

MEMORANDUM

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Date: January 28, 2019

To: Ken Roberts, Planner Director
Cc: Kristina Handt, City Administrator
Chad Isakson, Assistant City Engineer
From: Jack Griffin, P.E., City Engineer

Re: Springs at Lake Elmo (Continental Properties)
Concept Site Plan Review

We have reviewed the Springs at Lake Elmo Concept Plan. The Concept Site Plans consisted of the following documentation received on January 11, 2019:

- Vision Statement, not dated, prepared by Continental Properties.
- Land Use Request Narrative, not dated, prepared by Continental Properties.
- Concept Site Plan, not dated, prepared by Continental Properties.
- Concept Site Plan details, December 14, 2018, prepared by Continental Properties.

Engineering has the following review comments:

STREETS AND TRANSPORTATION

- Hudson Boulevard Improvements. Hudson Boulevard must be improved along the frontage of the proposed development in accordance with the Hudson Boulevard Design Standards, with an Urban section along the north boulevard and bituminous trail. East bound right turn lanes and west bound left turn lanes must be constructed along Hudson Boulevard at both the entrance to the proposed development and at the intersection with the new North-South Collector Street.
- Hudson Boulevard Right-of-Way Dedication. Additional right-of-way must be dedicated to the City along Hudson Boulevard, as needed, to accommodate the Hudson Boulevard Improvements, including turn lanes and including a 10-foot utility easement along the north side to be reserved for small utilities.
- There are existing City owned utilities located on the north side of Hudson Boulevard including a 12-inch diameter trunk watermain and an 8-inch sanitary forcemain. Any new development must show these existing utilities and the proposed development cannot encroach the associated utility easements. As shown on the concept plan, the proposed perimeter fencing must be relocated outside the existing utility easements and proposed 10-foot small utility easement.
- New North-South Collector Street Improvements. A new North-South Collector Street must be constructed along the west side of the development, from Hudson Boulevard to the northly plat line of the Springs at Lake Elmo. The new North-South Collector Street shall be designed as an urban collector street consistent with City design standards and within a 100-foot right-of-way, including a bituminous trail along one side and a sidewalk along the other side. The street alignment must accommodate the existing sanitary sewer and trunk watermain such that manholes are not within wheel paths. The City will need to determine the recommended typical street section required for this collector street.
- New North-South Collector Street Right-of-Way Dedication. A 100-foot Right-of-way must be dedicated to the City along the new North-South Collector Street and a 10-foot utility easement must be provided along the east boulevard to be reserved for small utilities. The proposed perimeter fencing must be located outside the 10-foot small utility easement.

- **Site Access.** The concept plan proposes a single primary access to the site on Hudson Boulevard. The access is proposed approximately 770 feet east of the proposed new North-South Collector Road. Access spacing is adequate from the Collector Road (minimum required 660 feet) but is only 400 feet from the existing private driveway to the east adjacent parcel. Either the private driveway access should be eliminated or the primary access to the development should be located further west (recommended 660 feet from collector road) to accommodate appropriate turn lane lengths to the site.
- **Secondary/Emergency Access.** The concept plan shows a secondary access to the new North-South Collector Street and is called out as proposed emergency access point. The emergency access will need to include a paved connection to the collector street. Further review for the need/design of this access will be needed during the preliminary planning.
- **Perimeter Fence.** A perimeter decorative fence is shown around most of the proposed site. The fence locations should be revised, where necessary, to preserve the City standard 10-foot utility easement.
- **Trail Connectivity.** The City should review the site plan to determine trail connection requirements along Hudson Boulevard and the proposed commercial street.
- **Private Streets.** The streets interior to the development are proposed to remain privately owned and maintained. Interior street design may require revisions to provide adequate fire lanes and safety access.
- **A Traffic Impact Study** should be completed and submitted as part of the preliminary plat application to determine the timing and extent of improvements required for the CSAH19 and 5th Street intersection, and CSAH19 and Hudson Boulevard intersection; including but not limited to turn lanes and traffic signals. A financial contribution to one or both of the CSAH19 traffic signals should be considered.

MUNICIPAL SANITARY SEWER

- The concept plan does not include a sanitary sewer utility plan for review but is proposing 300 REC units plus additional facilities such as fitness center, swimming pool and car care center.
- The proposed site is guided in the City's Comprehensive Plan for Phase I of the Regional Sewer Staging Plan and would discharge to the MCEC WONE Interceptor.
- Sanitary sewer service is available to the site. The applicant will be responsible to connect to the City sanitary sewer system and extend sanitary sewer into the property at applicant's sole cost. In addition, the applicant will be required to stub sanitary sewer mains to adjacent properties to the east, together with applicable easements, so that these parcels maintain sewer access.
- The applicant will be required to connect to the existing 10-inch sanitary sewer at manhole #24 located 200 feet north of Hudson Boulevard, along the west plat boundary. Capacity is not available to connect to the 8-inch sanitary main extending north of this manhole.
- **Existing Utility Easements.** The existing sanitary sewer utility easements along Hudson Boulevard and the new commercial street corridor must be shown with any preliminary plan submittal and plan revisions must be made to avoid encroachments/conflicts with these easements.
- Any sanitary sewer main lines placed within the development will require minimum 30-foot easements centered over the pipe (or wider dependent upon the sewer depths) dedicated to the City and in the form of the City's Utility Easement Agreement.

MUNICIPAL WATER SUPPLY

- The concept plan does not include a watermain utility plan for review but is proposing 300 REC units plus additional facilities such as fitness center, swimming pool and car care center.
- This review assumes that the development would be served by the City's High-Pressure Zone. Additional analysis and evaluation will be required with the preliminary plan submittal to verify the appropriate water pressure service zone based on proposed building elevations.
- Municipal Water service is available to the site. Watermain is available to be extended to the property from the existing 12-inch trunk watermain located along Hudson Boulevard (both high pressure and south intermediate pressure zone connections) and the existing 12-inch trunk watermain located along the westerly plat boundary (high pressure zone connection).

- The applicant will be responsible to extend municipal water into the development at its cost and will be required to construct a looped watermain network internal to the site and with a second City watermain connection point. In addition, the applicant may be required to connect to watermain, existing or proposed, located at adjacent properties to the north or east, together with applicable easements, to create a networked watermain system. Stub locations would be determined during preliminary planning.
- The existing water system has sufficient capacity for domestic service for the proposed 300 REC units and additional facilities. System capacity is likely adequate for fire suppression as well. However, during preliminary planning the applicant must provide fire flow demands for each building so that staff may verify adequate fire suppression capacity.
- No watermain pipe oversizing is anticipated at this time. Further review will be completed as the application moves forward through the process.
- The applicant will be responsible to place hydrants throughout the property at the direction of the Fire Department. All fire hydrants shall be owned and maintained by the City.
- Any watermain lines and hydrants placed within the development will require minimum 30-foot easements centered over the pipe. Easements must be dedicated to the City and be provided in the City's standard form of easement agreement.

STORMWATER MANAGEMENT

- The concept plan does not address storm water management. The proposed development is subject to a storm water management plan meeting State, Valley Branch Watershed District (VBWD) and City rules. A permit will be required from the Minnesota Pollution Control Agency and VBWD.
- Storm water facilities proposed as part of the site plan to meet State and VBWD permitting requirements must be constructed in accordance with the City Engineering Design Standards Manual.
- Permitting requirements will require rate control from all points of discharge from the site and will require volume control (or infiltration). Overland emergency overflows or outlets are required as part of the site plan for flood protection. The site plan will likely require significant revisions to meet all storm water regulations.
- To the extent adjacent properties are impacted by storm water management discharges, written permission from those properties must be submitted as part of the development applications.
- If storm water ponds (detention) and infiltration basins are proposed, the 100-year high water flood level (HWL) for each basin must be fully contained within private property.
- The storm water facilities constructed for this development should remain privately owned and maintained. The applicant will be required to execute and record a Stormwater Maintenance and Easement Agreement in the City's standard form of agreement.
- Even as privately owned and maintain facilities, maintenance access roads meeting the City engineering design standards must be provided for all storm water facilities.