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ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

TO: Director,
Preliminary Plan Review Bureau

SUPERSEDED BY EB 03-029 EFFECTIVE 6/6/2003

SUBJECT: UTILITY RELOCATION FOR TRANSPORTATION PROJECTS

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DEPUTY CHIEF ENGINEER (Facilities Design Subdiv.)

Purpose

This Engineering Instruction emphasizes the urgency of expediting relocation of utilities made necessary by highway work, and provides the format wherein this may be accomplished.

It has been apparent for some time that earlier utility relocation is urgently needed. By progressing utilities' preliminary engineering and relocation early enough in the design and construction phases of highway projects, we will:

1. Avoid delay in federal approval for highway contract letting.
2. Avoid delay of construction of the highway contract.
3. Avoid contractor claims because of delay.

Assignment of Regional Utilities Engineer

To accomplish the foregoing, the Utilities Engineer should work closely with the Designer and the Real Estate Group. This will insure an early start on utilities relocation. The Regional Utilities Engineer duties should include:

1. Acting as Regional representative to utility companies and municipalities.
2. Coordinating with designers, including TOPICS designers, to make sure all appropriate utilities are shown on plans with municipal utility work being done by contract item where possible.
3. Assist in preparation of:
   a. Initial Utilities Inventory Reports.
   b. Utility Work Agreements and Estimates.
   c. Final Utilities Inventory Reports.

4. Coordinating with Real Estate Group to assure earliest possible acquisition of utility R.O.W.

5. Monitoring utility preliminary engineering as to progress and policy.

6. Reviewing design of utility relocation as prepared by others for projects being advanced to contract.

Since some utility relocation will still occur during the construction phase and since utility relocation and repair also occur on the R.O.W. after it has been turned over to Maintenance, the Utilities Engineer may need assistants who will work with:

1. The Construction Supervisor assisting with utility relocations and reimbursement.

2. The Maintenance Engineer for the purpose of reviewing utility permits and inspecting utility relocation and repair other than that inspection done by the Resident Engineer or Permit Engineer.

Also in all three of these areas (Design, Construction and Maintenance) it may be necessary to assign an assistant at technical level to assist in review of plans and utility permits or for field inspection.

Action by Designer With Support From Utility Engineer

It is desirable whenever possible to avoid utility relocations in the selection of the highway design alternate and the establishment of right of way taking limits. Where such utility relocation is unavoidable, compliance shall be made with "Rules and Regulations Governing the Accomodation of Utilities within the State Highway Right of Way."

Preliminary Engineering, as affecting the relocation or adjustment of utilities on a transportation project, should be expedited by the Regional Design Engineer in conjunction with the Regional Utilities Engineer as much as possible early in the design phase of the project.

The Designer will perform or coordinate the following activities:

1. During Design Phase I

   a. Identify major utilities involved.

   b. Start liaison with these Utility Companies.

   c. Determine approximate scope and cost of utility relocation required for each design alternate. Include costs to State, Utility, Municipality, User, etc.

d. Include preliminary data on major utilities in Design Report.

e. Prepare Initial Utilities Inventory Report including as much information as possible. Retain in Regional Office and update as more information becomes available. This report for the approved design alternate only, is to be submitted early in Design Phase V.

2. During Design Phase II

send Design Report to Utilities for review and comment.

3. During Design Phase V

a. Furnish all utilities with approved design alternate.

b. Submit Initial Utilities Inventory Report early in this phase even if it must be revised and completed later.

c. Negotiate and submit HC 140's and, if a permit will be required, send a copy to the Regional Permit Engineer who will initiate action on the permit if the Utility does not.

d. Notify all utilities to prepare plans and take actions on replacement R.O.W., physical relocation, and ordering materials upon receipt of M.O. authorization. In the case of private utilities, the filing of R.O.W. acquisition maps for the utilities property rights is also necessary before the utilities can be directed to start the relocation process.

e. Coordinate utilities on bridges with Structures Subdivision. Reproducibles of Bridge Preliminary Plans are to be furnished to the Regional Office by the Main Office Structures Subdivision so that prints can be sent to involved Utilities who may be interested in occupying the structure with their facility. If so, they must justify this in their letter of request to the Regional Director, which must be forwarded to the Structures Subdivision for approval.

4. During Design Phase VI

a. Make sure all utilities are shown on Advance Detail Plans before submission to Main Office. Separate utility plan sheets are recommended on all but minor projects.

b. Submit Final Utilities Inventory Report at PS&E time.

5. On smaller projects, contact with utilities will start later than for large projects but should start as soon as possible.

6. Should no utility adjustments be required, so state in the Design Report.

The Designer and Utility Engineer should be aware that in urban areas, utilities and landscape plantings often must occupy the same relatively narrow strip of right of way and should make every effort to coordinate the location of both the utilities and the landscaping to best utilize the available area.

Utility design should be progressed by the Utility and the Region so that the plans showing existing and proposed lines and Final Utilities Inventory Report are ready to be sent to the Main Office at the time of PS&E submission.

It should be noted that it is not the intent of this instruction to remove from the jurisdiction of the Regional Traffic Engineer any of his responsibility concerning permits. His office should continue to:

1. Process all permits, including those for utility relocation on construction projects.

2. Coordinate activity to ensure that all concerned regional groups have an opportunity to review (prior to processing) utility permit applications and receive copies of permits as needed.

Initial Utilities Inventory Report

This report will be prepared by the Designer, with support from the Utilities Engineer, usually in Design Phase I, listing all information that can be obtained, at the time, about each major utility for each alternate. This report should be retained in the Regional Office and updated, listing all utilities for the selected alternate and related information as it becomes available. Information should be listed according to instructions on the back of the form. An example of this form is attached. Early in Phase V one copy of the report, sharp enough to be reproduced, should be sent by the Utilities Engineer to the Main Office Utilities Unit even if it is incomplete and must be revised and resubmitted later during Design Phase V.

Preliminary Utility Work Agreement (Form HC 140)

The Form HC 140, which was introduced July 1, 1971 has proven to be a very important part of Utility Relocation Preliminary Engineering and accomplishes the following:

1. Provides for accommodation of the utility within the public right of way whether or not the utility must be relocated.

2. Stipulates who will pay for the utility relocation.

3. Stipulates who will perform the work.

4. Indicates whether or not betterments will be provided.

5. Makes possible federal participation.

A completed Form HC 140 is required for each utility involved on the project whether reimbursable (by the State) or not and whether it must be relocated or not.

There is one exception to the above requirement. In the case of municipal utilities to be relocated by the prime contractor on a TOPICS project, neither form HC 140 nor listing on the Utilities Inventory Report will be required, since these are covered by the TOPICS agreement between the municipality and the State. However, if a betterment is involved, it is necessary to obtain a resolution authorizing deposit of funds to cover the betterment. If the betterment is included in the construction contract, the resolution is to be submitted with, or by the time of, final plans. But, if the Municipality elects to do the work with its own forces or its contractor, an HC 140 will be necessary.

The HC 140 will be revised in the near future so that it can be used for 3 different categories and boxes will be provided to indicate the use as follows:

HC 140A - Preliminary Utility Reimbursable Relocation and Use and Occupancy Agreement.

HC 140B - Utility Non-Reimbursable Relocation and Use and Occupancy Agreement.

HC 140C - Utility Use and Occupancy Agreement.

For the present, indicate at the top of the HC 140 form whether it is an HC 140A, HC 140B or HC 140C with the HC 140C being used where there are existing utilities on a contract which will not have to be relocated. Use of the HC 140C will indicate that the Utility has been advised of the proposed project and that a determination has been made that no relocation of its facility will be required for the project. It will also serve as a Use and Occupancy Agreement between the State and Utility for continued occupancy of the R.O.W. by the Utility, as required by Rules and Regulations For Accommodating Utilities within State Right of Way. Also indicate the Reference No. and the title of the form. This will be the same number used on the Utilities Inventory Report and will generally indicate the sequence that items are entered on that report. The reference number will be preceded by an A, B, or C with the A series being

used for reimbursable relocations, the B series being used for non-reimbursable relocations, and the C series being used for non-relocations.

The Regional Utilities Engineer should secure completion of the HC 140 as early as possible after receipt of Project Design Approval and transmit one copy to the Regional Permit Engineer if a permit will be required, four copies to the Main Office Utilities Unit with four copies of the estimates and two copies of plans (with profiles if applicable) prepared by the Utility Agency showing present, temporary, and proposed facilities within the affected area. Such early submission will result in earlier Main Office and Federal approval and authorization. Upon receipt of the authorization, the Region will be able to direct the Utility to start relocation in advance of project construction.

Major utility relocations will be authorized as HC 140's are submitted and processed. Later, when all HC 140's for reimbursable minor private utilities on a project are received and processed, a single authorization will be given. The authorization will consist of a PR 1240 for Federal Aid projects or a FIN 207 for Non Federal Aid projects. The estimated cost of relocation determined by the Utility and the Utility Engineer must be coordinated with the R.O.W. Agent. Payment for relocation of reimbursable private utilities will be made by Real Property Agreement of Adjustment in accordance with the Department Manual of Procedure for Reimbursement on Utility Agreements issued 7-1-71.

Reimbursement for the relocation of municipal utilities will be by (A) inclusion of the work in the State's contract thus requiring the submission of Form HC 140 indicating the estimated cost of the work to be incorporated, or (B) by Municipal Agreement for work done by the municipality or its contractor, also requiring the submission of Form HC 140, Plan, and Estimate for approval prior to authorization of the project for contract letting.

It should be noted that a permit is not to be substituted for Form HC 140 and vice versa; the permit will continue to be required by Traffic and Safety to specify conditions under which the Utility will be allowed to perform work on highway R.O.W.

Utility Relocation Schedule

As much actual utility relocation on a project as is feasible shall be expedited during the right of way acquisition phase so that a minimum of utility relocation remains to be accomplished subsequent to the start of project construction. In order to accomplish this remaining relocation in a timely fashion, a utility relocation schedule will be prepared by the Designer for discussion and presentation to the Contractor at the Pre-Construction Conference.

EI 77-14

The following points should be considered in setting up and working with the schedule:

1. The Utility should be consulted in preparing the schedule.

2. The schedule of utility work will not become part of the contract, except that the contractor shall be required, by means of notes in the proposal and on the plans, to clear certain areas, remove certain buildings and perform certain grading or other work, sufficiently early to facilitate utility relocation.

3. The Contractor's work schedule will be coordinated with all parts of the utility schedule before submission to the Regional Construction Engineer for approval. The Bidder shall be advised of this requirement by a note in the proposal.

4. Necessary permits must be obtained at an early date to enable Utilities to comply with the schedule.

Final Utilities Inventory Report

This report will be prepared by the Designer, with support from the Utilities Engineer, near the end of Design Phase V for submission by the Utilities Engineer to the Main Office Utilities Unit, at PS&E time. It is prepared by updating the Initial Utilities Inventory Report to show the status of all utility relocations required by the project and will replace the present Status of Utilities Report. It will indicate which utility relocations have already been made and will provide a basis for Federal authorization to go to contract letting. It should be accompanied by all utility agreements not already submitted. Contract plans and proposal must indicate disposition of each utility, i.e. to remain in place, or to be relocated by others, or to be relocated by the Contractor.

Action by Construction Group

Subsequent to the contract letting and award, the Regional Construction Group should coordinate the activities of the contractor and utility in meeting their responsibility of complying with the Utility Relocation Schedule. Listed below are items which should be monitored.

Work by the Contractor:

1. Stake necessary R.O.W. and center lines early, where this is the Contractor's responsibility.

2. Clear necessary areas early.

3. Do necessary excavating early.

4. Remove necessary buildings early.

5. Work in areas unaffected by utilities.

Work by the Utility

1. Remove facilities when and where contractor needs to work.

2. Construct temporary lines when and where necessary.

Other early action by the Construction Group is equally important. In many cases, right of way limits and center lines must be staked in advance by State Personnel or a contracting engineer to enable the utility to move their lines to meet construction schedules. It is necessary to have the E.I.C. assigned early enough to monitor utility moves.

By the time the contract final agreement is complete the E.I.C. should show the final location of all utilities on the Record Plans.

MDG:REH:FS
Attachment

INSTRUCTIONS FOR COMPLETING UTILITY INVENTORY REPORT
(Submit one copy to M.O.)

P.I.N. - Show 6 digit PIN; and 9 digit PINs, Federal Project Numbers, Contract Number, Letting Date, etc. when available.

PROJ. DESCRIPT. - Give complete official name of the project.

INITIAL/FINAL - Cross out inappropriate word.

INITIAL INV. TO M.O. - Give date Initial Utilities Inventory is sent to the Main Office. (Early in Design Phase V)

FINAL INV. TO M.O. - Give date Final Utilities Inventory is sent to the Main Office. (At time P.S.&E. is submitted to the Main Office.)

COL. 1 - REF. NO. Numerical listing to be used in future communications. Use A1, A2, etc. for reimbursable relocations; use B1, B2, etc. for non-reimbursable relocations; use C1, C2, etc. for non-relocations.

COL. 2 - NAME AND DESCRIPTION OF UTILITY.
SCOPE AND LOCATION OF WORK REQUIRED.
Give information, such as NYSE & G, Aerial Distr. Lines, 11 non-reimbursable and 14 reimbursable poles and aerial wire to be relocated between sta 50 and sta 100.

COL. 3 - PRESENT LOCATION. State Municipal, Utility, Private, or other ROW. If "Other," explain.

COL. 4 - Y/N. Utility to be relocated. Yes or No.

COL. 5 - R/NR. Reimbursable or Non-Reimbursable.

COL. 6 - COST EST. State best estimate of relocation cost. (Omit cents.) This cost is needed for programming purposes. Show category to which charges will be made e.g. P.E., R.O.W., Constr. Updated costs are requested whenever possible.

COL. 7 - WHEN?/BY? Indicate whether relocation will be started before construction or during construction and by whom the work will be done, such as Utility, Utility's Contractor, State's Contractor, or State's Sub-Contractor. Indicate % of completion of any relocations already started (for Final Inventory Report).

COL. 8 - DES. REP. TO UTIL. Indicate date (usually during Design Phase II) that a copy of the Design Report is sent to the Utility.

COL. 9 - DES. REC. TO UTIL. Indicate date that the approved Design Recommendation is sent to the Utility (early in Design Phase V).

COL. 10 - HC 140 TO M.O. Indicate date the Preliminary Utility Work Agreement, Form HC 140, is sent to the Main Office. (Usually early in Design Phase V.)

COL. 11 - AUTHORIZATION AND REMARKS. Indicate date and type of authorization received, such as HC 140, 3/12/73, FIN 207, 4/11/73, or PR 1240, 4/11/73 and any remarks regarding relocation progress. Also indicate last 3 digits of 9 digit PIN for each relocation if applicable.

NOTE -- When completing Initial Inventory Report, leave two (2) extra lines after each item to add entries for the Final Inventory Report.

SAMPLE ONLY

STATE OF NEW YORK

DEPARTMENT OF TRANSPORTATION

INITIAL/~~REVISED~~ UTILITIES INVENTORY

P.I.N. 9357.04.211 I-88-1(9)

9357.04.222 F-548(7)

9357.04.322 F-548(8)

PROJ. DESCRIPT. Route I-88

Susquehanna Expressway

(Bainbridge-Sidney)

Initial Inv. to M.O. 4/4/73 Revised 4/11/73 Final Inv. to M.O. _____ Revised _____

REF NO.	NAME & DESCRIPTION OF UTILITY SCOPE & LOCATION OF WORK REQUIRED	PRESENT LOCATION	RELOCATION DATA Y/N	R/NR	COST EST.	WHEN?/BY?	DES.REP. TO UTIL.	DES.REC. TO UTIL.	HC 140 TO MO	AUTHORIZATION AND REMARKS
A1	New York State Electric & Gas Corp., Aerial Distribution Line Crossing at ℄ Sta 1600+00	Private	Y	R	21,048.	During Const. by Utility	3/30/71	1/28/72	10/23/72	.211 Relocate 4.8 and 46 KV Plant
A2	New York State Electric & Gas Corp., Aerial Transmission Line From ℄ Sta 1648+00 to 1693+00	Private	Y	R	410,300.	Before Const. by Utility & Util. Contract	3/27/71	1/28/72	10/31/72	.211 Relocate 155 and 230 KV Plant (Upon completion of temporary work 8/74, sit will be available)
B1	New York Telephone Co. Overhead Service Route 8 ℄ Sta 101+00 to 109+50	State	Y	NR	4,600.	During Const. by Utility	4/7/71	1/28/72	10/31/72	.222 Relocate Service Lines
C1	Chenango and Unadilla Telephone Co., Underground Service Route 8	State	N				4/7/71	1/28/72	11/19/72	.222 No Relocation involve
A3	Village of Sidney Water Works 6" Water Line Route 8 at Intersection of Relocated Gifford Rd.	Municipal	Y	R	54,000.	During Const. by Utility	5/3/71	1/28/72	4/24/73	.322 Relocate 6" Water Lir

SAMPLE ONLY

P.I.N. 9357.04.211 I-88-1(9)
9357.04.222 F-548(7)
9357.04.322 F-548(8)

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
~~XXXXXXX~~/FINAL UTILITIES INVENTORY

PROJ. DESCRIPT. Route I-88
Susquehanna Expressway
(Bainbridge-Sidney)

Initial Inv. to M.O._____ Revised_____ Final Inv. to M.O. 5/18/73 Revised_____
9357.04 Letting 5/24/73, FISH 73-7, FARC 73-88

REF NO.	NAME & DESCRIPTION OF UTILITY SCOPE & LOCATION OF WORK REQUIRED	PRESENT LOCATION	RELOCATION DATA Y/N	R/NR	COST EST.	WHEN?/BY?	DES.REP. TO UTIL.	DES.REC. TO UTIL.	HC 140 TO MO	AUTHORIZATION AND REMARKS
A1	New York State Electric & Gas Corp., Aerial Distribution Line Crossing at ℄ Sta 1600+00	Private	Y	R	21,048.	During Constr. by Util.	3/30/71	1/28/72	10/23/72	.211 Relocate 4.8 and 46 KV Plant FHWA approves HC 140, Plan & Estimate 4/10/73 FHWA Auth. 5/7/73
A2	New York State Electric & Gas Corp., Aerial Transmission Line From ℄ Sta 1648+00 to 1693+00	Private	Y	R	410,300.	Before Const. by Utility & Util. Contract 5% Complete	3/27/71	1/28/72	10/31/72	.211 Relocate 155 and 230 KV Plant (Upon completion of temporary work 8/74, sit will be available) FHWA approves HC 140, Plan & Estimate 5/7/73 FHWA Auth. 5/7/73
B1	New York Telephone Co. Overhead Service Route 8 ℄ Sta 101+00 to 109+50	State	Y	NR	4,600	During Const. by Utility	4/7/71	1/28/72	10/31/72	.222 Relocate Service Lines FHWA approves HC 140 5/10/
C1	Chenango and Unadilla Telephone Co., Underground Service Route 8	State	N				4/7/71	1/28/72	11/19/72	.222 No Relocation involved FHWA approves HC 140 4/26/
A3	Village of Sidney Water Works 6" Water Line Route 8 at Intersection of Relocated Gifford Rd.	Municipal	Y	R	54,000.	During Const. by Utility	5/3/71	1/28/72	4/24/73	.322 Relocate 6" Water Line FHWA approves HC 140, Plan & Estimate 5/17/73
C2	Chenango and Unadilla Telephone Co., Aerial Service CR 39 at Route 8	State	N						5/11/73	.222 No Relocation involved FHWA approves HC 140 5/18/