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Dr. Lindsay Holliday
Forest Hill Road Mediation Group
VIA EMAIL ONLY: teeth@mindspring.com

March 29, 2008

Re: Forest Hill Road (FHR)

Dear Lindsay:

I would like to offer your group some thoughts and additional analysis regarding FHR traffic and geometry.

I am concerned that the County's latest response demonstrates that they did not read or they misunderstood the latest proposal for what I have termed "upper" FHR as they continue to include the same cross section I drew when I was in Macon. If you look in the lower left of the latest attachment of "Residents Drawing No. 1", you will see it was created on March 04, and is the identical attachment to the first reply.

Before I discuss some of the technical details, this error, and some other statements in their reply, to me are very telling. They demonstrate either closed minds or a lack of good faith consideration of new ideas and data, not the best way for these efforts to proceed.

Traffic Volumes And Projections

I have revisited this thorny matter in two ways: 2000 to 2007; and, 1992 to 2007. Only lower FHR South of Wimbish shows an upward trendline for both analysis scenarios.¹

I have attached only the "FHR Traffic.pdf" file, because it does show some growth in traffic volumes for the 15 years and 16 data points from 1992 to 2007. Again, if one analyzes only the seven years and eight data points from 2000 to 2007, upper Wimbish shows no growth as a trend- this is important to remember when I revisit the potential realignment matter below.

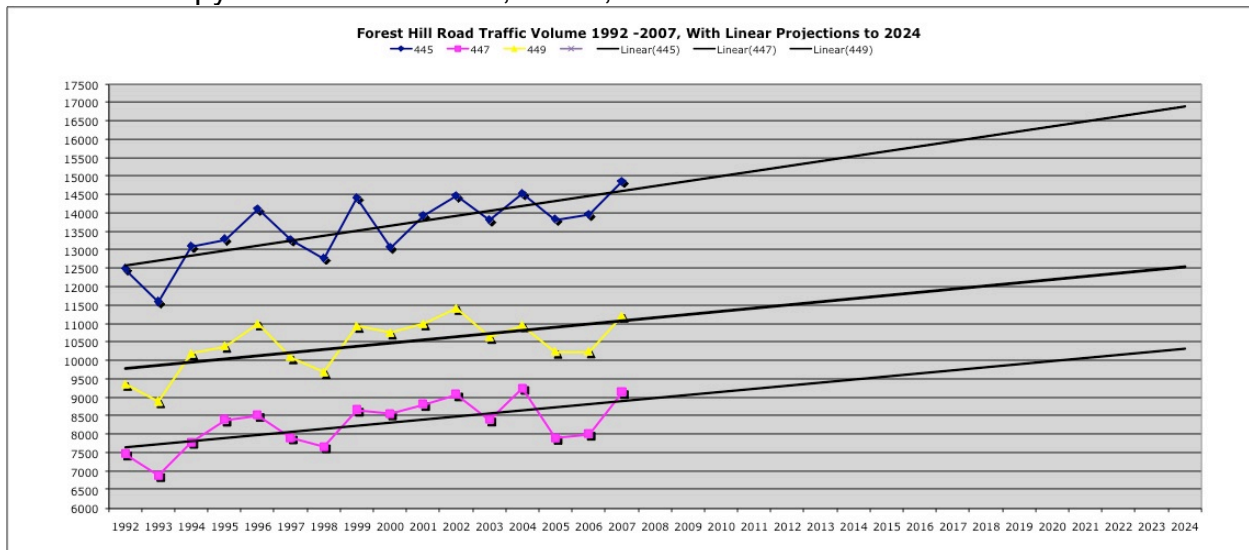
Using the longer time period projects future traffic volume increases of approximately 14% for the highest and lowest volume portions of FHR (these being counters 445 and 447), and 12% for the area around counter 449.

¹ For the record, all of my analysis of the traffic counts has been accomplished in Microsoft's Excel program. When a chart is created in excel, the software can calculate and place a trendline in the chart, this is not subject to discretion or interpretation, and hence is less likely to introduce error.

The data shows 2024 projections to be 16,900 for lower FHR with additional future 2024 projections of 12,600 and 10,400 for the other sections. These compare with GaDOT projections of: 22,000 to 25,000; 21,300 and 15,650, respectively.

Stated differently and plainly: if a fair projection of the data from 1992 to 2007 is done, the results show the GaDOT projections to overstate the probable future results by 39% for lower FHR and 55% for upper FHR. These are **huge** differences and plainly show the need to revisit the fundamental assumptions about how FHR should be configured.

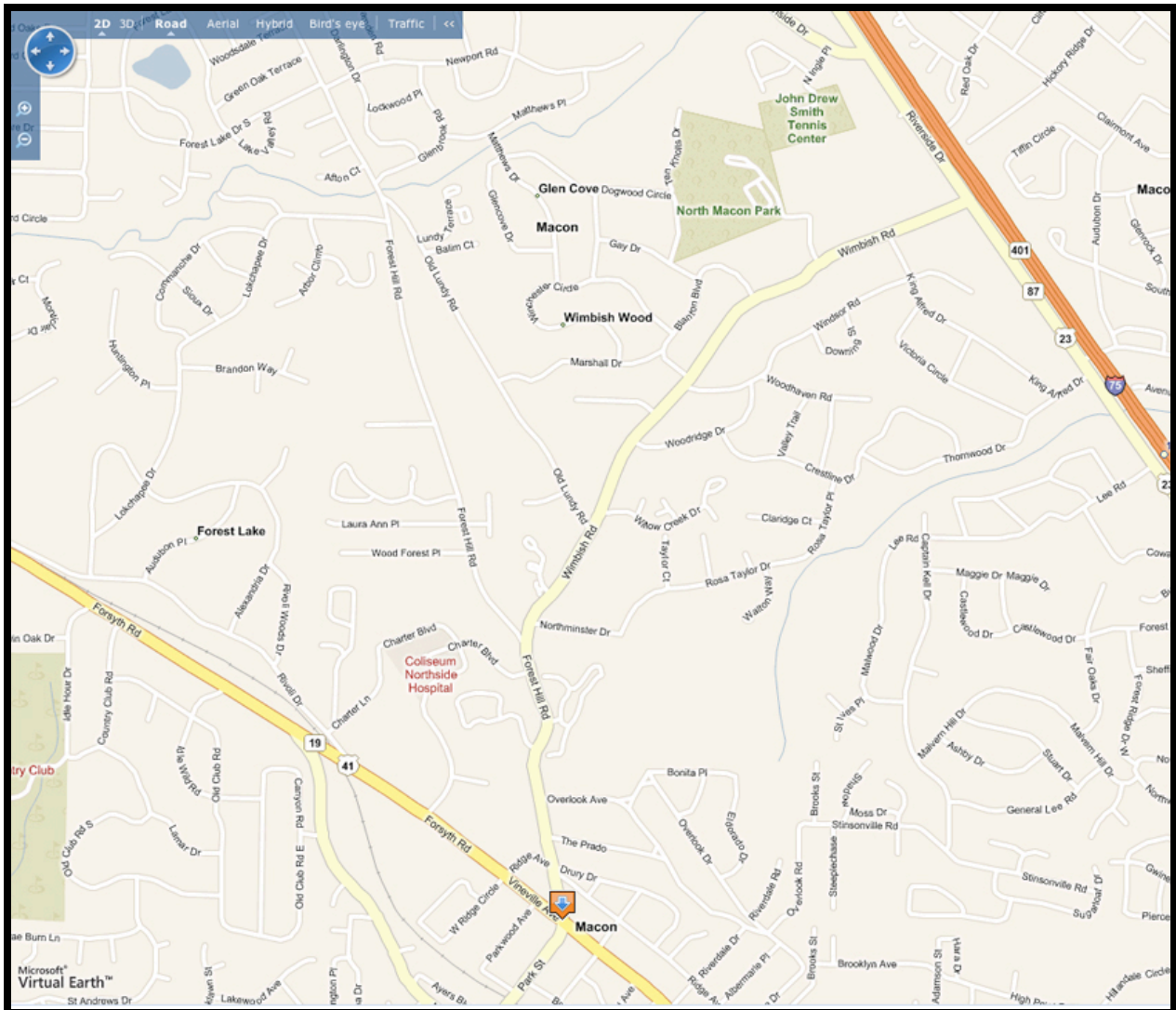
A reduced copy of the chart is here, below, the trend lines are black:



Realignment Potential

I regret that I did not think of the possible realignment of FHR and Wimbish/Northminster until after I left Macon. I think this notion has the potential to solve many design issues, and I do not think it has yet had a fair understanding.

First, if one looks online (the following image is from maps.live.com, a Microsoft site), the same result occurs when driving along Wimbish- it feels more commercial and a quicker connection to much larger thoroughfares than driving through all of the primarily residential part of upper FHR. I did not change the image- the authors of this mapping clearly feel that the lower FHR to Wimbish is the “bigger” (and it is obviously the shorter) connection to the bigger roads.



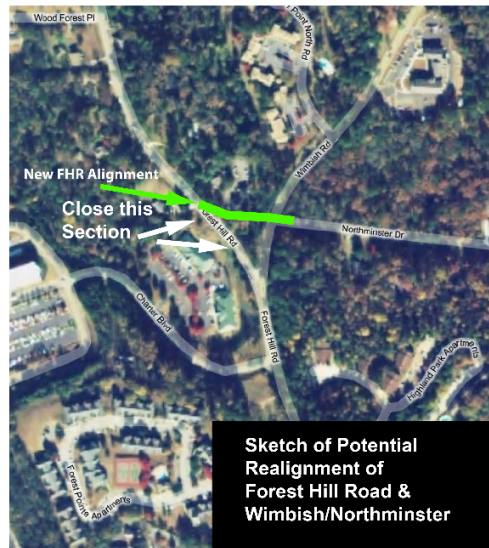
If the primary thoroughfare connection becomes lower FHR to Wimbish, then the heavy left turning movements from Wimbish to FHR would be eliminated- this also eliminates the need for additional “receiving” lanes on lower FHR for those left-turning vehicles.

I know that Mr. Etheridge feels that these left turning vehicles are at least a good part of why he feels that lower FHR needs to be 4 lanes wide.

Realigning FHR with Wimbish & Northminster would also greatly simplify the proposed pair of closely-spaced intersections, and generally simplify operations.

The recent comment that FHR carries about 1,000 more cars a day than Wimbish, thereby tending to make FHR the more dominant alignment is noted, but this design is

not for today and directing more traffic flow to Wimbish seems to make a lot of sense to me. A very rough sketch appears below.



With regard to the “need” to displace a law firm and a mortgage association to accomplish this, I offer the following image (FHR in foreground, Wimbish running across to upper left, and Northminster teeing into Wimbish). Clearly one could place an alignment through the building but it need not be so aligned.



Cross Section Details

At the Macon Mediation, I proposed, and your group accepted, a proposal for upper FHR that was for two eleven-foot travel lanes with five-foot shoulders with an urban curb (pavement flush to face of curb on both sides of the street); a 32' curb-to-curb proposal (I am going to limit my comments here to the curb-to-curb issue only, as their appears to be agreement beyond the face of curb).

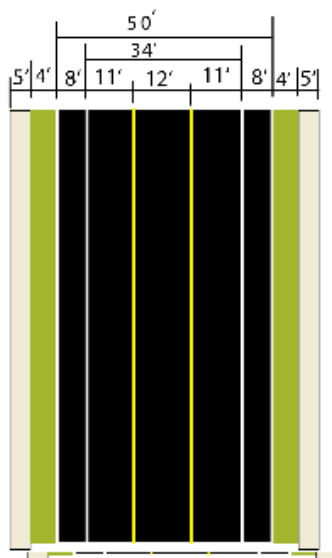
In the first reply, the County's representative(s) offered to reduce their proposed 38' plus 2' gutter pans, or 42' curb-to-curb (hereafter, c-c) dimension to a 36' c-c with the urban curb.

The County's most recent proposal- still in response to the Macon mediation day sketch, **not** the latest offer by your group, is a 32' +2'+2' gutter pan rural section with a 36' c-c. Both of the County's proposals have included a center two-way left turn lane and no shoulders.

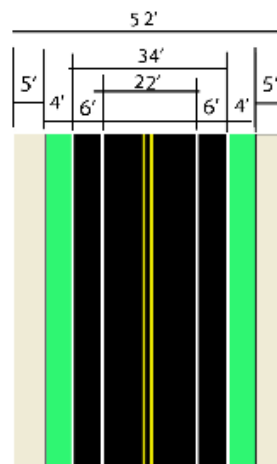
So that it is clear and in one letter, here are the two most recent proposals offered to the County:

Forest Hill Road

Below Wimbish



Above Wimbish



11' lanes beside 6' shoulders will definitely afford a slow deceleration area for right-turning cars, and enough room for cars to pass left-turning cars at slower and more appropriate speeds for a residential neighborhood.

I recognize that this proposal goes "outside" the agreed area by including lower FHR, but for me the **significant** errors in the future traffic volume projections, coupled with the possible realignment of FHR and Wimbish compel the additional diagram.

I take strong exception with any and all statements that any of the proposals that I have put forth have been "unsafe", especially including the allegation in the first reply that the mediation day sketch "does not provide any level of safety".

We can debate whether a high-speed road in a residential area is safer or not, and a center turn lane road certainly will afford higher speeds than either of the proposals I have offered.

However, the County's drawings: provide no or a tiny gutter pan buffer between moving cars and the curb; provide no space for bicyclists except within the flow of traffic (which, at 45 mph and above will not feel comfortable for even class A bicyclists); and provide no space for a broken down vehicle- except in a high speed roadway.

Finally, I am disappointed that the latest reply notes that a reduction in the design speed "from 45 mph to 35 mph **is not reasonable at this late date** (emphasis added)". This being a "late date" again does not demonstrate to me an open and accepting process, but a grounding in prior- and demonstrably incorrect- assumptions.

As I pointed out in my brief presentation in Macon, when pedestrians are considered, below 35 mph is a less than lethal speed for vehicles traveling through a residential area. Vehicles traveling at 45 mph and above will assure fatalities in the event there is a collision with a pedestrian.

There is a chance to get all of this right, but the County's representative(s) are not there yet; I urge them to reconsider these important matters once again.

Respectfully submitted,
TND Engineering

A handwritten signature in black ink, appearing to read 'Rick Chellman', written in a cursive style.

Chester "Rick" Chellman, P.E.
Principal