

Traffic Signal General Notes

The following is a list of traffic signal General Notes that may be included in the signal plans. Designers should review these notes for their applicability, as all notes may not be required for every project.

1. The complete signal installation shall conform to all appropriate parts of the Manual on Uniform Traffic Control Devices, current edition.
2. Material certification is required prior to beginning any signal installation work. The contractor shall follow procedures outlined in the specification. All materials must meet the Georgia DOT and Clayton County's specifications. If there is a discrepancy, the Clayton County specification shall apply, unless specified by the Signal Engineer.
3. The contractor shall locate underground utilities in vicinity of new traffic signal poles before installation. Minor shifts (up to a maximum of 5 feet) in location of new signal poles, at the discretion of the engineer, are acceptable to avoid underground utilities. Placement of the signal heads must be retained as shown on plans.
4. For strain pole foundation size and reinforcement, see Georgia DOT strain pole and mast arm pole foundation sheet.
5. The contractor shall be responsible for all new guys on existing utility timber poles when attaching span wire or interconnect cable to the poles, unless otherwise directed by the Engineer.
6. Proposed signal support wire attachment heights on poles are provided as general guidelines to installer. Actual attachment heights shall be field determined by installer to provide required signal head mounting heights and clearance from existing utilities.
7. Signal heads shall be erected to provide at least 17 feet but no more than 19 feet clearance from bottom of signal heads to top of road surface and a minimum of 8 feet measured horizontally between centers of signal faces.
8. All signal and pedestrian heads shall be black.
9. Signal cable splice bags shall be installed at every span wire signal installation, with one splice bag installed to the right of all signal heads for each approach.
10. For cable attachment to span wire installations, all cable shall be taped with approved electrical tape at 12-inch increments. Lashing of cable to signal span wire is unacceptable.

11. A 12 inch drip coil with 3 wraps shall be provided to the right of each signal head. The drip loop shall be formed so that water can not enter the entrance clamp. The wire shall enter the clamp from the bottom of the drip loop.
12. All wire entrance clamps shall open to the right as viewed from the stop bar.
13. Traffic signal wire splicing shall be as follows:
 - a. For span wire intersections, the 7-conductor cable shall be spliced in the appropriate splice bag only, then jumpered to the appropriate signal heads with 7-conductor cable
 - b. For mast arm intersections, the 7-conductor cable shall be spliced in the base of the signal pole only, then jumpered to the appropriate signal heads with 7-conductor cable.
14. Pedestrian wire splicing shall be as follows:
 - a. For one-way pedestal poles, all wire (7-conductor and 3-pair detector) shall be continuous to the pedestrian head and pushbutton
 - b. For two-way pedestal poles, all wire shall be spliced in the base of the pedestal, then jumpered to the appropriate pedestrian heads and buttons
 - c. For one-way signal pole mounting, all wire shall be continuous to the pedestrian head and pushbutton
 - d. For two-way signal pole mounting, all wire shall be spliced in the hand hole at the base of the pole, then jumpered to the appropriate pedestrian heads and buttons.
15. 3 PR/18 AWG shielded cable shall be used for detector runs as shown on the detail sheet. Detectors shall have separate lead-ins to the signal cabinet. Lead-in cable shall be continuous between the signal cabinet and the pull box adjacent to the detector loop(s).
16. Contractor shall mount all signs on span wire with standard 3/8 inch 3-bolt clamps with one 1/4 inch bolt drilled through the clamp and sign.
17. Power disconnect boxes shall be installed according to Georgia DOT specifications.
18. When removed, all cabinets, internal cabinet components, and LED signal heads shall be delivered by the contractor to the Clayton County Signal Shop. Contact the County Signal Engineer at 770-477-3691 to arrange delivery.
19. The contractor shall maintain existing traffic signals during construction. This includes all maintenance activities as well as emergency repair activities. The contractor shall be responsible for all traffic signal and/or control system adjustments, including temporary support pole location(s) required by the project

during the interim period through installation of new signal equipment. At no time shall the contractor cause any part of the signal operation to be inoperable.

20. Installation shall be checked and accepted by the Clayton County Signal Engineer prior to final acceptance.
21. The contractor shall replace in kind and size, at no separate expense to the County, any barrier wall, fence, ditch paving, curbing, sidewalk, gutter, slope pavement, signs, guardrail, landscaping, grassing, utility service lines, storm drain pipes, masonry walls and paving that is removed, damaged, or destroyed.
22. The contractor shall be responsible for any and all pertinent erosion control. These measures shall be implemented and maintained for the duration of the work. The contractor shall consider this work incidental to the overall work being submitted, and shall include this cost for completing this work in the overall bid submitted.
23. Any traffic markings, symbols, or striping to be removed shall be included in the overall bid submitted.
24. All mast arms shall be designed and manufactured for installation of a 200 lb. lighted street name sign.
25. All signal heads shall be attached to mast arms using Astro-bracket mountings.
26. The contractor must be prequalified by the Georgia DOT and approved by Clayton County for traffic signal construction.
27. The contractor must provide proper traffic control in work areas in accordance with the Manual of Uniform Traffic Control Devices.
28. It shall be the Contractor's responsibility to locate and avoid all utilities.
29. Installation methods and procedures must conform to all applicable Georgia DOT standard specifications and be accepted by Clayton County.
30. The contractor must provide a detailed construction schedule from start to finish. Clayton County will issue a written notice to proceed when the contractor is approved and a construction schedule has been accepted.
31. A Clayton County representative must be on site when the signal is flashed and activated.
32. If signal heads are installed prior to the day of activation, each section of each signal head must be covered with a black bag and shall not be removed until the signal is ready to flash.

33. The contractor shall warrant the entire signal installation during construction and for a “burn-in” period of 30 consecutive days from the date of activation. Any malfunction will initiate a new “burn-in” period. Any malfunction requiring a response by Clayton County will be billed to the Contractor.
34. Clayton County reserves the right to withhold final acceptance beyond the 30 consecutive day “burn-in” period if required work is not 100% complete.
35. Clayton County must be contacted to inspect all work as it progresses. The County’s representative will not be on site 100% of the time, but shall be kept informed of work status and will inspect various stages of construction regularly. A minimum of one inspection per week will be performed during the construction process.
36. The Contractor shall provide 48 hours advance notice prior to picking up any material from Clayton County DOT Traffic Signal Warehouse. All materials that are received from Clayton County DOT shall be signed for by the Contractor.