

**Date:** Thursday, August 22, 2019

**To:** KAW VALLEY ENGINEERING INC  
14700 W 114TH TERR  
LENEXA, KS 67554

**From:** Sue Pyles, P.E.  
Senior Staff Engineer

**Application Number:** PL2019186

**Application Type:** Engineering Plan Review

**Application Name:** STREETS OF WEST PRYOR - NW PRYOR ROAD SIGNAL IMPROVEMENTS & LANE  
WIDENING

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The Development Services Department received plans for this project on August 16 2019. We have completed our review and offer the following comments listed below.

- Resubmit three (3) full size sets of plans (no larger than 24"x36") folded to 8-½"x11", one (1) comment response letter, and one (1) digital copy following the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within five (5) business days of the date received.

**Engineering Review - Corrections**

1. Revise estimate per comments sent under separate cover.

**Traffic Review - Corrections**

1. Station 504+80 and Station 506+60 Existing Street Light Relocations. The notes associated with this work indicate relocate street light and base, but also indicate pour new base. The light pole should be relocated to a new concrete base per standard details. The notes should include removal of existing base with flowable backfill and the placement of a new pull box at the junction of existing conduit and proposed conduit (old base). The notes should also include wiring/cabaling, grounding, and splicing information (or reference where that information is provided elsewhere in the plans. The additional street light pull boxes, wiring/cabaling, and splice enclosures/kits should be included in the tabulated quantities.
2. The luminaire proposed on top of Pole 2 (SW Corner) of Summit Woods Xing intersection can be removed. The proposed pole is a relocated existing pole which does not have an existing luminaire. The street lights in the median on the south side of the intersection, in addition to lighting on Pole 1, Pole 5 and median on the north side, provide adequate intersection illuminance. Remove and revise wiring/quantities.
3. The Summit Woods Xing intersection signal plans note Pole 2 with New Mast Arm, but the wiring diagram

and quantities show relocated Existing Pole 2 with Existing Mast Arm (relocated/salvaged). Existing Pole 2 (SW Corner) is to be relocated with Existing Mast Arm (46') to the Proposed Pole 2 location where a 46' Mast Arm is shown on the plans.

4. The Summit Woods Xing intersection signal plans show New Conduit from Proposed Pull Box 1 to Existing Signal Cabinet, but the wiring diagram shows Existing conduit (intercepted) from Proposed Pull Box 1 to Existing Signal Cabinet. Likewise, the conduit from Power Source and PUP to Pull Box 1 and Signal Cabinet is New on plan, but Existing on wiring diagram. It's likely New conduits are needed to and from Power Source, PUP, Pull Box 1 and Signal Cabinet. New conduits to Existing Signal Cabinet is not advised (constructability issues of placing new conduits in existing concrete pad) and disruption of existing operations. Plan for a new Concrete Pad for the Signal Cabinet with new conduits to/from Proposed Pull Box 1 and relocate the Existing Signal Cabinet (after the New system is wired and ready for relocation). This will also help facilitate existing operations as long as possible while the new signal is constructed and until Pole 2 and Signal Cabinet Relocations are ready.
5. The Fiber Optic Signal Interconnect Plan is incomplete and unclear. The plan does not show proposed conduit, cable (FO/Pull String/Tracer Wire/Etc.), location of existing FO conduit/cable and intercepts/ties for continuity. How will this be constructed and connected?
6. The Tables on the signal quantities for Summit Woods Xing intersection have not been updated, omit necessary information and/or don't match the plans. For examples: Luminaires should be 400W (LED in Lieu of HPS) with 10' Bracket Arm and 40' Mounting Height on Pole 1 and Pole 5. Pole 1 and Pole 5 Head Spacing Added. Pole 1 Mast Arm Length Corrected.
7. The luminaire on top of Pole 2 and Pole 4 of Lowenstien intersection can be removed. The street lights in the median along Pryor, in addition to lighting on Pole 1 and Pole 3 provide adequate intersection illuminance. Remove and revise wiring/quantities.
8. The Tables on the signal quantities for Lowenstien intersection incorrectly identify the mast arm length for Pole 1 and the wrong base for Pole 1. Revise the 400W HPS to LED.
9. The Summit Woods Xing intersection signal plans note Pole 5 with New Mast Arm, but the quantities show a relocated Existing Pole for Pole 5. The relocated pole has an existing mast arm of 35', without an existing luminaire and cannot be used for a proposed new 46' mast arm with luminaire. A NEW Pole 5 is needed to pair with the NEW Mast Arm and luminaire.

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**

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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 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 multi-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,

Sue Pyles, P.E.  
Senior Staff Engineer  
(816) 969-1245  
Sue.Pyles@cityofls.net

cc: Development Engineering Project File