

COORDINATION WITH UTILITIES

CHAPTER 600

601 COORDINATION WITH UTILITIES

The Consulting Engineer shall be responsible for coordination activities with public, private and municipal utility owners (here after referred to as “the Utility”) that have facilities within the limits of the assignment. Existing utility facilities located in the roadway right-of-way that would be disturbed by the proposed design shall be relocated or adjusted. The Utility will be directed to prepare their own plans for the necessary facility relocations or adjustments.

The Consulting Engineer shall forward a copy of all correspondence received or sent regarding utility matters to the Department’s Project Engineer and Utilities Section representative.

The Consulting Engineer’s final submission must include all necessary final utility plans, specifications and estimates (if applicable). Should any utility design not be received by the Consulting Engineer prior to final submission, the Consulting Engineer must submit thorough documentation of continued efforts throughout the life of the assignment to procure the utility design in a timely fashion. If difficulty in achieving cooperation is encountered with a Utility, the matter should be brought to the attention of the Project Engineer. If the utility design plans are not satisfactory, the final submission will not be considered complete until such time as the Department has received a satisfactory utility design.

602 IDENTIFICATION OF AFFECTED UTILITIES

Immediately after the Preliminary Engineering Stage has been completed, or as soon as the information becomes available, the Consulting Engineer shall forward to the Department a list of all Utilities with facilities within the project area. The Department will notify the affected Utility companies providing the name and address of the Consulting Engineer and directing them to coordinate all design activities through them. The Consulting Engineer will be given a copy of each notification letter.

603 SUBMISSION OF PLANS TO UTILITIES

After receiving a copy of the Department's notification letter, the Consulting Engineer shall begin coordination with the affected Utility companies.

After the Preliminary Design has been developed, the Consulting Engineer shall forward to each Utility, one set of "dated" plans, together with cross sections as available in the area of the utility involved. These plans shall show drainage layouts and the taking and non-access lines. Furthermore, Utilities shall be advised that the plans are preliminary, and that drainage has not yet been finalized.

The plans provided to the Utilities should indicate the limits of federal participating and non-participating sections. Additionally, if it is proposed to have multiple construction contracts (i.e. various project numbers), the limits of the various contracts should be identified on the plans.

604 DESIGN/UTILITY MEETING

With the transmission of the dated plans to the Utilities, the Consulting Engineer shall confirm a meeting with the engineering representatives of each Utility, individually or collectively, to discuss and coordinate the Department's proposed design with that required from the Utility. Three to four weeks time should be provided between the transmission of the plans and the scheduled meeting to allow for receipt of the plans and analysis of information provided. The Department's Project Engineer and a representative of the Department's Utility Section shall also be invited to these meetings.

A report of the meeting shall be submitted to the Department for review and approval prior to being submitted to all utilities.

The Consulting Engineer will ensure that the following subjects are addressed at the Design/Utility meeting:

604.01 NOTICE OF ENVIRONMENTAL PERMITS

The Consulting Engineer will ensure that a copy of the "Notice of Environmental Permits Involving Utility Relocations", which can be obtained from the Department, is distributed to all represented Utilities. The Consulting Engineer will ensure that the meeting minutes reflect that this document was distributed, and any Utility invited to the Design/

Utility meeting not in attendance will receive a copy of the report of meeting and the Notice of Environmental Permits document.

604.02 CONSTRUCTION CONFLICTS

The Consulting Engineer will describe potential construction conflicts or any aspect of the project which may necessitate utility relocation work.

604.03 TEST PITS

The purpose of taking test pits is to accurately determine the location of underground utilities. This information should be used to prepare or adjust the design, wherever feasible, to avoid conflicts with existing utilities. This can result in significant cost reductions for the relocation or adjustment of underground utilities.

At the Design/Utility meeting, the Consultant shall identify where test pits may be required. A copy of plans depicting suggested test pit locations should be provided to each affected Utility. The Utilities may then request additional test pits and a complete set of plans depicting all suggested test pit locations shall be provided to the Department.

If the Consulting Engineer is responsible for survey for the project, the engineer should coordinate with the Utility to determine the precise location, size and elevations of the facilities in the field when the test pit is excavated. Should the Utility require accurate location of the test pits prior to excavation, the Consulting Engineer will provide such.

604.04 ENGINEERING COST ESTIMATES

The Consulting Engineer will ensure that all affected Utilities are directed to provide separate cost estimates for their preliminary engineering services and test pits. This information must be forwarded to the Utilities Section to prepare the necessary reimbursable agreements. It is important that this activity be initiated at the Design/Utility meeting so that the agreements are in place when the Utilities' engineering services are required.

604.05 TIME AND MATERIAL CONSTRAINTS

The Consulting Engineer will inquire of the Utilities regarding long lead time materials or time sensitive construction activities (e.g. splicing), which may require notification to the contractor regarding construction sequencing, contract time extensions or early utility authorizations to minimize contractor delays.

604.06 UTILITY WORK BY DEPARTMENT'S CONTRACTOR

Should the Utility Company desire that its reconstruction work be performed by the Department's contractor, a formal request should be made by the Utility to the Manager of Consultant Design. If such a request is approved, the Consulting Engineer will ensure that the utility plans, specifications and estimates are included in the construction contract in a manner that is consistent with the project plans, specifications and estimates.

604.07 UTILITY PLANS, SPECIFICATIONS AND ESTIMATES

The Consulting Engineer shall establish target dates for utility plans, specifications and estimate submittals at the Design/Utility meeting. The target dates should allow ample coordination time to ensure that test pit data is obtained, design adjustments are made where feasible and utility relocations can be designed. The Consulting Engineer will forward either design plan mylars or electronic files (as requested by the utility) to be used to design utility relocations. The plans for utility relocation work not included in the construction contract will be provided in the construction plans for the Contractor's information only.

After the Utility has designed the relocation and estimated the costs, this information will be forwarded to the Consulting Engineer who will in turn review the relocation to ensure that all conflicts are eliminated and that adequate provisions are made regarding constructability issues. Once the Consulting Engineer is satisfied that the utility plans, specifications and estimates adequately resolve utility conflicts, the engineer will keep the hard copy of the plans (conventional or electronic) and forward a set of prints along with all specifications and estimates to the Department to facilitate writing utility agreements.

It is not practical to assume that all the aforementioned concerns can be completely addressed at one meeting. Subsequent meetings should be anticipated to track progress of utility plan submittal dates. Should project design plans or schedules change, the Utilities shall be informed of such changes by the Consulting Engineer.

605 COST SHARING

The cost of adjusting or relocating utilities shall be computed in accordance with the guidelines contained in the Department’s “Public Service Facility Policy And Procedures For Highways In Connecticut.” The Department will be responsible for establishing the participation percentage in advance of the utility meeting.

The following chart outlines the general parameters for the sharing of costs between the Department and the Utility.

**PERCENTAGE OF PARTICIPATION IN HIGHWAY RELOCATION
PROJECTS**

NON-FEDERAL FUNDED

GENERAL STATUTES OF CONNECTICUT SECTION 13a-126	STATE ROADS UNLIMITED ACCESS HIGHWAY	STATE ROADS LIMITED ACCESS HIGHWAY
PRIVATE UTILITY COMPANY	50%	100%
MUNICIPAL UTILITY COMPANY	50%	100%

FEDERAL FUNDED

GENERAL STATUTES OF CONNECTICUT SECTION 13a-98f	STATE ROADS	LOCAL ROADS
PRIVATE UTILITY COMPANY	SEE "NON-FEDERAL FUNDED" CHART ABOVE	0%
MUNICIPAL UTILITY (TOWN OR CITY)	FUNDING DISTRIBUTION EQUAL TO CONSTRUCTION PERCENTAGES	FUNDING DISTRIBUTION EQUAL TO CONSTRUCTION PERCENTAGES
OTHER MUNICIPALITY (EX. METRO. DISTRICT COMM., SO. CENTRAL CT. REGIONAL WATER AUTHORITY, ETC.)	100%	100%

The Consulting Engineer shall be familiar with the cost-sharing guidelines so as to be duly informed as the Department's representative. The Consultant will not be responsible for preparing or administering engineering or construction agreements with the Utilities.

606 RAILROAD INVOLVEMENT

The Consulting Engineer shall determine, as early as possible, the locations where railroad facilities will be involved or disturbed by construction. A list of such locations, together with the plans and the name of the owning Railroad, shall be furnished to the Department so that an official notice may be sent to the Railroad requesting a Preliminary Engineering Estimate of work.

The Department will review the Railroad estimate, prepare the Railroad-Highway Agreement, request necessary funding, and when funds are in place, authorize the Railroad to proceed with preliminary engineering. Following this, the Consulting Engineer shall commence design communications with the Railroad in accordance with procedures outlined in Section 403 of this manual and in the Department's "Bridge Design Manual."

606.01 RAILROAD MEETING AND CLEARANCES

The Department shall arrange a Field Meeting with representatives of the Railroad, Consulting Engineer, and Department soils, traffic and design units. They shall investigate the site, determine controls, establish clearances, determine necessity for clearance diagrams and other pertinent items.

Following the meeting, the Consulting Engineer shall begin Structure Type Studies, as outlined in Section 303.05 of this Manual and the "Bridge Design Manual."

For highway bridges over the railroad with less than 7.6 m clearance, the Consulting Engineer shall develop clearance diagrams and "Approval of Railroad Clearance" forms. These will be forwarded to the Department for their review and approval. The Department shall secure further signature approvals from the Railroad and the FHWA (when applicable).

The Consulting Engineer shall prepare a Railroad Regulatory Agency plan for submission to the Department, which shall prepare necessary petitions and attend the Regulatory Hearings as required.

The Consulting Engineer shall arrange a structure utility meeting during the Structure Layout for Design review process. The involved Utilities and Railroad shall attend and their needs established and incorporated into the design by the Consulting Engineer. The Consulting Engineer shall send plans to the Railroad and Utilities for review and comment pertaining to those requirements.

606.02 TRANSMITTAL OF PLANS TO RAILROAD FOR AGREEMENT

Just prior to completion of Final Plans For Review, the Consulting Engineer shall provide the Department with the following material:

1. Completed structure plans, highway plans, profiles and cross sections of the area of the proposed crossing
2. Railroad special provisions (obtained from the Department) and all special provisions for contractor work on the railroad facility
3. Estimates of contractor work on the Railroad facility

The number of plans, specifications and estimates required varies with each Railroad company; therefore, contact your Project Engineer to determine the number of copies required.

The Department shall transmit the material to the Railroad for review and completion of the special provisions, and request the Railroad to determine force account work and submit necessary plans and estimates for that work.

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