

REQUEST FOR BOARD ACTION

**HENDERSON COUNTY
BOARD OF COMMISSIONERS**

MEETING DATE: May 19, 2006

SUBJECT: Water Line Extension

ATTACHMENTS: Gary King Property Project Summary
 Engineer's Report
 County's Review Sheet

SUMMARY OF REQUEST:

The City of Hendersonville has requested County comments on a proposed water line extension project to serve Gary King property.

A City of Hendersonville Project Summary sheet, with backup documents and a County review sheet with staff comments are attached for Board review and action.

COUNTY MANAGER'S COMMENTS:

Recommend that the Board take action to support the referenced water line extension.

HENDERSON COUNTY REVIEW OF CITY WATER LINE EXTENSIONS

Project Name: Gary King Property
 Size of Water Line (Main & Distribution Pipe Size): 6" DIP CL 350 – 1,860 linear feet
 County Staff Reviewing Extension: Rocky Hyder, Fire Marshal, Matt Card, Subdivision Administrator, Natalie Berry, Zoning Administrator, Rodney Tucker, Project Mgr.

Has the project been reviewed under the **County Subdivision Ordinance**? Yes No N/A

Date reviewed: _____
 Action: _____
 Conditions: _____
 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: 5-2-06
 Action: Approved
 Conditions: Open Use Zoning District
 Comments: Permits required for tenant upfits. Permits required for shell.

Is the project subject to **any other County Land Use Ordinance**? Yes No N/A

If yes, explain: Floodplain Ordinance – Northeast rear corner prop has unnumbered "A" zone. Permit Required.

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**? Pursuant to the NC Fire Prevention Code, Section 508.5, every portion of every building should be within 400 feet of a fire hydrant. 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**? Flow rate will depend upon occupancy class of the commercial building. 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
King, Gary

Date: April 24, 2006

This is a project to extend existing water lines to provide water service to a proposed residential/commercial development. This project will serve 36 residential apartment units and a 9,200 sq ft commercial retail space. This project is located on Upward Road, just east of Crest Road.

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

This project requires approximately **1,860** linear feet of water line sized as following:

Description:	Approximate Length
6" DIP CL350	860 lf

Fire Protection will be provided by the installation of 2 fire hydrants.

The entire cost of the proposed water line extension is to be paid for by Gary King of Hendersonville, NC.

Water pressure and flow in this area is as follows:

Static Pressure:	80 PSI
Residual:	52 PSI
Flow:	800 GPM

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 type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____
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	

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PROJECT NARRATIVE

Project : **City of Hendersonville**
WATER LINE EXTENSION
to serve
Properties on Upward Road, SR 1722
located west of the intersection of Howard Gap Road, SR 1006

Project Number: **LAA05-221**

Owner/Developer: **City of Hendersonville**

Address: P.O. Box 1670
Hendersonville, North Carolina 28793

Telephone: (828) 697-3063

5.20.03

Description:

This proposed Water Main Extension is being planned to serve a proposed residential and commercial development on Upward Road, SR 1722 located 100± feet east of Crest Road southeast of Hendersonville. This water main extension is being done by private contractors for the City of Hendersonville's Water and Sewer Department.

This proposed water extension will require tapping into the existing 12 inch water service on the north side of Upward Road, SR 1722 with a 12 inch by 6 inch tapping tee and a 6 inch gate valve.

This extension shall be installed according to the proposed plans and as follows:

OFF-SITE WATER EXTENSION;

A proposed connection to the existing City of Hendersonville water system shall be made by connecting to the existing 12" water line on the north side of Upward Road 100 feet ± east of its intersection with Crest Road.

PROJECT NARRATIVE, continued

City of Hendersonville

ON-SITE WATER EXTENSION;

Approximately 1860 lineal feet of 6-inch diameter water main with appurtenances will be extended northward into the proposed development to a point where a gate valves and fire hydrant will be installed.

This water main extension and all other appurtenances necessary to provide adequate water distribution shall be installed.

In General;

The installation of this Water Main Extension is expected to begin shortly after all approvals and permits have been issued and "authorization to start" has been given by the City's Water and Sewer Department. The utility contractor for this project will be determined at a later date and the City Water and Sewer Department will be notified.

This is a water main extension for the City of Hendersonville Water and Sewer Department. This water main extension shall be installed in accordance with all local and state regulations by a N.C. licensed utility contractor to be selected by the Owner/Developer and approved by the Water and Sewer Department.

Laughter, Austin and Associates, P.A. (Consulting Engineers) shall provide installation monitoring services during the construction and installation process and provide completion certification when the job is completed as required under the terms of the "Water Line Extension Agreement" with the City Of Hendersonville Water and Sewer Department.

ENGINEER'S REPORT
FOR
WATER SYSTEM IMPROVEMENTS
To Serve
GARY KING UPWARD ROAD DEVELOPMENT
Hendersonville
NORTH CAROLINA
Project Number 05-221

Prepared By:

LAUGHTER, AUSTIN & ASSOCIATES, P.A.
131 Fourth Avenue East
Hendersonville, North Carolina 28792

March 27, 2006

ENGINEER'S REPORT
GARY KING UPWARD ROAD DEVELOPMENT
WATER MAIN EXTENSION

1. NAME AND ADDRESS OF APPLICANT

City of Hendersonville
PO Box 1760
Hendersonville, NC 28793

2. PROJECT DESCRIPTION & INTRODUCTION

This project is located on the north side of Upward Road (SR 1722) southeast of Hendersonville and west of the intersection of Upward Road (SR 1722) and Howard Gap Road (SR 1006). This water main extension is being done by contractors for the City of Hendersonville's Water and Sewer Department.

This proposed water extension will require tapping into the existing 12" water service on Upward Road at the proposed residential/commercial development of Gary King. At the proposed development, approximately 100 feet east of the intersection of Upward Road with Crest Road, a 12 inch by 6 inch tee will be installed with 1 gate valve. From this tee a 6" water service line will be extended into the proposed development for approximately 1860 feet. This 6" line within the proposed development will have 1-6" by 6" tee, 3-6" gate valves, and two fire hydrants installed.

3. DESCRIPTION OF FUTURE SERVICE AREAS

This extension will serve 36 proposed residential apartment units and 9200 square feet of commercial retail space. Existing lines are adequate for serving surrounding areas.

4. PRESENT AND ANTICIPATED WATER DEMANDS

Present water demands are to serve the 36 residential apartment units and 9200 square feet of commercial retail space in the proposed development. Thus the design demand is approximately 36 connections @ 400 GPD/connection and approximately 25 retail employees at 25 GPD. Total demand is approximately 15,025 GPD.

5. CHARACTER OF THE SOURCE 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 50 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 12MGD. 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 initial service area for this project is approximately 36 domestic connections and 9200 square feet of commercial retail space.

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 @ 30 psi minimum at the street.

15. **PRIORITIZED LIST OF INFRASTRUCTURE IMPROVEMENTS**

Not Applicable