Rob Gordon
"cliff@credleengineering.com"
Kathryn Thurston; Derek Pielech
Eng TRC review - Time Warner Communication Facility
Monday, December 29, 2014 5:35:00 PM
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Engineering has reviewed the plans for the Time-Warner Switching facility and have the following comments:

- 1. City Stormwater permit requirements are determined by the amount of newly constructed impervious area. The plans indicate the amount of pre & post development impervious, but the amount removed and reconstructed (or newly constructed) are necessary to determine the type of stormwater permit that will be required for the project.
 - a. A drainage plan will be required if the project is proposing less than 10,000 sf of newly constructed impervious area on site. This would be a grading and drainage review only, no stormwater control measures would be required. A drainage plan requires a completed application and a \$200 review fee. The application is attached. All comments below assume only drainage plan review will be required.
 - b. If the project is proposing in excess of 10,000 sf of newly constructed impervious area on site, a full stormwater management permit will be required. This will be grading and drainage and stormwater control measures will be required for all newly constructed impervious area.
- 2. It appears an attempt was made to provide the above information, but there are a few clarifications necessary:
 - Please make sure the amount amount removed includes the perimeter asphalt (removed for landscaping), all asphalt under the new building and all asphalt/concrete under the HVAC/generator pads as well as the old building.
 - b. The building and generator pads were noted as newly constructed, but what about the portion of the old building that is not within the footprint of the generator pads or the new building? A note indicates this area will be stone, but this is not shown on the plans.
 - c. Where did the concrete pad in the middle of the site go? Is it being removed & replaced?
- 3. The City's Mineral Springs drainage improvements are not shown on the drawings, including the public draiange easement along the South side of the property. We can provide design drawings if necessary. Please see MB56 P111 for drainage easement info. The trees proposed will have to be consistent with the City's standard easement
- 4. Please make sure the site plan clearly shows drainage patterns. Use flow arrows if necessary.
- 5. Will (new) roof drains be piped or simply splash & sheet flow across pavement?
- 6. It appears as if the existing drainage simply sheet flows to the adjacent ditches. But the permiter landscaping is mounded with bark mulch (per detail) or pine straw (per note). First, how will the mounding affect drainage? Second, the mulch will float

and be conveyed to the City ditch system. Please address these issues.

- 7. If there are no pipes or conveyances proposed, I do not need to see any drainage calculations with the drainage plan review. If conveyances are proposed, they must be designed to the 10-yr storm and analyzed for the 50-yr storm.
- 8. Please make sure the drainage plan approval stamp (attached) is included on each sheet in the plan set.

These comments will be loaded to protrak. Please call or email if there are any questions. Thank you

Robert Gordon, PE Project Engineer

City of Wilmington, Engineering Division 212 Operations Center Drive Wilmington, NC 28412 Office: (910) 341-5856 | Fax: (910) 341-5881 Email: rob.gordon@wilmingtonnc.gov www.wilmingtonnc.gov



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