United States Department of Agriculture
NRCS Natural Resources Conservation Service
Texas

TX-ENG-36
July 2014
State Wide Approval

FARM POND (Damless Type) DATA SHEET

Cooperator				Field Office	
I.D.#:				SWCD:	
CIN:				Location:	
Job Class:		Field #		Structure #	
Additional Notes:					

Engineering Approval	Signature	I have EJAA Class	Date
Designed by:			
Comps Checked by:			
Design Reviewed by:			
Design Approved by:			

DESIGN AND LAYOUT

Date _____

Drainage Area (ac.) _____

Rod Reading on Bench Mark _____

Survey Party _____

Decription of BM _____

Sketch pond showing staked dimensions, Bench Mark, reference stakes, an adequate number of rod readings around the circumference and inside of planned top to determine average ground elevation, and proposed location of spoil

Show North Arrow and refernce to field location.

Average Top Rod _____ Ft.
Depth (excavation) _____ Ft.
Grade Rod (Bottom) _____ Ft.
Bottom Depth Below BM =
Grade Rod Minus BM Rod _____ Ft.
Spillway Rod Reading _____ Ft.
End Slopes _____ : 1
Side Slopes _____ : 1
Dimensions
Top _____ Ft.
Bottom _____ Ft.
Volume _____ Cu. Ft.
Chart No _____
Voume from Approved Tables

Calculations

Strorage Capacity _____ Ac-Ft.

Surface Area _____ Acres

Depth of Pond _____

Soils Investigation Report

CONSTRUCTION CHECK

Date _____

Rod Reading on Bench Mark _____

Survey Party _____

Bottom Depth Below BM _____

Bottom Grade Rod (Check) _____

Spillway Rod Reading _____

REPRESENTATIVE LONGITUDANAL CROSS SECTION	--------	--------	--------	--------	--------	--------	--------	--------	--------
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REPRESENTATIVE LATERAL CROSS SECTION	--------	--------	--------	--------	--------	--------	--------	--------	--------
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Formula: Rectangular Ponds - V (Cubic Yards) = $\frac{D\ (A_t + 4A_m + A_b)}{162}$

D = Depth (Ft) A_t = Area of Top (Sq. Ft.) A_m = Area of D/2 (Sq. Ft.) A_b = Area of Bottom (Sq. Ft.)

Formula: Circular Ponds - V (Cubic Yards) = $0.038785\ D\ (R^2 + r^2 + Rr)$

D = Depth (Ft) R = Radius of Top (Ft) r = Radius of Bottom (Ft)

Remarks:		
I certify that this practice meets NRCS specifications.		
I have EJAA Construction Class	Signature	Date