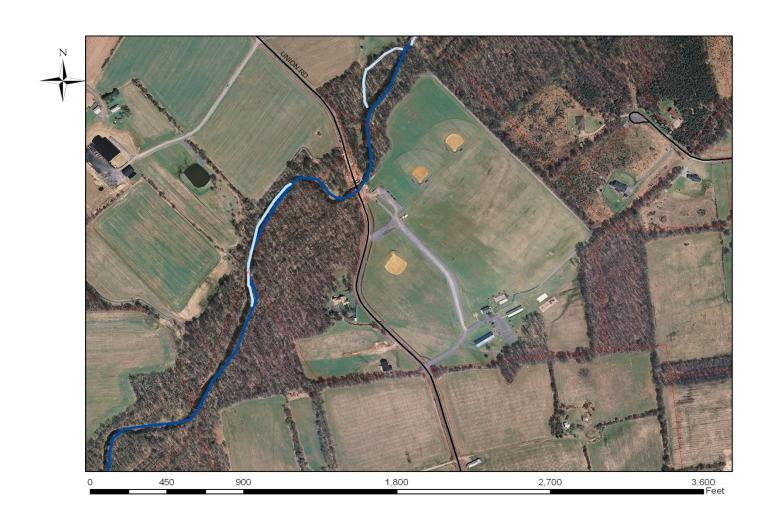
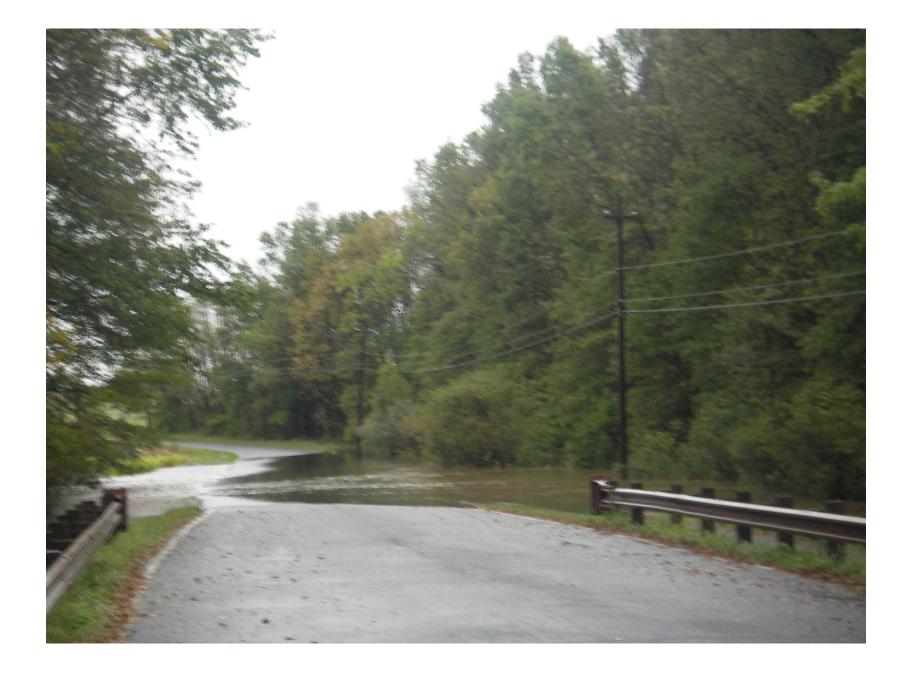
#### Kingwood Park- Preliminary Design Ideas







## Kingwood Park- Buffer Area

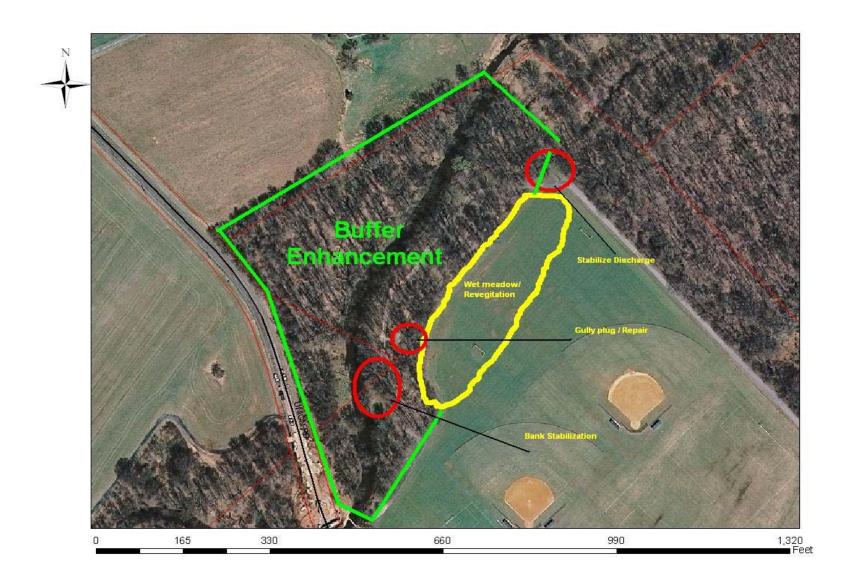
- Primary
- Nutrient Reduction
- Evapotranspiration
- Reduce Sedimentation
- Increase Roughness
- Increase Ponding
- Mitigate flows

- Secondary
- Species Diversity
- Habitat
- Aesthetics
- Other Recreation
- Soil Health

## Kingwood Park- Buffer Area

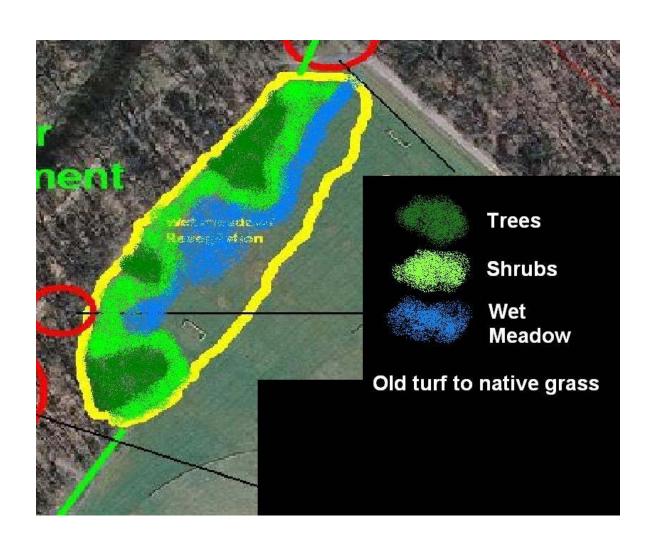
- Double species diversity
- Restore vegetative strata
- Eliminate areas of concentrated flow through buffer
- Add food and shelter (birds) (amphibians)

#### Stream Buffer





#### Wet Meadow Area





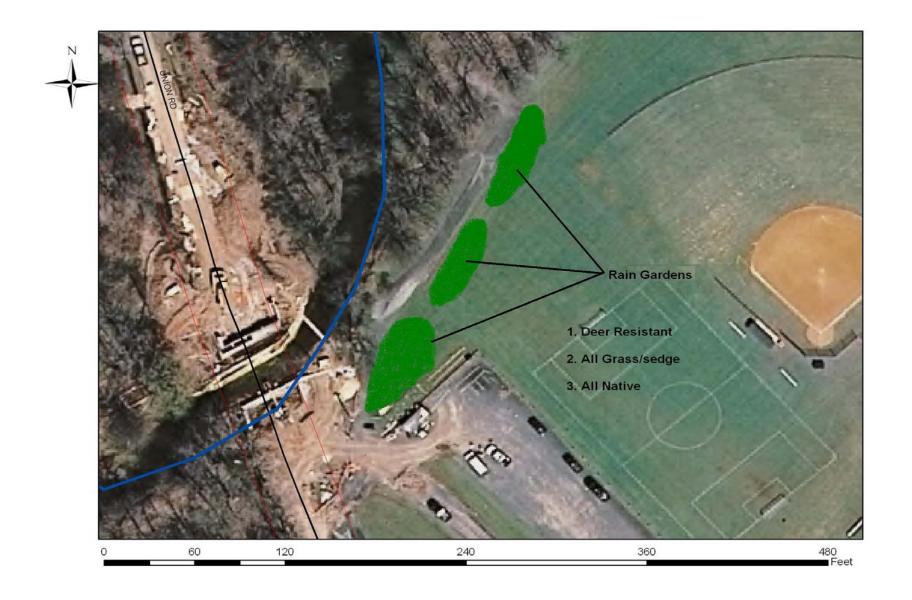


#### BMP's - Rain Gardens, Bio Swale, Constructed Wetland

- Water quality
- P & Fecal Reductions
- Evapotranspiration
- Explore Recharge

- Habitat
- Education
- Innovation & Adaptation
- Retrofitting

# Kingwood Park

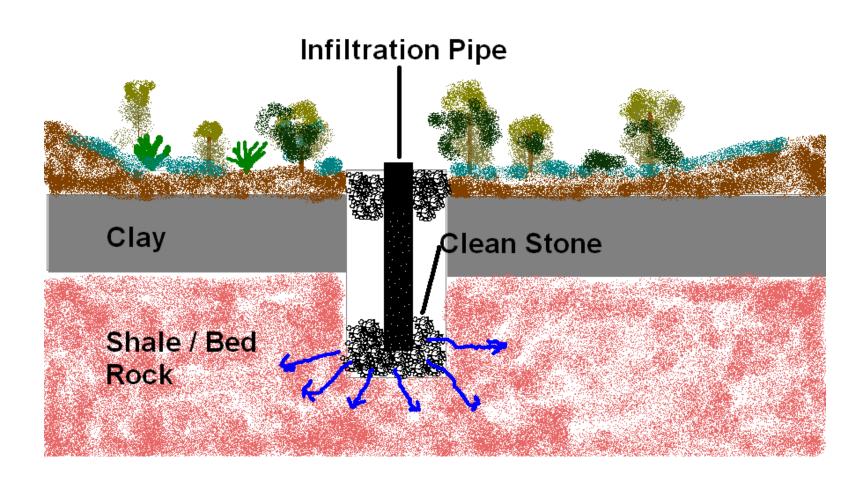




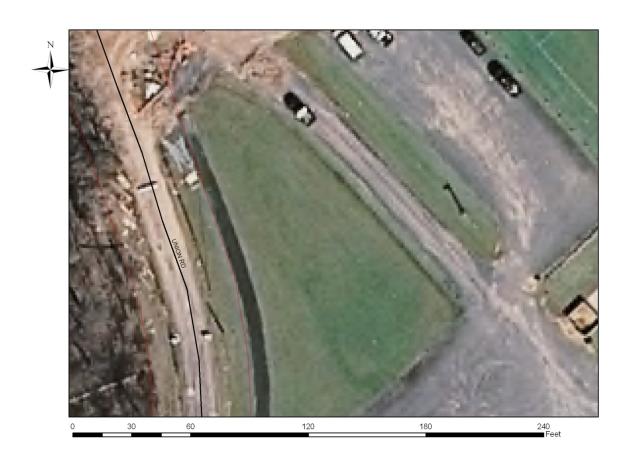
### Rain Gardens



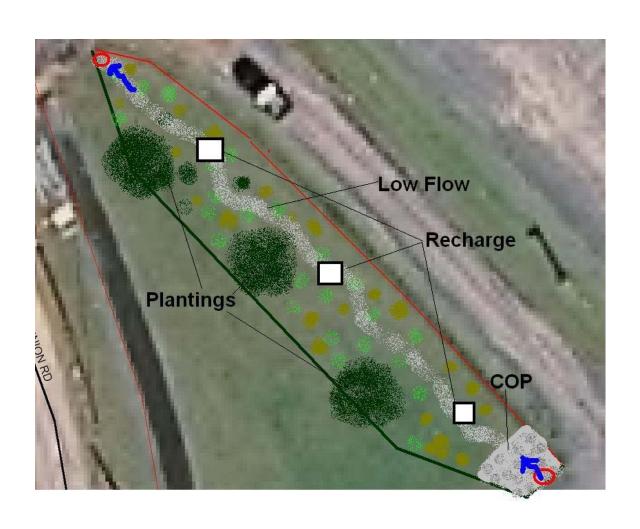
## Kingwood Park- Rain Garden



## Bio-Swale



# Bio-Swale



## **Bio-swales**



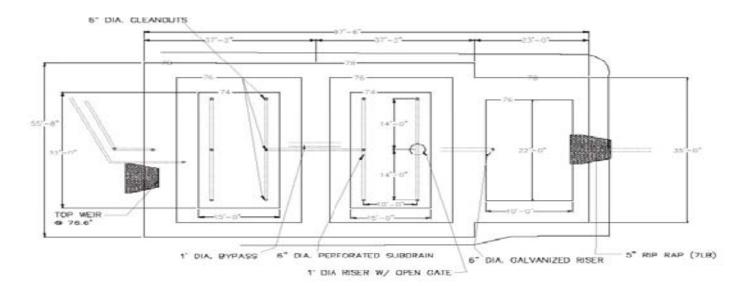


### **Gravel Wetlands**

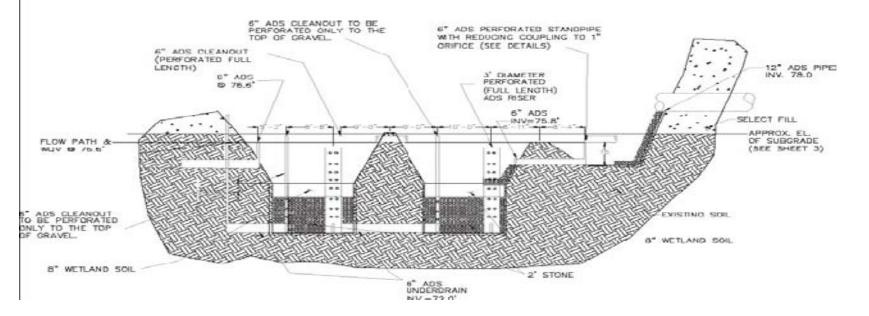


#### **Gravel Wetlands**





NOTE: 6" ADS CLEANOUTS SHALL BE NON-PERFORATED, CAPPED WITH THREADED FITTING AND SUPPORTED. NOTE: ALL RISER PIPES CONTAIN 4 -1/2" PERFORATIONS AT 90 DEGREES TO EACH OTHER ON 2" CENTERS



#### Thanks

- Questions?
- Better look at Gravel Wetlands?