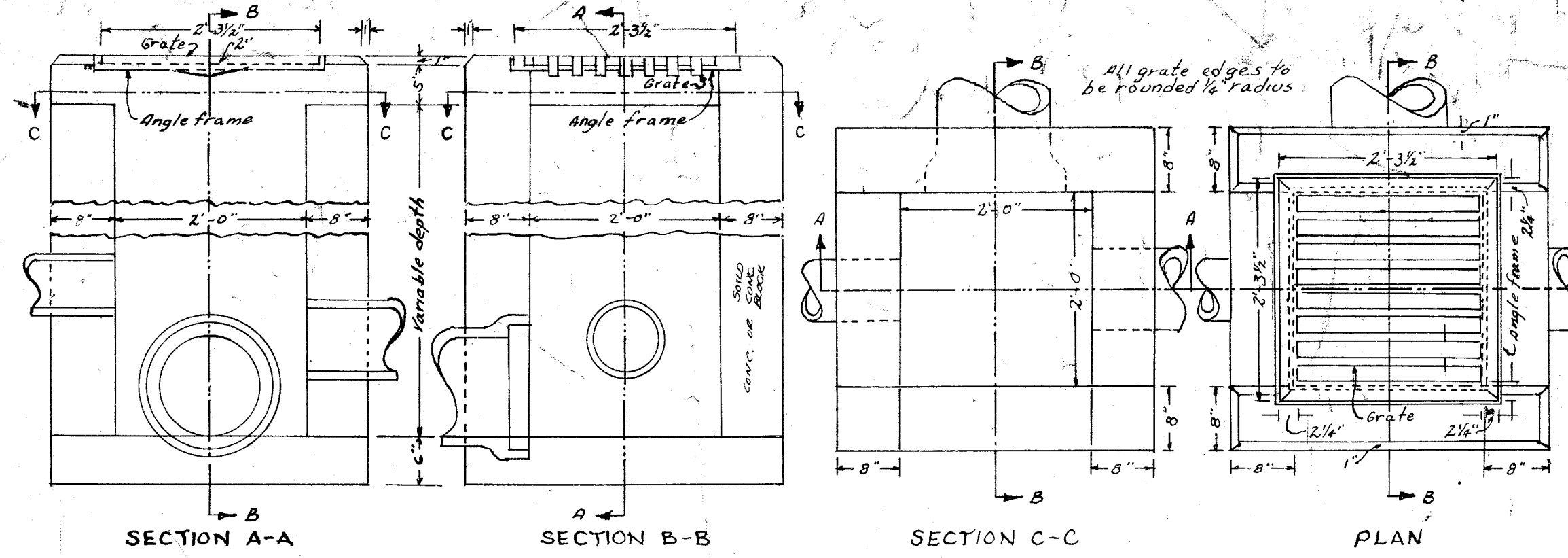


U.S. GOVERNMENT PRINTING OFFICE: 1964 O 434154

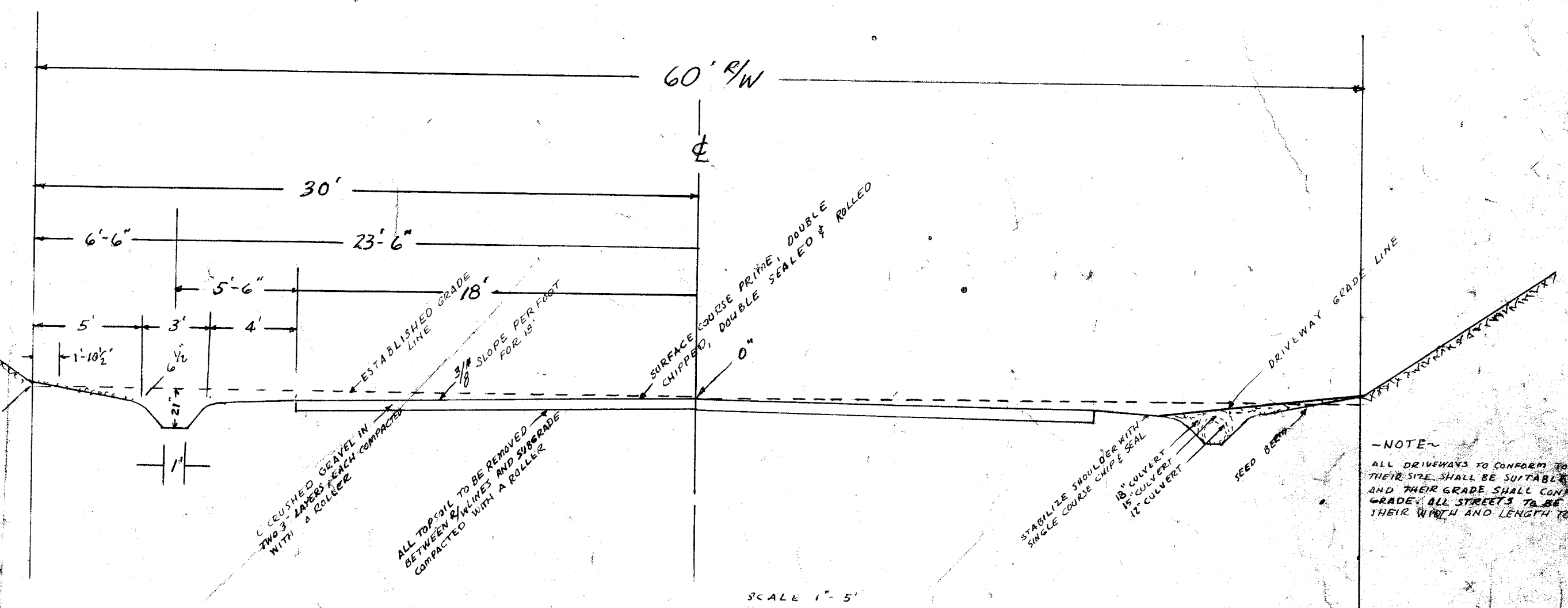
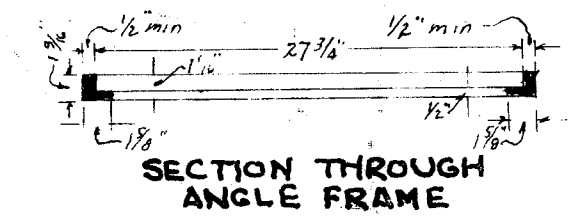
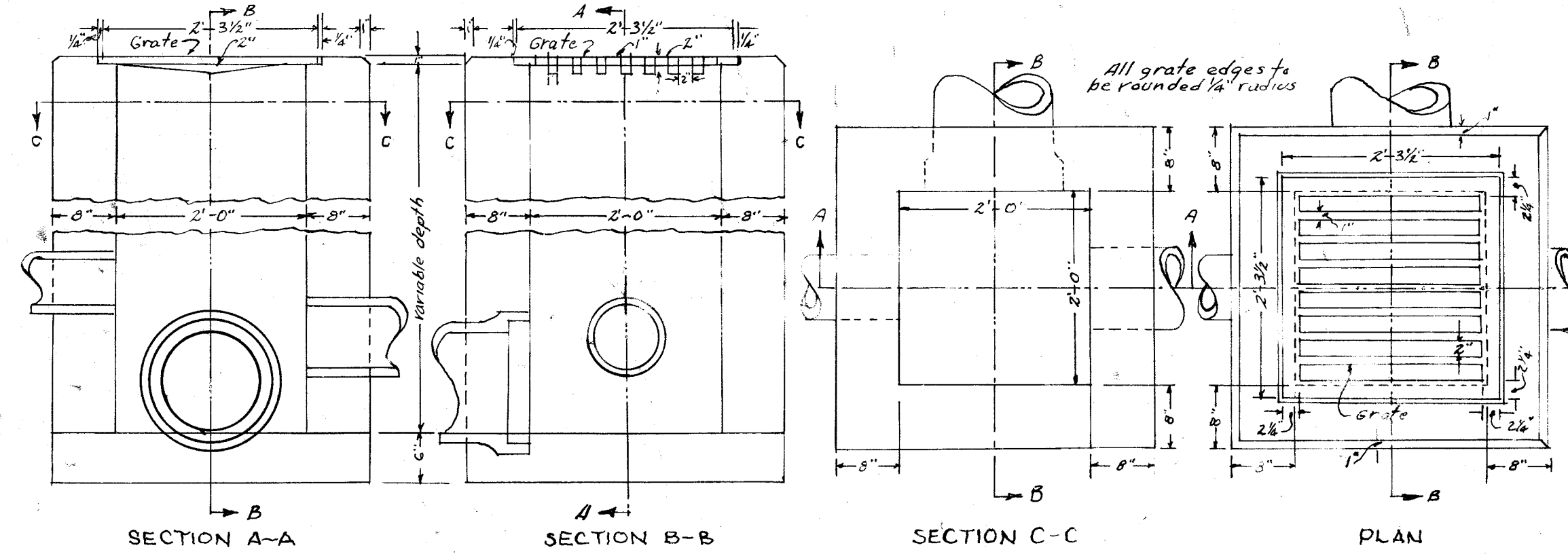
STANDARD NO. 2-2-A CATCH BASIN



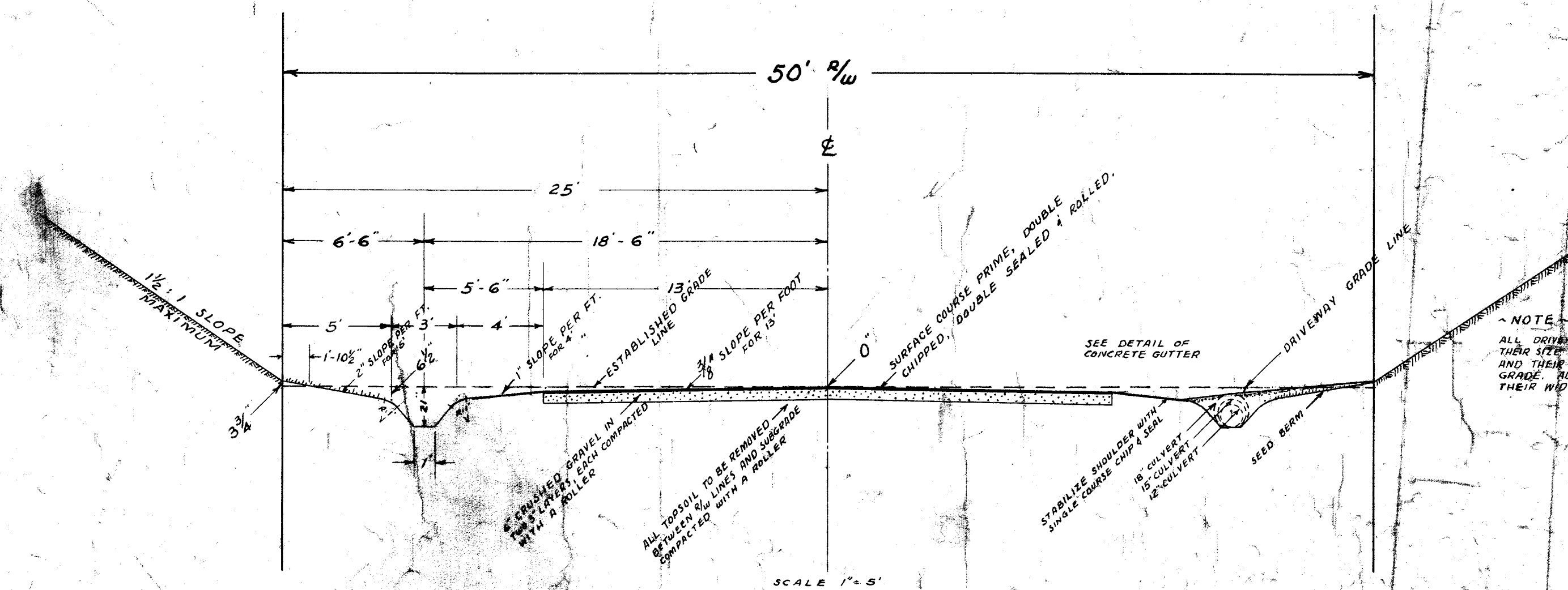
NOTES

GRATING AND FRAME shall meet the requirements of Item 1-B. The grating shall be essentially the same and equally as strong as the one shown herein.
Height of grate minimum 120 lbs.
Height of frame minimum 40 lbs.
CONCRETE cost in place to be class 1.
BRICK OR CONCRETE BLOCK side walls when used in place of concrete shall be 8 inches minimum in thickness. When brick or concrete blocks are used the walls of the catch basin above the flow line of the side opening shall be constructed of Portland Cement concrete.
2-2-A SIDE INLETS to be placed 4 to 6 inches below normal elevations of median or ditch flow line returning to normal 10 feet each side of basin.
2-2-B GRATE elevation to be placed 4 to 6 inches below normal ditch returning to normal 10 feet each side of basin.
SIDE INLETS shall be provided on both sides of the No. 2-2-A catch basin in dips and on ups from side only where the ditch has a continuous down grade past the catch basin.

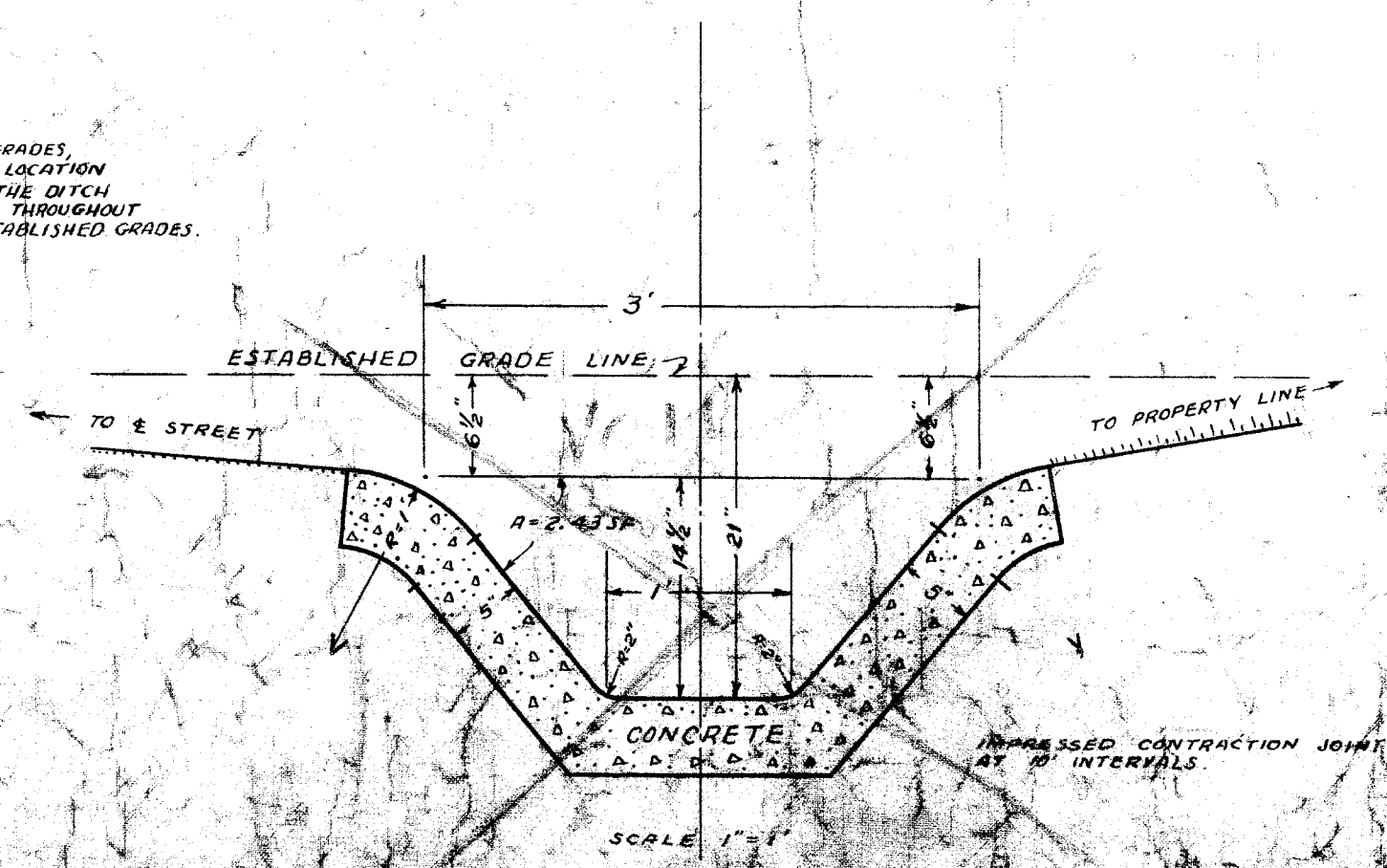
STANDARD NO. 2-2-B CATCH BASIN



~ TYPICAL STREET SECTION ~
MULTI-FAMILY

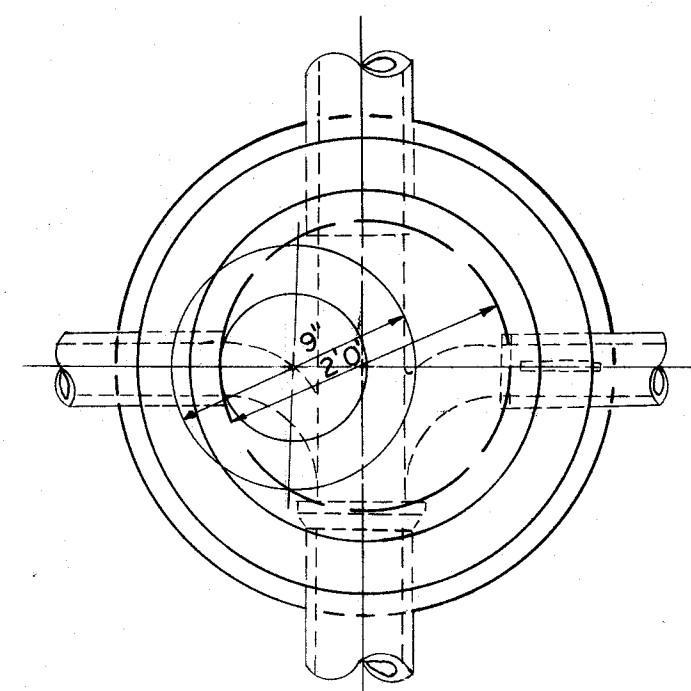


~ TYPICAL STREET SECTION ~



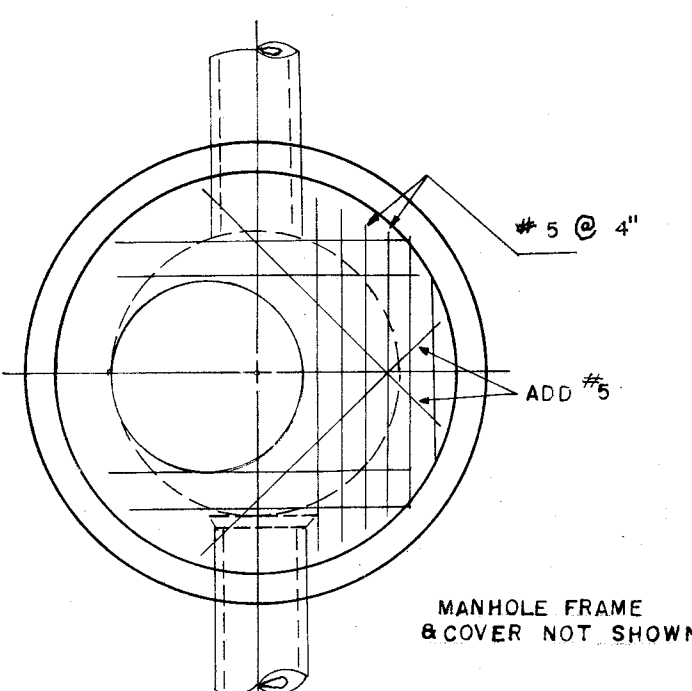
~ CONCRETE GUTTER DETAIL ~

L. W. J. COOPER & ASSOCIATES
REGISTERED ENGINEER & SURVEYORS
JAMES L. COOPER • J. ED. JUENEMANN • ROBERT A. MILLER
PHONE 475-3351 CANTON, OHIO 44705
SURVEYED BY JUENEMANN FIELD BOOK NO. 101 DATE JULY 29, 1965 FILE NO. 101-101



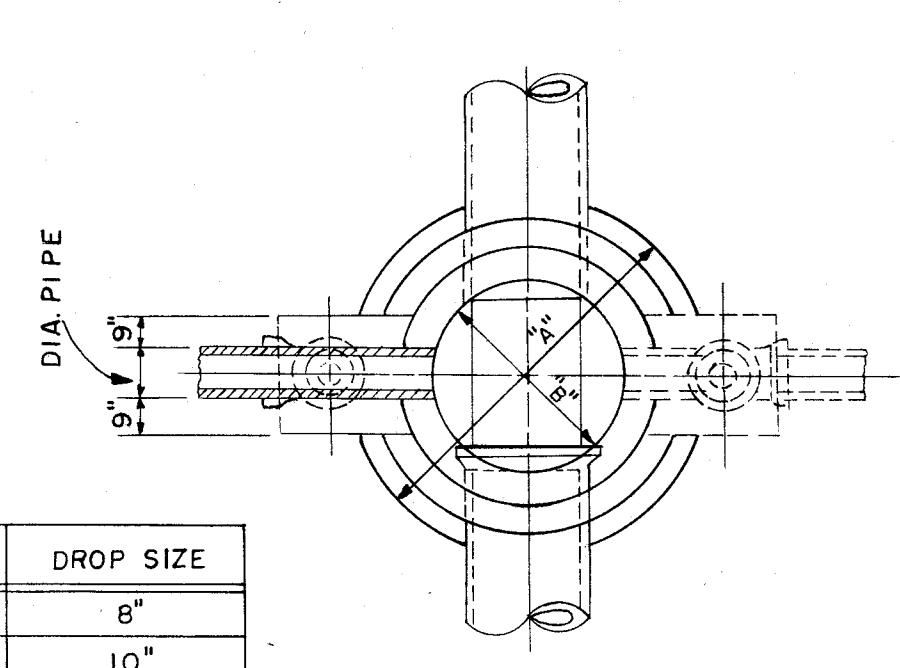
MANHOLE FRAME & COVER
NEENAH STARK COUNTY SPECIAL

EAST AKRON CASTING CO., TALLMAUGE, OHIO
FRAME NO. 155—WEIGHT 345 LBS.
COVER NO. 156—WEIGHT 154 LBS.
OR EQUAL

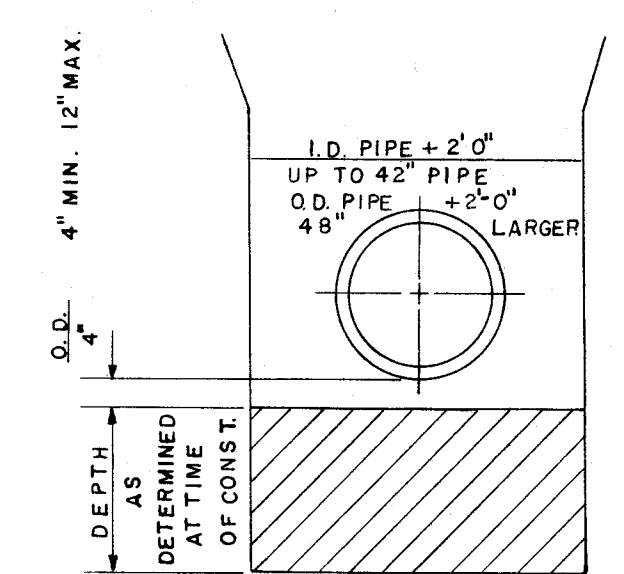


PLAN

SEWER SIZE	DROP SIZE
8"	8"
10"	10"
12"-15"-18"	12"
21"-24"	15"
27"-30"-36"	18"

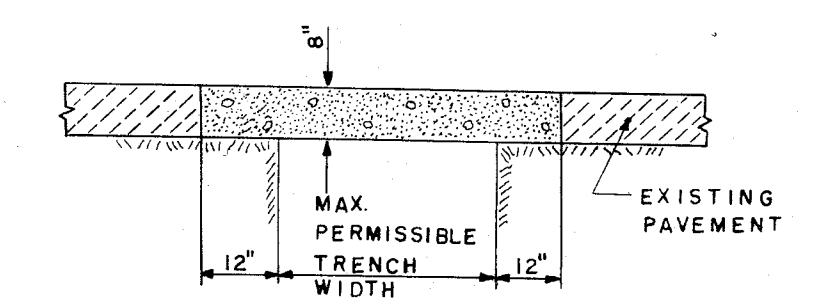


PLAN

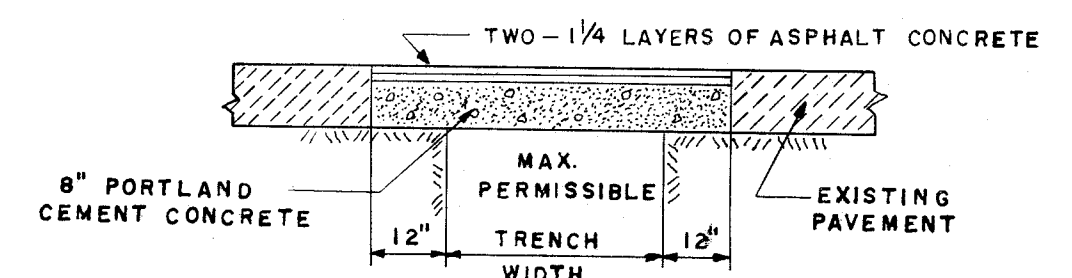


ADDITIONAL EARTH EXCAVATION
PAYMENT LIMITS

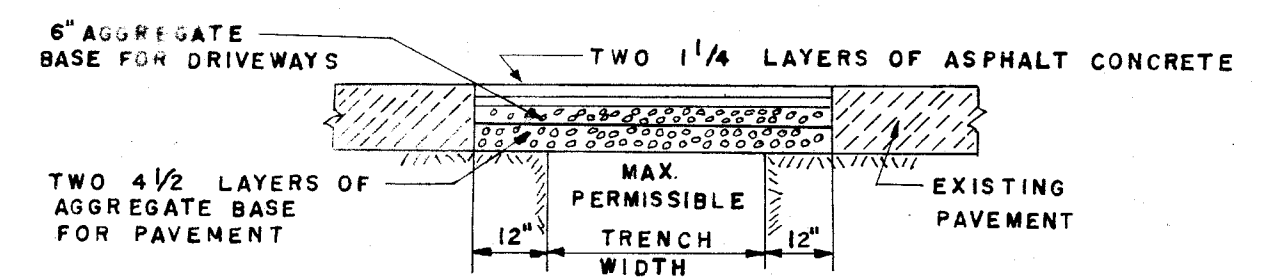
ADDITIONAL EARTH
EXCAVATION
ITEM NO. 100



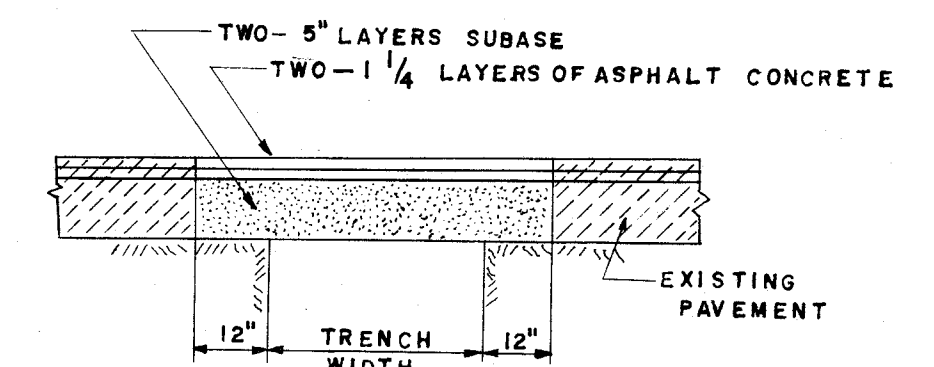
PORTLAND CEMENT
CONCRETE BASE OR SURFACE



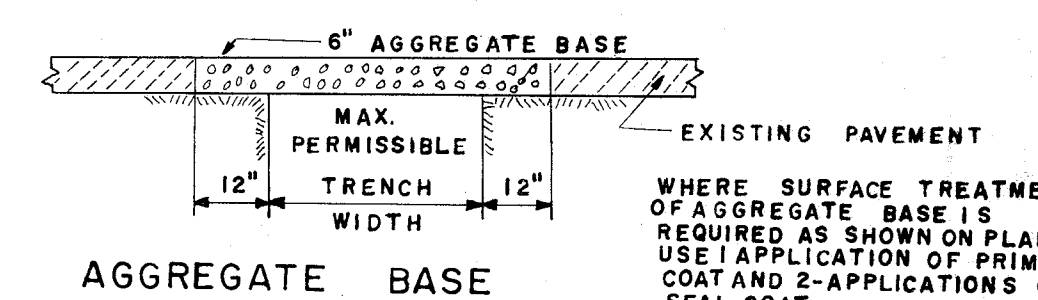
ASPHALT CONCRETE SURFACE COURSE PORTLAND
CEMENT CONCRETE BASE COURSE



ASPHALT CONCRETE SURFACE COURSE
AGGREGATE BASE COURSE



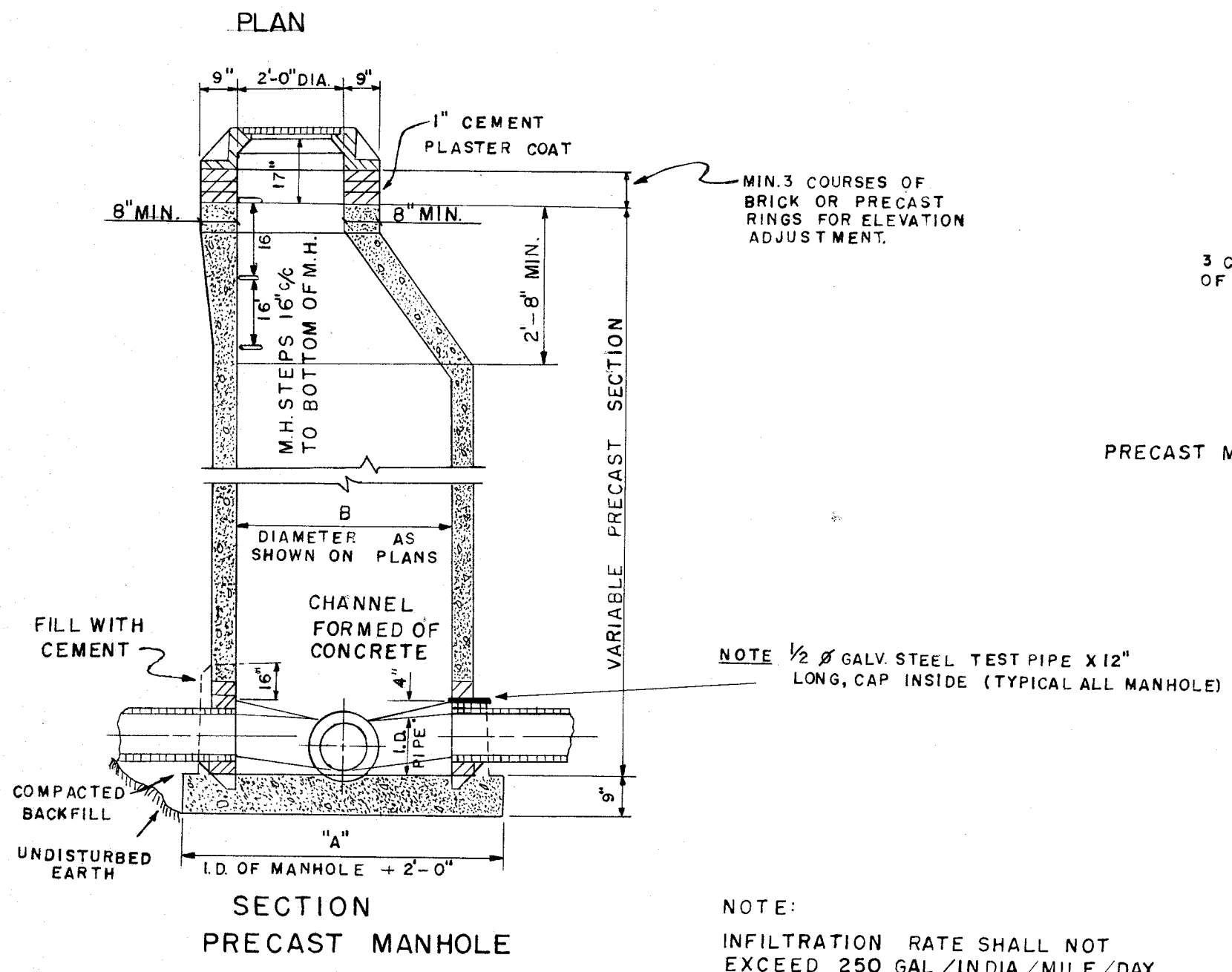
ASPHALT CONCRETE SURFACE COURSE
SUB BASE



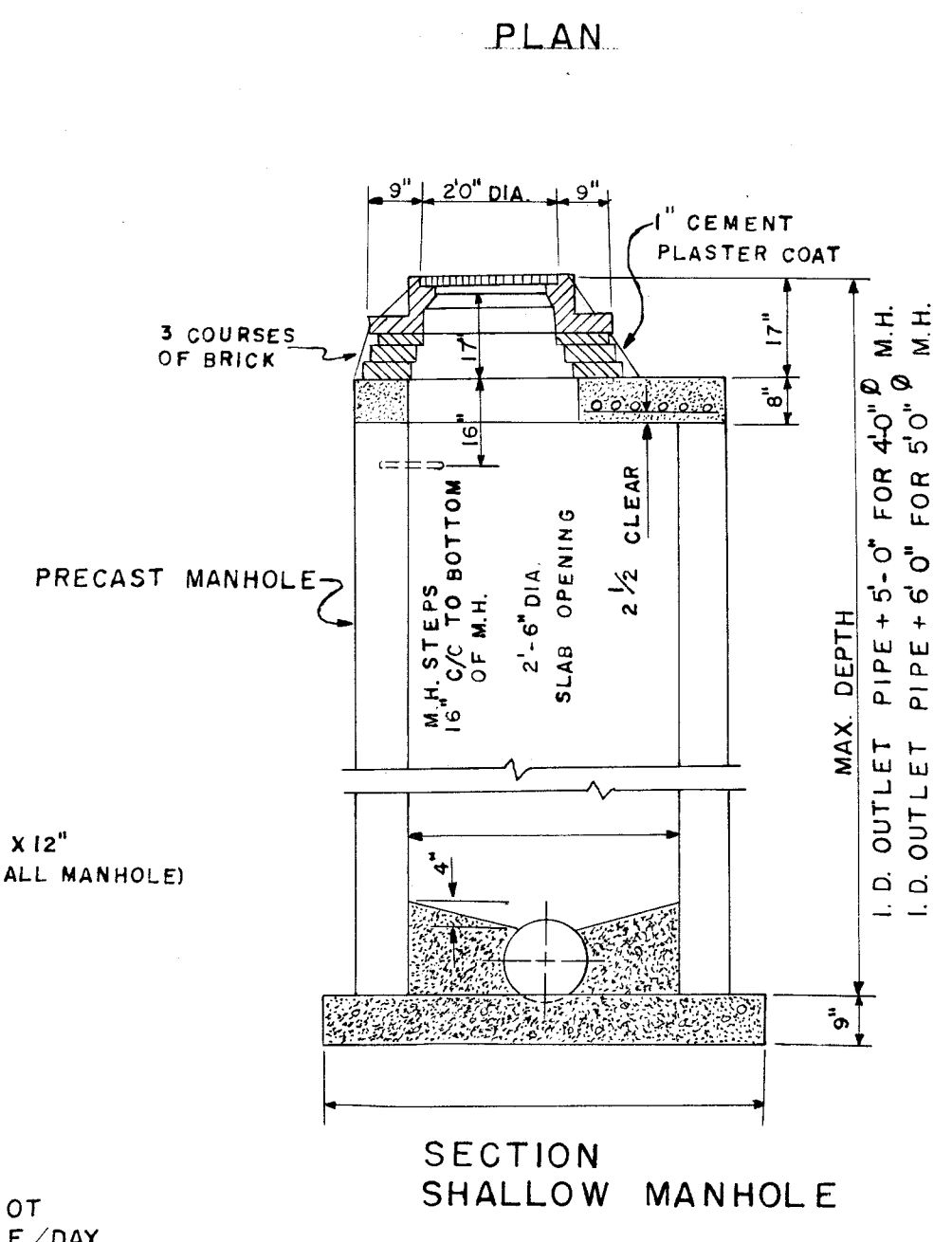
AGGREGATE BASE

TYPICAL PAVEMENT
REPLACEMENT SECTIONS

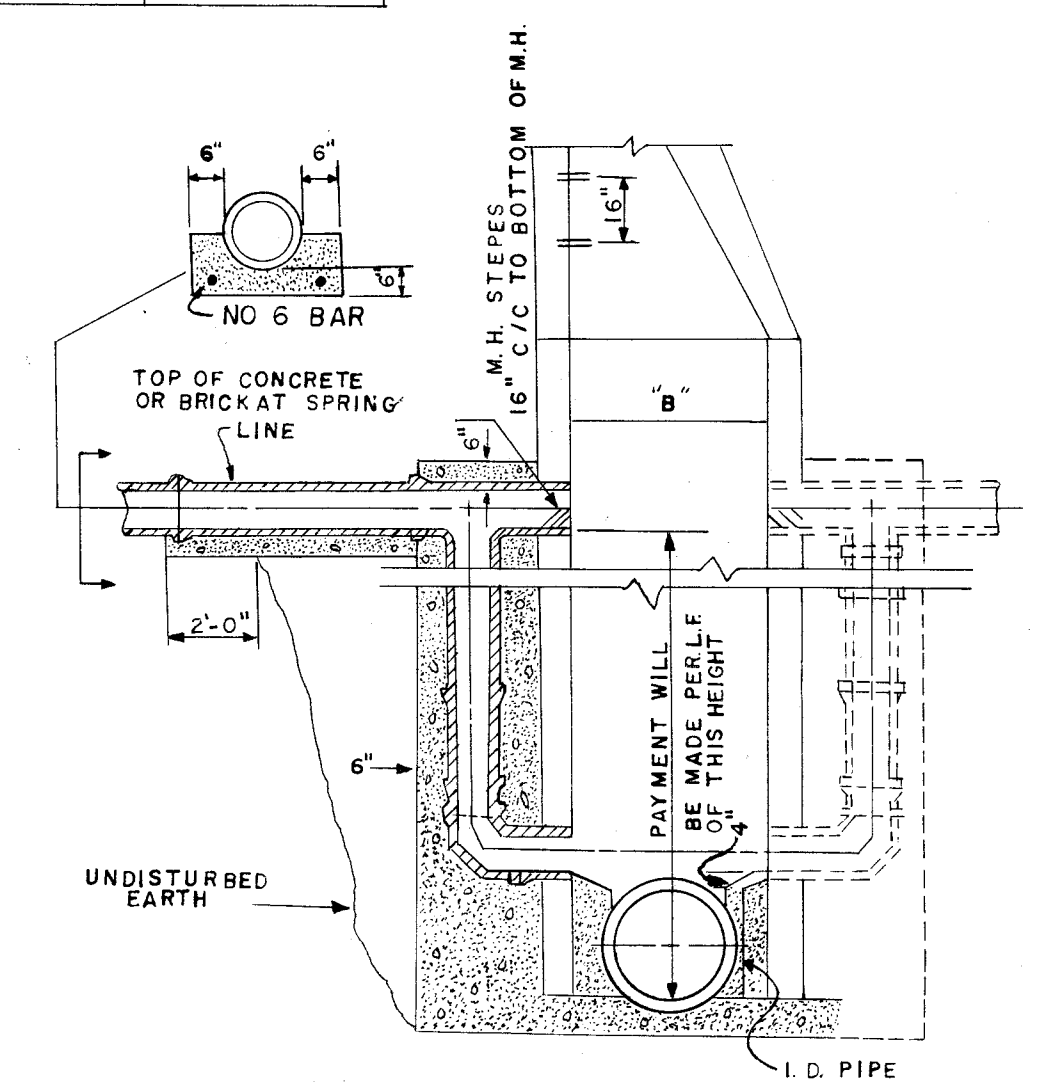
NOTE: THIS CONNECTION TO BE USED WHEN DEPTH OF SEWER IS TO GREAT TO USE STANDARD HOUSE CONNECTION. LOCATION AS SHOWN ON PLANS OR DETERMINED AT TIME OF CONSTRUCTION.



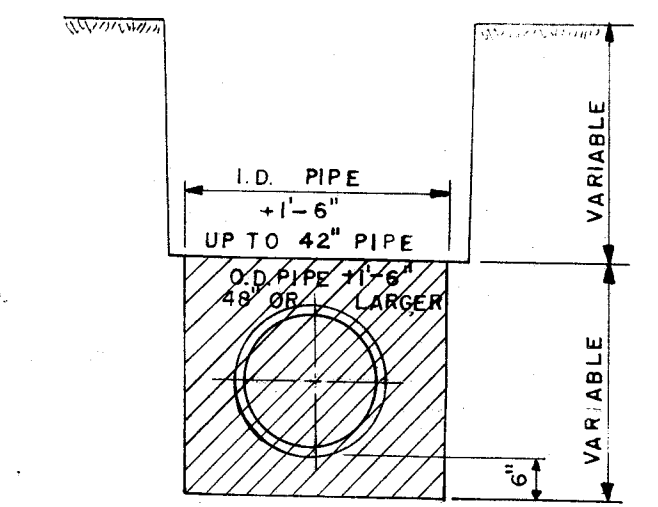
SECTION
PRECAST MANHOLE



SECTION
SHALLOW MANHOLE



SECTION
DROP MANHOLE

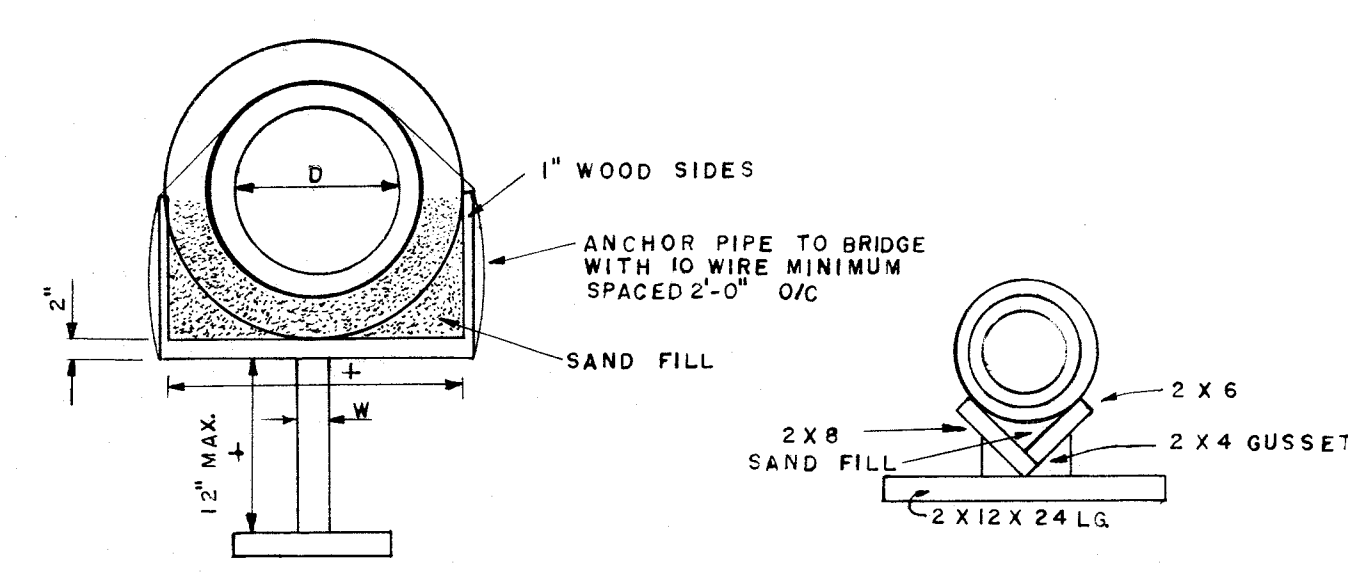


ROCK EXCAVATION
PAYMENT LIMITS

EARTH EXCAVATION
TO BE PAID FOR
UNDER PIPE ITEMS

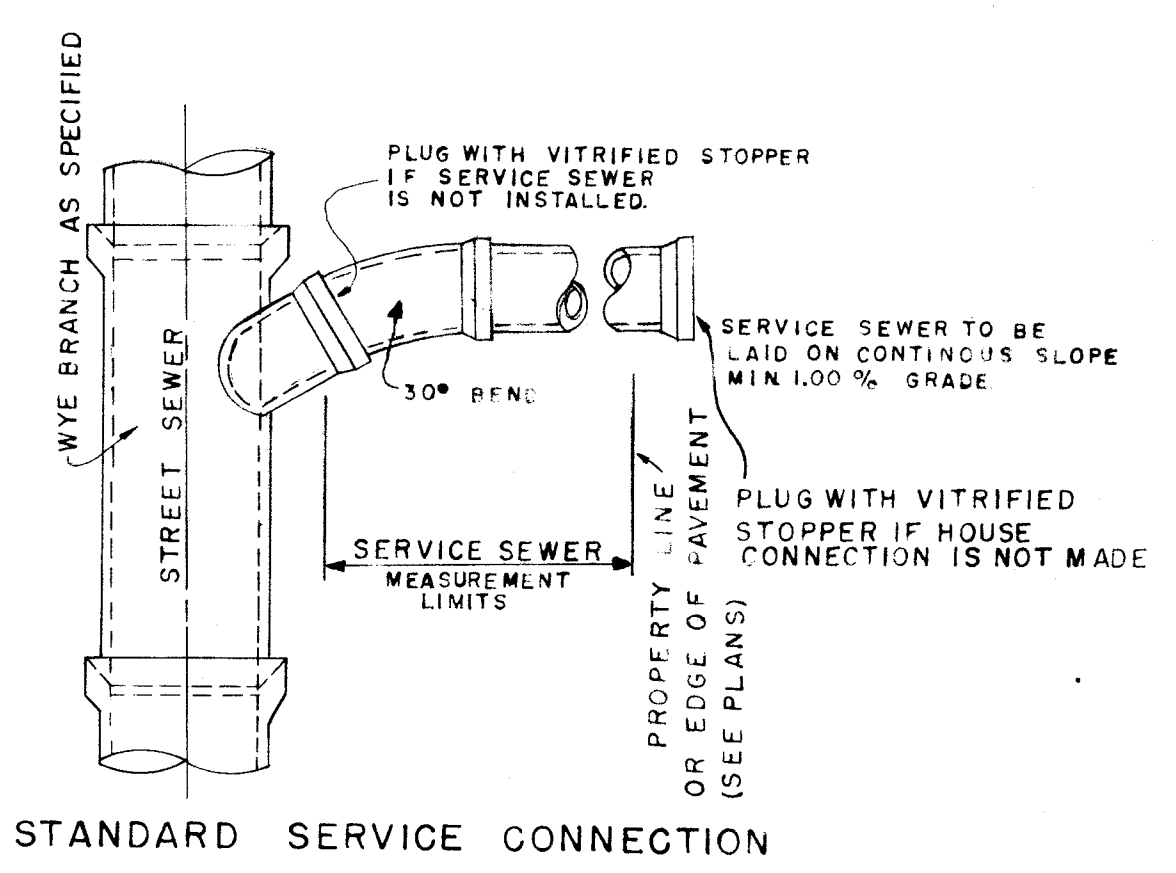
ROCK EXCAVATION
TO BE PAID FOR
UNDER ITEM NO. 110

D	4"-6"	8"	10"	12"	15"	18"
+	8"	12"	16"	18"	20"	24"
W	2"	2"	3"	3"	3"	3"

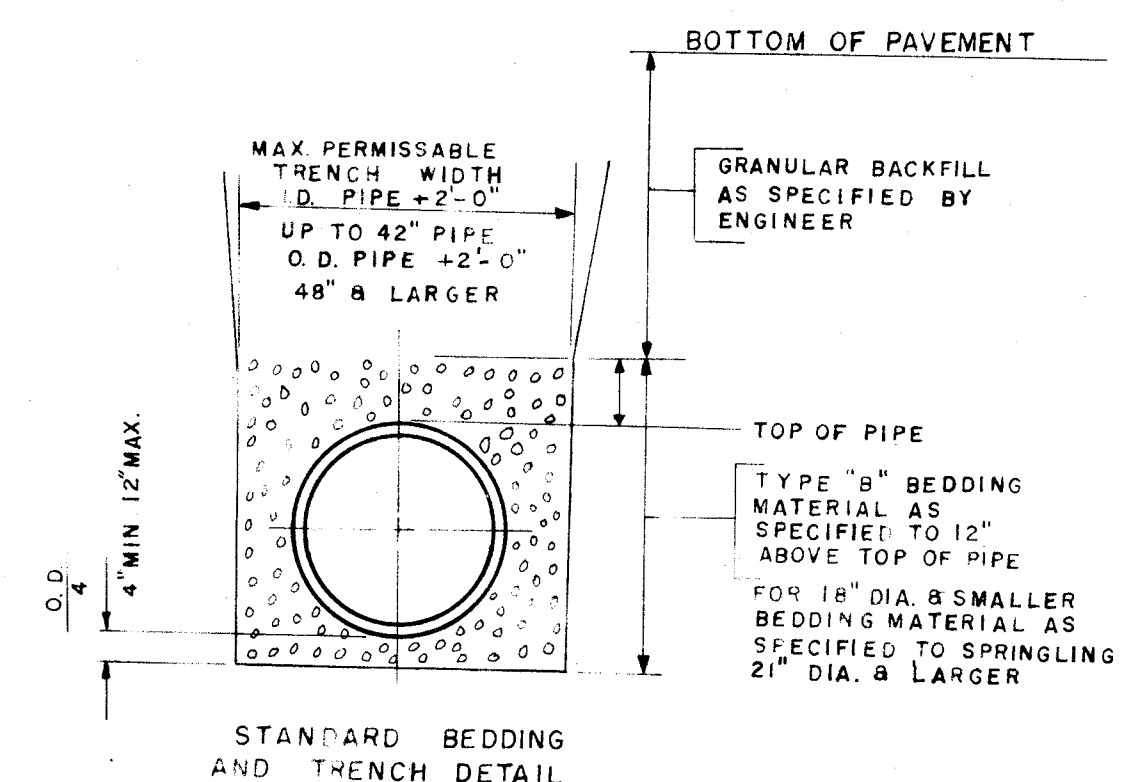


SECTION E-E

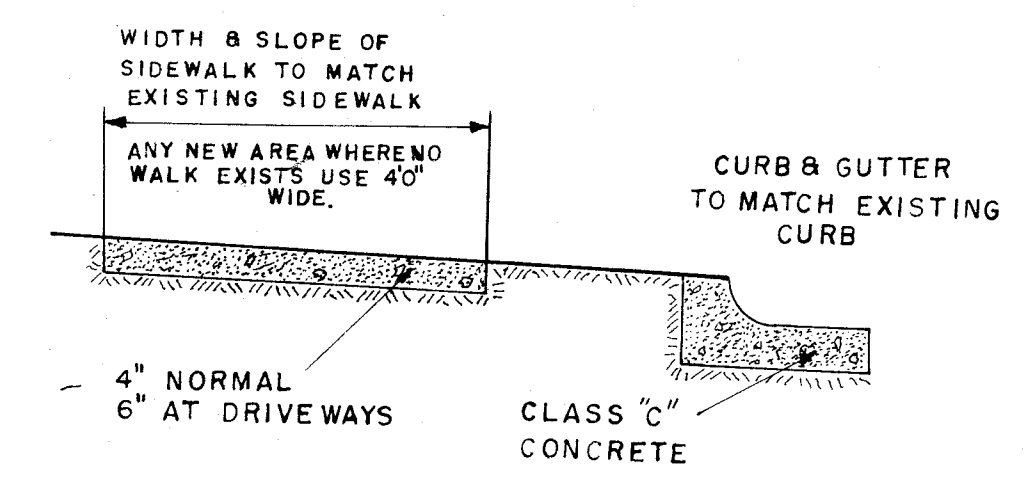
SECTION F-F



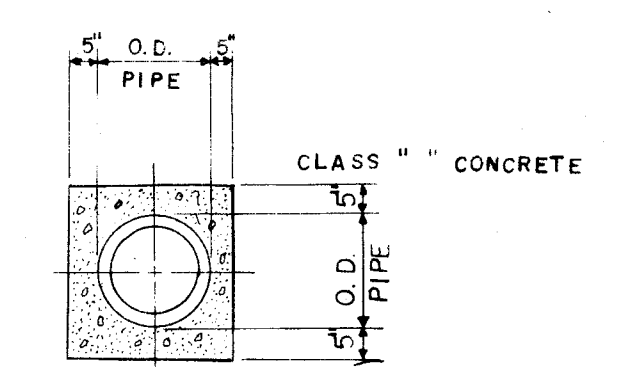
STANDARD SERVICE CONNECTION



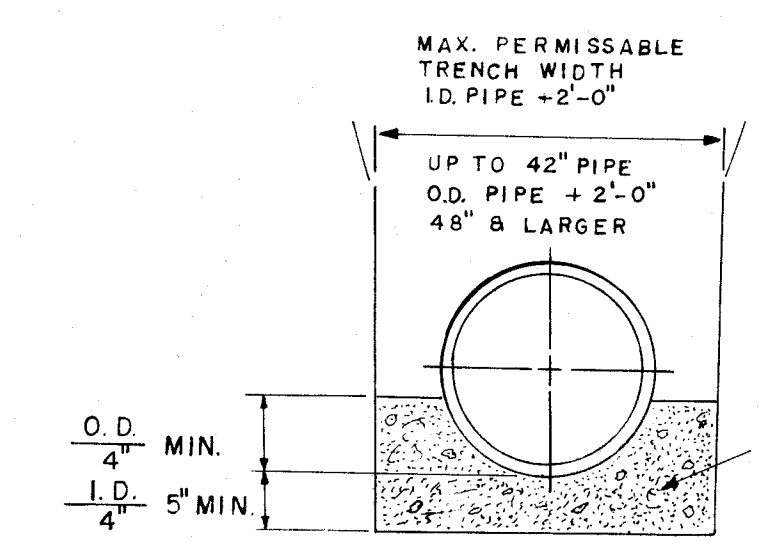
TYPE B BEDDING



SIDEWALK CURB & GUTTER
DETAIL

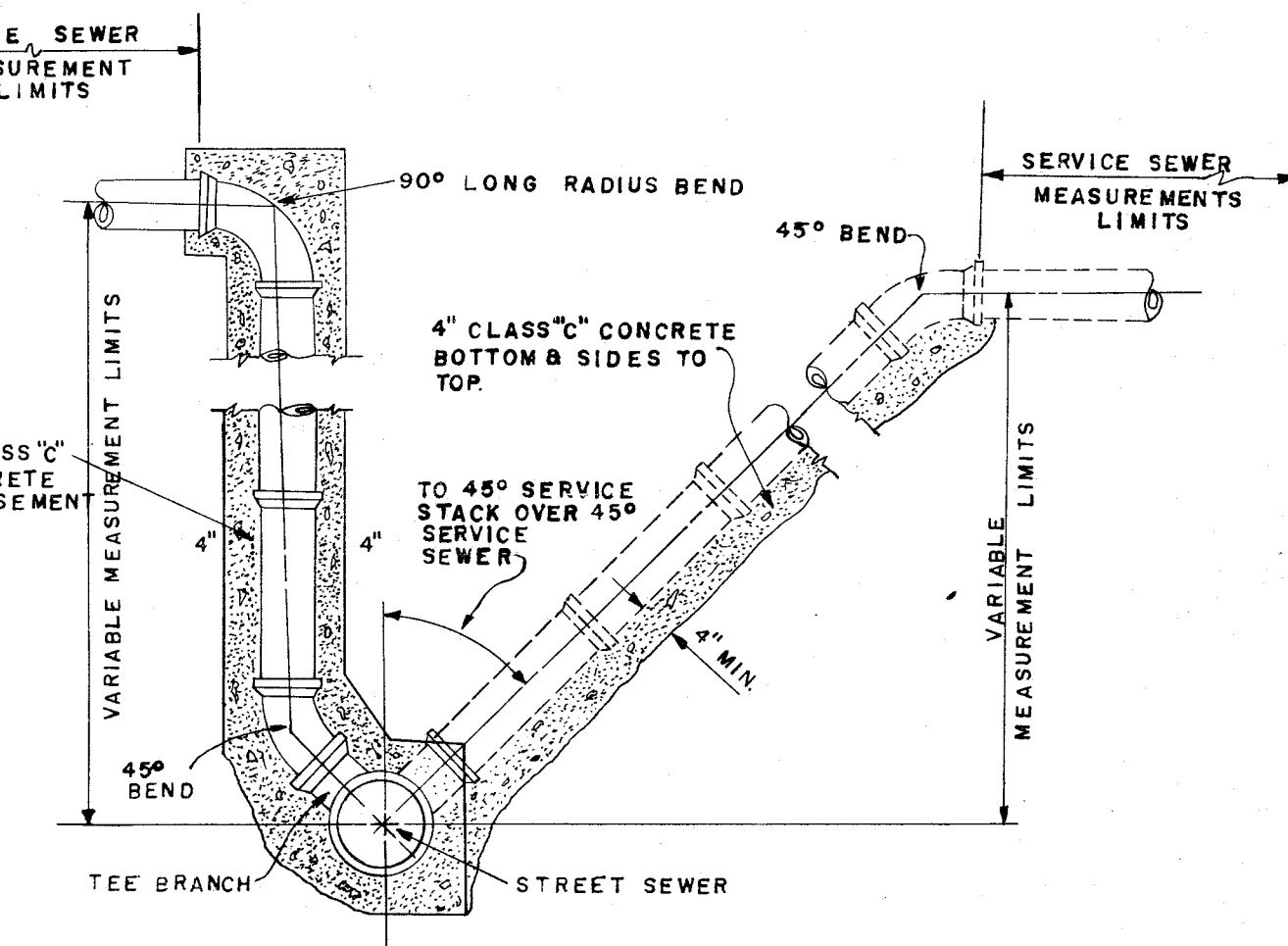


TYPICAL PIPE
ENCASEMENT

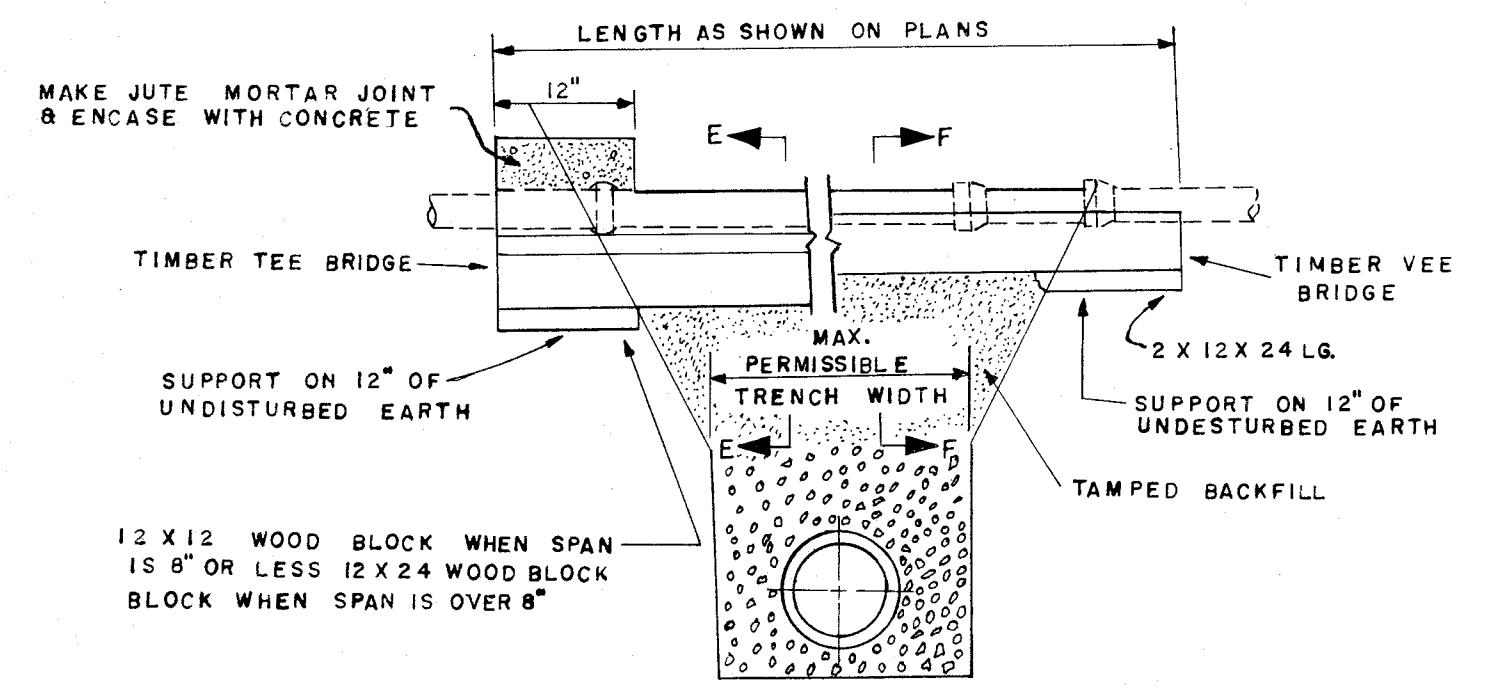


TYPE-A BEDDING

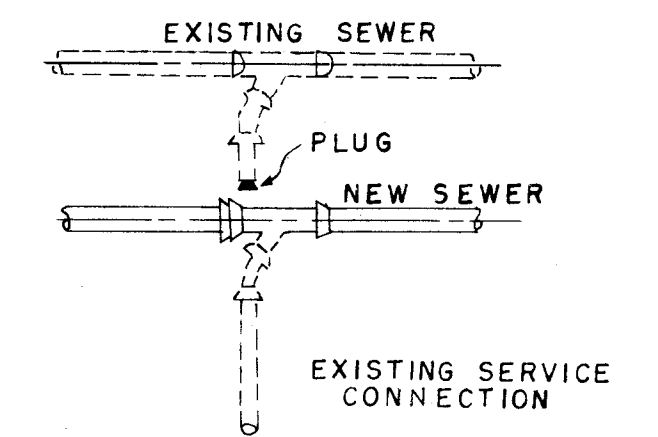
NOTE: PAVEMENT PAYMENT LIMITS IS
I.D. OF PIPE PLUS 4'-0"



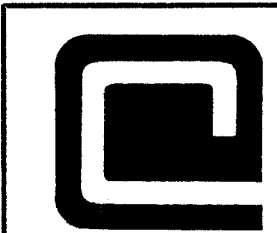
TYPICAL SERVICE STACK



RESTORE EXIST. SEWER PIPE LINES



RECONNECTION OF EXISTING
SERVICE SEWERS



L.W.J. COOPER AND ASSOCIATES
CONSULTING ENGINEERS AND SURVEYORS

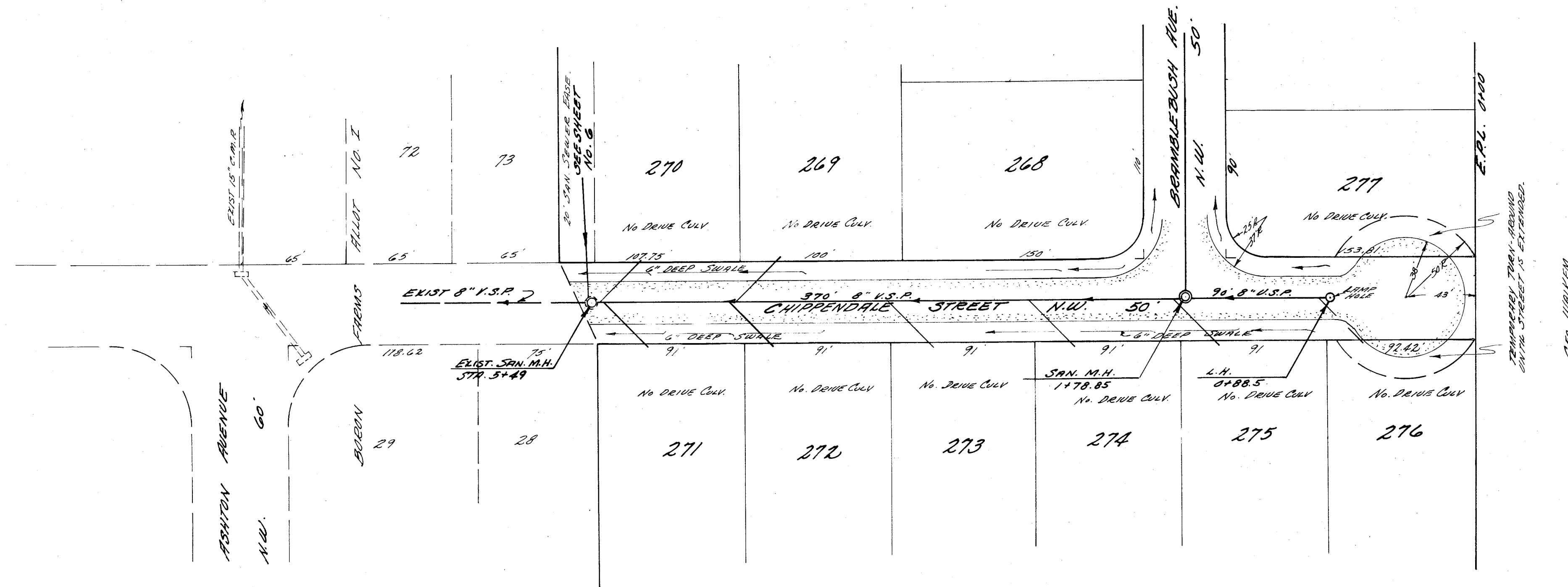
201 LINCOLN
AVENUE N.W.
CANTON, OHIO
44708

PHONE (216) 452-5731
(216) 492-3303

JAMES L. COOPER
J. EDWARD JUEDEMANN JR.
ROBERT A. MILLER
WILLIAM J. MEOLA

SURVEYED	PLATTED	FIELD BOOK	DATE	FILE	SCALE

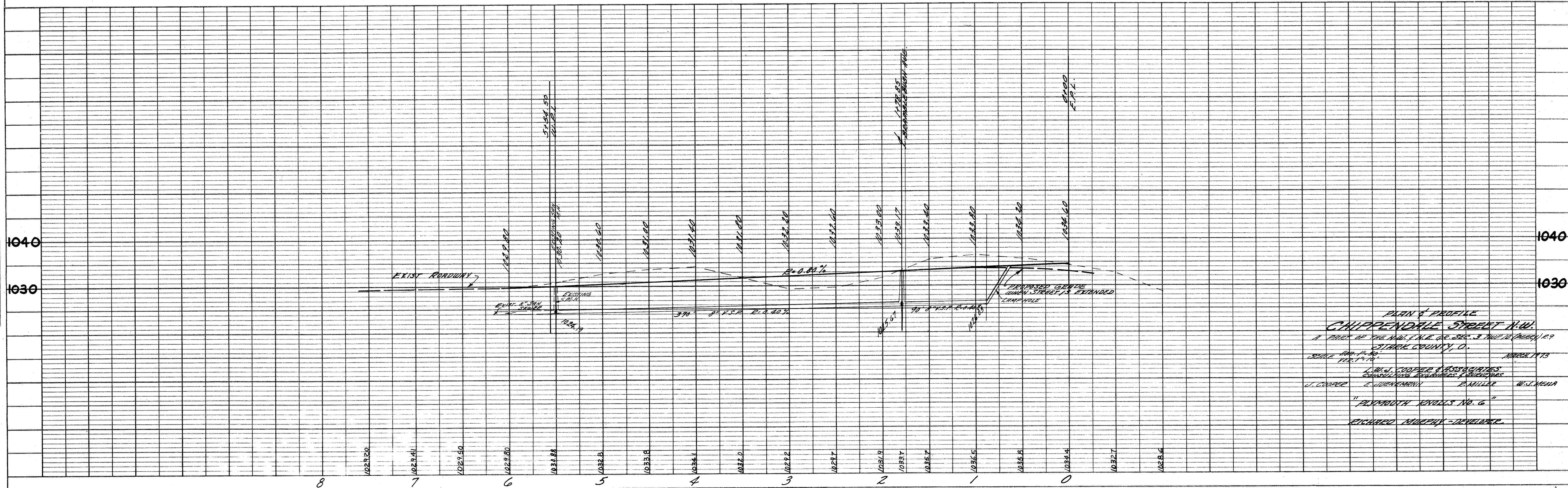
PLAN	DATE	BY
SURVEYED		
PLOTTED		
ALIGNED CHECKED		
RT. OF WAY CHECKED		
NO.		



SANITARY SEWER APPROVED THIS 9TH DAY OF MARCH 1973
Robert J. Mayhew
 SANITARY SEWER APPROVED THIS DAY OF APRIL 1973
 STATE COUNTY ENGINEER

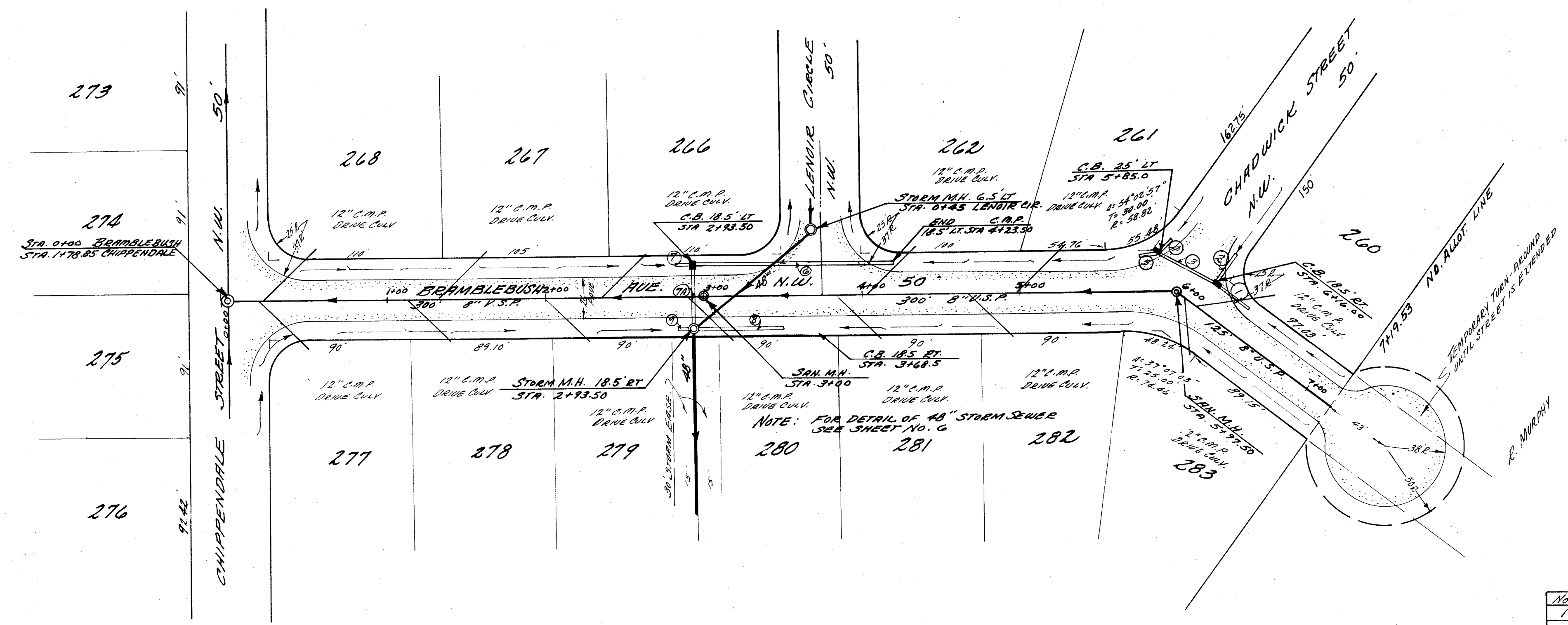
B.M. ~ TOP HYDRANT, N.E. CORNER CHIPPENDALE ST. AND ASHTON AVENUE.
 ELEVATION ~ 1032.33

PROFILE	DATE	BY
SURVEYED		
PLOTTED		
GRADES CHECKED		
B.M.'S NOTED		
SYMBOLS NOTED		
NO.		



PLAN & PROFILE
 CHIPPENDALE STREET N.W.
 A PORT OF THE N.W. 1/4 OF SEC. 3 T20N R20E S10W
 STATE COUNTY, O.
 SCALE: HORIZ. 1"=40' VERT. 1"=10'
 JUNE 1973
 J. COOPER & ASSOCIATES
 CONSULTING ENGINEERS & SURVEYORS
 J. COOPER E. JOHNSON D. MILLER W. J. MEYER
 "PLYMOUTH KNOLLS NO. 6"
 RICHARD MURPHY - DRAFTER

PLAN	NO.	NOTE BOOK	SURVEYED	BY	DATE

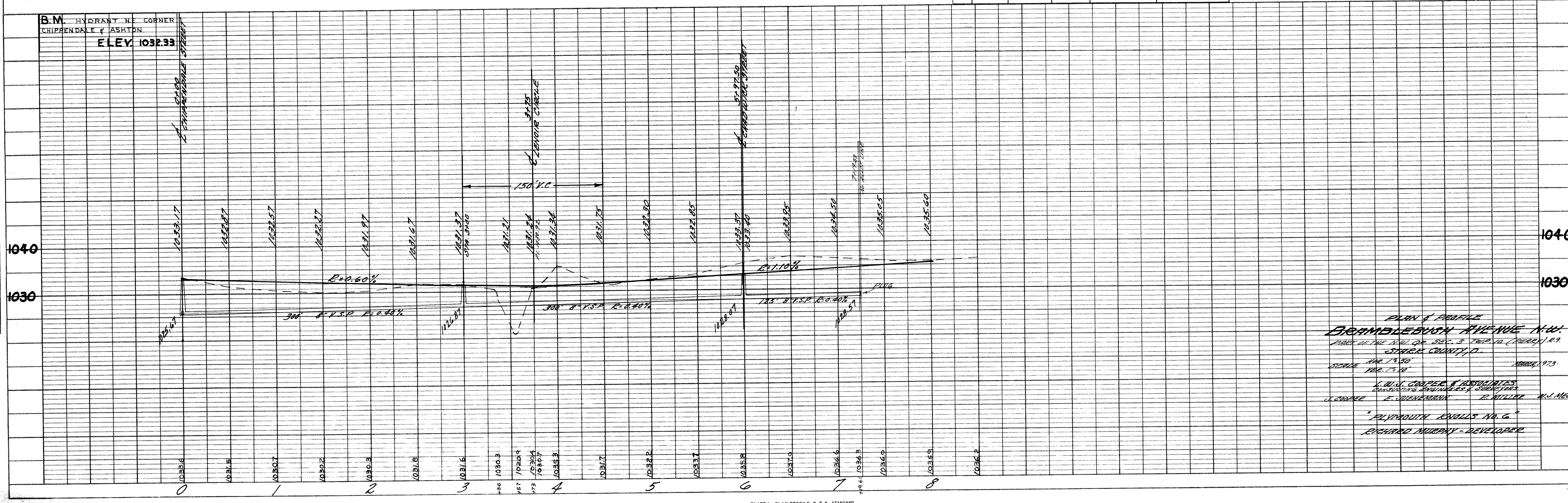


CULVERT DATA					
No.	SIZE	TYPE	LEN. FT.	INLET ELEV.	OUTLET ELEV.
1	12"	C.M.P.	20'	1032.00	1031.80
2	12"	C.M.P.	20'	1032.00	1031.80
3	12"	C.M.P.	40'	1031.80	1031.40
4	12"	C.M.P.	10'	1031.90	1031.40
5	12"	C.M.P.	10'	1031.40	1031.30
6	12"	C.M.P.	130'	1029.75	1028.40
7	12"	C.M.P.	10'	1029.67	1029.50
7A	15"	C.M.P.	36'	1028.40	1028.00
8	12"	C.M.P.	60'	1029.40	1028.80
9	12"	C.M.P.	10'	1029.67	1029.50

B.M. ~ TOP HYDRANT, S.W. CORNER CHADWICK ST. AND CLEARBROOK ROAD.
ELEVATION ~ 1035.87

B.M. ~ TOP HYDRANT, N.E. CORNER OF CHIPPEWDALE ST. AND ASHTON AVE.
ELEVATION ~ 1032.33

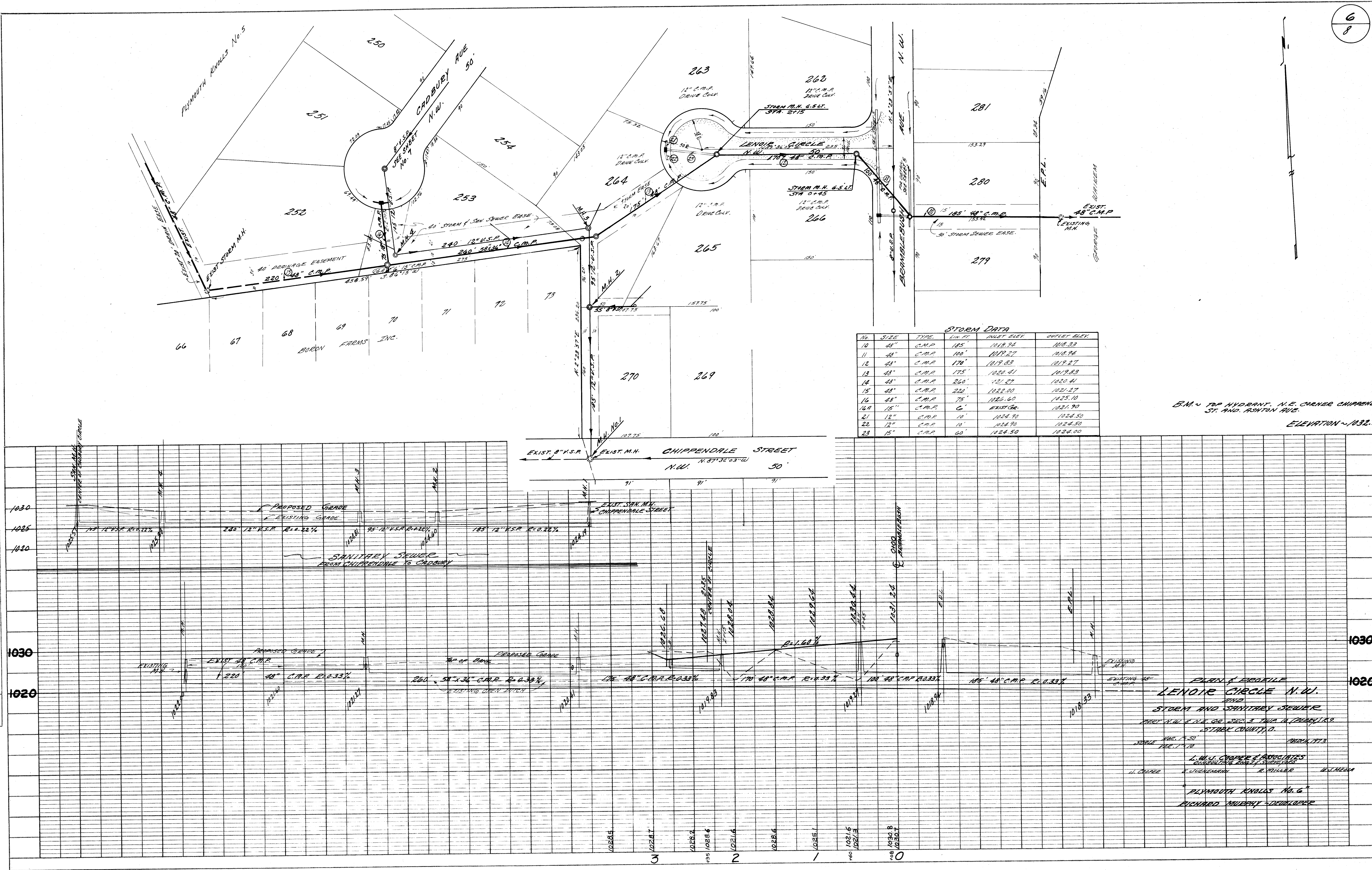
PROFILE	NO.	NOTE BOOK	SURVEYED	BY	DATE



PLAN & PROFILE
BRAMBLEBUSH AVENUE N.W.
FROM THE N.W. COR. 352.3' (202.10' (202.10') 2.9'
STREET COUNTY, O.
H.W. 1930
SCALE 1"=20'
J. D. COOPER & ASSOCIATES
CONSULTING ENGINEERS & SURVEYORS
J. COOPER E. J. COOPER R. WILLIAMS
"PLYMOUTH KNOLLS No. 6"
RICHARD MURPHY - DEVELOPER

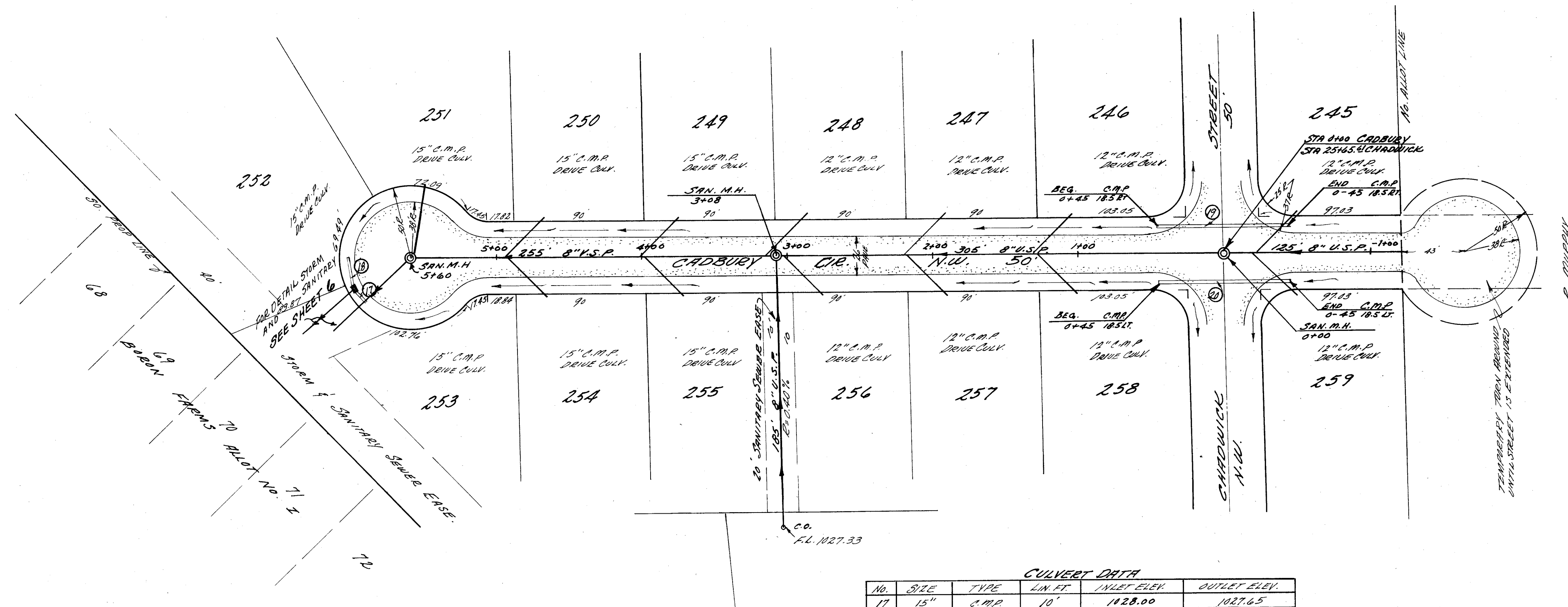
PLAN	SURVEYED	DATE
	BY	
NOTE BOOK	ALIGNED	
	CHECKED	
NO.	AT. OF WAY	
	CHECKED	

PROFILE	SURVEYED	DATE
	BY	
NOTE BOOK	GRADES	
	CHECKED	
NO.	STRUCTURE	
	NOTES	



PLAN	SURVEYED	DATE
	BY	
NOTE BOOK	PLOTTED	
	GRADES CHECKED	
NO.	BY	
	DATE	

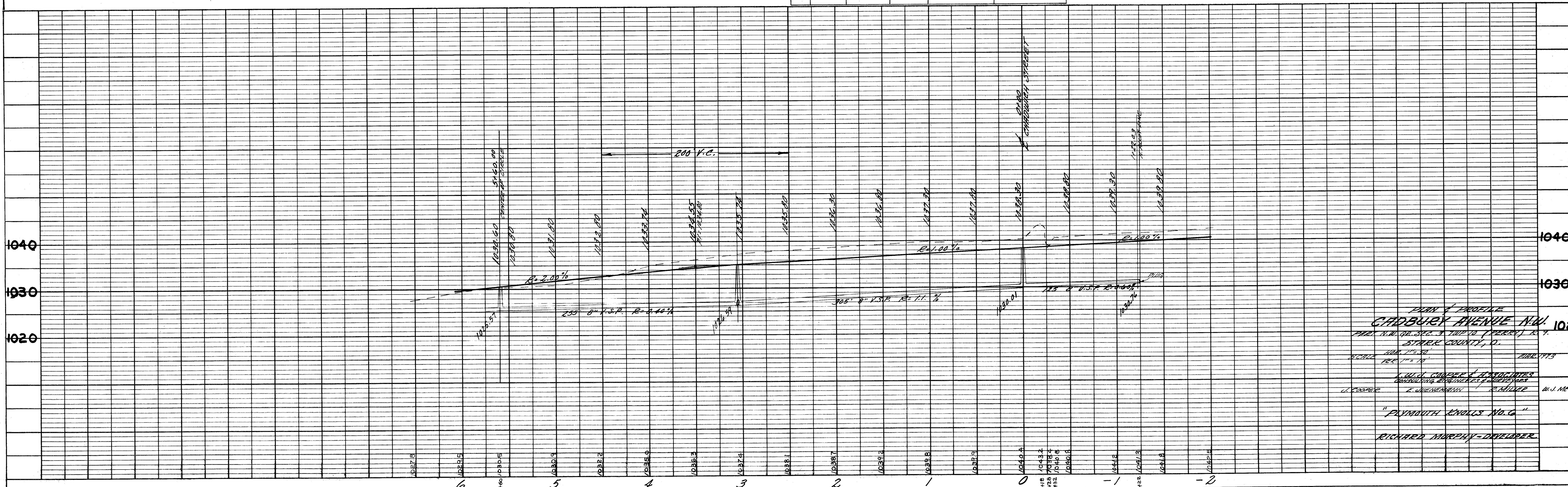
PROFILE	SURVEYED	DATE
	BY	
NOTE BOOK	PLOTTED	
	GRADES CHECKED	
NO.	BY	
	DATE	



CULVERT DATA

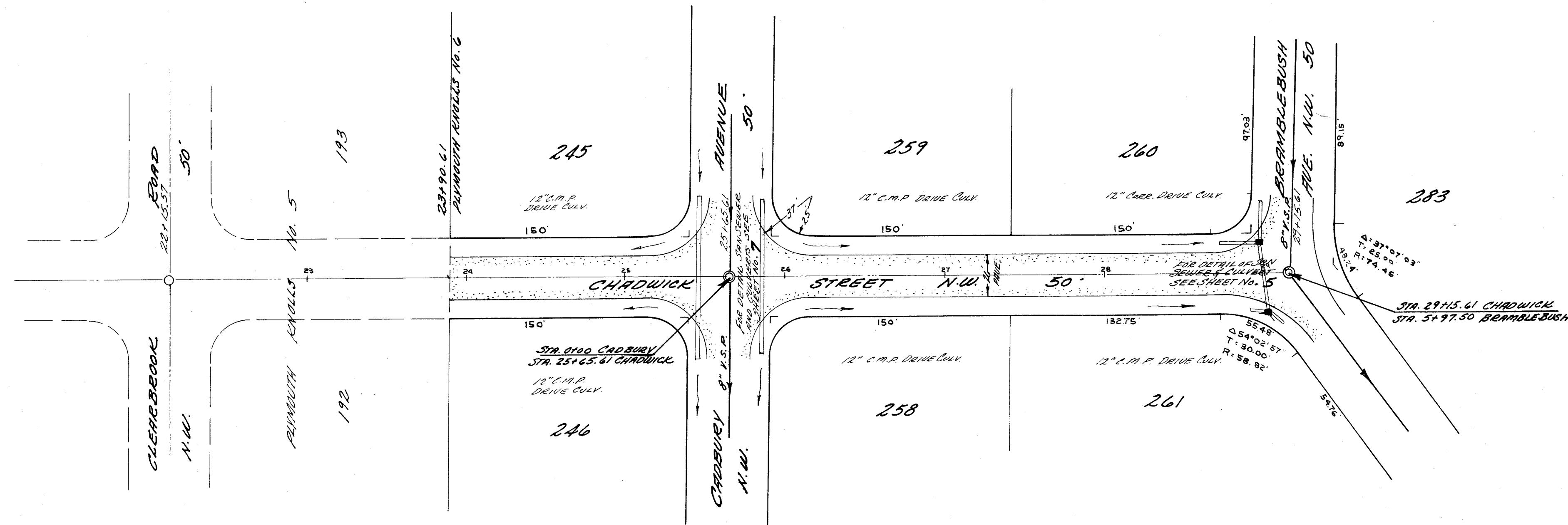
No.	SIZE	TYPE	LEN. FT.	INLET ELEV.	OUTLET ELEV.
17	15"	C.M.P.	10'	1028.00	1027.65
18	15"	C.M.P.	20'	1027.85	1027.65
19	12"	C.M.P.	90'	1037.00	1036.10
20	12"	C.M.P.	90'	1037.00	1036.10

B.M. - TOP HYDRANT, S.W. CORNER OF CLEARBROOK ROAD AND CHADWICK STREET.
ELEVATION - 1035.87



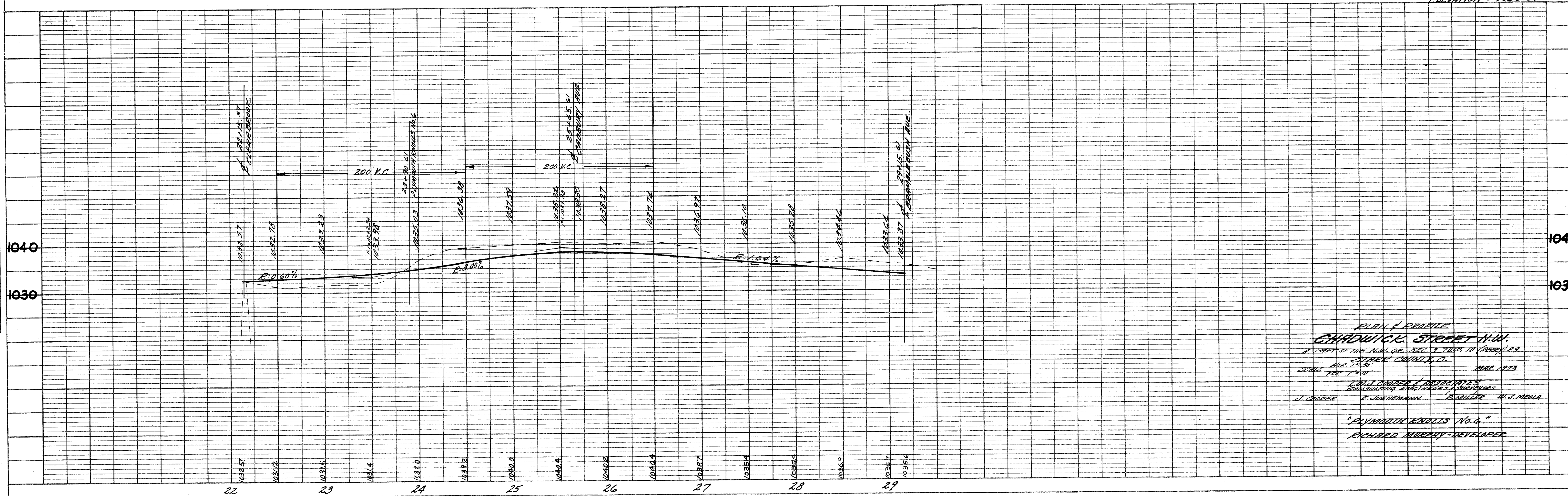
PLAN	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
NO.			

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	GRADES CHECKED		
	B. M. 3 NOTED		
NO. 62	STRUCTURE NOTING CVD.		



B.M. ~ TOP HYDRANT, S.W. CORNER OF CHADWICK STREET AND CLEARBROOK ROAD.

ELEVATION ~ 1235.87



PLAN & PROFILE
CHADWICK STREET N.W.
 A STREET OF THE N.W. CO. SEC. 3 TOW. 10 (2000) R. 2
 STARK COUNTY, O.
 APR. 1930
 SCALE 1"=40'
 J. COOPER & ASSOCIATES
 CONSULTING ENGINEERS & ARCHITECTS
 J. COOPER E. J. JOHNSON E. MILLER W. J. MUELLER
 "PLYMOUTH KNOLLS No. 6"
 RICHARD MURPHY - DEVELOPER