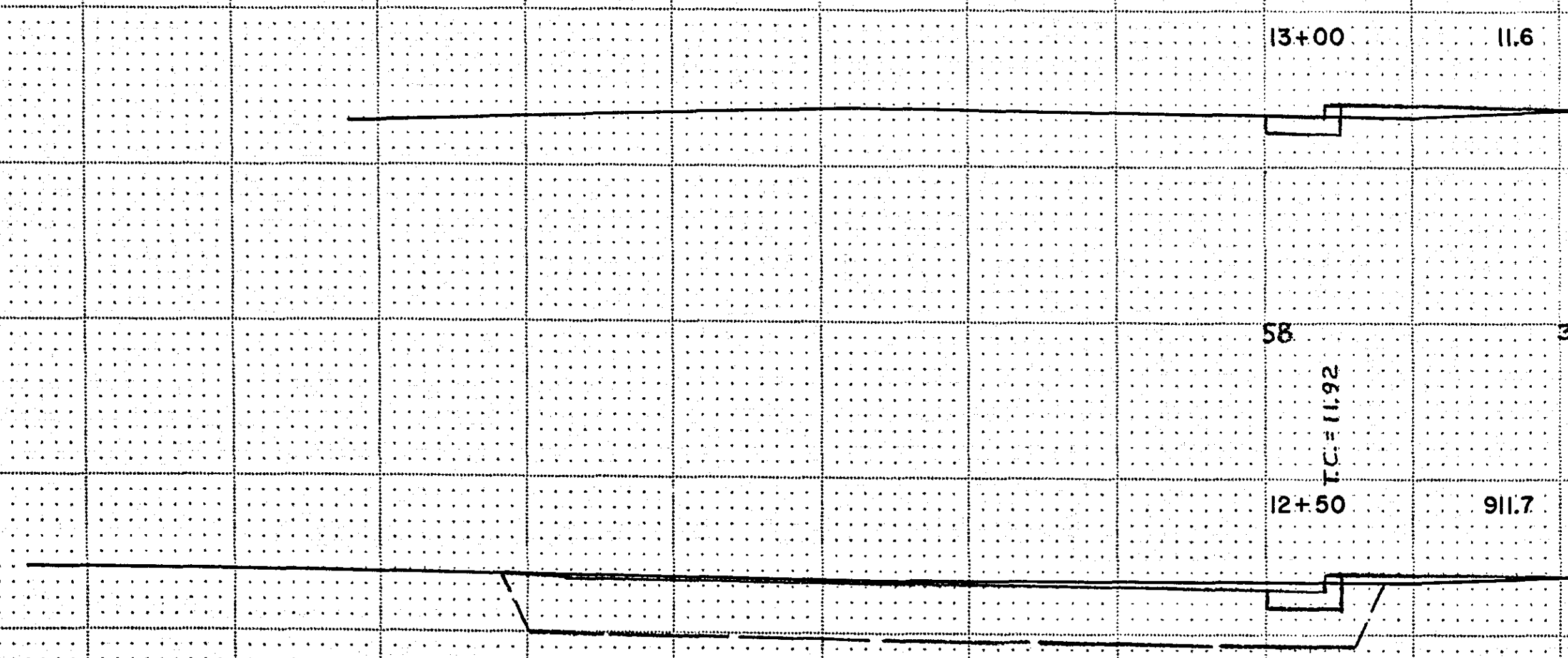


I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
W. A. Robert
Date 2-24-78 Reg. No. 5702

CO. PROJ. NO. OP-30

MICROFILMED
RAMSEY CO. ENGR. Sheet No. 5 of 7 Sheets
20-114

EXC. EMB.
 TOTALS 4348 CY 1393 X 130% = 1811 CY
1811
 2537 EXCESS



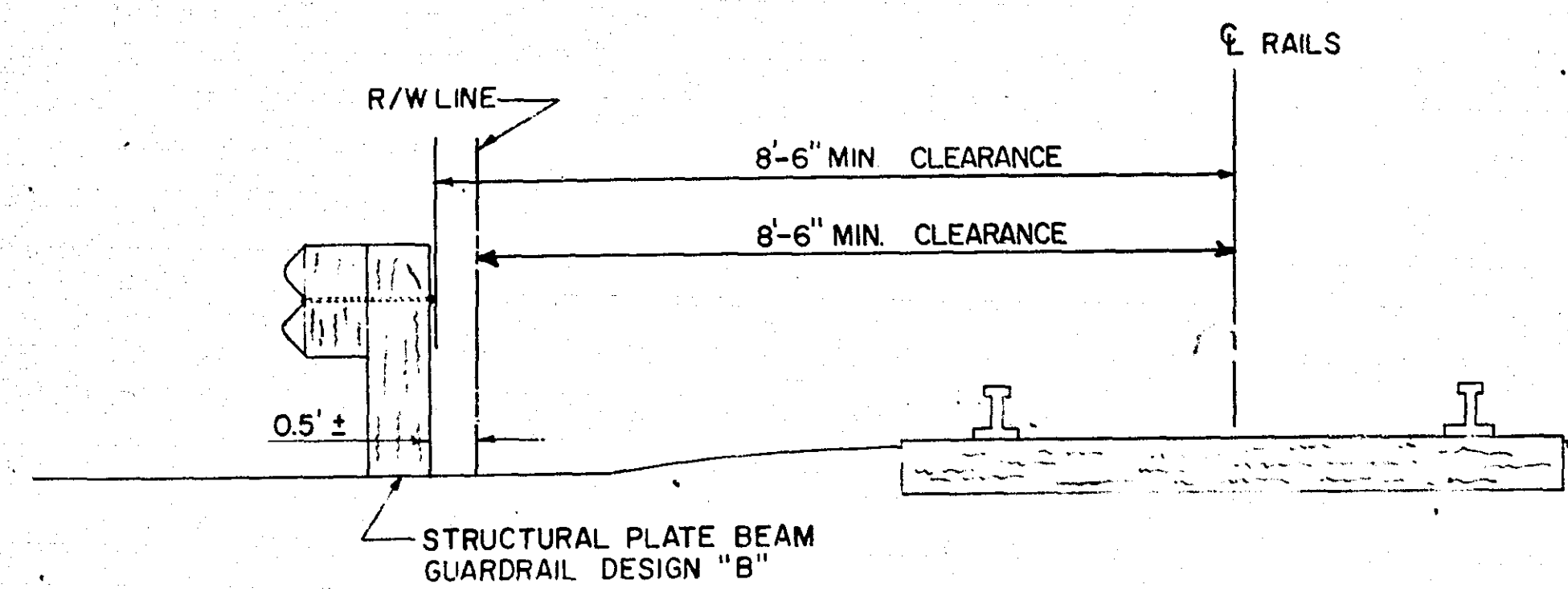
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
W. J. J. J.
 Date 2-24-76 Reg. No. 5792

CO. PROJ. NO. OP-30

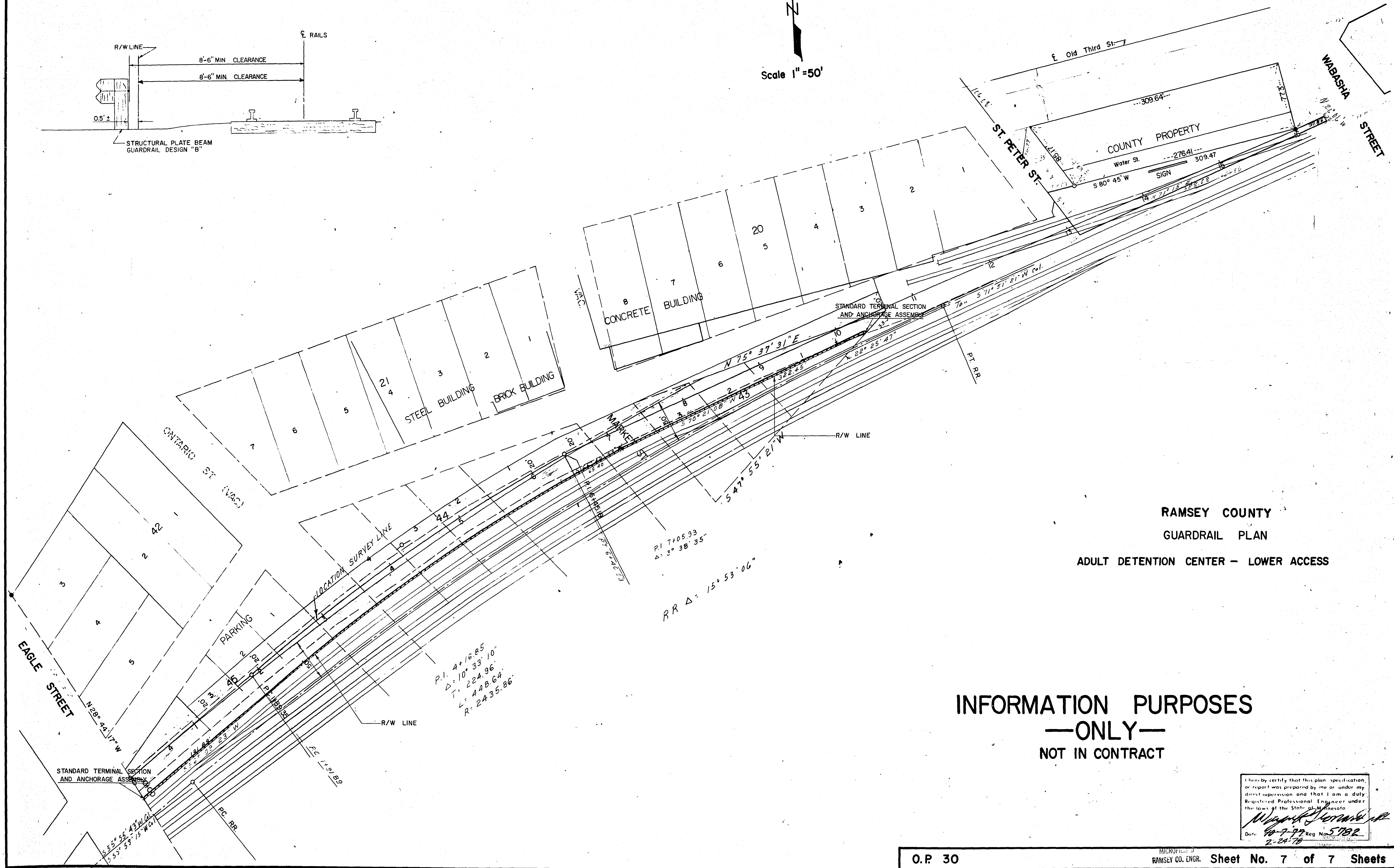
MICROFILMED
 RAMSEY CO. ENGR. Sheet No. 6 of 7 Sheets

20-114

ADULT DETENTION CENTER
LOWER ACCESS ROAD
DETAIL



Scale 1"=50'



RAMSEY COUNTY
GUARDRAIL PLAN

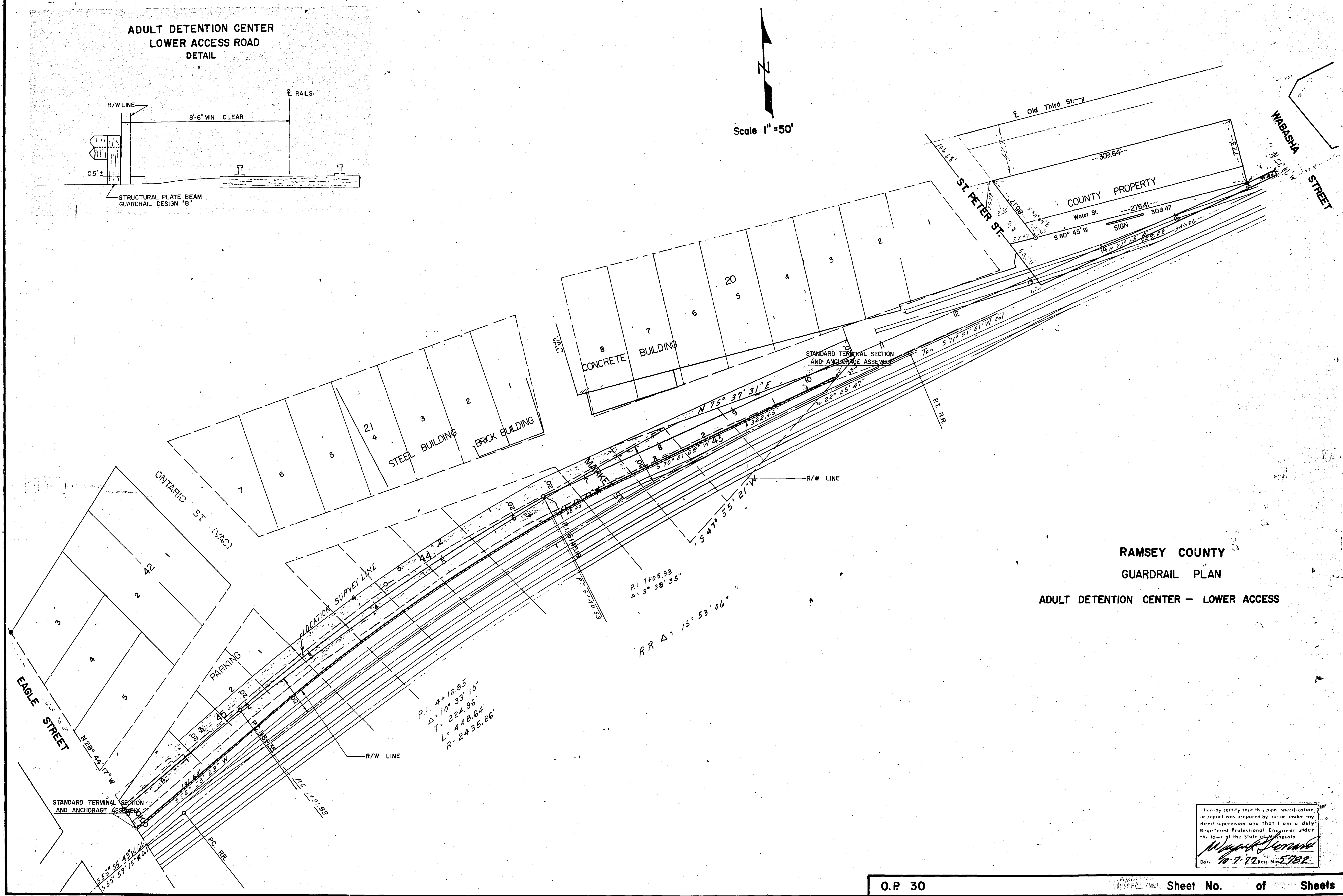
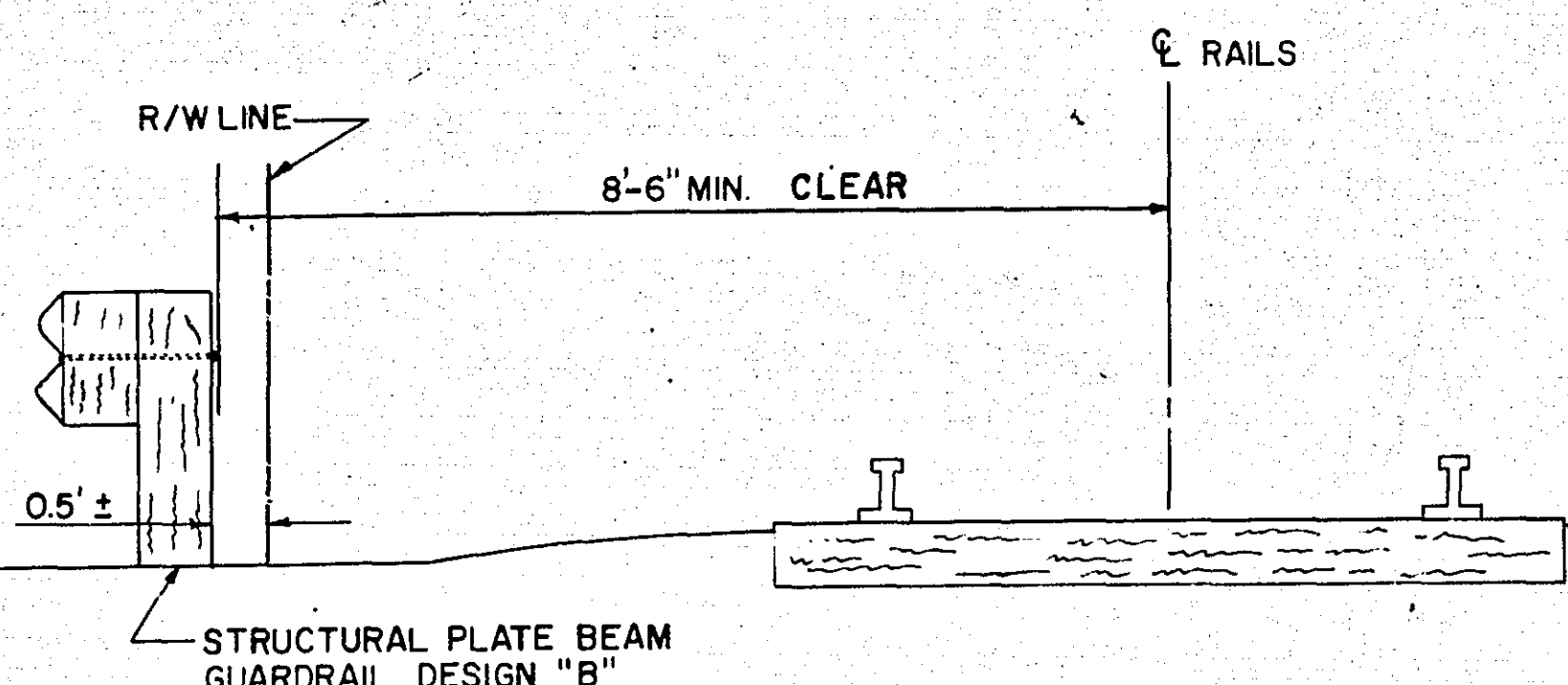
ADULT DETENTION CENTER - LOWER ACCESS

INFORMATION PURPOSES
—ONLY—
NOT IN CONTRACT

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.
Michael J. Dettmer
Date: 9-7-77 Reg. No. 5782
2-24-78

1-16-78 ENGINEER'S STATEMENT OF ESTIMATED QUANTITIES O.P.-30 Adult Detention Center

[illegible]



ADULT DETENTION CENTER - LOWER ACCESS

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.

Wayne L. Lennard

Date: 10-7-77 Reg. No. 5782

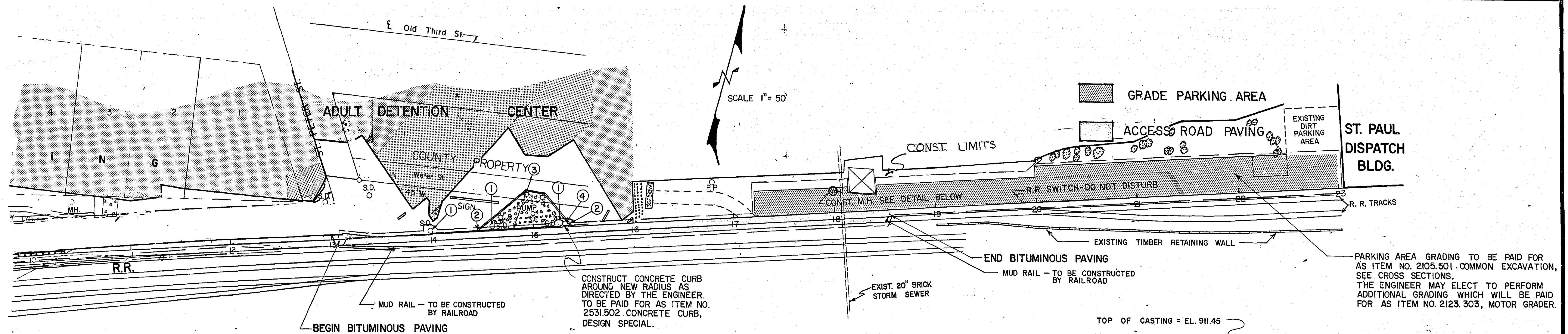
ADULT DETENTION - ADDITIONAL PARKING *RM* 8-17-79

STATEMENT OF ESTIMATED QUANTITIES CONST. ESTIMATE - O.P. 30

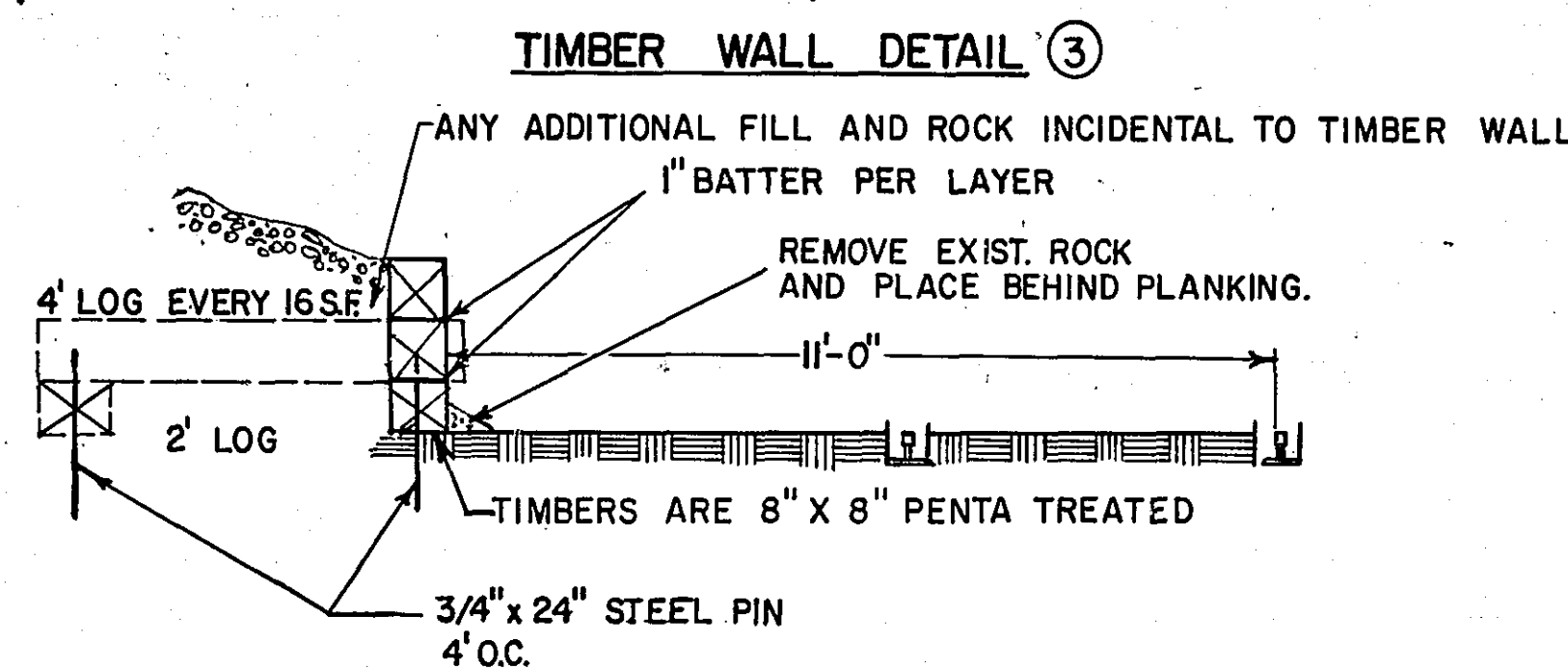
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	UNIT PRICE	AMOUNT
2021.501	MOBILIZATION	LUMP SUM	1	2000.00	2,000.00
2104.501	REMOVE CONCRETE CURB	L.F.	10	5.00	50.00
2105.501	COMMON EXCAVATION	C.Y.	1572	3.50	5,502.00
2123.303	MOTOR GRADER	HOUR	24	17.50	420.00
2211.501	AGGREGATE BASE, CLASS 6 OR 5 (100% CRUSHED)	TON	180	6.00	1,080.00
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	6	145.00	870.00
2331.510	BINDER COURSE	TON	115	17.50	2,012.50
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	33	2.50	82.50
2361.504	ASPHALT CEMENT	TON	3	145.00	435.00
2361.508	WEARING COURSE MIXTURE	TON	40	35.00	1,400.00
2503.511	15" R. C. PIPE SEWER, CLASS II	L.F.	4	100.00	400.00
2506.508	CONTRACT MANHOLE, DESIGN I	EACH	1	1,500.00	1,500.00
2506.522	ADJUST FRAME & RING CASTING	EACH	3	200.00	600.00
2531.502	CONCRETE CURB, DESIGN SPECIAL	L.F.	10	6.00	60.00
412.604	TIMBER WALL	S.F.	180	15.00	2,700.00
545.602	RELOCATE ELECTRIC LIGHT	EACH	1	1,500.00	1,500.00
			TOTAL	=	20,612.00

MICROFILMED
RAMSEY CO. ENGR.

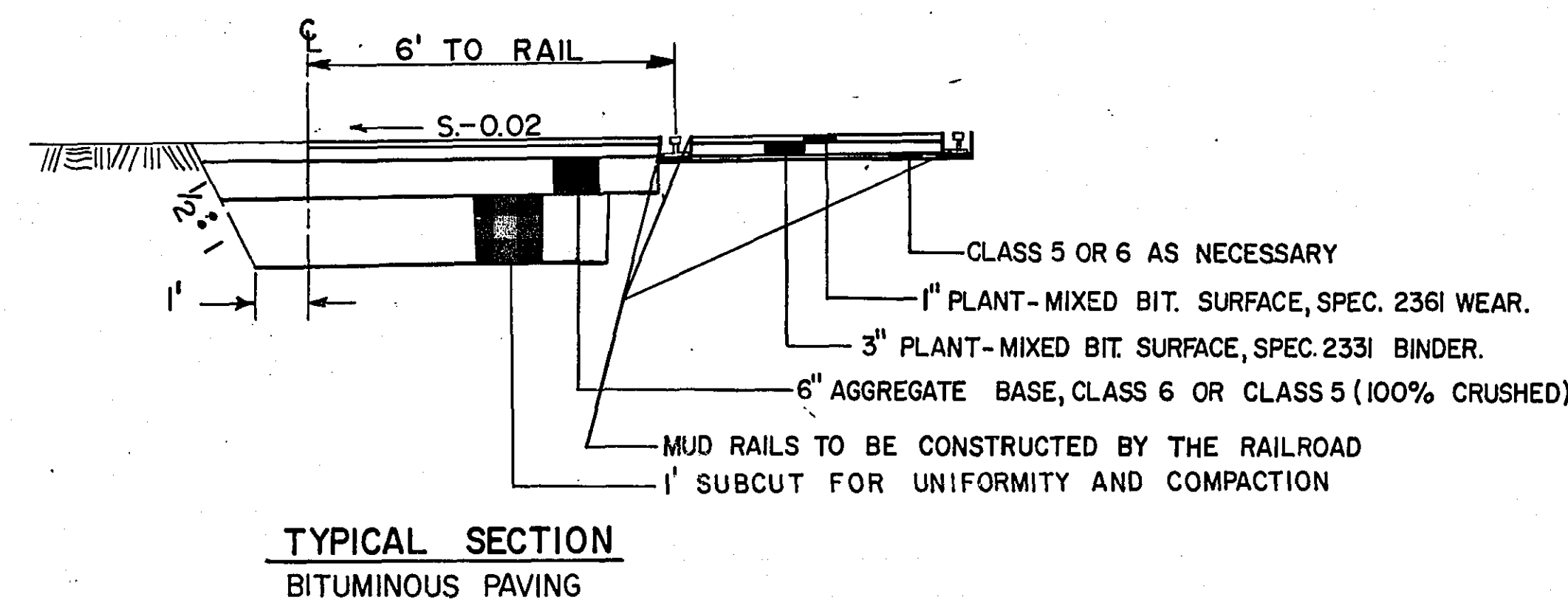
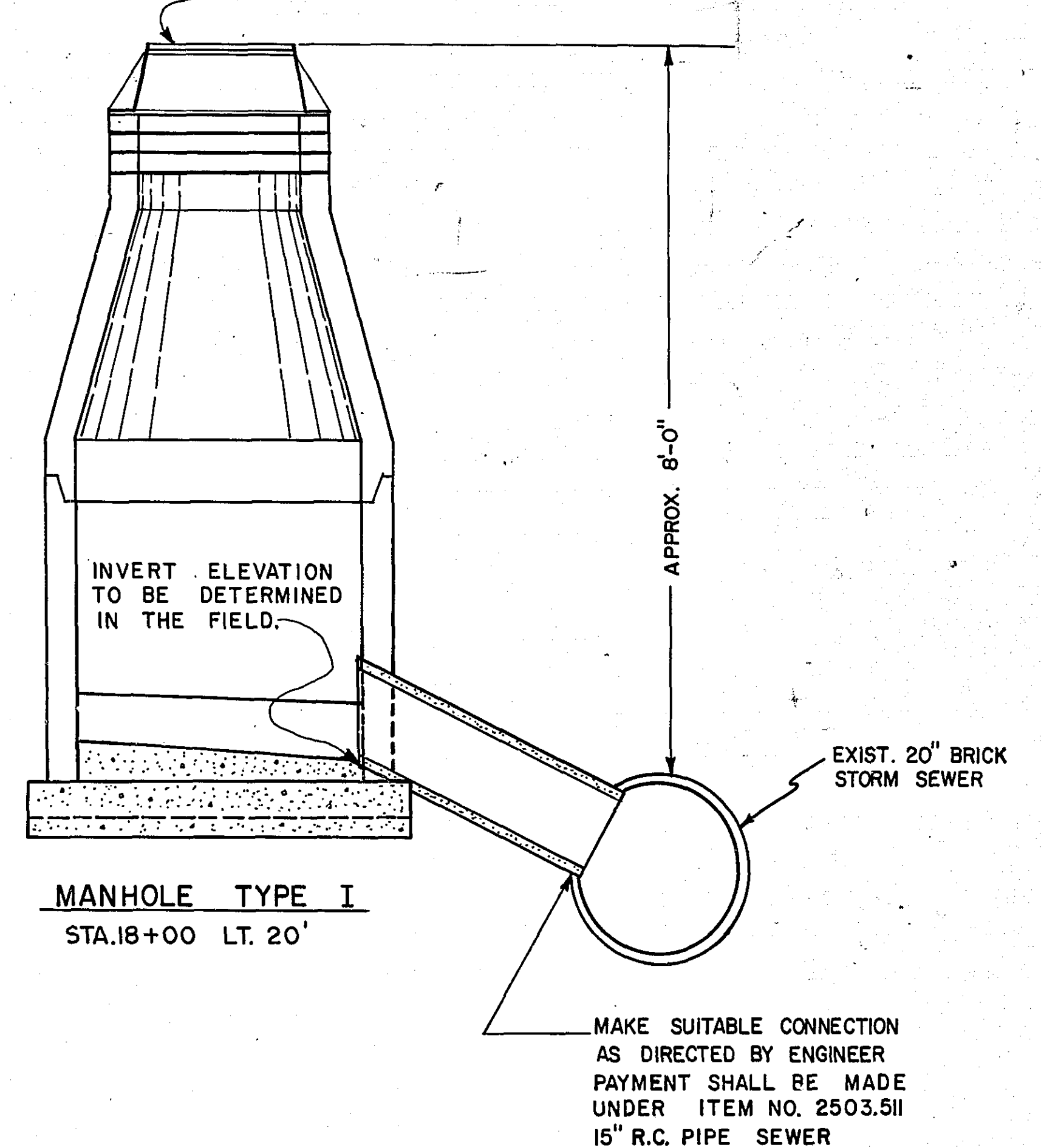
20-114



- ① ADJUST SURFACE DRAINS (3)
- ② REMOVE CONC. CURB AS DIRECTED BY ENGINEER
- ③ CONST. 8" x 8" TIMBER RETAINING WALL - SEE DETAIL
- ④ RELOCATE LIGHT STANDARD AS DIRECTED BY ENGINEER.



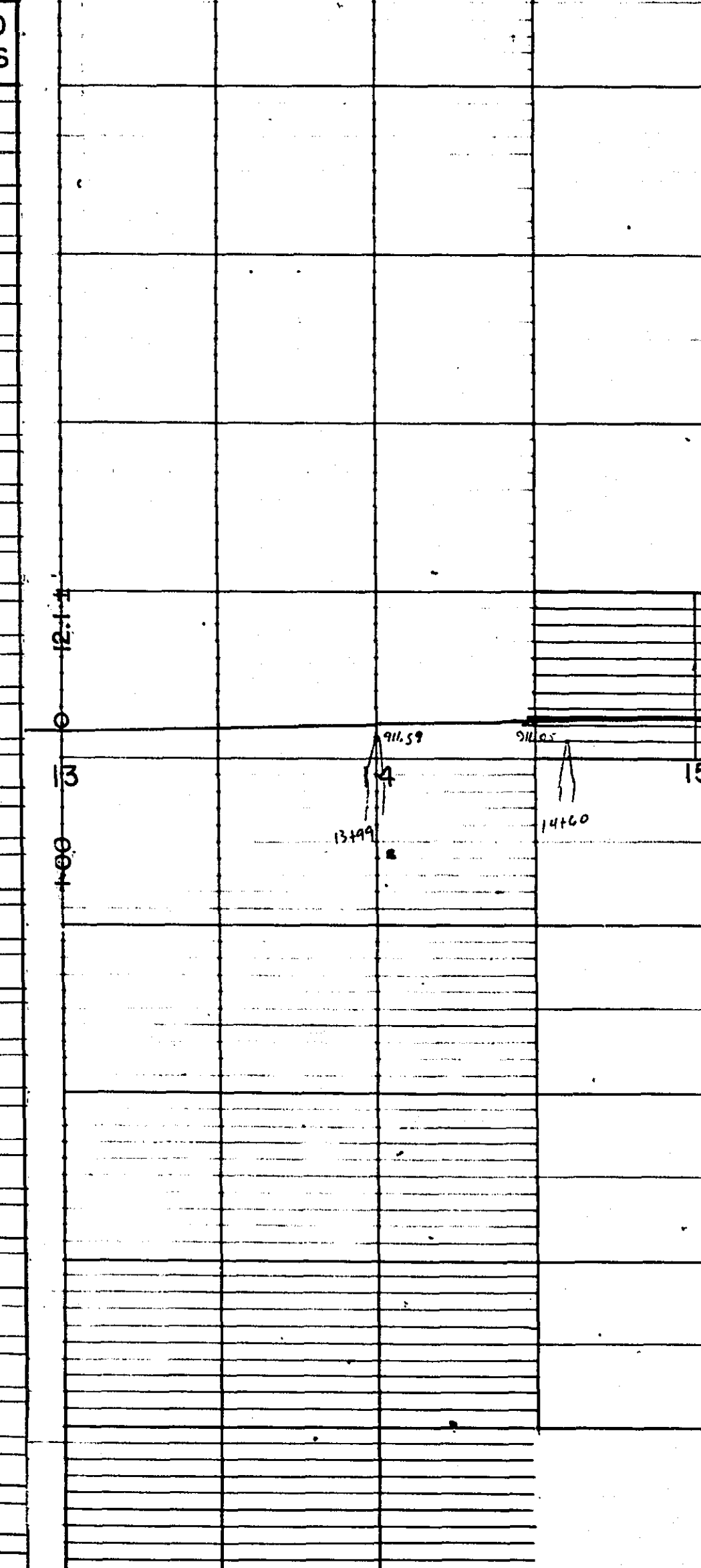
CONST. M.H. STA. 18+00 LT. 20'
CITY OF ST. PAUL STD. PLATE
NO. 2101 AND COVER CASTING
NO. 2202 "D"



NOTE: RAILROAD TO RAISE TRACKS PRIOR TO CONSTRUCTION WHICH WILL DETERMINE PROFILE GRADE.

STATEMENT OF ESTIMATED QUANTITIES			
ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES
2021.501	MOBILIZATION	LUMP SUM	1
2104.501	REMOVE CONCRETE CURB	L.F.	10
2105.501	COMMON EXCAVATION	C.Y.	1572
2123.303	MOTOR GRADER	HR.	24
2211.501	AGGREGATE BASE, CLASS 6 OR 5 (100% CRUSHED)	TON	180
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	6
2331.510	BINDER COURSE	TON	115
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	33
2361.504	ASPHALT CEMENT	TON	3
2361.508	WEARING COURSE MIXTURE	TON	40
2503.511	15" R.C. PIPE SEWER, CLASS II	L.F.	4
2506.508	CONTRACT MANHOLE, DESIGN I	EACH	1
2506.522	ADJUST FRAME & RING CASTING	EACH	3
2531.502	CONCRETE CURB, DESIGN SPECIAL	L.F.	10
412.604	TIMBER WALL	S.F.	180
545.602	RELOCATE ELECTRIC LIGHT	EACH	1

B.M. ELEV. 914.00
TOP HYD. RT. STA. 15+25



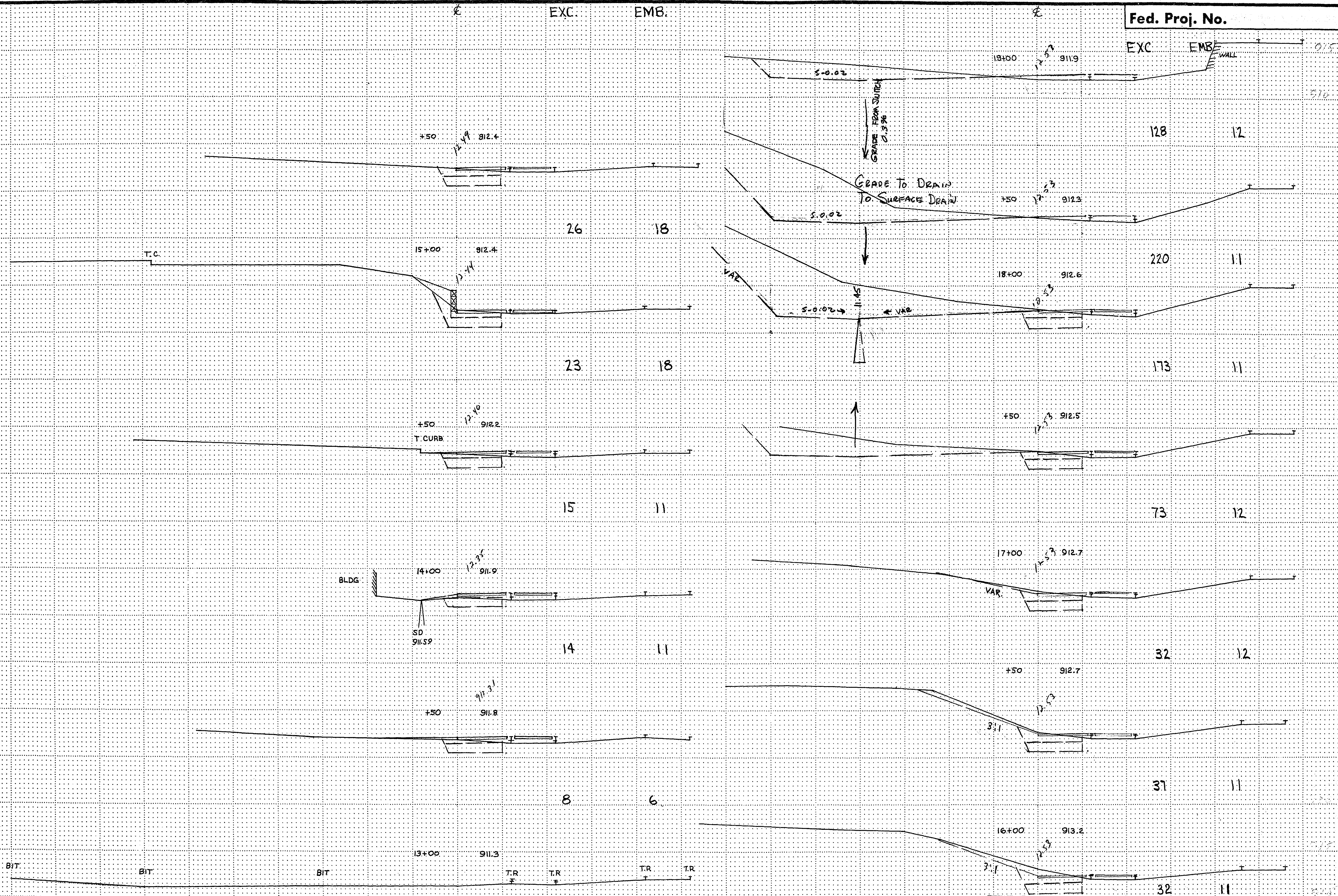
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Dean L. Arnold
Date 9/5/79 Reg. No. 5031

REVISED	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1	9-14-79			

RECOMMENDED FOR APPROVAL _____ DATE _____
TRAFFIC ENGR.
RECOMMENDED FOR APPROVAL _____ DATE _____
ENR. ENGR.
RECOMMENDED FOR APPROVAL _____ DATE _____
MAINT. ENGR.
RECOMMENDED FOR APPROVAL _____ DATE 9/4/79
CONST. ENGR.
RECOMMENDED FOR APPROVAL _____ DATE 9/05/79
DESIGN ENGR.
RECOMMENDED FOR APPROVAL _____ DATE _____
APPROVED _____ DATE 9/5/79
COORDINATING ENGR.

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY
ADULT DETENTION CENTER ACCESS ROAD
CONSTRUCTION PLAN FOR GRADING & ADDITIONAL PARKING AREA
COUNTY PROJECT NO. O.P.-30
AUG. 1979
CO. PROJ. NO. OP-30 SHEET 1 OF 4 SHEETS

EXC. EMB.

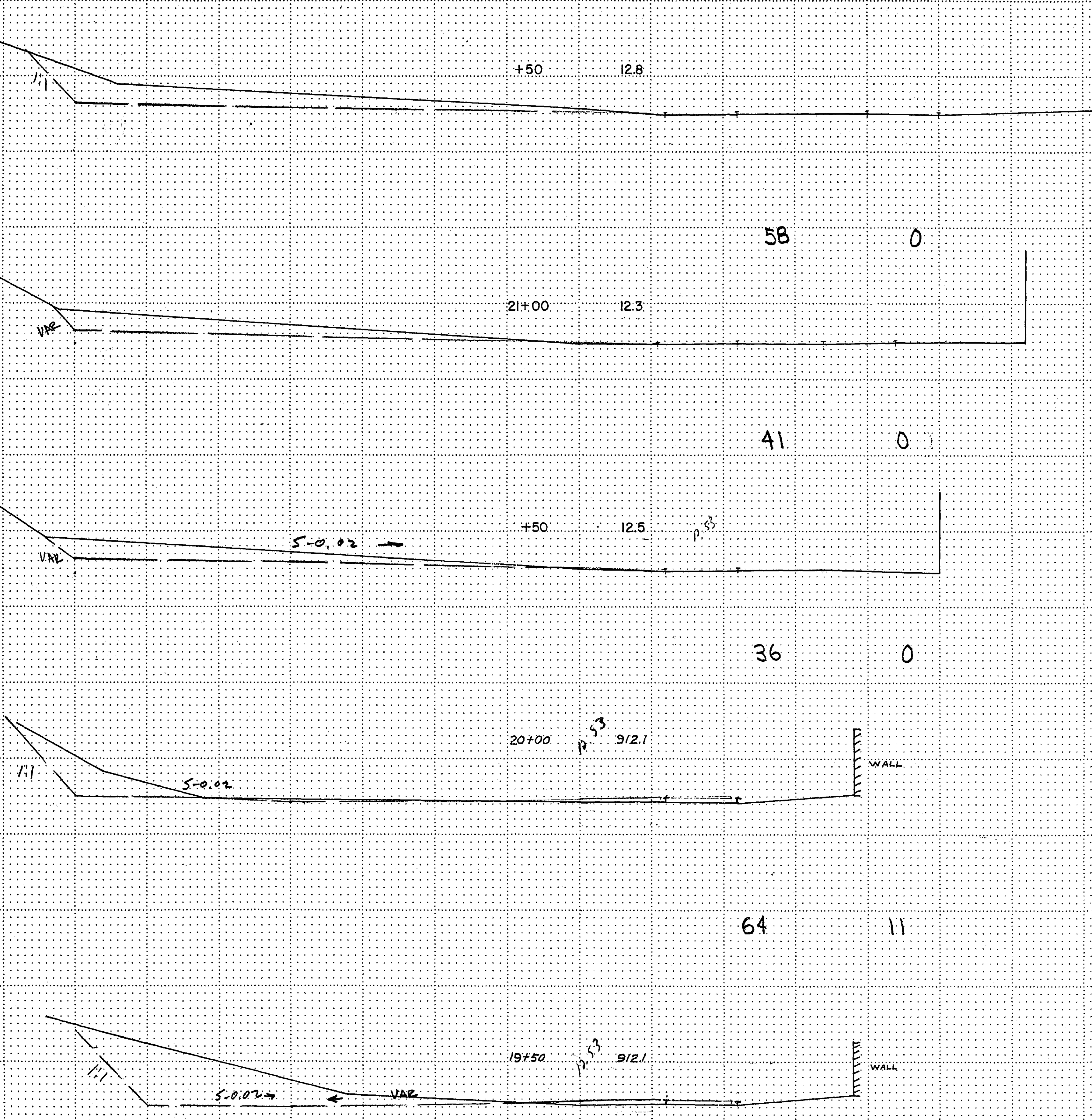


I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Date: 5/5/77 Reg. No. 5031

REVISED	DATE	DESIGNED BY
		DRAWN BY
		CHECKED BY

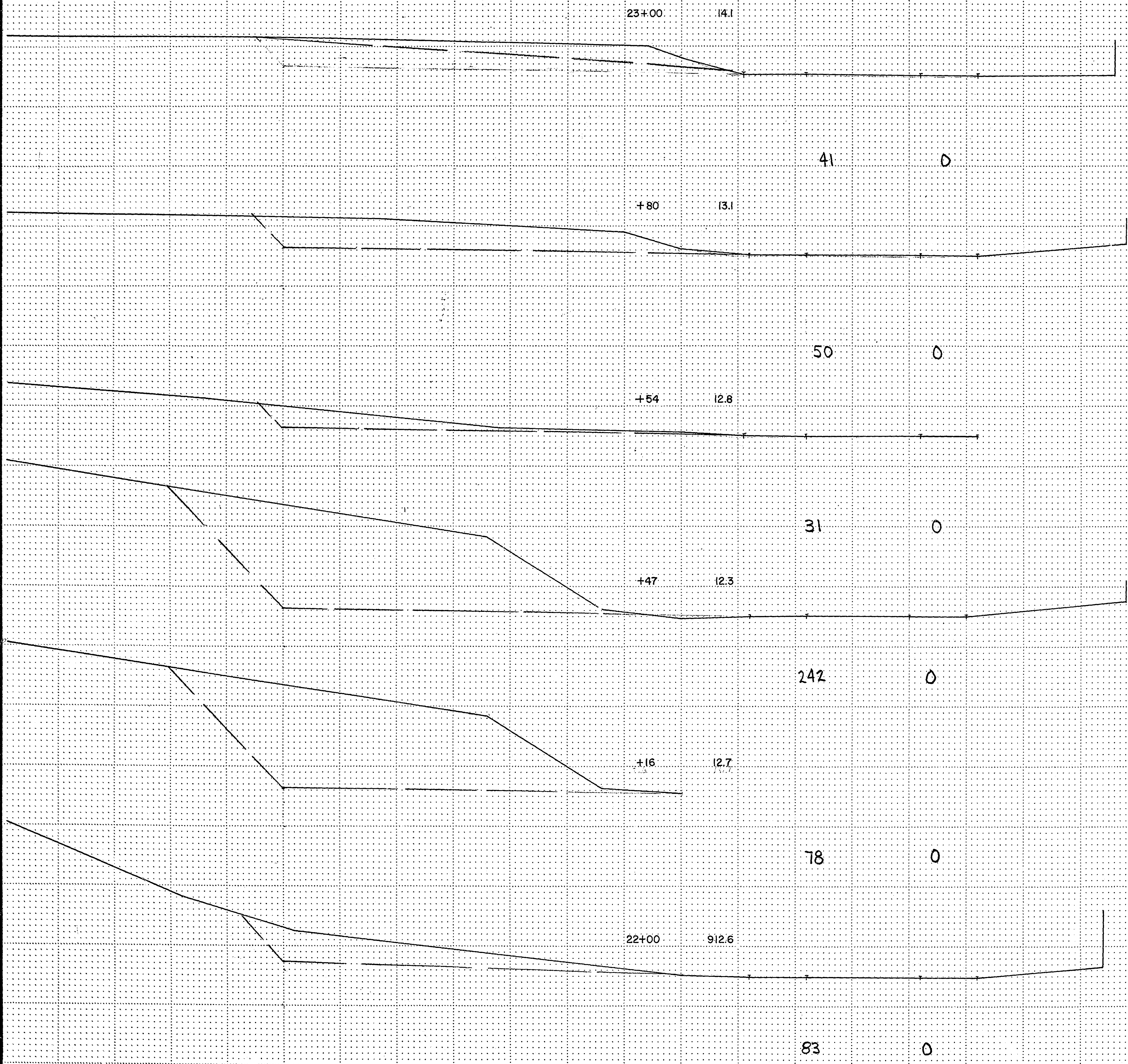
EXC. EMB.



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.
John L. Cullen
 Date 7/5/75 Reg. No. 5031

REVISED	DATE	DESIGNED BY
		DRAWN BY
		CHECKED BY

EXC. EMB.
TOTAL = 1572 CY. 1670 CY.



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.
Date 9/6/77 Reg. No. 0031

REVISED	DATE	DESIGNED BY
		DRAWN BY
		CHECKED BY