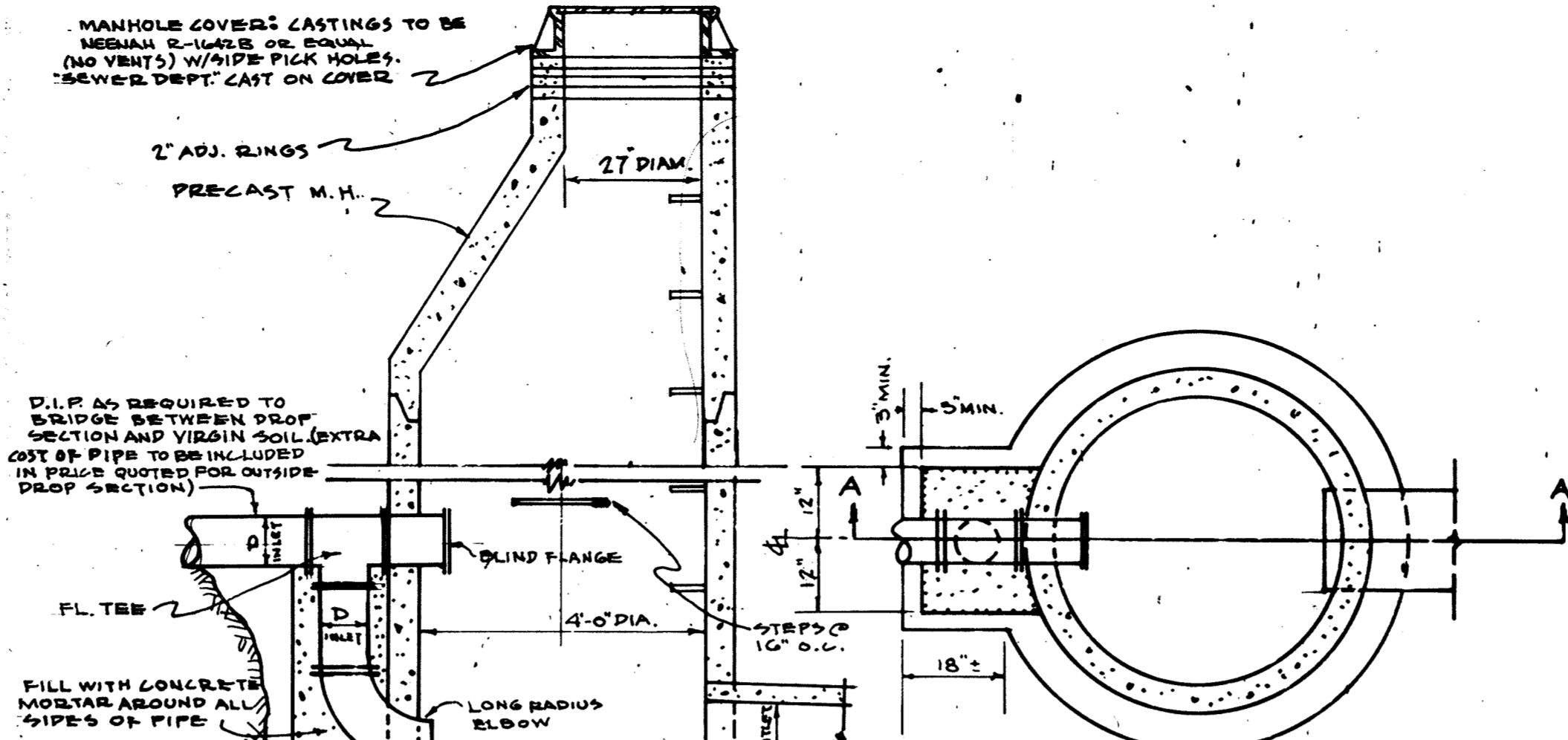


ELEVATION "A-A"
SCALE: 1/2" = 1'-0"

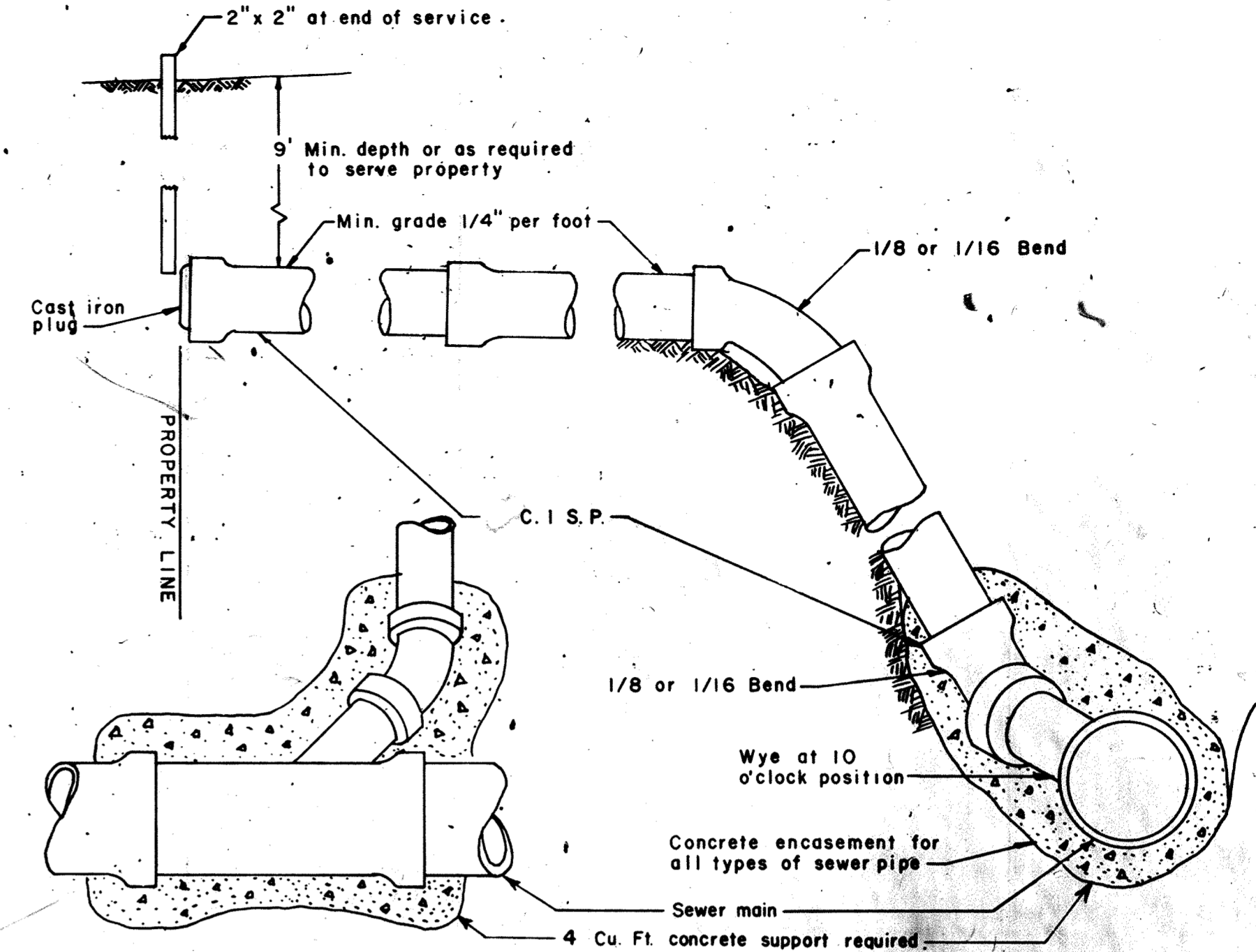
OUTSIDE DROP SECTION DETAIL
USED WHERE DIFFERENCE BETWEEN INVERTS IS OVER TWO FEET



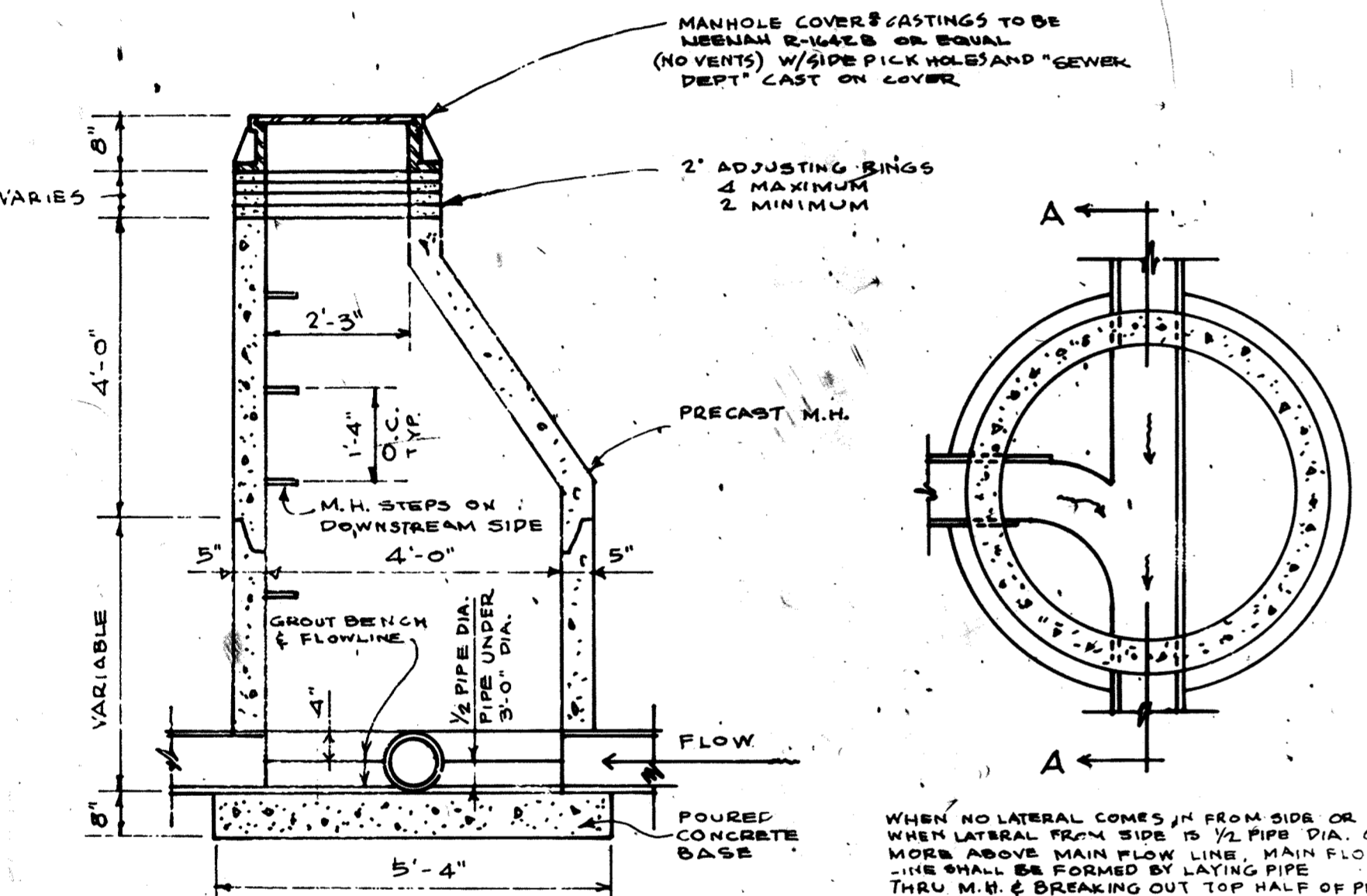
ELEVATION "A-A"
SCALE: 1/2" = 1'-0"

PLAN
SCALE: 1/2" = 1'-0"

FORCE MAIN DISCHARGE MANHOLE



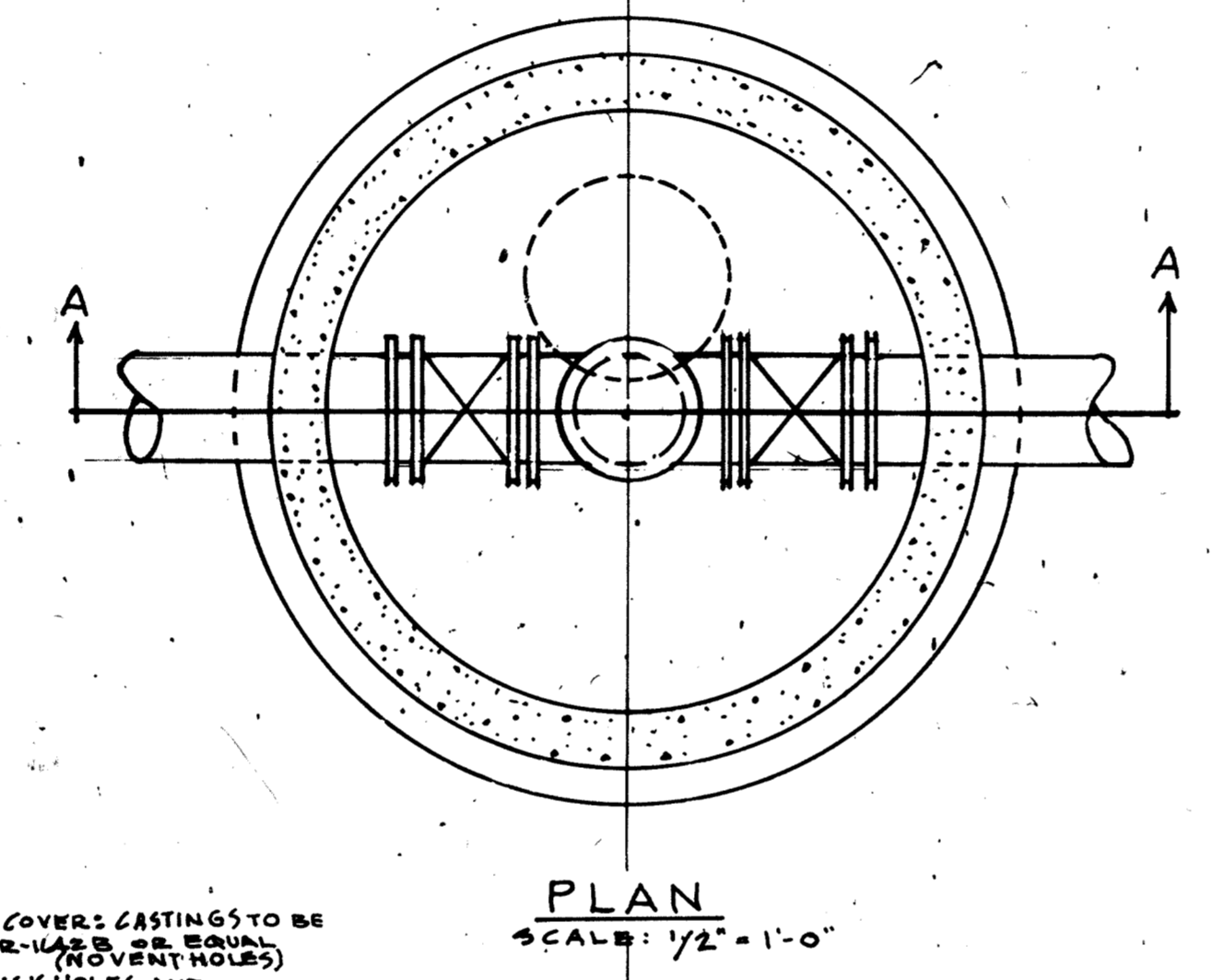
SEWER SERVICE RISER CONNECTION
NTS



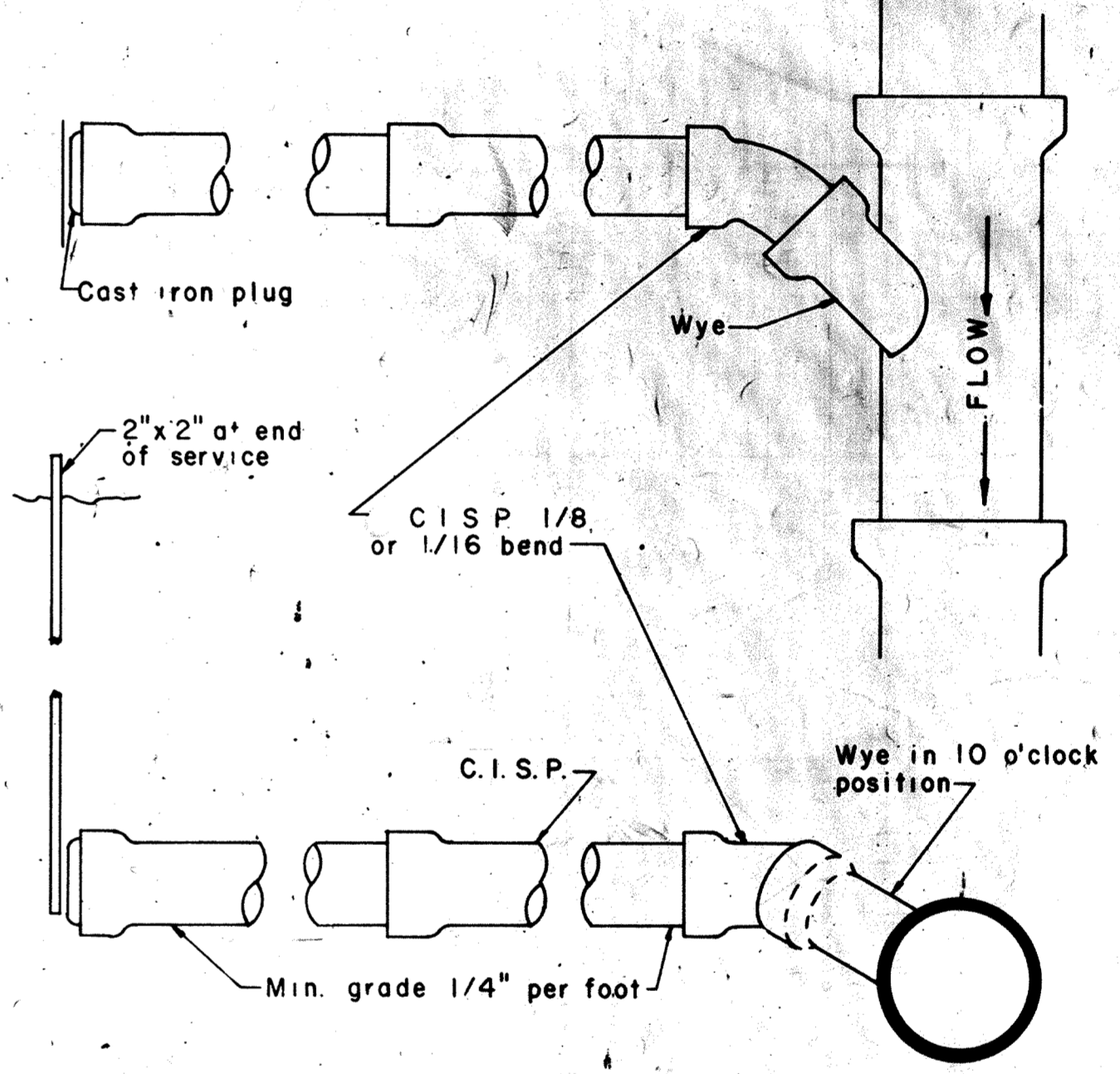
ELEVATION "A-A"
SCALE: 1/2" = 1'-0"

PLAN
SCALE: 1/2" = 1'-0"

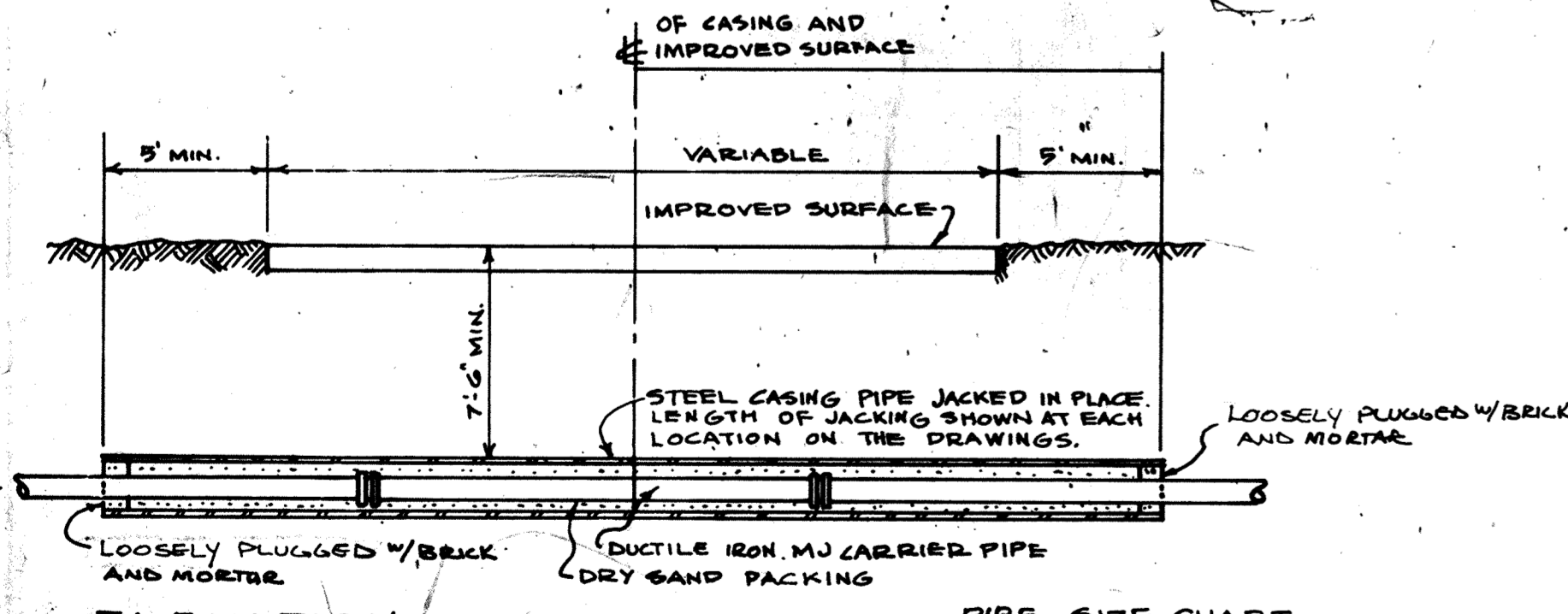
STANDARD MANHOLE DETAIL
ECCENTRIC CONE TYPE



SUBGRADE SECTION OF HIGH SCHOOL TRACK
NTS



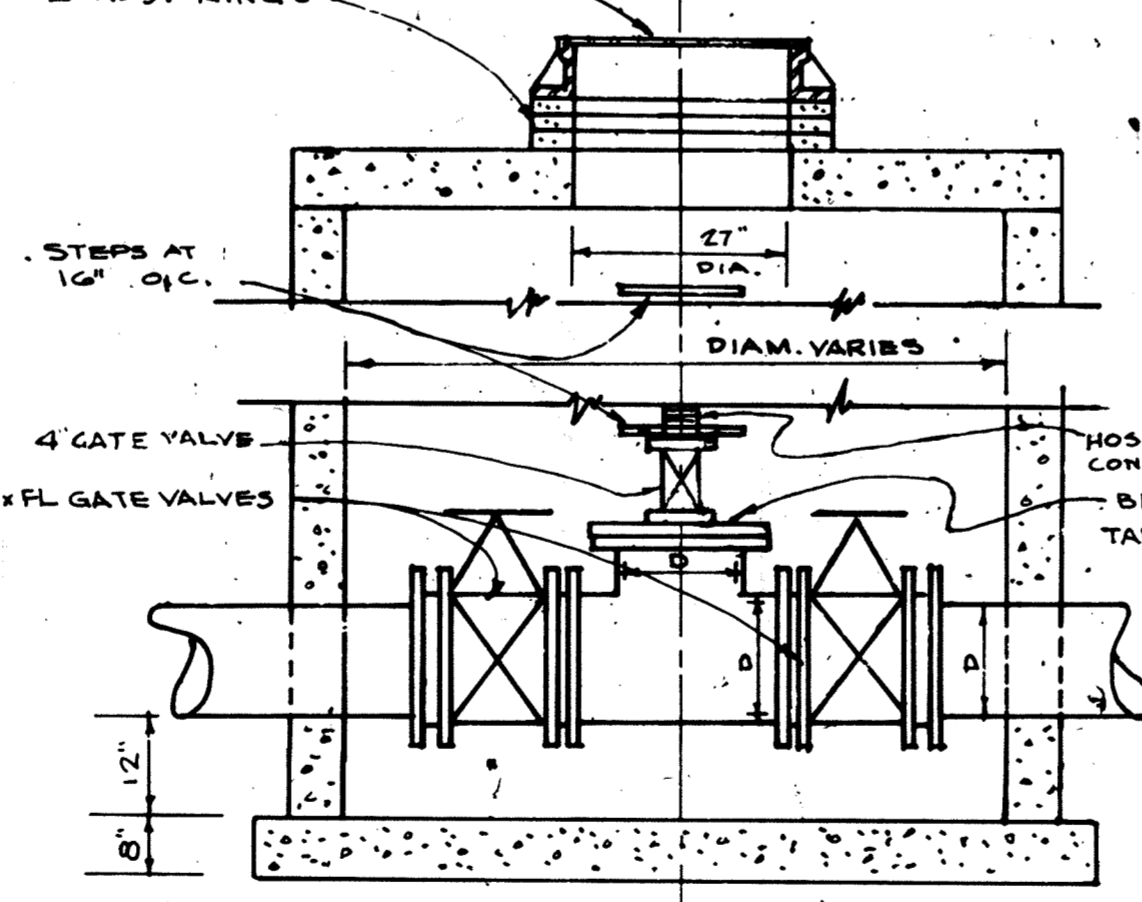
SEWER SERVICE CONNECTION
NTS



ELEVATION
NOT TO SCALE
TYPICAL JACKING DETAILS

PIPE SIZE CHART

D.I.P.	CASING PIPE	CASING THICKNESS
8"	18"	0.312"
10"	20"	0.344"
12"	24"	0.406"
18"	30"	0.469"



ELEVATION "A-A"
SCALE: 1/2" = 1'-0"

FORCE MAIN CLEAN - OUT MANHOLE

MANHOLE SIZE CHART

D.I.P. CARRIER PIPE	M.H. DIA.	MIN. HWY. DEPT. M.W. COVER
6"	48"	PLATE 4010D
8"	48"	"
10"	72"	PLATE 4019B-06
14"	84"	" -100"

DESIGNED L.S.	CHECKED P.W.P.	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. <i>Cliff Johnson</i>
DRAWN R.C.	APPROVED L.S.	
NO. DATE BY	DATE COMM.	
REVISIONS	DATE	DATE 10/17/80 REG. NO. 7411

McCOMBS-KNUTSON ASSOCIATES, INC.
CONSULTING ENGINEERS ■ LAND SURVEYORS ■ SITE PLANNERS
MINNEAPOLIS AND HUTCHINSON, MINNESOTA

ELK RIVER INTERCEPTOR
ELK RIVER, MINNESOTA

SCALE	SHEET	REV.
BOOK PAGE	9	
FILE NO. 5103	OF	9