MINUTES OF A MEETING OF THE PLANNING COMMISSION THE CITY OF FOREST HILLS

February 24, 2015

The Forest Hills Planning Commission (herein also the "Commission") held its regular monthly meeting on February 24, 2015 at the office of the City of Forest Hills, Nashville, Tennessee, beginning at 5:00 p.m. Chairman Winston Evans presided. Also present were Mr. Jim Gardner, Mr. Clay Jackson, Mr. Blair Myers, Mayor John Lovell, Vice-Mayor Lanson Hyde, and Commissioner Henry Trost. Others present are shown on the attached sign-in sheet. A copy of the Agenda is also attached to these minutes

- **1. Approval of the Minutes of the December 18th, 2014 Meeting.** Clay Jackson motioned to approve the minutes as submitted, Commissioner Trost seconded it and the Commission voted unanimously to approve the minutes of the December 18, 2014 meeting.
- 2. Preliminary Plat approval for a lot consolidation of Fentress Estates, consolidating 5 parcels into three lots. Newly created Lot 1 was proposed to have 11.47 acres. It was comprised of parcel 159-23400 (3.05 acres), parcel 159-31000 (6.81 acres) and a portion of parcel 159-20700 (3 acres) and a portion of parcel 159-23400 (2 acres). Newly created Lot 2 was a reinstatement of parcel 159-23500 (2.05 acres). Newly created Lot 3 was proposed to take a portion of parcel 15923400 (3 acres) and a portion of parcel 159-20700 (3 acres) and would contain 3.77 acres. This Subdivision was located in the Hillside Protection Overlay District.

Before discussion began, Vice-Mayor Hyde recused himself from discussion because he was an adjacent land owner. Chairman Evans asked Mr. Tom King, representative for lot owners, Greg and Angela Allen, to provide an overview of the proposed plat. Mr. King gave a brief summary of the project.

Mr. King stated that the city staff had raised concerns regarding the stability of the hillside during construction of the necessary retaining wall and its potential impact on the existing driveway. Specifically, the driveway located uphill from the intended retaining wall serves Vice-Mayor Hyde's residence as well as property owned by WKRN. Because two television antennas and several cell towers are located on the WKRN property, and because those towers provide essential public services, and because the driveway on the subject property provides the sole means of accessing the Hyde residence and the WKRN property, the city staff requires that development of these lots must be performed in a manner that guarantees no interruption of service on the driveway.

Furthermore, city staff had raised concerns about the sufficiency of the geotechnical report submitted supporting the proposed plat. Mr. Bob Stickney, geotechnical engineer for the applicant, was present to discuss those issues. Mr. King said that staff had also given him a number of drainage corrections with which he had no disagreement. Mr. Stickney took the floor and said the Allen's had agreed to top-down construction of a retaining wall located downhill from the existing driveway. Chairman Evans briefly described portions of the geotechnical reports detailing the presence of colluvial soils. Chairman Evans asked Mr. Stickney to describe what he meant by "top-down construction" and how this related to the colluvial soils and slope stability. Mr. Stickney explained that topdown construction is a method used to minimize soil movement during the construction process. Excavation is limited thereby allowing the soil and the hill to be stabilized from the surface while the retaining wall is constructed in a segmented process. Mr. Stickney also discussed using soil nails to bolster slope stability. He recommended that construction of the top-down retaining wall take place first and then a traditional wall be built to increase stability of the hillside and protect the home construction.

Chairman Evans asked what would happen when the uphill soil becomes saturated

with water. Mr. Jerry "Tyke" Johnson, contractor on the project, stated that all walls of this nature have weeping/drainage systems so that pressure from the water does not build. Mr. Johnson described similar walls he had built. Mr. Jackson asked how it was determined how far the retaining wall would fan out. Mr. Stickney and Mr. Johnson stated that was based on grade and necessary stability needs. Mr. Stickney added that the end of the wall was no more than 2 feet above the grade. There was additional discussion regarding the placement of the wall.

Mr. Myers asked for the distance was from the wall to the driveway. Mr. Johnson estimated it was about 50 feet, and Mr. Bivens concurred. Mr. Gardner asked about where the areas that had 17 feet of colluvial soils were located and how they intended to remove this amount of soil. Mr. Johnson responded that it was just below the planned swimming pool to the southeast. The downhill side was where the colluvium was deepest and they would not be disturbing this area. Chairman Evans reminded the applicants that the Zoning Ordinance required anchoring to bedrock. He wondered if that changed their plans. Mr. Stickney said he tried to address that issue in his addendum, but may have to detail it further. He said the walls and construction proposed would make the hill more stable than it was in its current, undeveloped state. Mr. Foster told the Commission that anchoring to bedrock would be a concern that the Board of Zoning Appeals will have to tackle when approving a building permit for the site, as it is required in the Hillside Protection overlay district.

Mrs. Deaton-Moyer asked the Commission to hear from the City's geotechnical Consultant, Rick Heckel with Ardent Consulting. Mr. Heckel stated that his job was to review the documents and determine if the applicant was considering what should be considered and if the analysis follows a reasonable process and delivers appropriate and rational conclusions. Mr. Heckel said that the assumptions in the Geotechnical reports were reasonable, if not conservative. The first geotechnical report suggested a traditional wall. The excavation of a traditional wall would result in a safety factor that would be too low to ensure there would not be a landslide. The top down approach provided an adequate level of safety during construction Mr. Heckel said. Chairman Evans asked Mr. Heckel if he thought that the approach would limit the risk to the driveway. Mr. Heckel said he thought that the approach would be adequate. Chairman Evan responded that he did not like hearing the words "adequate" or "I think" because that was not taking risk out of the equation and there was no certainty.

Mr. Myers said he felt that there were two concerns: the driveway and access to the towers/residential home, and the zoning ordinance requirement that foundations be tied to bedrock. Mr. Myers asked about the depth of the basement and if the basement wall would be a top down construction as well. Mr. Johnson responded that the upper wall would protect the hill from sliding and that top down construction of the basement wall would be unnecessary. There was discussion about how a deeper slide might occur despite the retaining wall. Chairman Evans asked if all the colluvium would need to be removed. Mr. Heckel responded that the answer depended on the composition of the soil. Additionally, he said that tying piers to bedrock would certainly be an option for further stabilization. Mr. Johnson said they had modeled the issue and did not expect a problem.

The Commission discussed whether they should request a structural drawing of the walls. Mr. Foster said the structure was not public infrastructure so it would not typically be required. Nevertheless, because the retaining wall would be vital to ensuring the stability of the driveway to the WKRN towers and the residence, he felt the Commission could ask for structural drawings. Structural drawings would also be required, reviewed, and approved through the Board of Zoning Appeals process. Mr. Bivens stated that as long as the applicants proved it could be done, it should be sufficient. He added that the proposed subdivision and retaining wall, and the risk of loss of access to the essential services located on the WKRN property made this a unique situation justifying increased scrutiny.

Chairman Evans asked if the city would incur liability to residents or WKRN if the

driveway failed as a result of construction. Mr. Foster responded that if the driveway failed, a lawsuit in and of itself would not fix the road or provide access, it would only apportion damages. Mr. Foster stated his opinion that it was important to require the applicant to ensure that the driveway does not fail. Mr. Jackson asked how often people went to the towers. Mrs. Deaton-Moyer responded that the tower was accessed daily. Chairman Evans noted that if the "standard of care" was adhered to, insurance would not help in this case. The contractors could do everything right and it still may fail, he added.

Mr. Gardner asked about the history of other slides in the area. Mr. Bivens responded that there had been slides in Agincourt near the west side of the driveway. Mr. Lanson Hyde of 1436 Old Hickory Blvd spoke as a resident and described slides on the upper part of lot 1 under consideration, the Agincourt lot that Mr. Bivens referenced, another lot in Agincourt owned by Warren Elliot, and a smaller slide on his patio. He offered this as a history of the area.

Mayor Lovell asked what the next steps were for this process. Mrs. Deaton-Moyer explained that should the Commission approve the preliminary plat, then it would go for final approval, then the Board of Zoning Appeals.

Mr. Gardner asked if the proposed placement of the house was the best option. Mr. Johnson responded that they had reworked it several ways and had determined this was the best and only way to place the house and achieve their design. Mr. Gardner asked about the size of the house. Mr. Johnson said it was about 6500 square feet. Mr. King interjected that the goal was to make it the land more stable and better than it was in its current state.

Chairman Evans asked if there were any residents to speak to the issue. Mr. Lanson Hyde of 1436 Old Hickory Blvd. spoke. He said that the top-down construction method made him more comfortable. He asked a few questions regarding the wall near the pool and its construction. Mr. Stickney said that excavation would be very narrow and he did not expect a problem. More discussion on this process followed. Mr. Hyde said he was not objecting to the project but just wanted to understand the process.

Mr. Gardner asked staff if they were comfortable with the level of risk. Mr. Bivens and Mr. Heckel stated that based on analysis they felt that risk had been addressed, but would be eager to review the structural drawings.

Chairman Evans said the Allen's patience and compliance was to be commended. They were flexible and willingly sought to comply with the Code.

Mr. Trost made a motion to approve the preliminary plat conditioned upon addressing the items outlined in the memo dated February 23, 2015 (attached to these minutes herein). The applicant should address the following before final plat approval:

- The applicant must deliver all items necessary for final plat approval prior to being placed on another Planning Commission agenda.
- The applicant must deliver full construction plans for development of the subdivision, specifically including, but not limited to, construction plans for all retaining walls.
- The applicant must commit to top-down construction of the proposed retaining wall on Lot 1, and/or the use of soil nails, to ensure slope stability during construction.
- The applicant must commit to daily inspections during construction by a geotechnical engineer with regular written reports to the city (the frequency of such written reports to be determined at a later date).

- The applicant must commit to providing evidence of insurance and a performance bond from the contractor that secure and guarantee uninterrupted use of the driveway both during and after construction. The amount and the language of the performance bond should be established by the City. In other words, if use of the driveway is interrupted either during or after construction as a result of the construction activities, the city needs assurance that the driveway can be immediately restored to service without cost to adjacent property owners or the city.
- While the applicant has provided drainage information for Lot 1, the applicant has not yet provided storm water drainage information for Lots 2 and 3. Since no development of these lots is presently contemplated, the applicant must commit to adding another special note to the plat indicating that evidence of storm water ordinance compliance will be required prior to issuance of a building permit for any lot within the *subdivision. Additionally, the applicant should:*
 - o Provide sufficient grading detail at Old Hickory Boulevard for drainage of storm water from ditch A and B along private drive at TDOT Safety Endwalls C1 & C2. Safety endwalls are 16 feet long. The applicant should explain how ditches A & B will be graded.
 - o Show pipe sizes on plat for future driveways accessing Lots 2 and
 - Move outlet control structure for detention pond northeast to other side of 22" tree so that outflow is not directed at back of building *envelope for lot 3.*
 - o Lot 3 as mentioned above will be required to comply with the storm water ordinance at time of development. Topography of lot drains toward southeast. There is no evidence of a culvert under private drive at Old Hickory. Size and install proper drainage with appropriate endwalls.
 - *Provide time of concentration calculations with drainage analysis.*
 - o Disturbed area for house and drive are over 1 acre. Provide copy of Stormwater Pollution Prevention Plan (SWPPP) sent to TDEC, TDEC Notice of Intent (NOI), and TDEC Notice of Coverage (NOC).
 - o Provide calculations and details for storm water quality management.

Mr. Jackson seconded the motion to approve the preliminary plat and to move of to final plat conditioned upon meeting the requirements in the memo date 2/24/2015. It was approved unanimously.	
The meeting was adjourned	
Chairman Winston Evans	Recorder, Amanda K. Deaton-Moye

3.