

ENGINEER'S REPORT
G. D. BALDWIN DRAIN
TOWNSHIP OF MATILDA
1969

TO THE REEVE AND MEMBERS OF COUNCIL

TOWNSHIP OF MATILDA

Gentlemen:

I herewith respectfully submit my report on the proposed maintenance and improvement of the G. D. Baldwin Drain, under Section 52 of The Drainage Act, 1962-63.

This report deals with the lower part of the G. D. Baldwin Drain, as far as it is located within the limits of the Township of Matilda.

The G. D. Baldwin Drain, formerly known as the Jacob Shaver Award, was originally constructed as a municipal drain under a report by Thomas H. Dunn, C.E., dated June 8, 1904. The drain starts at the east limit of County Road No. 2, opposite the east-west centre line of Lot 13, Concession I, in the Township of Mountain. It follows a general easterly and southeasterly direction, and crosses the boundary road between the Township of Mountain and the Township of Matilda at a point opposite Lot 13, Concession 8 in Matilda Township. It then continues east to an outlet in the South Branch of the Nation River.

The length of that section of the G. D. Baldwin Drain located within the limits of the Township of Mountain is 11,131 feet, and that section in Matilda Township is 4,030 feet.

SEPT 18 1969
[Signature]

Maintenance work on the portion of the drain within the limits of the Township of Mountain was carried out in 1957 under a report by Mr. R. F. Mucklestone. As far as known, no work was done on that section within the limits of the Township of Matilda.

PRESENT CONDITIONS

The drain in Matilda Township in its present condition is rather shallow, with an abundance of weeds growing in the bottom. Water entering from upstream tends to lay stagnant for too long a period of time, with consequent damage to the adjoining fields.

RECOMMENDATIONS

I recommend that the section of drain lying within the limits of the Township of Matilda be cleaned and deepened by approximately one foot to 18 inches, with a bottom width of four feet, and side slopes of 1½ horizontal to 1 vertical, as shown on the profile accompanying this report.

PLAN

A plan has been prepared showing the names of the owners written on their respective properties. The boundary limits of the watershed are shown outlined in yellow, and the benefit area in red. The general course and extent of the proposed work is shown by means of a solid blue line, and turns and intersections with property lines have been referenced to the hub line.

PROFILE

Wooden stakes and numbered markers called "Stations" were driven in average ground bordering the drain at hundred foot intervals. From the plotted results of levels and soundings then taken, a profile of the work has been prepared and a new grade designed. The hub line and the present ditch bottom are shown by means of the solid and broken irregular lines respectively, while the proposed new grade is indicated by the solid red regular line. The depth of earth to be removed from the present ditch bottom is shown coloured yellow. The cuts from the hub line to reach the new bottom are shown in feet and decimals of a foot along the top of the profile. A combined reference to the plan and profile shows the amount of deepening required over any particular portion of the scheme.

It is intended that the accompanying plan, profile and specifications form a part of this report, and that they together govern the performance of the work.

FARM BRIDGES

I have made allowances for the construction of **three** farm bridges, as shown on the attached Schedule "C". It is recommended that they be open bottom structures with a free span at least 6 feet. Bridges should be built as high as the neighbouring banks, and constructed and maintained by their respective owners.

In the case of future maintenance, for each ten year interval between the date of construction and a subsequent maintenance scheme, the owner shall be allowed the equivalent of one-third of the farm bridge allowance as allowed by the Engineer at that time. This allowance shall not, however, be increased beyond one hundred percent of the normal payment, and shall not be paid unless the owner did construct a bridge of a sufficient size for which an allowance is herein made, and has kept it in a proper state of repair. This is to be determined by the Engineer. This will apply only when a large enough maintenance program is being carried out to require the service of an Engineer, and the cost thereof spread over the entire scheme.

ROAD BRIDGES

No work on road bridges is necessary under this scheme, except for cleaning out the culverts, which is the contractor's responsibility.

ASSESSMENTS

The cost of this proposed work has been charged against the owners of lands and roads in both the Township of Matilda, and the Township of Mountain, in the same proportions as charged under the original construction report of 1904, and also, of the maintenance report of 1957; which shows that approximately 87 percent of maintenance cost is to be charged against lands and roads in Mountain Township, and 13 percent against lands and roads in Matilda Township.

As far as the cost of improvement is concerned, the sum of \$969.70 has been assessed against the lands in Matilda Township only. This includes the cost of farm bridges.

The old schedule of assessment against owners in the Township of Matilda is not available, and it was, therefore, necessary to prepare a new schedule, the proportioning of which, within the limits of the Township, is subject to a Court of Revision.

FUTURE MAINTENANCE

Each township will be responsible for the maintenance of that section of the drain located within that township. The cost of future maintenance will continue to be charged against the lands and roads assessed for its construction and in the same proportions as shown on the attached Schedules of Assessment - Schedules "A" and "B". The proportions of cost between the Township of Matilda and the Township of Mountain as established in the original construction report will not be altered.

ESTIMATE OF COST

1,950 cu.yds. Earth Excavation @ \$0.65 per cu.yd.	\$1,267.50
Allowances for Farm Bridges	750.00
Preparing & Printing by-laws - Matilda Township	75.00
Court of Revision - Matilda Township	80.00
Clerk's Fees - Matilda Township	250.00
Preparing & Printing By-Laws - Mountain Township	75.00
Court of Revision - Mountain Township	80.00
Clerk's Fees - Mountain Township	250.00
Engineering Fees - Reports, Plans, Specifications	550.00
Supervision & Inspections	<u>200.00</u>
Total Estimated cost	\$3,577.50

This total estimated cost of \$3,577.50 has been apportioned in the following manner:

Outlet Liability-Real Property-Matilda Township	\$ 529.60
Benefit Liability-Real Property-Matilda Township	579.49
Outlet Liability-Roads-Matilda Township	56.79
Benefit Liability-Roads-Matilda Township	137.22
Maintenance-Real Property-Mountain Township	1,936.02
Maintenance-Roads-Mountain Township	243.82
Maintenance-Roads-United Counties	<u>94.56</u>
Total	\$3,577.50

Trusting that this report will meet with your approval,
Gentlemen,

We have the honour to be

Your obedient servant,

STIDWILL & ASSOCIATES LIMITED

Per
C.E., O.I.S.

Cornwall, Ontario, February 7, 1969

SCHEDULE OF ASSESSMENT

SCHEDULE "A"

TOWNSHIP OF MATILDA

Name of Owner	Con.	Lot or Part	Acres Drained	Outlet Liability	Benefit
Ernest Plante	8	Lot 13	18	\$145.93	\$282.72
Peter Meerakker	8	N.Pt. Lot 12	40	271.70	124.26
Peter Meerakker	8	N.Pt. Lot 11	17	90.21	57.39
Earl Tinkler	8	E 1/2 Lot 11	5	21.76	115.12

TOWNSHIP OF MATILDA

Sideline Road btwn. Lots 12-13, Con. 8			1 1/2	24.42	110.49
<i>United Counties</i> Half Boundary Road btwn. Matilda & Mountain Twp.			2	32.37	26.73

SCHEDULE OF ASSESSMENT

SCHEDULE "B"

TOWNSHIP OF MOUNTAIN

Name of Owner	Con.	Lot or Part	Acres Owned	Maintenance
A.R.D.A.	1	E 1/4 Lot 11	50	\$ 2.38
Donald Sullivan	1	W 1/4 Lot 12	50	10.49
J. E. Sullivan	1	C.Pt. S $\frac{1}{2}$ & N.E. $\frac{1}{4}$ Lot 12	100	22.06
Mac Ellis	1	E $\frac{1}{2}$ -SE $\frac{1}{4}$ Lot 12	24 $\frac{1}{4}$	40.83
Mac Ellis	1	W $\frac{1}{2}$ -SW $\frac{1}{4}$ Lot 13	24 $\frac{1}{4}$	39.92
S. M. Keyes	1	E $\frac{1}{2}$ -SW $\frac{1}{4}$ Lot 13	25	71.50
R. McPhail	1	NW 1/4 Lot 13	50	46.56
S. M. Keyes	1	S $\frac{1}{2}$ -SE $\frac{1}{4}$ Lot 13	25	34.35
Denzil Shaver	1	N $\frac{1}{2}$ -SE $\frac{1}{4}$ Lot 13	25	52.53
Denzil Shaver	1	NE 1/4 Lot 13	50	136.14
Lyall Belway	1	NW 1/4 Lot 14	50	136.83
S. M. Keyes	1	S $\frac{1}{2}$ -W $\frac{1}{2}$ Lot 14	25	37.67
Denzil Shaver	1	N $\frac{1}{2}$ -SW $\frac{1}{4}$ Lot 14	25	47.59
Denzil Shaver	1	W 3/4-E $\frac{1}{2}$ -Lot 14	75	193.06
Denzil Shaver	1	E 1/8 Lot 14	25	63.05
Orval Reddick	1	W 1/2 Lot 15	100	256.43
Ralph Baldwin	1	W $\frac{1}{2}$ -E $\frac{1}{2}$ Lot 15	50	121.59
Ralph Baldwin	1	E 1/4 Lot 15	50	120.19
Ralph Baldwin	1	W $\frac{1}{4}$ -S $\frac{1}{2}$ Lot 16	25	65.58
Glenn Kenney	1	E 3/4-S $\frac{1}{2}$ Lot 16	75	207.08
Charles Guy	1	NW 1/4 Lot 16	50	76.59
Raymond Baldwin	1	S.Pt. NE $\frac{1}{4}$ Lot 16	19	39.82
Raymond Baldwin	1	Pt. Lot 17	14	22.65
Raymond Baldwin	1	Pt. Lot 17	16	11.71

Name of Owner	Con.	Lot or Part	Acres Owned	Maintenance
Glenn Kenney	1	Pt. Lot 17	4	\$ 8.74
Hattie Baldwin	1	S.Pt. Lot 17	28	57.37
Charles Shaver	2	S $\frac{1}{4}$ -W $\frac{1}{2}$ Lot 14	25	13.31

TOWNSHIP OF MOUNTAIN

Boundary Road btwn. Mountain & Matilda			107	183.14
Road Allw. btwn. Cons. 1-2			11	60.68

UNITED COUNTIES OF
STORMONT, DUNDAS & GLENGARRY

Part County Road No. 2			11	94.56
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SCHEDULE "C"

FARM BRIDGES

TOWNSHIP OF MATILDA

<u>Name of Owner</u>	<u>Con.</u>	<u>Lot or Part</u>	<u>Span</u>	<u>Allowance</u>
Ernest Plante	8	Lot 13	6'	\$250.00
Peter Meerakken	8	N.Pt. Lot 12, N.W.Pt. Lot 11	6'	250.00
Earl Tinkler	8	E 1/2 Lot 11	6'	250.00