PDN Stage 2 – Roadway Design QC Checklist

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

2RD1 Alignment Defined

| **Item #** | **Review Item** | **Yes** | **No** | **N/A** |
| --- | --- | --- | --- | --- |
|  | **Design Public Meeting/Hearing Maps** |  |  |  |
|  | Title Block |  |  |  |
|  | TIP project number and WBS number is shown. |  |  |  |
|  | County is shown. |  |  |  |
|  | Description of the project matches the STIP and environmental document. |  |  |  |
|  | Federal aid number is shown, if applicable. |  |  |  |
|  | Roll/sheet numbers are shown, if there are more than one. |  |  |  |
|  | Date the design public meeting or hearing will be held is shown (month and year). |  |  |  |
|  | Seal of the State of North Carolina is shown. |  |  |  |
|  | NCDOT triskelion is shown. |  |  |  |
|  | Typical Sections |  |  |  |
|  | Typical sections are shown in a 3-dimensional perspective. |  |  |  |
|  | All relevant features are shown with dimensions (ex. travel lanes, median, curb and gutter, bike lanes, sidewalk, sidepaths, etc.).  *(Best Practice – Do not show the slopes associated with the features.)* |  |  |  |
|  | Provide a note indicating that betterments are contingent upon municipal agreement, if applicable.  *Note: Betterments can include but are not limited to bike lanes, sidewalk, and sidepaths.* |  |  |  |
|  | Typical sections are shown for the mainline and major Y lines. |  |  |  |
|  | Typical section is provided for mainline bridge(s). |  |  |  |
|  | Road names are shown for their corresponding typical sections.  *(Best Practice - Do not show the SR numbers on the typicals.)* |  |  |  |
|  | Sheet Composition |  |  |  |
|  | Maps shall not exceed 10’ in length, unless prior coordination with the Public Involvement Officer indicates the facility and method of display can accommodate additional length. |  |  |  |
|  | A legend is shown with only the items applicable to the project.  *(Best Practice – When the length of the map exceeds 8’, show a legend at each end of the map. One should be placed at the top of the map and the other at the bottom.)* |  |  |  |
|  | Design data is shown including the proposed functional classification, design speed and maximum superelevation. |  |  |  |
|  | Scale of the maps is shown.  *(Best Practice – Discuss the appropriate scale for the* *project with Public Involvement and Roadway Design.)* |  |  |  |
|  | Begin and end TIP project are labeled. |  |  |  |
|  | Begin and/or end construction for the mainline are labeled if the construction extends outside the TIP project limits. |  |  |  |
|  | North arrow is shown. |  |  |  |
|  | Source and date of the aerial photography are shown.  *Note: Verify that the most recent aerial photography is being used.* |  |  |  |
|  | Traffic diagrams are shown, if applicable.  Note: Show the actual numbers instead of abbreviating the numbers (i.e. in hundreds or in thousands). |  |  |  |
|  | Incomplete plans note is shown. |  |  |  |
|  | Preliminary plans note is shown. |  |  |  |
|  | The appropriate control of access note(s) is/are shown (partial, limited, full), if applicable. |  |  |  |
|  | Utility note is shown. |  |  |  |
|  | Driveway note is shown, if applicable. |  |  |  |
|  | Potential noise abatement note is shown, if applicable. |  |  |  |
|  | Major landmarks are labeled (ex. subdivisions, schools, churches, hospitals, shopping centers, gas stations, etc.).  *Note: Labels should be black letters on pale gold background.*  *(Best Practice - Every location does not have to be labeled but enough to provide a reference to where we are along the project.)* |  |  |  |
|  | Interstate, US and NC route shields are shown. |  |  |  |
|  | Street names are labeled. Labels should include SR numbers, if applicable.  *Note: Labels should be white letters on a green background.* |  |  |  |
|  | Property boundaries are shown. |  |  |  |
|  | Property owner names are shown.  *Note: Options are white letters on photography, black letters inside a white background, or parcel numbers with cross referenced table listing the property owner names. A combination of these can be utilized.* |  |  |  |
|  | City, town, and county limits are shown with a label for each municipality, if applicable. |  |  |  |
|  | The design shown is reflective of the preliminary design and Congestion Management recommendations. |  |  |  |
|  | A detail for directional crossover with median U-turn should be shown, if applicable. |  |  |  |
|  | Provide destination labels at the beginning and end of the project. |  |  |  |
|  | All alignment information should be white (alignments, tick marks, 500’ stations).  *Note: The items listed in parentheses above should be the only information shown.* |  |  |  |
|  | Alignment names are provided.  *Note: Labels should be black letters on a white background.* |  |  |  |
|  | Existing right of way is shaded for all roads being affected by the project (including properties already owned by NCDOT). |  |  |  |
|  | Proposed right of way and proposed easements are shaded.  *Note: Verify slope stakes have been contained within these limits.*  *(Best Practice – Except for buildings, the proposed right of way and easement shapes should take precedence over all other shapes.)* |  |  |  |
|  | Existing roadways being affected by the project are shaded. |  |  |  |
|  | Existing roadways to be removed are shaded, if applicable.  *Note: The pavement removal should not stop at the slope stakes.* |  |  |  |
|  | Verify the existing roadways to be resurfaced and proposed roadways are shown correctly (i.e. wedging areas versus new pavement).  *Note: Existing driveway pavement should not be shown as resurfacing as the composition is unknown.* |  |  |  |
|  | Onsite detours are shown on the map. |  |  |  |
|  | Roadways of adjacent projects are shaded as future roadway with the project number, if applicable. |  |  |  |
|  | Proposed bridges, culverts, islands, sidewalks, and curb and gutter are shaded, if applicable. |  |  |  |
|  | Existing bridges, culverts, islands, sidewalks, curb and gutter to be retained are shaded, if applicable. |  |  |  |
|  | Existing bridges and culverts, to be removed are shaded, if applicable. |  |  |  |
|  | Lakes, rivers, streams and ponds are shaded, if applicable.  *(Best Practice – Consult with the Division about whether to show ponds in proposed right of way or easement.)* |  |  |  |
|  | Existing railroad right of way is shaded and railroad owner labeled. |  |  |  |
|  | Existing utility easements are shown for major utilities (power, gas, water) and labeled. |  |  |  |
|  | Cemeteries are shown, if applicable.  *(Best Practice – Provide a label for the cemetery (with a name, if applicable), especially for small ones where the symbology may be difficult to see.)* |  |  |  |
|  | Wetlands are shown, if applicable. |  |  |  |
|  | Sidewalk, sidepaths, and/or greenways are shaded and/or shown appropriately on the map. |  |  |  |
|  | Historic properties and districts are shaded and labeled. |  |  |  |
|  | Parks are shaded. |  |  |  |
|  | Potential noise abatement areas are shown, if technical noise report is complete. |  |  |  |
|  | Existing control of access symbology is shown, where applicable. |  |  |  |
|  | Proposed full, partial and limited control of access symbology is shown, where applicable. |  |  |  |
|  | Proposed express lanes are shaded, if applicable. |  |  |  |
|  | Expressway lane entry and exit point locations are shown, if applicable. |  |  |  |
|  | Proposed toll gantry locations are shown, if applicable. |  |  |  |
|  | Widths of the proposed pavement, and medians are labeled.  *Note: Labels should be black letters on a white background.*  *(Best Practice – Label EOT to EOT instead of individual lane widths.)* |  |  |  |
|  | Width of proposed right of way is labeled in areas where it is consistent. |  |  |  |
|  | Slope stakes shall be shown with cut and fill labels at least every 200’ and where the slopes transition between cut and fill.  *Note: Slope stake lines and labels should plot black.* |  |  |  |
|  | Paved shoulders should not be shaded. |  |  |  |
|  | U-turn bulb locations are contained in full control of access on both sides of the roadway. |  |  |  |
|  | Cul-de-sacs are fully contained in existing or proposed right of way. |  |  |  |
|  | Existing, proposed, and existing to be removed signal locations are identified, if applicable. |  |  |  |
|  | Lane arrows provided on the mainline and Y lines.  *(Best Practice - Do not show lane arrows for driveways.)* |  |  |  |
|  | Lane lines shown.  *(Best Practice – Show lane lines only where there are lane arrows or use the pavement marking plans line styles throughout the map.)* |  |  |  |
|  | The shapes for existing pavement and existing right of way are shown for a short distance outside the proposed construction on the mainline and Y lines.  *Note: The shapes should begin and/or end at the same location.* |  |  |  |
|  | Key Map (If Applicable) |  |  |  |
|  | The title block should be clearly labeled as “Key Map”. |  |  |  |
|  | North arrow is shown. |  |  |  |
|  | Sheet layout is shown and each sheet number labeled. |  |  |  |
|  | Aerial photography should be the base of the key map. |  |  |  |
|  | Source and date of the aerial photography are shown.  *Note: Verify that the most recent aerial photography is being used.* |  |  |  |
|  | All interstates, US and/or NC routes, SR routes and street names should be labeled |  |  |  |
|  | Scale of the key map is provided. |  |  |  |
|  | Preliminary base mapping and design features should ***not*** be shown. |  |  |  |
|  | Special Cases |  |  |  |
|  | Transmission tower locations are shown within the study area if the utility easement information is not available. |  |  |  |

*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. |

|  |  |  |  |
| --- | --- | --- | --- |
| ***This checklist may not be comprehensive to every project. It is the responsibility of the reviewer to ensure that an adequate review is performed.*** | | | |
| **QC Reviewer Name:** | | Click to edit. | **Date:** | Click to edit. | |
| **QC Reviewer (Signature):** | |  |  |  | |