bayer becker

PROJECT #: 07M056.005 SHEET ____ OF ____
PROJECT: Voice of America Park
CLIENT NAME: ____
SUBJECT: ____
DRAWN BY: GJK DATE: 4/16/12
CHECKED BY: ____ DATE ____

Lake #3

Q = 296.32
Spillway Elev. = 886.20
Spillway Length = 150.00
T/Dike Elev. = 888.00

$Q = CL\,H^{3/2} \Rightarrow H = \left(\frac{Q}{CL}\right)^{2/3} = \left(\frac{296.32}{3.0\,(150)}\right)^{2/3} = 0.76'$

Spillway Elev. + H + Freeboard ≤ T/Dike
886.20 + 0.76 + 1.0' ≤ 888.00
887.96 ≤ 888.00

Lake #4

Q = 94.05
Spillway Elev. = 891.50
Spillway Length = 40.0'
T/Dike Elev. = 893.50

$Q = CL\,H^{3/2} \Rightarrow H = \left(\frac{Q}{CL}\right)^{2/3} = \left(\frac{94.05}{3.0\,(40.0)}\right)^{2/3} = 0.85'$

Spillway Elev + H + Freeboard ≤ T/Dike
891.50 + 0.85' + 1.0' ≤ 893.50
893.35 ≤ 893.50

Lake #5

Q = 255.41
Spillway Elev = 889.80
Spillway Length = 70.00'
T/Dike Elev = 892.00'

$Q = CL\,H^{3/2} \Rightarrow H = \left(\frac{Q}{CL}\right)^{2/3} = \left(\frac{255.41}{3.0\,(70.0)}\right)^{2/3} = 1.1'$

Spillway Elev + H + Freeboard ≤ T/Dike
889.80 + 1.1' + 1.0' ≤ 892.00
892.00 ≤ 892.00