

Company Name SCRA/AOAAA
 Project Bluegill Pond AMD Project
 Site Name Sites 40A, 40B, 40C



AMDTREAT

AMD TREAT AEROBIC WETLANDS

Aerobic Wetlands Name

**Opening Screen
Water Parameters**

Influent Water Parameters that Affect Aerobic Wetlands

Calculated Acidity mg/L
 Alkalinity mg/L

Calculate Net Acidity (Acid-Alkalinity)
 Enter Net Acidity manually
 Net Acidity (Hot Acidity) mg/L

Design Flow gpm
 Typical Flow gpm
 Total Iron mg/L
 Aluminum mg/L
 Manganese mg/L
 pH su

SIZING METHODS Select One

Aerobic Wetland Based on Metal Removal Rates
 1. Iron Removal Rate g/m2/day
 2. Mn Removal Rate g/m2/day

Aerobic Wetland Based on Dimensions
 3. Top Length at Freeboard ft
 4. Top Width at Freeboard ft

Aerobic Wetland Based on Iron Oxidation Kinetics
 5. Rate Constant moles/sec
 6. Effluent Fe Concentration mg/l
 7. Dissolved Oxygen mg/l
 8. H2O Temperature °C

9. Length to Width Ratio Length : Width

10. Slope of Wetland Sides Run of Slope : Rise of Slope

11. Freeboard Depth ft

12. Free Standing Water Depth ft

13. Organic Matter Depth ft

14. Organic Matter Unit Cost \$/yd3

15. Organic Matter Spreading Unit Cost \$/yd3

16. Excavation Unit Cost \$/yd3

17. Wetland Planting Unit Cost \$/acre

21. Clearing and Grubbing?

22. Land Multiplier ratio

23. Clear/Grub Acres acres

24. Clear and Grub Unit Cost \$/acre

Liner Cost

No Liner
 Clay Liner
 18. Clay Liner Unit Cost \$/yd3
 19. Thickness of Clay Liner ft

Synthetic Liner
 20. Synthetic Liner Unit Cost \$/yd2

Aerobic Wetland Sizing Summaries

25. Length at Top of Freeboard	200.00	ft
26. Width at Top of Freeboard	110.00	ft
27. Freeboard Volume	1,171	yd3
28. Water Surface Area	20,176	ft2
29. Water Volume	725	yd3
30. Organic Matter Volume	346	yd3
31. Excavation Volume	1,071	yd3
32. Clear and Grub Area	0.7	acres
33. Liner Area	0	ft2
34. Retention Time	20	hrs

Aerobic Cost Summaries

35. Organic Matter Cost	10,395	\$
36. Excavation Cost	5,895	\$
37. Liner Cost	0	\$
38. Clear and Grub Cost	1,515	\$
39. Wetland Planting Cost	2,525	\$
40. Total Cost	20,330	\$

Record Number 2 of 2