PDN Stage 3 - ITS QC Checklist

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| --- | --- |
| **SPOT ID/Project TIP #:** |  Click or tap to edit. |
| **County:** |  Click or tap to edit. |

3SG1 Complete ITS Design

| **Item #** | **Review Item** | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
| 1.
 | **Plan Sheet** |  |  |  |
|  | Upper Title Block |[ ] [ ] [ ]
|  | All data included in title block in correct format |[ ] [ ] [ ]
|  | Plan sheets have a numbering scheme that matches Index of Sheets |[ ] [ ] [ ]
|  | Plan sheet numbering corresponds to the Utility Make Ready plan sheet numbering (if applicable) |[ ] [ ] [ ]
|  | Lower Title Block |[ ] [ ] [ ]
|  | North arrow |[ ] [ ] [ ]
|  | Division / County |[ ] [ ] [ ]
|  | City or direction of nearest city (if applicable) |[ ] [ ] [ ]
|  | Scale labeled |[ ] [ ] [ ]
|  | Date |[ ] [ ] [ ]
|  | Prepared By: / Reviewed By: |[ ] [ ] [ ]
|  | Revision made & date (if applicable) |[ ] [ ] [ ]
|  | Seal (final plans) |[ ] [ ] [ ]
|  | PEF Logo (PEF plans) |[ ] [ ] [ ]
|  | DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED |[ ] [ ] [ ]
|  | Base Map for Cable Routing Plans |[ ] [ ] [ ]
| * + 1.
 | Edge of pavement, (identification between existing and proposed edge of pavement) |[ ] [ ] [ ]
|  | Right of way lines (if applicable) |[ ] [ ] [ ]
|  | Route numbers & street names |[ ] [ ] [ ]
|  | Driveways, sidewalks, major culverts, etc. |[ ] [ ] [ ]
|  | Railroad tracks (RR crossing numbers & Name of railroad) |[ ] [ ] [ ]
|  | LEGEND – Identification of pertinent symbols, utility owners, etc. |[ ] [ ] [ ]
|  | Cable Routing Plans |[ ] [ ] [ ]
|  | The plan’s title block shows the correct north orientation with regards to the roadway and the correct scale (if applicable) |[ ] [ ] [ ]
|  | All device cabinets are labeled and identified by a unique identifier number. Device locations/identification numbers are shown on the title sheet and the individual plan sheets (where appropriate) |[ ] [ ] [ ]
|  | Check construction notes against the individual Cable Routing Plan sheets |[ ] [ ] [ ]
|  | Verify all special notes are clearly written and are applicable to the subject |[ ] [ ] [ ]
|  | Legend – Identification of pertinent symbols and notes etc. |[ ] [ ] [ ]
|  | Plan Sheet Checking |[ ] [ ] [ ]
|  | Conduit size |[ ] [ ] [ ]
|  | Verify conduit installation technique (trench, directional drill, plow, etc.) |[ ] [ ] [ ]
|  | Fiber size and count |[ ] [ ] [ ]
|  | Drop cables |[ ] [ ] [ ]
|  | Splice enclosures |[ ] [ ] [ ]
|  | Risers |[ ] [ ] [ ]
|  | Junction boxes |[ ] [ ] [ ]
|  | Delineator makers or Junction box makers |[ ] [ ] [ ]
|  | Tracer wire |[ ] [ ] [ ]
|  | Messenger cable |[ ] [ ] [ ]
|  | Pole grounding - Ground all poles where there is a transition from above ground to below ground and at 1,300 ft intervals for continuous aerial runs |[ ] [ ] [ ]
|  | Down guys (existing and proposed) |[ ] [ ] [ ]
|  | Interconnect centers |[ ] [ ] [ ]
|  | Ethernet switches or transceivers |[ ] [ ] [ ]
|  | Wireless communications devices and antenna |[ ] [ ] [ ]
|  | Cellular modems (if applicable) |[ ] [ ] [ ]
|  | CCTV installations |[ ] [ ] [ ]
|  | Dynamic Message Sign (DMS) installations |[ ] [ ] [ ]
|  | Microwave Vehicle Detector (MVD) installations |[ ] [ ] [ ]
|  | Electrical service installations |[ ] [ ] [ ]
|  | Fiber Splice Plans |[ ] [ ] [ ]
|  | Fiber count and size on Splice plans matches the Cable Routing Plan sheets |[ ] [ ] [ ]
|  | All devices are accounted for with correct identification numbers |[ ] [ ] [ ]
|  | Street names and location correspond with the location of the device |[ ] [ ] [ ]
|  | Verify/trace continuity and termination of fibers |[ ] [ ] [ ]
|  | All necessary notes are present and accurate |[ ] [ ] [ ]
|  | Call-out for transceiver or Ethernet switch matches plan sheets |[ ] [ ] [ ]
|  | Typical and Special Details |[ ] [ ] [ ]
|  | Typical details are included in the plan package as needed |[ ] [ ] [ ]
|  | Develop new typical details that are needed for the project |[ ] [ ] [ ]
|  | DMS S-Dimension sheet is included for each DMS (if applicable) |[ ] [ ] [ ]
|  | **Electrical Service & Feeders** |  |  |  |
|  | Note: power requirements for ITS devices (CCTV, DMS, etc.) normally do not need to do this step for signal cabinets  |[ ] [ ] [ ]
|  | Collaborate with Power Company to identify the closest power source and available voltage |[ ] [ ] [ ]
|  | Service and feeder size calculations based on distance and voltage loss |[ ] [ ] [ ]
|  | Conduit sizing |[ ] [ ] [ ]
|  | Identification of service location |[ ] [ ] [ ]
|  | Breaker sizing – Normal: 15 amp single pole for CCTV; 50 amp double pole for DMS  |[ ] [ ] [ ]
|  | Feeder sizes – 3 wire for 120 volt applications or 4 wire for 240 volt applications |[ ] [ ] [ ]
|  | **Project Special Provisions (PSPs) & Pay Items** |  |  |  |
|  | Verify proper TIP, county, date, etc., are included in the specifications along with page numbering |[ ] [ ] [ ]
|  | The PSPs identify that the contractor is responsible for obtaining “S-Dimension” for new roadway projects (if applicable) |[ ] [ ] [ ]
|  | All pay items are included and correct |[ ] [ ] [ ]
|  | Specifications are included in the final package that address all items identified in the estimate |[ ] [ ] [ ]
|  | Verify individual quantities of each associated pay item and develop a quantity total  |[ ] [ ] [ ]
|  | Review the total quantity estimate for errors in spelling of pay items and quantity totals |[ ] [ ] [ ]
|  | The Engineer of Record has complied with NCGS § 133-3 and NCDOT policy number F.25.0101 regarding the use of proprietary products. |[ ] [ ] [ ]

*For items marked* ***No*** *that require further explanation, provide comments or action items in the table below.*

| **Item #** | **Comments and Action Items** |
| --- | --- |
|  Click to edit. |  Click to edit. |

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| --- |
| ***This checklist may not be comprehensive to every project. It is the responsibility of the reviewer to ensure that an adequate review is performed.I have reviewed the plans for consistency with this checklist and confirmed that all items have been completed.*** |
| **QC Reviewer Name:** |  Click to edit. | **Date:** |  Click to edit. |
| **QC Reviewer (Signature):** |  |  |  |