

From: Kumar Neppalli
Sent: Tuesday, October 04, 2005 1:24 PM
To: Cal Horton
Cc: 'Amy Chute'; George Small; JB Culpepper; David Bonk; Gene Poveromo
Subject: Response to Ms. Chute Regarding Chapel Watch Village TIA

Mr. Horton,

The following responds to several questions raised by Ms. Amy Chute regarding the Chapel Watch Village Traffic Impact Analysis. Ms. Chute's questions and our responses are provided below:

Question: In my opinion, the Larkspur residents deserve to have a reasonable range of traffic volumes projected for Maywood Way. The Chapel Watch Village Traffic Impact Analysis (CWV TIA) does not adequately do this. I mentioned this fact at the Council meeting last Monday, but I didn't hear any comments to refer this item back to Staff. If I understand the process correctly, any revisions or additional studies would have to be a new charge from Council. So, I am asking you to please refer this item back to Staff for further study.

Response: In 2001, the Town Council adopted guidelines for preparation of traffic impact analyses for developments in Chapel Hill. The adopted guidelines are based on national industry standards. The Traffic Impact Analysis (TIA) for the Chapel Watch Village was prepared in accordance with those guidelines.

At its September 26, 2005 meeting, the Town Council held a public hearing regarding the Chapel Watch Village Special Use Permit/Concept Plan. At the hearing, several questions were raised by citizens and by the Council regarding the Traffic Impact Analysis and cut-through traffic in the area. The Council referred the questions and comments from the public hearing to Town staff for a follow-up report responding to the questions and comments. That report is scheduled to be presented to the Council at its November 21 meeting and it will include detailed responses to the questions related to the Chapel Watch Village Traffic Impact Analysis. If the Council is not satisfied with the responses to the questions and comments, it can request that the Developer prepare a revised TIA report including supplementary information responding to the questions and comments. The cost of a revised TIA report would be the responsibility of the Developer.

Question: There is one glaring contradiction between the study and in the Staff recommendation to the Transportation Board. The CWV TIA claims that the only cut through traffic on the Maywood connector will be from the Chapel Watch Village residents (see attached discussion from CWV TIA). However, in a memo dated August 9, 2005, David Bonk states that one of the goals of the Maywood connector is to, "decrease traffic on arterial streets." The memo also states, "the addition of another point of access along Weaver Dairy Road (extending Butterfield Court) would not substantively expand the connectivity of the Town's

street network or provide alternative routes between arterials (like the Maywood connector would do)."

My question to you is: how can the Town Staff explain the contradiction of traffic study that assumes NO CUT THROUGH TRAFFIC FROM THE SURROUNDING ARTERIALS, yet claims this is one of the goals for the road? This is inconsistent at best and potentially biased and irresponsible to the citizens of Chapel Hill. I think we all know the number of cut-through trips from Eubanks Road to points south in Chapel Hill will be greater than zero.

I spoke to Craig Schreffler of HNTB (who authored the study) and he said he cannot make any revisions without a new charge from Kumar Nepalli. I have spoken to Kumar Nepalli and David Bonk directly about the outages in the traffic study. They both stand behind the document as meeting all town requirements and refuse to restate any of it unless directed to do so by Council.

Response: Mr. Bonk's discussion of the goals of the Town's Comprehensive Plan outlined the general benefits of an interconnected street system. With regard to the benefits of the Larkspur connection to Chapel Watch Village, he did include a comment that connector streets can "decrease traffic on arterial streets" in his summary to the Transportation Board. His inclusion of this point relates to the ability of traffic from Larkspur and Chapel Watch Village to access either Weaver Dairy Road or Eubanks Road directly, without using other arterials. It was not his intention to suggest that the connection would be used by traffic from one arterial to the other.

On several occasions, Mr. Bonk and I discussed the details of the Chapel Watch Village TIA report with Ms. Chute and other residents in the area. Copies of the TIA reports were provided to Ms. Chute and several other residents. We have informed Ms. Chute that the report was prepared in accordance with the Town's TIA guidelines and that trip distribution to the area street network, including Maywood Road, is in accordance with nationally acceptable procedures. We also provided Ms. Chute with the TIA consultant's contact information, so she can contact the consultant directly to discuss the report and the methodology used to arrive at conclusions.

Question: Furthermore, I researched the scoping document that was sent from Town Staff to HNTB and there was no mention whatsoever of Larkspur or Maywood. When I followed up with Mr. Nepalli to find out what was the charge given to HNTB, he said that the Larkspur analysis was an afterthought and that he just phoned Mr. Schreffler and gave him verbal instructions regarding Larkspur. I think this explains the superficial nature of the study.

Response: We agree with Ms. Chute that the scoping of the TIA work does not include a special analysis for cut-through traffic on Maywood Road. However, the scope of the work includes the analysis of several intersections located on Eubanks Road and Weaver Dairy Road Extension. Maywood Road connection was approved by the Council as a part of the Larkspur subdivision and the road was included for trip distribution and analysis in the scope of the Chapel Watch Village TIA.

It is not a normal procedure to specify a particular road analysis for cut-through traffic as the street was already included in the analysis and access point.

Based on several calls from the neighborhood, I have asked the Consultant to include a separate section for cut-through traffic in the report. We have provided our Consultant's response below regarding his assumptions which we believe are reasonable:

Transit trips - In the original Chapel Watch Village Traffic Impact Study, an assumption was made that 10% of all trips generated would use transit. This is a common practice for traffic impact analyses for developments in Chapel Hill. Due to the close proximity of a park and ride transit stop across Eubanks Road, it was assumed that 10% of Chapel Watch Village trips would be made by transit. When the Applicant submitted an update to the site plan, the revised traffic impact study did NOT account for any trips being made by transit. This was to analyze a "worst case" scenario regarding site-generated vehicle trips on the study area transportation network. It is important to note that the Applicant revised the intensity of the proposed land use related to traffic when the decision was made to go from 306 apartments to 120 town homes in the revised site plan.

Analysis of Cut-Through Traffic - The initial Chapel Watch Village Study accounted for a small percentage (5%) of site-generated traffic using the Maywood Road Extension to eventually access the Weaver Dairy Road Extension and ultimately, Homestead Road. In discussions with Town staff regarding the reanalysis of the project, it was assumed to take a higher percentage of traffic (10%) to use Maywood Road. In both cases, this represents the total site traffic distribution - including any traffic using I-40, MLK Boulevard, Weaver Dairy Road to the east of MLK, Homestead Road, etc...

Regarding cut-through traffic from background traffic generators in the study area - the only Town-approved study that would potentially generate cut-through trips that is not already completed and open to traffic is the Town Operations Center. No traffic from the TOC was specifically routed down Maywood Road-Weaver Dairy Road for two reasons. First, there was not a readily apparent travel time savings for having Town Operations Center traffic make a right turn into the Chapel Watch development, cut-through that development, access Maywood Road Extension, cut-through the Larkspur Subdivision, and then access Weaver Dairy Road to get to MLK Blvd to the south or Weaver Dairy Road to the east. The two studies for Chapel Watch Village recommend improvements to the MLK Blvd/Eubanks Road signalized intersection that will allow reduce delay in accessing MLK Boulevard. The second reason for not routing Town Operations Center-related traffic through the Chapel Watch and Larkspur developments is that conversations with Town staff indicated that policy for vehicles using the Town Operations Center, whether they be buses, garbage trucks, police/fire vehicles, personal vehicles for workers, etc...would be to use the major arterial routes for access to the TOC - and not cut through neighborhoods to get to the TOC.

Regarding potential cut-through traffic for existing residential/commercial developments along Eubanks Road and other areas to the north of the Chapel Watch Village development - the reason for not diverting existing traffic through the Maywood Road

Extension is similar to the first point made about the TOC site traffic made in the paragraph above. The number of destinations that traffic along Eubanks Road would have that would make a cut-through of Chapel Watch/Larkspur/Weaver Dairy Extension feasible is minimal, unless that destination is along the Weaver Dairy Road Extension or its intersection with Homestead Road. Ultimately, a significant amount of trips being made in the Eubanks Road area either a) access I-40 or b) use MLK Boulevard to make direct access to downtown Chapel Hill.

Question: It has been pointed out to me (by a former member of the Transportation Board) that I do not have a degree in transportation planning and thus, should not critique this traffic study. While it is true that neither of my degrees is in transportation planning, I do know something about quantifying transportation issues. I once held a position in financial planning in Procter & Gamble's Warehouse and Distribution Division where I was responsible for shipping over \$1 billion in finished product around the country.

Response: We are unable to provide a response to this question because we were not involved in the conversation(s).

Thank you and please let me know if you need additional information.

Kumar Neppalli, E.I.T.
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E-mail from Ms. Chute
-----Original Message-----
From: Amy Chute [mailto:amychute1@yahoo.com]
Sent: Sat 10/1/2005 12:46 PM
To: Kevin Foy
Subject: Chapel Watch Village Traffic Study

October 1, 2005

Mayor Foy,

27

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3

of my degrees is in transportation planning, I do know something about quantifying transportation issues. I once held a position in financial planning in Procter & Gamble's Warehouse and Distribution Division where I was responsible for shipping over \$1 billion in finished product around the country.

In my opinion, the Larkspur residents deserve to have a reasonable range of traffic volumes projected for Maywood. If this is not possible, I would appreciate it if the Council would acknowledge that the study was not adequate to determine how much traffic will be on Maywood Way. I think this is important to note, so that Staff and others will stop referencing it as a credible piece of data for the Maywood connector issue.

Thank you for your help. I look forward to your response.

Sincerely,

Amy Chute

968-9955

The following is the entire Larkspur Analysis from the CWV TIA. I have added a few points of clarification in bold letters.

Page 24

M. Special Analysis / Potential Traffic "Cut-Though" in Larkspur Subdivision

One traffic-related issue needing to be analyzed for this study is the design concept for Maywood Road through the proposed site. This roadway will be maintained as a public street after project completion. It is necessary to evaluate the proposed concept to ensure it meets Town of Chapel Hill standards for similar facilities.

The Maywood Road Extension will function as a local street without on-street parking. Its current schematic design has a 25 foot back to back cross-section, with 10 foot paved travel lanes. It also intersects a major internal site driveway in a roundabout with an approximate 120 foot inscribed circle diameter. The roundabout, as shown on the preliminary plans, will operate as a traffic calming measure and not a high-capacity intersection. It lacks the appropriate flared entry points, splitter islands, and sidewalk setback geometry

necessary for higher speed and capacity operation. However, as designed, the roundabout provides adequate pavement widths to effectively circulate the projected traffic flows (assuming light truck traffic volumes). Five foot wide sidewalks are provided for the entire length of Maywood Road through the Chapel Watch Village site.

Another issue of concern to local residents in adjoining subdivisions to the south of Chapel Watch Village is the potential for neighborhood cut-through traffic. To analyze these concerns for this 2005 reanalysis, HNTB conducted field travel time studies throughout the study area to calculate any perceived or actual travel time benefit that may lead to increased cut through traffic along the proposed Maywood Road Extension. I spoke to the author of this study and he said that he only drove the routes one time, in one direction. These are not average times for multiple trips. The results of these travel time runs are documented in Figure 12.

Cut through traffic to Chapel Watch Village to/from points south would use Homestead Road to access Weaver Dairy Road and travel through the Larkspur Subdivision on Larkspur Lane/Maywood Drive. Travel time runs during AM peak conditions indicate that (using the CWV traffic circle as an origin) drive time to the Homestead Road/Airport Road intersection along Eubanks Road and airport road is 2 minutes 55 seconds. I have driven this during the AM peak period eight times and got an average time of 4 minutes and 15 seconds. The fastest time I could get (during a trip when all 4 traffic lights on MLK were green) was clocked at 3 minutes, 40 seconds. Estimated drive time from the traffic circle on site to Homestead/Airport Road intersection via the cut-through route described above would be approximately 3 minutes 30 seconds. Thus, on average it would be 45 seconds shorter to cut through Larkspur. Drive time for vehicles desiring to head west on Homestead Road from CWV would be

shorter using the cut through route than using Eubanks Road - Airport Road - Homestead Road. It should be noted that any trip heading west past the Homestead Road/Rogers Road intersection could be made quicker by simply accessing Eubanks Road westbound from CWV and heading south on Rogers Rd to Homestead.

In any case, the total amount of overall site trip distribution to the Homestead Road area is expected to be small (10 percent), compared to site trips heading directly on Airport Road into Chapel Hill or onto I-40 to points beyond the study area. The amount of cut through traffic would be expected to be less than 10 vehicles during a peak hour. The design of the roadway network within the Larkspur subdivision - narrow streets, with on-street parking, and low speed limits is not conducive to the perception that these roadways should be used as a cut-through route. The southern half of Old Larkspur Way was designed to collector road standards with 35 foot wide streets (measured curb to curb). This is not a "narrow street." Additionally, Larkspur residents rarely use the on-street parking option since each home has a garage and driveway.

To help eliminate the perception that the Maywood Drive Extension should be regarded as a cut-through route, traffic calming measures should be implemented near the southern entrance to the Chapel Watch site. The site plan shows a crosswalk at the Maywood Drive intersection with an internal driveway near a pod of townhomes in the southeast corner of the property. This pedestrian crosswalk could be designed as a raised concrete pedestrian table to slow vehicles at this crossing and provide additional pedestrian safety.
