



Illinois Department of Transportation

Memorandum

To:	Studies and Plans Squads	PPM 10-11
From:	Dennis L. Markwell	Revised: Scott W. Neihart
Subject:	Utility Coordination	
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PLAN PREPARATION MEMORANDUM 10-11

This memorandum updates supplements the BDE manual for uniformity in Utility Coordination.

The BDE Manual places certain responsibilities on the designer to request utility involvement, provide location plans, plot utilities on plans, identify utility conflicts, and work with the Utilities Coordinator in Project Support to resolve the conflicting areas.ⁱ Changes to Illinois Compiled Statutes, placed into effect January 1, 2002 require more stringent adherence to utility coordination as described in Chapter 6 of the BDE manual. A Utility Check sheet shall be placed in the section file with all PS&E documents. The Utility Check sheet provides documentation of utility coordination for each project and must be signed by the Project Support Engineer or Utility Coordinator.

Utility Coordination Requirements

Any Contract that requires work below the existing pavement structure or ground surface, including those where permanent posts will be driven into existing ground, shall be fully coordinated with utilities.ⁱⁱ A Status of Utilities sheet is required in the final plans to advise the contractor on current utility status, and to contact JULIE and local facilities owners that are not members of the JULIE System.

Projects that do not extend below the pavement or ground surface will not require utility locations unless appurtenances to utilities require adjustment during paving operations. A Status of Utilities sheet is required advising the contractor to contact JULIE and local facilities owners that are not members of the JULIE System. . A Project Support Utility letter is not required to be included in Smart and 3P project reports

Complex Projects

The Studies and Plans Project Engineers shall review and request Project Support to coordinate the use of Subsurface Utility Engineering (SUE) on major projects with congested utilities expected. Typically, this will be used on Major Urban Rehabilitation projects.

Use of 11x17 Plans for Utility Coordination

The BDE manual requires four (4) submittals of plans to each utility for coordination. Each plan submittal shall provide the utility with plan information in a scalable or otherwise usable format. Providing scalable preliminary, pre-final, and final plans in an 11x17 format is required

- *In-House Designs*

Plan sheets submitted for coordination with Railroads, Utilities, and Local Agencies shall be plotted by Studies and Plans squads or by District CADD. When plans are complete for preliminary, prefinal, or final utility coordination, the Studies & Plans Squad or District CADD will provide one set of requested 11x17 sheets per submittal for use in making copies for utility coordination.

- *Consultant Designs*

When plans are complete for preliminary, prefinal, or final utility coordination, the Consultant shall provide the needed copies of scalable 11x17 plans for utility coordination.

Process for Utility Coordination

Utility Coordination shall follow BDE Manual Chapter 6. Although most projects will not allow 10-12 months between pre-final plans and PS&E, the effort to coordinate with utilities is needed to provide the maximum time to ensure construction delays are minimized. A summary of the submittals follows and provides supplement to Chapter 6 BDE.

Topographic Plans

Once the survey information is collected and processed, the Studies & Plans Squad shall prepare Topographic Plans in accordance with the BDE manual and provide the necessary copies for submittal to utilities. Topographic plans shall include:

- A location Map showing the overall project limits, including named references to side streets or roads.
- Plan sized sheets containing complete topography from the survey; a stationed baseline or centerline; named references to the route and side streets; existing right-of-way; Land section information; preferably to the nearest ¼ section; a north arrow; right-of-way limits; scale.

Upon receipt of topographic plans, the utility coordinator shall spot check the plans and submits two (2) sets to each utility company for marking or confirming the horizontal location of their facilities on the plans. Project Support will request a depth of each facility to locate the vertical elevation on cross sections. The Studies and Plans Squad shall obtain and supply a listing of utility permit numbers (i.e. a copy of the permit index with the utilities in the pertinent construction sections highlighted) to the utility coordinator to confirm utility companies are addressed.

After Project Support returns marked up topographic plans, or other best information on utility locations, the Studies & Plans Squad shall incorporate the work into their plans. State –owned utilities are required to be shown on the plans. The Studies & Plans squad is responsible to research as-built plans and plot the facility location information (Quality Level C) on the plans. If SUE is used on the project, Project Support will coordinate with CADD to ensure quality level B horizontal locations are incorporated onto the plans. As soon as the Utilities are incorporated, the Studies & Plans Squad shall confirm with the Utilities coordinator of any need to a utility coordination meeting.

Preliminary Plans

The Studies & Plans Squad shall prepare and submit necessary copies of preliminary plans, as well as a listing of potential conflicts to Project Support. The Utilities Coordinator submits the preliminary plans to the utilities.ⁱⁱⁱ These plans should follow the scalable 11x17 format.

Potential conflicts include:

- Pipe culvert or storm sewer installation
- Areas where existing cover is reduced
- A location where pile driving occurs
- A location with sheet piling
- Removal of unsuitable material sites
- Large fill areas where settlement is expected
- Proposed run-around detours or other detours

Preliminary plans shall include:

- Cover Sheet showing a location map
- Plan sheets, based upon the topographic plan sheets that include existing utility locations; all proposed improvements; proposed right-of-way and easement lines; and known environmental issues
- Preliminary cross section sheets that show existing utility locations based upon facility supplied information (if available); proposed improvements; areas of earthwork; and drainage improvements.
- An existing and proposed ground profile at stream crossings or crossroad drainage locations and at all sideroad approaches. This Profile shall be taken along the right-of-way line, or along the approximate utility location if it is more than a few feet from right-of-way, to address potential utility conflicts involving grading at the stream crossing/crossroad drainage locations or around radius returns. Survey crews will need to be advised to collect this profile information.

The Project Support Unit shall submit two (2) copies of the preliminary plans to each facility to coordinate potential conflict resolution or prepare utility adjustment agreements.

Pre-Final Plans

The Studies & Plans Squad shall prepare and submit necessary copies of pre-final plans, as well as a listing of potential conflicts that could not be resolved to Project Support. These plans should be in the scalable 11x17 format. The Utilities Coordinator submits the pre-final plans, via certified mail, to the utilities.

Final Plans and PS&E

The Studies and Plans Squad shall request a final Status of Utilities sheet immediately before PS&E. Project Support shall provide a Status of Utilities sheet for the Special Provisions. Upon completion of final plans ready for PS&E, the Studies & Plans Squad shall provide copies for final submittal to utilities. These plans should be in the scalable 11x17 format. The Project Support Unit shall submit one copy, via certified mail, to all utilities.^{iv}

As soon as the Utilities Coordinator receives confirmation the certified final plans are received by all utilities, he will provide a copy of the utility check sheet to the Studies and Plans Squad for submittal with the PS&E.

If the utility's adjustment plan is available before the roadway plans are complete, the proposed utility location should be transferred to the final plans. Existing facilities requiring utility adjustment should be labeled "to be removed by others" or "to be abandoned in place".

Utility Coordination for Appurtenance adjustments

Water valves, manhole frames, and other appurtenances may require adjustment, which is the responsibility of the Local Agency or utility. Although the adjustment is not State responsibility, the District has determined adjustment of these facilities by contract at State expense is prudent, since it reduces possible delay and coordination costs. The District Utilities Coordinator shall identify the appurtenances requiring adjustment from the plans and contract documents. Project Support shall prepare and submit Informational letters reminding all Facility owners the adjustment is their responsibility, and inform them the State chooses to complete the adjustment at this time to reduce overall project costs.

JULIE Names on plans

Article 105.07 of the Standard Specifications requires the names of known utilities located within the project limits indicated on the plans.

Article 107.31 states Plan General Notes will indicate which facility owners are members of JULIE.

JULIE facilities shall be denoted on the plans with an Asterisk (*).

JULIE membership changes frequently. The Utilities Coordinator in Project Support has access to updated listings of JULIE members through the Internet. Please contact the Utilities Coordinator to determine JULIE Membership.

Review of Utility Permits

Utility Permit Applications for proposed construction projects on all District Multi-year work program projects will be submitted by Operations-Permits to Project Support for review by Program Development. Project Support will promptly coordinate review within Program Development all projects already initiated on the District Multi-year program.

Project Support shall coordinate review by the Studies & Plans Squad or Project Engineer. The review will consist of evaluating if proposed permit construction involves objectionable features or will conflict with the District's proposed improvement in any reasonably identifiable manner (drainage, geometrics, right-of-way, construction methods, operations, safety, etc.).

If the Program Development review discloses conflicts with proposed design, Project Support will advise Operation-Permits with the appropriate comments.

If the Program Development review discloses no conflict with proposed design, Project Support will advise Operation-Permits in writing of Program Development's concurrence with the propose utility plans.

After Operations-Permits completes processing a Utility Permit Application, they shall provide necessary copies of the approved permit to Project Support. Project Support shall forward a copy of the permit to Studies & Plans for reference and updates to plans. This copy shall be delivered to the Resident Engineer by the Studies & Plans Squad after incorporating updates into the plans.

General Plan Notes

District General Notes 105.07, 105.07B, 107.37, 107.37A, 107.38, 107.39, and 107.40 were developed to address specific concerns relevant to Article 105.07 and Article 107.37 and should be utilized accordingly in final plan documents.

i	BDE Manual 4-2.15
ii	BDE Manual 6-3.01
iii	BDE Manual 6-3.02(c)
iv	BDE Manual 6-3.02(e)