

**Date:** Friday, August 09, 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 July 26, 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. Include a Summary of Quantities table that includes quantity information. Only include items that are a part of this plan set in the table.
2. Verify the estimate items and quantities match the plan set.

#### **Traffic Review - Corrections**

1. Per previous comment (2); remove the Right Lane Must Turn Right Signs (R3-7) that are proposed NB and SB Pryor Road at Summit Woods Xing. These are "pocketed" turn lanes and the sign is not used in these situations per City. These signs and the Left Lane Must Turn Left Signs that were removed from the plans in latest revision remain in the quantity tables and should be removed.
2. Per previous comment (9); the plans must include detail related to street light relocation including conduit, pull boxes and cable, construction notes, etc. The plans were revised to note pole and base relocation, but omitted the construction of necessary conduit, cable, pull boxes, etc. to reconnect the system and included quantities.
3. Per previous comment (3); the existing lane use signs (2) should be removed and noted as removal on the Demo Plans or Signal Plans. The removals could not be found on the plans.

4. The signal pole symbol was removed (or not shown) for Pole 5 at the intersection of Summit Woods Xing and Pryor Road. This symbol representing the pole and its dimension should be added to the plans.
5. Signal Head 51 on Pole 4 at the intersection of Lowenstien and Pryor Road should be centered on the approaching left turn lane. The relocation of this signal head may reduce the mast arm length (if so, modify the table of quantities and other plan sheet accordingly).
6. The conduit/cable/wiring system for the traffic signal at Summit Woods Xing and Pryor Road seems in conflict between existing infrastructure, proposed, plans and wiring diagrams. Existing Pull Box 1 and Existing FO Box on the northwest corner of the proposed intersection cannot be located in the proposed curb or within the proposed roadway (right-turn lane). The survey shows these in conflict with the proposed improvements, but the plans note "To Remain" (for use in place). The signal plans do not show how new Pull Box 1 connects to the existing conduits between existing controller cabinet and existing pull boxes. The wiring plans show new Pull Box 1 intercepting existing conduits, but there are no existing conduits in the area of proposed Pull Box 1. How will this system be connected to the existing cabinet (no new conduits can be added to existing cabinet unless a new pad is constructed and existing cabinet relocated)? The existing and proposed signal system should be independent as much as possible (or capacity available in re-used existing conduits for existing and proposed cables/wires concurrently until service is transitioned and old cables/wires removed) so as to minimize downtime in transition. Please review survey information as the existing controller cabinet at this location appears to be misidentified as the PUP power supply cabinet (visa-versa) which would require relocation of the signal cabinet on a new foundation pad. A field review shows the PUP west of the signal cabinet, but the plans show the cabinet west of the PUP. The PUP power supply cabinet (which is likely the existing signal cabinet) is shown on the plans "To Remain", but is in conflict with the proposed roadway improvements and must be relocated. The power source to the PUP Unit (a utility pole nearby) will also be relocated by the utility and the relocated power source must be shown on the plans for reference.
7. Existing pole base, pull box, and conduits that will not be used along the west side of Pryor Road at Summit Woods Xing shall be removed (e.g. pole and pull box along with conduits in the southwest corner of the intersection and extending to existing pull box 1). Notes should be included on the plans to identify all removals, timing of removal (after operational transition to new signal system) and scope of restoration.
8. Coordinate the roadway improvement plans with the interconnect plans. The existing FO pull boxes (7, 8, 9) are in conflict with the proposed roadway improvements. The existing conduit will likely be impacted depending on depth within the proposed right-turn lanes, the existing FO pull boxes are not traffic rated and FO pull boxes should not be in traffic where maintenance is disruptive and less safe.
9. The improvement plans for Lowenstien Drive include a right-turn lane along Pryor Road at Lowenstien Drive. Those improvements impact the existing street light system (e.g. pull box and lighting cabinet/controller, location of power supply). The street light relocation plans must also include the relocation plans and details for the cabinet, pull box, power supply location and other street light system components in conflict with the proposed improvements.

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