



LOCATION & OWNERSHIP MAP

SECTION	PARCEL	PROPERTY OWNER	ACRES
7	A	MARTIN RECNY	1.0
12	B	ALBERT STONE	1.5
12	C	OLLIE TOMPSON	1.5
12	D	ERSEL HEATH	.5
12	E	DONALD DUDROW	.5
12	F	EARL CARRY	.5
12	G	RUSH MILLER	.5
6	H	PAUL HALICEK	.5

LEGEND

PROPOSED IMPROVEMENT	== == ==
HIGHWAYS	====
PROPERTY LINE	-----
SECTION CENTER	⊞
WATERSHED	-----
SECTION CORNER	⊞
ACRES OWNED	00 A.
ACRES BENEFITED	00 A.
AT&T CABLE	-----
RIVER & DITCHES	~~~~~

SUPPORTING DATA

DRAINAGE AREA	207 ACRES
LAND USE	GENERAL & SPECIAL CROPS
SOIL TYPE	HOYTVILLE-NAPPANEE
LAND SLOPE	0-2 %
DESIGN COEFFICIENT	Q _b CURVE
TYPE DRAINAGE	SURFACE & TILE

BENCH MARK DESCRIPTION

BM #1	TOP OF SPIKE IN S.W. SIDE OF UTILITY POLE E. SIDE NISSEN RD. 50' S. OF 0+00 M.S.L. ELEV. 612.92
BM #2	TOP OF "PAW" MARK S.E. END OF SIDE WALK J. VALASEK BLDG AREA. STA. 9+68 M.S.L. ELEV. 611.80
BM #3	TOP OF SPIKE IN W. SIDE OF ELEC. POLE W. SIDE OF DITCH 730' S. OF INTERSECTION OF DENO RD. STA. 12+41 M.S.L. ELEV. 611.92
BM #4	TOP OF S. RIM OF MANHOLE COVER 35' W. OF DITCH N.W. CORNER OF INTERSECTION OF NISSEN & DENO RD. STA. 20+64 M.S.L. ELEV. 611.63
BM #5	TOP OF SPIKE IN W. SIDE OF POWER POLE W. SIDE NISSEN RD. 1900' N. OF DENO RD. STA. 38+96 M.S.L. ELEV. 611.45
BM #6	X. CHISELED ON S. END OF BELL OF 18" CONCRETE TILE W. SIDE OF NISSEN RD. 568' S. OF FULKURT RD. STA. 56+64 M.S.L. ELEV. 605.63
BM #7	X. CHISELED ON TOP & CENTER OF S. HEADWALL S.W. CORNER OF INTERSECTION OF NISSEN & FULKERT RD. STA. 62+32 M.S.L. ELEV. 606.21

CONSTRUCTION DATA

STATION	% GRADE	BOTTOM WIDTH	SIDE SLOPES	CUBIC YARDS	AVERAGE DEPTH
56+54	0.10	3'	1 1/2 : 1	736	6'
46+00	0.07	3'	1 1/2 : 1	2,514	5'
19+73	0.15	3'	1 1/2 : 1	662	4.5'
10+57	0.70	3'	1 1/2 : 1	52	3.5'
8+16	0.08	3'	1 1/2 : 1	158	3'
				4,122	

HYDRAULIC CALCULATION

CHANNEL FLOW $V = 1.486 \frac{Q}{N}$ R^{2/3} S^{1/2}

REACH TO STA.	0+00	8+16	10+57	20+09	46+00
DRAINAGE AREA	51	61	114	192	207
Q _b FLOW C.F.S.	8.5	10.	19.	32	35
"N"	.04	.04	.04	.04	.04
SLOPE FT./FT.	.0008	.0070	.0015	.0007	.0010
S 1/2	.0283	.0837	.0387	.0266	.0316
Q/S ^{1/2} = KD	300	119	492	1203	1108
KD VALUE USED	3.19	129	498	1241	1158
SIDE SLOPE	1 1/2 : 1	1 1/2 : 1	1 1/2 : 1	1 1/2 : 1	1 1/2 : 1
BOTTOM WIDTH	3'	3'	3'	3'	3'
DEPTH	1.6'	1.0'	2.0'	3.1'	3.0'
AREA SQ.FT.	8.64	4.50	12.00	23.71	22.50
VELOCITY F.P.S.	.98	2.22	1.58	1.35	1.55

HEADLOSS IN CULVERT $H = \frac{V^2}{2g} (1 + KE + KPL)$

STATION	6+46	8+16	19+73	33+96	56+64
DRAINAGE AREA	51	56	114	150	207
Q _b FLOW C.F.S.	8.5	9.5	19.	26	35
DIAMETER IN.	24"	24"	33"	36"	36"
TYPE "N"	R/C	R/C	R/C	R/C	R/C
LENGTH FT.	.013	.013	.013	.013	.013
X SEC. AREA SQ.FT.	20'	45'	36'	20'	654'
KP	3.14	3.14	5.94	7.07	7.07
KE	.012	.012	.0080	.0072	.0072
KPL	.24	.54	.29	.14	4.71
VELOCITY F.P.S.	.50	.50	.50	.50	.50
HEADLOSS FT.	2.7	3.0	3.2	3.7	4.95
HEADLOSS FT.	.20	.29	.28	.35	

Inlet Control
HW = 2.85 ft

THIS DITCH PLAN HAS BEEN APPROVED BY
John G. Papcum
OTTAWA COUNTY ENGINEER 7/1/68 DATE

LOCATION - E. 1/2 OF N.E. 1/4 OF SEC. 12
E. 1/2 OF S.E. 1/4 - E. 1/2 OF S.E. 1/4 OF
N.E. 1/4 OF SEC. 1 T-6N R-15E.
CLAY TOWNSHIP, OTTAWA COUNTY, OHIO.

SURVEYED - 12-19-67 D. OFFER
E. CAMPBELL
D. SOMMER

REFERENCE - FIELD NOTES ON FILE IN
OTTAWA SOIL & WATER CONSERVATION OFFICE
149 CHURCH STREET, OAK HARBOR OHIO.
JOB CLASS III GROUP # 34

DITCH IMPROVEMENT
SCHOTT DITCH
CLAY TOWNSHIP
OTTAWA COUNTY, OHIO.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed by <i>Donald Offer</i> 12/67	Date	Approved by <i>Russell K. Rowe</i>
Drawn <i>Donald Offer</i> 2/68	Title	<i>and signs</i>
Traced	Sheet	Drawing No.
Checked <i>R.K. Rowe</i> 7/2/68	No. 1	34-01-83-68-1



