SUMMARY OF QUANTITIES

FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
10	OHIO	4(4)	1939

67
68

CLEVELAND BUFFALO ROAD
S.H. Nº 2 SEC. J. (PT.)
LAKE COUNTY

STRUCTURES 20' SPAN AND UNDER

21" Pipe Re-Storm Sewer Lin. Ft.	Sheet Nº	Item Nº	Excavation	Channel Excavation	12" Pdwy Culvert Pipe	Std. C.B. Nº 11-A	Std. C.B. Nº 12-A	Riprap Type "B"	18" Pipe Re-Storm Sewer	24" Pipe	Type "A" Waterproofing	Concrete Class "C"	Std. Nº 17 Side Ditch C.B.	Reinforcing Steel	Std. C.B. Nº 11-B	Std. C.B. Nº 12-B	12" C.M.P. Arch Pipe Culvert	Hand Rail	Dowel Holes	Type "B" Witnessing
			Cu.Yds.	Cu.Yds.	Lin.Ft.	Each	Each	Sq.Yds.	Lin.Ft.	Lin.Ft.	Sq.Yds.	Cu.Yds.	Each	Lbs.	Each	Each	Lin.Ft.	L.F.	L.F.	Sq.Ft.
	6	IC-4C	54		121	3	5			54			1							
	7	2C-4C	11		37	1	1		14				1				14	14		
	8	IC-2C	12.5		227	1	2						2							
	9	IC-6C	79		222	6	6													
	10	IC-6C	89		222	6	6													
	11	IC-4C	66		148	3	3								1	1				
	12	IC-5C	92		185	5	5													
	13	IC-2C	26		74	1	1								1	1				
2	7	3-C	162	3179				105	2		27.4	396.5		69695					55	100
2	TOTALS		704	3179	1236	26	29	105	16	54	27.4	396.5	4	69695	2	2	14	14	55	100

STORM SEWER

Item No	Storm Sewer Pipe Lin. Ft. 21"	24" Paved Bit. Coated C.M.P. Lin. Ft.	Std. No 11-B Catch Basin Each	30°x24" Band Bit. Coated C.M.P. Each	Riprap Type "A" Sq. Yds.
7 15-25	193	150	1	1	20
TOTAL	193	150	1	1	20

ROADWAY DRAINAGE

Sheet Nº	Item Nº	15" Pipe	18" Pipe	21" Pipe	24" Pipe	27" Pipe	8'-0"x5'-0" C.M.P. Arch Bit. Coated 24" Pipe under Pavement	30" Pipe	Type "A" Rip Rap Grouted Conc. Bl. Conc. Class "C"		12" Pipe	Special M.H.		Std. M.H.	Std. C.B. No. 12-B
		Lin.Ft.	Lin.Ft.	Lin.Ft.	Lin.Ft.	Lin.Ft.	Lin.Ft.	Lin.Ft.	Sq.Yds.	Cu.Yds.	Lin.Ft.			#1	Each
5	1D-5D	549	146								519				5
6	1D-7D		689	846											2
7	1D-6D			148	198		38	308			286				4
8	1D-7D			624	872										4
9	1D-7D	294	738	394											
10	1D-9D	223						1073	18	1.34	497	1			
11	1D-5D					1030		448							
12	1D-6D				1482										
13	1D-2D				96						284				
TOTAL		1066	1573	2012	2648	1030	38	308	1521	18	1.34	1586	1		15

REMOVAL OF EXISTING STRUCTURES

Sheet No.	Type - Size	No.
5	12"x36' Cast Iron Pipe	1
6	12"x37.1' Cast Iron Pipe	1
8	12"x45' V.S.P.	1
8	12"x62' V.S.P. & M.H	1
8	12"x66' V.S.P & 2 Inlets	1
	Total	5

EXCAVATION & EMBANKMENT

Station From	Station To	Excavation	Embankment	Emb. +30%
279+53.50	290+00	1565	5244	6817
290+00	300+00	2303	469	610
300+00	310+00	3604	1883	2448
310+00	320+00	3257	27425	35553
320+00	330+00	16185	0	0
330+00	340+00	8588	0	0
340+00	350+00	2241	161	209
350+00	360+00	591	139	181
360+00	370+00	527	163	212
370+00	380+00	652	485	631
380+00	390+00	586	1213	1577
390+00	400+00	853	1437	1868
400+00	407+00	402	203	264
CLEVE-BUFFALO RD.		41,354	36822	50,470
Extra Areas & Intersect's.		1061	2041	2653
See Sheet 7		1200	1200	1,560
PRIVATE DRIVES		205	27	36
		43820		
TOTALS			42090	54719

Net Borrow = Excavation + Channel Excavation + Pav't. Removal − Embankment + 30%.
43,820 + 3179 + 3562 − 54719 = −4158 Cu. Yds.

PRIVATE DRIVES

Sheet No.	Item No.	Agg. Reg. T-17	EXCAV.	Embank.	Embank.	6"-7" Conc. Bit. Conc. Base T-70	Curb Deduction
		CU.YDS.	CU.YDS.	CU.YDS.	CU.YDS.	SQ.YDS.	LIN.FT.
5	IA-9A	33	39	11		193	216
6	IA-14A	28.5	48	4		168	308
8	IA-9A	19.5	39	0		96	176
9	IA-7A	9	13	2		84	154
10	IA-14A	19.5	29	2		168	308
11	IA-7A	12	13	2.5		84	154
12	IA-9A	16	17	2.5		84	154
13	IA-3A	6	7	3		36	66
Total		143.5	205	27.0		913	1536

TREES

Sheet Nº	Size	Trees & Stumps Removed
5	9"-36"	10
6	9"-30"	5
7	9"-30"	9
8	9"-48"	9
9		0
10	9"-30"	23
10	10"-36"	5
12	9"-48"	8
13		0
Total	9"-48"	69

1.45 Acres

8" REINF CONC. BASE

Sheet No	For		SQ. YDS.	SEAL ONLY E-IOLIN.FT.
5				41.17
9	Culverts		111.0	200
9	Defective Areas		11.0	20
10	"	"	111.0	180
10	Culverts		133.2	240
11	"		88.8	160
11	Defective Areas		22.0	40
12	"	"	216.0	100
12	Culverts		111.0	200
13	"		44.4	100.17
Sta. 345+0 to Sta. 406+31.97+2=			12,263.94	
Totals			848.0	1354.528

STONE CURBS & HEADERS 6"x16"

Station	Item Nº I-11	Lineal Ft.
279+53.50-406+31.97	I-11	25356.94
LESS (SHORT STATIONS)		114.28
LESS (DEDUCT. FOR INTERSEC)		728.11
LESS (DEDUCT. FOR DRIVES)		1536.00
LESS (DEDUCT. FOR C. BASINS)		466.00
TOTAL		22,512.45

55-11-46 (12-AC-B @ 5'-5", 20-11-B & 12-BC-B @ 8'-2½")

GUARD RAILS

NORTH SIDE	SOUTH SIDE	LINEAL FT.
	312+76-318+50	576
310+30-317+98		768
TOTAL		1344

PAVEMENT REMOVAL

Sheet No	Monolithic Brick Pavement SQ. YDS.	Sheet No.	Monolithic Brick Pavement Sq. Yds.
5	3210.9	11	110.8
6	3555.6	12	327.0
7	2311.0	13	44.4
8	3433.3		
9	1010.9		
10	244.2		
		Totals	14248.1 = 3562 Cu. Yd.

PIPE UNDERDRAIN

Sheet No	Item No	6" Pipe Lin. Ft.	6"x6" Tees Each
7	I-U	500	3
TOTAL		500	3

EXTRA AREAS & INTERSECTIONS

Sheet Nº	Road	Excavation	Conc. Pavement Removal 9"x6'-9"	Reinforc. Pavement T-17	Curb Deduction	Embankment
		Cu.Yds	Sq.Yds.	Sq.Yds.	Lin.Ft.	Cu.Yds.
63	Sta. 310+00			532.0		1246
63	" 318+50	844		484.0	100	
64	PARMLY			435.5	76.78	795
65	CENTER	47	156.5	259.5	184.92	
66	CALL	90	290.0	205.1	86.85	
66	ANTIOCH	20	183	110.3	94.06	
66	TOWNLINE	60		213.6	185.50	
	TOTALS	1061	629.5	2240.0	728.11	2041