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August 4, 2023

Allen Nicholson
Town of Ashland City
233 TN Waltz Pkwy.
Ashland City, TN 37015

REFERENCE: **Walker Trucking Grading Permit (Plans Review)**

Dear Mr. Nicholson:

In assisting the city staff with plans review on this project, I recently provided comments related to the plans and calculations submitted by the Walker Trucking representatives. Those representatives returned a revised submittal along with their responses to the comments. Since the development did not tie their responses directly to my comments, this letter is intended to put the comments and responses together, summarize my review and how they attempted to meet the city requirements. My comments are shown first (*italicized*) and the development's response to those comments is inserted exactly as submitted in **bold, underline** text.

Here are my comments for the Walker property grading permit. You are welcome to forward these as written or I can provide a more formal letter if you prefer. The owner/engineer should consider these comments as part of a sufficiency review of the plans submittal. A second, more technical review can be provided upon revision to the plans and completion of the sufficiency comments listed following. In summary, all these comments are related to requirements in the City's Grading Permit Ordinance under Section 3-204. Review provided on 7 sheets dated 5-6-23 by W. Suiter.

- (b) The nature and amount of material proposed to be excavated and the amount of fill in cubic yards---- (show on the plans the amount of cut, amount fill separately and the net quantity) **The existing site is steep and wooded with soils that we have assumed are most nearly of hydrologic soil group "C," as noted in the attached hydrologic report. The design engineer is not concerned with details of the nature of materials being excavated from the site. Additionally, we do not quantify cut/fill volumes on plan sheets as it is unnecessary and only increases liability. We have shown existing grades and proposed grades, which is sufficient enough for anyone interested to calculate their own material quantity take-offs using external methods if desired.***
- (c) The street address at the point of access to the property where the work is to be performed --- -there are two locations shown and no specific address on either location **The site is a combination of two tracts, but the dividing boundary line between the two is not shown as it is irrelevant to the civil design of the project since the same developer owns each tract. The existing entrance to the north serviced the smaller of the two tracts and has a recorded***

address of 1840 Highway 12 South. The larger tract to the south has never had a residence to our knowledge and has therefore never received a recorded address.

- (e) A description of the equipment and methods to be used in performing the work ---- I believe this is the regulation/requirement that folks call the “scope of work” – this should be added to the plan sheet for clarity and ease of inspections and not submitted separately – further, incorporation of the other requirements of this permit should be utilized in the description of site processes, equipment and completion of the work The design engineer has no concern about means and methods for construction and will not comment on such. Methods for completing grading work are fairly standard and limited in choice. Any requirements for means and methods should be worked out between the reviewing authority and the developer/developer’s contractor.
- (f) The name of the firm that will haul excavated material to or from the property where the work is to be performed --- we understand this will Walker Trucking for the most part....any clarification of subcontractors with a major role would suffice for this requirement This is another item that is irrelevant to the design engineer. It is generally assumed that a civil plan would be reviewed and approved before a contractor would be selected to bid on a project (in most cases). The state NOI requires contractors to attach their names to the permit only after initial approval of the plans, and we would expect that allowance from the city in this case as well.
- (h) The estimated dates for starting and completing the work --- these dates should align with the cut/fill volumes and definition of the means and methods required above From our perspective, the estimated dates for starting and completing the work will be the day following a grading plan approval from the reviewing authority unless the developer decides otherwise. The validity of the grading plan is exclusive of any construction time frame.
- (i) provide any soils reports that are available.....provide these if they have been required by the Building Official....the various materials from the report should also be used within Item (b) for “natureof material” We have not completed any official soil reports and have no reason to believe that any would be warranted or beneficial to us as the design engineer. If soil reports are required by the reviewing authority, this will be need to be completed by a third party (most likely a geotechnical) firm. Whatever the results of such report, it’s findings would most likely have no influence on the nature of the grading plan proposed.
- Separate from the specific items listed under the grading permit ordinance here are other plans related comments
 - The existing contours on the site plans to not match the current conditions on the property --- revise and resubmit (the cut/fill quantities required above should also match the current vs proposed conditions once these existing conditions are revised) The existing contours on the plans are equal to the existing site conditions when the plan for this site was initially submitted in 2020. We will not be re-surveying the site to update the existing contours layer upon each site revision. Additionally, our existing site contours (as shown) would prove to be the most conservative means of ensuring the final condition of stormwater runoff was actually better than the existing

condition. The existing contours shown are the most appropriate ones to use for this particular grading design.

- *Reveal a site benchmark and what the reference system is for horizontal and vertical positions* **A benchmark has been provided on the grading plan, as requested.**
- *Ensure the proposed building is revealed on the plan sheets (there has been confusion on the building size, shape and orientation on this site with many separate submittalsthe plan sheets reviewed here have no building shown at all....at least show a tentative type of structure, dimensions and permanent driveway/access plan and not just the construction version currently shown for grading only)* **Based on recent communication, no specific building is currently proposed for the site. The developer has noted that a single-family residence will be constructed in the future, but it's footprint or time frame for construction is irrelevant to the validity of the proposed grading plan. It has not been our experience that a grading plan's sole purpose be to facilitate a known or expressly defined structure. None of the subdivision plans we do are for any particularly defined home or structure.**
- *The drainage calcs will need more definition in order to be properly reviewed. Major items are listed below so that review can occur with revised submittal.*
 - *Provide a drainage map that aligns with all site hydrology (subbasins should be revealed in the existing and proposed conditions with all basic parameters revealed ---size, surface assumptions, Tc, etc)* **A drainage map has been provided as requested. Time of Concentrations, site outfall, sub-watersheds, basins, and land use boundaries are shown on the plan. Details of the ground covers, etc. for each sub-basin may be referenced in the hydrologic summary. A pre- vs. post-development runoff table has been provided on both the plan sheet and the hydrologic summary for simplicity of review.**
 - *Provide a written summary of the drainage design to aid in review of existing and proposed site calculations* **A written summary has been provided, as requested.**
 - *Ensure all hydraulic routing conditions are revealed with all ditches, structures and pipe calculations shown (all routing parameters in calcs should be readily visible on the plans sheets for comparison)* **All information relative to the stormwater design of the site is visible on the plan sheet and/or the hydrologic model summary.**
 - *Add a table to the calcs that reveals the comparison of the pre vs post conditions* **The table has been provided, as requested.**

As you can see from above, some of the questions were addressed appropriately. Other items seem questionable, and the city can make the final decision on how to proceed with this permit request.

Respectfully,



Jason Lee Reynolds, P.E.
Project Manager