

REQUEST FOR BOARD ACTION

HENDERSON COUNTY BOARD OF COMMISSIONERS

MEETING DATE: July 19, 2006

SUBJECT: Water Line Extension

ATTACHMENTS: a'Virea

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 a'Virea development.

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.

City of Hendersonville - Project Summary
Water Line Extension
e'Avirea
aka Maxwell Property

Date: May 10, 2006

This is a project to extend existing water lines to provide water service to a proposed residential development. This development consists of 20 lots. This project is located on Kanuga Road.

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

This project requires approximately **2,260** linear feet of water line sized as following:

Description:	Approximate Length
8" DIP CL350	2,000 lf
6" DIP CL350	400 lf

Fire Protection will be provided by the installation of 6 (six) fire hydrant(s).

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

Water pressure and flow in this area is as follows:

Static Pressure:	60 PSI	Hydrant # 10-2086
Residual:	48 PSI	
Flow:	970 GPM	Hydrant # 10-2091

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: 6-9-06
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: _____

☐ Approved ☐ Disapproved

Narrative Comments Provided: ☐ Yes ☐ No

**ENGINEER'S REPORT
DALE MAXWELL SUBDIVISION
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 Kanuga Road west of Hendersonville and south of the intersection of Nelson Valley Lane. 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 8" water service on Kanuga Road, SR 1127 and running northward into the proposed development for approximately 2260 feet. This proposed line will have installed five fire hydrants with appropriate tee's, valves and fittings and a blow-off valve and gate valve at the end.

3. DESCRIPTION OF FUTURE SERVICE AREAS

This extension serves 20 residences in the proposed development. Existing lines are adequate for serving surrounding areas.

4. PRESENT AND ANTICIPATED WATER DEMANDS

Present water demands are to serve the 20 residences proposed in the Dale Maxwell development on Kanuga Road. Thus the design demand is approximately 20 connection @ 400 GPD/connection. Total demand is approximately 8,000 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 20 domestic connections.

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

**HENDERSON COUNTY
REVIEW OF CITY WATER LINE EXTENSIONS**

Project Name: a'Virea (aka Maxwell Property)
Size of Water Line (Main & Distribution Pipe Size): 8" DIP CL 350 – 2,000 linear feet; 6" DIP CL 350 – 400 linear feet
County Staff Reviewing Extension: Rocky Hyder, Fire Marshal, Matt Card, Subdivision Administrator, Rodney Tucker, Project Mgr.

Has the project been reviewed under the **County Subdivision Ordinance**? ☒ Yes ☐ No ☐ N/A
Date reviewed: June 20, 2006
Action: Approved with Conditions
Conditions: Final plat conditions, approval of water, approval of soil erosion and sedimentation control plans, revisions to development plans and other standard 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: _____
Action: _____
Conditions: _____
Comments:

Is the project subject to **any other County Land Use Ordinance**? ☐ Yes ☒ No ☐ N/A
If yes, explain:

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

The water extension project is consistent with 2020 CCP.

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**? Meets standard for structure spacing of 30 feet or more. ☒ Yes ☐ No ☐ N/A

BOARD OF COMMISSIONERS APPROVAL

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

Date of Board Review: _____
Comments: