

## **REQUEST FOR BOARD ACTION**

### **HENDERSON COUNTY BOARD OF COMMISSIONERS**

**MEETING DATE:** Monday, February 6, 2006

**SUBJECT:** Water & Sewer Line Extensions

**ATTACHMENTS:** Yes

1. Orchards at Flat Rock, Offsite & Phase 1 – Water Line Extension
2. Orchards at Flat Rock, Offsite & Phase 1 - Sewer Line Extension

#### **SUMMARY OF REQUEST:**

The City of Hendersonville has requested that the County comment on the proposed water line and sewer line extensions for the project listed above. Staff has reviewed the water and sewer lines and has provided the project summary and staff's review as attached.

#### **RECOMMENDATION / BOARD ACTION REQUESTED:**

County Manager recommends approval of the water line and sewer line extensions and directs staff to convey the County's comments upon Board approval.

**City of Hendersonville - Project Summary  
Water Line Extension  
Orchards at Flat Rock  
Offsite & Phase 1**

Date: December 9, 2005

This is a project to extend existing water lines to provide water service to a proposed residential development. The entire development will consist of 212 residential units broken into phases. Phase 1 will have 124 units. This project is located on South Orchard Road, just off of Upward Road.

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

This project requires approximately **7668** linear feet of water line sized as following:

Description:	Approximate Length
8" DIP CL 350	7668 LF

Fire Protection will be provided by the installation of thirteen (13) fire hydrants.

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

Water pressure and flow in this area is as follows:

Static Pressure:	60 PSI	Hydrant # 07-1096
Residual:	28 PSI	
Flow:	700 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: \_\_\_\_\_

☐ Approved ☐ Disapproved

Narrative Comments Provided: ☐ Yes ☐ No

City of Hendersonville - Project Summary  
**Sewer Line Extension  
Orchards at Flat Rock  
Offsite & Phase 1**

Date: December 9, 2005

This is a project to extend existing water lines to provide water service to a proposed residential development. The entire development will consist of 212 residential units broken into phases. Phase 1 will have 124 units. This project is located on South Orchard Road, just off of Upward Road.

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

This project requires approximately **2464' of Gravity line and 5980' of Force Main** sized as following:

Description:	Approximate Length
8" SDR 35 - Gravity	2464'
6" C900 PVC	5980'

Pump station required: ☒ yes ☐ No

The amount of wastewater generated by this project will be approximately **79,500** gallons per day.

The entire cost of the proposed sewer line extension is to be paid for by The Orchards, LLC.

*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 sewer line extension project and to authorize the City manager to execute the sewer 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: \_\_\_\_\_

☐ Approved ☐ Disapproved

Narrative Comments Provided: ☐ Yes ☐ No



# Memo

**Date:** Tuesday, October 18, 2005  
**To:** Lee Smith, Director of Water & Sewer, C/o Rhonda Wiggins  
**From:** Norman Divers  
**RE:** The Orchards at Flat Rock Water & Sewer System Extension

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Lee:

Please find enclosed the required documents for the review of the water and sewer system extensions necessary to serve a new 212 unit residential community. The community development is phased such to have 124 units in phase 1 and the remaining 88 to be added as phase 2. Improvements for water and sewer are proposed to accommodate both phases at the onset. Estimated flows have been based upon each lot being developed with a new 3-bedroom home which provides an average daily demand of approximately 79,500 gallons.

The proposed project is an extension of the existing public water distribution system and sewer collection system owned and maintained by the City of Hendersonville. The existing water system is located along Upward Road. The project will include installing approximately 7668 LF of 8" PVC. Service taps shall be installed to each unit in gangs of 4-3/4" meters off a 1" tap as required by the City.

The sewer system extension includes a gravity line along Upward Road to South Orchard Road. A sewer pump station and force main will be installed to convey wastewater from the site to the gravity sewer on Upward Road. The project includes installing approximately 2,464 LF of 8" gravity sanitary sewer, 5,980 LF of 6" PVC sewer force main and a sewer pump station.

We appreciate your expeditious review and look forward to working with you on this project. Should you have any questions please feel free to contact us.

Best regards,

Norman Divers

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

Project Name: Orchards at Flat Rock, Offsite and Phase 1  
Size of Sewer Line: 8" SDR 35 – Gravity - 2464' length  
6" C900 PVC – 5980' length  
County Staff Reviewing Extension: Gary Tweed, County Engineer; Matt Card, Subdivision Administrator, Autumn Radcliff, Interim Project Manager and Planner

Has the project been reviewed under the **County Subdivision Ordinance**?

☒  
Yes

☐  
No

☐  
N/A

Date reviewed: September 20, 2005

Action: Approved with Conditions

Conditions: Non-standard subdivision requirements, final plat conditions, approval of sewer and water, road name approval and

Comments: fire department requirements.

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 to the **2020 Henderson County Comprehensive Plan (CCP)**?

☒  
Yes

☐  
No

☐  
N/A

**Engineer's Notes:**

Project is within urban service area of the County Comprehensive Plan. Sewer service to be connected to the City of Hendersonville public sewer system. County would have no jurisdiction with regard to sanitary sewer and would not object to the project.

**BOARD OF COMMISSIONERS APPROVAL**

☐

Approved

☐

Not Approved

☐

Conditional Approval (See Comments)

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

Comments: \_\_\_\_\_

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

Project Name: Orchards at Flat Rock – Offsite & Phase 1  
Size of Water Line (Main & Distribution Pipe Size): 8" DIP CL 350 – 7668 LF  
County Staff Reviewing Extension: Rocky Hyder, Fire Marshal; Matt Card, Subdivision Administrator; Autumn Radcliff, Interim Project Manager and Planner

Has the project been reviewed under the **County Subdivision Ordinance**?

☒  
Yes

☐  
No

☐  
N/A

Date reviewed: September 20, 2005

Action: Approved with Conditions

Conditions: Non-standard subdivision requirements, final plat conditions, approval of sewer and water, road name approval and

Comments: fire department requirements.

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

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**? The estimated flow rate meets standard for structure spacing of 31 feet or more. The 8 inch pipe has the capacity for greater flow once system improvements are made.

☐  
Yes

☒  
No

☐  
N/A

**BOARD OF COMMISSIONERS APPROVAL**

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

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

Comments: \_\_\_\_\_