

## HENDERSON COUNTY REVIEW OF CITY WATER LINE EXTENSIONS

Project Name: Mountain Top, Phase 1 and 2  
 Size of Water Line (Main & Distribution Pipe Size): Mueller Centurion – National Standard Thread  
 County Staff Reviewing Extension: Matt Card, Planner; Lori Sand, Project Manager; Rocky Hyder, Fire Marshal

Has the project been reviewed under the **County Subdivision Ordinance**?  Yes  No  N/A  
 Date reviewed: August 16, 2005  
 Action: Approved with Conditions  
 Conditions: Final Plat Requirements, Road Name Approval, Water Approval and Soil Erosion Plan Approval  
 Comments:

Has the project been reviewed under the **County Manufactured Park Ordinance**?  Yes  No  N/A  
 Date reviewed: \_\_\_\_\_  
 Action: \_\_\_\_\_  
 Conditions: \_\_\_\_\_  
 Comments:

Has the project been reviewed under the **County Zoning Ordinance (i.e. Special-Use or Conditional-Use Permit)**?  Yes  No  N/A  
 Date reviewed: \_\_\_\_\_  
 Action: \_\_\_\_\_  
 Conditions: \_\_\_\_\_  
 Comments:

Is the project subject to **any other County Land Use Ordinance**?  Yes  No  N/A  
 If yes, explain: Property is in the Water Supply Watershed District IV

Does the project conform with the **2020 Henderson County Comprehensive Plan (CCP)**?  Yes  No  N/A

Does the project have **adequate hydrant location and spacing**?  Yes  No  N/A

Description of **hydrant type and thread**: Mueller Centurion – National Standard Thread

Does the estimated flow rate (gpm) meet **fire protection standards**? No estimated flow provided due to ongoing construction. Minimum flow rate of 750 gpm should be provided for structures spaced 31 to 100 feet apart.  Yes  No  N/A

### BOARD OF COMMISSIONERS APPROVAL

- Approved
- Not Approved
- Conditional Approval (See Comments)

Date of Board Review: \_\_\_\_\_  
 Comments: \_\_\_\_\_

**City of Hendersonville - Project Summary  
Water Line Extension  
Mountain Top, Phase 1 & 2**

Date: October 19, 2005

This is a project to extend existing water lines to provide water service to 65 residential lots in the Mountain Top area of the existing Cummings Cove Golf & Country Club, east of the Etowah community.

This project is under the reviewing jurisdiction of: **Henderson County.**

This project requires approximately **4,600** linear feet of water line sized as following:

Description:	Approximate Length
6" DIP CL350	4,600 lf

Fire Protection will be provided by the installation of 13 fire hydrant(s).

The entire cost of the proposed water line extension is to be paid for by Cummings Cove Company, LLC.

Water pressure and flow in this area is as follows:

The lines in this project will be connecting to another section that is under construction. Therefore, actual pressure & flow is not available at this time. The Engineer is responsible to ensure that pressure meets the State requirements.

*Based on the above information, the Water & Sewer department is capable of supporting the additional connections and recommends approval of the project contingent upon approval of the final plans and specifications from the Water & Sewer Department.*

A motion is needed to approve and accept this project. Suggest wording is as follows:

**I move to accept this water line extension project and to authorize the City manager to execute the water line extension agreement on behalf of the City.**

Water & Sewer Department:	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: 10-12-05
Hendersonville City Council:	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____

The undersigned represents this utility extension line request has been evaluated in light of the adopted land use plan for the municipality or Henderson County. In the absence of such a plan for the general area to be served, this extension has been evaluated in terms of its future impact on existing land uses.	
Reviewing Jurisdiction: Henderson County	
Signing Official: _____	
Date of Review: _____	
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	
Narrative Comments Provided: <input type="checkbox"/> Yes <input type="checkbox"/> No	

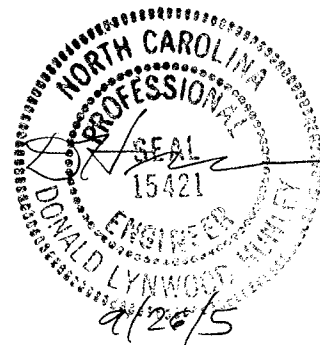
# **ENGINEER'S REPORT**

**FOR**

## **CUMMINGS COVE GOLF & COUNTRY CLUB**

**MOUNTAIN TOP AREA – PHASES 1 & 2  
WATER SYSTEM IMPROVEMENTS**

**CITY OF HENDERSONVILLE  
HENDERSON COUNTY, NORTH CAROLINA**



**PREPARED BY:**

**WILLIAM G. LAPSLEY & ASSOCIATES, P.A.  
CONSULTING ENGINEERS  
1635 ASHEVILLE HIGHWAY  
HENDERSONVILLE, NORTH CAROLINA**

**SEPTEMBER 2005**

**ENGINEER'S REPORT**  
**CUMMINGS COVE GOLF & COUNTRY CLUB**  
**MOUNTAIN TOP AREA – PHASES 1 & 2**  
**WATER SYSTEM IMPROVEMENTS**

**1. NAME AND ADDRESS OF APPLICANT**

City of Hendersonville  
P.O. Box 1760  
Hendersonville, NC 28793

**2. PROJECT DESCRIPTION & INTRODUCTION**

This project is located off of Cummings Road east of the community of Etowah. The project involves the extension of approximately 4600 LF of 6" water main to serve two new phases of the Cummings Cove Golf & Country Club . The water system users are all residential in nature.

**3. DESCRIPTION OF FUTURE SERVICE AREAS**

These extensions will serve Phases 1 & 2 of the Mountain Top Area of Cummings Cove. The extensions could serve other phases of Cummings Cove with future extensions.

**4. PRESENT AND ANTICIPATED WATER DEMANDS**

There is currently no water demand at the site. This phase of the development will create 65 additional lots. Expected water usage is 26,000 gallons per day.

**5. CHARACTER OF THE SOURCE OF SUPPLY**

The water supply for this project is from the City of Hendersonville Water Treatment Plant.

**6. AGREEMENTS TO PURCHASE WATER**

Not Applicable

**7. USEFUL LIFE OF FACILITIES**

The useful life of the water lines for this project is expected to be 30 years minimum.

**8. MAXIMUM DAILY TREATED WATER SUPPLY AND MAXIMUM DAILY DEMAND**

The maximum daily treated water supply for the City of Hendersonville water plant is 12 MGD. The average demand is 7.2 MGD, with a daily peak (for the year) of 9.5 MGD.

**9. IDENTIFICATION & DESCRIPTION OF THE SERVICE AREA**

The service area for this project is the Mountain Top Area of Cummings Cove, Phases 1 & 2. This property was previously forest land.

**10. CONSIDERATION OF ALTERNATIVES TO CONSTRUCTING A NEW WATER SYSTEM**

Not applicable

**11. POPULATION RECORDS AND TRENDS**

According to the Office of State Planning, The population of the City of Hendersonville in 1998 was 9,538 persons. The growth rate from 1990 to 1998 was 30.9%.

**12. PRESENT AND FUTURE YIELD FROM THE SOURCES OF SUPPLY**

The City of Hendersonville Water Plant currently draws water from the Mills River. The present and future yield of the source of supply is expected to be adequate for the City of Hendersonville's needs.

**13. PROPOSED WATER TREATMENT PROCESSES**

Not Applicable

**14. DESIGN BASIS**

The design basis for this project is to provide adequate flow and 30 psi minimum throughout the system.

**15. PRIORITIZED LIST OF INFRASTRUCTURE IMPROVEMENTS**

Not applicable