

PLANS and TECHNICAL SPECIFICATIONS

The Plans and Technical Specifications are used to construct the project and should meet accepted standards.

POLICY: Projects funded through NCDOT from FHWA should follow Departmental design standards and specifications, which meet minimum AASHTO design criteria; however, some exceptions may be made, based on Project type.

FHWA expects most projects funded through the NCDOT to utilize standard and approved drawings and specifications in order to construct a project that meets acceptable federal and state requirements.

Based on the PROJECT TYPES list, determine the correct procedures for developing your plans and technical specifications.

ENCROACHMENTS

If an LGA has a municipal agreement with NCDOT for the scope of work, then the LGA does not need to apply for an encroachment agreement, as plans will be reviewed by NCDOT and any work within the NCDOT ROW will be reviewed for compliance.

If the LGA has already acquired an encroachment agreement and the project later receives federal funding, then the LGA will need to go through a separate review of the plans and proposal that for the entire project, not just the portion within the NCDOT ROW.

An encroachment may also be required from other types of property holders - including railroads.

IMPORTANT: Prior to requesting construction authorization, NCDOT shall have received, reviewed and approved the final plans, specifications, and associated contract proposal.

DESIGN – PLANS and TECHNICAL SPECIFICATIONS

TYPE 1 Use NCDOT's Roadway Standard Drawings and NCDOT Standard Specifications for Roads & Structures (2012).

The NCDOT Standards should be used as the basis for the design of a project. If, however, the LGA can show and document that their own standards are more stringent, necessary for synchronization, or address design issues lacking in the NCDOT Standards, then an exception may be considered. Consult with the **Division Project Manager**, but please be aware that this may require a lengthy review time among multiple entities.

PROCEDURE

During development of the agreement, NCDOT staff will determine which review authority will have final approval of plans. Plans will either be submitted to the **Division Project Manager** or your PROGRAM MANAGER in Raleigh for distribution to **Roadway Design Unit (Raleigh)**.

DIVISION PROJECT MANAGER (DPM):

- Coordinate directly with the DPM on the appropriate number of plans and when to submit.
- DPM will review and provide comments. All comments should be addressed and plan revisions resubmitted to DPM for final approval. Allow sufficient time for review at the Division Level – at least three (3) months.

Refer to [Contract Proposal](#) section for more information on contractual requirements.

- DPM will issue final acceptance letter to PROGRAM MANAGER.

ROADWAY DESIGN UNIT:

- Submit six (6) sets of plans to the PROGRAM MANAGER.
- Plan comments will be sent from Roadway Design Unit, directly to the LGA and/or their consultant. NCDOT review staff will coordinate directly with consulting engineer on any comments that need to be addressed. Allow sufficient time for review by Roadway Design Unit. At least six (6) months or more may be required to complete the entire process.
- Roadway Design Unit will issue final acceptance letter to PROGRAM MANAGER, who will inform LGA.

TYPE 2**May use other appropriate Design Standards and Specifications**

These projects are typically not road or bridge-related, therefore NCDOT may not be the best review authority for plans. For these types of projects, the LGA and NCDOT shall coordinate on the appropriate review authority for final acceptance on plans. Local government staff or other state agency staff may be options for acceptable review.

PROCEDURE

- LGA shall submit plans and specifications to appropriate review authority.
- LGA shall obtain final letter of acceptance and provide to PROGRAM MANAGER.

IMPORTANT: The [Contract Proposal](#) must be reviewed by NCDOT to ensure compliance with applicable federal and state contractual requirements. See separate section for more information.

RESOURCES for DESIGN STANDARDS (may not be inclusive)

- AASHTO (American Association of State Highway Transportation Officials) - www.aashto.org
- [NCDOT Standard Drawings \(2012\)](#)
- [NCDOT Standard Specifications for Roads and Structures \(2012\)](#)
- NCDOT's Municipal/Developer Submittal Guidelines
<http://www.ncdot.org/doh/preconstruct/altern/value/manuals/1mdsg.pdf>
- [Americans with Disabilities \(ADA\) Standards](#)
- [North Carolina Bicycle Facilities Planning and Design Guidelines](#)
- [Secretary of Interior's Standards for Treatment of Historic Properties](#)
- NCDOT's [Guidelines for Planting within Highway Right of Way](#)
- NC Department of Administration [State Construction Office Guidelines](#)