

**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	
DROP INLET		S-STONE T-TILE	
GUARD RAIL		B-BRICK ST-STUCCO	
RAILROAD SNOW FENCE		IRON PIPE	
BOARD OR HIGHWAY SNOW FENCE		STONE MONUMENT	
STONE WALL OR FENCE		WOOD STAKE OR HUB	
HEDGE		MEANDER CORNER	
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  
GRADING & PAVING PLAN  
CARVER AVE. MINN. PROJ. S.A.P. 62-542-01**

From The East Service Drive of S.T.H. #1 at the South Line of the N.E. 1/4 of N.E. 1/4 of Sec. 23, T28N - R22W To S.E. Cor. of N.E. 1/4 of N.E. 1/4 of Sec. 23 - T28N - R22W

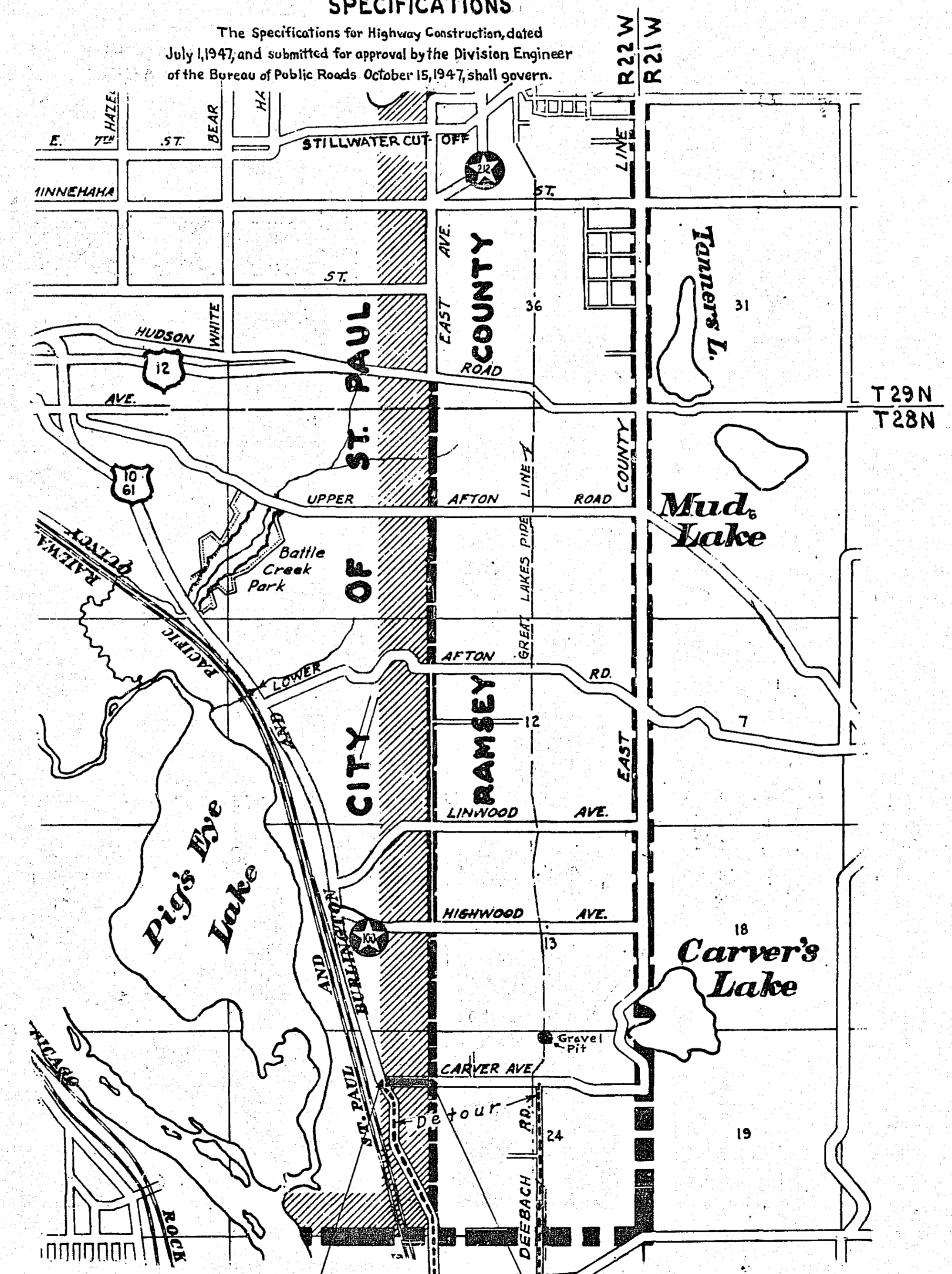
GROSS LENGTH 1343 FEET 0.254 MILES  
LENGTH OF EXCEPTIONS 0 FEET 0 MILES  
NET LENGTH 1343 FEET 0.254 MILES

PLAN, 1 Inch = 100 Feet  
PROFILE, Horz. 1 Inch = 100 Feet. Vert. 1 Inch = 10 Feet  
WORKING PLANS { Horz. 1 Inch = } As Noted  
{ Vert. 1 Inch = } As Noted  
Cross-Sections, 1 Inch = 10 Feet

LAYOUT  
SCALE, 1 Inch = 2640 Feet

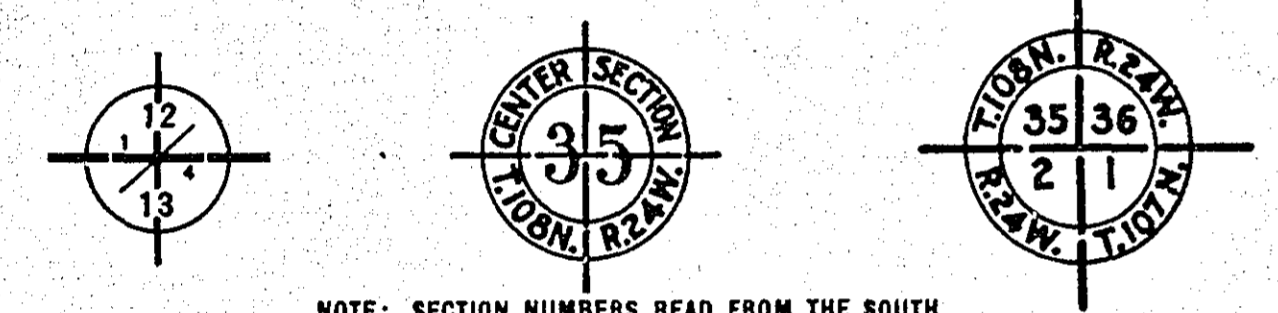
**SPECIFICATIONS**

The Specifications for Highway Construction, dated July 1, 1947, and submitted for approval by the Division Engineer of the Bureau of Public Roads October 15, 1947, shall govern.



**INDEX**

SHEET NO.	DESCRIPTION
1	LAYOUT MAP & TITLE SHEET
2	ESTIMATE & MISC. DETAILS
3	MISC. DETAILS
4	PLAN & PROFILE
5-9	CROSS SECTIONS
10	GRAVEL PIT PLAN



BEG. OF PROJ. 62-542-01 STA. 0+25 END OF PROJ. 62-542-01 STA. 13+67.8

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.  
*Randy S. Branson*  
DATE 4/15/50 REG. NO. 818

Approved *Randy S. Branson* 4/15 1950  
COUNTY SURVEYOR  
Approved *Edmund P. D. ...* 5/15 1950  
CHAIRMAN RAMSEY COUNTY BOARD  
Recommended for Approval *H. E. Elwood* 1950  
DISTRICT ENGINEER  
Recommended for Approval *G. M. ...* 5-4 1950  
ENGINEER OF COUNTY DIVISION  
Recommended for Approval *G. M. ...* 5-4 1950  
ENGINEER OF SURVEYS AND DESIGN

STATEMENT OF ESTIMATED QUANTITIES

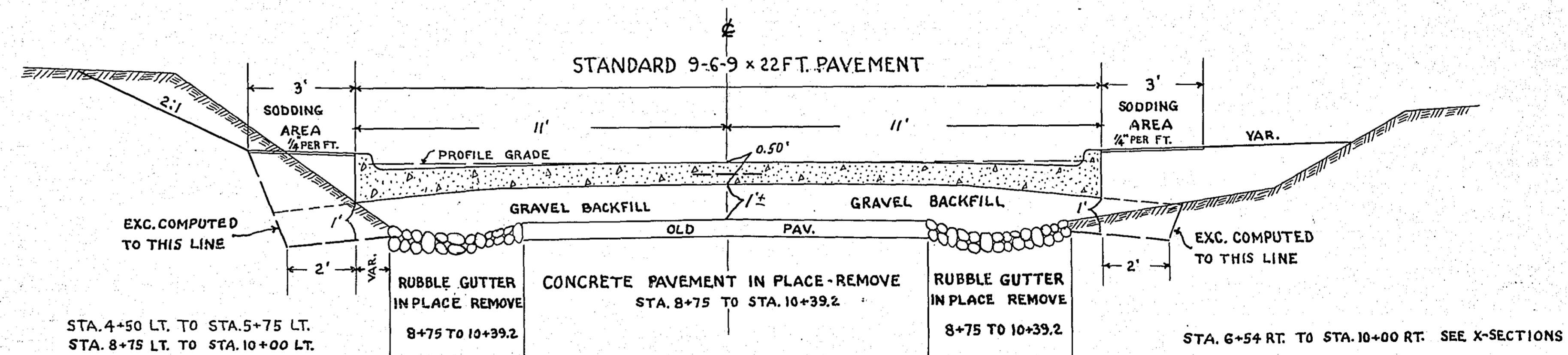
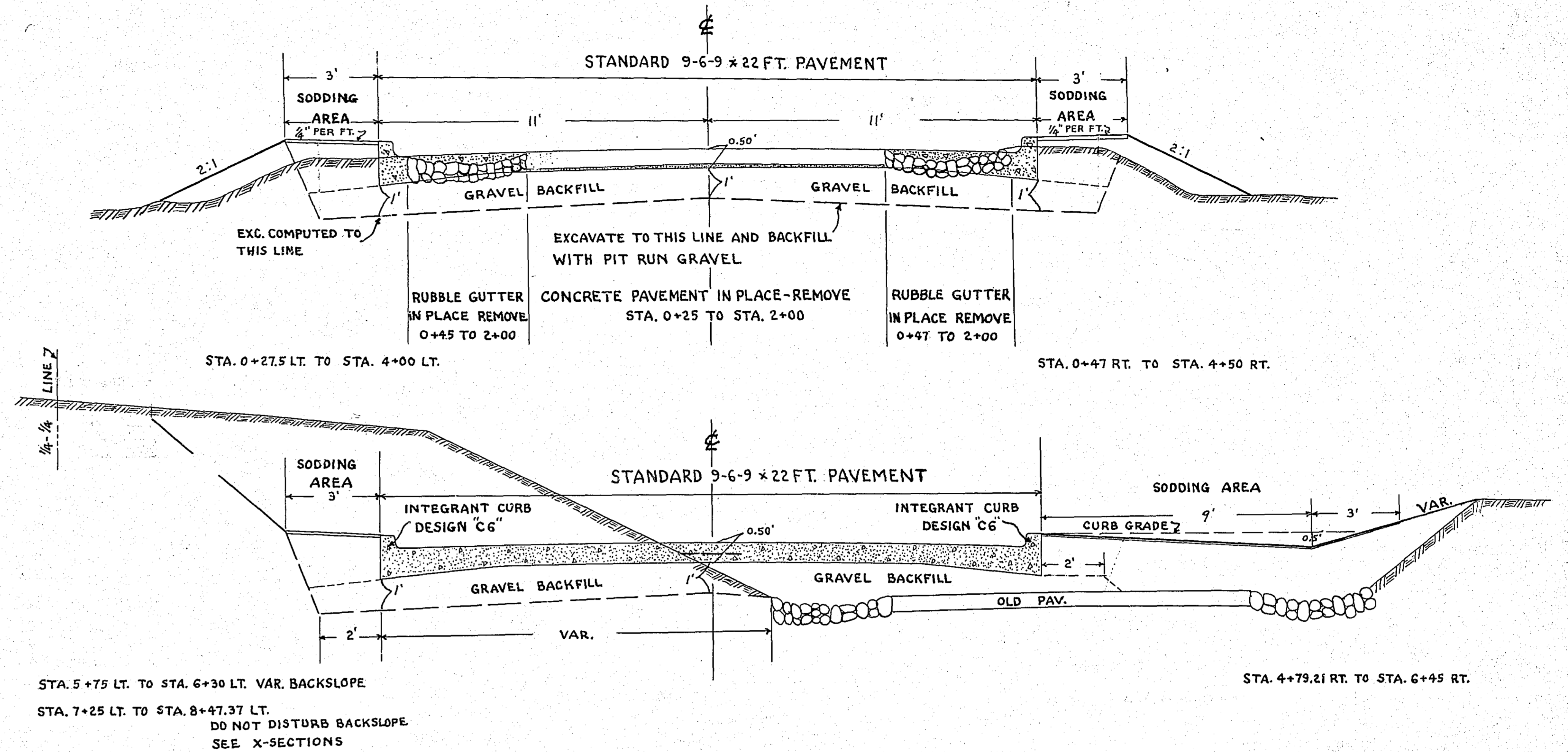
SPECIFICATION REF. NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.502	CLEARING	TREE	14 ✓
2101.507	GRUBBING	TREE	13 ✓
2104.502	REMOVE PAVEMENT	SQ.YD.	490 ✓
2105.503	CLASS "C" EXCAVATION	CU.YD.	2520 ✓
2130.501	WATER	(M)GALS.	16 ✓
2201.527	GRAVEL SUB-BASE INPLACE (VEH.MEAS.)	CU.YD.	640 ✓
2503.501	TRENCH EXCAVATION 0' TO 6' DEEP	L. F.	118 ✓
2503.512	F.&I. REIN. CONC. PIPE SEWER 15"	L. F.	30 ✓
2503.512	F.&I. REIN. CONC. PIPE SEWER 18"	L. F.	88 ✓
2506.501	EXCAV. FOR CATCH BASINS	CU.YD.	16.4 ✓
2506.507	CONST. C.B. TYPE N#1 (CITY OF ST. PAUL)	L. F.	3.6 ✓
2506.507	" " " N#2 (CITY OF ST. PAUL)	L. F.	5.9 ✓
2506.512	RECONSTRUCT C.B.	L. F.	2 ✓
2506.516	F.&I. CASTING ASSEMBLIES	ASSEMBLY	4 ✓
2568.501	PROJECT MARKERS	MARKER	2 ✓
2576.501	AREA SODDING	SQ.YD.	1050 ✓
2513.501	GROUTED RIP-RAPPING	CU.YD.	9 ✓
2301.512	CONC. PAVEMENT TYPE 2	SQ.YD.	2420
2301.513	" " " 3	SQ.YD.	
2301.514	" " " 4	SQ.YD.	
2301.531	REINFORCING BARS	LBS.	666
2301.541	INTEGRANT CURB, DESIGN C6	L. F.	1940
2301.546	HEADERS, TYPE "A"	L. F.	22

STANDARD DETAIL PLATES ISSUED OCTOBER 1, 1947, AND APPROVED BY THE BUREAU OF PUBLIC ROADS APRIL 1, 1948, WITH REVISIONS APPROVED FEBRUARY 24, 1949, SHALL GOVERN.

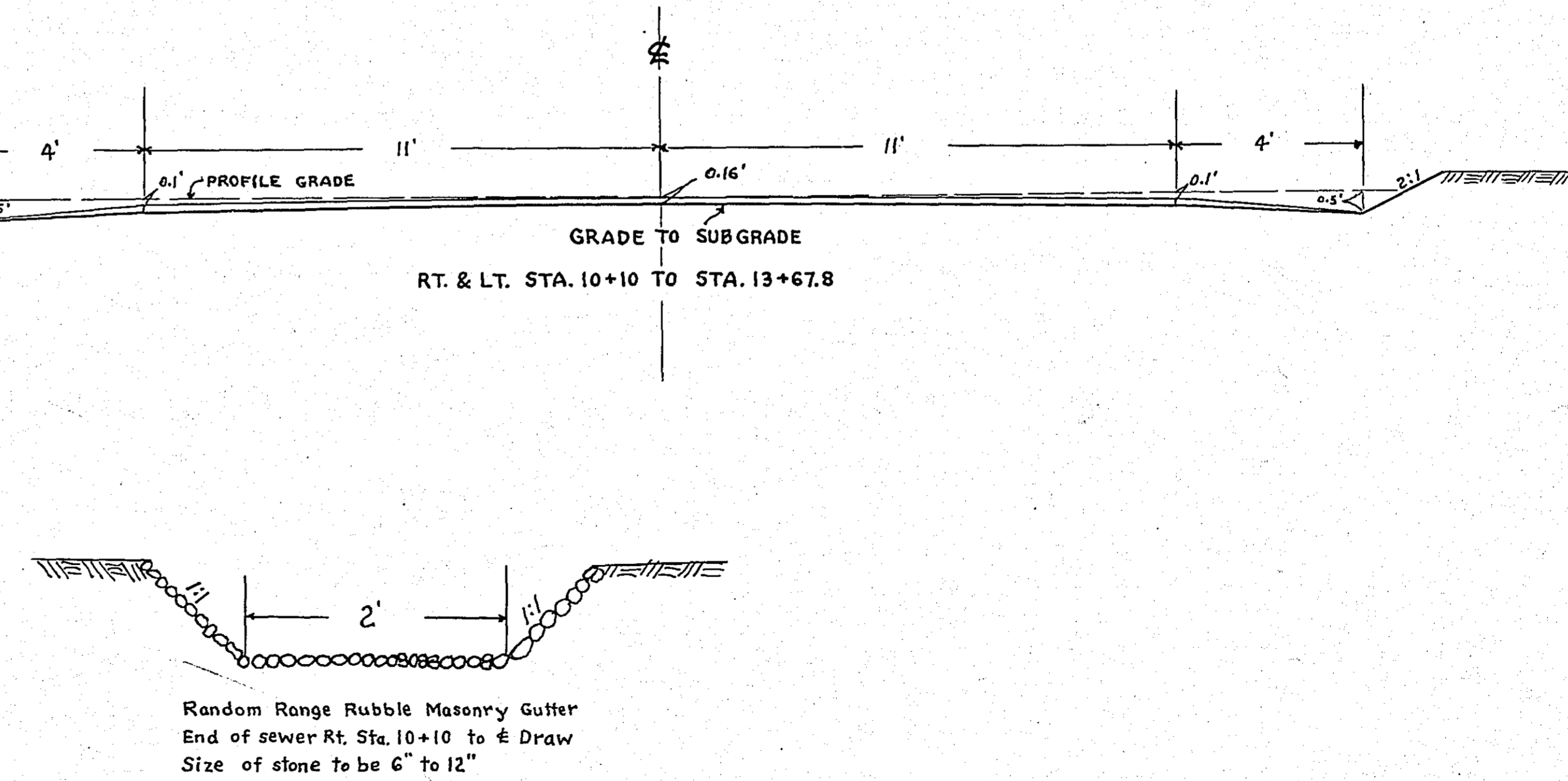
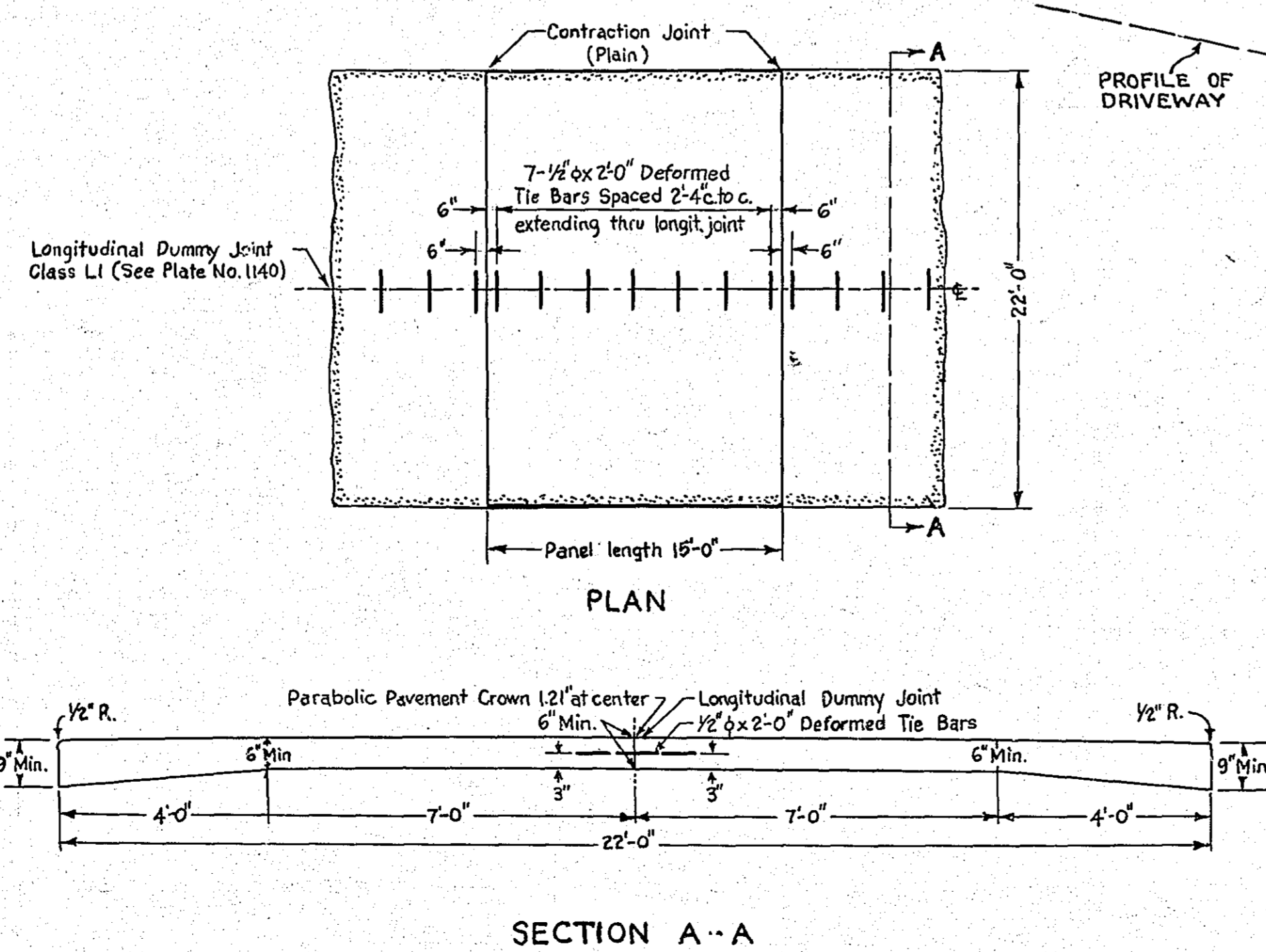
PLATE NO.	STANDARD DETAILS
1004	CONCRETE PAVEMENT 9-6-9 22 FOOT
1100	EXPANSION JOINTS
1120	CONTRACTION JOINTS
1140	LONGITUDINAL JOINTS
1200	CONCRETE PAVEMENT HEADER
1254	PAVEMENT ORDINATES
2400	MASONRY RANDOM RANGE RUBBLE
2500 TO 2577	PAVEMENT EQUIPMENT
7002	INTEGRANT CURB DESIGN C-6

SHEET NO.	SPECIAL DETAILS
3	PLAN OF ENTRANCE THRU INTEGRANT CURB
3	CATCH BASIN TYPE No. 1 & CURB INLET
3	PANEL LAYOUT
	SECTION THRU MASONRY GUTTER

TYPICAL GRADING SECTIONS

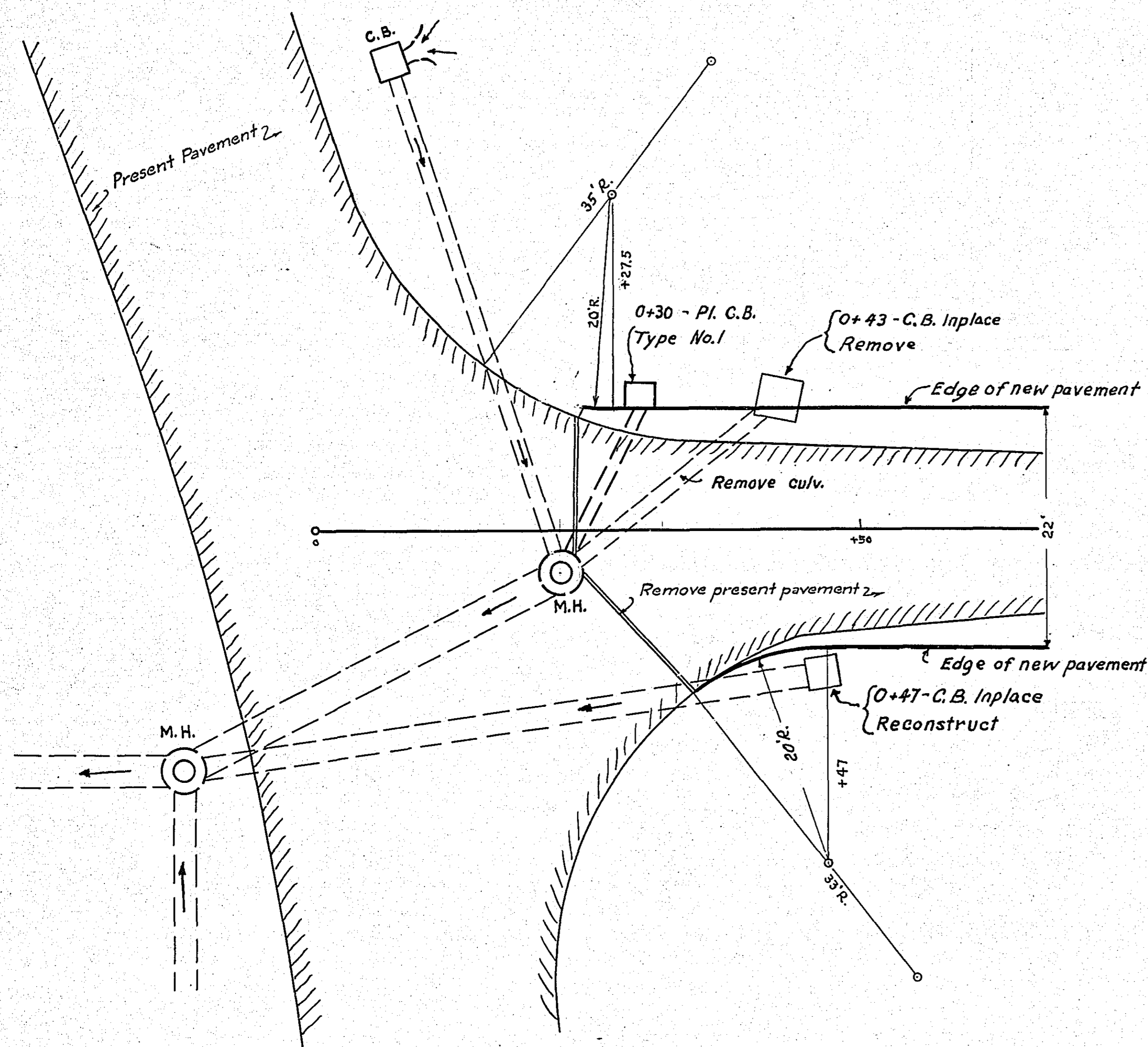


STANDARD PAVEMENT PANEL DETAILS  
9-6-9 x 22 FOOT

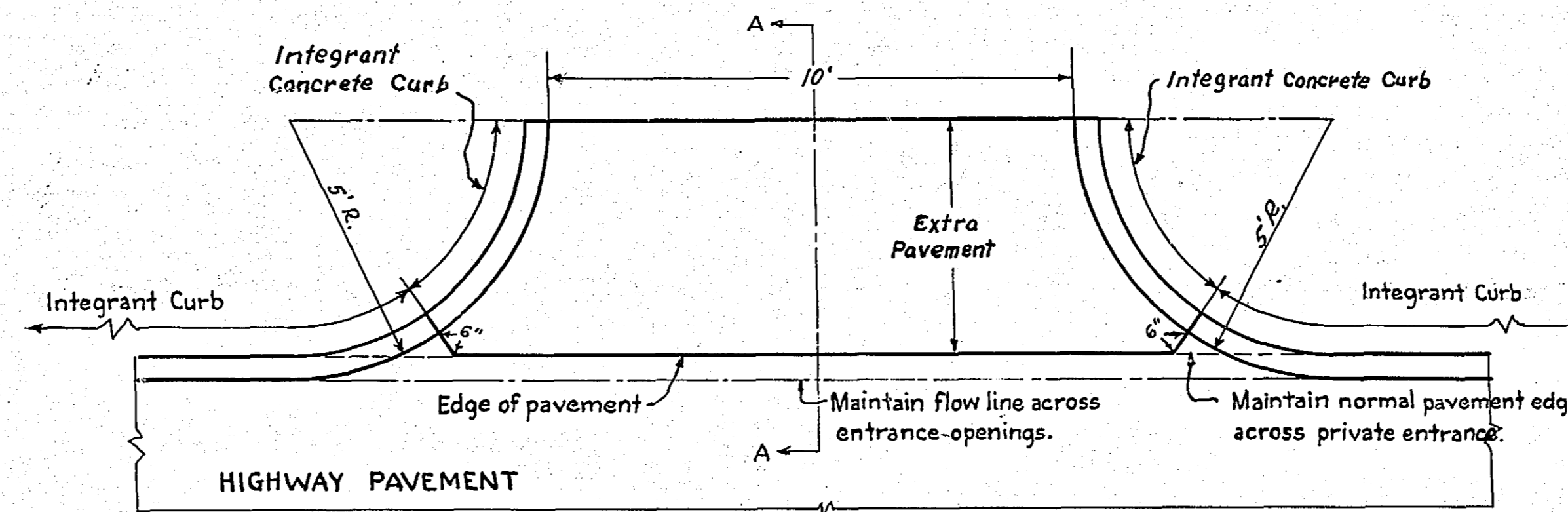


6676

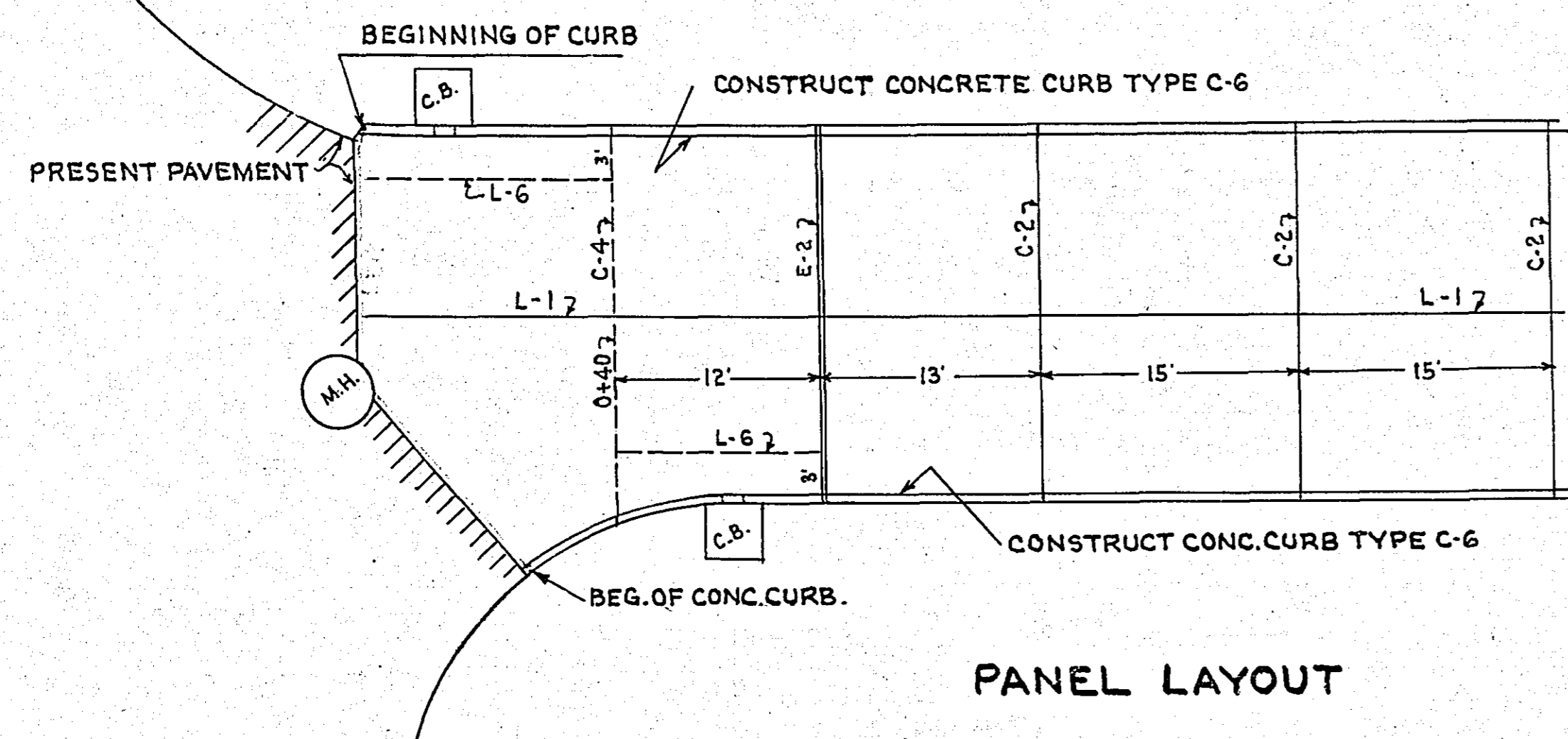
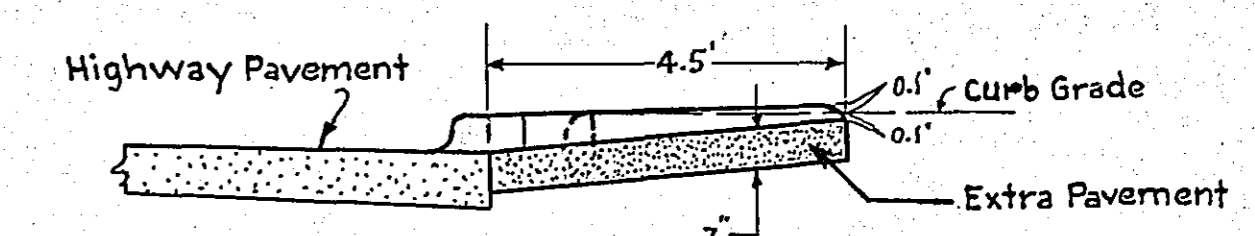
DETAIL OF SEWER AND RADI AT BEGINNING OF PROJECT



PLAN OF ENTRANCE THRU INTEGRANT CURB



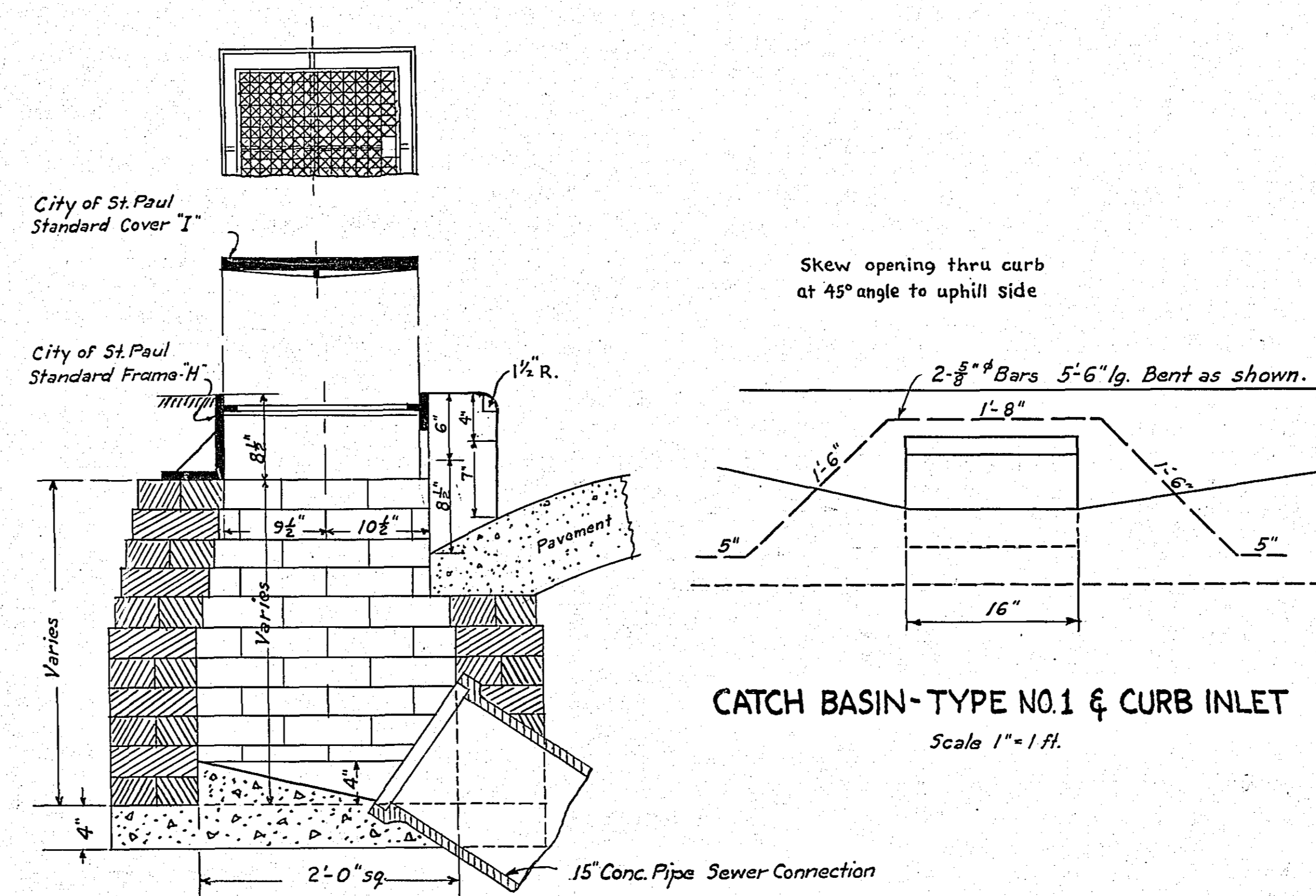
SECTION A-A



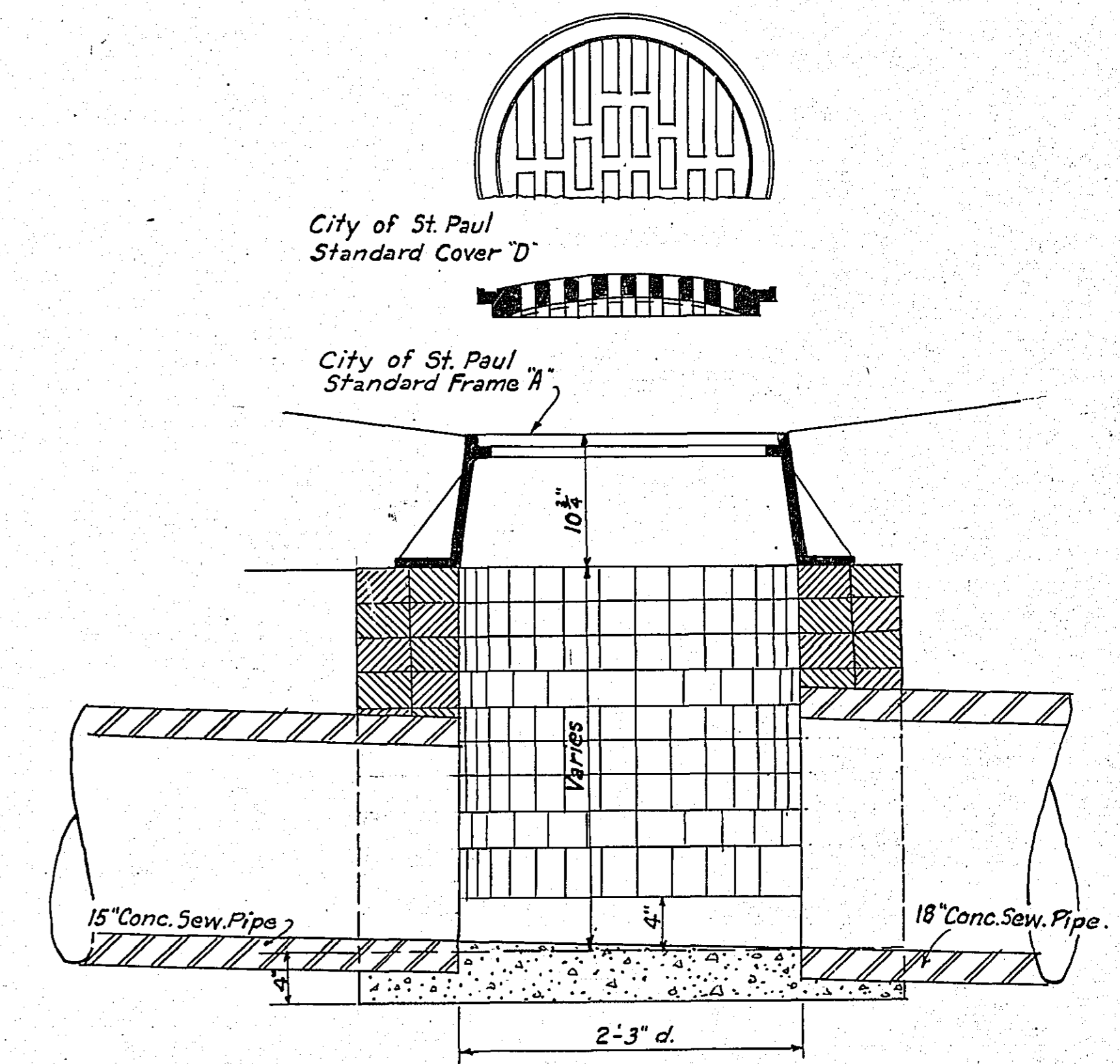
PANEL LAYOUT

JOINT LEGEND

- L-1 - INDICATES LONGITUDINAL DUMMY JOINT (TRAFFIC MARKER TYPE) CLASS L-1
  - L-6 - DOTTED LONGITUDINAL LINES INDICATE KEYED CONSTRUCTION JOINT WITH TIE BARS SEALED TYPE CLASS L-6
  - C-2 - SINGLE TRANSVERSE LINES INDICATE CONTRACTION JOINTS (PLAIN) CLASS C-2
  - C-4 - DOTTED TRANSVERSE LINES INDICATE CONTRACTION JOINTS (DOWELLED) CLASS C-4
  - E-2 - INDICATES 1/2" EXPANSION JOINTS CLASS E-2
- STANDARD 15' PANEL LENGTHS TO BE USED EXCEPT AS NOTED



CATCH BASIN - TYPE NO. 1 & CURB INLET  
Scale 1" = 1 ft.



CATCH BASIN - TYPE NO. 2  
Scale 1" = 1 ft.

6676

Sta. 0+30 Lt.  
Const. C.B. Type No. 1  
Place 15"x18" R.C.S.P.  
Exc. for C.B. = 6.4 Cu.Yds.  
L.F. of C.B. = 3.6'

Sta. 0+43 Lt.  
Remove C.B.  
Remove 15"x25" Pipe  
From C.B. to M.H.

Sta. 0+47 Rt.  
Place C.B. Type No. 1  
Fit on present C.B.

Sta. 10+10 Rt. & Lt.  
Const. (2) C.B. Type No. 2  
Place 15"x28" R.C.S.P.  
Rt. Place 18"x70" R.C.S.P.  
Lt. = Exc. for C.B. = 4.8 Cu.Yds.  
L.F. of C.B. = 2.8'  
Rt. = Exc. for C.B. = 5.2 Cu.Yds.  
L.F. of C.B. = 3.1'

Sta. 13+67 Rt.  
In place 15"x20" C.M.  
O.K. Leave

DATE	
BY	
REVISION	
NO.	
PLAN	
NOTE BOOK	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	

DATE	
BY	
REVISION	
NO.	
PROFILE	
NOTE BOOK	
GRADES CHECKED	
B. M.S. NOTED	
STRUCTURE NOTATIONS CHKD.	

