

**CONVENTIONAL SIGNS**

STATE LINE	TIMBER	
COUNTY LINE	BRUSH	
TOWNSHIP OR RANGE LINE	ORCHARD	
SECTION LINE	ROCK LEDGE	
QUARTER LINE	SAND	
SIXTEENTH LINE	EDGE OF CUT	
RIGHT-OF-WAY LINE	TOE OF EMBANKMENT	
PROPERTY LINE (Except Land Lines)	CATCH BASIN	
VACATED PLATTED PROPERTY	MANHOLE	
CORPORATE OR CITY LIMITS	FIRE HYDRANT	
TRUNK HIGHWAY CENTER LINE	ARC LAMP	
RETAINING WALL	OTHER LAMPS (State Kind)	
STEAM RAILROAD	RAILROAD CROSSING SIGN	
ELECTRIC RAILROAD	RAILROAD CROSSING BELL	
RAILROAD RIGHT-OF-WAY LINE	ELECTRIC WARNING SIGN	
CREEK	CROSSING GATE	
RAPIDS OR WATERFALL	CATTLE GUARD	
DRY RUN	OVERHEAD (Highway Over)	
DRAINAGE DITCH	UNDERPASS (Highway Under)	
HIGH TENSION LINE	ABUTMENT, WALL & PIER	
POWER POLE LINE	BRIDGE	
TELEPHONE OR TELEGRAPH LINE	BUILDING (One Story Frame)	
CULVERT	F-FRAME C-CONCRETE	
DROPPLET	S-STONE T-TILE	
GUARD RAIL	B-BRICK ST-STUCCO	
WIRE FENCE	IRON PIPE	
RAILROAD SNOW FENCE	STONE MONUMENT	
BOARD OR HIGHWAY SNOW FENCE	WOOD STAKE OR HUB	
STONE WALL OR FENCE	MEANDER CORNER	
HEDGE		
WATER PIPE		
SEWER PIPE		
DRAIN TILE		
GRAVEL PIT		
SAND PIT		
CLAY PIT		
ROCK QUARRY		
SPRINGS		
MARSH		
TRUNK HIGHWAY R/W		
RAILROAD R/W		
PRESENT ROAD R/W		

**OFFICE OF COUNTY SURVEYOR  
RAMSEY COUNTY  
LONG LAKE ROAD SEWER**

From Long Lake Road To 1936' S.E.  
**RAMSEY COUNTY PROJ. 53-02**  
GROSS LENGTH 1922 FEET 0.364 MILES  
LENGTH OF EXCEPTIONS FEET MILES  
NET LENGTH 1922 FEET 0.364 MILES

SCALES  
 PLAN, 1 Inch = 100 Feet  
 PROFILE, Horiz. 1 Inch = 100 Feet. Vert. 1 Inch = 10 Feet  
 WORKING PLANS  
 Horiz. 1 Inch = 100 Feet  
 Vert. 1 Inch = 10 Feet  
 Cross-Sections, 1 Inch = 10 Feet

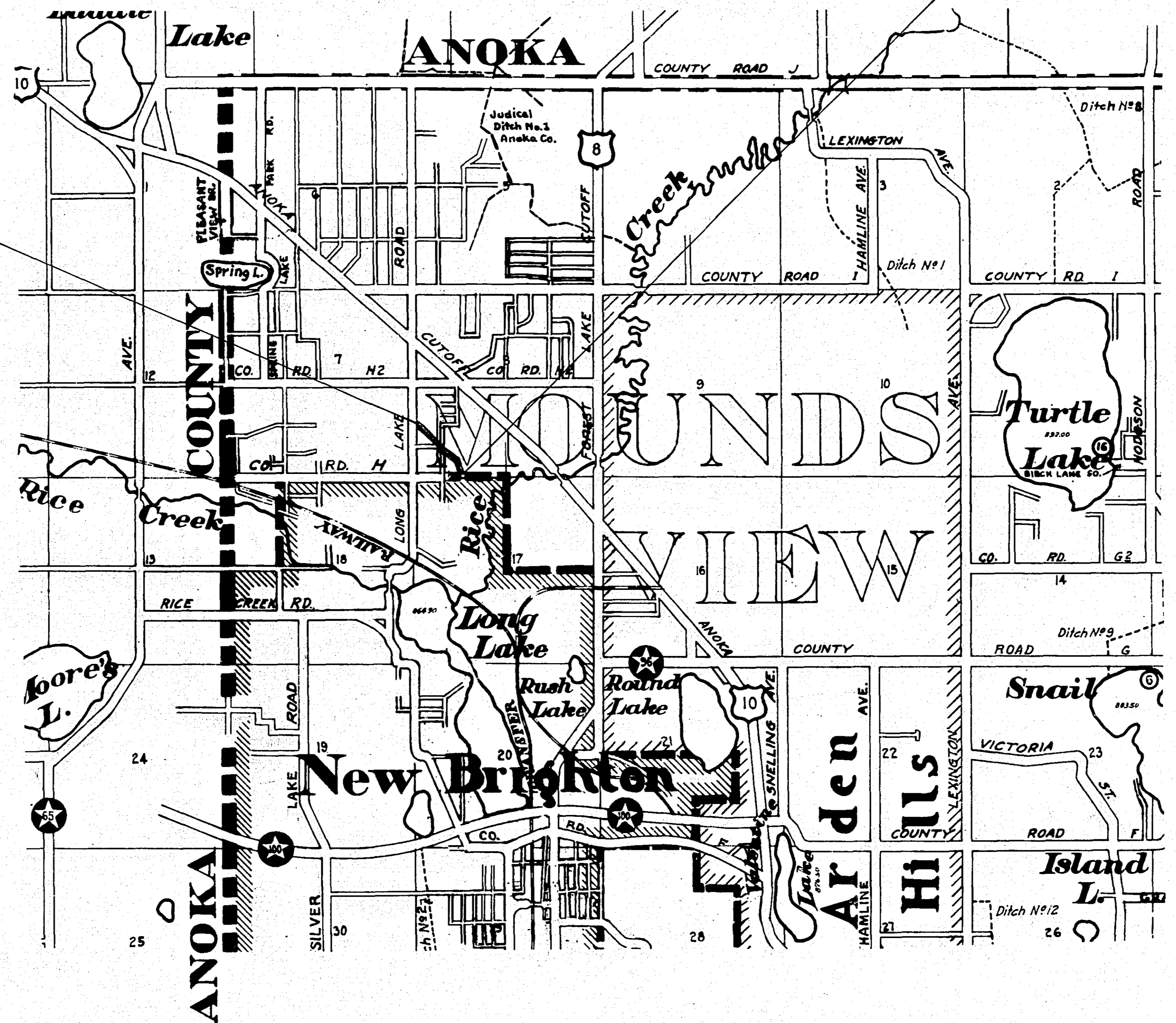
LAYOUT  
SCALE, 1 Inch = 2640 Feet

**INDEX**

SHEET NO.	DESCRIPTION
1	LAYOUT MAP & TITLE SHEET
2	ESTIMATE & MISCL. DETAILS
3	PLAN & PROFILE
4	CROSS SECTIONS

**BEG. OF PROJ.**  
STA. 0+14

**END OF PROJ.**  
STA. 19+36



Approved Barry J. Bronson  
COUNTY SURVEYOR

Approved 3/50 1953 John W. Paulson  
CHAIRMAN RAMSEY COUNTY BOARD

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.  
Barry J. Bronson  
DATE 3/26/53 REG. NO. 818

Sta. 0+19.4 to Sta. 0+14.4  
 1np. 15' x 33 L.F.C.M.  
 O.K. Leave

Sta. 9+50 ± Const. Conc. Headwall

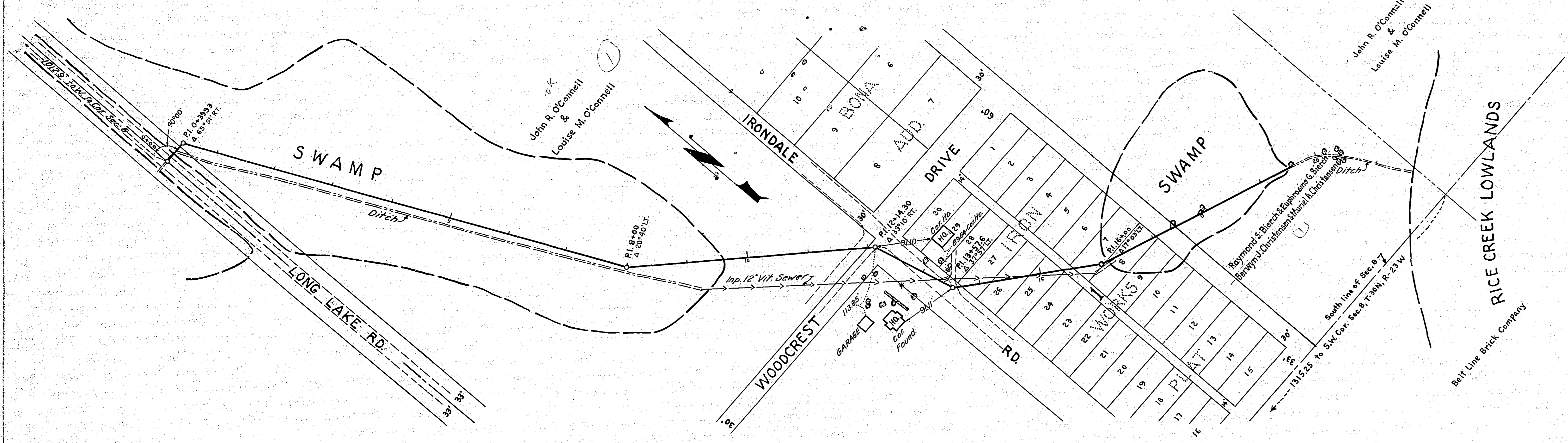
Sta. 12+14.3 ±  
 Const. M.H. 16 Lin. Ft.

Sta. 13+57.6 ±  
 Const. M.H. 16.4 Lin. Ft.

**OWNERSHIP, BLOCK 1 IRON WORKS PLAT**  
 Joseph & Julia M. Birkmeier, Lots 1-7 & 24-30 inclusive  
 Joseph H. & Mary M. Hilliard, Lots 8-23

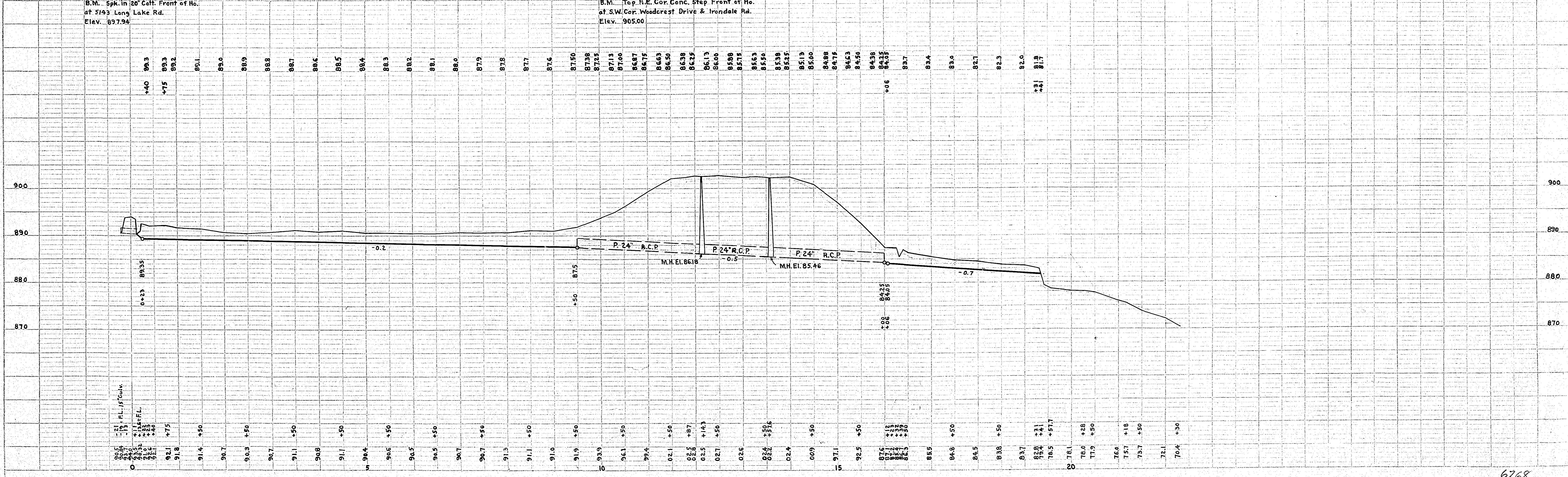
Sta. 16+00 to Sta. 16+06 ±  
 Const. Conc. Erosion Control Structure

Sta. 0+14 ± to Sta. 9+50 ±  
 Sta. 16+00 ± to Sta. 19+36 ±  
 Const. Open Ditch



B.M. 5pk. in 20' Coll. Front of Ho.  
 at 5143 Long Lake Rd.  
 Elev. 897.94

B.M. Top N.E. Cor. Conc. Step Front of Ho.  
 at S.W. Cor. Woodcrest Drive & Irondale Rd.  
 Elev. 905.00



PLAN SURVEYED, PLOTTED, ALIGNED, CHECKED, BY DATE

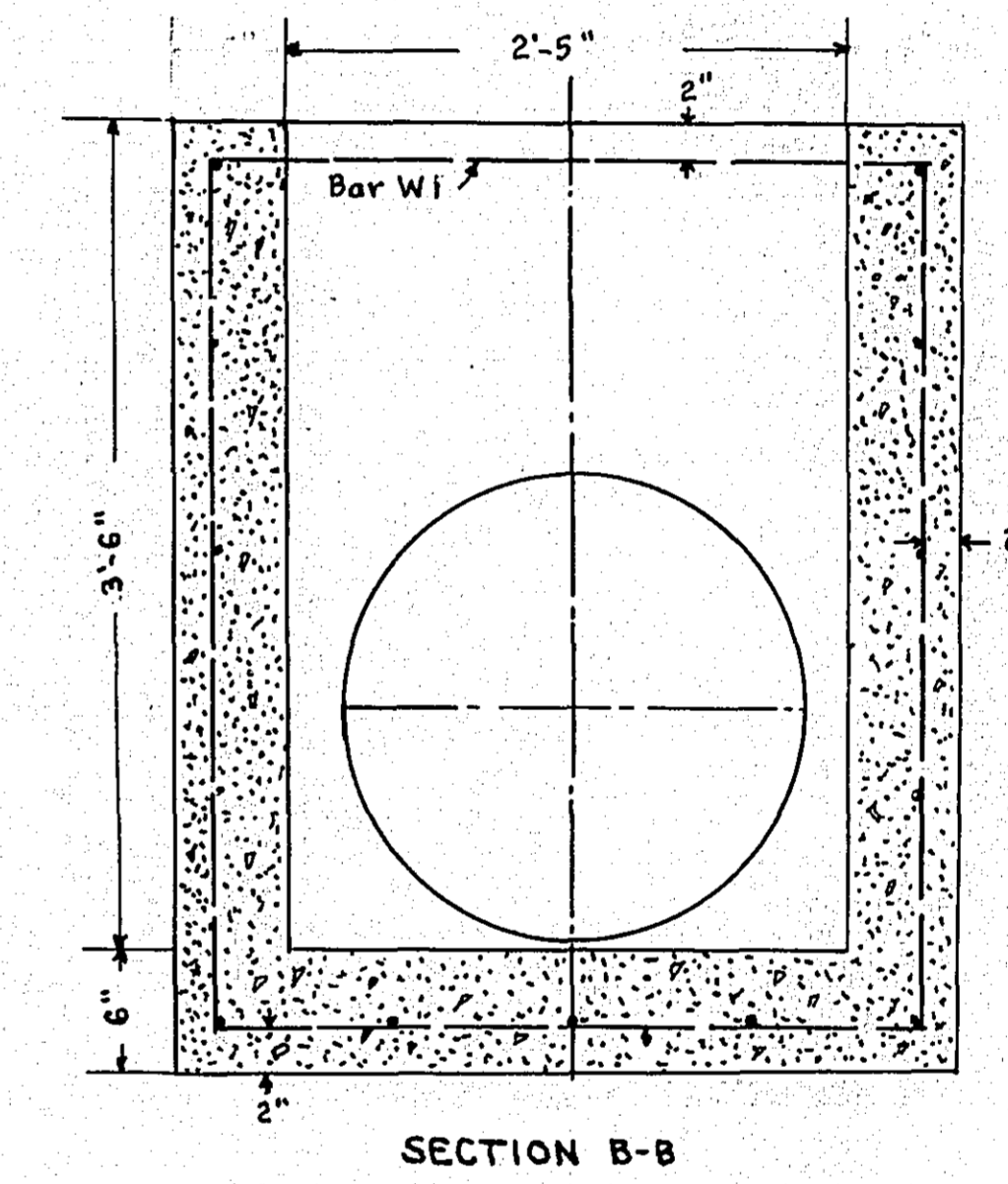
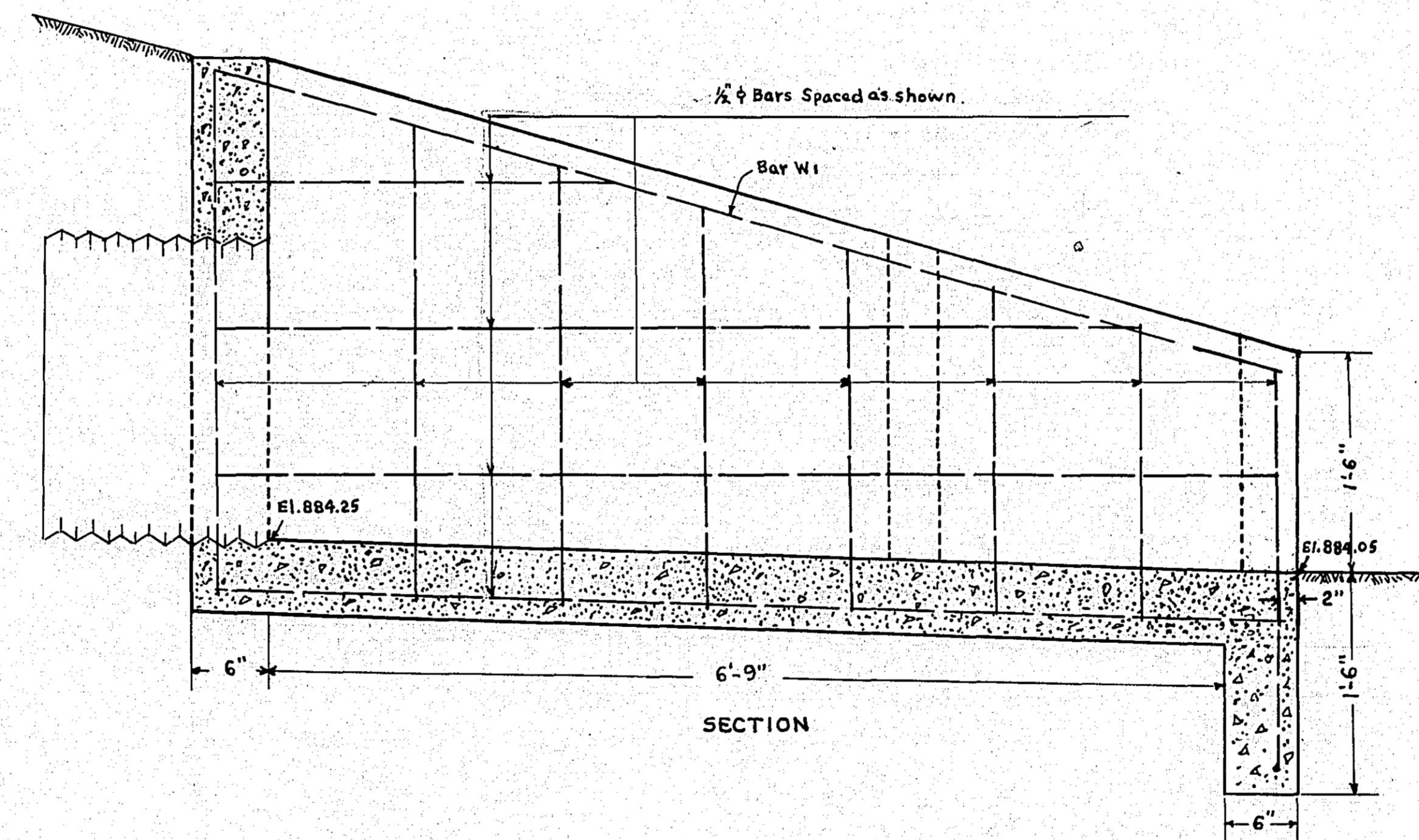
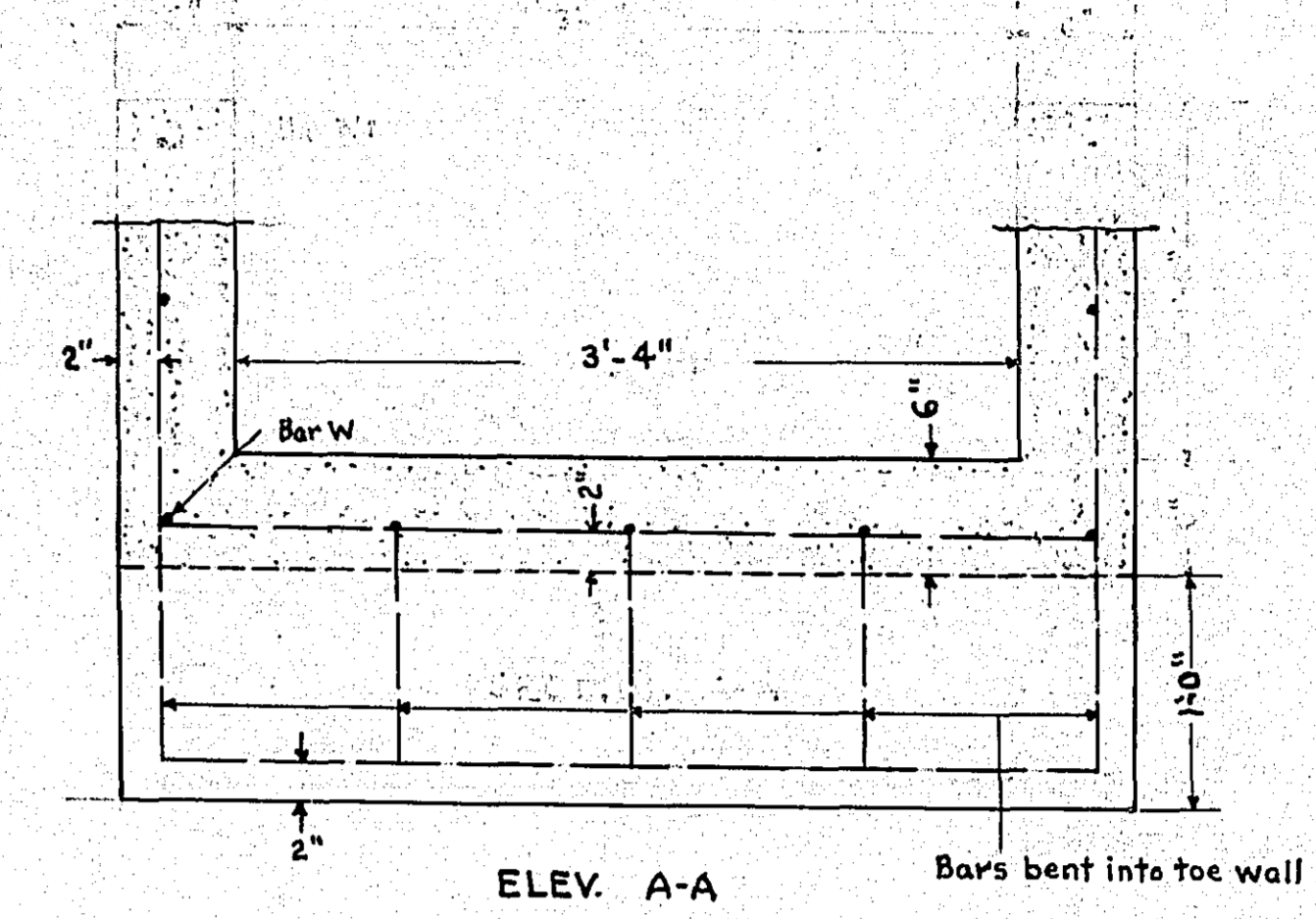
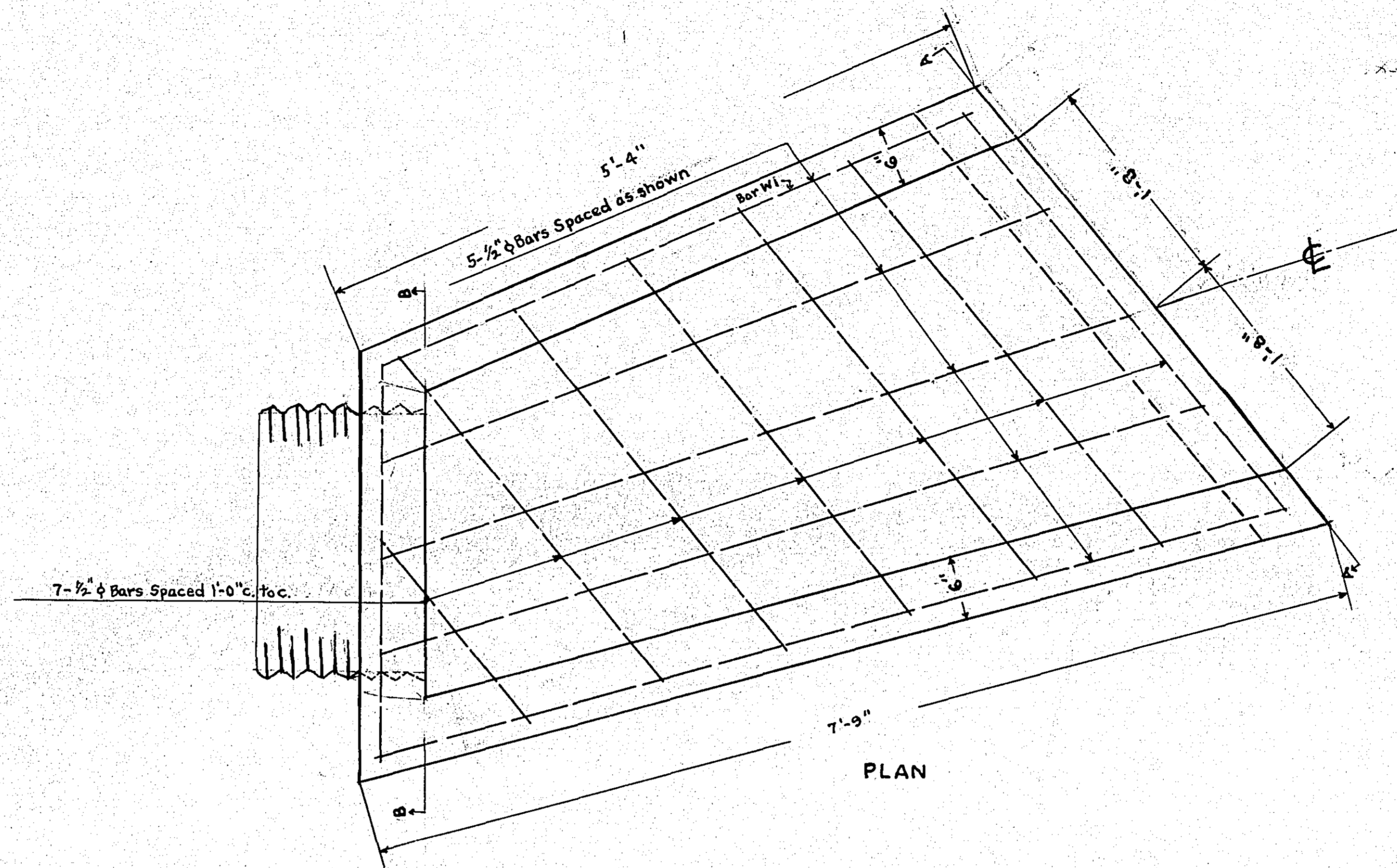
PROFILE SURVEYED, PLOTTED, ALIGNED, CHECKED, BY DATE

STATEMENT OF ESTIMATED QUANTITIES

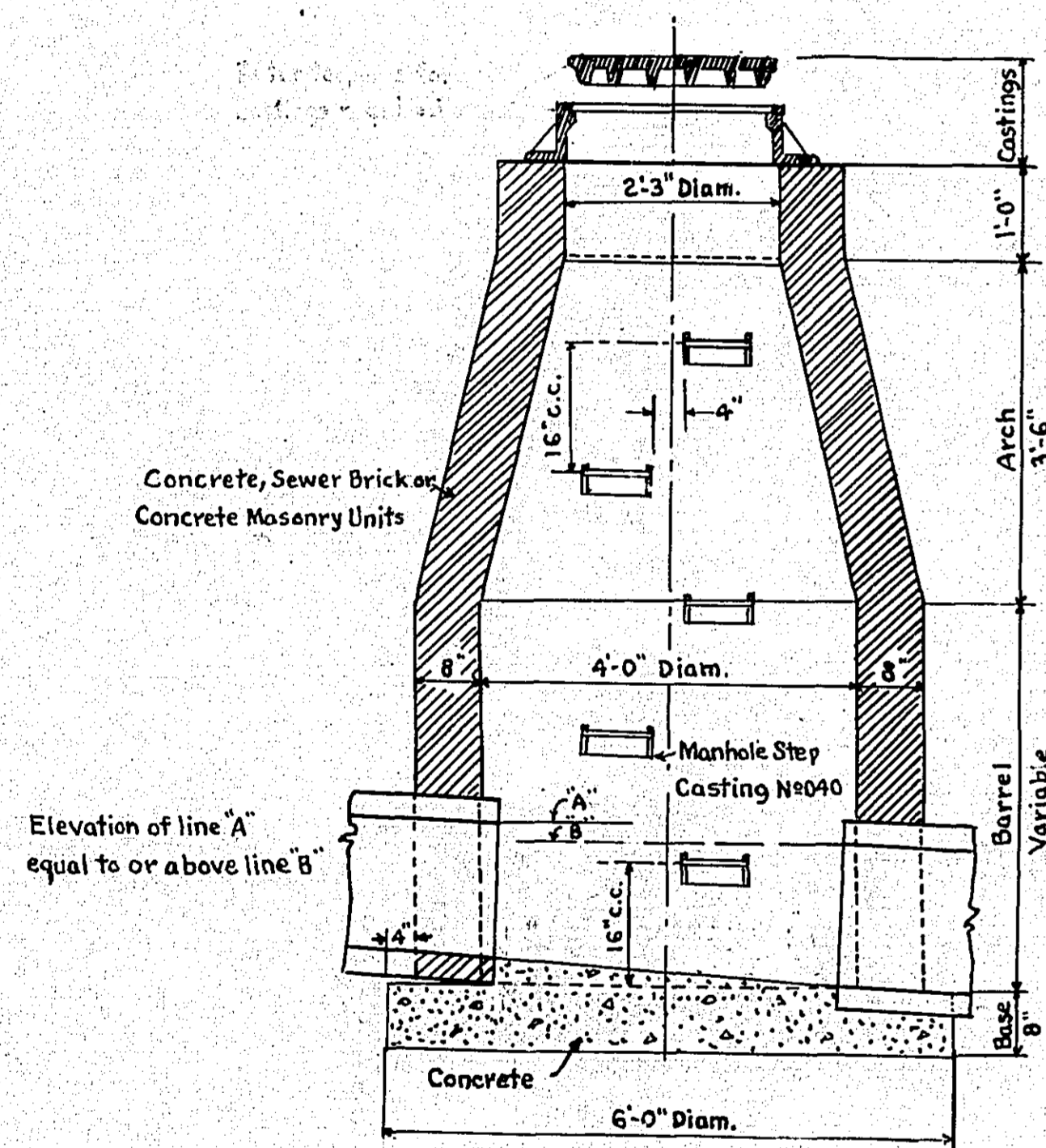
SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.502	CLEARING	TREE	2
2101.507	GRUBBING	TREE	2
2108.501	SPECIAL DITCH EXCAVATION	CU.YD.	790
2503.501	TRENCH EXC. 0' TO 6' DEEP	LIN.FT.	70
2503.502	TRENCH EXC. 0' TO 10' DEEP	LIN.FT.	116
2503.503	TRENCH EXC. 0' TO OVER 10' DEEP	LIN.FT.	464
2503.512-24	F & I R.C.P. SEWER 24"	LIN.FT.	650
2506.506	CONSTRUCT M.H.	LIN.FT.	32.4
2506.516	R & I CASTING ASSEMBLIES	ASSEMBLY	2
2515.506	CONCRETE CULV. HEADWALL	CU.YD.	1.7
2519.507	CONCRETE EROSION CONTROL STRUCTURE	CU.YD.	1.13

EROSION CONTROL STRUCTURE

1" = 1 Ft



MANHOLE



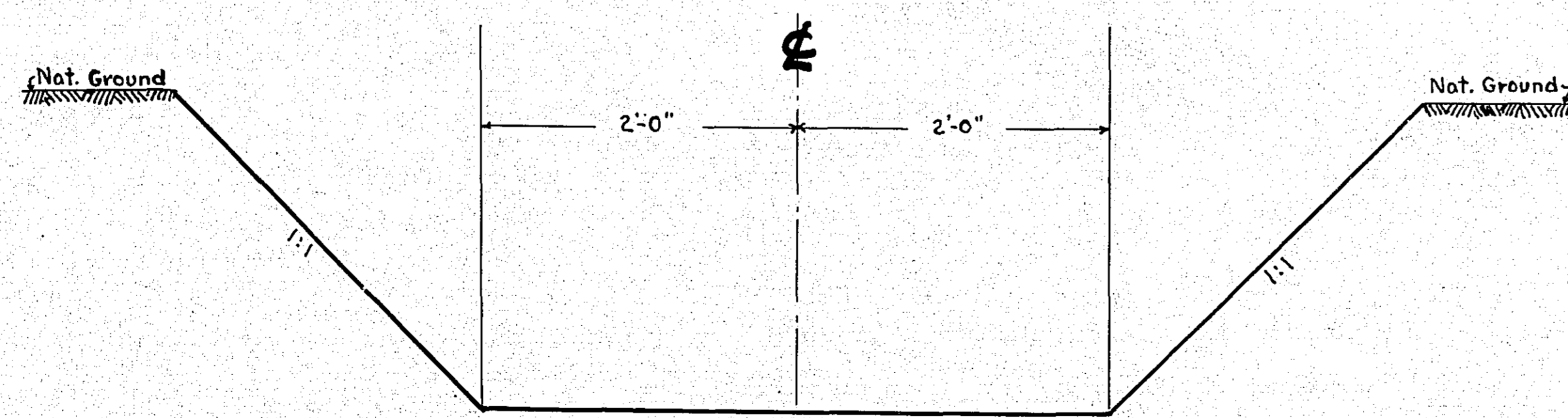
SECTIONAL VIEW  
PLATE 4000 C

CASTING ASSEMBLY

City of St. Paul Standard Frame "A"  
City of St. Paul Standard Cover "B"

NOTES:

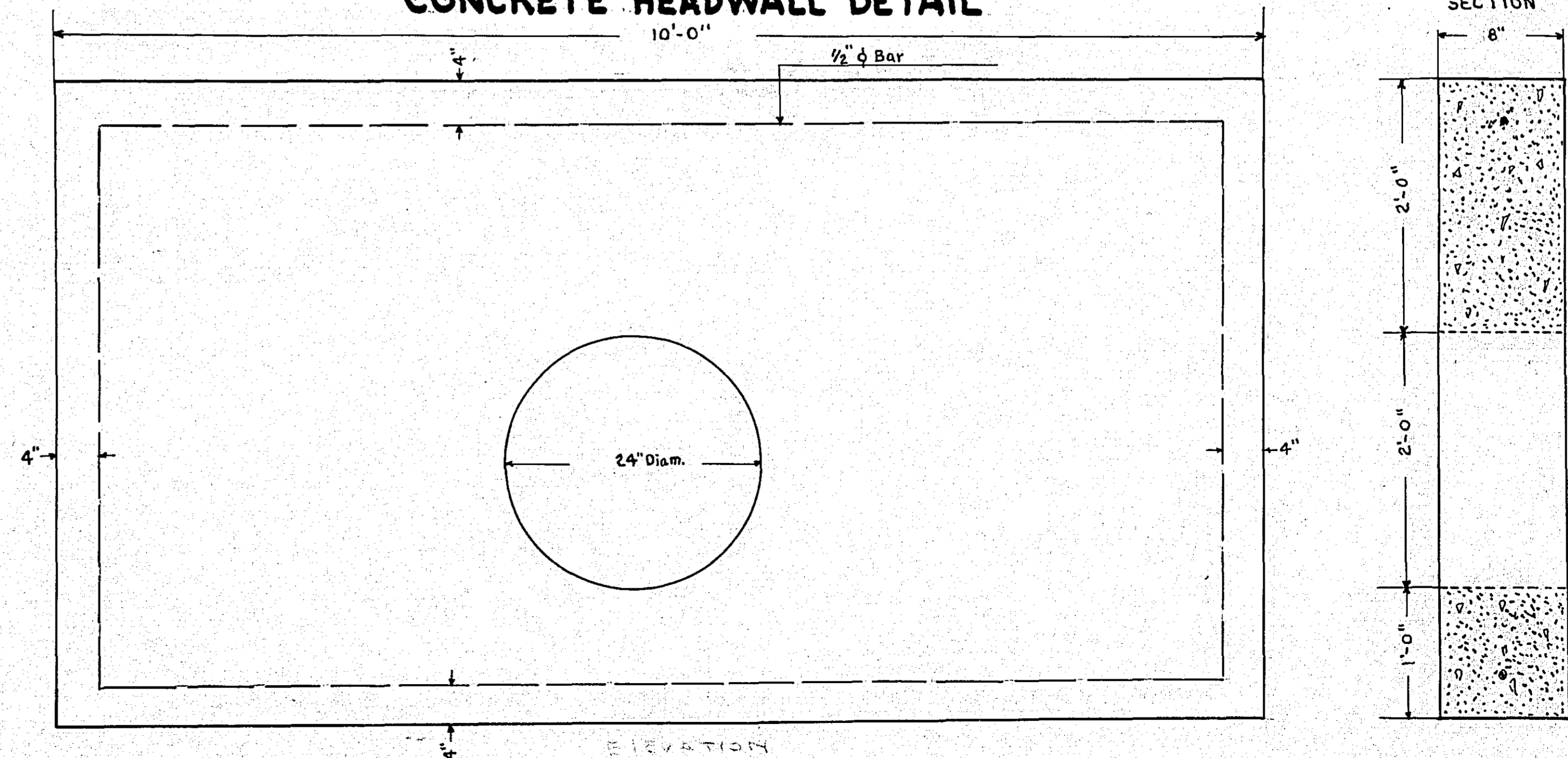
Unit price bid for manhole to include manhole step castings  
Space manhole steps 16" c. to c. beginning at bottom.  
For treatment of unstable foundation conditions see Plate No 4215  
See Plate No 4000 C for detail of wall construction.  
Spec. Ref. 2506



TYPICAL DITCH SECTION

Sta. 0+14 ± to Sta. 9+50 ±  
Sta. 16+06 ± to Sta. 19+36 ±

CONCRETE HEADWALL DETAIL



6768