Highway Design Manual

Chapter 9 - Utilities

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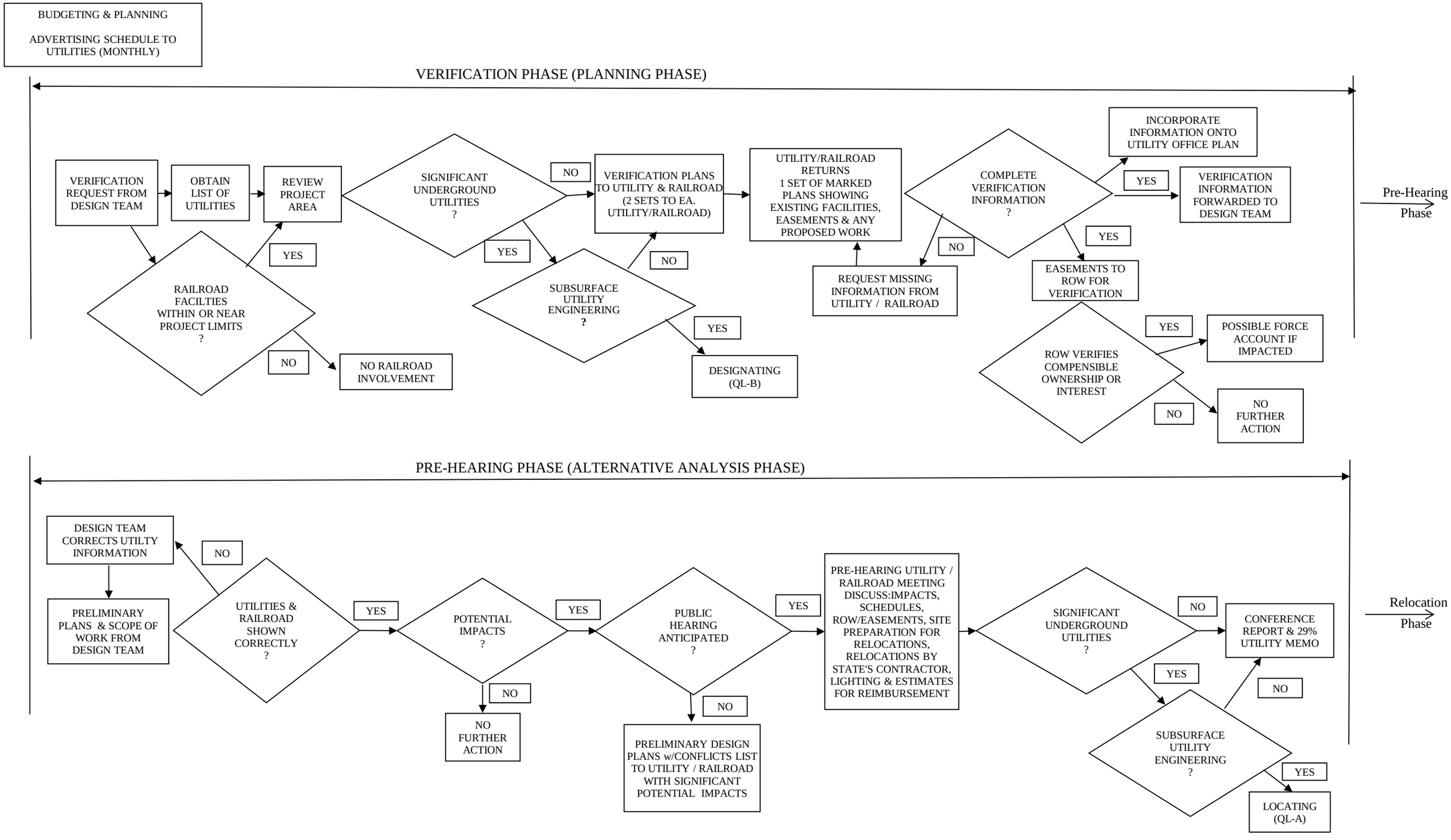
Appendix 9-2: Utility Coordination Process

Appendix 9-3: Utility Agreement Process - Flow Diagram

Appendix 9-4: Utility Request

Appendix 9-5: Utility & Railroad Certificates

UTILITY/RAILROAD COORDINATION PROCESS – FLOW DIAGRAM



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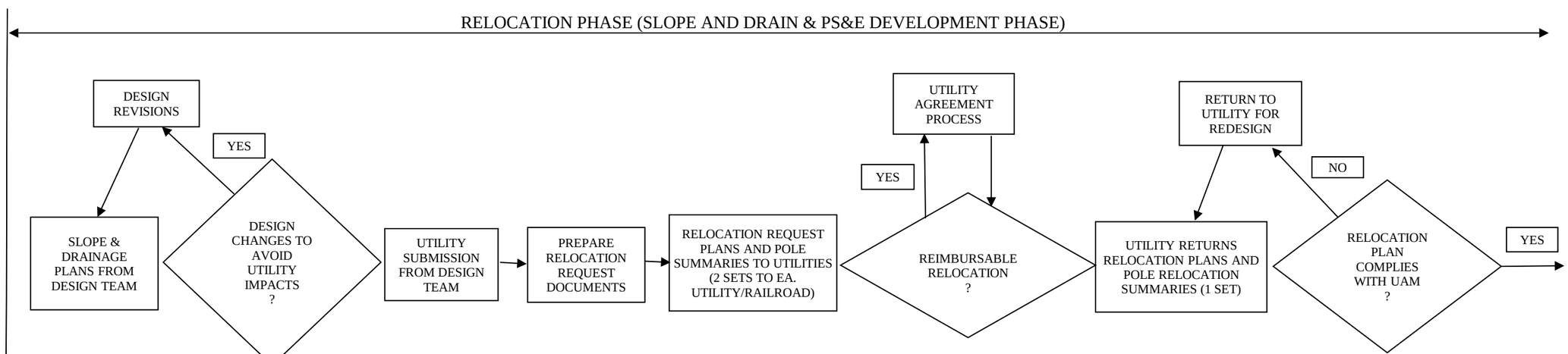

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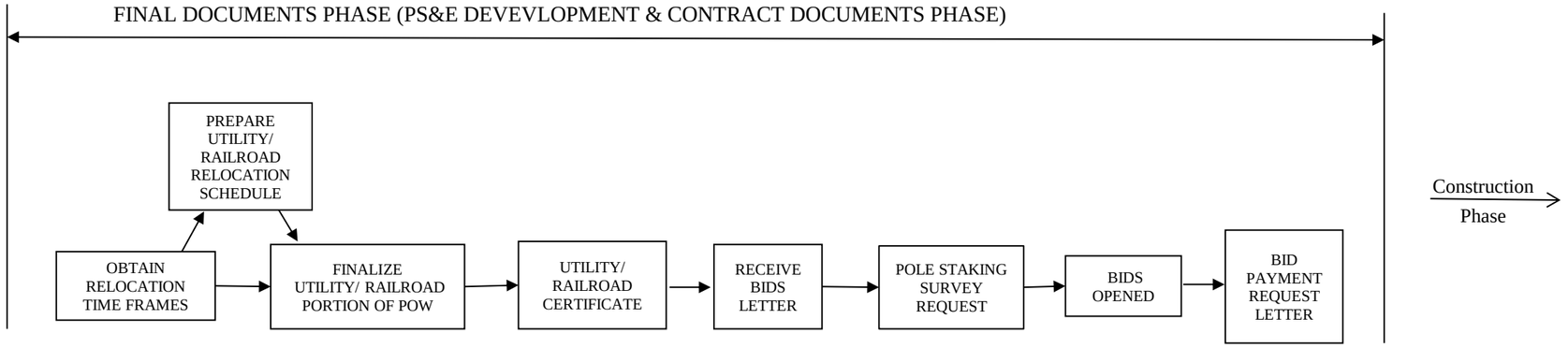
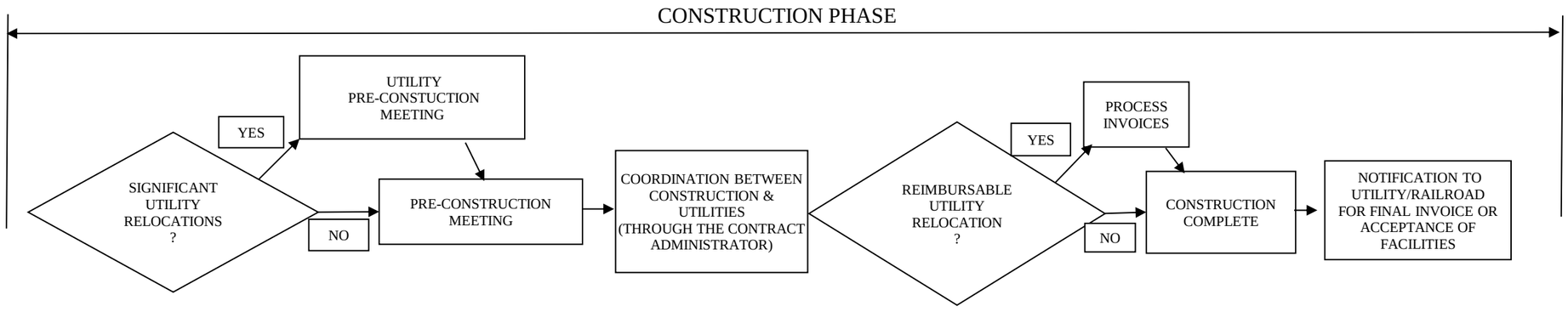




UTILITY COORDINATION PROCESS

(SCHEDULING GUIDELINES)

DESIGN PHASE

1. 10-15% Design Completion (Pre-Public Hearing) - Utility Coordinator will review the plans, field review if warranted and practical (with utilities if needed), outline liabilities, and discuss the ROW situation with the utility companies. Send plans to the utilities requesting verification of existing facilities and easement information. Evaluate the use of Subsurface Utilities Engineering (SUE) on the project, to determine whether to obtain designating information (Quality Level "B") after obtaining initial verifications.

2. 20-25% Design Completion (Pre-Public Hearing) - The Utility Coordinator will discuss anticipated relocations with the utilities; obtain rough relocations, schedules, and costs; outline liabilities and; address specific utility concerns (note the ROW needs, including replacement of easements, and site preparation). Provide the Design team with as much information as possible about lighting, including costs. (A meeting with affected utilities to be held as soon as practical after the Public Officials Meeting.)

3. 25-30% Design Completion (Public Hearing Stage) - If cost liability is likely to be the responsibility of the Department, the Utility Coordinator shall identify the liability to the Project Manager and Design Team. Also identify special costs, ROW or scheduling concerns. The Utility Coordinator shall follow-up with notification to utilities, as required, to inform utilities of the project status. The Utilities Engineer will issue a Utility Report defining the utility issues identified to date and the utility coordination progress to the appropriate Design Section Chief and the Project Manager. Evaluate the use of Subsurface Utilities Engineering to obtain locating information (Quality Level "A") prior to the Slope and Drainage Design.

4. 30-50% Design Completion (Pre-Preliminary, Preliminary, Slope and Drain, ROW, and Utility plan phases) - The Utility Coordinator and Utilities Engineer will review the Public Hearing transcript, for any commitments impacting utility relocations, (i.e. limited tree trimming, etc.). The Utility Coordinator will discuss potential conflicts and alternate designs to avoid utility conflicts with the Design team. Send second verification requests if required.

5. 60% Design Completion – Provide approved Slope and Drain plans, traffic control plans, construction schedule, and cross-sections, together with a list of conflicts, to affected utilities requesting relocation plans. Include any commitments impacting utility relocations (i.e. limited tree clearing, etc.). Establish procedures to resolve utility conflicts; review the preliminary relocation plans; lighting needs identified; schedule constructability reviews with the Bureau of Construction and the Design team. The Utility Coordinator will prepare and process any Force Accounts Agreements for reimbursement of Utility Design Engineering or early utility relocation costs, if eligible. The Utility Coordinator will attend the Preliminary Plan Coordination meeting.

6. 65-80% Design Completion (Preliminary PS&E at 80%) - The Utility Coordinator will discuss utility conflicts and proposed resolutions by the utilities with the Design team, and the Bureau of Construction, regularly communicate with utility representatives, and finalize relocation concepts and schedules. The Utility Coordinator shall furnish the Design team with estimated costs and the status of Force Account Agreements. The Lighting design and costs are to be developed and furnished to the Design team by Design Services. The Utility Coordinator shall hold utility meetings as necessary, and coordinate relocation work with the Bureaus of Construction and ROW. At 70% completion, the Utilities Engineer will issue a revised Utility Report defining the utility relocation issues, and identify the utility coordination progress to date.

7. 80-95% Design Completion (PS&E Stage) - The Utility Coordinator will complete and process Force Account Agreements for construction activities, prepare the Utility portion of the Prosecution of Work, prepare a Utility Relocation Progress Schedule, attend the Pre-Advertisement Coordination Meeting, prepare Utility & Railroad Certificate, and maintain coordination with the Design team, the Bureau of Construction and the utilities.

    - Two weeks prior to the project Pre-Advertisement meeting, verify with all utilities their proposed work schedules and commitment dates for proposed relocations. Complex relocations and/or relocation schedules will require meeting with affected utilities and the District Construction Engineer or a designee.

8. 99% Design Completion (Advertisement and Bid Opening) - The Utility Coordinator will send as advertised Plans, Prosecution of Work, and Traffic Control Plan documents to utilities within the project limits for their review. After determination of the apparent low bidder request payment for non-participating utility work performed by the State's contractor.

9. 100% Design Completion - Begins the Construction Phase.

UTILITY COORDINATION PROCESS

(SCHEDULING GUIDELINES)

CONSTRUCTION PHASE

1. Prior to the preconstruction conference, the Utility Coordinator should review the project utility coordination with the Contract Administrator.

    - The Utility Coordinator and Contract Administrator will decide if a separate preconstruction utility meeting is needed depending on the complexity and scheduling constraints of the project.

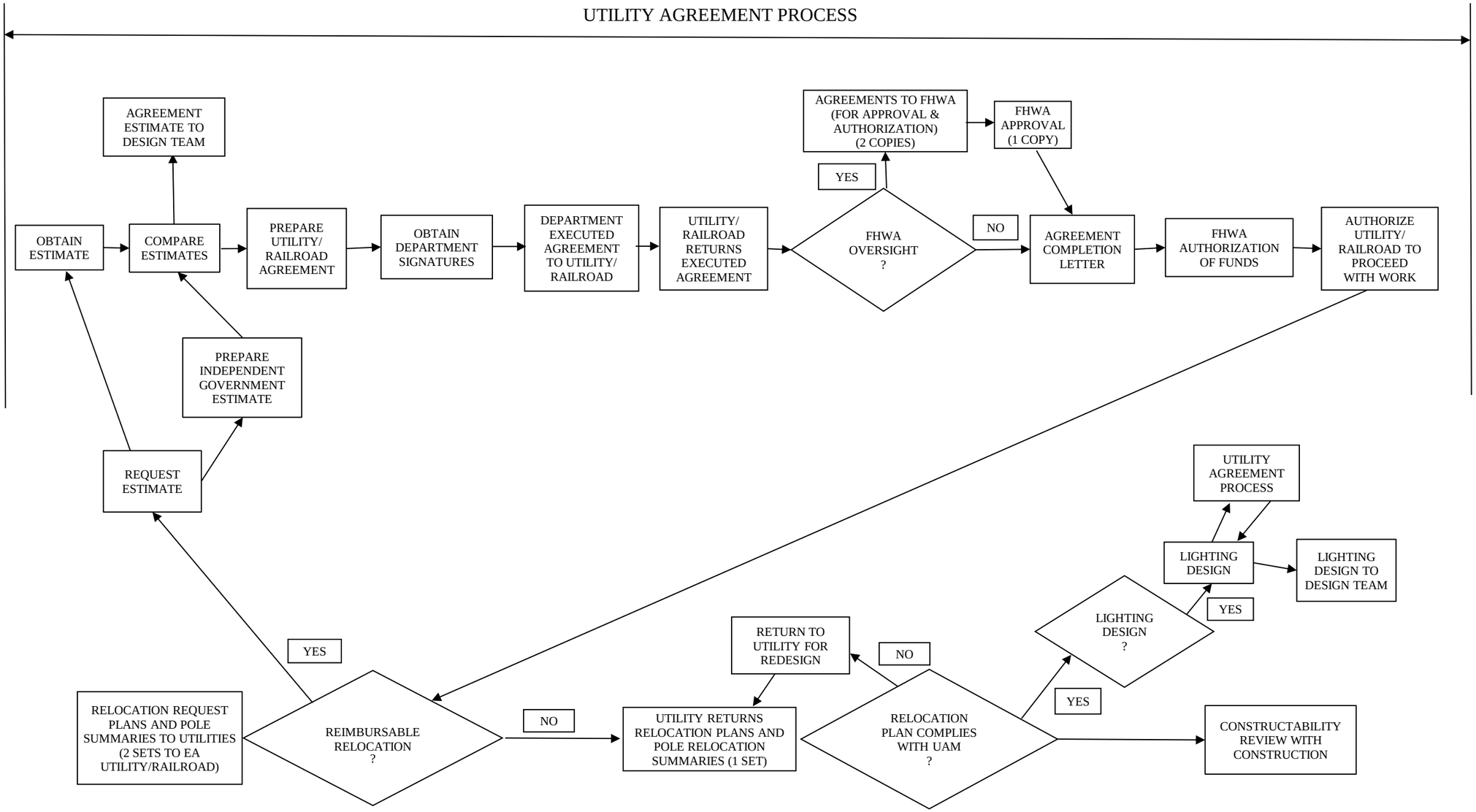
2. The Contract Administrator invites the utilities (via the Utility Coordinator) to the Preconstruction Conference. Appropriate representation from the utilities is essential (the invitation is sent to the Utility Coordinator by the Bureau of Construction and invitations

by e-mail or telephone to the individual utilities are the responsibility of the Utility Coordinator).

- The Utility Coordinator will attend the Preconstruction Conference. (If only minor utility involvement for the project, the Utility Coordinator will review the need to attend the meeting.)
- The Contractor defines the work schedule and confirms the utility contacts.
- The Utilities confirm their relocation time frames or completion target dates.

3. The Utility Coordinator will assist the Contract Administrator in implementing the previously approved utility schedule.
4. The Contract Administrator assigned to the project will conduct a construction utility meeting prior to the utility start date (the Utility Coordinator to attend) to verify utility commitments. (For projects where utilities have already started work, or intend to start immediately, the Preconstruction Conference shall be considered the meeting.) The Contract Administrator is to write the conference report and copy appropriate utility management, Utility Coordinator and the NHDOT Project Manager.
5. The Contract Administrator will notify the Utility Coordinator that the utility work has begun.
6. The Contract Administrator will document any changes to the scope of work and costs of Force Account Agreement work.
7. The Contract Administrator and Utility Coordinator will agree on a process for communicating weekly progress. If a problem arises, the Contract Administrator will contact the Utility Coordinator immediately.
8. If the schedule, as defined in the Prosecution of Work, is not met contact the appropriate District Construction Engineer and the Chief of Design Services to resolve issues that are created by missing the schedule.
9. The Utility Coordinator will review and process invoices for payment of Utility Force Account Agreement Project reimbursable work. Reviewed invoices will be submitted to the Bureau of Construction for concurrence. The Utility Coordinator and Contract Administrator together with the Utility will resolve any issues. Accepted invoices will be submitted to the Bureau of Finance and Contracts for payment.
10. The Contract Administrator will notify the Utility Coordinator when work is complete.
11. The Utility Coordinator will notify the Municipality or Utility of Completion and Acceptance of the project by the State. With the notification, will be a request for acknowledgement of acceptance by the Municipality or Utility of their State constructed facilities for ownership, operation and maintenance or submittal of final invoices for the Municipal or Utility constructed facilities.

UTILITY AGREEMENT PROCESS – FLOW DIAGRAM



STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

UTILITY REQUEST

FROM: _____ **DATE:** _____

_____

TO: Melodie A. Esterberg, P.E.
Chief of Design Services

Attention: _____

PROJECT: _____ **FEDERAL NO.:** _____
(Chargeable by Design Services) **STATE NO.:** _____

PROJECT DESCRIPTION: _____

_____

_____

Railroad within 100'of Project limits? ☐ No ☐ Yes Provide copy for Railroad Coordinator.

Type of Request:

☐ Initial Utility Verification

☐ Utility Re-Verification

☐ Utility Relocation [Programmed Utility Relocation to be complete by _____]

☐ Permanent Lighting Design ☐ Temporary Lighting Design

☐ Other _____

Completion Date Requested: _____

Anticipated Advertising Date: _____

Attachments:

☐ ____ Sets of Survey Detail/As-Built/Preliminary/Traffic Control Plans (Scale: _____)

☐ Location Map(s) __ ☐ Utility Conflict List

☐ Traffic Volumes ☐ Accident History ☐ Other: _____

COMMENTS: _____

_____

_____

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STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

UTILITY & RAILROAD CERTIFICATE

Municipality:

State Project Number:

Federal Project Number:

( )

In connection with the above referenced project;

Non-reimbursable work is {required of _____ for _____.|not required of any utility.}

Non-reimbursable work is {required of _____ for _____.|not required of any railroad.}

Reimbursable work is {required of _____ for _____.|not required of any utility.}

Reimbursable work is {required of _____ for _____.|not required of any railroad.}

{Accordingly, it is hereby certified that all known utility and/or railroad work, not included in the Contract under consideration, has been arranged to be undertaken and completed as required for proper coordination with the physical construction schedule. | There are existing utilities and/or railroads in the area; however, no impacts are anticipated. | There are no known utilities and/or railroads in the immediate work area.} All utility work {has been/will be} accomplished in accordance with FHWA regulation 23 CFR Part 645. All railroad work {has been/will be} accomplished in accordance with FHWA regulation 23 CFR Part 646.

_____ _____

Melodie A. Esterberg, P.E. Date
Chief of Design Services

MAE/{LDS/SJS}/____

cc: <Project Manager>, {Consultant Design|Final Design,} {Bridge Design,} Utilities