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July 25, 2011

RECEIVED
JUL 27 2011
BY: Denise Mille

Board of Supervisors
East Fallowfield Township
2264 Strasburg Road
East Fallowfield, Pa. 19320-4437

Attn: Jill Bukata, Manager

Re: Ridgecrest Subdivision
Sanitary Sewer - Plan Review #2

Dear Board of Supervisors:

Please be advised that our office has reviewed a revised submission for the above noted project in regards to the proposed sanitary sewer design. Generally, it appears the engineer has satisfactorily addressed the issues noted in the previous review from April 19th. However, there are a few aspects of the revised design where additional refinements may be warranted. The following materials were provided for review:

- A set of plans entitled, "Plan of Subdivision for Ridgecrest Subdivision". The plans are noted to be "Preliminary/Final Plans". The plans were prepared by E. B. Walsh & Associates, Inc. The plan set contains a total of 20 sheets, dated 5-10-2011 (revised).
- An "Off-site sewer aerial plan" that provides topographic data for the off-site sewer line.

The following comments are presented for the Board's consideration in processing the applicant's subdivision plan submission:

1. Overall design – The use of individual grinder pumps to provide sanitary sewer service to the homes along Wakefield Drive have been eliminated. A gravity sewer alignment has been developed, which demonstrates that the first floor of all of the dwellings can be provided with gravity sewer service.
   - Due to the topography along Wakefield Drive, approximately 200' of the sanitary main will need to be installed at "reverse" grade, which will cause portions of the line from Wakefield Dr. down through the Open Space to Covewood Way, to be between 15' and 20' deep.
   - It is recommended that the use of SDR 26 PVC pipe be utilized at depth's between 15' and 20'. DIP should be used for lines where any section of pipe would be greater than 20' deep.

2. Proposed Gravity line – The proposed design appears to be reasonable. It is requested that the engineer evaluates proposed alignment in regards to the following points:

   - Place the gravity line in Wakefield Dr. at 0.005'/' and extend it to the end of the cul-de-sac to reduce the length of the sewer lateral to lot 13. Verify the lateral can be installed and maintain a minimum cover of 3'.
   - Due to the depth of the line between the dwellings on lots 16 & 17, 32 & 33 and 36 & 37, it is recommended that the easement width be increased to 30' to provide for future maintenance and repairs.
   - The Township Engineer will need to review and approve the regrading in the area of the berm through the Open Space
   - It appears the depth of the line from MH15 to MH14 in Covewood Way could be reduced, as well as the sections from MH39 to MH15 and MH14 to MH13, if the line from MH39 to MH15 was shifted to run between lots 33 & 34.

3. Means of Access – The legal documents for the required permanent and construction easements for the offsite sewer line through the Poe properties will need to be reviewed and approved by the Township's Solicitor.

4. Sewer service for offsite properties – The plan depicts service laterals for the two properties on the eastern side of South Caln Road. What is the potential for the line from MH7 to MH6 to be placed on that side of the road. This would prevent the private lateral from having to run across the public road. It appears it would be beneficial to obtain additional site information for those two residences to ensure gravity service can be achieved. The plans do not depict and sewer service lateral to the properties on the western side of the road

5. Plan Information – The following information still needs to be corrected:
   - The site boundaries reflected in the location map are not representative of the actual size of development.

6. West Chester Road – In 2005 the applicant agreed to construct a sleeve under Caln Road to facilitate the future construction of a gravity sewer line to serve the existing dwellings along West Chester Road. These plans now contain a potential connection for a low pressure sewer line to serve those homes. Accordingly, it appears the Township will need to determine how the dwellings on West Chester Road are to be served by public sewer in the future and what infrastructure improvements may be required to be installed in conjunction with this development.

Please do not hesitate to contact our office should you have any questions.

Very truly yours,

James W. MacCombie, P.E.

Copy: Chris Della Penna, Twp. Engineer
Adam Brower, P.E., E. B. Walsh
T.R .Moser Builders
PAWC