

4-29-86

PLANS DITCH NO. 4 YELLOW MEDICINE RIVER WATERSHED DISTRICT MINNESOTA

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ESTIMATED QUANTITIES

OPEN DITCH						
EXCAVATION				SEEDING		
BRANCH	STA. TO STA.	LENGTH	BOTTOM	CUBIC YARDS	15' BERM	SIDE SLOPES
MAIN	0-1 - 344+30	34,430'	4'-8"	232,707	21.5 AC.	38.7 AC.
5	0 - 19+30	1,930'	4'	15,612	1.3 AC.	2.3 AC.
5B	0 - 58+39	5,839'	4'	34,271	4.0 AC.	6.2 AC.
14	0 - 40+60	4,060'	4'	31,148	2.3 AC.	4.9 AC.
20	0 - 12+06	1,206'	4'	11,768	0.4 AC.	1.6 AC.
TOTAL				47,465	325,506	53.7 AC.
CONSTRUCT 650' OF 24" TOP - 3 TO 1 SS. ROADWAY 2,580 CY.						
FURNISH AND HAUL GRAVEL 240 CY.						

CLEARING AND GRUBBING						
				OPEN DITCH	TILE LINES	
BRANCH	SECTION	TWP	RANGE	TREES	STUMPS	
MAIN	34	115N	43W			
MAIN	4	114N	43W	6		
5E	4	114N	43W			
MAIN	27	115N	43W	5		
TOTAL				11	1	

OUTLETS			
NUMBER	TOTAL LENGTH	SIZE	TYPE
2	40'	24"	CM 16
3	60'	21"	CM 16
3	60'	18"	CM 16
11	220'	15"	CM 16
1	10'	15"	CM 16
1 RELAY	10'	15"	CMP
1 BAND		15"	CM 16
7	140'	12"	CM 16
* 1	20'	12"	CM 16
1	200'	10"	CM 16
* 2	40'	10"	CM 16
1	8'	10"	CM 16
1 RELAY	12'	10"	CMP
1 BAND		10"	CM 16
1 REMOVE	20'	10"	CMP

* ON EXISTING TILE LINES
ALL OUTLET PIPE TO INCLUDE FLAP
GATES EXCEPT 10'-15"

TILE WORK			
SIZE	LENGTH	AVE. DEPTH	INLETS
22"	637'	8.3'	14'-1
20"	1,548'	6.9'	12'-4
* 20"	116'	11.8'	10"-12
** 20"	42'	13.6'	8"-24
*** 18" SC.	48'	8.2'	6"-129
18"	5,657'	6.4'	
16"	7,732'	6.5'	
* 16"	116'	9.2'	
** 16"	26'	9.2'	
14"	10,685'	5.9'	
12"	14,651'	5.0'	
* 12"	160'	10.5'	
** 12"	44'	10.5'	
*** 12" SC.	44'	7.5'	
*** 10" CMP	46'	7.8'	
10"	16,279'	4.9'	
8"	32,744'	4.6'	
TOTAL 90,575'			

CMP TO BE ASPHALT COATED
* WELDED STEEL PIPE BY BORING
** WELDED STEEL PIPE WITH MC
*** WITH MECHANICAL COMPACTION

CULVERTS				HIGHWAY CULVERTS			
NUMBER	TOTAL LENGTH	SIZE	TYPE	NUMBER	TOTAL LENGTH	SIZE	TYPE
1	40'	102"X62"	SC. II	1	40'	102"X62"	SC. II
1	48'	84"	SC. II	1	76'	78"	SC. II
1	42'	72"	SC. II	1	54'	72"	SC. II
1	52'	66"	SC. II	1	52'	66"	SC. II
3	142'	48"	SC. II	1	72'	54"	SC. II
1	20'	43"X27"	CM 12	1 RELAY	36'	54"	CMP
1	36'	30"	CM 14	1	18'	54"	CM 12
4	116'	24"	CM 16	1 BAND		54"	CM 12
2 BAND		24"	CM 16	2	116'	48"	SC. II
3	108'	21"	CM 16	1	42'	48"	SC. III
6	200'	18"	CM 16	* 1	32'	58"X36"	CMP
12	414'	15"	CM 16	1	26'	58"X36"	CMP 12
1 RELAY	32'	15"	CMP	2 BANDS		58"X36"	CMP 12
33	1154'	12"	CM 16	* REMOVE HAUL AND INSTALL			
4 BANDS		12"	CM 16	ALL HIGHWAY CROSSINGS INCLUDE M.C.			
1 RELAY	30'	12"	CM 16				
2 BANDS		15"	CM 16				

CHAMBERLAIN ENGINEERING COMPANY, MONTEVIDEO, MINNESOTA

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.

Ed. O. Chamberlain
Ed. O. Chamberlain Reg. No. 3359
April 7, 1986

MAPPING	C.G. 7-73	DESIGN	G.S. 7-76
PRELIM. SURVEY	L.T. 2-74	DRAFTING	J.A. 7-76
DESIGN	G.S. 6-74	REVISED	
DRAFTING	K.N. 6-74	CONST. SURVEY	L.T. 77-78
FINAL SURVEY		CORRECTED PLAN	V.S. 3-86

PLANS CORRECTED TO SHOW DITCH AS CONSTRUCTED

DITCH NO. 4
YELLOW MEDICINE RIVER WATERSHED DISTRICT, MINNESOTA

KEY MAP, INDEX & ESTIMATED QUANTITIES SHEET NO. 1

