

where people matter

City of Loganville

Public Utilities  
Brandon Phillips  
Director

P.O. Box 39  
Loganville, GA 30052

Tel: 770-466-3240

## Staff Report Department of Public Utilities

**To:** Honorable Mayor Baliles and Members of the City Council

**Through:** Danny Roberts, City Manager

**From:** Brandon Phillips, Director of Utilities

**Date:** April 13, 2023

**Subject:** Runoff Reduction Infeasibility for Logan Miami Development

### **DEVELOPER REQUEST:**

Steve Allen is requesting the City of Loganville waive the stormwater run-off reduction requirement for this development.

### **STAFF RECOMMENDATION:**

After reviewing the infiltration testing results from EnviroSoil, infiltration rates at the proposed stormwater best management practices (BMP's) are far less than 0.5 inches per hour which indicates runoff reduction cannot be supported by such low permeability. If the entire 1-inch runoff reduction standard cannot be met, the remaining runoff from the 1.2-inch rainfall must be treated by BMP's to remove at least 80% of the post-developed total suspended solids loading. After reviewing the Georgia Stormwater Management Manual Site Development Review Tool in the hydrology report, the proposed BMP's provide at least 80% total suspended solids removal for the site.

Therefore, the Department of Utilities along with the city engineers (Precision Planning) recommends that City Council waive the run-off reduction requirements for this development.

### **BACKGROUND:**

Runoff reduction practices are designed to retain the first 1-inch of rainfall on sites. Runoff reduction practices are intended to eliminate stormwater runoff rather than treating or detaining runoff, usually through infiltration practices. Sites containing shallow rock, poor soil infiltration rates, or a high water table typically cannot support runoff reduction. Soil infiltration rates should be greater than 0.5 inches per hour to support runoff reduction.

Date (submitted): 11/11/22

**City of Loganville**  
**Runoff Reduction Infeasibility (RRI) Form for**  
**Determination of Infeasibility**

Design Professional Primary Contact (Name/Email/Phone):

Tip Huynh / tipacell@gmail.com / 770-466-4002

Description of Site/Land Development Application Number: Logan Miami Townhouses

Address: Tommy Lee Fuller Rd.

Size (acres): 17.82

Maximum Practicable Runoff Reduction Volume\*: 0

*\*If any of the stormwater runoff volume generated by the first 1.0" of rainfall cannot be reduced or retained on the site, due to site characteristics or constraints, the remaining volume shall be increased by a multiplier of 1.2 and shall be intercepted and treated in one or more best management practices that provide at least an 80 percent reduction in total suspended solids.*

provided stormwater Pond 1 & Pond 2 to provide 1.2 WQV Volume.

**GENERAL SUPPORTING DOCUMENTATION**

All General Supporting Documentation must be included with this RRI Form for the submittal for a Determination of Infeasibility to be considered complete. Please check each item below to confirm it has been included in the submittal package.

Stormwater Concept Plan that has been developed based on site analysis, and natural resources inventory (including impracticability) in accordance with Section 2.4.2.5 of the GSMM

GSMM Stormwater Quality Site Development Review Tool for the Stormwater Concept Plan

Please include justification that the site cannot accommodate best management practices that rely on evapotranspiration and reuse such as rainwater harvesting or green roofs

Not practical for this townhouse development with 17.82 AC of total site acreage. See attached letter

**SITE CONDITION APPLICABILITY**

(descriptions are in *Policy on Practicability Analysis for Runoff Reduction*)

Please check each applicable item below and confirm the supporting documentation has been included in the submittal for a Determination of Infeasibility.

Site Condition	Supporting Documentation
<input checked="" type="checkbox"/> Soil Infiltration Rate <i>See attached Infiltration Report</i>	Infiltration test(s), Soil Boring Log(s), and Report of results as interpreted by a Professional Engineer, Professional Geologist, or Soil Scientist licensed in Georgia
<input type="checkbox"/> Water Table	Soil Boring Log(s) and Report with results of the seasonal high-water table assessment as interpreted by a Professional Engineer, Professional Geologist, or Soil Scientist licensed in Georgia
<input type="checkbox"/> Bedrock	Soil Boring Log(s) and Report with results of the shallow bedrock assessment as interpreted by a Professional Engineer, Professional Geologist, or Soil Scientist licensed in Georgia
<input type="checkbox"/> Extreme Topography	Site survey showing 50% of the site is steeper than 3:1 slopes as interpreted by a Professional Engineer or Land Surveyor licensed in Georgia AND Stormwater Concept Plan showing the proposed post-development condition will not change from the site survey
<input type="checkbox"/> Karst Topography	Report developed by a Professional Engineer, Professional Geologist, or Soil Scientist licensed in Georgia
<input type="checkbox"/> Hotspots/ Contamination	Phase I Environmental Assessment Report
<input type="checkbox"/> Historic Resources	Documentation of the NAHRGIS listing OR Report of assessment from a Preservation Professional (including Archaeologist, Architectural Historian, Historian, Historic Preservationist, or Historic Preservation Planner)
<input type="checkbox"/> Site Constraints	Site Plan identifying all development requirements (e.g. zoning side/front setbacks, build-to-lines, stream buffers, floodplains, septic fields) that are creating irreconcilable conflicts with on-site runoff reduction
<input type="checkbox"/> Economic Hardship*	An estimated cost comparison of proposed runoff reduction practices compared to the proposed water quality practices must be included to demonstrate an economic hardship and must show the cost of providing runoff reduction is a minimum of three times greater than the cost of providing water quality practices

\* Note: A Determination of Infeasibility cannot be granted solely for economic hardship and must be present with another site condition. Additionally, a Determination of Infeasibility for economic hardship may only be allowed for up to 50% runoff reduction volume.

**STORMWATER RUNOFF QUALITY/ REDUCTION SUMMARY**


Maximum Practicable Runoff Reduction Volume\*:

Remainder of Volume treated by Water Quality Best Management Practice:

*\*If any of the stormwater runoff volume generated by the first 1.0" of rainfall cannot be reduced or retained on the site, due to site characteristics or constraints, the remaining volume shall be increased by a multiplier of 1.2 and shall be intercepted and treated in one or more best management practices that provide at least an 80 percent reduction in total suspended solids.*

Full Water Quality Volume of 1.2" is provided through stormwater Pond #1 & Pond #2

Design Professional Printed Name Tip Huynh

Design Professional Signature 

**FOR CITY OF LOGANVILLE USE ONLY**

- ENGINEER RECOMMENDED APPROVED
- ENGINEER RECOMMENDED APPROVED WITH CONDITIONS
- ENGINEER RECOMMENDED DENIED

- STAFF RECOMMENDED APPROVED
- STAFF RECOMMENDED APPROVED WITH CONDITIONS
- STAFF RECOMMENDED DENIED

**\*\*Attach supporting documentation if needed for Engineer and Staff Recommendations\*\***

- CITY COUNCIL APPROVED
- CITY COUNCIL APPROVED WITH CONDITIONS
- CITY COUNCIL DENIED

DATE OF CITY COUNCIL MEETING: \_\_\_\_\_

Staff Reviewer  
:

(Print Name)

(Signature)

(Date)



**A.C.E.**  
**ALCOVY CONSULTING ENGINEERING  
AND ASSOCIATES, LLC.**

August 11, 2022

Mr. Tim Prater  
Planning and Development Director  
City of Loganville  
P.O. Box 39  
Loganville, GA 30052

Dear Mr. Prater,

I am writing in response to City Engineer comments #25 pertaining to section 8.9.11.a, runoff reduction requirements. Since this property was previously developed and all storm water conveyance piping and existing wet extended detention facilities have been built and is currently holding water at the bottom, it is not possible to achieve the required runoff reduction requirements per the GSWM. Due to low infiltration rate at the location where flow from the site is collected, Runoff Reduction for the site cannot be achieved. Furthermore, due to the large scale and type of construction of the project, BMPs such as rainwater harvesting, or green roof cannot be practically implemented. Therefore, we are requesting that this requirement be waived, and the city approves our proposed modification to the existing stormwater facilities into stormwater ponds to provide for the water quality requirements in place of the runoff reduction.

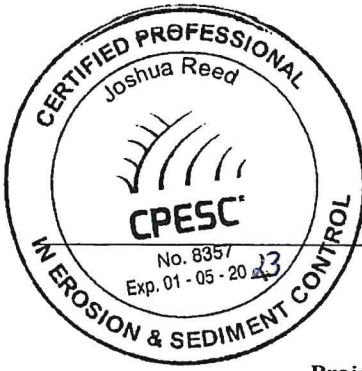
Please contact me at 770-466-4002 should you have any questions or concerns.

Sincerely,



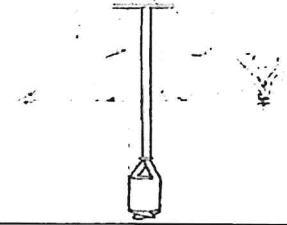
Tip Huynh, P.E.  
Principal Engineer

485 Edwards Rd.  
Oxford, Georgia 30054  
Phone: 770-466-4002  
TIPACELLC@GMAIL.COM



# EnviroSoil

Soil and Environmental Consultants  
 1191 BERRYHILL DR LITHONIA, GA 30058  
 PH: 678-815-8970  
[Envirosoilse@gmail.com](mailto:Envirosoilse@gmail.com)



## Infiltration tests for Residential/Commercial

Project Address: TOMMY LEE FULLER Project# 22-497

Type of Study or Method: Single Ring for no side wall absorption (porchet method) CHP and Soil Survey Mapping

Land Lot 185 District 4TH

### Existing site conditions

The site is located at TOMMY LEE FULLER RD LOGANVILLE, GA

The site has minimal activities, but the project is an existing plat subdivision with existing basin that is requiring an infiltration test under current site conditions.

Infiltration Test A : GPS : 33 49 54.537 / 83 53 48.809 Cut Soil

Infiltration Test B : GPS: 33 49 48.200 / 83 53 54.883 Cut Soil

### Infiltration test

Infiltration number	Soil series	Hydrologic Soil Group	Soil Drainage class	Infiltration rate Inches/hour	Green Infrastructure Types	Depth of test
A	CUT-FILL	D	POORLY DRAINED	.12	--	24
B	CUT-FILL	D	POORLY DRAINED	.09	--	24

Joshua Reed, CPSS/CPSC/CPESC  
 EnviroSoil  
 678-815-8970  
 1191 Berryhill drive  
 Lithonia, Ga 30058

