

## PUBLIC WORKS ENGINEERING DIVISION

Date: Friday, January 13, 2017

To:

**ENGINEERING SOLUTIONS** 

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From: Gene Williams, P.E.

Senior Staff Engineer

**Application Number:** PL2016152

**Application Type:** Engineering Plan Review

**Application Name:** Village at View High Drive On-Site and Off-Site Water Line Plans

The Public Works Department received plans for this project on Dec. 16, 2016. We have completed our review and offer the following comments:

## **Engineering Review**

- 1. Please refer to comment #1 of the previous applicant letter dated Nov. 11, 2016. The "future water line" leaders are shown, but are pointing to nothing (i.e., just blank white space on the sheet). There is also a note on the plans at Lot 1, "Berbiglia Heights", stating "not part of project." What does this mean? It leads to confusion, and it is our opinion the note should be removed.
- 2. Please refer to comment #2 of the previous applicant letter dated Nov. 11, 2016. It is impossible to see the southern valve at the cross, if it is even shown on the Sheet C.502. More importantly, however, is the fact that the in-line gate valve for the temporary fire hydrant assembly may be used to satisfy the requirement to include a valve on the southern leg. Please show the location of this valve.
- 3. Please refer to comment #4 of the previous applicant letter dated Nov. 11, 2016. A 12" gate valve is called-out at Kessler Dr. and View High Dr., when a butterfly valve is required. An additional 12" butterfly valve appears warranted near View High Dr. and 3rd St.
- 4. An additional 12" butterfly valve appears warranted near station 10+00 in order to comply with the 1000 foot rule.
- 5. There are insufficient notes and details concerning the abandonment of the existing 8" water line, and connection of the 12" line to the existing 8" water line, along View High Dr. The only reference to the 8" water line along View High Dr. is a vague note stating "Ex. 8" water line to be removed". This sheet and all subsequent sheets should include: 1) the location of the existing 8" water line grayed-out, 2) design notes stating what is to be done with the existing 8" water line, 3) connection details from the new 12"

water line to the existing 8" water line to the north of the project near station 27+00, and 4) location of the existing water line to the north of the project beyond station 27+00.

- 6. Sheet C.502: The stationing for the cross at station 9+93 appears to be in error based on the profile view.
- 7. Sheet C.502: As previously discussed, a 12" butterfly valve is required on 12" water lines, not a gate valve as shown at station 0+00.
- 8. Sheet C.502: The fire hydrant at the end of water line 1 near station 9+28 should be called-out as a "temporary fire hydrant asembly". The location of the gate valve prior to the temporary in-line fire hydrant should also be shown.
- 9. Sheet C.503: A new fire hydrant is shown on the north side of Village Park Dr. near the new commercial entrance. It is too close to the back of curb.
- 10. Sheet C.504: The response to comments letter stated that a traffic control plan was provided on Sheet C.504. There are no such details provided on Sheet C.504, or anywhere else within the plans.
- 11. Please refer to comment #7 and #10. A different approach to making the required water line connection at 3rd St. was requested. The response to this comment from the applicant is essentially the same, with the exception that the connection be bored to a point within the middle of a busy intersection, with no traffic control plan presented, and without exploring any alternatives. This is not a desired layout, and other alternatives must be explored.
- 12. Installation of a new 12" line beneath a busy intersection will not be allowed. The connection at 3rd St. should be made where the existing 12" line connects to the 16" main on the south side of 3rd St. It is recommended that the 12" line be installed parallel with 3rd St., to a point roughly perpendicular to the point described in the first sentence.
- 13. Sheet C.504: Show the locations of the existing water valves within the pavement near the 16" line and the 8" line.
- 14. Sheet C.504: Provide sufficient details on the plans which show how the existing 8" line will be abandoned in-place. This would be contingent upon the existence of a valve on the north side of the 8"x16" tee in the intersection. In addition, the details section of the plans did not show: 1) casing carrier pipe detail, and 2) trenching and backfill details for pipe.
- 15. The Engineer's Estimate of Probable Construction Costs will need revisions based on these comments. The estimate should also include: 1) boring beneath 3rd St., 2) casing carrier pipe installation beneath 3rd St., and 3) removal of existing 8" water main, and abandonment of existing water main. The estimate also showed a zero quantity for pipe. Finally, the unit price for 8" and 12" water line was low based on similar

estimates provided for developments of similar scope.

## **Electronic Plans for Resubmittal**

Begining Monday, May 23, 2016, all Planning application and development engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies. Electronic copies will not be required for initial application submittals at this time as the plans are subject to change.

Electronic copies shall be provided on CD in the following formats

- Plats All plats shall be provided in Tagged Image Format File (TIFF) Group 4 compression.
- Engineered Civil Plans All engineered civil plans shall be provided in Tagged Image Format File (TIFF) Group 4 compression. All sheets shall be individually saved and titled with the sheet title.
- Architectural and other plan drawings Architectural and other plan drawings, such as site electrical and landscaping, shall be provided in Portable Document Format (PDF).
- Studies Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).
- It is requested that each plan sheet be a maximum of 2MB.

Please contact Staff with any questions or concerns you may have.

If you have any questions or comments, please contact me, Gene Williams either at (816) 969-1812 or e-mail to Gene. Williams@cityofls.net.

Sincerely,

Original Signed

Gene Williams, P.E. Senior Staff Engineer

cc: Development Engineering Project File