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June 17, 2025

Mr. Ricky Clark
City Manager
745 Forest Parkway
Forest Park, GA 30297

RE: Metcalf Road Extension – Stormwater Review

Dear Mr. Clark,

Forest Park ordinance Section 8-11-7.4 requires runoff reduction be provided to the maximum extent practicable. Falcon Design Consultants recommends that the City waive runoff reduction requirements for the Metcalf Road Extension project based on Clayton County Water Authority's (CCWA) Appendix C. Policy on Practicability Analysis for Runoff Reduction. See attached.

We believe this project will qualify for waiver due to "Extreme Topography" and "Site Constraints". The proposed roadway will run through steep existing topography and is near existing industrial facilities, stream buffers, wetlands, and floodplain. This leaves very little room for stormwater management infrastructure – certainly not enough area for separate runoff reduction facilities along with their required pretreatment measures and setbacks. For these reasons, runoff reduction is not practicable and should be waived, in general accordance with Georgia Stormwater Management Manual (GSMM) and Clayton County Water Authority (CCWA) standards.

Thank you,

Adam Price, P.E.
Managing Partner
Falcon Design Consultants, LLC.

Appendix C
Policy on Practicability Analysis for Runoff Reduction

Clayton County Water Authority

Appendix C. Policy on Practicability Analysis for Runoff Reduction

Introduction

Runoff reduction practices are stormwater management facilities used to disconnect impervious and disturbed pervious surfaces from the storm drainage system. The purpose is to reduce post-construction stormwater runoff rates, volumes, and pollutant loads. Runoff reduction is more than simple infiltration. The Runoff Reduction Volume (RR_V) is the retention volume calculated to infiltrate, evapotranspirate, harvest and use, or otherwise remove runoff from a post-developed condition to mimic the natural hydrologic conditions more closely.

Certain conditions, such as soils with very low infiltration rates, high groundwater, or shallow bedrock, may lead CCWA to waive or reduce the runoff reduction requirement for proposed site development on a case-by-case basis. If any of the stormwater runoff volume generated by the first 1.0 inch 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 stormwater management facilities that provide at least an 80 percent reduction in total suspended solids.

The Clayton County Water Authority Policy on Practicability Analysis for Runoff Reduction (practicability policy) was developed to provide guidance about the site conditions and supporting documentation that could justify a "Determination of Infeasibility" for the runoff reduction stormwater management standard. This policy does not address stormwater management standards infeasibility for linear transportation projects; refer to the Clayton County Water Authority Policy on Practicability Analysis for Linear Transportation Projects for additional information.

The practicability policy is based on the following principles:

- Designed to help CCWA implement a process for granting a Determination of Infeasibility that supports review of land development applications.
- Applies to new development and redevelopment projects for public and private post-construction stormwater management facilities. It is referenced in the Post-Construction Stormwater Management Ordinance adopted by Clayton County and six Cities and the CCWA Stormwater Development Guidelines.
- Aligns with requirements for runoff reduction in the Georgia Environmental Protection Division's permit to discharge from the municipal separate storm sewer system (MS4) permit. The MS4 permit states that the stormwater management system shall be designed to retain the first 1.0 inch of rainfall on the site to the maximum extent practicable. Many Georgia Stormwater Management Manual (GSMM) stormwater management facilities include a runoff reduction component.
- Focused on the site conditions and regulatory environment in Clayton County.
- Requires ensuring all attempts to provide 100 percent RRV onsite have been exhausted when pursuing a Determination of Infeasibility.
- Applicants must request a pre-submittal consultation with CCWA or their designee when applying for a Determination of Infeasibility through the practicability policy.

Conditions that may Warrant a Determination of Infeasibility

The GSMM and the CCWA Stormwater Development Guidelines provide broad guidance about conditions that may lead CCWA to waive or reduce the runoff reduction stormwater management standard. The following conditions may warrant a Determination of Infeasibility.

- **Soil Infiltration Rate:** The soil infiltration rate is less than 0.5 inch per hour as measured over a meaningful portion of the site. Consideration should be given to infiltration rates throughout the soil profile.
- **Water Table:** The water table seasonal high elevation is measured less than 2 feet from the subgrade of a proposed infiltration practice.
- **Shallow Bedrock:** Bedrock that cannot be excavated by mechanical means AND is less than 2 feet from the subgrade of an infiltration practice.
- **Extreme Topography:** Proposed conditions reflect surface grades steeper than 3:1 (H:V) slope for more than 50 percent of the contributing drainage area.
- **Karst Topography:** Any of the existing conditions onsite exhibit karst topography.
- **Hotspots/ Contamination:** Reasonable suspicion that previous land uses have resulted in soil contamination onsite.
- **Historic Resources:** Buildings, structures, or historic sites included in the Georgia Historic Preservation Division's Historic Resources Survey or listed in the National Register of Historic Places or that has been recommended as a historic resource by a Preservation Professional.
- **Site Constraints:** Sites where the density or nature of the proposed redevelopment would create irreconcilable conflicts for compliance between the runoff reduction stormwater management standard and other requirements such as zoning, floodplains, stream buffers, or septic fields.
- **Economic Hardship:** The cost of retaining the first 1.0 inch of rainfall onsite using runoff reduction practices is equal to or greater than three times the cost of providing water quality practices to meet the stormwater management standards. This condition must be present with at least one other condition to warrant a Determination of Infeasibility. Additionally, a Determination of Infeasibility for economic hardship is applicable to a maximum 50 percent of the volume required for meeting the runoff reduction stormwater management standard.

Obtaining a Determination of Infeasibility

Determination of Infeasibility is not an all or nothing proposition. Design professionals must demonstrate that they have explored all avenues to meet the runoff reduction standard. If meeting the runoff reduction standard is determined to be infeasible, design professionals must attempt to provide the maximum percentage of RR_V on site as feasible. Only after all attempts to provide any RR_V on site are exhausted will CCWA consider a Determination of Infeasibility.

Qualify for a Determination of Infeasibility?

Answering "NO" to any of the following questions may indicate that the site qualifies for a Determination of Infeasibility:

1. Can GSMM runoff reduction stormwater management facilities fully meet the runoff reduction volume?
2. Does the site analysis show the conditions are supportive for managing the calculated runoff reduction volume needed for the site?
3. Can better site design practices (see GSMM, Volume 2, Section 2.3) be used to avoid challenging site conditions or constraints?
4. Can stormwater management facilities, such as green roofs and rainwater harvesting techniques, be used in ways that do not require infiltration into subsurface soils, but rather rely on evapotranspiration and reuse?
5. Can the installation of multiple runoff reduction stormwater management facilities, such as installing runoff reduction stormwater management facilities at higher elevations or in multiple subwatersheds, manage the calculated runoff reduction volume needed for the site?

Prior to Construction

1. Prior to submittal of the land development permit application, the design professional identifies conditions that limit using runoff reduction methods to retain 100 percent of the first 1.0 inch of rainfall onsite and must request a pre-submittal consultation with CCWA or their designee. CCWA will assess the need for a meeting with the design professional based on the project and site information provided with the Determination of Infeasibility application. If CCWA schedules a meeting with the applicant for the pre-submittal consultation, the following information will be reviewed during the meeting:

- Runoff Reduction Infeasibility Form.
- Supporting documentation submitted with the Determination of Infeasibility application.
    - Conceptual Stormwater Management Plan that has been developed based on site analysis and natural resources inventory (including impracticability) in accordance with GSMM, Volume 2, Section 2.4.2.5.
    - GSMM Stormwater Quality Site Development Review Tool for the Conceptual Stormwater Management Plan.
    - Written justification that the site cannot accommodate runoff reduction practices that rely on evapotranspiration and reuse such as rainwater harvesting or green roofs.
- Documentation of pre-submittal consultation outcomes.

2. CCWA or their designee will evaluate the information provided by the design professional on a case-by-case basis; coordinate with the design professional to understand site-specific issues; and explore potential design strategies to achieve 100 percent RR_V in compliance with the standards and specifications of the Post-Construction Stormwater Management Ordinance and GSMM.

3. Based on pre-submittal consultation meeting and information provided by the design professional, CCWA will provide one of the following determinations to the design professional:

- Approval – preliminary Determination of Infeasibility issued
- Approval with conditions – preliminary Determination of Infeasibility issued with conditions to incorporate CCWA comments into the Conceptual Stormwater Management Plan
- Denial - revise the Conceptual Stormwater Management Plan to obtain 100 percent RR_V

4. Design professional may either:

- Submit the land development application with the Stormwater Management Plan and preliminary Determination of Infeasibility (as applicable).
- Appeal the "denial" or "conditions" following the appeals process outlined in the CCWA ordinance (Ord. No. 2006-44, Pt. 1, 3-21-06).

During Construction

1. During the development process, the owner encounters a site condition that would prevent building stormwater management facilities as specified in the Stormwater Management Plan. The design professional will complete a Runoff Reduction Infeasibility Form and initiate a meeting with CCWA or their designee to discuss the findings. The design professional must evaluate modifications to the proposed stormwater management facilities or installation of alternative stormwater management facilities that will provide some or all RR_V in an alternative method.

2. CCWA will evaluate the Runoff Reduction Infeasibility Form on a case-by-case basis; coordinate with the design professional to understand site-specific issues; and explore potential design strategies to keep the stormwater management facilities identified in the Stormwater Management Plan.

3. Based on the Runoff Reduction Infeasibility Form and meeting, CCWA will provide one of the following determinations to the design professional:

- Approval – determination of Infeasibility is issued and attached to the land development permit
- Approval with conditions – preliminary Determination of Infeasibility issued with conditions to either:
    - Revise the design of runoff reduction methods (e.g. adding soil amendments or an underdrain to maximize runoff reduction volume) to retain the first 1.0 inch of rainfall onsite.
    - Meet the stormwater runoff reduction standard through a combination of runoff reduction and water quality management.

4. Design professional may either:

- Continue construction as outlined in the modified Stormwater Management Plan under the land development permit revision with an approved Determination of Infeasibility.
- Appeal the "conditions" following the appeals process as outlined in the CCWA ordinance (Ord. No. 2006-44, Pt. 1, 3-21-06).

Attachment C-1
Runoff Reduction Infeasibility (RRI) Form for Determination of Infeasibility

Date (submitted):_____

Clayton County Water Authority

Runoff Reduction Infeasibility (RRI) Form for Determination of Infeasibility

DESIGN PROFESSIONAL CONTACT INFORMATION

Name: _____

Email: _____

Phone: _____

DESCRIPTION OF SITE

Land Development Application Number: _____

Site Address: _____

PROPOSED CONDITIONS OF SITE

Disturbed Area (acres): _____

Impervious Area (acres): _____

RUNOFF REDUCTION AND WATER QUALITY VOLUME SUMMARY

Maximum Practicable Runoff Reduction Volume* (cubic feet): _____

Volume for Water Quality Treatment* (cubic feet): _____

**If any of the stormwater runoff volume generated by the first 1.0 inches 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 stormwater management facilities that provide at least an 80 percent reduction in total suspended solids.*

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.

- ☐ Conceptual Stormwater Management Plan (*prior to construction*) **OR** Stormwater Management Plan (*during construction*).
- ☐ GSMM Stormwater Quality Site Development Review Tool for the Conceptual Stormwater Management Plan (*prior to construction*) **OR** GSMM Stormwater Quality Site Development Review Tool for the Stormwater Management Plan (*during construction*).
- ☐ Written justification that the site cannot accommodate runoff reduction practices that rely on evapotranspiration and reuse such as rainwater harvesting or green roofs.

SITE CONDITION APPLICABILITY

Site condition descriptions are in the Clayton County Water Authority 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
☐ Soil Infiltration Rate	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
☐ Water Table	Soil boring log(s) and report with results of the seasonal highwater table assessment as interpreted by a professional engineer, professional geologist, or soil scientist licensed in Georgia
☐ 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
☐ Extreme Topography	Site survey showing 50 percent of the contributing drainage area is steeper than 3:1 (H:V) slopes, as interpreted by a professional engineer or land surveyor licensed in Georgia. Conceptual Stormwater Management Plan (*prior to construction*) **OR** Stormwater Management Plan (*during construction*), showing the post-development surface grades will reflect the same condition as the site survey
☐ Karst Topography	Report developed by a professional engineer, professional geologist, or soil scientist licensed in Georgia
☐ Hotspots/ Contamination	Phase I Environmental Assessment Report
☐ Historic Resources	Documentation of the Georgia's Natural, Archaeological, and Historic Resources GIS listing **OR** Report of assessment from a preservation professional (including archaeologist, architectural historian, historian, historic preservationist, or historic preservation planner)
☐ 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 onsite runoff reduction
☐ Economic Hardship*	An estimated construction cost comparison of proposed runoff reduction practices compared to proposed water quality practices must be included to show the cost of runoff reduction practices is equal to or greater than three times the cost of providing water quality practices

** Note: Economic Hardship must be present with at least one other condition to warrant a Determination of Infeasibility. Additionally, a Determination of Infeasibility for economic hardship is applicable to a maximum 50 percent of the volume required for meeting the runoff reduction stormwater management standard.*

GEORGIA PROFESSIONAL ENGINEER CERTIFICATION

Printed Name: _____

Signature: _____

Date: _____

FOR CLAYTON COUNTY WATER AUTHORITY USE ONLY

☐ **APPROVED**

☐ **APPROVED with the following requirements:**

☐ **DENIED**

CCWA Administrator:

_____

(Printed Name) (Signature) (Date)