



Development & Engineering Department
Traffic Engineering Division

Traffic Signal Plan Checklist & Process Guide

Traffic Signal Plan Submittal Checklist

Project
Name: _____

____ Submittal Application

____ Review Fee (Refer to Engineering Fee Schedule)

____ 1 Full Size Copies of Signal Plans (may be omitted in Electronic Submittal)

____ 1 Half Size (11x17) Of Signal Plans (may be omitted in Electronic Submittal)

____ 1 (8.5x11) Clearance Interval Memo, sealed

Special Considerations

*** The meter address and electrical permits must be obtained through a separate submittal, through the Building Development Division (for all projects submitted through the Site Development process). For modifications to existing signals requiring relocation of the cabinet, the applicant shall coordinate addressing between the Traffic and Building submittals, as this will affect the billing account with APS/SRP.

*** A Traffic Signal Plan Equipment Submittal is to be made to the Development & Engineering Department after the Traffic Signal Plans are approved. This is to include all equipment related to the traffic signal. The City is not responsible for any equipment that is purchased prior to approval of the Equipment Submittal.

I. Introduction

The Development and Engineering Department, Traffic Engineering Division is providing the following information to aid applicants processing a Traffic Signal Plan within the City of Peoria. Additional technical information may be obtained by contacting the City at (623) 773-7600.

III. Traffic Signal Plan Requirements

A. Coversheet

- a. Name of project and location
- b. Name, address, registration number, and seal of the Registered Professional Engineer
- c. Vicinity Map
- d. Approval Block
- e. Utility Coordination

B. Sheet 2

- a. General Notes (refer to the Peoria Engineering Standards Manual)
- b. General Information (refer to the Peoria Engineering Standards Manual)
- c. Traffic Signal Notes (refer to the Peoria Engineering Standards Manual)

C. Sheet 3

- a. Legend
- b. Plan view of the intersection. This should reflect the new traffic signal equipment as well as the civil improvements and all striping. Clearly show and dimension ROW. Show all utilities.
 - i. The City currently uses standard (historic, pre 2019) ADOT signal poles and foundations, with the exception of a modified R pole and the ped pole. The modified R pole foundation is to be per Detail PE-080 and the modified R pole per Detail PE-081. For ped poles, the City uses A poles, **in 5.5', 10', 14', or 16'**.
 - ii. Beginning in FY 21, the City will be implementing standard details for all traffic signal poles. Once these are published, all new traffic signal plans will be utilizing these standards.
- c. Construction Notes.
- d. Pull Box Schedule. Identify all pull boxes, existing or proposed, by type and location.
 - i. For new signal poles, the City uses #7 pull boxes with extension.
 - ii. For interconnect, new pull boxes are to be per Detail PE-071-1 and new vaults are to be per PE-073.
 - iii. Pull box wiring is to be per Detail PE-087.
- e. Fiber Splice Detail
 - i. Contact the Traffic Engineering Division to obtain the preferred fiber splice diagram.
- f. Detail of the Illuminated Street Name Signs

D. Sheet 4

- a. Equipment Schedule
- b. Equipment Notes
 - i. Control cabinet
 - ii. Emergency Vehicle Pre-Emption
 - iii. CCTV
 - iv. Video detection
 - v. Battery Backup
- c. Conductor Schedule:
 - i. Conduit runs are to be sized as follows:
 - 1. **2.5" to the meter** pedestal
 - 2. 2- 3" **conduits** across all legs of the intersection
 - 3. 1- **2" and 1- 3"** to main poles
 - 4. **2.5" to ped poles**
 - 5. **2.5" to A poles**
 - ii. Conductor cables are used as follows:
 - 1. No 8 insulated green and white XHHW is used in all conduit runs
 - 2. No 8 white/black XHHW is used between the BBU, service, and the control cabinet
 - 3. Include the following notes on the conductor schedule:
 - a. The IMSA 25-(stranded) conductor cable shall be #16 AWG IMSA 19-1 High temp cable. The IMSA 2-conductor, 5-conductor, and 7-conductor (stranded) cable shall be #16 AWG IMSA 19-1. 4-conductor (solid) shall be #14 AWG IMSA 19-1 cable.
 - b. 3-M Opticom model 138 detector cable
 - c. Video detection communication cable shall be shielded burial grade, gel filled CAT 5E with solid core 24 AWG conductors or 3-wire polyethylene jacket AWG, based on detection system being utilized.
 - d. (4) **1-1/4" conduits for traffic signal interconnect** with (1) #12 bare cu tracer wire per City of Peoria specifications and requirements. See City of Peoria detail PE-070.
 - e. CCTV Conductor per manufacturer specifications.
 - f. A 5-conductor thermostat 18/5 wire shall be between the battery backup and control cabinet.
- d. Wiring Detail
 - i. Signal wiring is to be per Detail PE-085.

IV. Clearance Interval Memo

- A. A stand alone, sealed memo is to be provided with the signal plans, providing the clearance intervals (yellow, red, and pedestrian). This is to be prepared in accordance with the City's *Traffic Signal Clearance Policy*, located at

<https://www.peoriaaz.gov/government/departments/development-and-engineering-department/traffic-engineering>. This memo should be accompanied by a diagram of the intersection showing all distances referenced in the memo. The Clearance Interval Memo shall be submitted with the first submittal of the traffic signal plans.