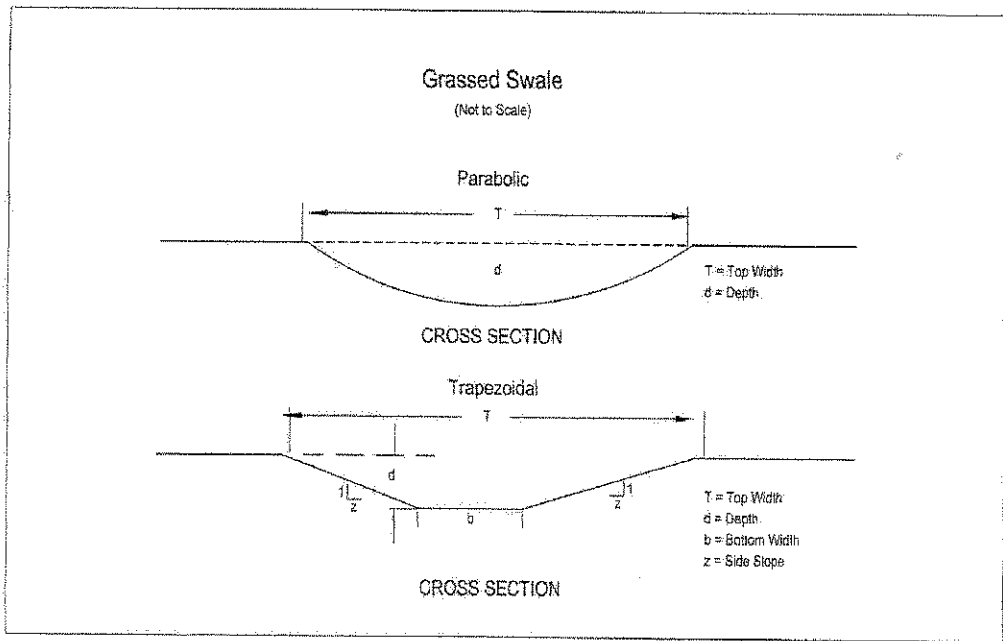
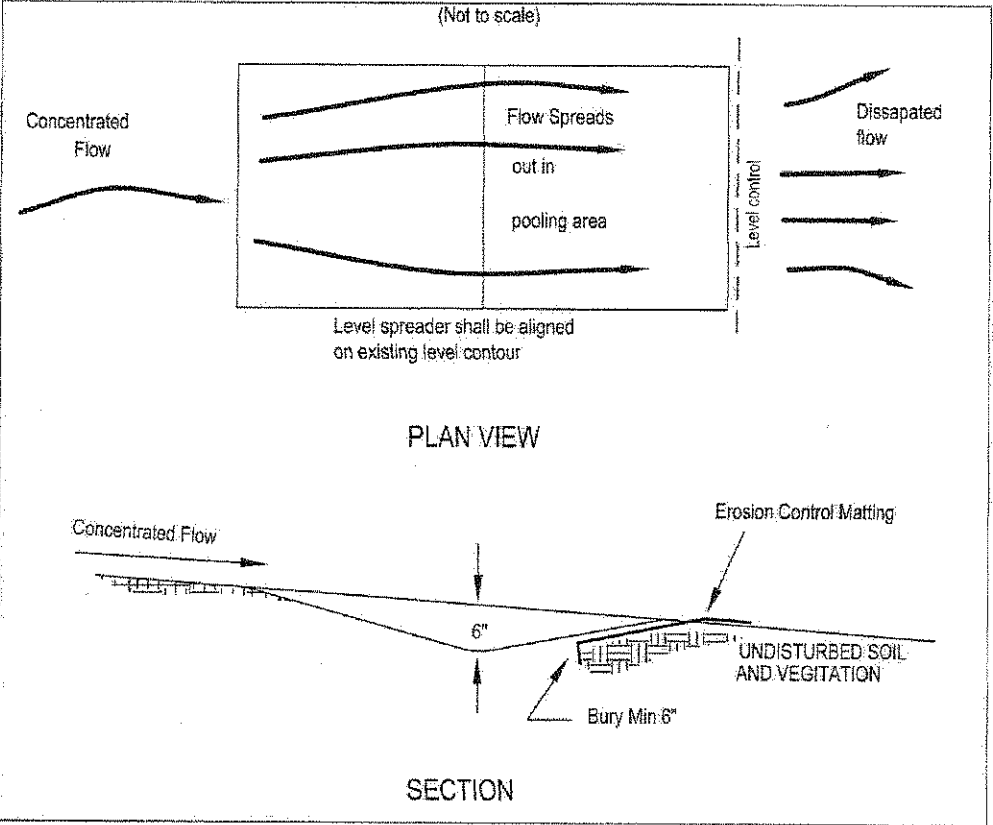


Specifications  
for  
**Grassed Swale**



1. All trees, brush, stumps, and other unsuitable material shall be removed from the site.
2. The channel shall be excavated and shaped to the proper grade and cross section.
3. Fill material used in the construction of the channel shall be well compacted in uniform layers not exceeding 9 inches using the wheel treads or tracks of the construction equipment to prevent unequal settlement.
4. Excess earth shall be graded or disposed of so that it will not restrict flow to the channel or interfere with its functioning.
5. Stabilization shall be done according to the appropriate specifications for permanent seeding, vegetative practices, sodding and matting.
6. Construction shall be sequenced so that newly constructed channels are stabilized prior to becoming operational. To aid in the establishment of vegetation, surface water may be prevented from entering the newly constructed channel through the establishment period.
7. Gullies that may form in the channel or other erosion damage that occurs before the grass lining becomes established shall be repaired without delay.

Specifications  
for  
**Vegetated Level Spreader**



1. Construct level spreader on a level grade to ensure uniform spreading of storm runoff.
2. Level spreaders must be constructed on undisturbed soil, NOT on fill.
3. The level spreader must outlet to erosion-resistant areas with established existing vegetation.
4. Vegetated lip spreaders shall be protected using an erosion control blanket installed according to manufactures' recommendations. The blanket shall start a minimum of 4 feet above the lip and extend at least 1 foot downstream over the spreader lip, secured with heavy-duty staples and the downstream and upstream ends buried at least 6 inches in a vertical trench.
5. Fertilizing, seeding, and mulching shall conform to the recommendations in the applicable vegetative specification.

INFORMATION OBTAINED FROM THE 2006  
EDITION OF THE STATE OF OHIO'S "RAINWATER  
AND LAND DEVELOPMENT MANUAL".

*Larry Luffich*  
CITY OF NORTH RIDGEVILLE, ENGINEER

REV No.	DATE	BY	DESCRIPTION
CITY OF NORTH RIDGEVILLE, OHIO DEPARTMENT OF ENGINEERING			
GRASSED SWALE			
SCALE: NOT TO SCALE			SWP-3
DATE: 10/01/08 DRWN BY: JAB/TEB			

INFORMATION OBTAINED FROM THE 2006  
EDITION OF THE STATE OF OHIO'S "RAINWATER  
AND LAND DEVELOPMENT MANUAL".

*Larry Luffich*  
CITY OF NORTH RIDGEVILLE, ENGINEER

REV No.	DATE	BY	DESCRIPTION
CITY OF NORTH RIDGEVILLE, OHIO DEPARTMENT OF ENGINEERING			
LEVEL SPREADER VEGETATED			
SCALE: NOT TO SCALE			SWP-4
DATE: 10/01/08 DRWN BY: JAB/TEB			