

**"WE PROVIDE SOLUTIONS"**

**DOWNSTREAM ANALYSIS**  
**OF**  
**110 WOODSTOCK STREET**  
**A TOWNHOME DEVELOPMENT**

**City of Roswell, Georgia**

**Approximate 2.425 Acres**  
**LL 411, 1<sup>st</sup> District, 2<sup>nd</sup> Section**

**Prepared For**  
**Lehigh Homes**  
**885 Woodstock Road**  
**Suite 430-849**  
**Roswell, Georgia 30075**

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**PEC Job # 14015.00**



## TABLE OF CONTENTS

SECTION	PAGE
Project Description	3
Site Location Map	4
Downstream Conditions and 10% Analysis	5
Conclusions	6
<b>APPENDIX</b>	
A. 10% Drainage Map	A-1

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## PROJECT DESCRIPTION

### Overview:

This development will consist of 21 townhome units. The project site comprises 2.425 acres, with a home density of 8.65 units/acre. The project site is located at 110 Woodstock Street (just northwest of the intersection of Woodstock Street and Alpharetta Street). The site is bounded by Old Roswell Cemetery to the east, Woodstock Street to the south, the Woodstock Park parking lot to the west, and a townhome development to the north. It is located in the city of Roswell, Ga, and within the jurisdictional boundaries of Fulton County, Georgia (LL 411, 1<sup>st</sup> District, 2<sup>nd</sup> Section).

### Existing Site Conditions:

The existing site is predominantly wooded with townhomes situated to the north of the site. The parking lot for Woodstock Park extends to the western property line of the site, and is shown on the right side of Figure 1.



Figure 1. Woodstock Park parking lot

The site consists of elevations ranging from approximately 1,088 ft. to 1,061 ft. over a lateral distance of approximately 475 ft. that run from the southwest to the northeast.

### Proposed Project:

The proposed project will encompass 21 townhome units. The project will have one storm water detention area located near the northeast outfall of the site. The majority of runoff developed onsite will be directed to this facility for treatment and detention. Permeable pavement will be used for water quality. After being detained, storm water will leave the site to the northeast side of the site. Storm water will drain through an existing backyard swale of the Townsend Place subdivision where it will meet the 10% point.

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## SITE LOCATION MAP

Figures 2 and 3 show both the location and an aerial view of the site.



Figure 2. Site Location Map

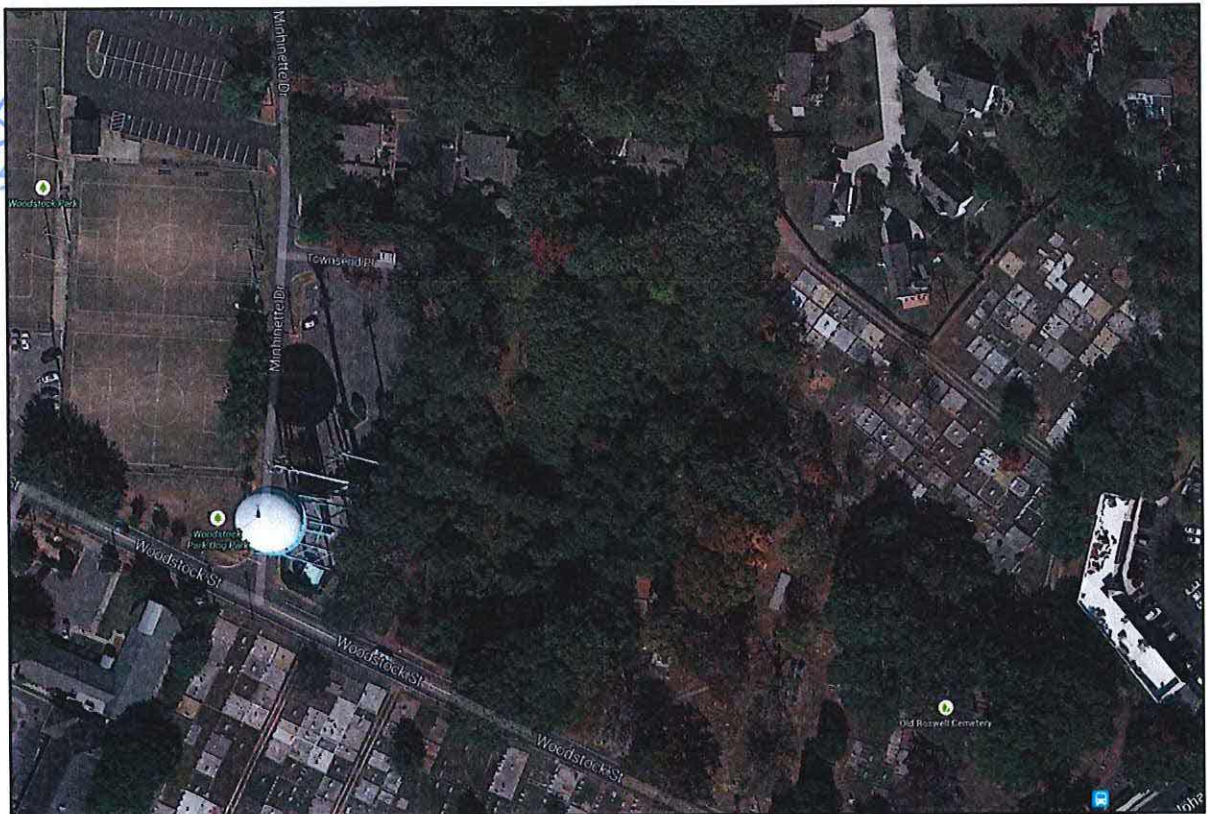


Figure 3. Aerial View of the Site

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## DOWNSTREAM CONDITIONS AND 10% ANALYSIS

### Downstream Point Summary:

The downstream analysis of the site shows that storm water runs through the swale located in Figure 4. The swale is vegetated properly with sod, and is located in a backyard of an existing townhome. The swale extends to the 10% point located in Figure 5. Storm water runs through the 10% point, which currently consists of riprap, before exiting to a ditch.



Figure 4. Downstream conditions – Existing grass swale



Figure 5. Downstream conditions – Riprap at 10% point

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## CONCLUSIONS

No erosion problems currently exist along the flow path of the 10% basin. The existing swale and riprap have been properly maintained. Furthermore, since the proposed site will contain runoff flow less than existing conditions, the performance of the existing downstream swale and riprap will be improved.

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## APPENDIX A

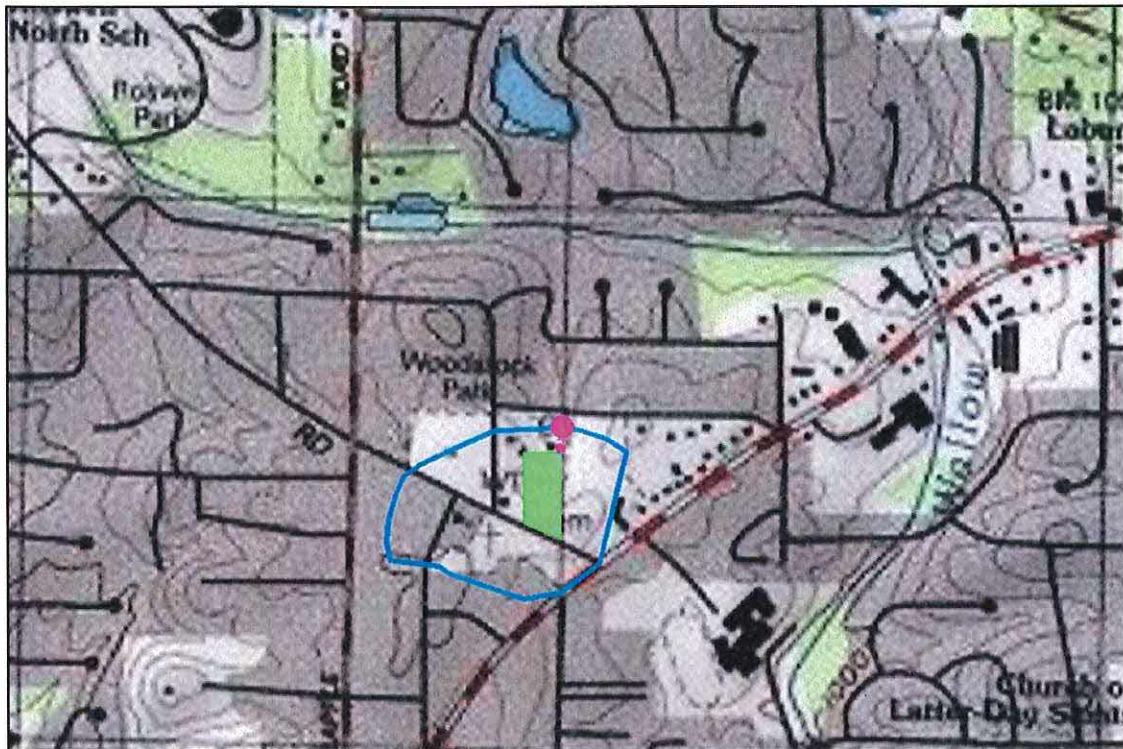


Figure A-1. 10% Drainage Map

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