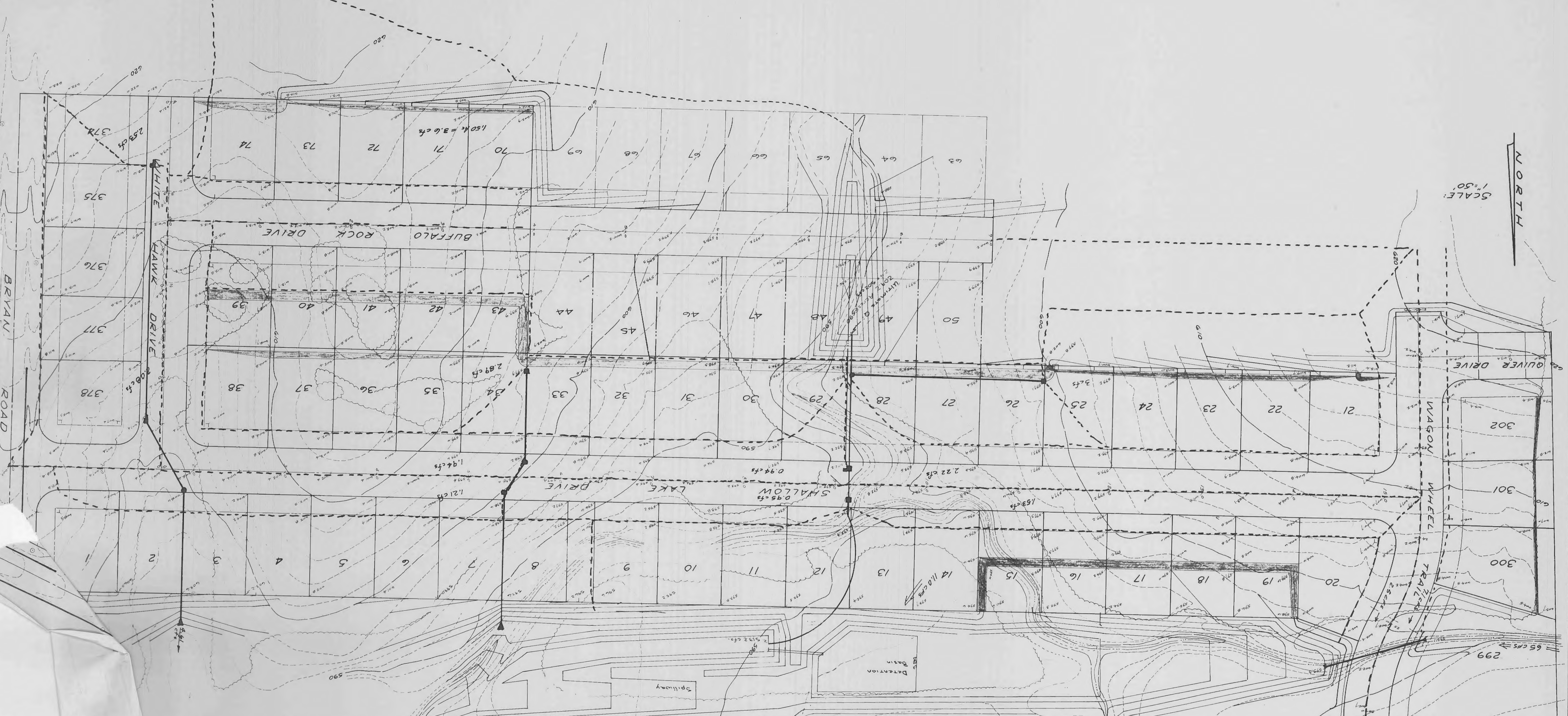


NORTH

SCALE: 1"=50'

5

Big Yards = 69,500 cu yds.



NOTE: SEE SHEET 4 FOR REVISED DETENTION

Allowable Release Rate @ 17' = 486.2 cfs  
 280 Ac @ 1.7 cfs/Ac = 486.2 cfs  
 Actual Q to #1:  
 On-site 194c @ 2.4 = 456  
 Off-site 180 Ac @ 1.7 = 319.6  
 Total Q to #1 499.2 cfs  
 Less Q to Detention 117.4  
 Allowable Release Rate Basin 104.4 cfs  
 Q = CLH<sup>2</sup> where C = 3.0 H = 1.5  
 Q = 28.3 cfs  
 Q = C x L<sup>2</sup> x H<sup>3/2</sup> where C = 3.192 H = 3.5  
 Q = 32.2  
 Set Top of Standpipe @ 586.0 & office @ 584.0  
 Max. (Release from basin thru standpipe) consists  
 of weir flow and orifice flow  
 Spillway to Ward  
 Set Spillway  
 Q = 35.10  
 Q Released thru st  
 Total Q = 35.10  
 Provide 20' w. Spi

**DETENTION CALCS.**  
 Part One  
 Usage Meadows 19,028 Ac.  
 Developed Runoff 19 x 2.4 = 45.6 cfs  
 Pre-Dev. Runoff 19 x 1.7 = 32.3 cfs  
 Differential 13.3 x 1/800 = 23,940 Ft<sup>3</sup>  
 Storage  
 Detention Volume Provided: 35,100 Ft<sup>3</sup>  
 Flow to Detention Area:  
 Off-Site: 56.92 Ac @ 1.7 = 96.76 cfs  
 On-Site: 8.60 Ac @ 2.4 = 20.64 cfs  
 Total Q to Detention = 117.40 cfs