AGENDA CARRBORO BOARD OF ALDERMEN TUESDAY, JANUARY 25, 1994 7:30 P.M., TOWN HALL BOARD ROOM

Approximate Time*

- 7:30 7:35 A. APPROVAL OF MINUTES OF PREVIOUS MEETING: January 18, 1994
- 7:35 7:45 B. RESOLUTIONS, PROCLAMATIONS AND CHARGES
- 7:45 7:55 C. REQUESTS FROM VISITORS AND SPEAKERS FROM THE FLOOR
 - D. OTHER MATTERS

7:55 - 8:10 (1) Acceptance of Streets - Whispering Hills Subdivision

P/5

On December 7, 1993, Mike Murray, President of the Whispering Hills Homeowners Association, addressed the Mayor and Board of Aldermen requesting that the town either accept the roads within the Whispering Hills Subdivision or that Lantern Way at its terminus with King Street be closed to through traffic. The Board requested that the town staff review Mr. Murray's request and report back to it as quickly as possible. The town staff has gathered the information for the Board and is recommending to deny Mr. Murray's request for the town's acceptance of the streets.

(2) Request from Piney Mountain Subdivision

The Piney Mountain Subdivision has a failing community low-pressure pipe sewerage disposal system. They have requested that OWASA permit the City of Durham to serve a pressurized sewer line to the subdivision. The Piney Mountain Homeowners Association is requesting approval of this connection with the City of Durham from the Town of Carrboro, Orange County and the Town of Chapel Hill.

8:30 - 9:00

8:10 - 8:30

P/5

P/5

(3) Proposal for Space Needs for Town Hall

The police department, other Town Hall departments, and the Friends for a Carrboro Library have identified a need for additional space for operations and proposed programs. On November 16, 1993 the Board of Aldermen requested that the administration develop a Request for Proposals for architectural services to address the space needs of the police department. An alternate bid to determine the space needs of all town departments at Town Hall would be requested. The Mayor and Board of Aldermen will review the proposed RFP's, decide whether to consider the Library Committee's request for inclusion and approve the process for reviewing the RFP's.

- 9:00 9:10 BREAK
- 9:10 9:55 (4) Open Space Zoning Ordinance Review

The Board will continue discussion of open space zoning concepts and how they compare with existing development options in the Town of Carrboro. This matter was requested by the Board at its 1993 Planning Retreat.

9:45 - 10:00 (5) Preliminary Status Report: Designing a Process for P/5 Comprehensive Quality Growth and Community Building Strategy

The Shaping Orange County's Growth Steering Committee is asking each jurisdiction within Orange County to review this status report for comment and recommendation. Alderman Jay Bryan is Carrboro's representative to the Steering Committee and will present the report for review by the Board of Aldermen. The Steering Committee is meeting regularly and would like to continue to develop the process and to create a work plan based on the attached report and a proposed budget by March 15, 1994.

10:00 - 10:05 (6) Cancellation of February 15th Board Meeting

NP

P/10

- The administration requests that the Board cancel its meeting scheduled for February 15, 1994 as this meeting follows the Planning Retreat scheduled for February 13th and 14th.
- 10:05 10:15 E. MATTERS BY MANAGER
- 10:15 10:25 F. MATTERS BY TOWN ATTORNEY
- 10:25 10:35 G. MATTERS BY BOARD MEMBERS

*The times listed on the agenda are intended only as general indications. Citizens are encouraged to arrive at 7:30 p.m. as the Board of Aldermen at times considers items out of the order listed on the agenda.

BOARD OF ALDERMEN

AGENDA ITEM ABSTRACT MEETING DATE: January 25, 1994

SUBJECT: Acceptance of Streets - Whispering Hills Subdivision

DEPARTMENT: PLANNING DEPARTMENT	PUBLIC HEARING: YES NO
ATTACHMENTS: Final Plat of Whispering Hills Subdivision. Memo from the Police and Fire chief. Recommendations from the TAB and the Appearance Commission.	FOR INFORMATION CONTACT: Kenneth Withrow, 968-7713
	ction Requested (x) Analysis

PURPOSE

On December 7, 1993, Mr. Mike Murray, president of the Whispering Hills Homeowners Association addressed the Mayor and the Board of Aldermen requesting that the Town either accept the roads within Whispering Hills subdivision, or that Lantern Way at its terminus with King Street be closed to through-traffic. The Board requested that the town staff review Mr. Murray's request and report back to it as quickly as possible. The town staff has gathered the information for the Board and is recommending to deny Mr. Murray's request for the Town's acceptance of streets.

SUMMARY

The Town's staff have noted that the streets do not meet Town standards with regard to pavement widths, driveway requirements, and general design requirements.

The lack of a stormwater system along the subdivision's streets is contrary to the street functions as listed within the Carrboro Land Use Ordinance.

The Appearance Commission and the TAB recommended that the Whispering Hills subdivision have another access point to alleviate traffic impacts on King Street.

The Fire Department will not drive a fire fighting apparatus through any type of barricade.

The staff recommends that the Board of Aldermen not accept the streets within the Whispering Hills subdivision.

The staff, however, does state that if the Board wishes to amend the Whispering Hills CUP to eliminate an access point, the Board would require a recordable document to be executed by all property owners within the subdivision.

ANALYSIS

Mr. Mike Murray of the Whispering Hills Homeowners Association addressed the Mayor and the Board of Aldermen requesting that the Town either accept the roads within Whispering Hills subdivision, or that Lantern Way at its terminus with King Street be closed to through-traffic.

There is no current policy that addressed this request; however, two options could be considered to address the Whispering Hills problem: (1) do no accept the streets, and (2) amend the existing Whispering Hills CUP to eliminate an access point. Both options were considered by the administration. The staff's conclusion not to accept the streets comes as a result of an on-site investigation of the Whispering Hills subdivision. The staff of both the planning and public works departments note that the pavement widths of the streets is only eighteen (18) feet and that no stormwater system exists. The streets also have speed bumps; and existing signs within the subdivision do not meet the Manual for Uniform Traffic Control Device's Standards. The streets within the Whispering Hills subdivision do not meet Town's standards as written in Section 15-216, subsection (a) of the Carrboro Land Use Ordinance. The current width of the streets, the lack of a stormwater system, and the existence of speed bumps are contrary to street functions as listed with the Carrboro Land Use Ordinance; in which streets carry motor vehicle traffic, allow onstreet parking in some cases, and serve as an important link in the Town's drainage system. Furthermore, the driveway entrances within the subdivision do not conform to the Town's specifications written in Section 15-213, subsection (c)(with reference to Appendix C); and Section 15-294, subsection (d) of the Carrboro Land Use Ordinance. Finally, the staff has noted that the Whispering Hills subdivision's general design requirements for vehicle accommodations under Section 15-295 does not meet Town standards. If the Town does not accept the streets, the Town would not incur any expenses to bring the roads to public standards; however, emergency service vehicles could face many hindrances (i.e. traversing speed bumps and/or tight curves) if streets remained in their current condition within the subdivision.

The staff's consideration of option two required a thorough review of the final plat. The final plat recorded within the deed book shows two points of access to public streets. The roadway system and points of access are private rights given to each property owner within the subdivision. The elimination of an access point will require each property owner to sign a recordable document giving up their individual right to that particular access point. The elimination of the King Street/Lantern Way intersection could be done by removing the current pavement at the intersection and replacing it with turfstone or a similar surface. Breakaway bollards would also be placed at the intersection to deter public access, yet allow emergency vehicles the opportunity to access the subdivision. The Lantern Way/Old Pittsboro Road intersection would be the only point of access for vehicles entering or leaving the subdivision; and that point of access can be hazardous under adverse weather conditions. The Carrboro Police Department considered option two as acceptable. The Carrboro Fire Department, however, believes that removing the current pavement at the King Street/Lantern Way intersection and replacing it with a turfstone or similar surface could hinder emergency service vehicle movement (particularly during adverse weather conditions). The Fire department also noted that closing the Whispering Hill's entrance at Kings Street and Lantern Way would greatly increase response time in fire emergencies at this location. Finally, the Fire Department indicated that they would not drive a fire fighting apparatus through any type of barricade.

The staff would like to bring to the Board's attention the recommendations from the advisory boards to include two entrances to the Whispering Hills subdivision. The Appearance Commission recommended that the staff coordinate with the developer in an effort to reduce the traffic impact on King Street. The TAB required that the Homeowners Association provide a paved street connecting the subdivision to Old Pittsboro Road if suitable easements become available. The staff noted that the provision of another point of access to the development would encourage additional cross connector traffic between South Greensboro Street and Jones Ferry; but the additional traffic would be limited because the route would be very circuitous.

Option one is viable and should be considered by the Board. Option two would require the King Street/Lantern Way entrance to be redesigned to allow a turn-around for emergency service vehicles.

RECOMMENDATION

The staff recommends that the Board of Aldermen not accept the streets within the Whispering Hills subdivision into the Town due to the streets not meeting public road standards. The staff recommends that both access points remain open; however, if the Board of Aldermen wishes to amend the existing Whispering Hills CUP to eliminate an access point, then the Board should require a recordable document to be executed by all property owners with the Whispering Hills subdivision relinquishing their right-of-access to King Street from Lantern Way and that a design for street closure be submitted for review and approval.

ACTION REQUESTED

To adopt by motion the administration's recommendation.

MEMORANDUM

TO: Kenneth Withro	row
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FROM: Ben Callahan

RE: Whispering Hills requests

DATE: January 19, 1994

The Police Department does not have any serious concerns with the proposal to install baffles on the roads in the Whispering Hills subdivision. Such installation would not impede the Department's ability to patrol and otherwise provide services to the neighborhood any more than the currently installed speed bumps do.

Should the neighborhood or Town elect to install a barricade at the King Street entrance, it is possible that Officers would patrol the area less frequently. Furthermore, if the neighborhood does not provide a turn-around near the barricade, it is possible that Officers would not patrol the upper section of the neighborhood since exit from this area would be difficult and inconvenient.

Regardless of what decisions are made concerning these streets, the Department will continue to provide services to the area, as Officers will be expected to patrol the neighborhood as often as possible. We cannot predict, however, how barricades or other traffic control devices might impact patrol patterns.

TOWN OF CARRBORO



NORTH CAROLINA

MEMORANDUM

- TO: Mr. Kenneth W. Withrow, Transportation Planner
- FROM: Wayne Lacock, Interim Fire Chief

SUBJECT: Closing Access to Whispering Hills at King Street & Lantern Way

DATE: January 20, 1994

Closing the entrance of the Whispering Hills subdivision at King Street and Lantern Way would greatly increase response time in fire emergencies at this location. Due to the layout of fire hydrants and the existence of narrow streets with no turn around capability for a fire apparatus, this would in some cases greatly delay establishing a water supply for fire suppression. Temporary emergency access are not usable in many cases due to poor maintenance and an unstable travel surface in certain weather conditions. We would not drive a fire apparatus through any type of breakaway barricade.

(THIS IS THE TAB'S RECOMMENDATION ON THE CONDITIONAL USE PERMIT FOR THE WHISPERING HILLS SUBDIVISION ISSUED IN 1984)

TAB RECOMMENDATIONS

Date of Meeting: February 2, 1984

Subject: Whispering Hills/Conditional Use Permit Request

RECOMMENDATION:

The TAB recommends that the application be approved subject to the following conditions:

The permit should attach the following requirements to the granting of the permit:

- 1) The Homeowners Association shall be required to provide a paved street connecting the development to Old Pittsboro Road if suitable easements become available.
- 6K 2) An internal sidewalk system should be constructed by which pedestrians can walk between building structures to the end of the project without walking in the driveway.
- 3) The internal sidewalk system should be constructed of materials other than concrete.
- 4) The staff shall work with the developer and residents in a continued effort to ameliorate the impact of traffic on children's safety on King Street.

(THES IS THE APPEARANCE COMMISSION'S RECOMMENDATION ON THE CONDITIONAL USE PERMIT FOR THE WHISPERING HILLS SUBDIVISION ISSUED-2N 1984.)

APPLICABLE REGULATIONS:

Carrboro Land Use Ordinance Sections:

- 15-49 Application to be Complete
- 15-54 Special Use Permits and Conditional Use Permits
- 15-55 Burden of Presenting Evidence
- 15-57 Recommendations on Conditional Use Permits
- 15-58 Board Action on Conditional Use Permits
- 15-59 Additional Requirements on Conditional Use Permits

SPECIAL INFORMATION:

The Appearance Commission has recommended that the staff continue to coordinate with the developer in an effort to reduce the traffic impact on King Street. The staff takes the position that the present plans will result in the least amount of impact on King Street because the additional traffic will be limited to that generated by the proposed development. Provision of another point of access to the development would encourage additional cross connector traffic between South Greensboro Street and Jones Ferry Road; however, this additional traffic would be limited because the route would be very circuitous.

The two possible connections that have been explored are as follows:

- 1. To the east via the Rocky Brook Trailer Park Road to Old Pittsboro Road. The landowner between the proposed development and Rocky Brook Trailer Park is unwilling to allow development of the property for any purpose.
- To the south across the Rocky Brook Trailer Park to Highway 54 Bypass. This connection is problematic for two reasons: 1) excessive elevation changes, and
 N.C. DOT will not permit a driveway connection onto a ramp at road interchanges. Further, the staff would discourage additional connections to Highway 54 Bypass.

ANALYSIS: The application, as submitted, is complete.

RECOMMENDATIONS: The Administration recommends approval of a Conditional Use Permit for the Whispering Hills development proposal.



BOARD OF ALDERMEN

ITEM NO. D(2)

AGENDA ITEM ABSTRACT

MEETING DATE: January 25, 1994

SUBJECT: Piney Mountain Subdivison waste treatment system

DEPARTMENT: MANAGER'S OFFICE	PUBLIC HEARING: YES	NO					
	FOR INFORMATION CONTACT:						
Environmental Health report, and proposed	Robert Morgan, 968-7706						
resolution							
THE FOLLOWING INFORMATION IS PROVIDED:							
	(x) Action Requested						
(x) Summary (x) Re	(x) Recommendation						

PURPOSE

The Piney Mountain Subdivision has a failing community low pressure pipe sewerage disposal system. They have requested that OWASA permit the City of Durham to service a pressurized sewer line to the subdivision. The Piney Mountain Homeowners Association petitioned the Carrboro Board of Aldermen at its January 18, 1994 meeting to adopt a non-binding resolution which would register its concurrence with whatever judgment is reached by OWASA and Orange County. The Board referred this item to the staff for its recommendation and requested additional information. The staff has provided that information and has proposed a resolution for the Board's consideration.

SUMMARY

The recommended resolution would endorse:

- The acknowledgment of the impending and irreversible failure of the Piney Mountain waste treatment system with the potential adverse public health and environmental impacts.
- The acknowledgment that waste treatment for the Piney Mountain subdivision cannot be provided by any available on-site waste treatment technology.
- The agreement in principle to construct a pump station and force main sewer that connects with the City of Durham sewer system designed to accommodate wastewater only from the currently approved lots in the Piney Mountain subdivision.
- A service area boundary between OWASA and Durham that is unchanged and that the decision in this case is based on an environmental concern and public health needs.
- A system design, ownership determination, and operational codicils that are agreeable to the homeowners association, the City of Durham, OWASA, and Orange County, precluding any possibility that this sewer system would be available to any other users outside the existing subdivision of Piney Mountain and that the system is properly maintained.

ANALYSIS

The Mayor and Board of Aldermen requested a written request from OWASA specifying the issues it would like the Board to address. A copy of this written request was given to the Board in its Friday packet.

The Board also requested the Town Attorney to address the joint planning issues involved in this request. The Town Attorney's memorandum on this issue is included in this abstract.

The Piney Mountain Subdivision is a development of fifty-eight homesites on approximately 120 acres located within Chapel Hill Township and the Rural Buffer approximately one mile west of the Orange/Durham County line on the north side of Mount Sinai Road (SR 1718). Currently, twenty-four of the homesites are undeveloped. Four of these remaining lots are still owned by the developer of Piney Mountain. Waste treatment for one homesite is provided by an individual on-site waste treatment unit which existed prior to the development. Waste treatment for all other existing homes in Piney Mountain is provided by a community waste treatment system consisting of two separate subsystems. Each subsystem includes individual septic and pump tanks at every home, a pressurized sewer collection system and a low pressure ground absorption waste disposal system. The treatment system can be characterized as plagued by a multitude of instances of non-compliance with regulatory requirements, by design inadequacies, by installation of nitrification lines in unsuitable soils, by maintenance and operational problems and by frequent incidents where septic tank effluent is discharged on the surface of the ground.

Beginning in 1987, the Piney Mountain waste treatment system was permitted, constructed and operated by its owner, North State Utilities Inc. or its subsidiaries, which also owned and/or operate nine other similar systems located in Wake, Durham, and Mecklenburg Counties. The Piney Mountain system was originally designed and permitted to serve all of the homesites within the subdivision. North State initially permitted and operated the Piney Mountain system and its other systems under the regulatory jurisdiction of the NC Division of Environmental Management (DEM) and the NC Utilities Commission. Regulatory authority over permitting and operational oversight for all ground absorption systems was transferred to the NC Division of Environmental Health (DEH) and local health departments in July, 1992. At that time, and in accordance with its new regulatory responsibilities associated with the Piney Mountain waste treatment system, the Environmental Health section of the Orange County Health Department opened communications with North State Utilities. The operating permit for the Piney Mountain treatment system was due to expire on January 31, 1993 and was to be renewed under the jurisdiction of the OC Health Department.

As a part of the permit renewal process, the Environmental Health section began reviewing the Piney Mountain system's existing permit and permit requirements, design, remaining or unused treatment capacity, physical plan condition, operational practices, etc. During this process, the Environmental Health Section discovered that: a) the system was not constructed in accordance with either approved or as-built construction plans; b) did not contain sufficient nitrification line necessary to accommodate permitted waste flow; c) the number of existing bedrooms (and resulting regulatory waste flow loadings) per home averaged far in excess of the three bedrooms per home envisioned in system design and permittng; d) permitted total waste flow capacity was insufficient to serve all of the homesites intended to be served by the systems; e) sufficient nitrification field repair area was not available as required by current or original permit standards; and f) the system was receiving improper or inadequate monitoring and maintenance. All concerned parties were kept abreast of the Environmental Health section's findings. As a result of these findings, the Health Department declined to renew the system's operating permit or issue improvement permits for the septic and pump tank step systems for individual home sites. Environmental Health staff continued to work with North State to determine how the system's operating permit could be renewed. During this process, North State Utilities was directed to provide necessary information on the system, make specified repairs and modify its operational and maintenance practices.

In November 1992, while the Environmental Health section was involved in the early stages of the discovery process related to the regulatory and operational issues outlined above, Dennis Osborne, president of North State Utilities, resigned. His resignation deprived North State of its resident expert on the design and operation of ground adsorption treatment systems. North Sate and its treatment system operating subsidiary continued in business under the direction of its vice-president. In early April 1993, North State's communications with several local health departments began indicating that the company was preparing to dissolve and abandon ownership and operation of all of its waste treatment systems. In July 1993, North State petitioned the NC Utilities Commission to be allowed to abandon all of its systems. This petition was never granted or denied but, in September 1993, Harrco Utilities was appointed by the Utilities Commission as the emergency operator for the Piney Mountain treatment system.

Prior to the North State Utilities' July 1993 petition to abandon the Piney Mountain system, members of the Piney Mountain homeowners' association, including owners of home and unimproved lots, had retained the services of an attorney and a professional engineer with ground absorption waste treatment expertise. Individual homeowners, the homeowners' attorney and engineer worked with staff from various County departments to determine how the treatment problems at Piney Mountain could be corrected. Once Harrco Utilities was appointed emergency system operation, its staff also became active in efforts to resolve problems.

During the summer of 1993, an engineer working with the Piney Mountain homeowners began the process of evaluating various options for providing adequate waste treatment for both the existing homes and the undeveloped homesites within the subdivision. The engineer estimated that costs to correct the readily apparent design and construction flaws in the existing Piney Mountain system would be in the \$50,000 -\$100,000. Due to a significant possibility of undetected damage to the soils of the nitrification fields resulting from chronic overdosing and neglect, the engineer could not guarantee that recommended repairs would allow the system to function adequately for any length of time. The homeowners' attorney subsequently made a preliminary inquiry to the Durham City Engineer regarding the connection of the Piney Mountain sewer collection system to Durham's sewer system by means of a pumping station and force main. The City Engineer indicated that this was possible, but that OWASA would have to agree to this service extension in conformance with provisions of the existing service area agreement between Durham and OWASA. During discussions with County staff, the attorney and consulting engineer were informed that extension of municipal sewer service to any point within the Rural Buffer area was expressly prohibited, except to address a public purpose or a health hazard, by the County's Water and Sewer Policy. They were also informed that municipal service extensions were expressly discouraged by the Joint Planning agreement involving the County, Chapel Hill and Carrboro. Subsequent efforts on the part of the homeowners, their attorney and engineer and Environmental Health staff to resolve the waste treatment problems focused on locating additional on-site areas which could be used for nitrification fields and repair areas. Environmental Health staff tested the soils at many sites within existing home sites, undeveloped lots and open areas in the subdivision, and they located several small areas containing suitable soil. However, the total additional area containing suitable soils was insufficient to provide the acreage for nitrification field expansion with repair area necessary to serve undeveloped lots. The new areas of suitable soils were also insufficient to provide the minimum repair area, even when added to existing repair area, required by regulation for the existing system.

Upon completion of the unsuccessful effort to locate new nitrification fields and repair areas, the Piney Mountain homeowners and their consultants focused on investigating the feasibility of replacing the existing system with other on-site waste treatment alternatives. They evaluated the possibility of utilizing non-discharging spray irrigation systems and a package waste treatment plant discharging to Piney Mountain Creek, a tributary of New Hope Creek. The consultants reported that spray irrigation was not feasible due to the large area required to provide buffers between spray fields and homesites, travel ways, wells, etc. The consultants also informed homeowners that DEM would be unwilling to issue a permit for discharge of treated wastes to Piney Mountain Creek. DEM confirmed (see attached DEM letter) that reported stream flow in Piney Mountain Creek does not meet DEM regulatory discharge requirements for minimum natural instream flow in receiving streams. The homeowners also had their consultants evaluate the suitability of the soils within the existing nitrification fields. Their soil scientist reported that seventy to eighty percent of the area in the existing nitrification fields was unsuitable for use as a nitrification field by virtue of one or a combination of unsuitable soils, insufficient soil depth or slope. His findings were essentially verified by a soils evaluation performed by County Environment Health staff during the week of December 27, 1993. The Environmental Health staff reported (copy attached to abstract) that a maximum of thirty-five percent of the existing nitrification lines are installed in soils which could be classified as suitable for the installation. Additionally, the Environmental Health report noted concerns regarding the large size of the system that was installed in suitable soils. The report also noted that staff had made no determination of overall system treatment capacity through evaluation of factors, other than soil suitability, which could produce additional limitations on system performance and treatment capacity.

On the basis of the findings and rulings by various engineers, soil scientists, sanitarians, etc., Piney Mountain homeowners have concluded that the existing waste treatment system is doomed to fail, probably in the near future and that it cannot be repaired or replaced by any available on-site waste treatment technology. County Environmental Health staff and the County engineer concur with this assessment. Harrco Utilities is currently under order to make repairs to the existing system to bring that system into provisional compliance with Health regulations. Harrco, without benefit of the knowledge that most of the existing nitrification field is located in unsuitable soils, has proposed \$200,00 in system repairs. The Piney Mountain homeowners have chosen to appeal to Orange County, other parties to the Joint Planning Agreement, OWASA and Durham to allow the connection of the Piney Mountain sewer collection system to nearest end of the City of Durham sewer collection system. That point is near the Kerley Road-Mount Sinai Road intersection, approximately 5000 feet east of the Piney Mountain entrance on Mount Sanai Road.

ADMINISTRATION'S RECOMMENDATION

The Administration recommends that the Mayor and the Board of Aldermen adopt the enclosed resolution.

ACTION REQUESTED

To adopt the enclose resolution.

The following resolution was introduced by Alderman Randy Marshall and duly seconded by Alderman Hank Anderson.

A RESOLUTION SUPPORTING THE EXTENSION OF PUBLIC SEWER SERVICE TO THE PINEY MOUNTAIN NEIGHBORHOOD Resolution No. 36/93-94

WHEREAS, information from the Orange County Health Department indicates that the Piney Mountain neighborhood present low-pressure pipe system is failing; and

WHEREAS, soils in the majority of the drainfield area for the Piney Mountain wastewater system are unsuitable for subsurface wastewater absorption; and

WHEREAS, no other community wastewater systems appear to be feasible for this neighborhood.

NOW, THEREFORE, THE BOARD OF ALDERMEN OF ALDERMEN OF THE TOWN OF CARRBORO RESOLVES:

Section 1. The Board agrees in principle with the construction of a pump station and force main sewer that connects with the City of Durham sewer system designed to accommodate wastewater only from the currently approved lots in the Piney Mountain Subdivision.

Section 2. The Board requests the City Council of Durham and the Board of Directors of the Orange Water and Sewer Authority to take action to enable a connection of a sewer from the Piney Mountain neighborhood to the City of Durham wastewater system at the expense of the Piney Mountain property owners with the following conditions:

- a. The pump station and force main from the Piney Mountain neighborhood should be designed at a size sufficient to accommodate wastewater only from the currently approved lots in the Piney Mountain Subdivision.
- b. The service area boundary between OWASA and the City of Durham is not changed, the rural buffer is preserved and the decision in this case is based solely on providing a remedy for a public emergency as outlined herein.
- c. There should be an agreement among parties including the Piney Mountain neighborhood association, City of Durham, OWASA, Orange County and the Towns of Chapel Hill and Carrboro that no additional lots or tracts shall be connected to the pump station and force main without the approval of all the above-named governing bodies; and concurrence among the parties to the Joint Planning Agreement regarding the extension of sewer service to the Piney Mountain neighborhood.

Section 3. This resolution shall become effective upon adoption.

The foregoing resolution having been submitted to a vote, received the following vote and was duly adopted this 25th day of January, 1994:

Ayes: Michael Nelson, Randy Marshall, Hank Anderson, Eleanor Kinnaird, Jacquelyn Gist.

Noes: Frances Shetley, Jay Bryan

Absent or Excused: None

A RESOLUTION SUPPORTING THE EXTENSION OF PUBLIC SEWER SERVICE TO THE PINEY MOUNTAIN NEIGHBORHOOD

WHEREAS, information from the Orange County Health Department indicates the Piney Mountain neighborhood present low pressure pipe system is failing; and

WHEREAS, soils in the majority of the drainfield area for the Piney Mountain wastewater system are unsuitable for subsurface wastewater absorption: and

WHEREAS, no other community wastewater systems appear to be feasible for this neighborhood

NOW THEREFORE BE IT RESOLVED by the Mayor and Board of Alderman of of the Town of Carrboro:

1. Agrees in principle to construct a pump station and force main sewer that connects with the City of Durham sewer system designed to accommodate wastewater only from the currently approved lots in the Piney Mountain subdivision.

2. It kequests the City Council of Durham and the Board of Directors of the Orange Water and Sewer Authority to take action to enable a connection of a sewer from the Piney Mountain neighborhood to the City of Durham wastewater system at the expense of the Piney Mountain property owners with the following conditions:

. The pump station and force main from the Piney Mountain neighborhood should be designed at a size sufficient to accommodate wastewater only from the currently approved lots in the Piney Mountain subdivision.

. The service area boundary between OWASA and the City of Durham is not changed, and the decision in this case is based on an environmental concern and public health need. ormidy a remady for a formal Rubh .There should be an agreement concerning system design, ownership and operational codicils among the parties including the Ainey Mountain Nomeowners Association, City of Durham, OWASA, and Orange County precluding any possibility that this sewer system would be available to any other users outside the existing subdivision of en. Piney Mountain, and that the sewer line is properly maintained. inter other topms while he append

A RESOLUTION SUPPORTING EXTENSION OF PUBLIC SEWER SERVICE TO THE PINEY MOUNTAIN NEIGHBORHOOD WITH CERTAIN CONDITIONS (94-1-25/R-6)

WHEREAS, information from the Orange County Health Department indicates the Piney Mountain neighborhood's present low pressure pipe system is failing; and

WHEREAS, soils in the majority of the drainfield area for the Piney Mountain wastewater system are unsuitable for subsurface wastewater absorption; and

WHEREAS, no other community wastewater systems appear to be feasible for this neighborhood;

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill:

- 1. That the Council supports, subject to the conditions listed below, the installation of sewer lines to connect the Piney Mountain neighborhood to the City of Durham wastewater system.
- 2. That the Council requests that the City Council of Durham and the Board of Directors of the Orange Water and Sewer Authority take action to enable connection of a sewer from the Piney Mountain neighborhood to the City of Durham wastewater system at the expense of the Piney Mountain property owners with the following conditions:
 - * The pump station and force main sewer from the Piney Mountain neighborhood should be designed at a size sufficient to accommodate wastewater only from the currently approved lots in the Piney Mountain subdivision.
 - * The service area boundary between OWASA and Durham is not otherwise changed, and the decision in this case is based on an environmental concern and public health need.
 - * The sewer line should be determined by Orange County to be in conformance with the County's water and sewer policy.
 - * There should be an agreement among parties including the Piney Mountain neighborhood association, City of Durham, OWASA, Orange County and the Towns of Chapel Hill and Carrboro that no additional lots or tracts shall be connected to the pump station and force main; and concurrence among the parties to the Joint Planning Agreement regarding the extension of sewer service to the Piney Mountain neighborhood.

MICHAEL B. BROUGH & ASSOCIATES

MEMORANDUM

TO: Mayor and Board of Aldermen

FROM: Michael B. Brough MAS

DATE: January 21, 1994

RE: Piney Mountain Request

In response to the Board's request at its meeting of January 18th, the purpose of this memorandum is to explain what role the town has to play in the decision whether to allow an extension of utility lines to serve the Piney Mountain development.

It is clear to me from a legal perspective that the town has no formal role to play in this issue. In other words, the town is not being asked to amend the joint planning agreement or to exercise any other approval authority under state law or the joint planning agreement.

For clarification, it should be recalled that the joint planning agreement does contemplate that, generally speaking, public utilities will not be extended into the rural buffer. This is apparent from the definition of the term "rural buffer" in that agreement, which states that the rural buffer "will remain rural, contain low density residential uses and not require urban services (public utilities and other town services)." Furthermore, the joint planning area land use plan provides that Orange County's policy is not to approve water and sewer extensions into the rural buffer area except "to provide service to an essential public service, such as a school, or to remedy a public health emergency, such as a failing septic tank or failing package treatment plant." (Page 90). An amendment of the joint planning area land use plan would require approval by the Town of Carrboro, but the foregoing language plainly indicates that an extension to serve an existing development with a failing package treatment plant. Thus, the Town of Carrboro has no formal role to play in the decision as to whether this extension should be allowed.

The one local governmental body in this county which clearly does have a formal decision to make is OWASA. Its authority arises out of an agreement between OWASA and the City of Durham that was executed in 1988 to define the respective utility service areas of the two jurisdictions. My understanding is that, under this agreement, Durham is not free to extend its lines to serve the Piney Mountain development without OWASA's consent.

All of the foregoing is not to suggest that the board has no interest in this issue or that the matter is not properly before the board. Apparently, OWASA wants input from the three jurisdictions that appoint its board members, Mayor and Board of Aldermen January 21, 1994 Page Two

and the residents of this development have also sought the blessing of the governing bodies of the three local jurisdictions. It is also plain that the issues raised by the proposed extension are primarily planning issues, rather than utility issues, and in that sense it is logical for OWASA to have sought input from the three jurisdictions.

As the Board considers the issues viewed by this request, an additional word is in order about the concern that, once a utility line is extended, adjoining property owners may have a right to tap onto that line. The concern is based on the premise that a utility that acts as a "public service corporation" has a duty to provide service on a non-discriminatory basis. However, in <u>Fulghum v. Town of Selma</u>, 238 N.C. 100, 76 S.E.2d 368 (1953), the North Carolina Supreme Court held:

A municipality which operates its own waterworks is under no duty in the first instance to furnish water to persons outside its limits. It has the discretionary power, however, to engage in this undertaking. When a municipality exercises this discretionary power, it does not assume the obligations of a public service corporation toward nonresident consumers.

Based upon this and similar cases, I believe the City of Durham could prohibit connections to any of its lines located outside city limits. The law is less clear with respect to lines owned by OWASA, since its primary service area is not limited by municipal boundaries. Assuming my understanding is correct that service by Durham would require OWASA's approval, OWASA could condition that approval on an agreement by Durham not to allow intervening connections (assuming such connections are possible with a force main).

cc: Bob Morgan

Orange County Health Department

Daniel B. Reimer, MPH, Director

ENVIRONMENTAL HEALTH DIVISION P O Box 8181 • 306C Revere Road ANIMAL CONTROL DIVISION P C Box 8181 • 304 Revere Road Hillsborough NC 27278

HILLSBOROUGH 919-732-8181 CHAPEL HILL 919-967-9251

TO: Paul Thames

FROM: Tom Konsler TK

RE: Soil/site evaluation of existing drainfield serving Piney Mountain Subdivision

DATE: January 12, 1994

In response to discussions in the meeting with representatives of Piney Mountain Subdivision on December 21, 1993, our staff soil scientist, Jerry Stimpson and I conducted assessments of the soils in the existing drainfield areas at Piney Mountain. The following is a summary of the results in the two phases of the subdivision.

Phase I - Which currently has 13 connections plus 1 under construction:

Out of 7 soil borings - All 7 borings could be classified Provisionally Suitable and ranged from 24 to 32 inch soil depth before encountering unsuitable horizons consisting of saprolite or in the case of two holes [in the 12-16 subfields], massive clay. It should be noted that while these borings indicated a Provisionally Suitable classification, we would express concern over a large capacity system such as this installed in these marginal site conditions. We also recognize from earlier evaluations that the soil depth within Phase I can be quite variable.

Phase II - Which has 20 connections:

- 5 borings in Field A None were classified as Suitable or Provisionally Suitable. All borings were classified Unsuitable due to one or more of the following factors:
 - -Topography/landscape positions containing convergent valley slopes, gullies, and/or terraces.
 - -Soils which are massive, exhibiting no structural peds, less than 24 inches from the ground surface.

-Expansive clay mineralogy.



MEMORANDUM

PERSONAL HEALTH DIVISION DENTAL HEALTH DIVISION P O Box 8181 • 300 W Tryon Street Hillsborough, NC 27278

DURHAM

919-688-7333

MEBANE 919-227-2032 WHEREAS, Piney Mountain is in the process of securing the approval of OWASA and the towns of Chapel Hill and Carrboro to construct the Sewer Line as hereinbefore stated; and

WHEREAS, time is of the essence since the LPP System is in urgent need of replacement;

IT IS THEREFORE RESOLVED, that the Orange County Commission does hereby find that by virtue of Riney Mountain's failing LPP System, and with regard to the installation of the Sewer Line only, Piney Mountain does fall within existing exceptions to the general prohibition on the extension of sewer to the Rural Buffer, and the Commission does hereby approve the installation of the Sewer Line as requested in the petition from Piney Mountain, subject to such conditions as may be reasonable and necessary in accordance with the recommendations of the Orange County Manager and his staff, and the Orange County Manager is directed to take all necessary and appropriate actions to facilitate the installation of the Sewer Line as soon as possible. $1\mathbf{l}$

-Shallow soil depths generally less than 24 inches to unsuitable horizons / saprolite or parent material.

15 borings in Field III - 3 borings indicated soils meeting a classification of Provisionally Suitable for LPP systems. These borings were located in areas which leads to the estimation that approximately 2,510 linear feet of drainfield is located in Provisionally Suitable site/soil conditions.

- 12 borings were classified as Unsuitable for the same reasons indicated above.

SUMMARY

Approximately 12,000/12,240 linear feet or 98% of Phase I system was installed in soil and sites meeting a classification of Provisionally Suitable.

Approximately 2,510/27,613 linear feet or less than 10 % of Phase II system was installed in soil and sites meeting a classification of Provisionally Suitable.

With a total of 14,500 linear feet of system installed in Provisionally Suitable soil, the estimated capacity of the system in flow is approximately 7,250 Gallons Per Day. This is compared with: - the permitted regulatory flow of 12,240 Gallons Per Day based on

DEM's assumption of three bedroom homes,
- and with the design flow rate of 15,360 Gallons Per Day based on the regulatory flow of 120 GPD per existing bedroom.

Please keep in mind that these figures are only estimates based on the limited amount of evaluations done, but are indicative of the expected long term functionality of the system based on site and soil criteria. In this evaluation, we have not taken other factors into account such as installation techniques, proximity to embankments or monitoring wells, trench depths, system components and materials, design factors, or the present operating difficulties, all which affect system performance. Please let me know if you have any questions regarding this.







State of North Carolina Department of Environment, Health and Natural Resources Division of Environmental Management

James B. Hunt, Jr., Governor Jonathan B. Howes, Secretary A. Preston Howard, Jr., P.E., Director



January 7, 1994

Mr. Alan K. Whitaker, President Piney Mountain Homeowners Associaton 4729 Tap Root Lane Durham, North Carolina 27705

> Subject: Piney Mountain Subdivision Wastewater Disposal Alternatives Orange County

Dear Mr. Whitaker

The Division of Environmental Management has been asked to review and comment to you on the December 8, 1993 letter prepared by Barrett Kays & Associates concerning potential discharge alternatives for the subject facility. At the onset, I must say that if a <u>formal</u> decision regarding the potential of a surface water discharge is necessary, an NPDES application prepared in accordance with the requirements of 15A NCAC 2H .0100 would have to submitted to our division for consideration. Since no application has been received, the opinion we give here is advisory only and assumes the accuracy of the information in Barrett Kays & Associates' letter. With this caveat, we agree with the conclusion in Barrett Kays & Associates' letter that the division would not desire to issue a discharge permit for Piney Mountain Subdivision because it would be undesirable for reasons which follow.

North Carolina General Statute 143-215.1 requires that a permit be obtained prior to any discharge to the surface waters of North Carolina. Furthermore, the statutes state that all permit decisions require that the practicable waste treatment and disposal alternative with the least adverse impact on the environment be utilized. The reason for this is that nondischarge alternatives such as recycling, subsurface disposal, spray irrigation and connection to regional waste treatment facilities, where feasible, are all more environmentally sound alternatives as compared to surface water discharges. Even in the name of the program authorized by the Clean Water Act, the National Pollutant Discharge *Elimination* System (NPDES), the intent of nondischarge preference is implied.

Title 15A of the North Carolina Administrative Code 2H .0100 further elaborates on the requirements for an NPDES permit. One important aspect of an NPDES permit application is to provide a summary of waste treatment and disposal options and why the proposed system and point of discharge were selected. The rule further requires that the summary should have sufficient detail to assure that the most environmentally sound alternative was selected from the reasonably cost effective options. The division has prepared guidance for permit applicants to utilize in conducting technical and financial evaluation of potential disposal alternatives which clearly identifies nondischarge preferences superior to potential discharge alternatives.

P.O. Box 29535, Raleigh, North Carolina 27626-0535 An Equal Opportunity Affirmative Action Employer

Telephone 919-733-7015 FAX 919-733-2496 50% recycled/ 10% post-consumer paper

17

Title 15A of the North Carolina Administrative Code 2B .0200 elaborates on the issue of potential discharges into low flow streams. In cases where the 7Q10 flow, the average flow for seven (7) consecutive days in a ten (10) year period as reported by the United State Geological Survey (USGS), is zero, approval for a new discharge is dependent upon the 30Q2, the average flow for thirty (30) consecutive days in a two (2) year period, as follows:

- Where the 30Q2 flow is estimated to be greater than zero, effluent limitations for new discharges of oxygen consuming waste will be set at BOD5 = 5 mg/l, NH3-N = 2 mg/l and DO = 6 mg/l, unless it is determined that these limitations will not protect water quality standards.
- 2. If the 30Q2 and 7Q10 flows are both estimated to be zero, no new discharge of oxygen consuming waste will be allowed.

Due to the statistical variability of these estimates, any 30Q2 flow estimate ≤ 0.05 cfs is considered to be zero by the division.

Therefore, based upon the information contained in the letter prepared by Barrett Kays & Associates, and that the estimated 30Q2 flow is below 0.05 cfs, we are in agreement with the conclusions drawn by the consultant.

If you have any questions regarding this matter, please do not hesitate to contact Mr. Steve Tedder, Chief of the Water Quality Section or me at (919) 733-7015.

Sincerely,

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A. Preston Howard, Jr., P.E.

cc: Office of the Attorney General - Mr. Jim Gulick Mr. Steve Tedder Ms. Nancy Essex Colonial Engineering, Inc.

Vernon O. Harris, Jr., P.E. President

P.O. Box 97005 Raleigh, N.C. 27624

(919) 847.1499 Ju (919) 847-1498

December 29, 1993

Mr. Morris Stanford Piney Mountain Home Owners Assoc. P. O. Box 15668 Durham, NC 27704

Re: Existing Wastewater Dilemma Piney Mountain Home Owners Assoc. (4316)

Dear Mr. Stanford:

Following up our conversation of December 22, 1993, we are herewith providing to you, for presentation to Orange County Agencies, a statement with regard to existing wastewater conditions and alternative possibilities. These situations are as personally observed during my visit to the Piney Mountain Subdivision on September 10, 1993. It should be noted that a very thorough review of the existing facilities and the proximity to other alternatives (i.e. hookup to Durham) was observed on that occasion.

Alternatives that were evaluated and discussed were as follows:

- Continue to operate the existing systems as mentioned above, the existing system is already undersized in that more lineal feet of nitrification should have been installed and additional area is not available. The system, as installed, is doomed for failure as more houses, and lack of operational maintenance, occurs on the system.
- 2. Use exiting collection system and install treatment plant discharging to Piney Mountain Creek. The Regional Office Staff of Environmental Management was checking on the ten year low flow for this condition. This would add a new point source discharge to the Basin.
- Install spray irrigation due to the proximity of 3. existing homes and the tightness of the soils, sufficient area is not available to this community. Since it is a privately owned subdivision, it does not have condemnation rights and thus, cannot forcibly acquire other lands that may be in a reasonable proximity to this subdivision location. Furthermore, housing commitments to lands surrounding the subdivision would not allow for the existing nitrification area to be converted to above ground irrigation as sufficient buffers and protection from runoff would not be available. Some of the areas

where the LPP system is installed is steeply sloping areas which would expedite runoff into the streams under rainfall conditions With spray irrigation. LPP can be terraced in; spray irrigation cannot.

4. Hookup to the existing Durham sewers - the existing collection system would lend itself very well to continuing to operate by discharging into a central pump station (S) that could then pump into the Durham sewers. In fact, measuring the distance in the field, it is anticipated that 1.5 miles is the distance to the nearest Durham gravity manhole located at the intersection of Mt. Sinai and Kurley Roads. Two roadbores and one creek crossing would be necessary in order to install this line. From an environmental protection point of view and the State's direction of centralizing all minor (even if potential) dischargers into a central, well-managed facility, this is the best alternative available to Piney Mountain Subdivision.

We would be happy to discuss the situation in any detail as may be requested by any review agencies on behalf of the Piney Mountain Home Owners Association. The Association is to be commended for its positive, aggressive direction in seeking to protect their environment and to handle wastewater generated from their home in the best environmental method available. It is my opinion that time is of the essence to seeking a quick solution so that contamination of nearby/streams does not occur.

Very truly yours Vernon O. Harris, PE President

VOH, Jr/ed stanford.pme

DURHAM



DIVISIONS

Street Engineering	560-4326
Water & Sewer Engineering	560-4326
Street Maintenance	560-4312
Water & Sewer Haintenance	560-4344



1 8 6 9 CITY OF MEDICINE

December 22, 1993

Mr. Alan Whitaker, President Piney Mountain Homeowner's Association 4729 Taproot Lane Durham, N. C. 27705

Dear Mr. Whitaker:

Over the last several months, I have had several conversations with Ms. Deborah Christie regarding the possibility of sewer service being provided by the City of Durham to the Piney Mountain subdivision. This discussion was in view of the fact that the current onsite system serving the subdivision was not operating property. I had advised Ms. Christie that the Piney Mountain subdivision was located in a utility service area designated to OWASA by the City of Durham and that service by the City would be contingent upon a release from OWASA.

As of this date, OWASA has not indicated a willingness to release the subdivision to service by the City of Durham, nor has it indicated under what conditions, if any, it may be willing to do so. If, however, OWASA were to release the subdivision, subject to conditions found acceptable by the City, this is to advise that I would be willing to recommend to the City Council that the City of Durham provide sewer service to the Piney Mountain subdivision subject to the terms of an agreement. The terms to be included in that agreement have not yet been fully determined. However, it would include a provision whereby the sewer collection system within the subdivision, a pump station, and force main connecting the subdivision to the existing City sewer system would remain in the ownership of the Piney Mountain Subdivision both developed and vacant. No new phases of the subdivision could be served by the sewer system nor could any other development outside the subdivision.

The provisions of this letter are limited to an agreement between the City and the Piney Mountain Homeowner's Association. No commitment is being made at this time for any similar arrangement with any other entity that might subsequently own and/or operate the sewer collection system serving the Piney Mountain subdivision. If you have any questions regarding this matter, please feel free to contact me.

Sincerely,

Kenneth E. Wright, PE, RLS City Engineer

KEW/lcp

c: Lee Murphy Don Greeley Deborah Christie

RECEIVED

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NOY 17

Barrett Kays & Associates

Civil Engineering/Environmental Engineering/Environmental LassessmentMENT

November 16, 1993

Ms. Deborah C. Christie c/o Law Department Liggett Group, Inc. 300 North Duke Street Durham, NC 27702

BKA Project #9310002

Dear Ms. Christie:

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This letter constitutes our report of our soil evaluations of the Piney Mountain low pressure system site. On November 8 and 9, 1993 I conducted a field evaluation of the soils on the low pressure system site.

Ten soil borings were located across the site, as shown on the attached maps. The borings were located across the toposequence to provide a good idea about the basic soil changes across the site.

Attached are copies of the soil profile description of each boring. The site and soil characteristics for each boring were compared with the N.C. Division of Environmental Management Administrative Code 15 NCAC 2H.0300 - Septic Tank Systems, July 1, 1988 and the N.C. Division of Environmental Health Administrative Code 15A NCAC 18A.1900, April 1, 1993.

The site and soil evaluations indicated that eight of the ten borings are unsuitable for shallow trenches and therefore a low pressure system under the DEM standards. The same eight borings are also unsuitable for low pressure system under the DEH regulations.

I have collected six subsoil samples for clay mineralogy analysis. I have not sent the samples into the laboratory. Please be advised that the soils are also unsuitable due to other factors, therefore the analysis would provide clarification but should not change my overall classification. Please advise me within the next week if you would like me to submit the samples, otherwise I will discard them. Letter to Deb Christie Page 2 November 16, 1993

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You requested that we determine the maximum number of homes which could be connected to the primary fields through the existing low pressure septic system without premature failure of the soils. Due to the significant amount of unsuitable soils present, the total number of homes which can be connected is, in fact, probably less than the number presently connected. Although it is difficult to determine the exact amount of provisionally suitable soils based upon the ten borings, it appears that approximately 12,000 lineal feet of low pressure trench are located in provisionally suitable soils. This would generally allow for up to 50 bedrooms or 12.5 homes, assuming 4 bedrooms per residence.

While the State may continue to allow the existing homes to be served, the soil suitability means that addition of new homes, expansion in the number of bedrooms of existing homes, and the rebuilding of any homes that might be destroyed for example by fire is not likely to be approved. Due to the severe soil limitations on the property, I recommend that you seriously consider other wastewater alternatives to serve the subdivision.

I am sorry to report these problems to you, but I know you want to have an accurate assessment of the situation. Please contact me if you have any questions.

Sincerely,

BARRETT KAYS & ASSOCIATES, P.A.

Kays, Ph.D. Barrett

Soil Scientist

BLK085:cr

Enclosures

LOW PRESSURE GROUND ABSORPTION SYSTEM SITE and SOIL CRITERIA

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		Standard					
Criteria	Classification	DEM	DEH				
Slope	Suitable Provisional Unsuitable	<15% 15-30% >30%	<10% >10%				
Texture	Suitable	Sandy, Loamy	Sandy, Coàrse, Loamy				
	Provisional	Clayey 1:1	Fine Loamy, Clayey 1:1				
	Unsuitable	Clayey 2:1	Clayey 2:1				
Structure	Suitable	Crumb, Granular	Crumb, Granular				
	Provisional	Blocky	Blocky				
	Unsuitable	Platy, Massive	Platy, Prismatic, Massive				
Clay Mineralogy	Suitable Unsuitable		Sandy, Coarse, Loamy Clayey 2:1				
Drainage	Suitable	24 inches	24 inches				
	Unsuitable	<24 inches	<24 inches				
Depth	Suitable	24 inches	24 inches				
	Unsuitable	<24 inches	<24 inches				
Restrictive Horizon	Suitable	24 inches	24 inches				
	Unsuitable	<24 inches	<24 inches				
Percolation	Suitable Provisional Unsuitable	<30 min/in. 30-60 min/in. >60 min/in.					

PINEY MOUNTAIN SUBDIVISION SOIL EVALUATION SUMMARY

DEM STANDARDS FOR SHALLOW TRENCHES

	Soil Borings									
Criteria	1	<u>2</u>	<u>3</u>	<u>4</u>	5	<u>6</u>	<u>7</u>	8	9	<u>10</u>
Slope	PS	PS	S	S	S	S	S	S	S	S
Texture	PS	PS	PS	PS	PS	PS	PS	US	US	US
Structure	US	US	PS	PS	US	US	US	US	US	US
Drainage	US	US	PS	S	US	US	US	US	US	US
Depth	US	US	PS	PS	US	US	US	US	US	US
Restrictive Horizon	US	US	PS	PS	US	US	ÙS	US	US	US
Overall Classification	US	US	PS	PS	US	UŞ	US	US	US	US

S = Suitable

PS = Provisionally Suitable

US = Unsuitable

PINEY MOUNTAIN SUBDIVISION SOIL EVALUATION SUMMARY

DEH LPS STANDARDS

	Soil Borings									
<u>Criteria</u>	1	2	<u>3</u>	4	5	<u>6</u>	7	<u>8</u>	9	<u>10</u>
Slope	PS	PS	PS	PS	S	S	PS	S	S	S
Texture	PS	PS	PS	PS	PS	PS	US	US	US	US
Structure	US	US	PS	PS	US	US	US	US	US	US
Clay Mineralogy	S	US	S	S	S	S	US	US	US	US
Drainage	US	US	PS	S	US	US	US	US	US	US
Depth	US	US	PS	PS	US	US	US	US	US	US
Restrictive Horizon	US	US	PS	PS	US	US	US	US	US	US
Overall Classification	US	US	PS	PS	US	US	US	US	US	US

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S = Suitable

PS = Provisionally Suitable US = Unsuitable






Barrett Kays & Associates

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Civil Engineering/Environmental Engineering/Environmental Assessment

December 8, 1993

Ms. Deborah Christie c/o Piney Mountain Home Owners Association 5310 Taproot Lane Durham, NC 27705

RE: Preliminary Low Flow Stream Analysis Pine Mountain Creek Orange County, NC

BKA Project #9311003

Dear Ms. Christie:

On your request Barrett Kays & Associates, P.A. has conducted a preliminary low flow stream analysis for Pine Mountain Creek in Orange County, NC. Pine Mountain Creek, adjacent to the Piney Mountain Subdivision, has a drainage area of 3.5 square miles. We utilized the United States Geological Survey methodologies for estimation of low flows. These are the methodologies used by North Carolina Division of Environmental Management (DEM) for waste load allocations for wastewater discharge permits to surface waters. DEM requests flow calculations from USGS. Ms. Nancy W. Lasater, P.E. of our office worked with Mr. Robert Mason, P.E. of USGS in determining the low flow values.

Using the regional equation methodology the 7Q10 is 0.00 cfs and the 30Q2 is 0.02 cfs. The 7Q10 is an estimated stream flow that would typically occur once every 10 years for at least 7 consecutive days. The 30Q2 is an estimated stream flow that would typically occur once every 2 years for at least 30 consecutive days. The USGS has previously completed a final flow analysis downstream at SR 1718 and their records showed a 7Q10 of 0.00 cfs. It was reported to DEM as no or zero flow under the criteria with DEM.

DEM's regulations prohibit a discharge of treated wastewater into a surface stream where the 7Q10 flow is zero. However, the regulations allow a discharge if the 30Q2 flow is greater than zero and where the waste load allocation modelling can demonstrate that the discharge will not impair the water quality below the standards for the stream.

> 304 East Jones Street / Raleigh, North Carolina 27601 Telephone: 919-828-1903 Fax: 919-828-0365

Letter to Deb Christie Page 2 December 8, 1993

The average daily wastewater discharge for Piney Mountain Subdivision would be 2.5 times the 0.02 cfs 30Q2 flow. This means that the wastewater discharge would frequently be the majority of the stream flow for extended periods of time. The peak daily wastewater discharge would be over 6 times the 0.02 cfs 30Q2 flow.

In addition, the 30Q2 flow is very close to zero. The difference between 0.02 and 0.00 cfs may be greater than the standard error in the flow estimation methodology.

Given these facts, it is my opinion than DEM would not desire to issue a discharge permit for Pine Mountain Creek. It is my opinion that DEM would want the Piney Mountain Subdivision sewer system connected into a municipal wastewater collection system.

I trust that this information may be helpful to you in evaluating your options. Please contact me if you have any questions or need further elaboration.

Sincerely,

BARRETT KAYS & ASSOCIATES, P.A.

Manay W. Lasata

Nancy W. Lasater, P.E. Project Engineer

Barrett L. Kays, Ph.D. President

BLK103/NWL001:cr

HARRCO

UTILITY CORPORATION

December 1, 1993

Robert H. Bennink, Jr., General Counsel North Carolina Utilities Commission P.O. Box 29510 Raleigh, NC 27626-0510

RE: Docket No. W-848, Sub 18-4-16 Capital Improvements Requiring Assessment Piney Mountain Subdivision

Dear Mr. Bennink:

In order to comply with ordering paragraph number nine of the "Recommended Order Appointing Emergency Operator and Approving Interim Rate", "issued September 1, 1993 by the commission in the above referenced docket, Harroo Utility Corporation (HUC) has contracted with Mr. James R. Butler, a professional engineer with the firm of Bass, Nixon and Kennedy, Inc. Mr. Butlers' duties are to aid HUC in determining the improvements necessary to bring the existing North State Systems into an acceptable working order.

Mr. Butler has worked closely with HUC personnel and local health officials in making site visits and inspections in order to assess the condition of the North State Systems. Attached to this letter, is a copy of his findings and recommendations relating to the North State System serving the Piney Mountain Subdivision.

At the request of HUC, Mr. Tom Konsler of the Orange County Health Department conducted an inspection of the system serving the Piney Mountain Subdivision. Attached to this letter, is a copy of his findings dated October 29, 1993.

After review of these two reports and compilation of operating data by our staff since September 1, 1993, Harroo Utility Corporation formally recommends the following repairs and improvements be performed as a minimum in order to bring this system into an acceptable working order that can be maintained and operated with reasonable effort and safety to the operating personnel.

CHIEF CLEPK

- RE: Docket No. W-848, Sub 15 & 16 Capital Improvements Requiring Assessment Piney Mountain Subdivision
 - 1) Provide all weather access to Phase I dosing tanks and maintenance access to field areas. Remove brush and debris left on site by North State Utilities.

TTP	I # 1 TOTAL:		\$1049.50
Dump Truck	5 hrs @	30.00	150.00
Bobcat Loader	5 hrs ê	35.00	175.00
Skilled Labor	5 hrs ê	15.00	75.00
Tractor w/Blade	3 hrs @	30.00	90.00
Equipment & Labor:			
Dump Fees(Clearing debris)			150.00
ABC Stone (4" thick)	39 TN 0	10.50	409.50
Materials:			

2) Repipe existing pumps in Phase I dosing tanks to allow for proper maintenance access, provide appropriate isolation valves for each pump, provide proper disconnect for pumps and floats adjacent to dosing tank, replace existing float switches, install non-corrosive float bracket, replace existing controls with new UL rated duplex control panel having suitable control logic to provide for reliable automatic and manual operation of control valves and valve-specific annuciation of improper operation of any given valve. New control panel will include event and time accumulators for each control zone. Replace inoperable telephone dialer.

Materials Equipment & Electrical	Labor	20070.00 584.00 2420.00
Electrical		2420.00

ITEM #2 TOTAL: \$23074.00

3) Raise buried access covers to additional "Phase I" dosing tank to ground surface.

Raise Buried Covers: (2' dia. riser w/concrete lids)	
Materials	910.00
Equipment & Labor	1104.00

ITEM #3 TOTAL: \$2014.00

Page 2

53

- RE: Docket No. W-848, Sub 15 & 16 Capital Improvements Requiring Assessment Piney Mountain Subdivision
 - 4) Replace all existing irrigation type solenoid values at Phase I drain field with suitable "contaminant resistant" (effluent rated) values, including the provision of independent ball value for isolation and gate value for flow control and flow sensing device. Value assembly shall be installed in suitable enclosures such that normal foot traffic and mowing equipment may pass over them without injury to either enclosure or equipment, while providing sufficient room to repair and adjust the values.

17 valve assemblies @ 530.00 ea.

Materials Equipment & Labor 4420.00

890.00 801.00

ITEM #4 TOTAL: \$ 9010.00

5) Locate and adjust to elevation acceptable to local authority all "turn-up" pipes at ends of laterals in Phase I drainfield and provide physical protection for those "turn-ups".

178 "turn-ups" @ \$9.50 ea.

Materials Equipment & Labor

ITEM #5 TOTAL: \$1691.00

6) Provide and install such additional soil material as may be necessary to smooth surface contour of Phase I field areas so that surface water ponding and trench settling are eliminated. Seeding and mulching of all disturbed areas.

Removal of Pine Straw Cover	1.73 AC	6	2000.00	3460.00
Furnish & Install Topsoil Fill	300 CY	6	22.50	6750.00
Seeding & Mulching	2.16 AC	6	1650.00	3564.00

ITEM #6 TOTAL:

\$13774.00

54

- RE: Docket No. W-848, Sub 15 & 16 Capital Improvements Requiring Assessment Piney Mountain Subdivision
 - 8) Provide boundary survey of existing nitrification fields and repair area.

Boundary Survey	8095 LF @	.50	4047.50

ITEM #7 TOTAL: \$4047.50

8) Check and pump accumulated residuals from individual septic and pump tanks (STEPS). Repipe effluent pump to provide maintenance and repair from ground surface. Provide approved disconnect for pump, controls and alarm adjacent to pump chamber. Install proper access risers and covers to septic and pump tanks as required by local health department. Provide separate electrical circuit for pump alarm.

Materials	6841.89
Equipment & Labor	7738.50
STEP Pumping (33 @ 145.00/ea)	4785.00

ITEM #8 TOTAL:

\$19365.39

 Provide all weather access to Phase II dosing tank and maintenance access to field areas. Remove brush and debris left on site by North State Utilities.

<u>Materials:</u> ABC Stone (4" thick) Dump Fees (clearing debris) 15" RCP	70 T 40 L	_	-	10.50 8.60	735.00 450.00 344.00
Equipment & Labor: Front-End Loader Skilled Labor Bobcat Loader Dump Truck Backhoe	16 h	irs Irs	6	70.00 15.00 35.00 30.00 45.00	1120.00 240.00 210.00 480.00 180.00

ITEM #9 TOTAL:

\$3759.00

- RE: Docket No. W-848, Sub 15 & 16 Capital Improvements Requiring Assessment Piney Mountain Subdivision
 - 10) Replace existing pumps in Phase II dosing tank and pipe new pumps to allow for proper maintenance access, provide appropriate isolation valves for each pump, provide proper disconnect for pumps and floats adjacent to dosing tank, replace float switches, install non-corrosive float bracket, replace existing controls with new UL rated duplex control panel having suitable control logic to provide for reliable automatic and manual operation of control valves and valve-specific annunciation of improper operation of any given valve. New control panel will include event and time accumulators for each control zone. Replace inoperable telephone dialer.

Materials		43372.00
Equipment & Labor		2336.00
Electrical	`	3630.00

TIEM #10 TOTAL:

\$49338.00

11) Replace all existing irrigation type solenoid values at Phase II drainfield with suitable "contaminant resistant" (effluent rated) values, including the provision of independent ball value for isolation and gate value for flow control and flow serving device. Value assemble shall be installed in suitable enclosures such that normal foot traffic and mowing equipment may pass over them without injury to either enclosure or equipment, while providing sufficient room to repair and adjust the values.

51 valve assemblies @ 530.00 ea.

Materials	13260.00
Equipment & Labor	13770.00

ITEM 11 TOTAL:

\$ 27030.00

56.

RE: Docket No. W-848, Sub 15 & 16 Capital Improvements Requiring Assessment Piney Mountain Subdivision

12) Locate and adjust to elevation acceptable to local authority all "turn-up" pipes at ends of laterals in Phase II drainfield and provide physical protection for those "turn-ups".

517 "turn-ups" @ 9.50 ea.	
Materials Equipment & Labor	2585.00 2326.50

ITEM #12 TOTAL: \$ 4911.50

13) Provide and install such additional soil material as may be necessary to smooth surface countour of Phase II field areas so that surface water ponding and trench settling are eliminated. Seeding and mulching of all disturbed areas.

Furnish & Install Topsoil Fill	600 CY	6	22.50	13500.00
Seeding & Mulching	3.92 AC	6	1650.00	6468.00

ITEM #13 TOTAL: \$ 19968.00

The above figures totalling **\$179031.89** represent the estimated outside cost to be incurred by HUC in making the listed repairs and improvements. In addition, HUC anticipates an engineering cost of approximately \$9705.00 to include submittal of plans and specifications necessary to acquire the required repair permit from the Wake County Department of Health.

A fee of ten percent of the total cost for these repairs will be needed by HUC in order to cover overhead expenses incurred by HUC in supervising and coordinating these repairs and improvements.

A reconciliation of the total cost is as follows:

Cost for Items #1	thru #13:	\$179031.89
Engineering Fees:		9705.00
HUC Supervision &	Coordination:	18873.68

TOTAL: \$207610.57

57

RE: Docket No. W-848, Sub 15 & 16 Capital Improvements Requiring Assessment Piney Mountain Subdivision

As emergency operator for the Piney Mountain Sewer Sytem, Harroo Utility Corporation request the imposition of an assessment under G.S. 62-118(C)in the amount of \$207,610.57.

For your convenience and use in determining the breakdown of this assessment, we have attached a current customer list to this letter reflecting the following numbers.

Total	System Capac	city			57	Homes
Total	Connections	Served	to	Date	33	Homes

*Application and payment has been received from Mr. Clay Thomas to connect lot #8. No fees have been collected for repairs or improvements to existing LPP System.

The above repairs and improvements include only those items recommended or "required by Mr. Butler or Mr. Tom Konsler in their respective reports. Items listed in either report and not detailed above have been determined to be normal. maintenance items and are being performed by HUC under the existing rate structure in place.

The repairs and improvements covered by this report will bring the existing Piney Mountain System into an acceptable working order. The Orange County Health Department has currently suspended all connections over 34 until suitable "repair area" can be located to serve this system. The existing system, once repaired, should be capable of serving the total 57 lots, although "repair area" is not present. The suspension by the Orange County Health Department of future connections has caused difficulties to lot owners who purchased lots unknowing of these problems. HUC has been requested by several of these lot owners to explore alternatives available for future connections. Please advise HUC of its duties or obligations as emergency operator to serve future connections.

Please advise of additional information or assistance required of our office.

Respectfully Symitted, Lexie W. Harrison, President

HARROD UTILITY ORPORATION

LWH/msh

Copy: (w/enclosures) Mr. Robin Cauthen

-1 J.J

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

Docket No. W-848, Sub 15 Docket No. W-848, Sub 16

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Piney Mountain Homeowners)	
Association, Inc.,)	
Complainant		OBJECTION OF PINEY MOUNTAIN
)	HOMEOWNERS ASSOCIATION TO
v.)	PROPOSED ASSESSMENT FOR
)	CAPITAL IMPROVEMENTS
North State Utilities, Inc., Respondent)	

The Piney Mountain Homeowners Association ("Homeowners Association") objects to the request by Harrco Utility Corporation ("Harrco") filed on December 1, 1993, for an assessment to users of the system in the Piney Mountain sewerage system to pay for certain capital improvements and repairs and asks the Commission to postpone consideration of this request. In support of this motion, the Homeowners Association shows the Commission as follows:

1. Harroo has requested an assessment totaling \$207,610.57, which would result in an assessment of over \$6,000 to each current user of the system (assuming only current users would be subject to the assessment.) This amount is substantial and would impose a considerable financial burden on each user.

2. The Homeowners Association has information indicating that even if this substantial sum is spent to improve and repair the sewerage system, it still will not be adequate to serve the subdivision for the life of the homes in the subdivision. The Homeowners Association has a letter from Paul K. Thames, the Engineer for Orange County, stating his opinion that because of the poor design and construction of the system, "there is no way to assure that this waste treatment system will ever perform expended on adequately, regardless of the funds improving operational practices or mechanical flaws inherent in the system." A copy of this letter is attached as Exhibit A. The Homeowners Association also has a report from Barrett Kays & Associates, a private engineering firm hired by the Homeowners Association to test the soils in the existing nitrification fields, stating that much of the soil presently used by the system for nitrification fields does not meet the state standards for such use and that the

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residents should consider other wastewater alternatives to serve the subdivision. A copy of this report is attached as Exhibit B.

3. Because of the information cited above, the Homeowners Association desires to have the subdivision served by the Durham municipal sewer system, so that the homeowners will not have to rely on the North State Utilities, Inc. system. The City of Durham has indicated it is willing to serve the subdivision. However, because of previous agreements made for planning purposes, Durham will not extend its service into Orange County to serve Piney Mountain without permission from the Orange Water and Sewer Authority ("Owasa") and OWASA requires approval from Orange County, the town of Chapel Hill and the town of Carrboro.

4. The Homeowners Association is in the process of petitioning all related governmental entities for approval of the Durham extension to Piney Mountain. If these petitions are granted, the North State system (or much of it) will not be needed and thus it would be a waste of money to make substantial repairs to the system at this time. The Homeowners Association is moving as fast as possible to have its petitions heard; however, it is informed that it will take at least a month and possibly two to gain the approvals needed to allow the subdivision to hook up to Durham.

5. Because of the facts cited above, the Homeowners Association objects to any assessments for capital improvements or repairs at this time. The Homeowners Association asks the Commission not to consider any such assessments (except to the extent required to meet an emergency situation) while the Homeowners Association pursues its effort to obtain approval for municipal service to the subdivision and, if approval is obtained, not make any assessments other than for emergency repairs before the subdivision can hook up to the Durham system.

This the day of December, 1993.

POYNER & SPRUILL

By: Nancy Bentson Essex Attorneys for the Piney Mountain Homeowners Association

3600 Glenwood Ave. Post Office Box 10096 Raleigh, North Carolina 27605-0096 Telephone: (919) 783-6400

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CERTIFICATE OF SERVICE

This is to certify that the undersigned has this day served the attached Objection of Piney Mountain Homeowners Association to Proposed Assessment for Capital Improvements on all parties to this cause by United States Mail, first class, postage prepaid, addressed as follows:

Robert B. Cauthen, Jr. Staff Attorney, Public Staff North Carolina Utilities Commission Post Office Box 29520 Raleigh, NC 27625-0520

James F. Jordan 2840 Plaza Place Suite 105 Raleigh, NC 27612 for North State Utilities

Karen E. Long Assistant Attorney General NC Department of Justice Post Office Box 629 Raleigh, NC 27602 for Attorney General's Office

Martha K. Walston McMillan Kimzey & Smith Post Office Box 150 Raleigh, NC 27602 for Carpenter Pond Development Corporation

Harrco Utility commission 8601 Barefoot Industrial Rd. Raleigh, NC 27613

Tri-County Waste Water Management 712 S. Hayne St. Monroe, NC 28112

This the day of December, 1993

Nancy Bentson Essex

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PINEY MOUNTAIN HOMEOWNERS' ASSOCIATION

To the Board of the Orange Water and Sewer Authority

The vast majority of the members of the Piney Mountain Homeowners' Association chose to live in Piney Mountain because of its unique features within the rapidly developing Triangle area. As part of the rural buffer in Orange County, Piney Mountain offers a woodland serenity that is unsurpassed in its natural beauty and character. All of us are proud of and want to maintain Piney Mountain's natural heritage.

We share the concerns of OWASA and the pertinent governing bodies to preserve the planned character of the rural buffer. Through no fault of our own, due to failure of our community sewage disposal system, we find ourselves having taken an arduous and circuitous path that has led us to doorstep of OWASA.

As our problem is discussed by you this evening, and in the coming weeks, we confirm for the OWASA Board our commitment to protect the rural buffer environment not only for ourselves and for our children, but also for the benefit of those who live in neighboring areas and who visit the area to partake of its beauty. Our request to OWASA to connect with the Durham County sewer line comes as a last resort. Our petition is intended not to change the nature of the rural buffer but rather to assure its preservation. The failure of our community sewage disposal system poses economic and environmental health concerns. It behooves OWASA to consider seriously our unfortunate plight. A favorable response to our request at this time will help secure the future of the rural buffer for those who live in and around it, for generations to come.

For the December 9, 1993 OWASA Board meeting. 62 .

p.pincy



Orange Water and Sewer Authority 400 Jones Ferry Road P.O. Box 366 Carrboro, NC 27510 (919) 968-4421

January 19, 1994

HAND-DELIVERED

Mr. Robert Morgan Town Manager Town of Carrboro 301 West Main Street Carrboro, NC 27510

Dear Mr. Morgan:

The referral to the Carrboro Board of Aldermen of the petition from the residents of Piney Mountain Subdivision requesting connection to a public sewer was for the Orange Water and Sewer Authority Board of Directors to receive comments on three basic issues from the Board of Aldermen:

- 1. Should municipal sewer service be extended into the rural buffer to relieve a public health emergency?
- 2. If public sewer service is extended to the Piney Mountain Subdivision, should it be through a line owned by Orange Water and Sewer Authority, Orange County, or the Piney Mountain Subdivision residents?
- 3. Should the public sewer connection, if installed, attach to the City of Durham system or the Orange Water and Sewer Authority system?

The apparent alternatives are provided in Kathryn Kalb's enclosed memorandum of January 7, 1994 which was furnished to the Board of Directors. Ms. Kalb will attend the Carrboro Board of Aldermen Meeting on Tuesday, January 25.

Please call if other information is needed.

Yours very truly,

un Bettingluy

Everett Billingsley Executive Director

jh

c: Julianne M. Andresen Melva Okun Henry Anderson Kathryn Kalb



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Orange Water and Sewer Authority 400 Jones Ferry Road P.O. Box 366 Carrboro, NC 27510 (919) 968-4421

MEMORANDUM

TO: Everett Billingsley

FROM: Kathryn Kalb

DATE: January 7, 1994

SUBJECT: Piney Mountain Subdivision

On December 9, 1993, the OWASA Board of Directors discussed a request from the Piney Mountain Subdivision Homeowners Association for attachment by force main to the Durham City sewer located at the intersection of Kerley and Mt. Sinai Roads. Several questions were raised by Board members on which staff agreed to report at the next scheduled meeting in January. The following issues were raised.

Identification of other onsite wastewater treatment systems in the rural buffer.

Both the Orange County Health Department and the Raleigh Regional Office of the State Department of Environment, Health, and Natural Resources were contacted. Printouts of all non-discharge and NPDES permits for Orange County were obtained. Exhibit I lists the County's spray irrigation systems and low pressure pump systems. Single family residence systems are excluded from this list. Of these, the following are in the rural buffer:

> Carolina Friends School Emerson Waldorf School Hillsborough Church of Christ Homestead Mobile Home Park Piney Mountain Subdivision

Exhibit II lists the discharging systems in the County with the exception of single family residences, municipal, and general permits. Of these, the following are in the rural buffer:

Birchwood Mobile Home Park Hilltop Mobile Home Park Kendall Page (Old Sparrow) Mobile Home Park

Management options for the Piney Mountain force main alternative.

There are several management scenarios which might be implemented. For this discussion, it will be assumed that the individual septic tanks and effluent pumps will be the property of the homeowner and the management entity will take over where the lateral connects to the collector lines. In Piney Mountain Subdivision, most of the collectors are 4-inch schedule 40 PVC which discharge to one of two dosing basins consisting of interconnected concrete tanks. In order for the force main alternative to be constructed, the two dosing basins need to be interconnected and a pump station built at the common point. The

An Equal Opportunity Employer

Everett Billingsley January 7, 1994 Page 2

Homeowners Association will construct these facilities as well as the force main to Durham.

<u>Private Force Main</u>

Management option number one might be that the collector lines, dosing basins, pump station and force main to Durham will be owned and maintained by the Piney Mountain Subdivision Homeowners Association. The Association would deal directly with Durham and they would be billed for services by the City, probably based on a flow measurement of the sewage discharged. The Association needs approval from OWASA to permit Durham to collect their sewage because they are in the OWASA service area.

<u>County Force Main</u>

The second management option might be that the collector lines, dosing basins, pump station and force main will be owned and maintained by the County. There is some precedence for this in the Eflund Cheeks pump station and sewer system which the County constructed in 1988 and which OWASA is contracted to maintain. In this alternative, the County, as owner of the system, would arrange for service by Durham and pass along the charges as necessary. Preliminary discussions with the County Engineer indicate that the County is not interested in owning and/or maintaining this pump station and force main. As with the first option, approval from the OWASA Board is required before the City can provide service to the County.

<u>City Force Main</u>

The third option for management of the force main for Piney Mountain Subdivision might be that the collector lines, dosing basin, pump station and force main will be owned and maintained by the City of Durham. As in option number one, the homeowners would then be dealing directly with the City relative to service charges. Again, approval from the OWASA Board is required before the City may provide service. It should be noted that preliminary discussions with the City Engineer indicate that the City is opposed to owning and maintaining a pump station and force main in the OWASA service area.

<u>OWASA Force Main</u>

The final force main option might be that the collector lines, dosing basin, pump station and force main will be owned and maintained by OWASA. In this case, the Authority will arrange for service and be billed by the City. The Homeowners Association will then in turn be charged for services by OWASA. It is probable that the City would charge its outside rates to OWASA and OWASA would add a surcharge for the force main and pump station maintenance. As in all of the above options, the Board must approve this arrangement with Durham.

As noted in the December Board agenda packet, another alternative is to construct the force main to OWASA's closest sewer which is south of I-40 near Erwin Road. While this would be a considerably longer force main it would not involve the City of Durham in the OWASA service area. Exhibit III is a sketch showing the two alternative force main routes. Everett Billingsley January 7, 1994 Page 3

Preliminary Engineering Estimates for Force Main Alternative

Staff has prepared engineering cost approximations for the construction of the collection interconnection, pump station and force main to Durham. Included is a sewage flow meter upon which monthly service and commodity charges would be based. The total project costs including engineering and contingencies are \$200,000.

Alternatively, pumping to the Authority's closest sewer on Erwin Rd. south of I-40 is estimated to be approximately \$500,000 in total project costs. The increase is due to 13000 additional feet of force main and boring under the I-40 interstate.

Surface Water Discharge Alternative

Additional information was received after the Board meeting in December which supports the argument made by the homeowners with regard to obtaining a NPDES permit from the State. Exhibit IV attached is correspondence from the homeowners consultant which analyzes the lowflow condition of the proposed receiving stream and offers this as one more reason why obtaining a NPDES permit may be impossible. The homeowners have recently asked DEHNR to confirm in writing these findings and it is anticipated that such correspondence is forthcoming.

Spray Irrigation Alternative

Exhibit V is a engineering report prepared by Colonial Engineering, Inc. for the Piney Mountain Homeowner's Association relative to the feasibility of installing a spray irrigation system in Piney Mountain Subdivision. Mr. Vernon Harris, President, concludes that because of the proximity of existing homes and the tightness of the soils, there is insufficient land upon which to construct a spray irrigation system.

Since the December Board meeting, representatives from the Piney Mountain Homeowner's Association have met with the staffs of the Towns of Carrboro and Chapel Hill and Orange County. Attached, Exhibit VI, is the cover letter sent to the Town Managers. The attachments are in my files. Also included as Exhibit VII is correspondence from the City of Durham Engineering Department, City Engineer, Kenneth Wright confirming their willingness to provide sewer service to the Piney Mountain subdivision subject to approval by OWASA.

The Board has asked that this agenda item be placed on the first meeting in January, 1994. I am available to discuss these matters at your convenience.

PROVIDE TO BOARD OF DIRECTORS

Kathryn Kalb, P.E. General Manager of Operations

krk Attachments wp51\piney2

EXHIBIT I

Spray Irrigation Permits in Orange County Excluding Single Family Residences

Stonegate Mobile Home Park Bingham Woods Mobile Home Park Carolina Friends School Emerson Waldorf School Hillsborough Church of Christ Phelps Restaurant South Park Thirty-Restaurant Southern Equipment Co.-Orange Fac.

<u>Collective Ground Absorption Systems in Orange County</u> <u>Including Low Pressure Pump</u> <u>Excluding Single Family Residences</u>

Calvandar Mobile Home Park Highwoods Mobile Home Park Homestead Mobile Home Park Mobile Acres II Mobile Home Park Piney Mountain Subdivision Woods Mobile Home Park

EXHIBIT II

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<u>NPDES Permits in Orange County</u> <u>Excluding Single Family Residences, Municipal, & General Permits</u>

Arbor Hills Mobile Home Park Birchwood Mobile Home Park Economy Motel Hilltop Mobile Home Park Page, Kendall Mobile Home Park Southern Village Limited Trails Property Owners Assoc. UNC-CH Power Plant



Exhibit IV

Barrett Kays & Associates

Civil Engineering/Environmental Engineering/Environmental Assessment

December 8, 1993

Ms. Deborah Christie c/o Piney Mountain Home Owners Association .5310 Taproot Lane Durham, NC 27705

RE: Preliminary Low Flow Stream Analysis Pine Mountain Creek Orange County, NC

BKA Project #9311003

Dear Ms. Christie:

On your request Barrett Kays & Associates, P.A. has conducted a preliminary low flow stream analysis for Pine Mountain Creek in Orange County, NC. Pine Mountain Creek, adjacent to the Piney Mountain Subdivision, has a drainage area of 3.5 square miles. We utilized the United States Geological Survey methodologies for estimation of low flows. These are the methodologies used by North Carolina Division of Environmental Management (DEM) for waste load allocations for wastewater discharge permits to surface waters. DEM requests flow calculations from USGS. Ms. Nancy W. Lasater, P.E. of our office worked with Mr. Robert Mason, P.E. of USGS in determining the low flow values.

Using the regional equation methodology the 7Q10 is 0.00 cfs and the 30Q2 is 0.02 cfs. The 7Q10 is an estimated stream flow that would typically occur once every 10 years for at least 7 consecutive days. The 30Q2 is an estimated stream flow that would typically occur once every 2 years for at least 30 consecutive days. The USGS has previously completed a final flow analysis downstream at SR 1718 and their records showed a 7Q10 of 0.00 cfs. It was reported to DEM as no or zero flow under the criteria with DEM.

DEM's regulations prohibit a discharge of treated wastewater into a surface stream where the 7Q10 flow is zero. However, the regulations allow a discharge if the 30Q2 flow is greater than zero and where the waste load allocation modelling can demonstrate that the discharge will not impair the water quality below the standards for the stream.

> 304 East Jones Street / Raleigh, North Carolina 27601 Telephone: 919-828-1903 Fax: 919-828-0365

Letter to Deb Christie Page 2 December 8, 1993

The average daily wastewater discharge for Piney Mountain Subdivision would be 2.5 times the 0.02 cfs 30Q2 flow. This means that the wastewater discharge would frequently be the majority of the stream flow for extended periods of time. The peak daily wastewater discharge would be over 6 times the 0.02 cfs 30Q2 flow.

In addition, the 30Q2 flow is very close to zero. The difference between 0.02 and 0.00 cfs may be greater than the standard error in the flow estimation methodology.

Given these facts, it is my opinion than DEM would not desire to issue a discharge permit for Pine Mountain Creek. It is my opinion that DEM would want the Piney Mountain Subdivision sewer system connected into a municipal wastewater collection system.

I trust that this information may be helpful to you in evaluating your options. Please contact me if you have any questions or need further elaboration.

Sincerely,

BARRETT KAYS & ASSOCIATES, P.A.

Many W. Lasata

Nancy W. Lasater, P.E. Project Engineer

Barrett L. Kays, Ph.D. President

BLK103/NWL001:cr

Vernon O. Harris, Jr., P.E. President

Colonial Engineering, Inc. P.O. Box 97005 Raleigh, N.C. 27624

(919) 847-1499 Fax (919) 847-1498

December 29, 1993

Mr. Morris Stanford Piney Mountain Home Owners Assoc. P. O. Box 15668 Durham, NC 27704

Re: Existing Wastewater Dilemma Piney Mountain Home Owners Assoc. (4316)

Dear Mr. Stanford:

Following up our conversation of December 22, 1993, we are herewith providing to you, for presentation to Orange County Agencies, a statement with regard to existing wastewater conditions and alternative possibilities. These situations are as personally observed during my visit to the Piney Mountain Subdivision on September 10, 1993. It should be noted that a very thorough review of the existing facilities and the proximity to other alternatives (i.e. hookup to Durham) was observed on that occasion.

Alternatives that were evaluated and discussed were as follows:

- 1. Continue to operate the existing systems as mentioned above, the existing system is already undersized in that more lineal feet of nitrification should have been installed and additional area is not available. The system, as installed, is doomed for failure as more houses, and lack of operational maintenance, occurs on the system.
- 2. Use exiting collection system and install treatment plant discharging to Piney Mountain Creek. The Regional Office Staff of Environmental Management was checking on the ten year low flow for this condition. This would add a new point source discharge to the Basin.
- 3. Install spray irrigation due to the proximity of existing homes and the tightness of the soils, sufficient area is not available to this community. Since it is a privately owned subdivision, it does not have condemnation rights and thus, cannot forcibly acquire other lands that may be in a reasonable proximity to this subdivision location. Furthermore, housing commitments to lands surrounding the subdivision would not allow for the existing nitrification area to be converted to above ground irrigation as sufficient buffers and protection from runoff would not be available. Some of the areas

where the LPP system is installed is steeply sloping areas which would expedite runoff into the streams under rainfall conditions With spray irrigation. LPP can be terraced in; spray irrigation cannot.

Hookup to the existing Durham sewers - the existing 4. collection system would lend itself very well to continuing to operate by discharging into a central pump station (S) that could then pump into the Durham sewers. In fact, measuring the distance in the field, it is anticipated that 1.5 miles is the distance to the nearest Durham gravity manhole located at the intersection of Mt. Two roadbores and one creek Sinai and Kurley Roads. crossing would be necessary in order to install this line. From an environmental protection point of view and the State's direction of centralizing all minor (even if potential) dischargers into a central, well-managed facility, this is the best alternative available to Piney Mountain Subdivision.

We would be happy to discuss the situation in any detail as may be requested by any review agencies on behalf of the Piney Mountain Home Owners Association. The Association is to be commended for its positive, aggressive direction in seeking to protect their environment and to handle wastewater generated from their home in the best environmental method available. It is my opinion that time is of the essence to seeking a quick solution so that contamination of nearby/streams does not occur.

Very truly yours Vernon O. Harris, PE

Vernon O. Harris, Jr., PE President

VOH, Jr/ed stanford.pme

Piney Mountain Homeowners Association Mount Sinai Road, Orange County, N.C.

December 21, 1993

Mr. Calvin Horton Chapel Hill Town Manager 306 N. Columbia Street Chapel Hill, N.C. 27516

Re: Piney Mountain Request for Expedited Review by Chapel Hill Town Council

Dear Mr. Horton:

Petition to the Chapel Hill Town Council

Thank you for meeting recently with Ms. Bes Baldwin, a member of the Piney Mountain Homeowners Association, concerning Piney Mountain's application to OWASA and the Orange County Commissioners for permission to install a pressurized sewer line from Piney Mountain to the City of Durham sewer line at Kerley and Mt. Sinai Road in Durham County. Such a line would be constructed in accordance with specifications of OWASA and the City of Durham, and would be restricted to existing lots in the Piney Mountain Subdivision. No new phases or additions to the subdivision or adjacent to the subdivision would be permitted to utilize the line. Mr. Ken Wright, Director of Engineering with the City of Durham is in the process of confirming by letter the willingness of the City of Durham to permit such a hookup to the Durham City sewer line, and I will forward to you a copy of his letter as soon as I receive it.

In your meeting with Bes, you recommended that Piney Mountain submit a petition to you for presentation to the Chapel Hill Town Council at its January 10, 1994 meeting. Piney Mountain should then present in 3 minutes its request for a nonbinding resolution by the Council approving Piney Mountain's request to OWASA and Orange County. You anticipated that the Council would then refer the matter to staff. Following investigation and recommendations by staff, the matter would then come back to the Council for action at the January 25 or February 14, 1994 meetings, depending on how soon your staff could be ready to make a recommendation.

Enclosed (<u>Attachment 1</u>) is a draft of a nonbinding resolution which we would propose for consideration by the Chapel Hill Town Council. We have drafted this resolution on the assumption that Chapel Hill will not approve or disapprove of Piney Mountain's request; instead, Chapel Hill will register its concurrence with whatever judgment is reached by OWASA and Orange County. Is this the correct approach?

How Can Piney Mountain justify an Exception to Current Policy?

You stated to Bes Baldwin that Piney Mountain would need to show how we justify an exception to the current policy which prohibits water and sewer in the Rural Buffer. As the attached nonbinding resolution shows, Piney Mountain is not requesting an exception to existing policy. Rather, Piney Mountain falls squarely within existing policy, which provides that sewer may be extended into the Rural Buffer in cases of public health emergency, such as a failing septic system. Since Piney Mountain has a failing septic system, it qualifies under the existing policy.

In addition, Piney Mountain has exhausted all other possible solutions to its sewer problem. You have already received from Bes Baldwin copies of the soil testing report dated November 16, 1993 performed by Barrett Kays & Associates, and engineering opinion dated November 24, 1993 from Paul Thames, Orange County Engineer. The Kays report indicates that 80% of the soils in the primary nitrification fields at Piney Mountain are unsuitable. Tom Konsler, of the Orange County Health Department has determined that only 1.5 of the 7 acres of designated repair area at Piney Mountain contain suitable soils. We have been unable to locate sufficient additional suitable land to purchase. The Thames letter indicates that even with suitable soils (he was not aware of the Kays report when he wrote his opinion), the LPP System at Piney Mountain is likely never to perform adequately, regardless of the funds spent. The attached additional report dated December 8, 1993 from Barrett Kays & Associates (Attachment 2)indicates that the Pine Mountain stream is not suitable for an NPDES discharge system (treatment plant). Individual septics systems are possible for only a few homesites (7 of the 58), and individual septic systems are prohibited under the restrictive covenants for the subdivision.

Will Granting Piney Mountain's Request Set a Bad Precedent?

You also suggested to Bes that Piney Mountain should explain what will prevent future requests similar to that of Piney Mountain. The best way to prevent future requests like the present one is to make certain that government regulators look closely at proposals for subdivisions with a private sewerage system. In the case of Piney Mountain, regulators at the Division of Environmental Management (DEM) approved a system that did not meet existing state standards, and the Orange County Commission relied on the DEM approval in approving the construction of the subdivision. <u>Attachment 3</u> is a sample of the complaint recently filed by owners of 30 lots in Piney Mountain against DEM.

Responsibility for enforcement of exisiting guidelines for sewer systems changed, effective June 1992, from the DEM to the Division of Environmental Health (DEH) of the State Department of the Environment, Health and Natural Resources. DEH, in turn, has delegated to local Health Departments primary enforcement authority, and it was the Orange County Health Department which initially identified defects in the Piney Mountain LPP System in the spring and summer of 1993. With proper administration of State regulations, future sewer systems in the Rural Buffer can be designed, installed and maintained properly.

i i i

It is certain that no purchaser of a lot at Piney Mountain can be blamed for the failure of our LPP System. The choice of unsuitable soils, the design, construction and maintenance of the LPP System were the responsibility of others. The key to prevention of similar requests in the future, therefore, cannot lie in penalizing current owners.

Staff Investigation As Soon As Possible

I am also writing to inquire whether it might be possible to accelerate the process by having your staff begin its investigation in advance of the January 10 meeting, so that Council members might have your recommendation and take possible action at the January 10 or 25 meetings. Such an investigation by your staff can be facilitated by their contact with the OWASA and Orange County staffs who have already begun extensive investigation of our LPP System and alternatives.

To explain further: the Piney Mountain LPP System is failing. On December 1, 1993, the emergency operator of the LPP System, Harrco Utility Corporation, submitted a request to make repairs totalling \$207,610.57 (<u>Attachment 4</u>). Harrco has never tested the Piney Mountain soils, and at the time it recommended these repairs, Harrco did not have the results of the Kays Report. Thus, Harrco has made no determination as to whether the LPP System will operate adequately even after these repairs are made. In fact, the Kays report indicates the LPP System will not operate properly for long. <u>Attachment 5</u> is a copy of the objection to Harrco's proposed assessment for capital improvements to the current LPP System, which Piney Mountain Homeowners Association filed with the Utilities Commission.

Obviously, the members of Piney Mountain are trying to avoid paying for extremely expensive repairs to a system which will shortly have to be abandoned. In order to avoid making the futile repairs, we must be able to act quickly on the installation of the pressurized sewer line to Durham's municipal line.

We have already made a presentation (on December 10, 1993) to the OWASA Board. <u>Attachment 6</u> is a copy of the statement we offered. OWASA Staff was instructed at that meeting to investigate further into the matter, and to determine the best method of communication with the governmental bodies which appoint members to OWASA (Chapel Hill, Carrboro, and Orange County). The next meetings of the OWASA Board are January 13 and 27, 1994.

The Orange County Commissioners meet on January 3 and 18, the Carrboro Aldermen meet on January 4 and 11, and the Chapel Hill Town Council meets on January 10 and 25. If Piney Mountain could secure the approval/concurrence of these governmental bodies on one of these dates, then OWASA could perhaps take definitive action on January 13 or 27.

horton

On behalf of all of the members of the Piney Mountain Homeowners Association, I thank you for your patient understanding of our request. If not for the urgence of the situation, we would not ask you for accelerated assistance. I will be telephoning you in the next few days to speak further with you about our request. Bes has already provided you with a contact sheet with the names and addresses of various members of our Association. Please feel free to contact any of those listed.

Thank you for your assistance in placing the matter of Piney Mountains request to OWASA and Orange County on the agenda for the January 10 meeting, and for beginning staff investigation as soon as you can.

Sincerely yours,

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Alm Whitaker

Alan Whitaker, President Piney Mountain Homeowners Association

Attachments:

- 1) Draft of a nonbinding resolution
- 2) Report dated December 8, 1993 from Barrett Kays & Associates
- 3) Complaint against DEM
- Request to Utilities Commission from Harroo dated December 1, 1993
- 5) Objection of Piney Mountain to Harrco's Request to Utilities Commission
- 6) Statement to OWASA dated December 10, 1993

c w/att:

Ralph Carpinos, Esquire Chapel Hill Town Attorney

Ms. Sonna Loewenthal Ms. Flo Miller

The Honorable Kenneth Broun Mayor of Chapel Hill

Ms. Julianne Andresen, Chair OWASA Board of Directors

Robert Epting, Esquire Attorney to OWASA Mr. Everett Billingsley Executive Director of OWASA

Ms. Kathryn Kalb General Manager of Operations of OWASA

Mr. John M. Link, Jr., Orange County Manager

Geoffrey E. Gledhill, Esq. Attorney to Orange County

Mr. Marvin E. Collins Orange County Director of Planning

Mr. Robert W. Morgan, Carrboro Town Manager

Mr. Roy Williford, Carrboro Director of Planning

Piney Mountain Homeowners Association Mount Sinai Road, Orange County, N.C.

December 22, 1993

Mr. Robert W. Morgan Carrboro Town Manager 301 W. Main Street Carrboro, N.C. 27510

Re: Piney Mountain Request for Expedited Review by Carrboro Board of Aldermen

Dear Mr. Morgan:

Petition to the Carrboro Board of Aldermen

Thank you for meeting recently with Ms. Bes Baldwin, a member of the Piney Mountain Homeowners Association, concerning Piney Mountain's application to OWASA and the Orange County Commissioners for permission to install a pressurized sewer line from Piney Mountain to the City of Durham sewer line at Kerley and Mt. Sinai Road in Durham County. Such a line would be constructed in accordance with specifications of OWASA and the City of Durham, and would be restricted to existing lots in the Piney Mountain Subdivision. No new phases or additions to the subdivision or adjacent to the subdivision would be permitted to utilize the line. Mr. Ken Wright, Director of Engineering with the City of Durham is in the process of confirming by letter the willingness of the City of Durham to permit such a hookup to the Durham City sewer line, and I will forward to you a copy of his letter as soon as I receive it.

Enclosed (<u>Attachment 1</u>) is a draft of a nonbinding resolution which we would propose for consideration by the Carrboro Board of Aldermen at its January 11 meeting. We have drafted this resolution on the assumption that Carrboro will not approve or disapprove of Piney Mountain's request; instead, Carrboro will register its concurrence with whatever judgment is reached by OWASA and Orange County. Is this the correct approach?

How Can Piney Mountain justify an Exception to Current Policy?

As the attached nonbinding resolution shows, Piney Mountain is not requesting an exception to existing policy. Rather, Piney Mountain falls squarely within existing policy, which provides that sewer may be extended into the Rural Buffer in cases of public health emergency, such as a failing septic system. Since Piney Mountain has a failing septic system, it qualifies under the existing policy.

In addition, Piney Mountain has exhausted all other possible solutions to its sewer problem. You have already received from Bes Baldwin copies of the soil testing report dated November 16, 1993 performed by Barrett Kays & Associates, and engineering opinion dated November 24, 1993 from Paul Thames, Orange County Engineer. The Kays report indicates that 80% of the soils in the primary nitrification fields at Piney Mountain are unsuitable. Tom Konsler, of the Orange County Health Department has determined that only 1.5 of the 7 acres of designated repair area at Piney Mountain contain suitable soils. We have been unable to locate sufficient additional suitable land to purchase. The Thames letter indicates that even with suitable soils (he was not aware of the Kays report when he wrote his opinion), the LPP System at Piney Mountain is likely never to perform adequately, regardless of the funds spent. The attached additional report dated December 8, 1993 from Barrett Kays & Associates (Attachment 2) indicates that the Pine Mountain stream is not suitable for an NPDES discharge system (treatment plant). Individual septics systems are possible for only a few homesites (7 of the 58), and individual septic systems are prohibited under the restrictive covenants for the subdivision.

Will Granting Piney Mountain's Request Set a Bad Precedent?

The best way to prevent future requests like the present one is to make certain that government regulators look closely at proposals for subdivisions with a private sewerage system. In the case of Piney Mountain, regulators at the Division of Environmental Management (DEM) approved a system that did not meet existing state standards, and the Orange County Commission relied on the DEM approval in approving the construction of the subdivision. <u>Attachment 3</u> is a sample of the complaint recently filed by owners of 30 lots in Piney Mountain against DEM.

Responsibility for enforcement of exisiting guidelines for sewer systems changed, effective June 1992, from the DEM to the Division of Environmental Health (DEH) of the State Department of the Environment, Health and Natural Resources. DEH, in turn, has delegated to local Health Departments primary enforcement authority, and it was the Orange County Health Department which initially identified defects in the Piney Mountain LPP System in the spring and summer of 1993. With proper administration of State regulations, future sewer systems in the Rural Buffer can be designed, installed and maintained properly.

It is certain that no purchaser of a lot at Piney Mountain can be blamed for the failure of our LPP System. The choice of unsuitable soils, the design, construction and maintenance of the LPP System were the responsibility of others. The key to prevention of similar requests in the future, therefore, cannot lie in penalizing current owners.

Staff Investigation As Soon As Possible

I am also writing to inquire whether it might be possible to accelerate the process by having your staff begin its investigation so that Aldermen might have your recommendation and take possible action at the January 11 meeting of the Aldermen. Such an investigation by your staff can be facilitated by their contact with the OWASA and Orange County staffs who have already begun extensive investigation of our LPP System and alternatives.

To explain further: the Piney Mountain LPP System is failing. On December 1, 1993, the emergency operator of the LPP System, Harrco Utility Corporation, submitted a request to make repairs totalling \$207,610.57 (Attachment 4). Harrco has never tested the Piney Mountain soils, and at the time it recommended these repairs, Harrco did not have the results of the Kays Report. Thus, Harrco has made no determination as to whether the LPP System will operate adequately even after these repairs are made. In fact, the Kays report indicates the LPP System will not operate properly for long. Attachment 5 is a copy of the objection to Harrco's proposed assessment for capital improvements to the current LPP System, which Piney Mountain Homeowners Association filed with the Utilities Commission.

Obviously, the members of Piney Mountain are trying to avoid paying for extremely expensive repairs to a system which will shortly have to be abandoned. In order to avoid making the futile repairs, we must be able to act quickly on the installation of the pressurized sewer line to Durham's municipal line.

We have already made a presentation (on December 10, 1993) to the OWASA Board. <u>Attachment 6</u> is a copy of the statement we offered. OWASA Staff was instructed at that meeting to investigate further into the matter, and to determine the best method of communication with the governmental bodies which appoint members to OWASA (Chapel Hill, Carrboro, and Orange County). The next meetings of the OWASA Board are January 13 and 27, 1994.

The Orange County Commissioners meet on January 3 and 18, the Carrboro Aldermen meet on January 11, and the Chapel Hill Town Council meets on January 10 and 25. If Piney Mountain could secure the approval/concurrence of these governmental bodies on one of these dates, then OWASA could perhaps take definitive action on January 13 or 27.

On behalf of all of the members of the Piney Mountain Homeowners Association, I thank you for your patient understanding of our request. If not for the urgence of the situation, we would not ask you for accelerated assistance. I will be telephoning you in the next few days to speak further with you about our request. Bes has already provided you with a contact sheet with the names and addresses of various members of our Association. Please feel free to contact any of those listed.

Thank you for your assistance in placing the matter of the nonbinding resolution concerning Piney Mountain's request to OWASA and Orange County on the agenda for the January 11 meeting of the Carrboro Board of Aldermen, and for beginning staff investigation as soon as you can.

morgan

Sincerely yours,

Alon Whitaker

Alan Whitaker, President Piney Mountain Homeowners Association

Attachments:

- 1) Draft of a nonbinding resolution
- 2) Report dated December 8, 1993 from Barrett Kays & Associates
- 3) Complaint against DEM
- 4) Request to Utilities Commission from Harroo dated December 1, 1993
- 5) Objection of Piney Mountain to Harrco's Request to Utilities Commission
- 6) Statement to OWASA dated December 10, 1993

c w/att: Mr. Roy Williford Carrboro Director of Planning

> Mr. Calvin Horton Chapel Hill Town Manager

Ralph Carpinos, Esquire Chapel Hill Town Attorney

Ms. Sonna Loewenthal Ms. Flo Miller

The Honorable Kenneth Broun Mayor of Chapel Hill

Ms. Julianne Andresen, Chair OWASA Board of Directors

Robert Epting, Esquire Attorney to OWASA

Mr. Everett Billingsley Executive Director of OWASA

Ms. Kathryn Kalb General Manager of Operations of OWASA
Mr. John M. Link, Jr. Orange County Manager

Geoffrey E. Gledhill, Esq. Attorney to Orange County

Mr. Marvin E. Collins Orange County Director of Planning

Exhibit VII

DURHAM



1869 CITY OF MEDICINE DIVISIONS

Street Engineering	560-4326
Water & Sewer Engineering	560-4326
Street Haintenance	560-4312
Water & Sewer Haintenance	560-4344



December 22, 1993

Mr. Alan Whitaker, President Piney Mountain Homeowner's Association 4729 Taproot Lane Durham, N. C. 27705

Dear Mr. Whitaker:

Over the last several months, I have had several conversations with Ms. Deborah Christie regarding the possibility of sewer service being provided by the City of Durham to the Piney Mountain subdivision. This discussion was in view of the fact that the current onsite system serving the subdivision was not operating properly. I had advised Ms. Christie that the Piney Mountain subdivision was located in a utility service area designated to OWASA by the City of Durham and that service by the City would be contingent upon a release from OWASA.

As of this date, OWASA has not indicated a willingness to release the subdivision to service by the City of Durham, nor has it indicated under what conditions, if any, it may be willing to do so. If, however, OWASA were to release the subdivision, subject to conditions found acceptable by the City, this is to advise that I would be willing to recommend to the City Council that the City of Durham provide sewer service to the Piney Mountain subdivision subject to the terms of an agreement. The terms to be included in that agreement have not yet been fully determined. However, it would include a provision whereby the sewer collection system within the subdivision, a pump station, and force main connecting the subdivision to the existing City sewer system would remain in the ownership of the Piney Mountain Homeowner's Association, and that sewer service would be limited to the existing lots within the Piney Mountain subdivision both developed and vacant. No new phases of the subdivision could be served by the sewer system nor could any other development outside the subdivision.

The provisions of this letter are limited to an agreement between the City and the Piney Mountain Homeowner's Association. No commitment is being made at this time for any similar arrangement with any other entity that might subsequently own and/or operate the sewer collection system serving the Piney Mountain subdivision. If you have any questions regarding this matter, please feel free to contact me.

Sincerely.

Kenneth E. Wright, PE, RLS City Engineer

KEW/lcp

c: Lee Murphy Don Greeley Deborah Christie

BOARD OF ALDERMEN

ITEM NO. D(3)

AGENDA ITEM ABSTRACT MEETING DATE: January 25, 1994

SUBJECT: Proposal for Space Needs for Town Hall (Police, Fire, Library)

DEPARTMENT: MANAGER'S OFFICE	PUBLIC HEARING: YES	NO _X_
ATTACHMENTS: RFP for space needs study Library Committee request	FOR INFORMATION CONTACT: James Harris 968-7700	
THE FOLLOWING INFORMATION IS PROVIDED:(x) Purpose(x) Action Requested(x) Summary(x) Recommendation		(x) Analysis

PURPOSE:

The police department, other town hall departments, and the library committee have identified a need for additional space for operations and proposed programs. On November 16, 1993 the Board of Aldermen requested that the Administration develop a Request for Proposal for Architectural Services to address the space needs of the police department. An alternate bid to determine the space needs of all town departments at town hall is to be included. The Mayor and Board of Aldermen will review the proposed RFP, decide whether to consider the inclusion of the library committee's request for inclusion and approve the process for reviewing the RFP's.

SUMMARY:

The proposed RFP is to determine the space needs of the police department with an alternate proposal to study the space needs of all town hall departments including a potential library. The study should reflect adequate space to accommodate the first ten (10) years of a twenty (20) year program expansion for all town services located in town hall. The town may opt to stop the process after the space study.

- If the Board approves the RFP as represented, the town will be able to, with a complete study, determine in a rational fashion how to budget and plan for the expansion needs of all departments, and the proposed library.
- This process will allow the Board to select an architectural firm to conduct a phased study of the space needs of town departments located at town hall.
- The Board of Aldermen will be able to evaluate each phase of this process before committing to proceed to the next phase.

ANALYSIS:

The Board of Aldermen at 1992 Annual Retreat requested that staff prepare a report on the space needs of the police department. In response the staff prepared a report and presented it to the Board on June 15, 1993. The report documented a need for additional space for the police department and a need to bring all police functions to one area to facilitate communication in the department and allow for better supervision.

Staff recommended that a formal Space Needs Study be performed by an architect for all town hall departments. The inclusion of all departments in the study was based upon a request from the Board at the January 1993 Annual Retreat.

During the 1993-94 budget deliberations the Board requested that the space needs of the police department be brought back to the Board.

On November 16, 1993 the Board directed the staff to develop a Request for Proposal for an architect to study the space needs of the police department, and alternately, all town hall departments based upon an expansion program plan to year 2010. The study would show how and where town departments and offices may be located in either renovated or newly constructed space. The Board also wanted to know about the possibility of renting space to meet the police departments current needs.

The options available to the town to meet the expansion needs are to rent space to accommodate current needs, perform a space needs study to determine the true needs of the town departments and renovating existing town hall space, building on to town hall or buying and renovating an existing structure.

At the Board's request, staff looked at renting additional space and prepared a RFP for architectural services. There are vacant spaces at Carrboro Plaza that would meet the current needs of the police department. The space rents for \$15 per square foot. The police department currently occupies 3,500 sq. ft.. A review of the departments current needs indicates an additional 1,500 sq. ft. is needed. The additional space would be \$22,500 per year not including cost for utilities and retrofitting the building. An approximate figure for water and electricity for one year is \$2,700. It will cost \$45,000 to retrofit the building, bringing the total amount of rent, utilities and retrofitting for the space to \$70,200.

Some Board members suggested meeting current space needs as a solution to the space needs issue. Meeting current needs suggest that the police department would be further fragmented. The more fragmented the department, the more defused the supervision becomes. The Police Chief wishes to unify the department in one location to improve communications across the divisions. Better communication and coordination of resources would produce better service. There was also a questions about the location of rented space and it's impact on response time. The location of the additional space would have little effect on the response time because the officers are on patrol and respond from those routes in the field.

A committee including board members and key staff is needed to guide the process of selecting an architectural firm to ensure that the concerns of the Board and staff are met.

RECOMMENDATION:

Administration recommends proceeding with the solicitation of Request for Proposals to study the space needs of all departments and the library and that funds from contingency be earmarked for this project. It is estimated that the cost will be from \$8,000 to \$15,000.

Administration also recommends the establishment of a six (6) member committee to review the proposals for service and selection of an architect to be recommended to the full Board. The composition of the committee would include two board members, the Public Works Director, the Community and Economic Development Officer, Police Chief, and Chair of the Appearance Commission. It is also recommended that this process be exempt from the requirements of General State Statute 143-64.31 of the N.C. General Statues as it refers to cost and negotiated contracts.

ACTION REQUESTED:

That the Board of Aldermen authorize the Manager to issue the RFP for an architect to design a new facility for the police department with a preliminary phase to determine the space needs of the police department and cost estimates for constructing an addition to the town hall; and an alternated bid to assess the space needs of the entire town hall departments including the proposed library. The Town of Carrboro is seeking comprehensive architectural proposals to provide the following services :

1. A space needs study for the Carrboro police department which is currently housed in the Carrboro Town Hall and the Fire department. The intent is to determine, based on a minimum expansion program to the 2010, and how and where the department may be located in either renovated space or newly constructed space.

The scope of the work for item 1 will include, at a minimum, the following task:

- a. Photographic and written essay of the existing building conditions (interior and exterior)
- b. Measured drawings of town hall and the fire station (partial plans exist, dated 1981, of Town Hall)
- c. Program space needs of the Police Department (requires questions and answer sessions with staff) Note. An initial preliminary program exists for the police department. Town staff will define future staffing needs.
- d. Proposed police department relocation plans indicating new layout in existing facilities and schematic layout of new construction. Note: The Town anticipates that the Police Department will be relocated away from the Town Hall to a new facility either attached or separate from Town Hall. This will free up space for other office use:
- e. Phasing plan to explain how office relocation will occur.
- f. Structural analysis for appropriate space use; i.e., will the second floor suitably house an office or file storage room.
- g. Analysis of existing electrical and mechanical systems.
- h. Provide cost estimates for each proposed alternative.
- 2. Basic architectural and engineering services, including programming, to provide new or renovated space to facilitate the first ten years of the expansion program.

The scope of work for item 2 will include all tasks described in AIA document B-141, latest edition, including working from the program statement previously prepared under item 1. Other items to be included as basic services will be:

a. A prime construction contract.

- b. Field survey analysis and documentation of existing conditions to the extent new construction is concerned. This will not include property, boundary or topographic surveying.
- c. All services involved with public hearings.

Other items shall be negotiated after designer selection and prior to contract signing. The town reserves the right to discontinue the contract after Phase One.

Proposal should include, at a minimum, the following:

- 1. Information on firm and resume of project manager to be assigned to this project.
- 2. Information on consultants to be assigned to this project.
- 3. Explanation of your firm's approach to this project.
- 4. Approximate time table, in weeks, to accomplish various tasks.
- 5. The base fee or hourly rate proposed for the project. Hourly rate listings for all employees will be included. This will include all of the firm's employees who may work on a project of this nature. Other associated or anticipated unit costs will be provided (copies, travel, etc.). For the proposal to be considered, the firm shall submit a not to exceed total cost as well. The Town wishes to receive this information under separate cover in a sealed envelope so that this information can be considered apart from the other items requested on Page 1.
- 6. Other pertinent information you wish to submit.

Deliver six copies of proposal to:

James Harris, Community and Economic Development Officer, Office of Town Manager Post Office Box 829 Carrboro, N.C. 27510

ALTERNATE

The Town of Carrboro is seeking comprehensive architectural proposals to provide the following services:

1. A space needs study which will include the Fire Department, Police Department and all offices presently housed in the existing Town Hall structure. The intent of this study is to determine, based on a minimum expansion program to the year 2010, how and where Town departments and offices may be located in either renovated space or new construction. The Town wished to utilize the existing Town Hall and adjacent Fire Station facilities to the greatest extent possible.

It is anticipated that the scope of work for item 1 will include, at a minimum, the following tasks:

- a) Photographic and written essay of existing building conditions (interior and exterior).
- b) Measured drawings of Town Hall and Fire Station (partial plans exist, dated 1981, of Town Hall).
- c) Program space needs of all offices (requires question-and-answer sessions with staff). NOTE: An initial preliminary program exists for the Police Department. Town Staff will define future staffing needs.
- d) Proposed office relocation plans indicating new layout in existing facilities and schematic layout of new construction. NOTE: The Town anticipates that the Police Department will be relocated from Town Hall to a new facility either attached or separate from Town Hall. This will free up space for other office uses.
- e) Phasing plans to explain how office relocation might occur.
- f) Structural analysis for appropriate space use; i.e.. will the second floor suitably house an office or file storage room.
- g) Analysis of existing electrical and mechanical systems.
- h) Provide cost estimates for each alternative.
- 2. Basic architectural and engineering services, including programming, to provide new or renovated space to facilitate the first 10 years of the expansion program.

The scope of work for Item 2 will include all tasks described in AIA Document B-141, latest edition, including working from the program statement previously prepared under item 1. Other items to be included as basic services will be:

- a) Separate Prime construction contracts.
- b) Field survey analysis and documentation of existing conditions to the extent new construction is concerned. This will not include property, boundary or topographic surveying.
- c) All services involved with public hearings.

Proposals should include, at a minimum, the following information:

- 1. Information on firm and resume of project manager to be assigned to this project.
- 2. Information on consultants to be assigned to this project.
- 3. Explanation of your firm's approach to this project.
- 4. Approximate time table, in weeks, to accomplish various tasks.
- 5. The base fee or hourly rate proposed for the project. Hourly rate listings for all employees will be included. This will include all of the firm's employees who may work on a project of this nature. Other associated or anticipated unit costs will be provided (copies, travel, etc.). For the proposal to be considered, the firm shall submit a not to exceed total cost as well. The Town wishes to receive this information under separate cover in a sealed envelope so that this information can be considered apart from the other items requested on Page 1.
- 6. Other pertinent information you wish to submit.

Deliver three copies of proposal to:

James Harris Community and Economic Development Officer Office of Town Manager Post Office Box 829 Carrboro, NC 27510

Proposals accepted until Friday, _____, @ 4:00PM.

Friends of Carrboro Library: Branch of Orange County Library PO Box 665 Carrboro, NC 27510 October 4, 1993

Board of Aldermen Carrboro, North Carolina 301 W. Main Street Carrboro, NC 27510

Dear Aldermen:

In two years of searching for the most ideal place to put a branch library within Carrboro, the upstairs of Town Hall has come to the fore again and again as the site most central, most accessible, and most revered by the citizens. The natural lighting and the shape of the space lend themselves well to library service. The building is well-positioned: it is in the downtown business district of Carrboro and not far from the geographic center of the town. People can walk to it; there are nearby buses; it is possible to park nearby. And no site better represents Carrboro than its well-used Town Hall. County Manager John Link has come out in favor of a Town Hall site for a library because the one-time cost of renovation, which needs to be done anyway, would be far easier on county budgets than paying rent continuously for a storefront site.

We would like to request that you consider a public branch library as a contender for use of the upstairs space. Specifically, we urge you to act on Town Manager Robert Morgan's request that a study of space needs for town offices be done, and we ask that you include the forthcoming branch library in that space study. We further request that you get an architectural firm to conduct the space study, as such a firm would then do an engineering study of the potential cost of strengthening the floors to make any use of the top floor usable.

If the upstairs space were to be accepted as a space for a library, our Friends of the Library group would be willing to mount a fund-raising campaign and also send off a number of grant-requests to raise some or all of the funds necessary for renovating the space. We would like to get started on that process soon, as we do plan to open either a branch library or a reading room in a temporary site in the new middle school in August or September of 1994, assuming negotiations with the Chapel Hill-Carrboro City Schools continue to be positive. We need a centrally located site to move into as quickly as possible once we begin operation, and we would very much like to see Town Hall be that site.

We are delighted that you are replacing the roof in such a timely fashion! We ask that you continue your efforts to make all of Town Hall usable by conducting the space study requested of you by Mr. Morgan.

Sincerely,

Barbara Dewey, President Friends of Carrboro Library

cc Robert Morgan Mayor Eleanor Kinnaird

RECEIVED OCT 6 1993

BOARD OF ALDERMEN

ITEM NO. D(4)

AGENDA ITEM ABSTRACT

MEETING DATE: January 25, 1994

SUBJECT: OPEN SPACE ZONING ORDINANCE REVIEW (Continued)

DEPARTMENT: PLANNING DEPARTMEN	NT PUBLIC HEARING: YES	NO X_
ATTACHMENTS:	FOR INFORMATION CONTACT:	
Open Space Questions Article by Randall Arendt	Roy M. Williford, 968-7713	
THE FOLLOWING INFORMATION IS PROVIDED:		
(x) Purpose (x) Summary	(x) Action Requested (x) Analysis (x) Recommendation	

PURPOSE:

To continue the Board of Aldermen's discussion of open space zoning concepts and how they compare with existing development options in the Town of Carrboro. This matter was requested by the Board at its 1993 Planning Retreat.

SUMMARY:

Open space zoning is a type of cluster development in which the development is required to be concentrated on a portion of the total tract and the remainder is left as permanent open space. Originally conceived as a technique to preserve active agricultural use of lands under pressure for conversion to residential use, open space zoning techniques were intended for use in rural areas. However, the techniques are now being used in some suburban area to combat suburban sprawl and preserve non-agricultural open space.

Carrboro's Land Use Ordinance presently allows cluster development in residential zoning districts and requires that open space be set aside in residential developments. None of the existing Town of Carrboro cluster regulations are mandatory and the required amounts of open space to be set aside are far smaller than those typically found in open space zoning schemes.

ANALYSIS:

The Board began its discussion of open space zoning on June 22, 1993 at which time a staff report was submitted. The Board reviewed the staff report and requested that a worksession be scheduled to provide further review of open space concepts and requested copies of ordinances from other municipalities that have mandatory open space ordinances.

The Board held a worksession on January 04, 1994, ordinances from other jurisdictions that have mandatory open space regulations were supplied for Board review and discussion.

The Board continued its review and discussion of open space zoning ordinances on January 04, 1994 and voiced concerns and questions which are addressed in the attached report.

RECOMMENDATION:

The staff recommends that the Aldermen review the attached report and that particular attention be directed toward answering the first two questions of the report -- "Will open space standards be voluntary or mandatory?", "How much open space will be set aside?"

ACTION REQUESTED:

That the Board of Aldermen discuss the attached report and attempt to provide solutions to the questions as listed.

QUESTIONS REGARDING OPEN SPACE

(OPEN SPACE TREATMENTS PROVIDED BY CARRBORO; LOUDOUN COUNTY, VIRGINIA; WEST TISBURY, MA; LIVINGSTON COUNTY, MI; GRAFTON, MA; AND EAST LYME, CT.)

1. Will the open space standards be voluntary or mandatory?

A. Carrboro - Open space mandatory - cluster and AIS optional

- B. Loudoun County Optional
- C. West Tisbury Optional
- D. Livingston County Optional
- E. East Lyme Option of Planning Commission see attached article "Cluster Development: A Profitable Way to Save Open Space" regarding mandatory vs optional provisions (page 30 "Degrees of Mandating Open Space")

2. How much open space will be set aside?

A. Carrboro -

• ••

- 1) <2 units/acre = 5%
- 2) >2 units/acre = 15%
- 3) AIS requires reduced lot size savings to be put into open space.
- 4) Cluster development standards

Zoning District	Standard Lots Minimum Sq.Feet	Cluster Lots Minimum Sq. Feet	۶ Change
R-7.5	7,500	5,625	-25
R-10	10,000	7,500	-25
R-S.I.R	10,000	7,500	-25
R-15	15,000	11,250	-25
R-20	20,000	15,000	-25
R-R	43,560	20,000	-54
WR	217,800	43,560	-80

Subdivided residential development of less than 25 units are exempt from the open space requirement of the LUO unless the Town agrees to accept a portion of the tract as public open space, otherwise a payment in-lieu of open space must be provided.

- B. Loudoun County Minimum of 80% of the tract must be in open space.
- C. West Tisbury 60,000 square foot lot requirement can be reduced if open space areas are set aside in accordance with the guidelines - no specific percent given.
- D. Livingston County Minimum of 50%.
- E. Grafton Minimum of 40% or 50% depending on the base zoning district.
- F. East Lyme Minimum of 33 to 50% depending on the base zoning district.

OPEN SPACE QUESTIONS (con't) Page #2

3. What features should not be included as open space?

- A. Carrboro 1) areas not encumbered with any substantial structure; 2) roadways, parking area, sidewalks; 3) waste disposal fields; 4) land not legally or practicably accessible to the residents of the development.
- B. Loudoun County Excludes floodplains and slopes greater than 25% from net acreage.
- C. West Tisbury Net developable area does not include wetlands.
- D. Livingston County 1) areas donated to public or private streets or rights-of-way or any land that has been or is to be conveyed to a public agency; 2) any area donated to natural or improved flood control channels or those area encumbered by floodway or county drainage easements; 3) all area in surface water bodies or wetlands shall not be considered dedicated open space.
- E. Grafton Rights-of-way for streets are excluded.
- F. East Lyme No specific exclusions.

4. What features should be included or protected as open space?

- A. Carrboro 1) land which is part of a designated stream buffer or flood hazard area, including floodways and floodplains; 2) water bodies; 3) land which has slopes over 15%; 4) passive recreation and ballfields and picnic area; 5) environmentally sensitive land such as those listed in the <u>Inventory of Natural Areas and Wildlife Habitat of Orange County, NC</u>; 6) bikepaths and pedestrian trails; 7) wooded area (although this can be waived under certain conditions).
- B. Loudoun County 1) agricultural; 2) forestal and open space land; 3) historic and natural features.
- C. West Tisbury 1) open fields, pastures, stone walls, and working farms; 2) sites of significant species of plants/wildlife; 3) ancient ways, scenic views, and vistas; 4) historic sites; 5) recreational access to resource lands.
- D. Livingston County Any undeveloped land within a parcel which is not specifically excluded (i.e.; no public or private streets, public lands, flood control channels, drain easements, water bodies, wetlands, and lots).
- E. Grafton 1) agricultural and forestry land; 2) natural resources; 3) scenic vistas; 4) unique and significant natural, historic, and archeological resource; 5) detention facilities or leaching areas; 6) may be used for walkways and bikepaths.
- F. East Lyme 1) natural areas; 2) agricultural open space; 3) significant stands of trees; 4) steep slopes; 5) ridge lines;
 6) geological features; 7) water bodies; 8) wetlands; 9) water courses; 10) floodplains.
- 5. What design standards should be selected to provide for the placement of open space?

- A. Carrboro Select from the following areas in descending order (up to 25% and 35% of the tract inside the University Lake Watershed)
 - 1) Designated buffer areas including floodplains.
 - 2) Land with slopes greater than 15% and water bodies associated with the University Lake Watershed.
 - 3) Other flood hazard areas, slopes greater than 15%, areas adjacent to buffers int he University Lake Watershed with assimilative soils.
 - 4) Other hazard area, environmentally sensitive area and natural area identified in the <u>Inventory of Natural Areas</u> and <u>Wildlife Habitat of Orange County, NC</u>.
- B. Loudoun County -
 - 1) Hamlets should not be placed on the crest of a ridge.
 - 2) Houses should be located in a dip of the land or on the side of a hill.
 - 3) Hamlet designs should incorporate a mix of evergreen trees - generally located to the north and west of the winter wind protection and deciduous trees to the west and south for summer shade.
 - 4) Where natural contours, subsurface conditions and tract boundaries prevent discrete hamlet placement, the development's presence should be reduced by locating naturalistic earth berms near adjacent roadways and/or planting screens of trees simulating mature hedgerows.
 - 5) Hamlets should seek compact massing and profile similar to traditional form buildings.
 - 6) 70% tract shall be reserved as open space surrounding the hamlet.
- C. West Tisbury -
 - 1) Preserve and maintain existing fields, pastures, and other agricultural use and sufficient buffer areas to minimize conflict between residential and agricultural use.
 - 2) Maintain and create a buffer of natural vegetation of at least 100 feet in width adjacent to surface waters and wetlands and a buffer area free of residential structures of at least 200 feet in width adjacent to surface waters.
 - 3) Leave unblocked or uninterrupted scenic views and vistas, particularly as seen from public roads, special places or scenic roads.
 - 4) Protect the habitat areas of species listed as endangered, threatened or of special concern by the Natural Heritage Program.
 - 5) Preserve historic and prehistoric sites and their environs insofar as needed to protect the character of the site.
 - 6) Maintain the visual integrity of the hilltops and ridgelines by siting development so that building silhouettes will be below the ridgeline or hilltop or if the area is heavily wooded, the building silhouette will

be at least 10 feet lower than the average canopy height of trees on the ridge or hilltop.

- 7) Leave land defined and mapped as prime farmland by the U.S. Soil Conservation Service.
- D.
- Livingston County -1) Residential lots shall be laid out, to the greatest extent feasible, to achieve the following objectives:
 - on the most suitable soils for subsurface septic а. disposal.
 - b. within a woodland contained in the parcel or along the far edge of open fields adjacent to any woodland.
 - c. in locations least likely to block or interrupt scenic vistas, as seen from public roadway(s).
 - 2) Setback
 - a. front, rear and side yard setbacks may be staggered to provide for maximum variety in the size of such yards.
 - b. the minimum distance between dwellings shall be sixty feet.
 - the maximum possible rear yards onto open space c. shall be provided.
 - dwelling placement shall be as far as possible from d. open space.
 - 3) Lot width - Eighty feet as measured from the front building line.
 - Open space between clusters. 4) Open spaces between clusters, including those spaces used as recreation areas, shall be at least 100 feet wide and shall be protected with an irrevocable conveyance that is found acceptable to the Planning Commission.
 - 5) Landscaping and buffering-
 - 1. buffer zones at least 100 feet in width shall be required between residential nd agricultural areas and shall be planted with fast growing native shrubs and trees to create an effective barrier separating yards from fields and pastures.
 - 2. Landscaped or natural vegetative cover shall provide a screened buffer between dwellings and neighboring properties.
 - 6) Dwelling Placement - Dwelling units shall be carefully located and designed in accordance with community plans, inventories and mapping in order to avoid conflicts with neighboring land uses. Dwelling placement shall be planned to screen homes from off-site vantage points, away from environmentally sensitive areas, existing agricultural uses, sites suitable for open space and upwind from areas subject to land management practices that will cause dust, noise, smoke, odors or similar problems.
 - 7) Natural Features Preservation - The development shall be

designed to promote the preservation of natural features. Individual lots, buildings, streets and parking areas shall be designed and situated to minimize alteration of the natural environment.

- 8) Compatibility with adjacent land uses Individual lots, buildings, and units shall be arranged and situated to relate to surrounding properties, to improve the view from public roadways and to blend into the existing natural landscape.
- 9) Preserving rural character The design of open space should show consideration for the character of the open space reserve. Wildlife habitats shall be preserved by leaving open space in single blocks of land. Prime agriculture and woodlands shall be preserved in such a way to ensure continuing feasibility of agriculture and forestry.
- 10) Vehicular and open space access Cluster homesites shall provide vehicular access from an interior common area. The interior common area shall be connected to the common open space system by an open space corridor.
- 11) Waterways and wetlands buffering All dwellings, accessory structures and roadways shall be no less than 100 feet from lakes, ponds, streams and wetlands. The 100 foot area shall be part of the dedicated open space and shall not be in private ownership.
- 12) Preserving roadway frontage All dwellings and accessory structures shall be no less than 100 feet from the edge of the major arterial and that 100 foot area shall be maintained in native plants and trees so as to create a buffer between the roadway and the development.
- E. Grafton -

In evaluating the layout of lots and common land, the following criteria will be considered by the Planing Board as indicating design appropriate to the natural landscape and meeting the purpose of flexible development.

- 1) Preserve and maintain existing fields, pastures, other land in agricultural use and sufficient buffer areas to minimize conflict between residential and agricultural use.
- Maintain or create a buffer of natural vegetation of at least 100 feet in width adjacent to surface waters and wetlands.
- 3) Leave unblocked or uninterrupted scenic views and vistas, particularly as seen from public roads, special places as designated in the Town of Grafton Open Space and Recreation Plan, or scenic roads.
- 4) Protect the habitat areas of species listed as endangered, threatened or of special concern by the Massachusetts Natural Heritage Program.
- 5) Preserve historic and prehistoric sites and their environs insofar as needed to protect the character of

the site.

- 6) The elements of the Flexible Development Plan (buildings, circulation, common land, landscaping, etc.) are arranged favorably with and so as to protect valuable natural environments such as stream valleys, outstanding vegetation, water bodies or scenic views.
- 7) Protection of major street appearance and capacity by avoiding development fronting such streets while contributing to the overall aesthetic quality of the development.
- 8) Landscaping screens areas of low visual interest, such as utility boxes, trash containers, and parking areas, and treats pedestrian systems and open space areas in a manner which contributed to their use and visual appearance.
- 9) Active recreational areas are suitably located and accessible to the residential units and adequate screening ensures privacy and quiet form neighboring residents. Where called for in the <u>Grafton Open Space and Recreation Plan</u> and where warranted by the criteria established in the plan, and where feasible on a site, a large playing field is to be provided for recreational use.
- 10) The pedestrian circulation system is designed to assure that pedestrians can mover safely and easily on the site and between properties and activities within the site and neighborhood.
- 11) The Common Land shall be reasonably contiguous, coherent and if the tract of land abuts adjacent Common Land or other permanently protected open space, the Common Land shall be connected with such adjacent Common Land and with such permanently protected open space.
- 12) Access to the Common Land shall be delineated by the use of design elements such as stone walls, woodland paths surfaced with bark mulch, etc.
- F. East Lyme Not clearly stated.
- 6. What land uses should or mixture of land uses should be subject to the open space requirements and should different land uses be subject to different open space provisions?
- A. Carrboro Residential uses.
- B. Loudoun County Residential uses.
- C. West Tisbury Residential uses.
- D. Livingston County Residential uses.
- E. Grafton Residential uses.
- F. East Lyme Residential uses.

OPEN SPACE QUESTIONS (con't) Page **#**7

7. Where should the open space requirements apply (i.e., should portions of the jurisdiction be treated differently than other portions such as the transition area verses "in-town" developments or should some areas be excluded?)?

A. Carrboro - All residential zones.

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- B. Loudoun County A-3 zoning district (1 unit/3 acres)
- C. West Tisbury A-R zoning district (1 unit/60,000 sq. ft.)
- D. Livingston County Residential zones.
- E. Grafton R-20, R-40, Agricultural and Rural Multi-family zones
- F. East Lyme RU-40, RU-80, and RU-120 zones

8. How should the open space be dedicated?

- A. Carrboro Land Trust Conservation Corporation, Homeowners Associations, Town, Fee Simple or Easement
- B. Loudoun County Homeowners Association, Fee Simple and Easement
- C. West Tisbury To the town or a non-profit land conservation organization fee simple/permanent conservation restriction.
- D. Livingston County 1) deed restriction; 2) covenants that run perpetually with the land; 3) conservation easement (maintenance schedules and responsibilities must be spelled out)
- E. Grafton Conveyed to the Town, non-profit, corporation or trust owned jointly or in common by the owner of lots; retained by the owner and restricted to conservation uses.
- F. East Lyme Deeded to the Town, deeded to homeowners association, reserved for common use (deed restriction), deeded to the East Lyme Conservation Trust.
- 9. Should density bonus options be provided in relation to open space?

Carrboro, as well as the other jurisdictions, provides for lot size reductions as part of the clustering incentive.

- 10. Should the underlying density remain the same (i.e., should an open space overlay district be applied over base zoning districts or should separate open space zoning districts be created)?
- 11. When should open space be dedicated (up front, on a phases-byphase basis, prior to construction plan approval, prior to or as part of each final plat)?
- 12. Determine density with two possible plans -- conventional zoning and cluster zoning.

OPEN SPACE QUESTIONS (con't) Page #8

- 13. Determine whether open space can be used for recreational purposes.
- 14. If open space is used for recreational purposes, the recreational use should be defined/designated.
- 15. Suburban design should not be enforced on rural housing.

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Cluster Development: A Profitable Way to Save Open Space

By Randall Arendt, MRTPI Natural Lands Trust

Building homes in clusters can reduce development costs while preserving permanent open space for recreation, wildlife, or agriculture.

ost suburban and rural residential developers probably have not fully considered the political and economic advantages offered by cluster or "open space" development. The cluster approach allows developers to build the usual number of homes on a given site while reducing roadbuilding and utility costs. In addition, open space development provides permanently protected open space (for recreation, wildlife, agriculture), which adds tangible economic value to individual house lots. Best of all, the increased value is created at no additional cost to the developer or to the local jurisdiction and involves no sacrifices by the original land owner (who receives the usual selling price). In fact, the cluster approach rewards all participants in the development process and penalizes no one.

In an era of substantial buyer resistance to condominiums and other attached units, it is important to note that cluster developments can be easily designed to maintain the traditional American standard of the single-family detached home on its own lot. Open space is created by downsizing and clustering lots on a site and thereby protecting the property's valuable natural features or scenic attributes. The classic New England village settlement pattern is a superb example of clustered single-family homes, with the central village green constituting the permanently preserved open space.

Many studies conducted over the years by the National Association of Home Builders and others have clearly demonstrated that developers can

achieve cost savings by adopting the cluster approach (see Cost-Effective Site Planning: Single-Family Development, NAHB, 1986). Studies recently completed at the Center for Rural Massachusetts have revealed another pertinent fact: initial sale prices and subsequent resale prices can be higher in cluster or open space developments than in comparable conventional developments. Attractive views of and access to protected areas appear to enhance the value of downsized lots (see LAND DEVEL-OPMENT, Winter 1991).

In Amherst, Massachusetts, for example, a comparison of two late 1960s subdivisions-whose house sizes are similar but whose lot sizes and patterns are markedly differentindicates a strong market preference for cluster development. In the standard subdivision, where lots are twice the size of the cluster development lots, houses originally sold for \$26,300, or \$600 (2.3 percent) less than the homes in the cluster subdivision. After 25 years, during which time the prices of the homes in both developments increased many times over, houses in the cluster subdivision now sell for \$17,000 (12.7 percent) more than their counterparts in the conventional "cookie-cutter" development. The chief difference between the two developments, which were developed at similar gross densities, is that one provides scenic and recreational open space (low-cost active and passive), while the other offers nothing more than house lots and streets.

Cluster development can also offer a political benefit. In Connecticut,



The New England village pattern-small lots and small setbacks and village greens-is an early example of the cluster concept.

where open space advocates are increasingly locking horns with developers, the cluster approach is providing an excellent way for home builders and others to demonstrate that their proposals can, in fact, help towns maintain their cherished rural character. Cluster development can be an effective "mitigation technique" to rebut legal challenges that development is producing an adverse impact on such valued natural assets as farmland, riverbanks, steep hillsides or summits, and deeryards. To quote land use consultant Robert Lemire. the challenge is to "build what needs to be built, and save what needs to be saved."

Few people realize that conventional zoning is essentially a blueprint for development and development alone. Most rural residents consider their towns fairly well "protected" by zoning regulations that were originally intended to separate incompatible uses and to establish development standards such as maximum densities and minimum setbacks. In practice, however, these ordinances generally do nothing to protect open space or to conserve rural character.

Conventional zoning assigns a development designation-generally residential, commercial, or industrial-to every acre of land in a community. The only lands not designated for development are unbuildable areas such as wetlands and flood plains. Conventional zoning has been accurately described as "planned sprawl" because every square foot of each development parcel is converted to front yards, back yards, streets, sidewalks, or driveways. Nothing remains to become open space through this land-consumptive process of regulation.

Local officials, residents, and developers who are interested in ensuring that their towns will not ultimately become a seamless web of subdivisions, shopping centers, and office or industrial parks have a practical and effective alternative in the form of cluster development or "open space" zoning. To avoid redistributing the equity held by existing land owners, cluster zoning allows the same gross density or overall amount of development that is already permitted. The difference is that clustering requires all new construction to be limited to (typically) one-half of the parcel. The remaining open space is permanently protected under a conservation easement and recorded in the deed for the land.

Local regulations can offer cluster development as an option to the developer or can make clustering compulsory. In Massachusetts, about one-third of the towns offer "permissive cluster" as an option for developers. Mandatory or "compulsory cluster" has been used by a number of rural towns in southern Maine and upstate New York for many years but has only recently been introduced in Massachusetts, where about a dozen towns have adopted it within the last two to three years. In Connecticut, the town of Cromwell made state history when it became the first municipality to mandate open space development designs for subdivisions located in certain types of natural resource areas.

Although the basic concept of clustering is fairly simple and well established, those who do not associate it with traditional townscapes tend to view it as a new form of development. Interestingly, it is the conventional suburban model that is actually the more alien pattern in otherwise traditional landscapes such as New England. Conventional subdivisions look "at home" only in places where, after several years, they have become the predominant building pattern.

Ultimately, of course, community residents and decision makers must address the question of the cluster approach's appropriateness in rural or suburbanizing municipalities. The following points are useful in addressing the principal concerns typically expressed at local meetings when the open space or cluster development concept is proposed.

The Open Space (Cluster) Concept in Practice

The basic principle underlying cluster development is to group new homes onto part of the development parcel so that the remainder of the tract can be preserved as unbuilt open space. The degree to which clustering achieves a significant savings in land while providing an attractive and comfortable living environment depends largely on the zoning regulations and the expertise of the land planner.

Open Space: What Size and Shape?

Unless local regulations specify minimum area and dimensions for the open space, the "open space" can end up being nothing more than a long, narrow fringe that abuts rear lot lines and the parcel's outer perimeter. To avoid awkward, unusable spaces, the zoning ordinance should require lots and roads to cover not more than, say, 50 percent of the parcel and should specify that at least one-half of the open space must be configured to be usable for recreation or agriculture.

Counting Only Truly Usable Land

Many communities require housing density to be based on "net buildable area." which typically eliminates from the density calculation all or a certain percentage of unbuildable lands such as wetlands or extremely steep slopes. Without this requirement, the cluster approach could be used to propose a greater number of dwellings than would be buildable under conventional subdivision provi-

sions. Some towns address this issue . by requiring developers to demonstrate that their cluster plan would not produce a greater number of new homes than would be allowed under a standard layout. For this reason, developers may be required to submit two inexpensive sketch plans for comparison.

Will It Harmonize with Its Surroundings?

Communities are often concerned that cluster housing will not blend with a town's rural character. It is true that some cluster developments built in the past have failed to harmonize with their surroundings. Recognizing this potential problem, a few towns now require new cluster plans to consist only of detached, single-family homes, each set on its own smaller lot. By resembling a traditional village pattern, a single-family cluster plan ensures that every family will have its own separate yard in addition to the larger open space created by clustering.

Architectural Design Issues

To permit some variation in housing types, a few towns have adopted special permit procedures that authorize their planning boards to approve attached units under certain circumstances, e.g., when units are carefully designed to reflect traditional archi-



Suburban zoning and subdivision standards have given us a "planned sprawl."

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Most older small-town roads in New England are 18 feet wide and have worked well.

tectural styles. Typically, such regulations set an upper limit on the number of dwellings per building (four. for example) and provide standards relating to features such as roof pitch, siding material, roofline breaks, and window proportions, thus giving developers an incentive to hire architects who are sensitive to the building forms that blend with the town's character.

Open Space Maintenance

Another issue of concern is maintenance of the open space created by clustering. If the open space is recreational (playing fields, jogging trails, tennis courts, etc.), a homeowners' association—to which all residents are contractually obligated to contribute when they purchase their home—typically handles the upkeep. At Echo Hill in Amherst, Massachusetts, home buyers sign a legally binding agreement that authorizes the homeowners' association to collect any unpaid dues, with accrued interest. at the time owners sell their house. Unpaid dues cloud the title and effectively prevent resales.

If the open space is agricultural, other options apply. The open space can be sold "in fee" to the homeowners' association, which, in turn, can lease the land to local farmers. Alternatively, the original farmers can retain ownership of the land and sell only their "development rights." The latter option affords farmers the opportunity, upon retirement, of selling their fields to younger farmers at an affordable price that reflects the land's agricultural value (rather than its potential building value), thus strengthening the local farming economy. This is essentially a private sector version of a "purchase-of-development-rights" program.

"Locking In" the Open Space

Another commonly expressed fear is the possibility of future development in the open space. Even though cluster ordinances typically prohibit further subdivision of the parcel, some ordinances provide for an added safeguard by requiring a local, regional, or statewide land trust or conservation commission to be a cosigner and enforcer of any conservation easement that permanently restricts development in the open space.

Buffering Farm Operations

To reduce potential conflicts between new residents and existing agricultural practices, a few towns are beginning to require cluster lots to be separated from the protected farmland by a buffer strip that is typically 75 to 100 feet wide. Where the development can be so designed, existing woodland should be used as the buffer. Otherwise, towns can require new buffer areas to be thickly planted with a variety of rapidly growing native trees and shrubs (such as white pine, birch, poplar, American viburnum, honeysuckle, wild rose).

Adjacent Property Values

Cluster's impact on surrounding property values is often cited as an issue. Along any part of the parcel perimeter where downsized lots would adjoin standard-sized lots. towns can require buffer strips similar to the ones described above. Along other edges, buffers may not be desirable or logical as lots bordering permanently protected open space almost always enjoy enhanced property values. In fact, buffers may not be needed anywhere because the value of cluster lots appears to be initially higher and to appreciate faster than the value of conventional lots, as noted previously.

Private Streets, Different Standards?

When cluster developments are designed with privately maintained road systems, developers often ask local planning officials to relax standard street width requirements. If subdivision street construction standards are excessive, as they often are, particularly for pavement width, they should be revised for all types of new development, not just for cluster developments. In this way, residential street design will not compromise a community's rural character. It is useful to note that most small-town roads in New England outside new subdivisions are designed for an 18-foot-wide paved surface, which is much more in scale than the 22-foot to 30-foot paved travel surfaces commonly required by "modern" subdivision regulations,

Sewerage and Septic Systems

Because of the shorter road lengths needed to serve village-sized lots in a cluster development, substantial savings are possible in the construction of roads, sewers, and water lines. Where sewer service is unavailable, however, people have expressed concerns about siting septic systems on the smaller cluster lots. Some towns, as a result, require house lots to be located on the section of the parcel where soils are most suitable for leaching fields. Another option, however, is to locate septic systems out-

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side the individual lot in an easement within the protected open space. The flexibility of cluster siting allows either approach.

Why Require Open Space (Cluster) Design?

Perhaps the most controversial issue surrounding the cluster concept is the suggestion that local ordinances could mandate an open space approach. The rationale behind a mandatory approach is that certain irreplaceable natural resources must be protected, including wildlife habitat, wetlands, riverfront land, productive farm fields, large rock formations, scenic views, and mature tree stands. Clustering permits flexibility in land design so that developers can avoid these and other important or valuable areas. It remains a local decision whether to require the cluster approach when development is proposed on any or all of these resource lands.

Degrees of Mandating Open Space

It is possible to limit the cluster requirement to certain zoning districts. It is also feasible to authorize local planning officials to require clustering on a case-by-case basis when a proposed conventional plan would destroy or remove more than a specified percentage of certain listed resources. However, proponents of "compulsory open space" zoning in any of its various forms argue that anything less than a mandatory approach cannot guarantee resource protection because developers remain free to ignore cluster "recommendations" from town officials.

Legal Points

Towns considering "compulsory open space zoning" are strongly encouraged to work closely with legal counsel to ensure that their ordinances are not inconsistent with statutory or case law. In particular, two points should be noted. First, compulsory open space zoning should be used to protect identifiable and important resource lands and should not be a "blanket" over all rural properties. Second, it must leave an "escape

valve" for a limited amount of conventional (noncluster) development so that applicants have other options that do not require them to submit to a special permit process.

Cluster Design and Rural Character

Last, but certainly not least, is the issue of whether cluster development is "appropriate" in a rural setting. Without proper regulatory safeguards and design criteria, it is clear that clustering can produce results that are incompatible with its surroundings. However, many rural residents are beginning to recognize the advantages that well-designed cluster development can offer. It is the only development approach that sets aside land for permanent open space.

Conclusion

Had the Pilgrims not run out of ink or parchment after finishing the *Mayflower Compact* and had they the time and "foresight" to draft a modern zoning and subdivision rulebook, all of our attractive New England towns would have a thoroughly suburban character by today's standards. It is a sobering thought, but New England would be virtually indistinguishable from many other parts of the nation.

As towns shape their landscape with standardized, suburban-style municipal regulations, we must ask whether continuous coverage by large-lot subdivisions will be more attractive than a mixture of villagesized cluster lots surrounded by permanently protected farm fields, woodlands, or open space. This is a question for developers, residents, and officials in each town to address. As long as everyone understands and recognizes the ultimate consequences of the various types of development, each participant in the debate can make an informed decision. П

Randall Arendt, MRTPI, is Vice

President of the Natural Lands Trust in Media, Pennsylvania, and is formerly Director of Planning and Research at the Center for Rural Massachusetts, University of Massachusetts.

BOARD OF ALDERMEN

ITEM NO.___D(5)__

AGENDA ITEM ABSTRACT

MEETING DATE: January 25, 1994

SUBJECT: PRELIMINARY STATUS REPORT: Designing a Process for Comprehensive Quality Growth and Community Building Strategy

DEPARTMENT: PLANNING DEPARTMEN	T PUBLIC HEARING: YES	NOx
ATTACHMENTS: 1) Memorandum from Joyce Brown 2) Resolution #19/93-94: Charge to the Steering Committee for the Shaping Orang County's Future Conference	FOR INFORMATION CONTACT: Roy M. Williford, 968-7713 ge	
THE FOLLOWING INFORMATION IS PROVIDED:(x) Purpose(x) Action Requested(x) Analysis(x) Summary(x) Recommendation		(x) Analysis

PURPOSE:

The Shaping Orange County's Growth Steering Committee is asking each jurisdiction within Orange County to review this status report for comment and recommendation. Alderman Jay Bryan is Carrboro's representative to the Steering Committee and will present the report for review by the Board of Aldermen. The Steering Committee is meeting regularly and would like to continue to develop the process and to create a work plan based on the attached report and a proposed budget by March 15, 1994.

SUMMARY:

There are various possibilities as to how Orange County may develop over the next 10 to 20 years. Scenarios could range from a pattern of urban sprawl to a pattern of well-managed development with areas of concentrated growth and as of agricultural and open space preservation. With this in mind, the Steering Committee has prepared a status report on the development of a community building and comprehensive quality growth strategy. This strategy proposes that the four governing bodies in Orange County work together towards 1) building community by assessing the County's community perspectives on issues relating to quality of Growth and reaching consensus on resolving these issues and 2) development of a structure and process maintenance of community in the County and in each jurisdiction.

ANALYSIS:

Attached memo from Joyce Brown, Chair, Shaping Orange County's Growth Steering Committee.

ADMINISTRATION'S RECOMMENDATION:

The Administration recommends that the Board of Aldermen review and comment on the preliminary status report as presented.

ACTION REQUESTED:

Review and comment by the Board of Aldermen.

MEMORANDUM

- TO: Carrboro Board of Aldermen Chapel Hill Town Council Hillsborough Board of Commissioners
- FROM: Joyce Brown, Chair, Shaping Orange County's Growth Steering Committee
- SUBJECT: Preliminary Status Report on Designing a Process for Comprehensive Quality Growth and Community Building Strategy
- DATE: January 6, 1994

Attached is the preliminary report from the Shaping Orange County's Future Steering Committee on the charge given to us by Carrboro, Chapel Hill, Hillsborough and Orange County to develop a process for a comprehensive quality growth and community building strategy. A copy of the resolution passed by all four governing bodies is attached as well.

Background

In the fall of 1993, a forum was held by the four governing bodies in Orange County called Shaping Orange County's Future. The keynote speaker at this forum was growth management expert Dr. John DeGrove.

Following the forum, a proposal was brought to each of the four elected governing bodies in Orange County. The proposal suggested that there is a need for a countywide process for community building and to assure quality growth. The Orange County Board of Commissioners, the Carrboro Board of Aldermen, and the Hillsborough Board of Commissioners, as well as the Chapel Hill Town Council adopted this resolution asking the Steering Committee to develop the idea.

Review By Orange County Board of Commissioners

The Orange County Commissioners discussed this report at a December 11 retreat. The comments from the Commissioners were positive. Attached is a memorandum from Commissioners Alice Gordon with considerations the Commissioners wished the Steering Committee to discuss. As regards the Public Private Partnership initiative referred to in the memorandum, a separate memorandum from Chapel Hill Town Manager Cal Horton is attached outlining the PPP work related to a countywide comprehensive planning effort. Also attached is a memorandum from Allen Spalt to the Orange County Commissioners regarding goal setting at their retreat. He did not know that our effort was underway. His unsolicited comments are an indication that there is a concern among Orange County citizens about what is happening and a need to go forward with a Countywide comprehensive planning process.

Next Steps

We ask each elected Board to review the Status Report. The Steering Committee is meeting regularly and would like to continue to develop the process and to create a work plan based on the attached report and a proposed budget by March 15.

We welcome your comments and suggestions.

The Steering Committee is composed of the following members:

Elected officials representing:

Carrboro: Jay Bryan Chapel Hill: Joyce Brown Hillsborough: Bob Rose (before November election) Orange County: Alice Gordon

Others:

Bill Bracey David Brower Margaret Brown Livy Ludington

Invaluable staff support has come from all four jurisdictions.

cc: Orange County Board of Commissioners

PRELIMINARY STATUS REPORT ON DEVELOPMENT OF A COMMUNITY BUILDING AND COMPREHENSIVE QUALITY GROWTH STRATEGY

Orange County is at a crucial period in its history. The next ten to twenty years could well determine whether Carrboro, Chapel Hill, Hillsborough and the unincorporated areas of Orange County will continue to be an attractive, desirable place to live. With the improving economy, national recognition of our area as a good place to live and work, as well as increased interest nationally in our county as a place for retirement, we face tremendous development pressures. There are various possibilities. We could become like Los Angeles with urban sprawl from Caswell to Chatham and Durham to Alamance. The environmental, social and economic consequences of this picture are not pleasant to contemplate. Another possibility is that we could use the Oregon model with areas of concentrated growth and areas of agricultural and open space preservation.

One of the other possibilities is that the four governing bodies working together with each other and the citizenry could develop an Orange County model as determined by the values and visions of the people. This would not be an easy, nor a quick task, but the prospect we face without working together to preserve the quality of life we enjoy now, but are beginning to lose, is worth the effort of trying. Without this we face increased environmental degradation, increased social problems, and increased taxes and expenses for citizens. The prospect of any one of these makes it imperative that we work together to develop a comprehensive quality growth and community building strategy.

Building community in the context of this effort has two components. First we need to assess the entire County community's perspectives on issues relating to quality growth. Once assessed, we will need "community" itself to reach consensus on resolving these issues. Attempting to reach such consensus - reaching out to understand others - is in fact community building.

The second component is the development of a structure and process for maintenance of community in the County as a whole as well as in each jurisdiction. What is at the heart of growth except to better our community, to improve our relations with each other, and to hopefully lay the foundation for future generations to lead fulfilling lives. If these are the tenets of our work together, then the building of a structure and a process for nurturing community is imperative. Although the issues and areas of contention surrounding growth may certainly be different in the future, the framework for discussing these and reaching consensus on possible solutions should be established, consistent and reliable.

Carrboro, Chapel Hill and Orange County began working together some years ago and the result of that work is the rural buffer and the joint planning agreement and process. The present effort would expand that work and include Hillsborough and the rest of the unincorporated areas.

At the recent conference on Shaping Orange County's Future, the nationally recognized quality growth planner, Dr. John DeGrove, said that we could grow smart or we could grow dumb. The way to grow smart, he said, was to develop a comprehensive quality growth strategy and the place to start was with Carrboro, Chapel Hill, Hillsborough and the unincorporated areas of Orange County.

This is a preliminary report on the charge given to the Shaping Orange County's Future Steering Committee by the four governing bodies in Orange County to design a process for a comprehensive quality growth and community building strategy.

Goals/Issues for Shaping Orange Task Force

- I. Community Building Goals/Issues
 - A. Develop a structure and process for community maintenance that, among other efforts:
 - fosters tradition, history, common heritage and memory;
 - 2. fosters a sense of identity and belonging;
 - 3. fosters a framework of shared values;
 - nurtures networks of caring individuals and a climate of caring, trust, teamwork and mutual responsibility;
 - 5. creates institutional arrangements that diminish polarization, teach diverse groups to know one another and encourage coalition-building, dispute resolution, negotiation and mediation;
 - fosters wholeness within diversity while allowing healthy conflict and an open atmosphere for dissent;
 - establishes collaborative ties between leaders of different jurisdictions and communities, and nonprofit organizations with each other and with forprofits and government;
 - strengthens each community or jurisdiction while requiring them to recognize and accept responsibility for the entire county's well-being;

- 9. asks a high proportion of the population to have some role in this community maintenance system and to share leadership tasks at all levels;
- 10. encourages the maintenance of the existing infrastructure of neighborhood associations, churches, citizens groups, youth-serving organizations and professional groups.
- B. Quality Growth Topics that might be considered and defined further by the steering committee
 - 1. The Environment and Environmentally Sensitive Areas
 - 2. The County's Natural Beauty
 - 3. The Character of the County
 - 4. The County's Water and Air Quality
 - 5. The County's Existing Neighborhoods, Municipalities and Other Jurisdictions
 - 6. Housing (density and variety)
 - 7. Public and Private Modes of Transportation
 - 8. Community Services
 - 9. Resources Protection
 - 10. The County's Economy
 - 11. Land Use
 - 12. Water and Sewer Infrastructure (provision/boundaries/where prohibited)
 - 13. Greenways/Open Space
 - 14. Agriculture and Rural Areas
 - 15. Crime and Security
 - 16. Non-residential Development
 - 17. Inter-governmental Cooperation and Communication
 - 18. Our Borders (how do we deal with Durham, Alamance, Chatham, Caswell)

Proposed Consensus Building Process for Comprehensive Quality Growth and Community Building Strategy

In the interest of assuring that the process design reflects the concerns of the whole County, the steering committee will review its membership and solicit additional ideas as needed.

The steering committee proposes that a group of Orange County residents be selected to gather information and make recommendations concerning quality growth and community building in Orange County in the following manner:

- I. Selection of a Task Force
 - A. Notices informing the public of the formation of such a group will be widely publicized throughout the County, following procedures used by each jurisdiction, so interested person can participate.

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- B. The Task Force shall be composed of persons whose names are submitted by the Steering Committee to the municipalities and county for approval.
- C. Membership shall reflect a balance of the interests of all those concerned about the County's future, and shall be a microcosm of the whole Orange County community. Such interests may be defined as:
 - 1. citizens from each jurisdiction and townships;
 - 2. citizens from the public at large;
 - 3. large landowners, including farmers
 - 4. business/development/real estate;
 - 5. environmentalists;
 - 6. elected officials;
 - 7. planning staff;
 - 8. neighborhoods;
 - 9. University/school systems;
 - 10. civic, religious.
- II. Proposed Method of Decision-making
 - A. Team Building

Members shall participate in a facilitated meeting or series of meetings prior to discussing substantive issues in order to build rapport, develop team building skills, and foster a sense of community among themselves in order for the Task Force to best work together as a team.

- B. Information Gathering
 - As part of its responsibilities, the Steering 1. Committee will develop a mandate for this Task Force for approval of the jurisdictions' elected officials. Once the Task Force has participated in the community building meetings, the Task Force, based on the approved mandate, shall begin the process of gathering information. The Task Force shall use methods for gathering information about Orange County that include but are not limited to, telephone and mail surveys, public meetings, informal meetings at identified gathering places such as churches, barber shops, restaurants, and written documents. The Task Force shall also identify specific organizations or entities, as well as individuals who represent particular interests concerned with quality growth in the county and the municipalities, from whom the Task Force wishes to receive information.

- 2. The Task Force shall identify any potential barriers to prevent participation by citizens in its information gathering process, such as loss of time from work, lack of transportation, day care, intimidation by group processes and perhaps a sense that the public meetings, in particular, are designed for professional participation, rather than from the point of view of ordinary citizens.
- 3. The Task Force shall make all public meetings as accessible as possible. To address the large group intimidation factor, citizens should be encouraged to use any vehicle of communication to provide input - written, by telephone or otherwise. Fliers to neighborhoods and business community, as well as personal, one-on-one invitations should be considered.
- 4. The principle of the process should be based in broad outreach designed to be democratic and to build community.
- III. Analysis of Information
 - A. After the necessary information has been gathered to the satisfaction of the entire Task Force, the Task Force shall then analyze the information gathered in light of the approved mandate to better, and as specifically as possible, define the nature of the problem or problems needing solutions.
 - B. Based on the information gathered, the Task Force will develop a consensus on a problem definition, describing the following:
 - two to three scenarios as to the present course of Orange County;
 - 2. elements of those scenarios which the Task Force considers favorable and elements the Task Force considers to be unfavorable;
 - a set of principles defining a desirable future for Orange County;
 - 4. identification of the forces (policies, practices, attitudes, behaviors, values, traditions, beliefs, physical factors, etc.) currently affecting Orange County's progression toward the desirable future; these shall be forces currently blocking achievement of the desired future, and those currently contributing to that future.

IV. Solutions to Defined Problem or Problems

The Task Force shall next generate ideas on how to achieve the principles, evaluate those ideas according to criteria developed by the Task Force, and assemble its preferred ideas into a coherent set of recommendations.

- V. Implementation
 - A. Over the course of this community building process, including the point at which recommendations are developed, the Task Force shall seek support and/ or commitments from individuals, groups and institutions with a role to play in carrying out the consensus.
 - B. As part of its recommendations to the community, the Task Force shall design a community feed back mechanism through which responsible parties will monitor, evaluate and made mid-course corrections as the consensus is carried out. The feed back mechanism shall also include ways in which successful completion of significant steps on the way toward achievement of the desired future can be recognized by the community.

A RESOLUTION CHARGING THE SHAPING ORANGE COUNTY'S FUTURE CONFERENCE STEERING COMMITTEE WITH THE DESIGN OF A PROCESS FOR A COMPREHENSIVE QUALITY GROWTH STRATEGY FOR THE TOWNS OF CARRBORO, CHAPEL HILL AND HILLSBOROUGH AND ORANGE COUNTY (93-10-13/R-7)

WHEREAS, a Steering Committee comprised of representatives from the Towns of Carrboro, Chapel Hill and Hillsborough and Orange County was formed to begin a dialogue on growth management issues of importance to all of Orange County; and

WHEREAS, the Shaping Orange County's Future conference was held on September 30, 1993 to address issues the County and the municipalities might consider in planning for the future; and

WHEREAS, as a result of the discussions at the Shaping Orange County's Future conference, the potential of a comprehensive quality growth strategy was identified; and

WHEREAS, the need to include the principle of community building is important to the development of a comprehensive quality growth strategy; and

WHEREAS, the Towns of Carrboro, Chapel Hill and Hillsborough and Orange County should all have a role in the development of a community building and comprehensive quality growth strategy.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby resolves:

- Section 1. The Shaping Orange County's Future Steering Committee should continue its work in order to design a process for developing a community building and comprehensive quality growth strategy for Orange County and the municipalities.
- Section 2. The Steering Committee should complete the design of this process by target date of December 1, 1993. Following the completion of their report, the Steering Committee or their designated representative will report to the elected boards of the Towns of Carrboro, Chapel Hill and Hillsborough and Orange County.
- Section 3. The community building and comprehensive quality growth management strategy which results from this process could be used as a basis for creating a community building and comprehensive quality growth strategy for the region.
- Section 4. This resolution shall become effective upon adoption.

This the 13th day of October, 1993.

MENORANDUM

- TO: Joyce Smith for Joyce Brown
- FROM: Alice Gordon
- VIA: Beverly Blythe
- DATE: December 15, 1993
- RE: DeGrove Countywide Vision Development

The County Commissioners made the following points in their discussion on December 11, 1993:

- 1. That the PPP Countywide Vision Development and the DeGrove Countywide Vision Development should be one effort.
- 2. That in this development, grassroots input should be considered as well as the Township Advisory Council's (TAC) involvement.
- 3. Consider a common planning board for the county, and
- 4. Making the study all inclusive because of pressures created by municipalities that impact on the county.

MEMORANDUM

TO: Council Member Joyce Brown

FROM: W. Calvin Horton, Town Manager

SUBJECT: Public Private Partnership Research Project

DATE: December 20, 1993

Professor Mike Luger has recruited two senior students in the UNC Policy Analysis Program to work under his direction in conducting a review of comprehensive plans and vision statements of Orange County governments.

The students already have begun assembling documents from the Town of Chapel Hill, Carrboro, Hillsborough and Orange County. Their major work, as I understand it, will be to tabulate the policies of the governmental units by major category (transportation, education, recreation, etc.) and compare them.

This work should be of use to any group who wishes to see how much agreement there is among the comprehensive plans and vision statements of local governments in Orange County.

The Public Private Partnership plans no work on developing a County-wide vision statement, but is supportive of local government efforts to do so.

cc: Mayor and Council

300 James Street Carrboro, North Carolina 27510

Home: 919/967-3054

Work: 919/967-1886

November 29, 1993

Moses Carey, Jr., Chair Orange County Board of Commissioners P.O. Box 8161 Hillsborough, NC 27278

RE: Goal Setting Retreat

Chairman Carey and Members of the Board of Commissioners:

Thank you for inviting suggestions for the Commissioners' Goal Setting Retreat. Please accept a procedural and a policy suggestion for your consideration. I offer them briefly in this letter and enclose expanded discussions in the accompanying pages. A recent newspaper article is also attached as it captured my sentiments quite well.

I. Examine and Experiment with Alternatives to the Existing Means of Notifying Citizens of Issues of Importance to Them.

The recent lack of public awareness on Cane Creek Watershed rezoning is, unfortunately, all to typical. Wider circulation of the staff proposal would, I feel certain, have brought early and substantial comment. By contrast, I was mailed the memo by Chairman Carey on your Goal Setting Retreat. I urge you to explore alternates and enhancements to standard notice and comment procedures for informing and involving citizens.

II. Develop a Comprehensive Plan for the Future of Orange County.

Development of a comprehensive plan for Orange County along the lines discussed at the recent "Shaping Orange County's Future" conference this fall should be a highest priority. John DeGrove and other nationally known planners who have visited this area recently make it clear we are missing opportunities and failing to employ valuable tools such as "concurrence". Half way measures will no longer suffice.

Thank you very much for publicizing your retreat and for your consideration of these comments.

Sincerely,

Allen Spalt

enclosures

I. Examine and Experiment with Alternatives or Enhancements to Existing Means of Notifying Citizens of Issues of Importance to Them.

It is a common complaint that citizens are only involved when issues directly affect them, often at a time that is too late to do anything but complain and obstruct. As a citizen who is active on issues at virtually all levels of government, I can understand official frustration. But it is very difficult for a citizen, even when moderately alert, to be sufficiently aware of what issues will be considered at what time in what forum and to what effect. Developers appear no happier or better served with the current process than do neighbors. Long advertisements in fine print in the back of newspapers are not enough. More creative outreach is needed if input up front is to be effective and end of the pipeline criticism reduced.

I was amazed on the recent Cane Creek Watershed re-zoning that so few people involved with watershed protection knew the issue was up for consideration even when a highly controversial proposal was on the table. Wider circulation of the staff proposal for 1-acre zoning in most of the watershed and 5%/70% impervious surface limits would, I feel certain, have brought early and substantial comment.

No doubt there was other notice of your planned goals retreat, but what I saw was the memo circulated by Chairman Carey to members of Orange County Boards and Commissions of which I was mailed a copy. I appreciate the notice and note the contrast with the watershed publicity.

I urge you to explore alternates and enhancements to standard notice and comment procedures on informing and involving citizens. I urge the board to adopt as a highest priority the development of a comprehensive plan for Orange County along the lines discussed at the recent "Shaping Orange County's Future" conference this fall. I was pleased to serve on the morning panel with Chairman Carey and other Orange County citizens. John DeGrove and other nationally known planners who have come to this area in recent years make it clear we are missing opportunities and failing to use important planning tools, such as the "concurrence".

A new, overall vision and plan is needed as we head toward the end of this decade and century. Issues are interrelated so that it is impossible to make decisions in one area without affecting many others. Conflicts over development, environmental protection, quality of life, and property rights, for example, can either be fought out each in turn or worked out in a more orderly, comprehensive, predictable, and satisfactory fashion.

While the county and its towns have "comprehensive plans", it seems clear from repeated conflicts that they do not now adequately reflect an agreed upon vision. We can't start the process too soon.

Planing should be undertaken in connection with the rest of the region, if possible, but alone, if necessary, despite the drawbacks of the more limited approach.

Many examples could be used to illustrate the need for a new approach. Issues currently before the Board demonstrate why a new vision is needed. A few examples include:

--<u>Need for alternatives to current "low density" zoning</u>. Much of Orange County is now zoned at one unit per one or two acres for a variety of reasons: to provide a rural buffer, to protect watersheds, and as a part of the effort to preserve rural character. Such zoning is much lower density than what is found in the "urban" centers of Chapel Hill and Carrboro. Many, including me, have requested such zoning of rural lands to protect water supplies and for other reasons, and it is to the credit of the Commissioners that reduced densities are in place or in progress in many important areas of the county.

But it is increasingly clear that such zoning must be seen as <u>interim</u> if we are to preserve the character of Orange County. Nothing

November 29, 1993 Allen Spalt

> could be worse for the county than its development--"build-out"--at currently permitted levels. If the rural buffer or Cane Creek Watershed are developed at or near 1 unit per two acres throughout, the county will be awash not in rural preservation but suburban sprawl. The <u>average</u> densities may be protective, but unless population is distributed other than in an average fashion, we will have no rural character and little environmental protection left. In short, our quality of life will be severely, and negatively, impacted. New approaches to zoning, critical area protection, property rights, and development are needed. Fortunately, though new to Orange County, models exist elsewhere to follow and adapt.

rage 4

--<u>"Fast track" permitting is acceptable ONLY as a part of a careful,</u> integrated generally accepted plan. The current economic development plan is, I believe, the first to propose a form of fast track, or "onestop", permitting for projects in Orange County. It would provide general approval of development in nodes and then simplify the approval process for individual projects. It would shorten the time and reduce public input and comment on projects. It is, however, premature and unjustified at this time.

Such a process may be warranted under some circumstances. But, as planner John DeGrove said during his fall visit, it is only appropriate as part of the <u>trade off</u> following general debate and agreement on a shared vision of a comprehensive plan. The fast track is a boon to developers while it effectively leaves the public out of the process. It can <u>only</u> be justified if the public has truly been involved in widespread public debate up front. That has not been the case, for example, in the current economic development plan; its proposed "trade off" of a fast track is not justified.

--<u>Need for agreement on economic goals and expected impact of</u> <u>development</u>. I continue to be amazed that the general experience elsewhere, now documented by many studies, is so often disregarded locally. Despite wishful thinking to the contrary, economic development does <u>not</u> generally pay for itself. Virtually no residential development does so, though some is more efficient than others. Increasingly, it is also shown that much, if not most, commercial development does not pay for itself either. When all impacts are considered--the only reasonable approach--both result in Orange County Goals November 29, 1993 Allen Spalt

> increased, not lowered, taxes. There is a progression with the most highly developed locations having the highest taxes.

Economic development may be desirable for other reasons, but it is flying in the face of experience to expect it to stabilize or reduce taxes in Orange County, to reduce pressure on housing costs, to lessen the need for school spending, to pay for increased levels of services demanded for police, tax assessors, libraries, or recreation, or to help us preserve our quality of life or rural character.

We will have growth. But, as long as we pretend it can be achieved painlessly and on the cheap, rather than recognizing and managing its costs up front, we are kidding ourselves and robbing our future. Most important for this debate, we must come to agreement on the assumptions regarding growth. The process must be broadbased, will take some time, and must inspire general confidence.

Finally, though it has been suggested the Public-Private Partnership undertake the task, I do not believe it is right for this important, broad-based effort. A body specially constituted by the Commissioners and perhaps other jurisdictions is more appropriate and will generate more confidence.

I watched as the town in which I grew up, which was about the same size as combined Chapel-Hill Carrboro, had its surrounding countryside develop in a haphazard manner. It is no longer a good place to live; not for the old timers who were squeezed out (a few, but not many, made a killing) or the new comers who thought they were moving "to the country". The urban core suffered, and the quality of life in general declined. Taxes soared while services struggle to keep up. It was unintentional, unanticipated, and very unfortunate.

We are now faced with similar choices here in Orange County but can no longer say that the consequences of development are unanticipated--they are clear all over the country. We have the opportunity to benefit from the last generation's mistakes. At least we know what doesn't work. The Commissioners are in a special position to help Orange County work out what it does want in the light of all we know.

I urge you to make moving in that direction a highest priority.

The following resolution was introduced by Alderman Hilliard Caldwell and seconded by Jay Bryan.

A RESOLUTION CHARGING THE SHAPING ORANGE COUNTY'S FUTURE CONFERENCE STEERING COMMITTEE WITH THE DESIGN OF A PROCESS FOR A COMPREHENSIVE QUALITY GROWTH STRATEGY FOR ORANGE COUNTY AND FOR THE TOWNS OF CARRBORO, CHAPEL HILL, AND HILLSBOROUGH Resolution No. 19/93-94

WHEREAS, a Steering Committee comprised of representatives from the Towns of Carrboro, Chapel Hill, Hillsborough and Orange County was formed to begin a dialogue on growth management issues of importance to all of Orange County;

WHEREAS, the Shaping Orange County's Future conference was held on September 30, 1993 to address issues the County and the municipalities might consider in planning for the future;

WHEREAS, as a result of the discussions at the Shaping Orange County's Future conference the potential of a comprehensive quality growth strategy was identified;

WHEREAS, including the principles of community building is important to the development of a comprehensive quality growth strategy; and

WHEREAS, Orange County and the Towns of Carrboro, Chapel Hill, and Hillsborough should all have a role in the development of a community building and comprehensive quality growth strategy.

NOW, THEREFORE, THE BOARD OF ALDERMEN OF THE TOWN OF CARRBORO HEREBY RESOLVES:

Section 1. The Shaping Orange County's Future Steering Committee should continue its work in order to design a process for developing a community building and comprehensive quality growth strategy for Orange County and the municipalities.

Section 2. The Steering Committee should complete the design of this process by the target date of December 1, 1993. Following the completion of their report, the Steering Committee or their designated representative will report to the elected boards of Carrboro, Chapel Hill, Hillsborough, and Orange County.

Section 3. The community building and comprehensive quality growth management strategy which results from this process could be used as a basis for creating a community building and comprehensive quality growth strategy for the region.

Section 4. This resolution shall become effective upon adoption.

The foregoing resolution, having been submitted to a vote, received the following vote and was duly adopted this 12th day of October, 1993:

- AYES: Randy Marshall, Tom Gurganus, Hilliard Caldwell, Eleanor Kinnaird, Frances Shetley, Jacquelyn Gist, Jay Bryan
- NOES: None

BOARD OF ALDERMEN

ITEM NO. <u>D(6)</u>

AGENDA ITEM ABSTRACT MEETING DATE: January 25, 1994

SUBJECT: Cancellation of February 15th Board Meeting

DEPARTMENT: Administration	PUBLIC HEARING: YES No_x
ATTACHMENTS:	FOR INFORMATION CONTACT: Robert Morgan, 968-7706

PURPOSE

It has been the Board's practice in past years to cancel the Board meeting following the annual retreat. This year's retreat is scheduled for Sunday, February 13th and Monday, February 14th. The administration recommends that the Board cancel its meeting scheduled for Tuesday, February 15, 1994.

RECOMMENDATION

The administration recommends that the Board of Aldermen cancel its meeting scheduled for Tuesday, February 15, 1994.

ACTION REQUESTED

To cancel the February 15th meeting of the Board of Aldermen,.