Meets or exceeds stormwater criteria for proposed flows

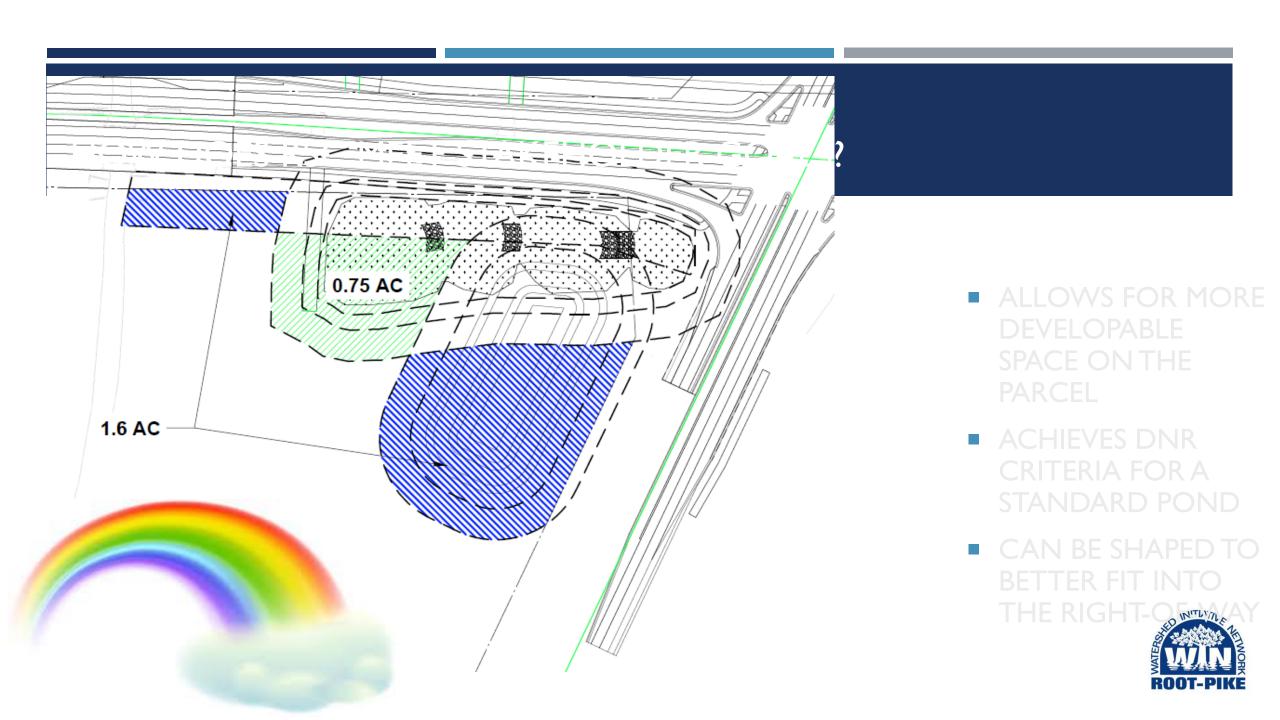
Metric	RSC ¹	Pond ²
100-yr Peak	16 cfs	16 cfs
2-yr Peak	5.8 cfs	6 cfs
TSS Reduction	60%	40% (min)

¹ Based on preliminary modelling for proposed RSC





² From preliminary pond design calcs



Installation

- Comparable in cost to conventional BMPs based on preliminary cost estimates
 - ☐ Pond & Roadside Swale: \$275,000
 - RSC: \$288,000, plus removed trunk line







RSC

- Inspection (2x year + after large events)
 - Manholes, weir structures
 - Signs of erosion
 - Sediment accumulation that may impact weir structure
- Vegetation
 - 3-year establishment period
 - Mow annually
 - Control for invasive species as needed

Pond

- Inspection (2x year + after large events)
 - Manholes, inlet/outlet structures
 - Signs of erosion/Sediment accumulation
- Vegetation
 - Control for invasive species as needed

<u>Swale</u>

- Inspection (2x year + after large events)
 - Signs of erosion/Sediment accumulation
- Vegetation
 - Mow seasonally
 - Control for invasive species as needed





- Can be part of a restoration project
 - Native plants to promote infiltration
 - Provides a variety of pollutant removal mechanisms (for removal of P, Bacteria, etc.)
 - Habitat creation (i.e. pollinators)
 - Deters geese (not perceived as safe with tall native grasses)
 - Incorporates nicely into recreation, ecological education





UNDER CONSTRUCTION







RESULTS: .75" RAIN IN 6 HOURS



First and Second Weirs Third Weirs Fourth Weir





RESULTS: 5" RAIN IN 24 HOURS

Immediately After the Storm (09/12/22)



Three Days After the Storm (09/15/22)







EARLY ADOPTERS: UW-PARKSIDE







SUMMARY

- Seek "win-win"... early in the process
- Don't assume "No" from DNR/DOT
- Leverage the heck out of your plans
- Green doesn't always equal more green
- Can the solution expand their toolkit?
- Operate with patience and persistence









Adrienne Cizek
Project Engineer
adrienne@stormwater-solutions engineering.com

Dave Giordano
Executive Director
dave@rootpikewin.org

SO HAPPY TO ANSWER QUESTIONS!