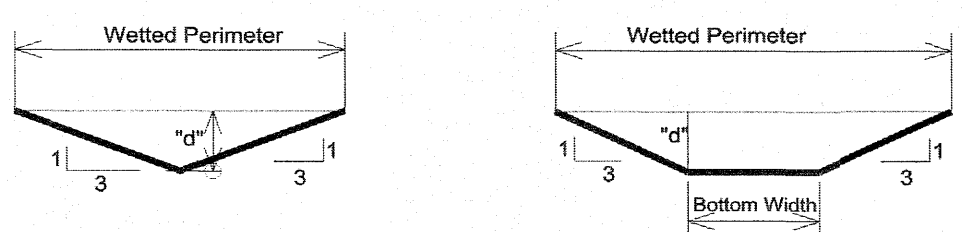


Kalasa PUD Subd Ditch & Swale Calcs-

Rev. 110920 SWALES 10, & 17 REMOVED  
Corrected Wetted Perimeter Equation



Ditch Section (For Bottom Width = 0) (Not To Scale)  
Trapezoidal Ditch / Swale Section (Not To Scale)

SWALE DRAINAGE CHART-PHASE ONE

Table with columns: Ditch I.D., D.A., Ac., C, Iso. In/hr, Qto, Cfs, Left Side Slope, Right Side Slope, Avg. Ditch Slope, Bottom Width, Ditch Lining, Manning's n, Qto Flow Depth, Flow Velocity V10, and Calc. Shear Stress, psf. Lists various ditch segments like DS 1, DS 2A, etc., with their respective dimensions and materials.

Shear Stress=62.4(d|Slope)  
American Green Product (SC150BN): 70% Agri Straw & 30% Coconut Fiber with net; n=0.22; Allowable Shear = 1.8 lbs./ft.  
\*Grass-Fescue Lined; n=0.030; Good for V10 <4.0 fps  
\*Class B Riprap, 6" size; Flow d < 2" mesh  
\*Coconut Fiber with net, n=0.02 (Mesh)  
\*Reinforced mesh linings where required per schedule above shall be North American Green model SC150BN or engineer approved equal and stabilized per manufacturers

Phase 1 Lot Areas

Grid of lot areas for Phase 1. Columns include Lot Number and Square Footage. Rows 1-37 show lot numbers and their corresponding square footage, such as Lot 1 (12,302 sq ft) and Lot 37 (21,627 sq ft).

PIPING & STRUCTURES SUMMARY-PHASE ONE

Large summary table for piping and structures. Columns include Downstream Structure, Upstream Structure, Pipe Size (in), Length (ft), Slope (%), Downstream Rim Elev (ft), Upstream Rim Elev (ft), Downstream Invert (ft), Upstream Invert (ft), and Q(10) Downstream Velocity (fps). Lists various pipe segments from CB 104 to JB 756.

RIP-RAP PADS

Table for RIP-RAP PADS. Includes Date (6/14/21), Location (Kalasa Falls, Phase 1), and a table with columns: Outlet No., Pipe Dia. (in.), Velocity (FPS), Zone, Stone Size, Stone Class, Width (ft.), Length (ft.), and Depth (in.). Lists various pad locations like FES101, FES220, etc.

RIP-RAP PADS, PHASE 1

Table for RIP-RAP PADS, PHASE 1. Includes Date (12/7/2020) and a table with columns: Outlet No., Pipe Dia. (in.), Velocity (FPS), Zone, Stone Size, Stone Class, Width (ft.), Length (ft.), and Depth (in.). Lists various pad locations like SBH111, SBH211, etc.

Sediment Basin/Sediment Trap Schedule

Table for Sediment Basin/Sediment Trap Schedule. Columns: Basin No., Bottom Elev., Top of Dam Elev., Top of Riser Elev., Spillway Elev., Weir Length, Riser/Barrel Size, Basin Dimensions (At Top, At Emerg., At Bott.), Skimmer Size, Skimmer Hole Size, and Anti-Flotation Size. Lists various basins like SB110, SB111, etc.

Sediment Basin/Sediment Trap Schedule

Table for Sediment Basin/Sediment Trap Schedule. Columns: Basin No., Bottom Elev., Top of Dam Elev., Top of Riser Elev., Spillway Elev., Weir Length, Riser/Barrel Size, Basin Dimensions (At Top, At Emerg., At Bott.), Skimmer Size, Skimmer Hole Size, and Anti-Flotation Size. Lists various basins like SB310, SB311, etc.

REVISION  
DATE 06/15/2021  
NO. 2  
DW/NC/HC  
EDS/JRH

SCHEDULE PLAN FOR KALASA FALLS  
SITUATED AT ROLESVILLE RD, ROLESVILLE WAKE COUNTY, NORTH CAROLINA  
FIRM # C-3881

JOB NUMBER: 9900  
CHECKED BY: JRH  
DRAWN BY: EDS  
DATE: 9/19/2019

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