## **MEMORANDUM**



Cara Geheren, P.E. 651.300.4261
Jack Griffin, P.E. 651.300.4264
Ryan Stempski, P.E. 651.300.4267
Chad Isakson, P.E. 651.300.4285

Date: August 28, 2019

To: Ken Roberts, Planner Director

Cc: Chad Isakson, Assistant City Engineer

From: Jack Griffin, P.E., City Engineer

Re: Springs at Lake Elmo (Continental Properties)

Final Plat/Plan Submittals/Review

An engineering review has been completed for the Springs at Lake Elmo Addition. Final Plat/Construction Plans were received August 19, 2019 consisting of the following documentation:

- Final Plat and Construction Plans dated August 19, 2019.
- Stormwater Management Plan dated March 22, 2019; updated August 13, 2019.

**STATUS/FINDINGS:** Engineering review comments have been provided in two separate memos; one for Final Plat approval, and one to assist with the completion of the final Construction Plans. Please see the following review comments relating to the Final Plat application.

## FINAL PLAT AND EASEMENTS

- There are no Outlots proposed with this Plat.
- Final Plat must be contingent upon the City receiving separate drainage and utility easements, or temporary
  grading/construction easements in the City's standard form of easement agreement for all temporary and
  off-site development improvements. The easements must be obtained and recorded prior to recording of
  final plat.
  - A permanent off-site drainage and utility easement is required for the storm sewer run west of Julia Avenue and for the proposed infiltration basin.
  - ➤ A permanent off-site drainage and utility easement may be required for the storm sewer run east of the Subdivision along the north side of Hudson Boulevard and for any ditch improvements required to accommodate the proposed discharges.
- All off-site easements must be clearly shown on the site, street, grading and utility plans, with all dimensions labeled. Type of easement must also be noted on the plans.
- All easements as requested by the City Engineer and Public Works department shall be documented on the Final Plat prior to the release of the Final Plat for recording.
- No pipe oversize pipe costs are anticipated for this development.
- Final Construction Plans and Specifications must be prepared in accordance with the latest version of the City Engineering Design Standards Manual, using City details, plan notes and specifications and meeting City Engineering Design Guidelines.
- Final Construction Plans and Specifications must be revised in accordance with the Construction Plan engineering review memorandum dated September 6, 2019.
- The Final Plat shall not be recorded until final construction plan approval is granted.
- No construction for Springs at Lake Elmo may begin until the applicant has received City Engineer approval
  for the Final Construction Plans; the applicant has obtained and submitted to the City all applicable permits,

easements and permissions needed for the project; and a preconstruction meeting has been held by the City's engineering department.

## PUBLIC IMPROVEMENTS, RIGHT-OF-WAY AND EASEMENTS

- Julia Avenue Right-of-way. The Julia Avenue right-of-way (the north-south collector street connecting 5th
  Street North to Hudson Boulevard) is shown to be dedicated as part of the Union Park Subdivision and is an
  important roadway corridor for the City. Therefore, Final Plat approval for Springs at Lake Elmo must be
  contingent upon the Union Park Final Plat being recorded at Washington County with the Julia Avenue 100foot right-of-way.
- Julia Avenue Improvements. The construction of Julia Avenue, from the north plat boundary of the Springs Subdivision to Hudson Boulevard, is a requirement for the Springs at Lake Elmo development. Final Plat must be contingent upon the final construction plans for Julia Avenue demonstrating no encroachments by elements of the proposed Subdivision, including the perimeter fencing.
- Hudson Boulevard Improvements and Right-of-way. Final Plat must be contingent upon sufficient right-of-way being dedicated along Hudson Boulevard to allow for the Hudson Boulevard Improvements to be constructed in accordance with the Hudson Boulevard Design Standards. No encroachments will be allowed by design elements of the proposed Subdivision to either the right-of-way or 10-foot utility easement along the north right-of-way line of Hudson Boulevard. The Final Plat must be updated to clearly identify both the existing and proposed Hudson Boulevard right-of-way to clearly depict the right-of-way dedication being granted along Hudson Boulevard. The construction plans must also be updated to clearly show both the existing and proposed Hudson Boulevard right-of-way.
- Municipal Watermain. The watermain and hydrants extended into the Subdivision will be owned and
  maintained by the City. All watermain lines and hydrants placed within the development will require
  minimum 30-foot easements centered over the pipe. Easements will be dedicated as part of the Final Plat.
  The northerly watermain connection to Union Park must be coordinated with the Union Park developer and
  redesigned to minimize bends and fittings and to fully detail the proposed connection. The Final Plat
  easements must be updated to reflect the City approved watermain connection plans.
- Sanitary Sewer. The applicant will be responsible to connect to the City's existing 10-inch sanitary sewer extending along Julia Avenue north from Hudson Boulevard. This will require the replacement of approximately 250 feet of 8-inch sanitary sewer with 10-inch sanitary sewer at applicant's sole cost.

## STORMWATER MANAGEMENT

- The proposed development is subject to a storm water management plan meeting State, Valley Branch Watershed District (VBWD) rules, South Washington Watershed District (SWWD) rules, and City rules. The proposed Subdivision resides within the VBWD jurisdiction; however, the applicant has proposed to direct and manage the storm water from the public improvements (Hudson Boulevard and Julia Avenue) to land within the SWWD jurisdiction. Permits will be required from the VBWD, SWWD and Minnesota Pollution Control Agency. A stormwater permit may also be required from MnDOT. Final Plat must be contingent upon the applicant obtaining the required storm water management permits and the proposed designs for meeting these rules being acceptable to the City.
- Permitting requirements will require rate control from all points of discharge from the site. The proposed
  easterly storm water outfall pipe discharges to an existing ditch on the north side of Hudson Boulevard. Ditch
  improvements will be required to accommodate this new combined discharge, or calculations must be
  submitted to demonstrate that the existing ditch can accommodate the proposed discharge rates.
- Storm water facilities proposed for the public improvements must be designed and constructed to meet the requirements of the City Engineering Design Standards Manual.
- The SWWD storm water management system is incomplete. Final Plat must be contingent upon the storm water construction plans meeting the approval of the City and all required easements or Outlots for these facilities being dedicated to the City in the city standard form of agreements.
- Soil borings must be submitted in the number according to the City design standards for the proposed offsite infiltration basin. Type A or B soils are required to propose infiltration.

- Maintenance access roads and benches must be provided for the off-site storm water basin, meeting the City engineering design standards. Access must also be provided to all storm sewer structures.
- The storm water facilities constructed internal to the Subdivision include several underground storage chambers and a proposed storm water reuse irrigation system. These facilities will 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 and must include a detailed maintenance plan and schedule for these facilities.