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U.S. Department of Agriculture
Soil Conservation Service

NB-ENG-36
Rev. 6/77
(File Code: ENG-13)

DATA SHEET FOR EXCAVATED PONDS

Natural Resources District Upper Republican Field Office Imperial

Cooperator Joe Perkins Location 9 miles E & 6 miles N of Imperial

Plan I.D. 0 - 47 Other No. - Field No. 7

Purpose - To provide water for -

Livestock [X] Wildlife [ ]
Area of grass served 120 ac.
Drainage Area 80 ac.
Q = - cfs
Water Source: ground [X]
Surface [X]
Yield: EFM Chapter 2
% chance Isogram no. _____
C.N. 70 Runoff 0.14 ac-in./ac.

ac.in./ac. 0.14 x D.A. 80 ac.

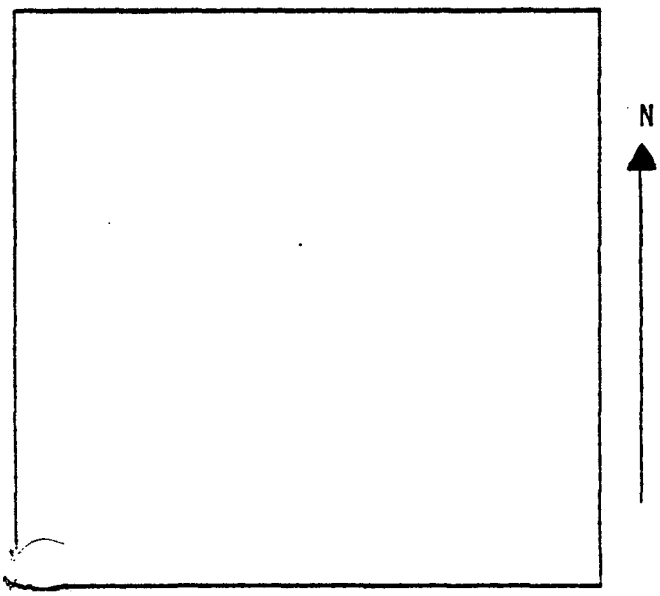
= 11.2 ac.in.

ac. in. 11.2 / 12 in/ft = .93 ac.ft.

Legal Description:

Sec. NE 1/4 1 T 7 R 87

Sketch Map:



Irrigation Reuse Pit Data:
Planned reuse of water -
Irrig. land (above) _____ ac.

Soils _____ Slope _____
Crop _____ Row Spacing _____ in.
Border width _____ ft.
Well Capacity _____ gpm = _____ cfs
450
Design group _____,
Net irrig. application _____ in.
gpm/100 of row length _____ gpm or cfs/ 100 sq.ft.
Irrigation Guide time _____ hrs.
Operation Schedule _____ hrs.

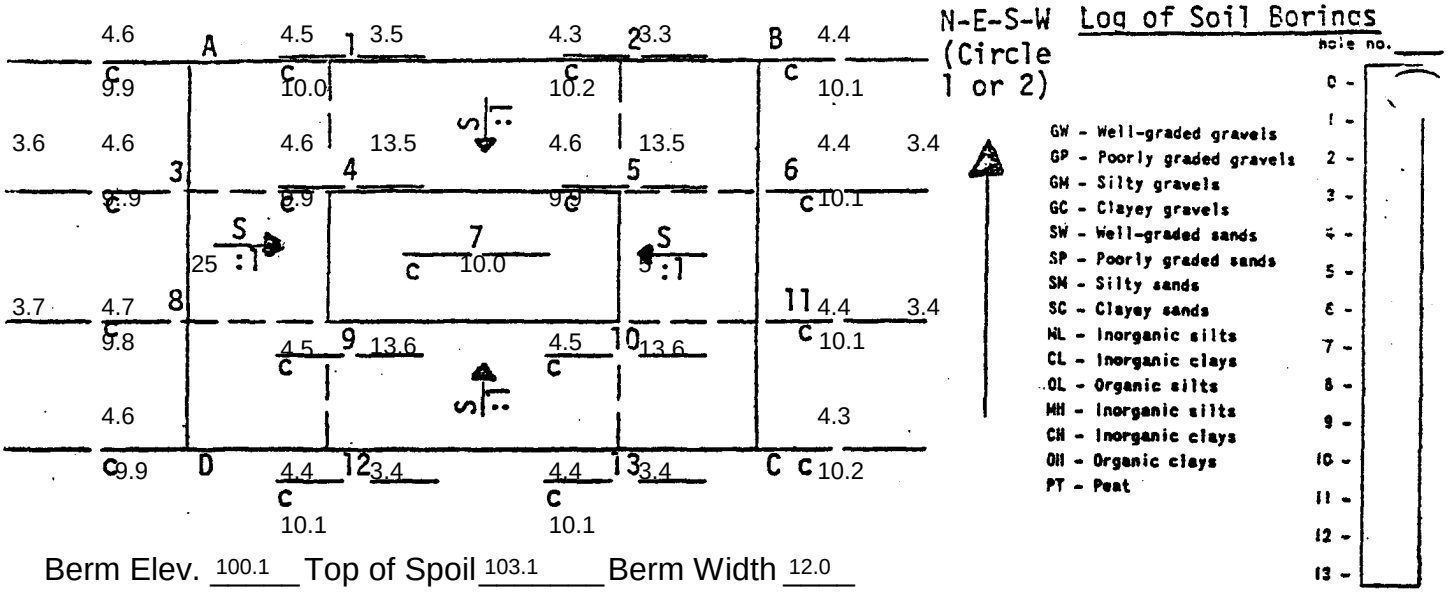
Design:
cfs x hrs. x 50% / 12 in. = ____ x ____ / 12 = ____ ac.ft.

ac.ft. _____ x 1613 x 1.2 (Dead Storage)
_____ cu.yds.

Remarks _____

Designed by Harry Keebler
Date 7/11/77
Design checked by Jim Conner
Date 7/13/77

LAYOUT Berm Elev._____Top of Spoil_____ Berm Width_____



Berm Elev. 100.1 Top of Spoil 103.1 Berm Width 12.0

Sta.	B.S.	H.I.	F.S.	El.	Gr. rod	Remarks
BM # 1	4.50	104.50		100.0	14.5	STAKE NOTES
BM # 1	3.50	103.5		100.0	13.5	CHECK OUT

B.M. 1 X 2 HUB 50' SE OF STA. C El. 100.0 Groundwater El. 83.9

Planned dimensions: Top / Bottom -L. 50 ft., W. 20 ft., El. 90.0

Design Capacity .98 ac.ft.
Average ground surface El. - Control El. - = - Overburden

QUANTITY COMPUTATIONS - EXCAVATION

(1) Determining DW (weighted depth) for location of cuts see above.

(A+B+C+D) x I = 40.1
(1+2+3+6+8+11+12+13) x 2 = 160.6
(4+5+9+10) x 5 = 199.0
(7) x 4 = 40.0
Total = 439.7
DW = Total = 439.7 ÷ 44 = 9.99 / USE 10.0

Excavated quantity
(1) By Table 15.97, Depth (d) 10.0, read 1575 cu.yd.
(2) By Average End Areas see NB-ENG-37
(3) By Prismoidal Formula see NB-ENG-37

Computations by. Harry Keebler Date 7/11/77
Computations checked by. Jim Conner Date 7/13/77

CONSTRUCTION CHECK Construction meets plans and specifications. (Show rod reading or elevation on layout sketch above.)

Construction checked by Harry Keebler Date 7/14/77
Constructed by Jones Construction Company