

MEMORANDUM

FROM: Transportation Board
TO: David Bonk, Principal Transportation Planner
SUBJECT: Chapel Watch Village Concept Plan
DATE: August 9, 2005

This memorandum reviews the Council request to the Transportation Board related to the Chapel Watch Village Concept Plan and the issues raised by residents of the Larkspur Subdivision concerning the connection of local streets.

BACKGROUND

On May 16, 2005 the Council held a public hearing on the proposed Chapel Watch Village Concept Plan. The Plan proposed the construction of 120 multi family dwellings. The Plan also included a connection of the Chapel Watch Village street network to Maywood Drive in the existing Larkspur Subdivision.

Residents of the Larkspur Subdivision voiced concerns about the proposed street connection to the proposed Chapel Watch and the Traffic Impact Statements prepared for the Chapel Watch project.

The Council requested that the Transportation Board review and comment on the following issues:

- Should the proposed Chapel Watch Village Concept Plan provide an extension of Maywood Road into the Larkspur development?
- Does the Chapel Watch Village Traffic Impact Study Reanalysis adequately address the issue of traffic using Maywood Road Extension through the Larkspur development?

The Transportation Board reviewed the charge from the Council on June 21, 2005 and agreed to meet on August 9, 2005 to receive a staff report and citizen comments on the Chapel Watch Village Concept Plan. The Board requested staff to provide a report on the two issues raised by the Council and related concerns provided by the Larkspur Safety First group. (Attachment 1)

DISCUSSION

We have reviewed the two issues identified by the Town Council for Transportation Board consideration and provide below an assessment.

Should the proposed Chapel Watch Village Concept Plan provide an extension of Maywood Road into the Larkspur development ?

We believe that the proposed connection of Chapel Watch Village to Larkspur supports the goals of the Town's 2000 Comprehensive Plan. The Comprehensive Plan included a goal to "develop a balanced, multi-modal transportation system that will enhance mobility for all citizens, reduce automobile dependence and preserve/enhance the character of Chapel Hill". (page 92)

The Objectives included to achieve that goal include:

- Integrate all transportation modes within existing and future developments with appropriate land use, design standards and infrastructure.
- Develop strategic transportation linkages between neighborhoods, transit stops and activity areas.
- Develop and maintain a comprehensive network of streets and highways that support safe automobile, transit, bicycle and pedestrian mobility with Town.

We believe that the integration of local streets with Chapel Hill will provide greater mobility and supports the Town's goals to encourage alternative modes of transportation. We believe that the connection of Larkspur to Chapel Watch Village will result in:

- Greater access and quicker response times for emergency vehicles;
- More efficient and cost-effective provision of public services, including garbage collection and bus routing;
- Decreased traffic on arterial streets; and
- More continuous and direct routes that encourage travel by walking and bicycling.

We also note that the Town's Design Guidelines require that "all major developments are expected to have two points of street access, except when: the second means of access can be achieved best by subsequent development of an adjacent piece of land and a road stub out to that land is provided" (page 9)

When the Larkspur Subdivision was approved, Maywood Way was built to the northern property line in accordance with the Design Guidelines. During review and approval of the Larkspur Subdivision the Council did discuss the need to provide access to the property to the north, which would also have access to Eubanks Road.

Although the street shown opposite Butterfield Court has been extended to the eastern property line to provide access to undeveloped property along Weaver Dairy Road it is unclear how the development of this parcel might provide safe access to Weaver Dairy Road. Also, the addition of another point of access along Weaver Dairy Road would not substantively expand the connectivity of the Town's street network or provide alternative routes between arterials.

We do recognize that the connection of Maywood Way may result in additional traffic using Maywood Way. The Traffic Impact Study and Reanalysis for Chapel Watch Village has addressed this issue and concluded that approximately 10 trips per day would utilize Maywood Way during the peak hour from Chapel Watch Village. The Study estimated that 70 vehicles would use Maywood on a daily basis. We believe that the amount of traffic estimated to use Maywood Road will not result in a significant safety issue. Alternatively, we believe that the connection to Maywood Road will result in some traffic from Larkspur accessing Eubanks Road through Chapel Watch Village resulting in a reduction of overall vehicles along the southern section of Maywood Way and Weaver Dairy Road.

We note that there is a sidewalk along Maywood Way to provide for safe pedestrian movement through the neighborhood. We believe that concerns raised by the residents of Larkspur concerning safety and cut through traffic can be address through provision of traffic calming devices and additional sidewalks. We believe that the implementation of some of these traffic calming options could be the responsibility of the Chapel Watch Village project.

Does the Chapel Watch Village Traffic Impact Study Reanalysis adequately address the issue of traffic using Maywood Road Extension through the Larkspur development?

We have reviewed the assumptions, analysis and conclusions included in the Reanalysis and believe they have adequately addressed the issue of through traffic. We have also discussed the issue of cut through traffic with the Town Traffic Engineer and he is satisfied that the Reanalysis provides an adequate assessment. He believes that the analysis was completed using a worst case approach, using conservative assumptions about the use of alternative modes of transportation such as public transit.

Several residents of Larkspur have raised questions about the assumptions used in the Reanalysis. We have addressed these issues in our response to the Larkspur Safety First group below.

Issues Raised by Larkspur Safety First

1. Town Operations Center traffic is omitted.

Staff Comment: Traffic related to the relocation of the Town Operations Center along Millhouse Road was not included in the analysis. It was felt that very few employees of either Public Works or Transit would use Maywood Way due to the dispersed nature of their locations. Access to the Town Operations Center will be much faster using the principal arterial streets. We also note that most Public Works and many Transit employees must report to work very early in the morning, at times when the principal arterials are not less congested, further discouraging any possible use of Maywood Way.

We have completed a preliminary assessment of the general location of residence for Public Work and Transit employees. This preliminary assessment suggests that employees living directly south or east of Larkspur might utilize Maywood Way. Based on the most current information on place of residence we estimate that approximately 6 employees live in these areas. We will present a detailed review of this data at your meeting.

The use of Maywood Way by Town vehicles from the Operations Center or other commercial vehicles can be restricted through prohibitions on these vehicles that are not providing services directly to the adjacent residences. In the Council approval of the Town Operations Center they included a stipulation that prohibited Town vehicles from traveling north on Millhouse Road.

2. Several commercial entities contiguous to the Chapel Watch Village site will contribute considerable traffic around the Eubank Road area and were also omitted.

Staff Comment: Several of the locations listed in the Safety First memorandum have already been built and were captured in the peak hour intersection analysis as background traffic. Any diversion of traffic from the UPS Distribution Center, Orange County Landfill and Recycling Center would be addressed through the prohibition on through traffic discussed above. Patrons of the Eubanks Road park and ride facility arrive from areas to the west and north and would not be expected to use Maywood Way.

Without detailed information concerning the amount and type of development that might be built along Eubanks Road it would very difficult to include related traffic in the Chapel Watch analysis. Similarly, until a development plan has been approved for Carolina North, an assessment of future traffic cannot be completed and incorporated into the assessment of projects like Chapel Watch Village.

3. Insights from the 2030 Regional Transportation Plan were not incorporated into the analysis.

Staff Comment: The 2030 Regional Transportation Plan is based on the build out of land in the portion of Town that includes Larkspur and Chapel Watch Village. The Plan also assumes that the land currently anticipated for mixed use development north of Eubanks will be built out by 2030. The 2030 Plan analysis does indicate that traffic volumes would exceed acceptable levels of service along Eubanks Road at NC86. The 2030 Plan does not assume any improvements along Eubanks Road beyond the current configuration. We would anticipate that at the time that the mixed use areas north of Eubanks Road were developed there would be associated roadway improvements to mitigate the anticipated congestion.

There is no proposal in the 2030 Regional Transportation Plan to extend Millhouse Road to the Horace Williams property. We are not aware of any other plans or proposals that include an extension of Millhouse Road.

4. The discussion of Larkspur data is misleading and the data itself is flawed.

Staff Comment: The calculation of traffic associated with the Chapel Watch Village project was completed using standard traffic engineering assumptions. The trip generation rates used to estimate daily and peak hour traffic were taken from the national data for multi family development. The Town does not have access to detailed trip generation rates for similar development in Chapel Hill and as a matter of course has required the use of national data for the development of traffic impact statements. Local data was collected on existing peak hour and daily traffic along adjacent roadways and intersections to assess the impact of the Chapel Watch Village project.

We note that the traffic impact analysis assumed that only 10% of the Chapel Watch Village traffic was assumed to use public transit or other alternative modes of transportation. We believe that a majority of the proposed units at Chapel Watch Village would be occupied by students or staff at the University of North Carolina. Recent survey data from the University suggests that over 50% of these students and staff would use public transit to travel to the main campus.

5. Due diligence was not performed to conduct the “Time Study Analysis”

Staff Comment: The Town Traffic Engineer accompanied the consultant during the collection of travel time data and believes the data was collected accurately. We understand that travel times between the same origin and destination will vary due to a variety of factors, including time of day, environmental conditions and day of the week. We believe that drivers make decisions about the route they will choose to follow based on these factors and others that it would be difficult to anticipate.

Another way to look at this issue is from the perspective of distances, which do not change due to changes in time of day or other factors. The table below compares the distances between Chapel Watch Village and three outside destinations.

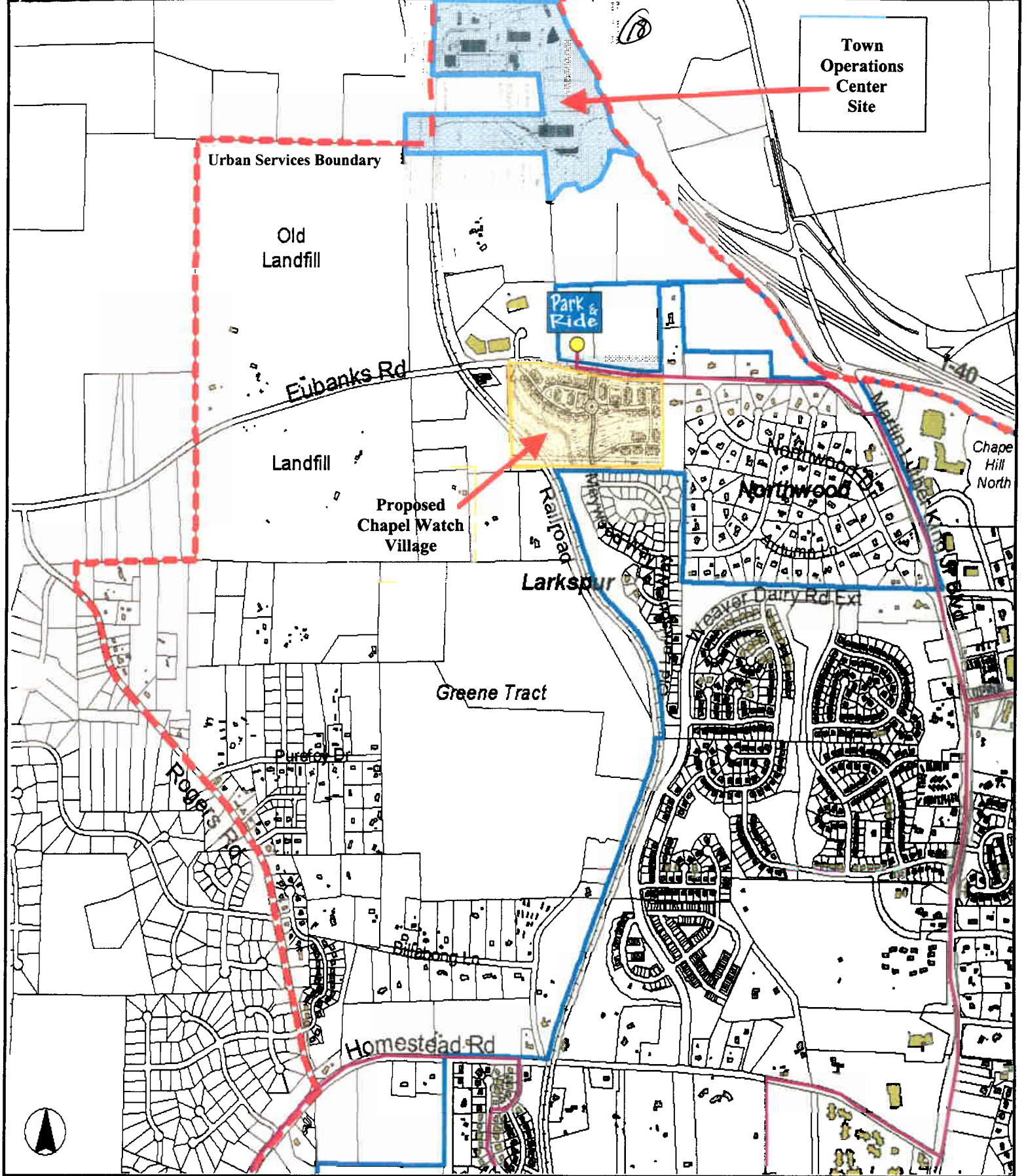
<u>ROUTE</u>	<u>DISTANCE (mi)</u>
CWV to MLK & Weaver Dairy via Larkspur	1.32
<i>CWV to MLK & Weaver Dairy via Eubanks</i>	<i>1.01</i>
<i>CWV to MLK & Homestead via Larkspur</i>	<i>1.87</i>
CWV to MLK & Homestead via Eubanks	2.04
<i>CWV to Homestead & Seawell School via Larkspur</i>	<i>1.80</i>
CWV to Homestead & Seawell School via Rogers	2.75
CWV to Homestead & Seawell School via MLK	3.03

This data suggests that the for trips to the intersection of Martin Luther King Boulevard and Weaver Dairy Road from Chapel Watch Village the shortest distance would not include utilizing the Larkspur road network. The distance to the intersection of Martin Luther King Boulevard and Homestead Road is slightly shorter using Larkspur and the

distance to Homestead Road and Seawell School Road is also shorter. We believe that the majority of trips out of Chapel Watch Village will not be destined for the area around Homestead Road and Seawell School Road. We also believe that any trips destined for that area have already been captured in the Reanalysis estimate of through traffic from Chapel Watch Village.

6. Technology will make it easy for people to locate the Larkspur/CWV cut through route, specifically, GPS devices and internet mapping.

Staff Comment: It is unclear how many people would utilize internet mapping to travel to destinations that used the Chapel Watch Village/Larkspur street network. If this did happen, we believe it would be infrequent.



Proposed Chapel Watch Village

Bus Routes

Buildings

Town Operations Center Site

Chapel City Limits

500 0 500 1000 Feet

