

TRAFFIC SIGNALS

REVIEW AND APPROVAL PROCESS FOR PRIVATE DEVELOPMENTS



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Division of Highways
Traffic Engineering and Safety Systems Branch
Traffic Management and Signal Systems Unit*

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PHASE I: Initial Contact

The developer contacts the district engineer's office to initiate access to a state system road. Generally, an encroachment agreement is required for any construction, installation, activity, or operation within NCDOT right-of-way.

Traffic signal and traffic management system improvements are not covered in the encroachment agreement or driveway permitting process.

PHASE II: Traffic Signal Impact Analysis

Step 1 - Need for Analysis - A traffic signal impact analysis may be required in order to initiate requests for traffic signal and traffic management system improvements. The developer or designated representative contacts the district engineer's office to determine the scope of analysis required for individual project needs.

The analysis may require investigation of all intersections within the vicinity of the project to determine warrants for possible traffic signal upgrades (operational and equipment changes), new traffic signals (temporary and permanent), and traffic signal systems. Where there is an existing signal system, the analysis may require identifying the impact of the new traffic signals and traffic signal upgrades on the corridor established by the existing system timing data. The analysis should identify all railroad/highway at-grade crossings that may require railroad crossing signals and all traffic signals that may require railroad preemption or vehicle preemption systems. The analysis will be sealed by the engineer. The engineer must be duly registered to practice engineering in North Carolina.

Step 2 - Submittal of Analysis to the Department - The developer submits five copies of the traffic signal impact analysis to the district engineer's office for review by the division traffic engineer and other internal Department personnel.

All transmittals and correspondence pertaining to the Traffic Signal Impact Analysis should be directed to the District Engineer. The District Engineer shall act as the Developer's single point of contact with the Department. The District Engineer will coordinate the review of the Traffic Signal Impact Analysis with the Division Traffic Engineer, municipality, and local metropolitan planning organization (MPO), as needed.

Step 3 - Department Review of the Analysis - The district engineer's office facilitates review of the Traffic Signal Impact Analysis with the division traffic engineer's office, area traffic engineer's office, and other internal units of the Department. Issues that are identified during the review along with recommended traffic signal and traffic management system improvements are forwarded to the division engineer's office.

Allow a minimum of 4 weeks for department review of the analysis. Preparing the analysis using software consistent with that used by the Department will keep the review time to a minimum. The firm should contact the Congestion Management Engineer to verify the software applications currently used by the NCDOT.

Step 4 - Review Results Submitted to the Developer - The district engineer's office transmits a memorandum of the review results to the developer. Copies are distributed to the division engineer's office, the division traffic engineer's office, the area traffic engineer's office, the traffic management and signal systems engineer's office, and the developer's designated representative.

PHASE III: Development of Traffic Agreements

The developer may have plans, specifications, and estimates (PS&E) for traffic signal and traffic management system improvements transmitted to the department for review at any time after Phase III, Step 2. All required fees are submitted to the department prior to PS&E submittal.

Step 1 - Mutual Resolution on Traffic Signal Improvements - The division engineer's office facilitates a resolution to any areas of disagreement or unresolved issues regarding the project with the developer. The Department and the developer should reach a mutually acceptable resolution on the scope of traffic signal and traffic management system improvements necessary on the project.

Step 2 - Submittal of Request for Traffic Agreement - After concurrence from the division engineer's office and approval for the traffic signal and traffic management system improvements from the area traffic engineer, the division engineer's office will submit a traffic request form/agreement to the appropriate contract officer of the Program Development Branch, Agreements Section, with a copy of the request to the area traffic engineer's office and the traffic management and signal systems engineer's office. Advance payment may be submitted with the request to accelerate the agreement and the PS&E review.

Step 3 - Development of Traffic Agreement - Upon receipt of all pertinent information from the division engineer's office, the contract officer will prepare/review the traffic agreement, establish a reimbursable job order number, return/approve the traffic agreement to/for the division engineer's office, and notify the Board Member by placing the item on the upcoming Board of Transportation Agenda. The contract officer may e-mail the agreement/review with the assigned job order to accelerate agreement preparation and will send a copy to the traffic management and signal systems engineer's office.

Allow a minimum of 3 weeks for preparation of the draft traffic agreement.

Step 4- Transmittal of Traffic Agreement to the Developer - The division engineer's office transmits the traffic agreement to the developer for execution. If modifications are anticipated then either an electronic version or a hard copy of the agreement can be sent to the developer for review and concurrence. Any modifications to the agreement have to be approved by the division engineer's office.

Step 5 - Signed Traffic Agreement Returned to the Department - Upon concurrence, the developer executes the traffic agreement and returns the signed copy to the division engineer's office with the required fees. The division engineer's office examines the agreement to verify that it was properly signed, sealed, witnessed, with federal tax identification number and remittance address shown.

All required fees should be submitted by this time. The developer may submit the required fees to the Department prior to this step to accelerate reviews.

Step 6 - Processing and Execution of Traffic Agreement by the Department -

The division engineer's office transmits the signed traffic agreement to the contract officer for final review and approval by the attorney general's office and execution by the highway administrator. The contract officer transmits the check to fiscal when received and copies the division engineer's office and the traffic management and signal systems engineer's office.

Allow a minimum of 2 weeks for processing and execution of the traffic agreement.

Step 7 - Distribution of Executed Traffic Agreement - Upon execution by the highway administrator, the contract officer sends an original copy of the agreement back to the division engineer's office for distribution to the developer and distributes duplicate copies to the division traffic engineer's office, the area traffic engineer's office, the fiscal branch, and the traffic management and signal systems engineer's office. The Agreements Section retains one original copy of the agreement.

PHASE IV: Review of PS&E

Attention is directed to the fact that Phase IV may run concurrently with certain steps of Phase III.

Step 1 - Submittal of PS&E to the Department - The developer or designated representative submits six review copies of the traffic signal and traffic management system PS&E to the division traffic engineer's office. The division traffic engineer's office distributes three copies to the traffic management and signal systems engineer's office and one copy to the area traffic engineer's office. Two copies are retained by the division traffic engineer's office. The division traffic engineer's office will also coordinate plan review with the municipality, as appropriate, for their comments.

Step 2 - Review of PS&E by the Department - The traffic management and signal systems engineer's office facilitates review of the PS&E for the department.

Allow a minimum of 3 weeks for review of the PS&E for traffic signal and traffic management system improvements. PS&E's requiring corrections or multiple submittals should allow for additional review periods.

Step 3 - Review Results Submitted to the Division Traffic Engineer - The traffic management and signal systems engineer's office transmits a memorandum with results of the PS&E review to the division traffic engineer's office. Copies of this memorandum are distributed to the division engineer's office, the area traffic engineer's office, and the developer. Copies of this memorandum and required PS&E revisions are transmitted to the private engineering firm.

Step 4 - Transmittal of Final PS&E to the Department - Final PS&E will be sealed by the engineer. The engineer must be duly registered to practice engineering in North Carolina. The developer (or their PEF) provides to the traffic management and signal systems engineer's office an electronic format of the complete PS&E, full-size and half-size prints of the accepted submittals, quantities estimates with original computations, and all other supporting documentation. The quantity of each item required will be as specified by the department.

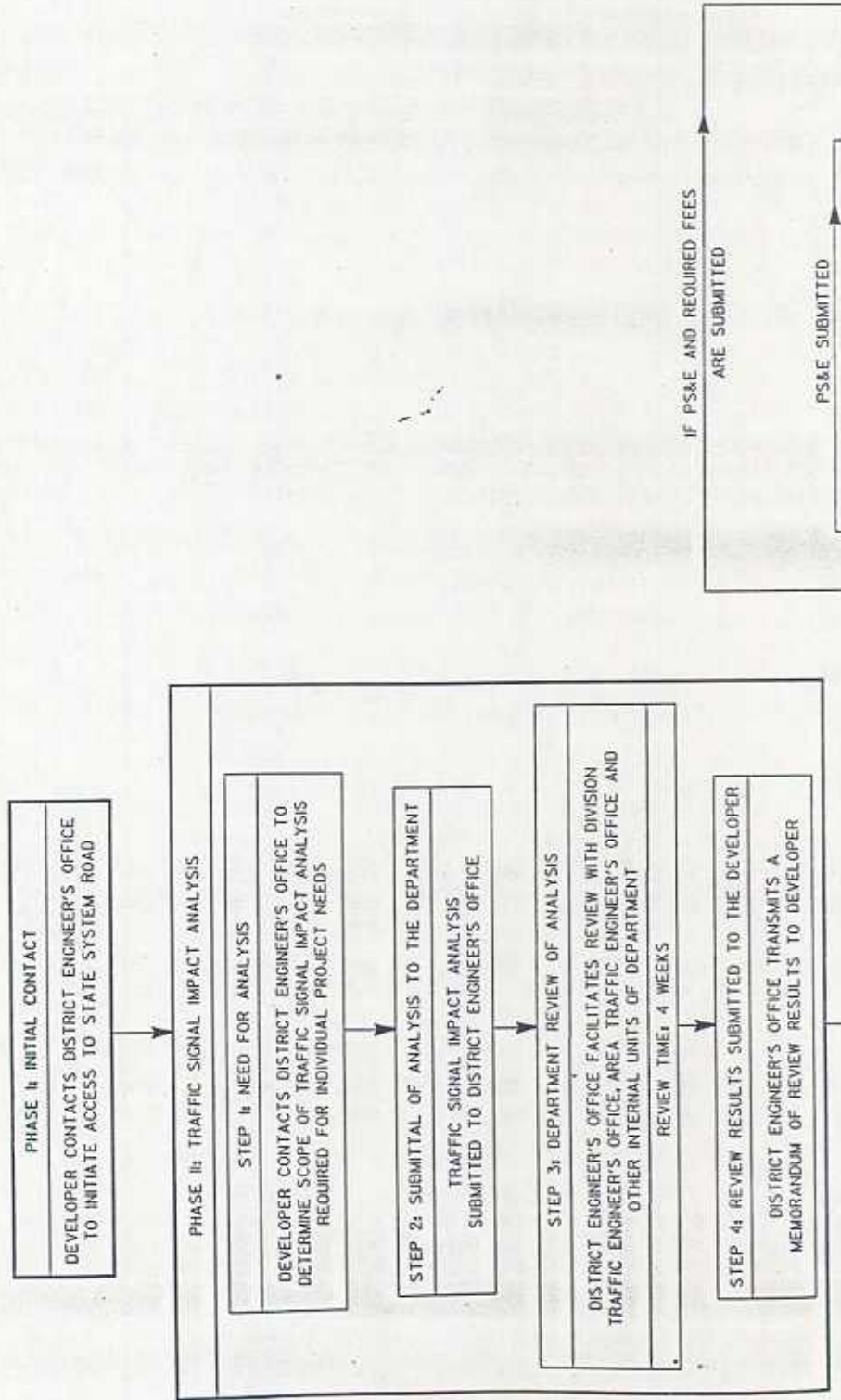
Step 5 - Transmittal of Letter of Acceptance - The traffic management and signal systems engineer's office is responsible for final acceptance of the PS&E for traffic signal and traffic management system improvements. Upon submittal of acceptable PS&E to the Department, the traffic management and signal systems engineer's office transmits a letter of acceptance to the division traffic engineer. Copies of the memorandum are distributed to the division engineer's office, the area traffic engineer's office, the developer, and the private engineering firm responsible for development of the PS&E.

The traffic management and signal systems engineer's office distributes the final PS&E to the division traffic engineer's office and the area traffic engineer's office.

PHASE V: Authorization for Construction of Traffic Signal

Acceptance of the plans, specifications, and estimates does not authorize any traffic signal or traffic management system construction, installation, activity, or operation within NCDOT right-of-way. Final authorization for traffic signal and traffic management system work is under the direction of the division engineer's office after execution of the traffic agreement. The division must give authorization before any traffic signal related construction may begin at the site.

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PHASE III: DEVELOPMENT OF TRAFFIC AGREEMENTS

STEP 1: MUTUAL RESOLUTION ON TRAFFIC SIGNAL IMPROVEMENTS
DEPARTMENT AND DEVELOPER AGREE ON TRAFFIC SIGNAL IMPROVEMENTS AND SCOPE OF WORK

STEP 2: SUBMITTAL OF REQUEST FOR TRAFFIC AGREEMENT
AFTER APPROVAL OF TRAFFIC MANAGEMENT IMPROVEMENTS, DIVISION ENGINEER'S OFFICE SUBMITS REQUEST FOR TRAFFIC AGREEMENT TO AGREEMENTS SECTION CONTRACT OFFICER

STEP 3: DEVELOPMENT OF TRAFFIC AGREEMENT
AGREEMENTS SECTION CONTRACT OFFICER PREPARES TRAFFIC AGREEMENT; ESTABLISHES WORK ORDER NUMBER, AND PLACES ITEM ON UPCOMING BOARD OF TRANSPORTATION AGENDA TO NOTIFY BOARD MEMBER; TRAFFIC AGREEMENT RETURNED TO DIVISION ENGINEER'S OFFICE (MAY BE EMAILED)
REVIEW TIME: 3 WEEKS

STEP 4: TRANSMITTAL OF TRAFFIC AGREEMENT TO THE DEVELOPER
DIVISION ENGINEER'S OFFICE TRANSMITS TRAFFIC AGREEMENT TO DEVELOPER FOR REVIEW AND CONCURRENCE; ANY MODIFICATIONS MUST BE APPROVED BY DIVISION ENGINEER'S OFFICE

STEP 5: SIGNED TRAFFIC AGREEMENT RETURNED TO THE DEPARTMENT
DEVELOPER SIGNS TRAFFIC AGREEMENT AND RETURNS TO DIVISION ENGINEER'S OFFICE
REQUIRED FEES MUST BE SUBMITTED BY THIS TIME

STEP 6: PROCESSING AND EXECUTION OF TRAFFIC AGREEMENT BY THE DEPARTMENT
DIVISION ENGINEER'S OFFICE TRANSMITS SIGNED TRAFFIC AGREEMENT TO AGREEMENTS SECTION CONTRACT OFFICER; TRAFFIC AGREEMENT SENT TO ATTORNEY GENERAL'S OFFICE FOR APPROVAL AND TO HIGHWAY ADMINISTRATOR FOR EXECUTION; AGREEMENTS SECTION CONTRACT OFFICER SENDS CHECK TO FISCAL
PROCESSING TIME: 2 WEEKS

STEP 7: DISTRIBUTION OF EXECUTED TRAFFIC AGREEMENT
AGREEMENTS SECTION CONTRACT OFFICER SENDS ORIGINAL COPY OF EXECUTED TRAFFIC AGREEMENT TO DIVISION ENGINEER'S OFFICE FOR DISTRIBUTION TO DEVELOPER AND DISTRIBUTES COPIES TO DIVISION TRAFFIC ENGINEER, AREA TRAFFIC ENGINEER, FISCAL, AND TRAFFIC MANAGEMENT AND SIGNAL SYSTEMS ENGINEER'S OFFICE

PHASE IV: REVIEW OF PS&E

STEP 1: SUBMITTAL OF PS&E TO THE DEPARTMENT
DEVELOPER SUBMITS PS&E TO DIVISION TRAFFIC ENGINEER'S OFFICE; DIVISION TRAFFIC ENGINEER'S OFFICE FACILITATES PS&E WITH INTERNAL PERSONNEL AND MUNICIPALITIES

STEP 2: REVIEW OF PS&E BY THE DEPARTMENT
TRAFFIC MANAGEMENT & SIGNAL SYSTEMS ENGINEER'S OFFICE FACILITATES PS&E REVIEW
REVIEW TIME: 3 WEEKS

STEP 3: REVIEW RESULTS SUBMITTED TO THE DIVISION TRAFFIC ENGINEER
TRAFFIC MANAGEMENT & SIGNAL SYSTEMS ENGINEER'S OFFICE TRANSMITS PS&E REVIEW RESULTS AND RECOMMENDATIONS TO DIVISION TRAFFIC ENGINEER'S OFFICE

STEP 4: TRANSMITTAL OF FINAL PS&E TO THE DEPARTMENT
DEVELOPER SUBMITS FINAL PS&E TO TRAFFIC MANAGEMENT & SIGNAL SYSTEMS ENGINEER'S OFFICE

STEP 5: TRANSMITTAL OF LETTER OF ACCEPTANCE
TRAFFIC MANAGEMENT & SIGNAL SYSTEM ENGINEER'S OFFICE ACCEPTS PS&E; TRAFFIC MANAGEMENT & SIGNAL SYSTEMS ENGINEER'S OFFICE TRANSMITS ACCEPTANCE LETTER TO DIVISION TRAFFIC ENGINEER'S OFFICE AND DISTRIBUTES FINAL PS&E TO DIVISION TRAFFIC ENGINEER'S OFFICE AND AREA TRAFFIC ENGINEER'S OFFICE

PHASE V: AUTHORIZATION FOR CONSTRUCTION OF TRAFFIC SIGNAL
DIVISION ENGINEER'S OFFICE MAY AUTHORIZE TRAFFIC SIGNAL CONSTRUCTION ONCE THE TRAFFIC SIGNAL PLANS ARE ACCEPTED AND TRAFFIC AGREEMENT IS EXECUTED.