LEE'S SUMMIT
MISSOURI

DEVELOPMENT SERVICES

Date: Tuesday, August 17, 2021

To: ENGINEERING SOLUTIONS
50 SE 30TH ST
LEES SUMMIT, MO 64082

From: Gene Williams, P.E.
Senior Staff Engineer

Application Number: PL2021296

Application Type: Engineering Plan Review

Application Name: NAPA VALLEY 5TH PLAT - PUBLIC WATERLINE

The Development Services Department received plans for this project on August 02, 2021. We have completed our review and offer the following comments listed below.

- See comments below to determine the required revisions and resubmit to the Development Services Department public portal located at **devservices.cityofls.net**. Digital documents shall follow the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within ten (10) business days of the date received.

Engineering Review - Corrections

1. Water line is not contained within the easement around the end of the cul-de-sac bulb or at the beginning of Mondavi Ln. Either move the water main partially within right of way, or increase the width of the easement along the cul-de-sac and the beginning of Mondavi Ln. Please see Final Plat comments concerning the 15 foot requirement for an easement around the cul-de-sac bulb.

2. Our GIS records show the existence of a fire hydrant at the present end of Flintrock Dr. It would appear a fire hydrant is warranted in the vicinity of the current location. What is the plan for this existing fire hydrant? Will this be relocated, and where will it be relocated? If to remain, please provide notes stating "to remain in place", or equivalent language.

3. The same issue appears to exist at the intersection of Stoney Brook Dr. and Flintrock Dr. It appears a fire hydrant exists at this location. What is the plan for relocating this fire hydrant? The Design and Construction Manual does not allow fire hydrants to remain within the radius of intersections. Fire hydrants shall be located a minimum of 20 feet from the points of curvature of the curb return.

4. Sheet C.503: What is meant by the note "install existing fire hydrant"?

5. Lot 177 can be served by a private line from the opposite side of the street. Please shorten the length of

the water main extension to a point where Lot 178 can be served with a fire hydrant and a water meter. This point should be just beyond Lot 179.

6. Water main along Lot 196 is outside the limits of the easement. Either dedicate a wider easement, or adjust the line within the easement with a minimum of 5 feet from the outside of the pipe to the limits of the easement. It should be noted the Design and Construction Manual requires a minimum easement width of 15 feet around the outside of cul-de-sac bulbs, and only 10 feet was shown. This was provided as a comment on the Final Plat.

7. Please provide sufficient notation on the profile view of the water main where existing grade is low enough to trigger the fill and compaction rule contained within the Design and Construction Manual. When pipe is to be installed in embankment or fill, the embankment shall be constructed in accordance with APWA section 2102.6 and shall be built up to a plane at least 18 inches above the top of the pipe prior to the excavation of the pipe trench. Cross-hatching and notation shall be provided on the profile view so there are no misunderstandings on this rule. This shall also apply to the sanitary sewer, where this condition was shown on Sheet C.403.

Traffic Review - Not Required

In order to calculate the Engineering Plan Review and Inspection Fee, a sealed Engineer's Opinion of Probable Construction Costs shall accompany your final submittal copies. The itemized estimate (material and installation) shall be sufficiently broken down and shall include the following items, as applicable.

- Public infrastructure, both onsite and offsite.
- Private street construction, including parking lots and driveways.
- Sidewalks located within the right-of-way.
- ADA accessible ramps.
- Sanitary sewer manholes and piping between manholes, including private mains.
- Connection of the building sanitary sewer stub to the public main.
- Waterlines larger than 2 inches in diameter, valves, hydrants, and backflow preventer with vault, if outside the building.
- Stormwater piping greater than 6 inches in diameter, structures, and detention / retention facilities - public or private.
- Water quality features installed to meet the 40-hour extended duration detention requirements.
- Grading for detention / retention ponds.
- Grading to establish proper site drainage.
- Utility infrastructure adjustments to finished grade (i.e. manhole lids, water valves, etc.).
- Erosion and sediment control devices required for construction.
- Re-vegetation and other post-construction erosion and sediment control activities.

Electronic Plans for Resubmittal

All Planning application and developmrnt engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies.

Electronic copies shall be provided in the following formats

- Plats – All plats shall be provided in multi-page Portable Document Format (PDF).

- Engineered Civil Plans – All engineered civil plans shall be provided in mulit-page Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).

Please contact me if you have any questions or comments.

Sincerely,

/s/ Gene Williams electronically signed Aug. 17, 2021

Gene Williams, P.E.
Senior Staff Engineer
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cc: Development Engineering Project File