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U.S. Department of Agriculture
Soil Conservation Service

NE-ENG-37
Rev. 12-77

DATA SHEET FOR EXCAVATED PONDS
(Supplement A)

Cooperator John Jones Pond No. 4

QUANTITY COMPUTATIONS FOR EXCAVATION BY: -

A. Prismoidal Formula
Volume (excavation) - 1/6 DW(b+8+4m) (For dimensions, see NB-ENG-36)
Where: b - Bottom length x bottom width
B - Top length x top width
4M - (Top length + bottom length) x (Top width + bottom width)

DW= 10

b = 50 x 30 = 1500

End slope (EI) = 2 x 10 = 20

End slope (E2) = 50 x 40 = 20

Top length = 50 + 40 + 20 = 110

Side slope (SI) = 2 x 10 = 20

Side slope (S2) = 2 x 10 = 20

Top width = 30 + 20 + 20 = 70

B = 110 x 70 = 7700

4M = (110 + 50) x (70 + 30) = 16000

V.= $\frac{10}{6}$ (1500 + 7700 + 19200) = 42000 cu.ft.

= $\frac{4200}{27}$ = 1556 cu.yd.

Computations by John Doe Date 1/3/74
Computations checked by Jim Daniels Date 1/3/74

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QUANTITY COMPUTATIONS FOR EXCAVATION BY:

B. Average end areas

	2	3	4	5	6	7
Station	End area sq.in.	End area sq.ft.	Sum end areas sq.ft.	Distance feet	Columns 4 x 5 cu.ft.	Volume cu.yd. (col. 6 ÷ 54)
0+00	0	0				
			500	40	20,000	370.3
0+40	-	500				
			1000	50	50,000	925.9
0+90	-	500				
			500	20	10,000	185.1
1+10	0					
TOTALS						1481.3

Remarks: NONE

Computations by John Doe Date 1/3/74

Computations checked by Jim Daniels Date 1/4/74