Going Green at the Collins Hill Library is a Win for the Community

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Presented by

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Gwinnett County DWR

Department of Water Resources

- Organization
- Funding
- Objectives





WIP Focus Areas

GCSMM BMP DESIGNS

SMART STORMWATER MASTER PLANNING

MODELING AND H & H STUDIES

GIS AND CAD SUPPORT





Project Guidance Documents

GWINNETT COUNTY
STORMWATER MANAGEMENT
MANUAL (GCSMM)

GCDWR WIP MONITORING
GUIDANCE

GCDWR BMP CONSTRUCTION FIELD GUIDE

FEE SCHEDULE SPREADSHEET

FINAL CONFORMED WIP ANNUAL CONTRACT VOL 1 (SPECS) AND VOL 2 (DETAILS)





Selection of Collins Hill Library

A 2017 assessment of existing facilities, detention ponds, and BMP retrofit opportunities identified the Collins Hill Library site as a priority project for:

- Improving water quality
- Monitoring BMP pollution removal performance
- Providing educational demonstration projects





Project Design

Project Purpose

- Provide additional low maintenance BMP's
- Improve water quality of stormwater runoff
- Create educational opportunities for library patrons and staff







Final Concept Development

Process included:

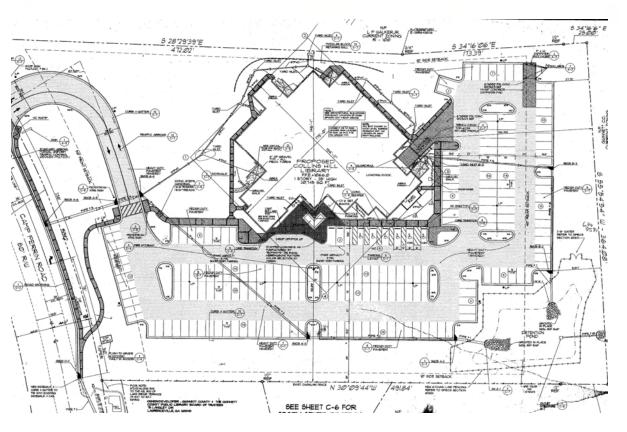
- Review of existing information
- Site visit
- Preliminary H and H modeling and analysis
- Stakeholder meetings
- Final concept





Existing Information

- Pond Asbuilts
- Construction Plans
- Concept Study

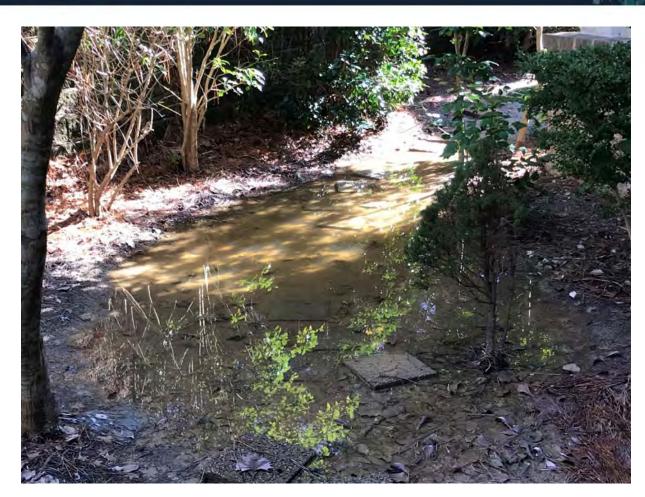






Site Visit

- Proposed BMP locations
- Existing drainage patterns
- Site constraints







Stakeholder Meeting

Discussion Topics

- BMP function
- Educational benefits
- Site concerns
- Maintenance
- Construction







Final BMP Site Selection



- Enhanced Swale
- Permeable Pavement
- Bio Retention
- RSC





Design Phase

- Survey
- Geotechnical investigation
- 60% staking of BMP's
- Stakeholder meetings
- Site visits

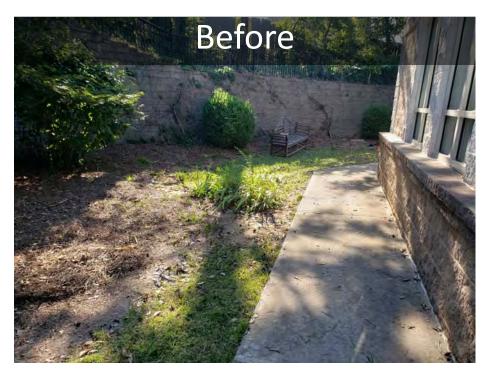






Construction

Bioretention Installation...









Construction

...and in between











Construction

Educational Component









Lessons Learned

- BMP Design is not Always Standardized
- Challenges Designing to the Annual Contract
- Expect the Unexpected
- Need Contractor Familiar with BMP Construction (Challenging!)
- Involve Partners in Design/Construction Process
- ?





Questions?

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